

ICC-ES Evaluation Report

ESR-1414

Reissued July 2014

This report is subject to renewal October 1, 2015.

www.icc-es.org | (800) 423-6587 | (562) 699-0543

A Subsidiary of the International Code Council®

DIVISION: 05 00 00—METALS
Section: 05 31 00—Steel Decking
Section: 05 31 13—Steel Floor Decking
Section: 05 31 23—Steel Roof Decking

REPORT HOLDER:

ASC STEEL DECK
A DIVISION OF ASC PROFILES INC.
2110 ENTERPRISE BOULEVARD
WEST SACRAMENTO, CALIFORNIA 95691
(800) 360-2477
www.ascsteeldeck.com

EVALUATION SUBJECT:

ASC STEEL ROOF AND FLOOR DECK

1.0 EVALUATION SCOPE

Compliance with the following code:

- 2009 *International Building Code*® (IBC)

Properties evaluated:

- Structural
- Fire resistance

2.0 USES

ASC Steel Roof and Floor Deck is used as roof deck, floor deck and horizontal diaphragms.

3.0 DESCRIPTION

3.1 General:

All decks include fluted sections and are cold-formed from steel sheets. Deck types include B, BR, BF, DGB, DGBF, N, NR, NF, DGN, DGNF, 2W, 2WF, DG2W, DG2WF, 3W, 3WF, DG3W, DG3WF, CP-32, CF Deep Deck and Deep Deck Cellular. See the Index to Tables and Figures, following the text of this report, and Figure 1, for the details of each deck type. When the deck flanges or webs are perforated for acoustical effects, sections are referred to as Acustadek™ type. The "F" designation refers to cellular units composed of fluted upper sheets resistance-welded to flat lower sheets.

3.2 Roof Deck Types B, BR, BF, DGB, DGBF, N, NR, NF, DGN, DGNF:

Decking is made from galvanized steel conforming to ASTM A653 SS, Grade 40 or ASTM A1003-12 ST40H, or from bare mill finish steel conforming to ASTM A1008-12, SS Grade 40 Type 1 or 2. Decking is available with

optional prime paint. These decks are also available as Acustadek™ type.

3.3 Floor Deck Types 2W, 2WF, DG2W, DG2WF, 3W, 3WF, DG3W, DG3WF:

Decking is made from galvanized steel conforming to ASTM A653 SS, Grade 40, or ASTM A1003 ST40H, or from bare mill finish steel conforming to ASTM A1008, SS Grade 40 Type 1 or 2. Decking is available with optional prime paint. These decks are also available as Acustadek™ type.

3.4 Acustadek™ Perforations:

3.4.1 B, BR, DGB, N, NR, DGN and Deep Deck Type Decks: For web perforated Acustadek™, the holes are centered on each web running the full panel length (see Figure 2 for perforation patterns). For fully perforated B, DGB, N and DGN Acustadek™, the perforations cover the width of the deck section excluding the deck sidelap (see Figure 2 for perforation patterns). The pattern consists of 0.127-inch-diameter (3 mm) holes spaced 0.375 inch (10 mm) on center transverse to the panel length, and 0.325 inch (8 mm) on center (staggered) along the panel length. See Table 2.

3.4.2 BF, DGBF, NF, DGNF, 2WF, DG2WF, 3WF, DG3WF and Cellular Deep Deck Type Deck: The perforations are in the flat sheet centered under each top flange running the full panel length (see Figure 2 for perforation patterns). The pattern consists of 0.157-inch-diameter (4 mm) holes spaced 0.433 inch (11 mm) on center transverse to the panel length, and 0.375 inch (10 mm) on center (staggered) along the panel length for the BF, DGBF, NF, DGNF, 2WF, DG2WF, 3WF, and DG3WF. The pattern consists of 0.127-inch-diameter (3 mm) holes spaced 0.375 inch (10 mm) on center transverse to the panel length, and 0.325 inch (8 mm) on center (staggered) along the panel length for the Cellular Deep Deck. See Table 2.

3.5 Concrete Pan CP-32 Deck:

No. 18 gage decking is manufactured from ASTM A653 SS Grade 40 or ASTM A1003 ST40H. No. 20, 22, 24 and 26 gage decking is manufactured from ASTM A653 SS Grade 80. Consisting of fluted sections 1³/₈ inches (35 mm) deep at a pitch of 4⁷/₁₆ inches (116 mm), the decks may be used with or without lightweight insulating concrete fill. If used, the concrete fill must be at least 2 inches (50.8 mm) thick over the top flutes. The lightweight insulating concrete must have a minimum compressive strength of 140 psi (0.96 MPa) when tested in accordance with ASTM C495, and must conform to the following specifications:

- a. Oven-dry weight of 25 to 30 pounds per cubic foot (400 to 480 kg/m³).
- b. 1-to-6 ratio by volume of cement to aggregate.
- c. Aggregate must comply as a Group 1 aggregate per ASTM C332. The lightweight aggregate must be tested in accordance with ASTM C495.

Allowable diaphragm shear values may be determined in accordance with this evaluation report.

3.6 CF Decks:

No. 18 gage decking is manufactured from ASTM A653 SS Grade 40 or ASTM A1003 ST40H. No. 20, 22, 24 and 26 gage decking is manufactured from ASTM A653 SS Grade 80. CF-1³/₈ is identical to CP-32 except that it is installed in the inverted position. See Figure 1.

3.7 DeltaGrip™ System:

The DeltaGrip™ shear and flexibility design values only apply to deck bearing the DGB-36, DGBF-36, DGN-24, DGNF-24, DG2W36, DG2WF36, DG3W36 or DG3WF36 identification markings. This system consists of the DeltaGrip™ side seam attachment system installed per Figure 6 on roof deck designated DGB-36, DGBF-36, DGNF-24, or DGN-24 fabricated per Section 3.2, or floor deck without concrete fill designated DG2W36, DG2WF36, DG3W36 or DG3WF36 fabricated per Section 3.3. A DeltaGrip™ seam attachment is comprised of three triangular tabs produced by ³/₈-inch-wide (10 mm), 60-degree triangular punches that tightly clinch the side lap standing seam interlock. The allowable diaphragm shear values, factored diaphragm shear values and the flexibility factors with arc spot/seam welds or mechanical fasteners attaching the panels to underlying steel supports are set forth in Tables 7, 10, and 12. The arc spot/seam welds are as noted in General Note 5, and the mechanical fasteners are as noted in the footnotes to Tables 7, 10, and 12.

3.8 Deep Deck and Cellular Deep Deck Types 4¹/₂, 6 and 7¹/₂ Inch:

Decking is made from steel conforming to ASTM A653, SS Grade 33. Decking is available with optional prime paint. Decking depths are 4¹/₂, 6 and 7¹/₂ inches (114, 152 and 191 mm), respectively, with a width of 12 inches (305 mm) for Deep Deck or 24 inches (610 mm) for Cellular Deep Deck.

3.9 Welding:

For all decking described, welding must use E60 or E70 filler metal. Other weld requirements must comply with AWS D1.3. Allowable tension loads for arc spot welds must be determined in accordance with Section 2205.1 of the IBC.

3.10 Resistance Welds:

Where Types BF, DGBF, NF, DGNF, 2WF, DG2WF, 3WF, DG3WF or Cellular Deep decks are used as bare deck, allowable vertical loads must be based on section properties in Table 1A for Types B, DGB, N, DGN, 2W, DG2W, 3W, DG3W or Deep Deck, unless special calculations are provided demonstrating that the resistance welds develop the full section properties of the cellular decks. Resistance welds must be placed in rows parallel to the flutes. See Figure 4 for details.

4.0 DESIGN AND INSTALLATION

4.1 General:

The section properties and allowable load tables are established using the base-metal thicknesses of the decks noted in Tables 1A thru 1D.

4.2 Diaphragm Shear and Flexibility:

A one-third stress increase (or 0.75 reduction of the resulting forces) must not be permitted for Allowable Stress Design for load combinations containing wind or seismic forces for shear values in the diaphragm tables.

Decks are attached to supporting framing members with arc spot welds in the patterns shown in Figure 3.

4.3 Diaphragm Design Considerations:

The diaphragm design must include the following considerations:

- a. Diaphragm classification (flexible or rigid) must comply with Section 1602 of the IBC; the diaphragm deflection (Δ) must be calculated using the equation noted in Table 20.
- b. Diaphragm flexibility limitations must comply with Table 20.
- c. Diaphragm deflection limits must comply with Sections 12.10.1 and 12.12.2 of ASCE 7.
- d. Horizontal shears must be distributed in accordance with Section 12.8.4 and 12.9.5 of ASCE 7.

4.4 Restrained Fire-resistance Ratings:

CP-32, 2W, 3W, B and N decks may be used in two-hour fire-resistance-rated roof deck assemblies with exposed soffits, provided:

- a. The fill type, thickness and construction are as set forth in Table 720.1(3) of the IBC.
- b. The maximum clear span for CP-32 in No. 26 gage deck is 6 feet, 8 inches (2.032 m), and in heavier gages is up to 8 feet, 6 inches (2.591 m).
- c. The decks are attached to supporting structural elements as set forth in the tables of this report.
- d. No conduits or pipes are embedded in the concrete.

The interior spans of continuous steel-framed construction slabs may be assumed to be restrained for fire-resistance-rated construction. The perimeter spans are assumed unrestrained unless restraint is substantiated by the structural designer and approved by the code official.

Appendix X3 of ASTM E119 or ACI 216.1 may be referenced as guidance on other possible restraint conditions at both exterior spans and discontinuities within fire-resistance-rated constructions, subject to the approval of the code official.

For additional restrained fire-resistance ratings, see Table 19.

4.5 Unrestrained Fire-resistance Ratings:

Fire-resistance ratings when fireproofing material is spray-applied to the deck soffit are described in current ICC-ES evaluation reports [ESR-1649](#) and [ESR-1186](#).

4.6 Special Inspection:

4.6.1 Concrete: Continuous special inspection for concrete and concrete reinforcement must be in accordance with Section 1704.4 of the IBC. The inspector's duties include sampling and testing; and verification of concrete mixes, reinforcement types and placement and concrete placement.

4.6.2 Jobsite Welding: Continuous or periodic special inspection for welding must be in accordance with Section 1704.3 of the IBC. Prior to proceeding, the welder must demonstrate his ability to produce the prescribed weld to the special inspector's satisfaction. The inspector's other duties include verification of materials, weld preparation, welding procedures, and welding processes.

4.6.3 Additional Requirements for Installations Under the IBC:

4.6.3.1 Periodic Special Inspections: Periodic special inspections in accordance with Section 1706.3 of the IBC are required where the steel deck systems are used as part of the main wind-force-resisting system in structures assigned to Wind Exposure Category B, where the 3-second-gust basic wind speed is 120 miles per hour (52.8 m/sec) or greater, or Wind Exposure Categories C or D, where the 3-second-gust basic wind speed is 110 miles per hour (49 m/sec) or greater. Periodic special inspections in accordance with Section 1707.4 of the IBC are required where the steel deck systems are used as part of a seismic-force-resisting system in structures assigned to Seismic Design Category C, D, E or F. Periodic special inspections apply to connections such as screws, power-actuated fasteners, DeltaGrip™ side seam attachments and button punches. Periodic special inspections also apply where noted in Tables 1704.3 and 1704.4 of the IBC.

4.6.3.2 Continuous Special Inspections: Continuous special inspections must be provided where noted in Tables 1704.3 and 1704.4 of the IBC.

4.6.3.3 Statement of Special Inspections: A statement of special inspections must be prepared by the registered design professional in charge and submitted to the code official as set forth in Section 1705 of the IBC. The plan must include the special inspection duties noted in Sections 4.6.1 and 4.6.2 of this report.

5.0 CONDITIONS OF USE

The ASC Steel Roof and Floor Deck described in this report complies with, or is a suitable alternative to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

5.1 ASC steel deck panels have not been evaluated for use without a roof covering.

5.2 Where used as a diaphragm:

5.2.1 A one-third stress increase (or 0.75 reduction of the resulting forces) must not be permitted for Allowable Stress Design for load combinations containing wind or seismic forces for shear values in the diaphragm tables.

5.2.2 Allowable shear values must be limited to values set forth in the accompanying tables for the types of deck involved.

5.2.3 Diaphragm deflections must not exceed the permitted relative deflections of walls between the diaphragm level and the floor below. See Table 20 for diaphragm flexibility and deflection limitations.

5.3 Vertical load design of deck without a concrete fill must be based on section properties and web crippling values set forth in this report. Vertical load capacity of concrete-filled, composite deck systems must be as set forth in the tables in this evaluation report.

5.4 Special inspection in accordance with Section 4.6 is required for all field-welding.

5.5 Fire-resistive ratings are as described in Sections 4.4 and 4.5 or as set forth in Table 720.1(3) of the IBC, provided the fill type, thickness, metal gage and construction are as specified therein.

5.6 Calculations and details demonstrating that the loads applied to the decks comply with this report must be submitted to the code official for approval. Calculations and drawings must be prepared, signed, and sealed by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed.

5.7 Bundles marked in accordance with Section 7.0 of this report provide the material traceability required to conform with the requirements of Table 1704.3, Item 3, of the IBC.

5.8 All cellular deck types are fabricated at the West Sacramento, California, facility under a quality program with inspections by ICC-ES.

6.0 EVIDENCE SUBMITTED

6.1 Data in accordance with the ICC-ES Acceptance Criteria for Steel Deck Roof and Floor Systems (AC43), dated October 2010.

6.2 Reports of fire-resistance tests.

7.0 IDENTIFICATION

Each bundle of ASC steel floor and roof deck panels is identified by labeling bearing the manufacturer's name (ASC Steel Deck); the steel deck panel profile name; the design thickness; the minimum specified yield strength; the manufacturing location (West Sacramento, California, or Fontana, California); the cover width of the panel; and the ICC-ES evaluation report number (ESR-1414).

General Notes: The following notes apply to all of the tables in this report unless otherwise noted.

1. The allowable diaphragm shear values listed in the tables are in pounds per linear foot (N/m).
2. The base-metal thickness for all decks is indicated in Tables 1A thru 1D. For decks with specified yield strength of 80,000 psi (551 MPa), yield strength used for design must be 60,000 psi (413 MPa).
3. Deck panel seams must be fastened by welds, button punches or DeltaGrip™ seam attachment, as indicated in the report. The length of seam welds must be a minimum of 1½ inches (38 mm). The DeltaGrip™ seam attachments must be as described in Figure 6. The seam attachment, where required, must be in accordance with the appropriate table, not to exceed 3 feet (914 mm) on center unless noted otherwise.
4. Arc seam or spot (puddle) welds must have an effective fusion area to supporting members at least equivalent to ¾ inch (10 mm) wide by 1 inch (25 mm) long or ½ inch (13 mm) in diameter. DGB and DGBF deck types must be attached to supporting members with welds that have an effective area of ¾ inch (10 mm) wide by 1 inch (25 mm) long in the flutes adjacent to the deck interlock. See Figure 5.
5. Puddle weld patterns are shown in Figure 3 for Types B, BR, BF, DGB, DGBF, N, NR, NF, DGN, DGNE, 2W, 2WF, DG2W, DG2WF, 3W, 3WF, DG3W and DG3WF decks; and Figure 7 for CF 1⅜ and CP-32 decks.
6. Spacing of marginal welds to members parallel to flutes must comply with the following, unless otherwise noted:
 - a. Arc seam or spot (puddle) welds to members such as chords and to collector elements such as struts or ties must have a spacing in feet (mm) equal to $35,000(t)/v$ (For **SI**: $6,130(t)/v$), where:

t = Uncoated base-metal thickness of fluted steel deck, in inches (mm).

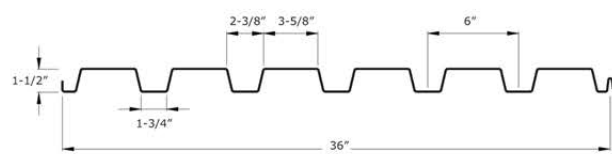
v = Actual diaphragm shear at marginal supports or actual shear transferred to collector, in pounds per foot (N/m).
 - b. Fillet welds to members such as diaphragm chords must have a spacing in feet (mm) equal to $480 (l_w)/v$ (For **SI**: $84 (l_w)/v$), where:

l_w = Length of weld, in inches (mm) [not less than 1½ inches (38 mm)].

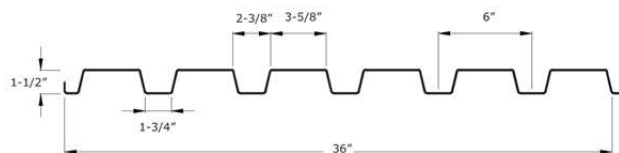
v = Actual diaphragm shear to be transferred to chords, in pounds per foot (N/m).
 - c. Fillet welds attaching the diaphragms to struts, ties or other collector elements must have a spacing in feet (mm) equal to $300 (l_w)/v$ (For **SI**: $52.5 l_w/v$), where v is the actual shear to be transferred to the collector element, in pounds per foot (N/m).
 - d. Weld spacing is limited to 3 feet (914.4 mm), maximum.
7. Regarding attachments at interior lines of shear transfer perpendicular to deck corrugations: The shear transfer from a diaphragm to interior tie or strut lines perpendicular to deck corrugations must not exceed the shear values indicated in the tables. Two lines of puddle welds may be used to develop the actual shear transfer to these collector elements.
8. Where individual panels are cut, the partial panel must be fastened in a manner to fully transfer the shears at the point of the diaphragm to the adjacent full panels for the values specified in the tables.
9. The diaphragm shear values, for decks without fill, also apply to the acoustical version of the specific deck, known as Acustadek™. For fully perforated Acustadek™, multiply the allowable or factored shear strength in the tables by 0.85.
10. Deck panel seams may be fastened with self-tapping or self-drilling screws in place of button punches without affecting the tabulated allowable diaphragm shear and flexibility factors under the following conditions:
 - a. Screws are minimum No. 10 size, with a minimum ¾-inch (19 mm) length.
 - b. Screw spacing is no greater than tabulated button-punch spacing.
 - c. The deck material base-metal thickness is minimum No. 22 gage [0.0299 inch (0.737 mm)].
11. The diaphragm shears for cellular deck profiles, identified by the letter "F", are based upon the gage of flat bottom sheet (pan).

TABLE NUMBER	SUBJECT	PAGE NO.
1A, 1D	Section Properties	7-10
2	Acustadek™ Section Property Adjustment Factors	11
3	Allowable Reaction.....	12
4	Nominal Weld Capacity	13
5	Mechanical Fastener Nominal Shear Strength	14
6	AISI Factors of Safety and Resistance Factors for Diaphragms.....	11
Roof Deck		
DeltaGrip™ System Notes		14
B Deck		
7	DGB-36 DeltaGrip™ System Diaphragm Shears	
	DGB-36 with Arc Spot/Seam Welds.....	17-20
	DGB-36 with Hilti X EDNK22 Pin Fasteners ...	21-24
	DGB-36 with Hilti X-EDN19 Pin Fasteners.....	25-28
	DGB-36 with Hilti X-ENP19 Pin Fasteners.....	29-32
	DGB-36 with Pneutek SDK61 Pin Fasteners ..	33-36
	DGB-36 with Pneutek SDK63 Pin Fasteners ..	37-40
	DGB-36 with Pneutek K64 Pin Fasteners	41-44
	DGB-36 with Pneutek K66 Pin Fasteners	45-48
	DGB-36 with ITW Buildex Screw Fasteners	49-52
8	B Deck Diaphragm Shears.....	53-54
9	B Deck With Lightweight Insulating Fill.....	55
N Deck		
10	DGN-24 DeltaGrip™ System Diaphragm Shears	
	DGN-24 with Arc Spot/Seam Welds	56
	DGN-24 with Pin Fasteners	57
	DGN-24 with ITW Buildex Screw Fasteners	58
11	N Deck Diaphragm Shears.....	59
2W and 3W		
12	DG2W36 & DG3W36 DeltaGrip™ System Diaphragm Shears	
	DG2W36 & DG3W36 with Arc Spot/Seam Welds	60
	DG2W36 & DG3W36 with Pin Fasteners	61
13	2W Diaphragm Shears without Fill.....	62
14	3W Diaphragm Shears without Fill.....	63
Deep Deck		
15A, 15B	Deep Deck Diaphragm Shears	64
CP32 / CF 1 3/8		
16	CP32 Diaphragm Shear with Insulating Fill.....	65
17	CP32 Deck Attachment	65
18	CP32 and CF 1 ³ / ₈ Diaphragm Shears.....	66-68
19	Fire-Resistive Ratings.....	68
Misc		
20	Diaphragm Flexibility Limitations	69
FIGURE	SUBJECT	PAGE NO.
1	Deck Profiles.....	6
2	Acustadeck™ Perforation Patterns.....	11
3	Attachment Patterns	15
4	Resistance Weld Details	15
5	Weld Details	15
6	DeltaGrip™ System Details	16
7	Weld Patterns for Concrete Pan Deck (CP32).....	65

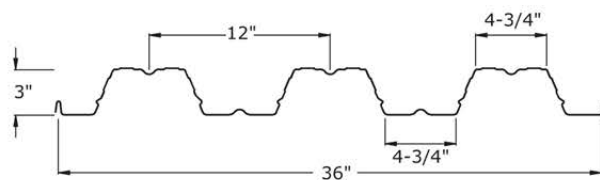
DECK PROFILES



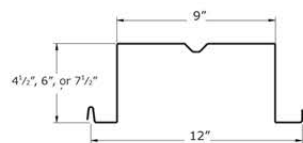
DGB-36 & B-36



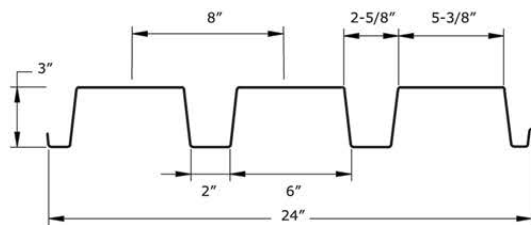
B-36 Nestable



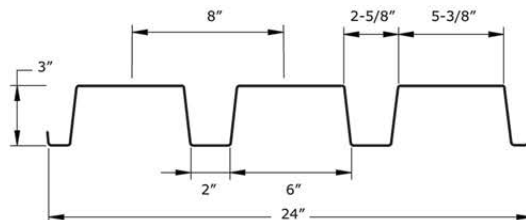
DG3W-36 & 3W-36



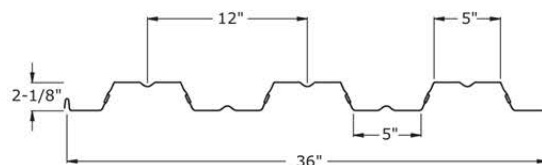
4.5, 6 & 7.5 DEEP DECK



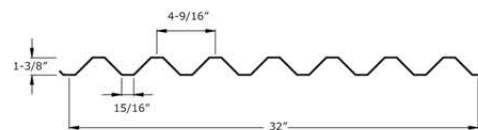
DGN-24 & N-24



N-24 Nestable

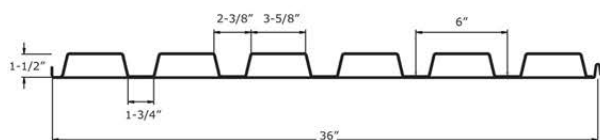


DG2W-36 & 2W-36

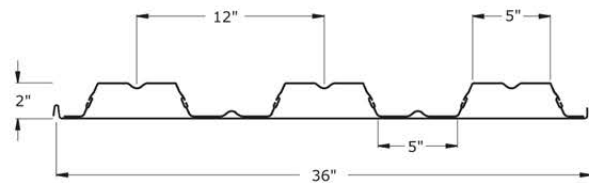


CP-32 & CF1 3/8

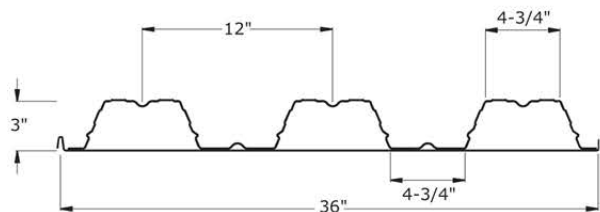
CELLULAR PROFILES



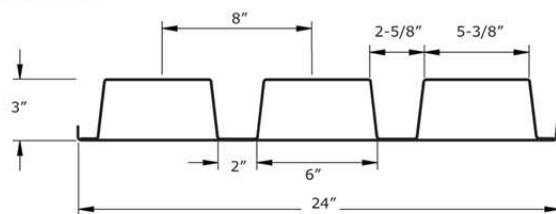
DGBF-36 & BF-36



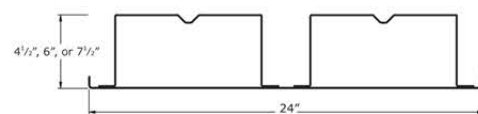
DG2WF-36 & 2WF-36



DG3WF-36 & 3WF-36



DGN-24 & N-24



4.5, 6 & 7.5 DEEP DECK CELLULAR

FIGURE 1—DECK PROFILES

TABLE 1A—SECTION PROPERTIES^{1,2,3,4}

Deck Type	Gage	Design Base Metal Thickness	Gross Moment of Inertia	Positive Effective Moment of Inertia	Negative Effective Moment of Inertia	Design Moment of Inertia for Uniform Load	Positive Effective Section Modulus	Negative Effective Section Modulus
		t (in)	I _{gross}	I _e ⁺ (in ⁴)	I _e ⁻ (in ⁴)	I _D (in ⁴)	S _e ⁺ (in ³)	S _e ⁻ (in ³)
B DGB BR	16	0.0598	0.383	0.383	0.383	0.383	0.396	0.404
	18	0.0478	0.313	0.297	0.313	0.302	0.315	0.330
	20	0.0359	0.240	0.207	0.240	0.218	0.232	0.244
	22	0.0299	0.200	0.163	0.200	0.176	0.185	0.194
BF DGBF ⁵	16/16	.0598/.059	0.778	0.754	0.730	0.746	0.626	0.736
	18/16	.0478/.059	0.665	0.598	0.625	0.620	0.460	0.604
	18/18	.0478/.047	0.618	0.558	0.581	0.578	0.451	0.581
	18/20	.0478/.036	0.568	0.515	0.496	0.520	0.441	0.505
	20/16	.0359/.059	0.541	0.433	0.510	0.469	0.310	0.467
	20/18	.0359/.047	0.505	0.407	0.475	0.440	0.303	0.450
	20/20	.0359/.036	0.465	0.378	0.407	0.407	0.297	0.423
N DGN NR	16	0.0598	1.785	1.595	1.785	1.658	0.898	0.970
	18	0.0478	1.445	1.190	1.445	1.275	0.704	0.780
	20	0.0359	1.099	0.828	1.090	0.918	0.468	0.560
	22	0.0299	0.921	0.655	0.891	0.744	0.363	0.452
NF DGNF ⁵	16/16	.0598/.059	3.312	2.800	2.914	2.971	1.158	1.627
	18/16	.0478/.059	2.851	2.203	2.509	2.419	0.858	1.339
	18/18	.0478/.047	2.653	2.068	2.208	2.263	0.843	1.174
	18/20	.0478/.036	2.436	1.918	1.874	2.061	0.824	0.958
	20/16	.0359/.059	2.339	1.613	2.066	1.855	0.571	1.038
	20/18	.0359/.047	2.185	1.524	1.815	1.744	0.562	0.989
	20/20	.0359/.036	2.012	1.418	1.522	1.616	0.557	0.772

For **SI**: 1 inch = 25.4 mm.¹Tabulated values are based on a 1 foot wide section.² Properties based on 40,000 psi yield strength, (Tensile strength = 55,000 psi).³The name "Acustadek™" as suffix to deck type refers to web or pan perforations. See **Section 3.4** for additional details. Section properties for Acustadek™ profiles must be adjusted using the adjustment factors noted in **Table 2**.⁴BR and NR indicate inverted profiles for which the section moduli are to be reversed.⁵The first number is the gauge thickness of fluted top sheet. The second number is the gauge or thickness of flat bottom sheet.

TABLE 1B—SECTION PROPERTIES^{1,2,3}

Deck Type	Gage	Design Base Metal Thickness	Gross Moment of Inertia	Positive Effective Moment of Inertia	Negative Effective Moment of Inertia	Design Moment of Inertia for Uniform Load	Positive Effective Section Modulus	Negative Effective Section Modulus
		t (in)	I _{gross}	I _e ⁺ (in ⁴)	I _e ⁻ (in ⁴)	I _D (in ⁴)	S _e ⁺ (in ³)	S _e ⁻ (in ³)
2W DG2W	16	0.059	0.723	0.723	0.723	0.723	0.655	0.654
	18	0.047	0.580	0.580	0.580	0.580	0.527	0.526
	19	0.042	0.523	0.523	0.520	0.521	0.457	0.464
	20	0.035	0.437	0.437	0.430	0.432	0.361	0.361
	21	0.033	0.413	0.413	0.403	0.407	0.335	0.335
	22	0.029	0.363	0.350	0.347	0.352	0.282	0.281
2WF DG2WF ⁴	16/16	.059/.059	1.253	1.365	1.000	1.084	0.789	0.733
	18/16	.047/.059	1.041	1.077	0.845	0.910	0.573	0.593
	18/18	.047/.047	0.987	1.021	0.804	0.865	0.565	0.569
	18/20	.047/.036	0.927	0.959	0.737	0.800	0.557	0.463
	20/16	.035/.059	0.818	0.766	0.680	0.726	0.375	0.450
	20/18	.035/.047	0.777	0.730	0.648	0.691	0.370	0.432
	20/20	.035/.036	0.731	0.689	0.570	0.624	0.364	0.385
3W DG3W	16	0.059	1.493	1.493	1.493	1.493	0.958	0.958
	18	0.047	1.200	1.200	1.200	1.200	0.771	0.768
	19	0.042	1.077	1.077	1.073	1.074	0.683	0.687
	20	0.035	0.900	0.900	0.890	0.893	0.544	0.567
	21	0.033	0.850	0.850	0.837	0.841	0.505	0.526
	22	0.029	0.750	0.733	0.723	0.732	0.429	0.445
3WF DG3WF ⁴	16/16	.059/.059	2.635	2.819	2.087	2.269	1.195	1.108
	18/16	.047/.059	2.196	2.238	1.643	1.827	0.876	0.896
	18/18	.047/.047	2.081	2.122	1.632	1.782	0.864	0.860
	18/20	.047/.036	1.956	1.995	1.484	1.641	0.852	0.701
	20/16	.035/.059	1.730	1.609	1.424	1.526	0.581	0.681
	20/18	.035/.047	1.644	1.533	1.318	1.426	0.574	0.654
	20/20	.035/.036	1.547	1.450	1.154	1.285	0.561	0.575

For SI: 1 inch = 25.4 mm.

¹Tabulated values are based on a 1 foot wide section.² Properties based on 40,000 psi yield strength, (Tensile strength = 55,000 psi).³The name "Acustadek™" as suffix to deck type refers to web or pan perforations. See **Section 3.4** for additional details. Section properties for Acustadek™ profiles must be adjusted using the adjustment factors noted in **Table 2**.⁴The first number is the gauge thickness of fluted top sheet. The second number is the gauge or thickness of flat bottom sheet.

TABLE 1C—SECTION PROPERTIES^{1,2,4}

Deck Type	Gage	Design Base Metal Thickness	Gross Moment of Inertia	Positive Effective Moment of Inertia	Negative Effective Moment of Inertia	Design Moment of Inertia for Uniform Load	Positive Effective Section Modulus	Negative Effective Section Modulus
		t (in)	I _{gross}	I _e ⁺ (in ⁴)	I _e ⁻ (in ⁴)	I _D (in ⁴)	S _e ⁺ (in ³)	S _e ⁻ (in ³)
4 1/2 Deep Deck	14	0.075	5.691	5.691	5.691	5.691	2.166	2.166
	16	0.059	4.547	4.547	4.547	4.547	1.699	1.733
	18	0.047	3.665	3.468	3.665	3.534	1.335	1.398
	20	0.035	2.763	2.375	2.763	2.504	0.927	1.045
6 Deep Deck	14	0.075	11.173	11.173	11.173	11.173	3.242	3.244
	16	0.059	8.906	8.906	8.906	8.906	2.529	2.590
	18	0.047	7.165	6.753	7.165	6.890	1.981	2.085
	20	0.035	5.393	4.642	5.939	4.892	1.369	1.453
7 1/2 Deep Deck	14	0.075	18.900	18.902	18.902	18.901	4.440	4.360
	16	0.059	15.040	15.011	14.936	14.971	3.454	3.316
	18	0.047	12.089	11.371	11.737	11.610	2.702	2.548
	20	0.035	9.088	7.960	8.558	8.336	1.718	1.791
4 1/2 Cellular Deep Deck ³	20/20	.035/.035	4.748	3.765	3.219	3.729	0.903	0.919
	20/18	.035/.047	5.224	4.058	4.004	4.410	0.898	1.148
	20/16	.035/.059	5.606	4.244	4.539	4.698	0.896	1.465
	18/20	.047/.035	5.799	5.038	4.062	4.641	1.508	1.167
	18/18	.047/.047	6.396	5.486	4.948	5.430	1.535	1.397
	18/16	.047/.059	6.893	5.923	5.573	6.013	1.515	1.714
	16/16	.059/.059	8.054	7.449	6.570	7.064	2.972	1.982
6 Cellular Deep Deck ³	20/20	.035/.035	8.787	6.841	5.836	6.820	1.238	1.331
	20/18	.035/.047	9.666	7.272	7.231	8.042	1.231	1.609
	20/16	.035/.059	10.380	7.603	8.394	8.529	1.225	1.973
	18/20	.047/.059	10.738	9.406	7.488	8.571	2.102	1.716
	18/18	.047/.047	11.821	10.371	8.860	9.847	2.061	1.990
	18/16	.047/.059	12.733	11.187	10.318	11.123	2.027	2.350
	16/16	.059/.059	14.867	13.730	12.186	13.080	3.149	2.754
7 1/2 Cellular Deep Deck ³	20/20	.035/.035	14.266	10.759	9.529	11.108	1.579	1.822
	20/18	.035/.047	15.686	11.413	11.614	12.837	1.569	2.132
	20/16	.035/.059	16.855	11.911	13.638	13.559	1.561	2.550
	18/20	.047/.035	17.451	15.551	12.270	13.997	2.622	2.349
	18/18	.047/.047	19.177	17.151	14.286	15.916	2.566	2.657
	18/16	.047/.059	20.646	18.242	16.580	17.935	2.517	3.064
	16/16	.059/.059	24.099	22.759	19.472	21.014	3.963	3.622

For SI: 1 inch = 25.4 mm.

¹Tabulated values are based on a 1 foot wide section.²The name "Acustadek™" as suffix to deck type refers to web or pan perforations. See Section 3.4 for additional details. Section properties for Acustadek™ profiles must be adjusted using the adjustment factors noted in Table 2.³The first number is the gauge thickness of fluted top sheet. The second number is the gauge or thickness of flat bottom sheet.⁴Properties based on 33,000 psi yield. (Tensile strength = 45,000 psi).

TABLE 1D—SECTION PROPERTIES^{1,3}

Deck Type	Gage	Design Base Metal Thickness	Gross Moment of Inertia	Positive Effective Moment of Inertia	Negative Effective Moment of Inertia	Design Moment of Inertia for Uniform Load	Positive Effective Section Modulus	Negative Effective Section Modulus
		t (in)	I _{gross}	I _e ⁺ (in ⁴)	I _e ⁻ (in ⁴)	I _D (in ⁴)	S _e ⁺ (in ³)	S _e ⁻ (in ³)
CP32 CF 1 3/8	18 ²	0.0480	0.191	0.191	0.191	0.191	0.261	0.261
	20	0.0374	0.150	0.150	0.150	0.150	0.206	0.206
	22	0.3140	0.128	0.128	0.128	0.128	0.175	0.174
	24	0.0254	0.103	0.103	0.103	0.103	0.139	0.141
	26	0.0195	0.079	0.078	0.078	0.078	0.101	0.106

For **SI**: 1 inch = 25.4 mm.

¹Tabulated values are based on a 1 foot wide section.

²The Properties for 18 gage are based on 40,000 psi yield (Tensile strength=55,000 psi).

³Properties based on 75 percent of 80,000 psi yield. (Tensile strength = 82,000 psi) unless noted otherwise.

TABLE 2—ACUSTADECK™ SECTION PROPERTY ADJUSTMENT FACTORS^{1,2,3}

DECK TYPE	MOMENT OF INERTIA (I_{gross} , I_e^+ , I_e^- , I_b)	POSITIVE SECTION MODULUS (S_e^+)	NEGATIVE SECTION MODULUS (S_e^-)	PERFORATION DIAMETER (in)	PERFORATION SPACING, a
B, DGB	1.00	0.96	0.95	0.127	4 spaces @ 0.1875" = 0.750"
BR	1.00	0.95	0.96	0.127	4 spaces @ 0.1875" = 0.750"
B Full Perf DGB Full Perf	0.87	0.67	0.69	0.127	----
N, DGN	1.00	0.96	0.94	0.127	9 spaces @ 0.1875" = 1.6875"
NR	1.00	0.94	0.96	0.127	9 spaces @ 0.1875" = 1.6875"
N Full Perf DGN Full Perf	0.86	0.67	0.71	0.127	----
4 1/2" Deep Deck	0.97	0.90	0.86	0.127	18 spaces @ 0.1875" = 3.375"
6" Deep Deck	0.97	0.90	0.86	0.127	26 spaces @ 0.1875" = 4.875"
7 1/2" Deep Deck	0.97	0.90	0.86	0.127	34 spaces @ 0.1875" = 6.375"
BF, DGBF, NF, DGNF	0.94	0.97	0.90	0.157	16 spaces @ 0.2165" = 3.464"
NF, DGNF	0.94	0.97	0.90	0.157	24 spaces @ 0.2165" = 5.196"
2WF, DG2WF, 3WF, DG3WF	0.97	1.00	1.00	0.157	30 spaces @ 0.2165" = 6.495"
Cellular Deep Deck	0.95	1.00	0.93	0.127	42 spaces @ 0.1875" = 7.875"

For SI: 1 inch = 25.4 mm.

¹To determine the section properties for acoustical version of one of the deck types listed above, multiply the section properties in **Tables 1A thru 1D** by the adjustment factor for the deck type.

²Adjustment factors apply for all gauges of the deck types listed in **Tables 1A thru 1D**.

³Cellular Deep Deck factors apply for 4 1/2-inch, 6-inch, and 7 1/2-inch versions of the deck type.

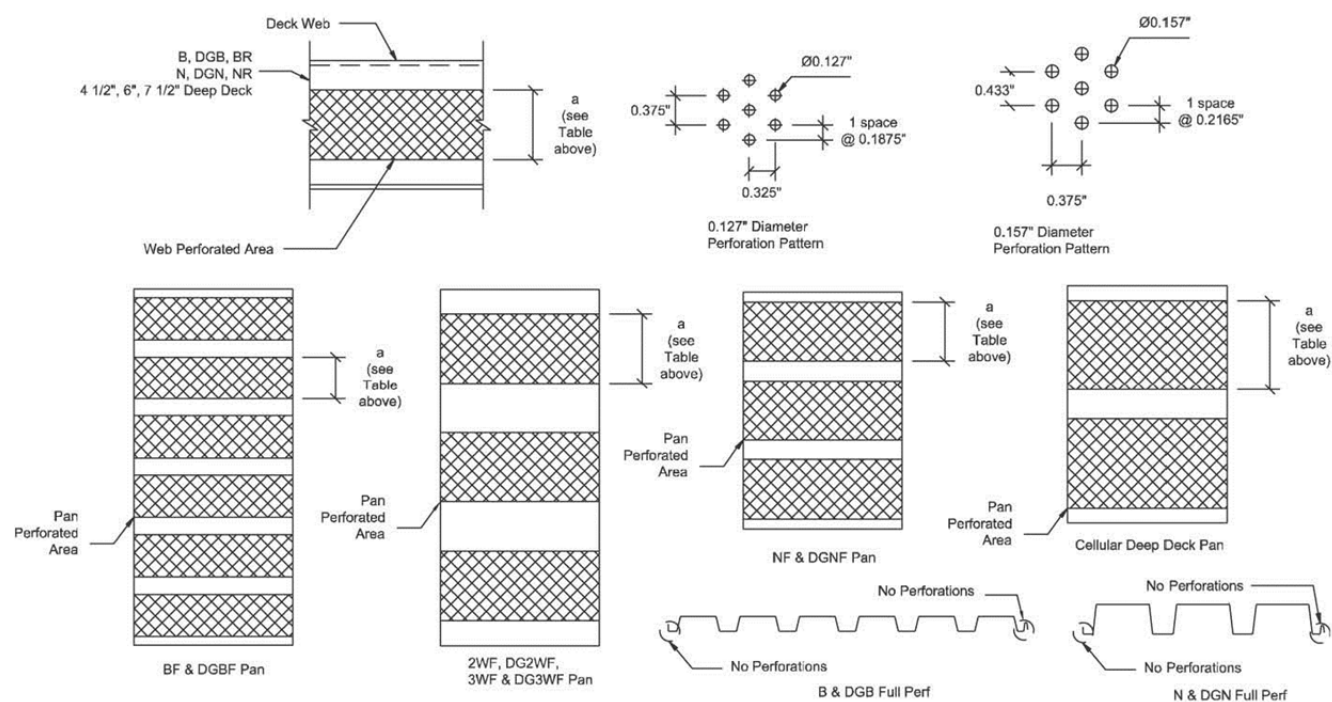


FIGURE 2—ACUSTADECK™ PERFORATION PATTERNS

TABLE 3—ALLOWABLE REACTION BASED ON WEB CRIPPLING (ASD)^{1,2}

DECK TYPE	GAGE	ALLOWABLE LOAD (PLF) REACTION LOCATION					
		End of Deck			Interior		
		1.5	2	3	1.5	2	3
B, DGB, BR, BF & DGBF	16	2345	2547	2885	3781	4050	4501
	18	1561	1701	1938	2491	2679	2994
	20	927	1016	1164	1461	1579	1778
	22	664	730	840	1038	1126	1273
24 Inch N, DGN, NR, NF & DGNF	16	864	939	1063	713	763	848
	18	549	599	682	359	389	431
	20	303	332	381	111	120	135
	22	206	226	260	26	28	32
2W, DG2W, 2WF & DG2WF	16	1011	1098	1244	1683	1803	2005
	18	665	725	826	1101	1184	1324
	19	540	590	674	893	962	1079
	20	386	423	485	635	687	773
	21	346	379	436	569	616	695
	22	272	299	344	447	485	548
3W, DG3W, 3WF & DG3WF	16	1002	1089	1234	1716	1839	2044
	18	656	716	815	1122	1207	1350
	19	532	581	664	909	980	1099
	20	378	414	475	646	699	788
	21	338	371	426	579	627	707
	22	265	291	335	454	493	558

DECK TYPE	GAGE	ALLOWABLE LOAD (PLF) REACTION LOCATION					
		End of Deck			Interior		
		1.5	2	3	1.5	2	3
CP-32 CF-1 ³ / ₈ "	18	1451	1582	1802	2370	2549	2849
	20	1449	1587	1817	2350	2538	2854
	22	1050	1153	1326	1695	1836	2074
	24	710	782	903	1139	1239	1406
	26	434	480	557	692	757	864
4 ¹ / ₂ " Deep Deck	14	1598	2113	2508	3434	4006	4444
	16	966	1286	1531	2060	2428	2710
	18	588	787	939	1256	1495	1678
	20	297	400	479	648	781	883
6" Deep Deck	14	1479	1956	2322	3179	3708	4114
	16	881	1172	1395	1878	2213	2470
	18	526	704	840	1123	1337	1501
	20	257	346	414	560	675	763
7 ¹ / ₂ " Deep Deck	14	1386	1832	2175	2979	3474	3855
	16	813	1082	1289	1735	2044	2282
	18	477	639	762	1019	1213	1362
	20	225	304	364	491	592	670

For SI: 1 inch = 25.4 mm, 1 plf = 14.594 N/m.

¹For web perforated and fully perforated Acustadek™, the allowable reaction based on web crippling must be multiplied by 0.90.²All values are based on fastened to support and One-Flange Loading or Reaction.

TABLE 4—NOMINAL WELD CAPACITY

Ultimate Capacity

Deck Profile	Gage	Arc Spot (puddle) Weld (1/2 in effective diameter)		Arc Seam Weld (3/8 in x 1 in effective width and length)
		Shear (lbs)	Tensile (lbs)	Shear (lbs)
B, DGB, N, DGN	22	2187	2187	3277
	20	3052	2608	3967
	18	4982	3425	5368
	16	6145	4225	6824
2W, DG2W, 3W, DG3W	22	2070	2123	3174
	21	2616	2405	3632
	20	2913	2545	3863
	19	4078	3030	4680
	18	4903	3371	5272
	16	6069	4172	6725
Deep Deck	20	2595	2048	3161
	18	4011	2717	4314
	16	4965	338/	5503
	14	6193	4188	7143
BF, DGBF, NF, DGNF	20/20	7283	5007	8222
	20/18	8287	5698	9632
	20/16	8836	6495	11211
	18/20	8368	5753	9762
	18/18	8836	6487	11211
	18/16	8836	7430	12834
	16/20	8836	6565	11345
	16/18	8836	7430	12834
	16/16	8836	8401	14501
2WF, DG2WF, 3WF, DG3WF	20/20	7200	4950	8336
	20/18	8206	5642	9749
	20/16	8836	6425	11332
	18/20	8269	5704	9866
	18/18	8836	6425	11318
	18/16	8836	7367	12944
	16/20	8836	6503	11452
	16/18	8836	7367	12944
	16/16	8836	8335	14614
Cellular Deep deck	20/20	5815	3932	6624
	20/18	6714	4540	7780
	20/16	7647	5171	9173
	18/20	6714	4540	7780
	18/18	7647	5171	9173
	18/16	8767	5928	10501
	16/20	7647	5171	9173
	16/18	8767	5928	10501
	16/16	8836	6708	11865

Calculated in Accordance with the 2004 Supplement to the 2001 NASPEC and 2007 NASPEC

TABLE 5—MECHANICAL FASTENER NOMINAL SHEAR STRENGTH¹ (lbs)

MECHANICAL FASTENER TYPE	DGB-36, DGBF-36, DGN-24, AND DGNF-24				DG2W, DG2WF, DW3W, AND DG3WF					
	Gage				Gage					
	22	20	18	16	22	21	20	19	18	16
Hilti X-EDNK22-THQ12 Pin	1508	1800	2367	2924	1464	1659	1756	2092	2329	2887
Hilti X-EDN19-THQ12 Pin	1604	1914	2517	3109	1557	1765	1868	2225	2477	3070
Hilti ENPH2-21-L15 Pin	1608	1879	2362	2780	1566	1750	1839	2135	2332	2754
Pneutek SDK61075 Pin	1546	1833	2378	2896	1502	1695	1790	2116	2342	2862
Pneutek SDK63075 Pin	1728	1977	2417	2812	1689	1860	1941	2210	2389	2787
Pneutek K64062 Pin	1735	2216	3009	3686	1655	1993	2149	2642	2690	3644
Pneutek K66062 Pin	1841	2258	3132	4076	1780	2055	2195	2698	3071	4011
ITW Buildex 12-14 or 12-24 I.C.H. Traxx, Traxx or TEK Self Drilling Screw	1196	1436	1912	2392	1160	1320	1400	1680	1880	2360

¹See AISI S100 for applicable Ω (ASD) and Φ (LRFD) factors.

TABLE 6—AISII FACTORS OF SAFETY AND RESISTANCE FACTORS FOR DIAPHRAGMS

Load Type or Combinations Including	Connection Type ¹	Limit State					
		Connection Related			Panel Buckling*		
		USA and Mexico		Canada	USA and Mexico		Canada
		Ω _d (ASD)	Φ _d (LRFD)	Φ _d (LSD)	Ω _d (ASD)	Φ _d (LRFD)	Φ _d (LSD)
Earthquake	Welds	3.00	0.55	0.50	2.00	0.80	0.75
	Screws	2.50	0.65	0.60			
Wind	Welds	2.35	0.70	0.65			
	Screws						
All Others	Welds	2.65	0.60	0.55			
	Screws	2.50	0.65	0.60			

Note: *Panel buckling is out-of-plane and not local buckling at fasteners

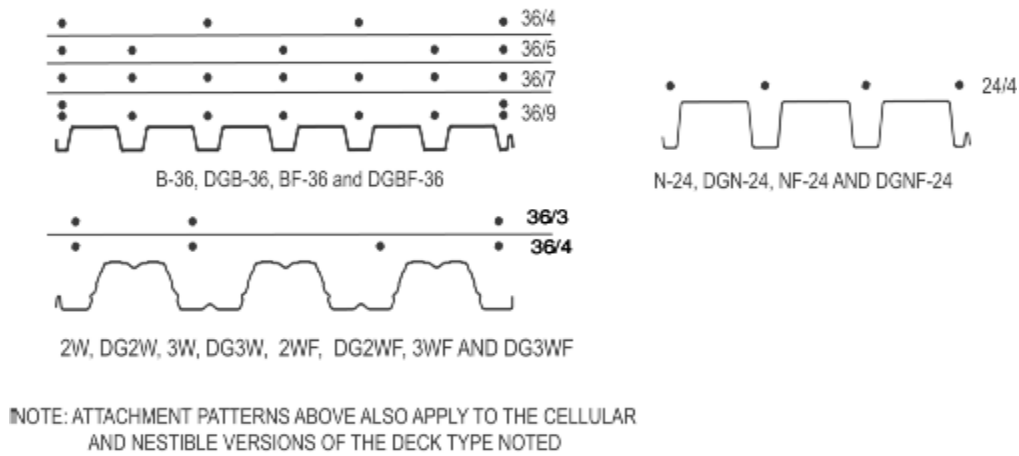


FIGURE 3 - ATTACHMENT PATTERNS (At Perpendicular Supports)

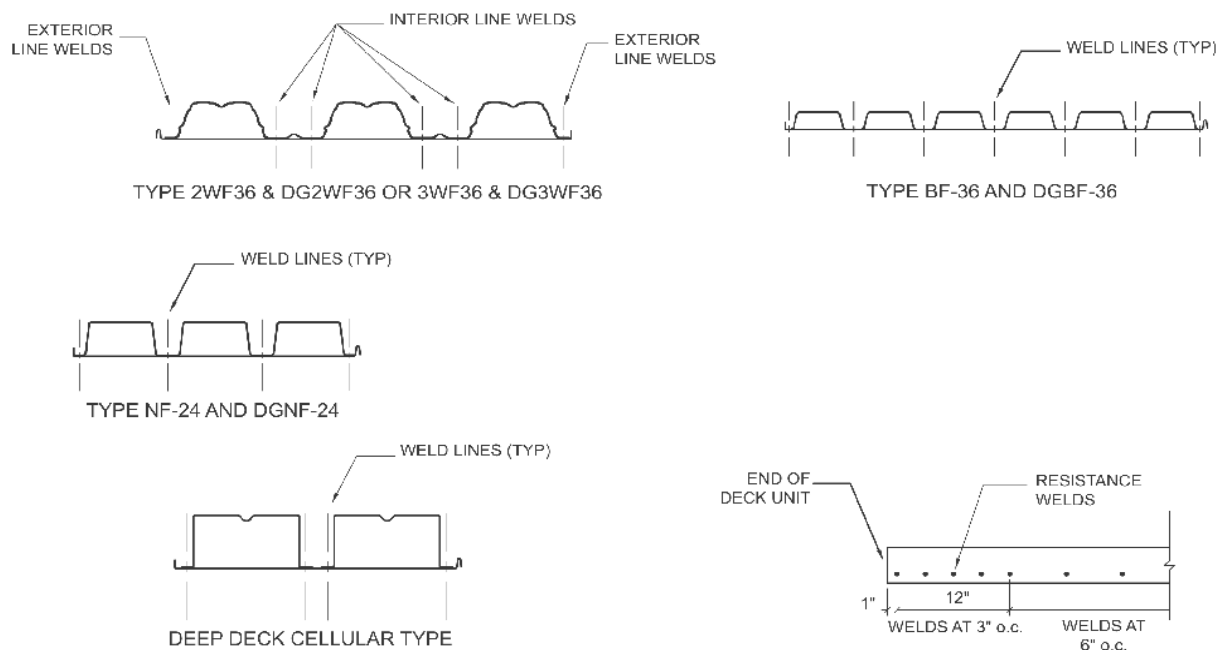


FIGURE 4 - CELLULAR DECK RESISTANCE WELD PATTERNS

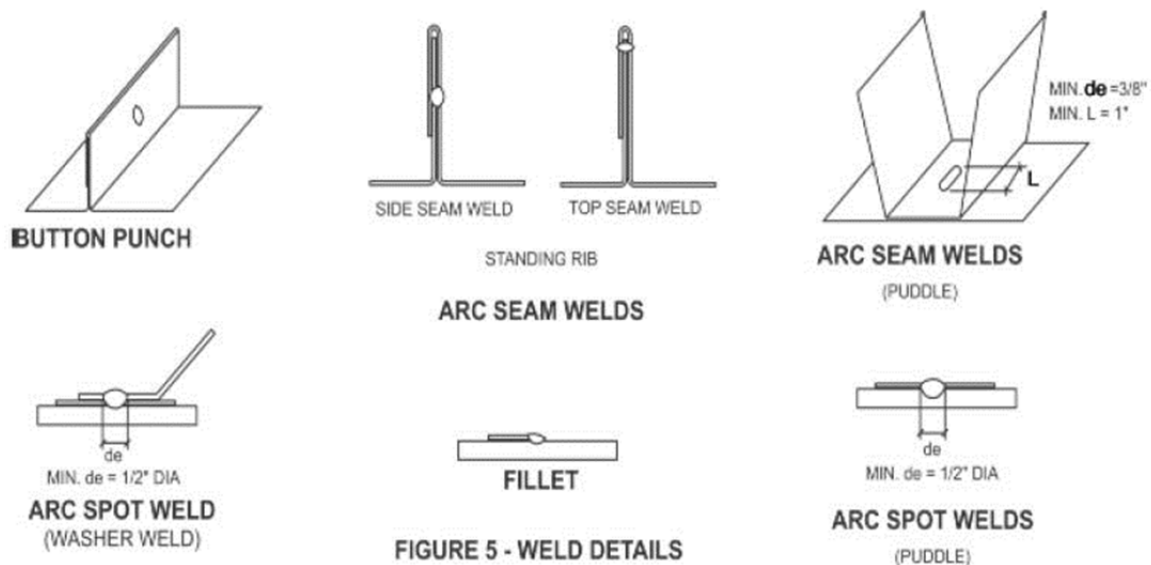


FIGURE 5 - WELD DETAILS

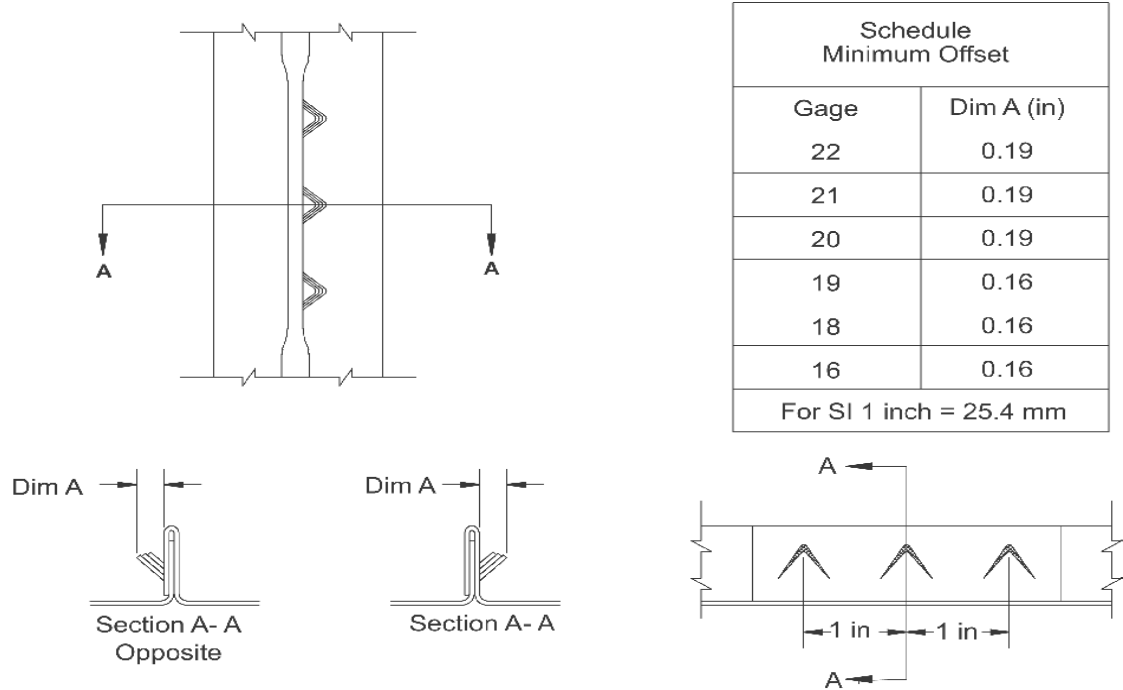


FIGURE 6—DELTAGRIP™ SYSTEM DETAILS

DELTAGRIP™ SYSTEM NOTES FOR TABLES 7, 10 AND 12:

¹See **Figure 3** for fastener attachment patterns to supports and see **Figure 6** for DeltaGrip™ System details.

²The dimension from the first and last sidelap connection within each span is to be no more than one-half of the specified spacing.

³ $\frac{5}{8}$ inch minimum edge distance for mechanically driven pin and self drilling screws.

⁴DGB-36 and DGN-24 Deck end lap to be 2 inch nominal $\pm \frac{1}{2}$ inch over supports, no end lap required for DG2W-36 and DG3W-36.

⁵For allowable shears, q_a , the allowable stress design safety factor for load combinations including earthquake loads of, $\Omega = 3.0$ with welded connections or $\Omega = 2.5$ for pins or screws, has been applied to tabulated values. Plate like buckling governs allowable shears above and to the right of the heavy line and a safety factor of, $\Omega = 2.00$ has been applied.

⁶For factored shears, q_f , the resistance factor for load and resistance factor design for load combinations including earthquake loads of, $\Phi = 0.55$ with welded connections or $\Phi = 0.65$ for pins or screws has been applied to the tabulated values. Plate like buckling governs allowable shears above and to the right of the heavy line and a resistance factor of $\Phi = 0.80$ has been applied.

⁷Allowable shear, q_a , and factored shear, q_f , are for diaphragms subject to load combinations that include earthquake loads. Adjustments may be made for load combinations subject to wind loads per AISI S100-07 Section D5 (see **Table 6 of this report**).

⁸Spacing, s , of arc spot welds, pins or screws at marginal support members such as chords and to collector elements such as struts or ties must have a spacing adequate to transfer the actual required force to the diaphragm. $s = q_n/q_{ult}$ where s is spacing in feet, q_{ult} is actual required shear in plf, q_n is nominal shear strength of the weld or fastener in lbs per **Tables 4 & 5**.

⁹ R is the vertical load span of deck units (L_v) divided by the length (L) of the deck unit $R=L_v/L$

¹⁰Interpolation of shear and flexibility values between adjacent spans is permissible.

¹¹Acceptable mechanically driven pins:

Hilti ESR-2197	Pneutek
X-EDNK-22 THQ12 pin	SDK61075 pin
X-EDN-19 THQ12 pin	SDK63075 pin
X-ENP19 L15	K64062 pin
	K64075 pin
	K66062 pin
	K66075 pin

¹²Acceptable self drilling screws:

ITW Buildex

12-14 I.C.H. Traxx, Traxx, or TEK self drilling screw.

12-24 I.C.H. Traxx, Traxx, or TEK self drilling screw.

¹³DG2W-36 and DG3W-36 Shear values for pins and screws must be adjusted by factor of 0.8 for Nos 22 and 20 gage, 0.9 for Nos 18 and 16 gage.

**TABLE 7-1—ALLOWABLE DIAPHRAGM SHEARS (q_a), (In plf),
FACTORED DIAPHRAGM SHEARS (q_f), (In plf), AND FLEXIBILITY FACTOR (F)**

22 GAGE			DGB-36 AND DGBF-36 INTERLOCK DECK WITH ARC SPOT/SEAM WELDS AND DELTAGRIP™ SIDE SEAM ATTACHMENT (See DeltaGrip™ System Notes)																	
Support Fasteners	Seam Spacing (in)	Span																		
			4		5		6		7		8		9		10		11		12	
7	4	q _a q _f	1835	3029	1764	2911	1713	2826	1674	2762	1457	2331	1151	1842	932	1492	771	1233	647	1036
		F	7.3-0.9R		7.6-0.9R		7.8-0.8R		7.9-0.8R		8-0.7R		8.1-0.7R		8.2-0.6R		8.3-0.6R		8.3-0.5R	
	6	q _a q _f	1587	2618	1491	2460	1422	2346	1370	2260	1330	2194	1151	1842	932	1492	771	1233	647	1036
		F	8.2-1.4R		8.6-1.4R		8.9-1.4R		9.2-1.3R		9.4-1.3R		9.6-1.2R		9.7-1.2R		9.8-1.1R		9.9-1R	
	8	q _a q _f	1432	2363	1357	2240	1243	2051	1212	2000	1138	1878	1125	1842	932	1492	771	1233	647	1036
		F	8.8-1.8R		9.2-1.8R		9.8-1.9R		10-1.8R		0.5-1.8 0.0		10.6-1.7R		11-1.7R		11-1.6R		11.3-1.4R	
	12	q _a q _f	1255	2070	1129	1863	1040	1717	962	1587	900	1485	851	1405	813	1341	771	1233	647	1036
		F	9.6-2.4R		10.4-2.6R		11.1-2.7R		11.7-2.8R		12.1-2.7R		12.6-2.8R		13-2.7R		13.3-2.7R		13.4-2.2R	
	18	q _a q _f	1157	1909	1046	1725	863	1424	806	1330	763	1259	669	1104	649	1070	632	1042	572	944
		F	10.2-2.9R		11-3.1R		12.3-3.7R		12.9-3.6R		13.4-3.5R		14.5-4R		14.8-3.8R		15.1-3.7R		15.8-3.3R	
	24	q _a q _f	1054	1739	943	1555	772	1273	728	1201	626	1033	608	1004	539	889	532	878	481	794
		F	10.8-3.4R		11.7-3.6R		13.2-4.3R		13.7-4.2R		15-4.7R		15.4-4.6R		16.6-4.9R		16.8-4.7R		17.5-4.1R	
	36	q _a q _f	1054	1739	833	1375	680	1123	649	1072	558	920	487	803	484	799	433	714	390	643
		F	10.8-3.4R		12.5-4.3R		14.1-5.2R		14.6-4.9R		16.1-5.5R		17.6-6.2R		17.7-5.7R		19-6.3R		19.7-5.2R	
48	q _a q _f	925	1527	833	1375	680	1123	571	943	489	808	487	803	430	709	383	632	344	568	
	F	11.6-4.2R		12.5-4.3R		14.1-5.2R		15.8-5.9R		17.4-6.6R		17.6-6.2R		19-6.7R		20.5-7.4R		21.1-6R		
60	q _a q _f	925	1527	724	1194	680	1123	571	943	489	808	426	703	375	619	383	632	344	568	
	F	11.6-4.2R		13.5-5.2R		14.1-5.2R		15.8-5.9R		17.4-6.6R		19-7.4R		20.6-8R		20.5-7.4R		21.1-6R		
5	4	q _a q _f	1511	2493	1470	2426	1441	2377	1418	2339	1400	2309	1151	1842	932	1492	771	1233	647	1036
		F	7.5-0.9R		7.8-0.8R		7.9-0.8R		8.1-0.7R		8.2-0.7R		8.3-0.6R		8.3-0.6R		8.4-0.5R		8.4-0.5R	
	6	q _a q _f	1351	2229	1289	2127	1244	2052	1209	1994	1181	1949	1151	1842	932	1492	771	1233	647	1036
		F	8.5-1.4R		8.9-1.4R		9.2-1.3R		9.5-1.3R		9.7-1.2R		9.8-1.1R		10-1.1R		10.1-1R		10.1-0.9R	
	8	q _a q _f	1242	2049	1192	1967	1109	1830	1088	1796	1032	1703	1024	1689	932	1492	771	1233	647	1036
		F	9.2-1.9R		9.6-1.8R		10.2-1.9R		10.4-1.7R		10.9-1.7R		11-1.6R		11.4-1.6R		11.4-1.5R		11.6-1.3R	
	12	q _a q _f	1107	1826	1013	1672	945	1559	893	1473	852	1406	819	1352	787	1299	758	1233	647	1036
		F	10.3-2.6R		11.1-2.7R		11.8-2.8R		12.4-2.8R		12.8-2.8R		13.3-2.7R		13.6-2.7R		14-2.6R		14.1-2.2R	
	18	q _a q _f	1029	1697	944	1557	817	1349	769	1269	731	1206	641	1057	623	1028	608	1004	551	909
		F	11-3.1R		11.8-3.2R		13.3-3.9R		13.9-3.8R		14.3-3.6R		15.6-4.1R		15.8-3.9R		16.1-3.7R		16.8-3.3R	
	24	q _a q _f	942	1555	869	1434	729	1203	691	1140	594	981	580	957	513	847	509	840	460	758
		F	11.8-3.8R		12.7-3.9R		14.4-4.7R		14.8-4.5R		16.3-5R		16.6-4.8R		17.9-5.2R		18.1-4.9R		18.9-4.3R	
	36	q _a q _f	942	1555	782	1290	638	1052	613	1011	526	868	458	756	459	757	410	676	368	608
		F	11.8-3.8R		13.7-4.8R		15.7-5.8R		16-5.4R		17.7-6R		19.4-6.8R		19.3-6.1R		20.8-6.7R		21.7-5.7R	
48	q _a q _f	848	1399	782	1290	638	1052	535	882	457	755	458	756	404	667	360	594	323	533	
	F	12.9-4.8R		13.7-4.8R		15.7-5.8R		17.5-6.6R		19.4-7.4R		19.4-6.8R		21-7.3R		22.7-8R		23.5-6.7R		
60	q _a q _f	848	1399	673	1110	638	1052	535	882	457	755	397	656	349	576	360	594	323	533	
	F	12.9-4.8R		15.1-6R		15.7-5.8R		17.5-6.6R		19.4-7.4R		21.3-8.3R		23.1-8.9R		22.7-8R		23.5-6.7R		
4	4	q _a q _f	1270	2095	1246	2056	1229	2028	1216	2007	1206	1990	1151	1842	932	1492	771	1233	647	1036
		F	7.8-0.8R		8-0.8R		8.1-0.7R		8.2-0.6R		8.3-0.6R		8.4-0.5R		8.5-0.5R		8.5-0.5R		8.6-0.4R	
	6	q _a q _f	1143	1885	1103	1821	1075	1773	1053	1737	1035	1708	1021	1685	932	1492	771	1233	647	1036
		F	8.9-1.4R		9.3-1.3R		9.6-1.2R		9.8-1.2R		10-1.1R		10.1-1R		10.2-1R		10.3-0.9R		10.4-0.8R	
	8	q _a q _f	1049	1731	1021	1685	961	1585	951	1569	909	1501	907	1497	876	1446	771	1233	647	1036
		F	9.8-1.9R		10.1-1.7R		10.8-1.8R		10.9-1.6R		11.4-1.6R		11.4-1.5R		11.8-1.5R		11.8-1.4R		12-1.2R	
	12	q _a q _f	927	1530	861	1421	813	1341	776	1280	747	1233	724	1194	705	1163	688	1135	647	1036
		F	11.1-2.7R		12-2.8R		12.6-2.8R		13.2-2.8R		13.6-2.7R		14.1-2.6R		14.4-2.5R		14.7-2.5R		14.8-2.1R	
	18	q _a q _f	853	1408	796	1313	692	1142	660	1088	635	1048	555	916	546	901	539	889	487	803
		F	12-3.4R		12.9-3.4R		14.6-4.1R		15.1-3.9R		15.4-3.7R		16.8-4.1R		17-3.8R		17.2-3.7R		18.1-3.3R	
	24	q _a q _f	770	1270	724	1195	601	992	581	959	498	822	494	816	437	721	439	725	396	653
		F	13.2-4.3R		14-4.2R		16-5.1R		16.3-4.7R		18-5.3R		18.1-4.9R		19.7-5.4R		19.6-5R		20.6-4.4R	
	36	q _a q _f	770	1270	628	1037	510	841	503	830	430	709	373	615	382	630	340	561	304	502
		F	13.2-4.3R		15.5-5.4R		17.7-6.5R		17.9-5.9R		19.8-6.6R		21.8-7.4R		21.4-6.5R		23.1-7.1R		24.2-6.1R	
48	q _a q _f	670	1105	628	1037	510	841	425	701	362	597	373	615	327	540	290	478	259	427	
	F	14.8-5.7R		15.5-5.4R		17.7-6.5R		19.9-7.4R		22.1-8.3R		21.8-7.4R		23.6-8R		25.6-8.8R		26.6-7.4R		
60	q _a q _f	670	1105	519	856	510	841	425	701	362	597	312	515	273	450	290	478	259	427	
	F	14.8-5.7R		17.4-7.1R		17.7-6.5R		19.9-7.4R		22.1-8.3R		24.4-9.4R		26.5-10.1R		25.6-8.8R		26.6-7.4R		

**TABLE 7-1—ALLOWABLE DIAPHRAGM SHEARS (q_a), (ln plf),
FACTORED DIAPHRAGM SHEARS (q_f), (ln plf), AND FLEXIBILITY FACTOR (F)**

20 GAGE			DGB-36 AND DGBF-36 INTERLOCK DECK WITH ARC SPOT/SEAM WELDS AND DELTAGRIP™ SIDE SEAM ATTACHMENT (See DeltaGrip™ System Notes)																	
Support Fasteners	Seam Spacing (in)	Span	4		5		6		7		8		9		10		11		12	
7	4	q _a q _f	2332	3847	2261	3731	2211	3648	2173	3585	1916	3065	1514	2422	1226	1962	1013	1621	852	1362
		F	5.9-0.6R		6-0.6R		6.1-0.5R		6.2-0.5R		6.3-0.4R		6.4-0.4R		6.4-0.4R		6.4-0.4R		6.5-0.3R	
	6	q _a q _f	2025	3341	1924	3175	1851	3054	1796	2964	1754	2894	1514	2422	1226	1962	1013	1621	852	1362
		F	6.6-1R		6.9-0.9R		7.1-0.9R		7.2-0.9R		7.4-0.8R		7.5-0.8R		7.6-0.7R		7.6-0.7R		7.7-0.6R	
	8	q _a q _f	1825	3011	1751	2890	1618	2670	1590	2624	1503	2480	1493	2422	1226	1962	1013	1621	852	1362
		F	7.1-1.3R		7.4-1.2R		7.8-1.3R		7.9-1.2R		8.3-1.2F 0.0		8.3-1.1R		8.6-1.1R		8.6-1R		8.8-0.9R	
	12	q _a q _f	1587	2618	1445	2384	1344	2218	1269	2093	1211	1998	1160	1914	1114	1837	1013	1621	852	1362
		F	7.9-1.8R		8.5-1.9R		9-2R		9.4-1.9R		9.7-1.9R		10-1.9R		10.2-1.8R		10.5-1.8R		10.6-1.5R	
	18	q _a q _f	1452	2396	1329	2194	1128	1860	1066	1759	1020	1683	897	1480	877	1447	861	1420	781	1289
		F	8.5-2.2R		9.1-2.3R		10.2-2.8R		10.5-2.7R		10.8-2.5R		11.7-2.9R		11.9-2.7R		12-2.6R		12.6-2.3R	
	24	q _a q _f	1308	2157	1207	1992	996	1644	954	1573	823	1358	809	1335	719	1187	717	1184	650	1072
		F	9.1-2.8R		9.7-2.8R		11-3.4R		11.3-3.2R		12.4-3.6R		12.5-3.4R		13.5-3.7R		13.5-3.4R		14.2-3R	
36	q _a q _f	1308	2157	1056	1742	865	1427	841	1387	724	1195	634	1046	640	1057	574	947	519	856	
	F	9.1-2.8R		10.6-3.5R		12-4.2R		12.2-3.9R		13.4-4.3R		14.7-4.9R		14.5-4.3R		15.7-4.8R		16.3-4.1R		
48	q _a q _f	1145	1889	1056	1742	865	1427	728	1201	626	1033	634	1046	561	926	502	829	453	747	
	F	10-3.6R		10.6-3.5R		12-4.2R		13.4-4.8R		14.7-5.4R		14.7-4.9R		15.8-5.3R		17.1-5.8R		17.7-4.8R		
60	q _a q _f	1145	1889	898	1482	865	1427	728	1201	626	1033	546	901	483	796	502	829	453	747	
	F	10-3.6R		11.7-4.5R		12-4.2R		13.4-4.8R		14.7-5.4R		16.2-6R		17.5-6.5R		17.1-5.8R		17.7-4.8R		
5	4	q _a q _f	1884	3109	1847	3047	1820	3002	1799	2968	1782	2941	1514	2422	1226	1962	1013	1621	852	1362
		F	6-0.6R		6.1-0.5R		6.2-0.5R		6.3-0.4R		6.4-0.4R		6.4-0.4R		6.5-0.3R		6.5-0.3R		6.5-0.3R	
	6	q _a q _f	1699	2803	1637	2702	1592	2627	1557	2569	1530	2524	1507	2422	1226	1962	1013	1621	852	1362
		F	6.8-0.9R		7.1-0.9R		7.3-0.8R		7.4-0.8R		7.5-0.7R		7.6-0.7R		7.7-0.7R		7.8-0.6R		7.8-0.5R	
	8	q _a q _f	1564	2581	1518	2505	1426	2353	1409	2325	1345	2220	1340	2211	1226	1962	1013	1621	852	1362
		F	7.5-1.3R		7.7-1.2R		8.1-1.2R		8.2-1.1R		8.5-1.1R		8.5-1R		8.8-1R		8.8-0.9R		9-0.8R	
	12	q _a q _f	1390	2293	1288	2124	1212	2000	1155	1906	1110	1831	1074	1772	1044	1723	1013	1621	852	1362
		F	8.4-1.9R		9-2R		9.5-2R		9.8-1.9R		10.2-1.9R		10.4-1.8R		10.7-1.7R		10.9-1.7R		11-1.4R	
	18	q _a q _f	1285	2120	1194	1970	1039	1715	1001	1651	971	1602	863	1424	846	1397	833	1374	756	1247
		F	9.1-2.4R		9.7-2.4R		10.9-2.9R		11.2-2.7R		11.4-2.5R		12.4-2.9R		12.6-2.7R		12.7-2.5R		13.3-2.3R	
	24	q _a q _f	1166	1925	1092	1802	943	1557	910	1502	785	1295	775	1279	689	1136	690	1138	625	1031
		F	9.9-3.1R		10.5-3R		11.9-3.6R		12.1-3.3R		13.3-3.7R		13.4-3.4R		14.5-3.7R		14.4-3.4R		15.1-3.1R	
	36	q _a q _f	1166	1925	980	1617	814	1343	797	1316	686	1132	600	990	610	1006	546	901	493	814
		F	9.9-3.1R		11.6-3.8R		13.2-4.6R		13.3-4.1R		14.6-4.6R		16-5.2R		15.7-4.5R		17-5R		17.7-4.3R	
	48	q _a q _f	1034	1706	980	1617	814	1343	685	1130	588	970	600	990	531	876	474	783	427	705
		F	11.1-4.1R		11.6-3.8R		13.2-4.6R		14.8-5.3R		16.3-5.9R		16-5.2R		17.4-5.6R		18.8-6.2R		19.5-5.2R	
	60	q _a q _f	1034	1706	837	1381	814	1343	685	1130	588	970	512	845	452	746	474	783	427	705
		F	11.1-4.1R		13-5.1R		13.2-4.6R		14.8-5.3R		16.3-5.9R		18-6.6R		19.5-7.2R		18.8-6.2R		19.5-5.2R	
4	4	q _a q _f	1575	2598	1555	2565	1540	2541	1528	2522	1520	2507	1513	2422	1226	1962	1013	1621	852	1362
		F	6.1-0.5R		6.3-0.5R		6.4-0.4R		6.4-0.4R		6.5-0.3R		6.5-0.3R		6.6-0.3R		6.6-0.3R		6.6-0.2R	
	6	q _a q _f	1434	2366	1397	2305	1369	2259	1348	2225	1332	2198	1319	2176	1226	1962	1013	1621	852	1362
		F	7.1-0.9R		7.3-0.8R		7.5-0.8R		7.6-0.7R		7.7-0.7R		7.8-0.6R		7.9-0.6R		7.9-0.5R		8-0.5R	
	8	q _a q _f	1323	2183	1300	2145	1234	2036	1228	2027	1182	1951	1184	1953	1149	1895	1013	1621	852	1362
		F	7.8-1.3R		8-1.1R		8.5-1.2R		8.5-1R		8.8-1R		8.8-0.9R		9.1-0.9R		9-0.8R		9.2-0.7R	
	12	q _a q _f	1170	1930	1099	1814	1047	1728	1008	1663	977	1612	952	1570	931	1537	914	1508	852	1362
		F	9-2R		9.6-2R		10-1.9R		10.4-1.8R		10.7-1.8R		10.9-1.7R		11.1-1.6R		11.3-1.6R		11.4-1.3R	
	18	q _a q _f	1073	1770	1014	1672	887	1464	865	1428	849	1401	761	1256	755	1246	750	1237	680	1122
		F	9.9-2.5R		10.4-2.4R		11.8-2.9R		12-2.7R		12.2-2.5R		13.3-2.8R		13.3-2.6R		13.4-2.4R		14.1-2.2R	
	24	q _a q _f	960	1584	917	1513	793	1308	779	1286	671	1107	674	1112	597	986	606	1001	548	905
		F	11-3.4R		11.5-3.2R		13.1-3.8R		13.1-3.4R		14.5-3.8R		14.4-3.4R		15.6-3.7R		15.5-3.4R		16.3-3.1R	
	36	q _a q _f	960	1584	809	1335	661	1091	667	1100	572	944	498	822	518	855	463	764	417	688
		F	11-3.4R		12.9-4.2R		14.8-5.1R		14.6-4.4R		16.2-4.9R		17.8-5.5R		17.2-4.7R		18.6-5.1R		19.5-4.5R	
	48	q _a q _f	829	1369	809	1335	661	1091	554	914	473	781	498	822	440	725	391	646	351	580
		F	12.6-4.7R		12.9-4.2R		14.8-5.1R		16.6-5.8R		18.5-6.5R		17.8-5.5R		19.3-6R		20.9-6.6R		21.9-5.6R	
	60	q _a q _f	829	1369	654	1079	661	1091	554	914	473	781	411	678	361	595	391	646	351	580
		F	12.6-4.7R		14.9-5.9R		14.8-5.1R		16.6-5.8R		18.5-6.5R		20.3-7.3R		22.1-7.9R		20.9-6.6R		21.9-5.6R	

**TABLE 7-1—ALLOWABLE DIAPHRAGM SHEARS (q_a), (ln plf),
FACTORED DIAPHRAGM SHEARS (q_f), (ln plf), AND FLEXIBILITY FACTOR (F)**

18 GAGE			DGB-36 AND DGBF-36 INTERLOCK DECK WITH ARC SPOT/SEAM WELDS AND DELTAGRIP™ SIDE SEAM ATTACHMENT (See DeltaGrip™ System Notes)																	
Support Fasteners	Seam Spacing (in)	Span																		
			4		5		6		7		8		9		10		11		12	
7	4	q _a q _f	3345	5519	3283	5417	3238	5343	3204	5287	2932	4692	2317	3707	1877	3003	1551	2481	1303	2085
		F	4.1-0.3R		4.2-0.3R		4.2-0.2R		4.3-0.2R		4.3-0.2R		4.3-0.2R		4.3-0.2R		4.4-0.1R		4.4-0.1R	
	6	q _a q _f	2951	4869	2849	4700	2775	4578	2719	4486	2676	4415	2317	3707	1877	3003	1551	2481	1303	2085
		F	4.6-0.5R		4.8-0.5R		4.9-0.4R		4.9-0.4R		5.0-4R		5.1-0.3R		5.1-0.3R		5.1-0.3R		5.1-0.3R	
	8	q _a q _f	2667	4400	2605	4298	2441	4028	2425	4002	2315	3820	2316	3707	1877	3003	1551	2481	1303	2085
		F	5.1-0.7R		5.2-0.6R		5.4-0.6R		5.4-0.6R		5.6-0.6R 0.0		5.6-0.5R		5.8-0.5R		5.7-0.5R		5.9-0.4R	
	12	q _a q _f	2304	3801	2138	3528	2019	3332	1931	3186	1862	3072	1807	2981	1762	2907	1551	2481	1303	2085
		F	5.8-1.1R		6.1-1.1R		6.3-1.1R		6.5-1R		6.7-1R		6.8-1R		7-0.9R		7.1-0.9R		7.1-0.8R	
	18	q _a q _f	2088	3445	1952	3221	1684	2778	1635	2698	1598	2637	1434	2366	1420	2343	1409	2324	1283	2085
		F	6.2-1.4R		6.5-1.4R		7.3-1.7R		7.5-1.5R		7.6-1.4R		8.2-1.6R		8.2-1.4R		8.2-1.3R		8.7-1.3R	
	24	q _a q _f	1848	3049	1751	2888	1499	2474	1473	2431	1276	2106	1278	2109	1140	1882	1154	1905	1050	1732
		F	6.9-1.9R		7.2-1.8R		8.1-2.1R		8.1-1.9R		8.9-2.2R		8.8-1.9R		9.5-2.1R		9.4-1.9R		9.9-1.7R	
	36	q _a q _f	1848	3049	1533	2529	1270	2095	1274	2101	1102	1818	968	1597	1001	1651	900	1485	817	1347
		F	6.9-1.9R		8-2.4R		9.1-2.9R		9-2.5R		9.8-2.8R		10.8-3.1R		10.4-2.6R		11.2-2.9R		11.8-2.6R	
	48	q _a q _f	1583	2611	1533	2529	1270	2095	1074	1772	927	1529	968	1597	861	1420	773	1276	700	1155
		F	7.9-2.7R		8-2.4R		9.1-2.9R		10.1-3.3R		11.2-3.7R		10.8-3.1R		11.6-3.4R		12.5-3.7R		13.1-3.2R	
	60	q _a q _f	1583	2611	1265	2087	1270	2095	1074	1772	927	1529	812	1340	721	1189	773	1276	700	1155
		F	7.9-2.7R		9.2-3.4R		9.1-2.9R		10.1-3.3R		11.2-3.7R		12.2-4.2R		13.2-4.5R		12.5-3.7R		13.1-3.2R	
5	4	q _a q _f	2624	4330	2594	4281	2573	4245	2556	4218	2543	4197	2317	3707	1877	3003	1551	2481	1303	2085
		F	4.2-0.3R		4.2-0.2R		4.3-0.2R		4.3-0.2R		4.3-0.2R		4.4-0.2R		4.4-0.1R		4.4-0.1R		4.4-0.1R	
	6	q _a q _f	2408	3974	2352	3881	2311	3813	2279	3761	2254	3719	2234	3686	1877	3003	1551	2481	1303	2085
		F	4.8-0.5R		4.9-0.4R		5-0.4R		5-0.4R		5.1-0.3R		5.1-0.3R		5.2-0.3R		5.2-0.3R		5.2-0.2R	
	8	q _a q _f	2234	3686	2200	3630	2096	3459	2089	3447	2016	3326	2019	3331	1877	3003	1551	2481	1303	2085
		F	5.2-0.7R		5.3-0.6R		5.6-0.6R		5.6-0.5R		5.8-0.5R		5.7-0.5R		5.9-0.5R		5.8-0.4R		6-0.4R	
	12	q _a q _f	1988	3279	1875	3094	1792	2958	1729	2853	1679	2770	1639	2704	1605	2649	1551	2481	1303	2085
		F	6-1.1R		6.3-1.1R		6.6-1R		6.8-1R		6.9-0.9R		7-0.9R		7.2-0.8R		7.2-0.8R		7.3-0.7R	
	18	q _a q _f	1828	3016	1734	2860	1525	2516	1490	2459	1464	2416	1335	2203	1329	2192	1323	2183	1232	2033
		F	6.6-1.5R		6.9-1.4R		7.7-1.7R		7.8-1.5R		7.9-1.4R		8.5-1.5R		8.5-1.4R		8.5-1.3R		9-1.2R	
	24	q _a q _f	1639	2705	1572	2593	1369	2258	1355	2235	1215	2004	1221	2014	1100	1816	1118	1845	1016	1677
		F	7.4-2R		7.6-1.8R		8.6-2.2R		8.6-1.9R		9.4-2.2R		9.3-1.9R		10-2.1R		9.9-1.8R		10.4-1.7R	
	36	q _a q _f	1639	2705	1388	2291	1197	1975	1207	1992	1052	1735	923	1524	961	1585	864	1426	783	1293
		F	7.4-2R		8.6-2.5R		9.8-3.1R		9.6-2.5R		10.6-2.8R		11.6-3.2R		11.1-2.6R		12-2.9R		12.6-2.6R	
	48	q _a q _f	1418	2339	1388	2291	1197	1975	1017	1678	877	1447	923	1524	821	1354	737	1216	667	1100
		F	8.7-3R		8.6-2.5R		9.8-3.1R		11-3.5R		12.2-3.9R		11.6-3.2R		12.5-3.5R		13.5-3.8R		14.2-3.4R	
	60	q _a q _f	1418	2339	1183	1952	1197	1975	1017	1678	877	1447	768	1267	681	1124	737	1216	667	1100
		F	8.7-3R		10.2-3.8R		9.8-3.1R		11-3.5R		12.2-3.9R		13.4-4.4R		14.5-4.8R		13.5-3.8R		14.2-3.4R	
4	4	q _a q _f	2172	3583	2157	3558	2146	3540	2138	3527	2131	3516	2126	3508	1877	3003	1551	2481	1303	2085
		F	4.2-0.2R		4.3-0.2R		4.3-0.2R		4.4-0.2R		4.4-0.1R		4.4-0.1R		4.4-0.1R		4.4-0.1R		4.4-0.1R	
	6	q _a q _f	2019	3332	1988	3280	1965	3242	1947	3213	1933	3190	1922	3172	1877	3003	1551	2481	1303	2085
		F	4.9-0.4R		5-0.4R		5.1-0.3R		5.1-0.3R		5.2-0.3R		5.2-0.3R		5.2-0.2R		5.2-0.2R		5.3-0.2R	
	8	q _a q _f	1885	3111	1873	3090	1802	2974	1805	2978	1754	2895	1762	2907	1723	2843	1551	2481	1303	2085
		F	5.4-0.6R		5.4-0.5R		5.7-0.5R		5.7-0.5R		5.9-0.5R		5.8-0.4R		6-0.4R		5.9-0.4R		6-0.3R	
	12	q _a q _f	1680	2773	1607	2651	1552	2561	1511	2493	1478	2439	1452	2395	1430	2359	1412	2329	1303	2085
		F	6.3-1.1R		6.6-1R		6.8-1R		7-0.9R		7.2-0.8R		7.3-0.8R		7.4-0.8R		7.4-0.7R		7.5-0.6R	
	18	q _a q _f	1539	2540	1482	2446	1314	2169	1300	2145	1289	2126	1182	1950	1185	1955	1187	1958	1110	1831
		F	7-1.5R		7.3-1.3R		8.2-1.6R		8.2-1.4R		8.3-1.3R		9-1.4R		8.9-1.3R		8.9-1.2R		9.4-1.1R	
	24	q _a q _f	1364	2251	1335	2202	1169	1929	1175	1938	1058	1746	1076	1775	981	1618	1009	1664	917	1513
		F	8.1-2.1R		8.2-1.8R		9.3-2.2R		9.1-1.9R		10.1-2.1R		9.8-1.8R		10.6-2R		10.4-1.7R		11-1.6R	
	36	q _a q _f	1364	2251	1161	1916	1004	1656	1035	1708	902	1488	790	1304	841	1387	755	1246	684	1128
		F	8.1-2.1R		9.4-2.7R		10.8-3.2R		10.4-2.6R		11.5-2.9R		12.6-3.2R		11.9-2.6R		12.8-2.9R		13.6-2.6R	
	48	q _a q _f	1149	1896	1161	1916	1004	1656	846	1396	727	1200	790	1304	701	1157	628	1036	567	936
		F	9.7-3.4R		9.4-2.7R		10.8-3.2R		12.2-3.7R		13.5-4.2R		12.6-3.2R		13.7-3.5R		14.8-3.9R		15.5-3.5R	
	60	q _a q _f	1149	1896	946	1560	1004	1656	846	1396	727	1200	635	1048	561	926	628	1036	567	936
		F	9.7-3.4R		11.5-4.3R		10.8-3.2R		12.2-3.7R		13.5-4.2R		14.9-4.7R		16.2-5.1R		14.8-3.9R		15.5-3.5R	

**TABLE 7-1—ALLOWABLE DIAPHRAGM SHEARS (qa), (ln plf),
FACTORED DIAPHRAGM SHEARS (qf), (ln plf), AND FLEXIBILITY FACTOR (F)**

16 GAGE			DGB-36 AND DGBF-36 INTERLOCK DECK WITH ARC SPOT/SEAM WELDS AND DELTAGRIP™ SIDE SEAM ATTACHMENT (See DeltaGrip™ System Notes)																	
Support Fasteners	Seam Spacing (in)	Span																		
			4		5		6		7		8		9		10		11		12	
7	4	q _a q _r	4369	7209	4317	7123	4280	7061	4251	7015	4230	6979	4212	6950	3546	5674	2931	4690	2463	3941
		F	3.1-0.2R		3.1-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R	
	6	q _a q _r	3923	6473	3827	6315	3758	6201	3706	6115	3665	6047	3632	5993	3546	5674	2931	4690	2463	3941
		F	3.5-0.3R		3.6-0.3R		3.6-0.2R		3.7-0.2R		3.7-0.2R		3.7-0.2R		3.7-0.2R		3.8-0.2R		3.8-0.1R	
	8	q _a q _r	3572	5894	3528	5821	3345	5520	3344	5518	3218	5309	3231	5332	3136	5174	2931	4690	2463	3941
		F	3.8-0.4R		3.9-0.4R		4-0.4R		4-0.3R		4-0.3R		4-0.3R		4-0.3R		4-0.3R		4-0.3R	
	12	q _a q _r	3090	5099	2910	4802	2781	4589	2684	4429	2609	4304	2548	4205	2499	4123	2458	4056	2423	3941
		F	4.4-0.7R		4.6-0.7R		4.7-0.6R		4.8-0.6R		4.9-0.6R		5-0.5R		5.1-0.5R		5.1-0.5R		5.2-0.4R	
	18	q _a q _r	2787	4599	2649	4371	2303	3800	2263	3734	2233	3684	2025	3342	2024	3340	2023	3338	1878	3098
		F	4.8-0.9R		5-0.9R		5.6-1R		5.6-0.9R		5.6-0.8R		6.1-0.9R		6-0.8R		6-0.8R		6.3-0.7R	
	24	q _a q _r	2438	4022	2357	3890	2031	3350	2028	3347	1808	2983	1831	3022	1650	2723	1689	2787	1539	2539
		F	5.4-1.4R		5.5-1.2R		6.2-1.4R		6.1-1.2R		6.7-1.4R		6.6-1.2R		7.1-1.3R		6.9-1.1R		7.3-1.1R	
36	q _a q _r	2438	4022	2034	3356	1732	2857	1777	2933	1544	2548	1360	2244	1431	2362	1291	2130	1174	1937	
	F	5.4-1.4R		6.3-1.7R		7.1-2R		6.9-1.6R		7.6-1.8R		8.2-2.1R		7.9-1.7R		8.4-1.8R		8.9-1.7R		
48	q _a q _r	2039	3364	2034	3356	1732	2857	1468	2422	1270	2096	1360	2244	1213	2001	1092	1802	992	1636	
	F	6.4-2.1R		6.3-1.7R		7.1-2R		7.9-2.3R		8.8-2.6R		8.2-2.1R		8.9-2.3R		9.6-2.5R		10.1-2.2R		
60	q _a q _r	2039	3364	1663	2744	1732	2857	1468	2422	1270	2096	1117	1843	994	1640	1092	1802	992	1636	
	F	6.4-2.1R		7.5-2.6R		7.1-2R		7.9-2.3R		8.8-2.6R		9.6-2.9R		10.4-3.2R		9.6-2.5R		10.1-2.2R		
5	4	q _a q _f	3353	5532	3330	5494	3313	5466	3300	5446	3291	5430	3283	5417	3276	5406	2931	4690	2463	3941
		F	3.1-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.3-0.1R	
	6	q _a q _f	3127	5160	3079	5080	3044	5022	3017	4977	2995	4942	2978	4914	2964	4890	2931	4690	2463	3941
		F	3.6-0.3R		3.6-0.2R		3.7-0.2R		3.7-0.2R		3.7-0.2R		3.8-0.2R		3.8-0.1R		3.8-0.1R		3.8-0.1R	
	8	q _a q _f	2928	4832	2908	4798	2801	4621	2803	4625	2726	4499	2737	4516	2678	4419	2692	4441	2463	3941
		F	3.9-0.4R		3.9-0.3R		4.1-0.3R		4.1-0.3R		4.2-0.3R		4.2-0.2R		4.3-0.2R		4.2-0.2R		4.3-0.2R	
	12	q _a q _f	2623	4328	2509	4140	2424	4000	2360	3893	2308	3809	2267	3741	2233	3684	2204	3637	2180	3597
		F	4.6-0.7R		4.7-0.6R		4.9-0.6R		5-0.6R		5.1-0.5R		5.1-0.5R		5.2-0.5R		5.2-0.4R		5.3-0.4R	
	18	q _a q _f	2411	3979	2321	3830	2064	3405	2039	3364	2020	3333	1855	3061	1858	3065	1860	3069	1741	2872
		F	5.1-0.9R		5.2-0.8R		5.8-1R		5.8-0.9R		5.8-0.8R		6.3-0.9R		6.2-0.8R		6.2-0.7R		6.5-0.7R	
	24	q _a q _f	2147	3543	2098	3461	1842	3039	1848	3049	1667	2750	1692	2791	1554	2564	1586	2617	1476	2435
		F	5.8-1.4R		5.8-1.2R		6.5-1.4R		6.4-1.2R		7-1.3R		6.9-1.1R		7.4-1.2R		7.2-1.1R		7.6-1R	
36	q _a q _f	2147	3543	1834	3026	1590	2623	1634	2696	1464	2416	1305	2154	1382	2281	1246	2057	1133	1870	
	F	5.8-1.4R		6.7-1.7R		7.6-2.1R		7.3-1.6R		8-1.8R		8.8-2.1R		8.3-1.6R		8.9-1.8R		9.4-1.7R		
48	q _a q _f	1822	3006	1834	3026	1590	2623	1398	2306	1209	1995	1305	2154	1164	1920	1047	1728	951	1569	
	F	7-2.3R		6.7-1.7R		7.6-2.1R		8.6-2.4R		9.5-2.7R		8.8-2.1R		9.5-2.2R		10.2-2.5R		10.8-2.2R		
60	q _a q _f	1822	3006	1526	2519	1590	2623	1398	2306	1209	1995	1062	1753	945	1559	1047	1728	951	1569	
	F	7-2.3R		8.2-2.9R		7.6-2.1R		8.6-2.4R		9.5-2.7R		10.4-3R		11.3-3.3R		10.2-2.5R		10.8-2.2R		
4	4	q _a q _f	2753	4542	2742	4524	2734	4511	2728	4501	2723	4494	2720	4488	2717	4483	2714	4479	2463	3941
		F	3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.3-0.1R		3.3-0.1R		3.3+0R	
	6	q _a q _f	2602	4294	2577	4252	2558	4221	2544	4198	2533	4180	2525	4165	2517	4153	2511	4143	2463	3941
		F	3.6-0.2R		3.7-0.2R		3.7-0.2R		3.7-0.2R		3.8-0.1R		3.8-0.1R		3.8-0.1R		3.8-0.1R		3.8-0.1R	
	8	q _a q _f	2458	4056	2455	4051	2386	3937	2395	3951	2344	3868	2357	3888	2317	3824	2331	3845	2299	3793
		F	4-0.4R		4-0.3R		4.2-0.3R		4.1-0.2R		4.3-0.2R		4.2-0.2R		4.3-0.2R		4.3-0.2R		4.4-0.2R	
	12	q _a q _f	2218	3659	2146	3541	2093	3454	2053	3388	2021	3335	1996	3293	1974	3258	1957	3229	1942	3204
		F	4.7-0.6R		4.9-0.6R		5-0.5R		5.1-0.5R		5.2-0.5R		5.2-0.4R		5.3-0.4R		5.3-0.4R		5.4-0.3R	
	18	q _a q _f	2038	3363	1989	3281	1786	2947	1782	2940	1779	2935	1646	2715	1657	2734	1667	2750	1568	2588
		F	5.3-0.9R		5.4-0.8R		6.1-1R		6-0.8R		6-0.7R		6.5-0.8R		6.4-0.7R		6.3-0.6R		6.7-0.6R	
	24	q _a q _f	1801	2971	1792	2957	1586	2617	1612	2659	1463	2413	1499	2473	1383	2282	1422	2346	1328	2192
		F	6.2-1.4R		6.1-1.1R		6.9-1.4R		6.7-1.1R		7.4-1.2R		7.2-1R		7.7-1.1R		7.5-1R		7.9-0.9R	
36	q _a q _f	1801	2971	1549	2555	1349	2225	1415	2334	1273	2100	1142	1884	1226	2022	1113	1836	1010	1667	
	F	6.2-1.4R		7.2-1.8R		8.3-2.1R		7.7-1.6R		8.5-1.8R		9.4-2R		8.7-1.5R		9.4-1.7R		9.9-1.6R		
48	q _a q _f	1491	2460	1549	2555	1349	2225	1188	1959	1025	1691	1142	1884	1016	1677	914	1507	828	1366	
	F	7.8-2.5R		7.2-1.8R		8.3-2.1R		9.3-2.4R		10.3-2.8R		9.4-2R		10.1-2.2R		11-2.4R		11.6-2.2R		
60	q _a q _f	1491	2460	1252	2065	1349	2225	1188	1959	1025	1691	899	1483	797	1316	914	1507	828	1366	
	F	7.8-2.5R		9.2-3.1R		8.3-2.1R		9.3-2.4R		10.3-2.8R		11.3-3.1R		12.3-3.4R		11-2.4R		11.6-2.2R		

**TABLE 7-2—ALLOWABLE DIAPHRAGM SHEARS (qa), (ln plf), FACTORED
DIAPHRAGM SHEARS (qf), (in plf), AND FLEXIBILITY FACTOR (F)**

22 ga.			DGB-36 AND DGBF-36 INTERLOCK DECK WITH HILTI X-EDNK22 PINS AND DELTAGRIP™ SIDE SEAM ATTACHMENT (See DelatGrip™ system notes)																	
Support Fasteners	Seam Spacing (in)	Span																		
			4		5		6		7		8		9		10		11		12	
9	4	q _a q _f	1506	2447	1479	2404	1459	2371	1444	2347	1432	2327	1151	1842	932	1492	771	1233	647	1036
		F	6.9-0.9R		7.2-0.9R		7.4-0.9R		7.6-0.9R		7.7-0.8R		7.8-0.8R		7.9-0.8R		8-0.7R		8.1-0.6R	
	8	q _a q _f	1251	2033	1218	1980	1147	1863	1135	1845	1086	1765	1084	1761	932	1492	771	1233	647	1036
		F	8-1.7R		8.4-1.7R		9-1.8R		9.2-1.8R		9.7-1.8R		9.9-1.8R		10.2-1.8R		10.3-1.7R		10.5-1.5R	
	12	q _a q _f	1109	1802	1030	1674	973	1581	929	1510	895	1454	867	1409	845	1373	771	1233	647	1036
		F	8.6-2.1R		9.3-2.4R		9.9-2.5R		10.5-2.6R		10.9-2.6R		11.4-2.7R		11.8-2.7R		12.1-2.7R		12.2-2.2R	
	18	q _a q _f	1022	1661	954	1550	831	1350	802	1304	778	1265	682	1108	671	1090	662	1075	599	974
		F	8.9-2.4R		9.7-2.7R		10.8-3.2R		11.3-3.2R		11.8-3.2R		12.8-3.6R		13.1-3.6R		13.5-3.5R		14-3R	
	24	q _a q _f	924	1501	869	1412	738	1200	714	1161	614	998	609	990	539	877	542	881	490	796
		F	9.3-2.8R		10.1-3R		11.3-3.6R		11.8-3.7R		12.9-4.1R		13.3-4.1R		14.3-4.4R		14.6-4.3R		15.1-3.6R	
	36	q _a q _f	924	1501	772	1255	629	1022	620	1008	532	864	463	753	474	770	423	687	380	618
		F	9.3-2.8R		10.6-3.5R		11.9-4.2R		12.4-4.2R		13.6-4.6R		14.8-5.2R		15-5R		16.1-5.4R		16.6-4.4R	
	60	q _a q _f	813	1321	641	1041	629	1022	527	856	450	731	390	634	342	557	363	590	326	529
		F	9.8-3.2R		11.2-4R		11.9-4.2R		13.1-4.8R		14.4-5.3R		15.6-6R		16.8-6.4R		17-6.2R		17.5-4.9R	
7	4	q _a q _f	1218	1979	1206	1959	1197	1945	1191	1935	1185	1926	1151	1842	932	1492	771	1233	647	1036
		F	7.4-0.9R		7.7-0.9R		7.8-0.8R		8-0.8R		8.1-0.7R		8.2-0.7R		8.3-0.6R		8.3-0.6R		8.4-0.5R	
	8	q _a q _f	1007	1637	998	1622	951	1545	952	1547	919	1493	924	1501	899	1460	771	1233	647	1036
		F	9-1.8R		9.4-1.8R		10-1.9R		10.2-1.7R		10.7-1.8R		10.8-1.7R		11.1-1.7R		11.2-1.6R		11.4-1.4R	
	12	q _a q _f	873	1419	827	1344	794	1290	769	1249	749	1217	734	1192	721	1171	710	1154	647	1036
		F	9.9-2.5R		10.7-2.7R		11.4-2.8R		12-2.8R		12.5-2.8R		12.9-2.8R		13.3-2.7R		13.6-2.7R		13.7-2.2R	
	18	q _a q _f	787	1279	753	1223	657	1067	648	1053	642	1043	583	948	584	950	585	951	544	884
		F	10.5-3R		11.4-3.1R		12.8-3.8R		13.3-3.7R		13.8-3.6R		15-4R		15.3-3.8R		15.5-3.7R		16.3-3.3R	
	24	q _a q _f	686	1114	668	1086	577	938	580	942	513	834	524	852	467	760	481	781	437	710
		F	11.3-3.6R		12.1-3.7R		13.7-4.5R		14.2-4.3R		15.6-4.9R		15.9-4.7R		17.2-5.1R		17.4-4.8R		18.1-4.2R	
	36	q _a q _f	686	1114	574	932	480	780	499	811	431	700	378	615	402	653	361	587	328	532
		F	11.3-3.6R		13-4.5R		14.8-5.4R		15.3-5.1R		16.8-5.8R		18.4-6.5R		18.4-5.9R		19.8-6.5R		20.6-5.4R	
	60	q _a q _f	568	923	453	736	480	780	405	658	349	567	305	496	270	439	302	490	273	443
		F	12.2-4.5R		14.2-5.6R		14.8-5.4R		16.5-6.2R		18.3-6.9R		20-7.8R		21.7-8.4R		21.4-7.7R		22.2-6.3R	
5	4	q _a q _f	927	1506	922	1498	918	1492	915	1487	913	1484	911	1481	910	1479	771	1233	647	1036
		F	7.6-0.9R		7.8-0.8R		8-0.7R		8.1-0.7R		8.2-0.6R		8.3-0.6R		8.4-0.6R		8.4-0.5R		8.5-0.5R	
	8	q _a q _f	818	1330	815	1324	788	1280	789	1282	770	1251	773	1256	758	1232	762	1233	647	1036
		F	9.5-1.9R		9.8-1.8R		10.4-1.8R		10.6-1.7R		11.1-1.7R		11.1-1.6R		11.5-1.6R		11.5-1.4R		11.8-1.3R	
	12	q _a q _f	736	1196	707	1149	686	1115	670	1089	657	1068	647	1051	638	1037	631	1025	625	1015
		F	10.6-2.7R		11.4-2.8R		12.1-2.8R		12.7-2.8R		13.1-2.7R		13.6-2.7R		13.9-2.6R		14.2-2.6R		14.4-2.2R	
	18	q _a q _f	677	1100	655	1065	585	951	580	943	577	937	531	863	533	866	535	869	502	815
		F	11.3-3.2R		12.2-3.3R		13.8-4R		14.3-3.8R		14.7-3.7R		16-4.1R		16.3-3.9R		16.5-3.7R		17.3-3.3R	
	24	q _a q _f	602	978	592	962	522	848	526	855	476	773	484	787	446	725	456	741	425	691
		F	12.3-4R		13.1-4R		14.9-4.8R		15.4-4.6R		16.9-5.1R		17.2-4.8R		18.6-5.3R		18.6-4.9R		19.5-4.3R	
	36	q _a q _f	602	978	516	839	448	729	464	754	414	673	363	590	388	631	349	567	316	514
		F	12.3-4R		14.4-5R		16.4-6R		16.7-5.6R		18.5-6.2R		20.2-7R		20.1-6.3R		21.7-6.9R		22.6-5.9R	
	60	q _a q _f	507	824	426	692	448	729	386	627	332	540	290	472	257	418	289	470	262	425
		F	13.6-5.1R		15.9-6.4R		16.4-6R		18.4-6.9R		20.4-7.7R		22.4-8.7R		24.3-9.4R		23.7-8.3R		24.6-6.9R	
4	4	q _a q _f	759	1233	757	1230	755	1227	754	1225	753	1223	752	1222	751	1221	751	1220	647	1036
		F	7.8-0.8R		8-0.7R		8.2-0.7R		8.3-0.6R		8.4-0.6R		8.5-0.5R		8.5-0.5R		8.6-0.4R		8.6-0.4R	
	8	q _a q _f	685	1113	685	1114	668	1086	671	1090	658	1070	662	1076	652	1060	656	1066	647	1036
		F	10-1.9R		10.3-1.7R		11-1.8R		11-1.6R		11.5-1.6R		11.5-1.4R		11.9-1.4R		11.9-1.3R		12.2-1.2R	
	12	q _a q _f	622	1010	604	982	591	961	581	945	574	932	567	922	562	913	558	906	554	900
		F	11.4-2.8R		12.3-2.8R		12.9-2.8R		13.5-2.8R		13.9-2.7R		14.3-2.6R		14.7-2.5R		15-2.4R		15.1-2.1R	
	18	q _a q _f	573	930	561	912	507	824	507	824	507	824	471	765	475	772	478	777	451	733
		F	12.4-3.5R		13.2-3.5R		15.1-4.2R		15.5-3.9R		15.8-3.7R		17.3-4.1R		17.4-3.8R		17.6-3.6R		18.6-3.3R	
	24	q _a q _f	506	822	507	823	450	732	459	746	418	680	430	698	398	646	409	665	383	623
		F	13.7-4.5R		14.5-4.4R		16.6-5.2R		16.9-4.8R		18.6-5.4R		18.7-5R		20.3-5.4R		20.2-5R		21.2-4.5R	
	36	q _a q _f	506	822	437	710	382	621	403	655	364	591	319	518	348	566	312	508	283	460
		F	13.7-4.5R		16.1-5.6R		18.5-6.7R		18.6-6R		20.6-6.7R		22.7-7.6R		22.2-6.6R		24-7.2R		25.1-6.3R	
	60	q _a q _f	417	677	346	562	382	621	328	534	282	458	246	399	217	352	253	411	228	371
		F	15.5-6R		18.4-7.5R		18.5-6.7R		20.9-7.7R		23.2-8.7R		25.6-9.7R		27.8-10.5R		26.7-9R		27.8-7.6R	

**TABLE 7-2—ALLOWABLE DIAPHRAGM SHEARS (qa), (In plf), FACTORED
DIAPHRAGM SHEARS (qf), (in plf), AND FLEXIBILITY FACTOR (F)**

20 ga.			DGB-36 AND DGBF-36 INTERLOCK DECK WITH HILTI X-EDNK22 PINS AND DELTAGRIP™ SIDE SEAM ATTACHMENT (See DelatGrip™ system notes)																	
Support Fasteners	Seam Spacing (in)	Span																		
			4		5		6		7		8		9		10		11		12	
9	4	q _a q _f	1869	3037	1845	2999	1828	2971	1815	2949	1805	2932	1514	2422	1226	1962	1013	1621	852	1362
		F	5.6-0.6R		5.8-0.6R		5.9-0.6R		6-0.5R		6.1-0.5R		6.2-0.5R		6.2-0.5R		6.3-0.4R		6.3-0.4R	
	8	q _a q _f	1578	2564	1550	2519	1473	2393	1466	2382	1411	2294	1413	2296	1226	1962	1013	1621	852	1362
		F	6.6-1.3R		6.9-1.2R		7.3-1.3R		7.4-1.2R		7.8-1.3R		7.9-1.2R		8.1-1.2R		8.2-1.1R		8.3-1R	
	12	q _a q _f	1399	2274	1315	2138	1254	2038	1207	1961	1170	1901	1140	1852	1115	1813	1013	1621	852	1362
		F	7.1-1.7R		7.7-1.8R		8.2-1.9R		8.5-1.9R		8.9-1.9R		9.2-1.9R		9.5-1.9R		9.7-1.9R		9.8-1.5R	
	18	q _a q _f	1286	2089	1215	1974	1065	1731	1039	1688	1018	1655	927	1507	921	1497	916	1489	833	1353
		F	7.5-2R		8.1-2.1R		9-2.5R		9.4-2.5R		9.7-2.4R		10.5-2.7R		10.7-2.6R		10.9-2.6R		11.4-2.2R	
	24	q _a q _f	1153	1874	1101	1789	956	1554	944	1534	823	1338	826	1343	734	1193	745	1211	675	1097
		F	7.9-2.3R		8.5-2.4R		9.5-2.9R		9.9-2.9R		10.8-3.2R		11-3.1R		11.8-3.4R		12-3.3R		12.5-2.8R	
	36	q _a q _f	1153	1874	974	1582	814	1323	819	1331	705	1146	616	1001	640	1039	573	931	517	841
		F	7.9-2.3R		9-2.9R		10.2-3.5R		10.5-3.4R		11.5-3.7R		12.5-4.2R		12.6-3.9R		13.5-4.3R		13.9-3.6R	
	60	q _a q _f	999	1623	806	1311	814	1323	684	1112	587	953	511	830	450	732	487	791	438	712
		F	8.4-2.8R		9.7-3.5R		10.2-3.5R		11.2-4R		12.3-4.4R		13.4-5R		14.4-5.4R		14.4-5R		14.8-4.1R	
7	4	q _a q _f	1505	2445	1495	2429	1488	2417	1482	2409	1478	2402	1475	2397	1226	1962	1013	1621	852	1362
		F	5.9-0.6R		6.1-0.5R		6.2-0.5R		6.3-0.5R		6.3-0.4R		6.4-0.4R		6.4-0.4R		6.5-0.3R		6.5-0.3R	
	8	q _a q _f	1277	2075	1273	2068	1223	1987	1228	1995	1192	1937	1200	1950	1173	1906	1013	1621	852	1362
		F	7.3-1.3R		7.5-1.2R		8-1.3R		8-1.1R		8.4-1.2R		8.4-1.1R		8.7-1R		8.7-1R		8.9-0.9R	
	12	q _a q _f	1115	1812	1067	1735	1033	1679	1007	1636	987	1603	970	1577	957	1555	946	1537	852	1362
		F	8.1-1.9R		8.7-1.9R		9.2-2R		9.6-1.9R		9.9-1.9R		10.2-1.9R		10.4-1.8R		10.7-1.7R		10.7-1.5R	
	18	q _a q _f	1005	1634	973	1581	856	1391	851	1383	848	1378	775	1259	780	1267	784	1274	732	1189
		F	8.7-2.3R		9.3-2.3R		10.5-2.8R		10.8-2.7R		11.1-2.5R		12.1-2.9R		12.2-2.7R		12.3-2.5R		12.9-2.3R	
	24	q _a q _f	871	1415	862	1400	749	1217	760	1235	682	1108	699	1135	639	1039	657	1068	607	987
		F	9.5-2.9R		10.1-2.9R		11.4-3.5R		11.7-3.2R		12.8-3.6R		12.9-3.4R		13.9-3.7R		13.9-3.4R		14.6-3R	
	36	q _a q _f	871	1415	733	1191	629	1023	660	1072	580	942	510	829	549	892	495	804	450	731
		F	9.5-2.9R		11-3.7R		12.5-4.4R		12.7-4R		14-4.5R		15.3-5R		15.1-4.4R		16.3-4.9R		16.9-4.2R	
	60	q _a q _f	709	1152	578	939	629	1023	534	868	462	750	405	658	360	585	409	664	371	603
		F	10.5-3.8R		12.3-4.8R		12.5-4.4R		14-5R		15.5-5.6R		17-6.3R		18.4-6.8R		17.8-6R		18.5-5R	
5	4	q _a q _f	1129	1835	1125	1829	1122	1824	1120	1820	1119	1818	1117	1816	1116	1814	1013	1621	852	1362
		F	6-0.5R		6.2-0.5R		6.3-0.4R		6.4-0.4R		6.4-0.4R		6.5-0.3R		6.5-0.3R		6.5-0.3R		6.6-0.3R	
	8	q _a q _f	1018	1655	1017	1653	991	1610	994	1616	975	1584	980	1592	965	1567	970	1576	852	1362
		F	7.6-1.3R		7.8-1.2R		8.2-1.2R		8.3-1.1R		8.6-1.1R		8.6-1R		8.9-1R		8.9-0.9R		9.1-0.8R	
	12	q _a q _f	925	1503	897	1458	876	1424	861	1399	848	1378	838	1362	830	1348	823	1337	817	1327
		F	8.6-1.9R		9.2-2R		9.7-2R		10-1.9R		10.4-1.8R		10.6-1.8R		10.8-1.7R		11-1.7R		11.1-1.4R	
	18	q _a q _f	854	1387	834	1356	753	1224	752	1222	751	1220	697	1132	701	1140	705	1146	665	1081
		F	9.4-2.4R		9.9-2.4R		11.2-2.9R		11.5-2.7R		11.7-2.5R		12.8-2.9R		12.8-2.6R		12.9-2.5R		13.6-2.3R	
	24	q _a q _f	758	1232	755	1227	671	1091	682	1109	621	1009	636	1034	588	956	605	982	566	919
		F	10.3-3.2R		10.8-3.1R		12.3-3.7R		12.5-3.3R		13.8-3.8R		13.8-3.4R		14.9-3.7R		14.8-3.4R		15.6-3.1R	
	36	q _a q _f	758	1232	656	1065	573	931	601	976	542	881	492	800	523	849	480	781	436	709
		F	10.3-3.2R		12-4R		13.8-4.8R		13.8-4.2R		15.2-4.7R		16.7-5.3R		16.3-4.6R		17.6-5.1R		18.4-4.4R	
	60	q _a q _f	631	1025	532	864	573	931	507	823	442	718	387	629	344	559	394	641	357	581
		F	11.7-4.3R		13.7-5.4R		13.8-4.8R		15.4-5.5R		17.1-6.1R		18.8-6.9R		20.4-7.5R		19.5-6.3R		20.4-5.4R	
4	4	q _a q _f	920	1495	918	1492	917	1490	916	1488	915	1487	915	1486	914	1485	914	1485	852	1362
		F	6.2-0.5R		6.3-0.4R		6.4-0.4R		6.5-0.4R		6.5-0.3R		6.5-0.3R		6.6-0.3R		6.6-0.3R		6.6-0.2R	
	8	q _a q _f	847	1377	849	1380	833	1354	837	1360	825	1340	829	1347	819	1332	823	1338	816	1326
		F	8-1.3R		8.1-1.1R		8.6-1.1R		8.6-1R		8.9-1R		8.9-0.9R		9.2-0.9R		9.1-0.8R		9.3-0.7R	
	12	q _a q _f	779	1265	762	1239	750	1219	741	1204	734	1193	728	1183	723	1176	719	1169	716	1163
		F	9.2-2R		9.8-1.9R		10.2-1.9R		10.6-1.8R		10.9-1.7R		11.1-1.7R		11.3-1.6R		11.5-1.5R		11.6-1.3R	
	18	q _a q _f	722	1173	713	1159	652	1059	655	1064	657	1068	616	1000	622	1011	627	1019	596	968
		F	10.1-2.6R		10.7-2.5R		12.1-2.9R		12.3-2.7R		12.5-2.5R		13.6-2.8R		13.6-2.5R		13.6-2.3R		14.4-2.2R	
	24	q _a q _f	640	1040	647	1051	581	944	596	969	547	889	564	916	525	853	542	880	510	828
		F	11.4-3.5R		11.8-3.2R		13.5-3.8R		13.5-3.4R		14.9-3.8R		14.8-3.4R		16.1-3.7R		15.8-3.3R		16.7-3.1R	
	36	q _a q _f	640	1040	558	908	492	799	524	852	476	773	434	705	466	757	432	703	396	644
		F	11.4-3.5R		13.4-4.3R		15.4-5.2R		15.1-4.4R		16.8-5R		18.4-5.6R		17.8-4.7R		19.2-5.2R		20.2-4.6R	
	60	q _a q _f	522	848	442	718	492	799	437	710	382	620	334	543	296	481	351	570	317	516
		F	13.3-5R		15.7-6.2R		15.4-5.2R		17.3-6R		19.3-6.7R		21.2-7.6R		23.1-8.2R		21.7-6.7R		22.7-5.8R	

**TABLE 7-2—ALLOWABLE DIAPHRAGM SHEARS (q_a), (ln plf), FACTORED
DIAPHRAGM SHEARS (q_f), (ln plf), AND FLEXIBILITY FACTOR (F)**

18 ga.			DGB-36 AND DGBF-36 INTERLOCK DECK WITH HILTI X-EDNK22 PINS AND DELTAGRIP™ SIDE SEAM ATTACHMENT (See DelatGrip™ system notes)																	
Support Fasteners	Seam Spacing (in)	Span																		
			4		5		6		7		8		9		10		11		12	
9	4	q _a q _f	2582	4196	2565	4168	2552	4147	2542	4131	2535	4119	2317	3707	1877	3003	1551	2481	1303	2085
		F	4-0.3R		4.1-0.3R		4.1-0.3R		4.2-0.3R		4.2-0.2R		4.3-0.2R		4.3-0.2R		4.3-0.2R		4.3-0.2R	
	8	q _a q _f	2250	3656	2235	3632	2152	3497	2154	3501	2095	3404	2103	3418	1877	3003	1551	2481	1303	2085
		F	4.8-0.7R		4.9-0.7R		5.2-0.7R		5.2-0.6R		5.4-0.6R		5.4-0.6R		5.6-0.6R		5.6-0.5R		5.7-0.5R	
	12	q _a q _f	2011	3268	1924	3126	1859	3021	1809	2940	1770	2876	1738	2825	1712	2782	1551	2481	1303	2085
		F	5.3-1.1R		5.6-1.1R		5.9-1.1R		6.1-1.1R		6.3-1.1R		6.4-1R		6.6-1R		6.7-1R		6.7-0.8R	
	18	q _a q _f	1846	3000	1777	2888	1579	2565	1560	2536	1546	2513	1420	2307	1422	2311	1424	2314	1303	2085
		F	5.6-1.3R		6-1.3R		6.6-1.6R		6.8-1.5R		7-1.4R		7.5-1.6R		7.6-1.5R		7.6-1.4R		8-1.3R	
	24	q _a q _f	1640	2666	1604	2606	1407	2286	1412	2295	1273	2069	1293	2101	1187	1930	1213	1970	1121	1822
		F	6.1-1.7R		6.4-1.6R		7.1-2R		7.3-1.8R		7.9-2.1R		8-1.9R		8.6-2.1R		8.6-1.9R		9-1.7R	
	36	q _a q _f	1640	2666	1399	2274	1212	1969	1247	2027	1106	1798	971	1578	1031	1676	928	1507	841	1367
		F	6.1-1.7R		6.9-2.1R		7.8-2.5R		7.9-2.3R		8.6-2.5R		9.4-2.9R		9.3-2.5R		9.9-2.8R		10.3-2.4R	
	60	q _a q _f	1387	2255	1161	1887	1212	1969	1040	1690	897	1457	785	1275	696	1130	775	1259	701	1140
		F	6.7-2.2R		7.7-2.7R		7.8-2.5R		8.7-2.9R		9.5-3.2R		10.4-3.6R		11.2-3.9R		10.8-3.4R		11.2-2.9R	
7	4	q _a q _f	2062	3351	2055	3340	2050	3332	2047	3326	2044	3322	2042	3318	1877	3003	1551	2481	1303	2085
		F	4.1-0.3R		4.2-0.2R		4.3-0.2R		4.3-0.2R		4.3-0.2R		4.3-0.2R		4.4-0.2R		4.4-0.1R		4.4-0.1R	
	8	q _a q _f	1824	2964	1828	2971	1778	2889	1788	2906	1752	2847	1764	2866	1735	2820	1551	2481	1303	2085
		F	5.2-0.7R		5.2-0.6R		5.5-0.6R		5.5-0.5R		5.7-0.5R		5.7-0.5R		5.8-0.5R		5.8-0.4R		5.9-0.4R	
	12	q _a q _f	1624	2639	1577	2562	1543	2507	1517	2466	1497	2433	1481	2407	1468	2386	1457	2368	1303	2085
		F	5.9-1.1R		6.2-1.1R		6.4-1.1R		6.6-1R		6.8-1R		6.9-0.9R		7-0.9R		7.1-0.8R		7.2-0.7R	
	18	q _a q _f	1472	2393	1447	2352	1294	2103	1300	2113	1305	2120	1205	1958	1219	1980	1230	1999	1157	1880
		F	6.4-1.4R		6.7-1.4R		7.5-1.7R		7.6-1.5R		7.7-1.4R		8.4-1.6R		8.4-1.4R		8.4-1.3R		8.8-1.2R	
	24	q _a q _f	1272	2067	1285	2089	1131	1838	1163	1890	1053	1711	1088	1769	1003	1630	1038	1687	969	1574
		F	7.1-2R		7.4-1.8R		8.3-2.2R		8.3-1.9R		9.1-2.2R		9.1-1.9R		9.8-2.1R		9.6-1.9R		10.1-1.7R	
	36	q _a q _f	1272	2067	1084	1762	939	1526	1005	1633	902	1465	816	1326	879	1428	810	1316	744	1209
		F	7.1-2R		8.3-2.5R		9.4-3R		9.2-2.5R		10.2-2.8R		11.1-3.2R		10.7-2.6R		11.6-2.9R		12.1-2.6R	
	60	q _a q _f	1010	1642	841	1366	939	1526	825	1340	724	1176	637	1036	568	923	664	1079	604	982
		F	8.2-2.9R		9.6-3.6R		9.4-3R		10.5-3.4R		11.6-3.8R		12.7-4.3R		13.8-4.6R		13-3.8R		13.6-3.3R	
5	4	q _a q _f	1521	2471	1518	2467	1516	2464	1515	2462	1514	2460	1513	2459	1512	2457	1512	2456	1303	2085
		F	4.2-0.3R		4.3-0.2R		4.3-0.2R		4.3-0.2R		4.4-0.2R		4.4-0.1R		4.4-0.1R		4.4-0.1R		4.4-0.1R	
	8	q _a q _f	1414	2297	1417	2302	1392	2263	1398	2272	1380	2243	1387	2253	1373	2230	1379	2240	1303	2085
		F	5.3-0.7R		5.4-0.6R		5.6-0.6R		5.6-0.5R		5.8-0.5R		5.8-0.4R		5.9-0.4R		5.9-0.4R		6-0.4R	
	12	q _a q _f	1309	2126	1284	2087	1266	2057	1252	2035	1241	2017	1232	2002	1225	1991	1219	1981	1214	1972
		F	6.1-1.1R		6.4-1.1R		6.7-1R		6.9-1R		7-0.9R		7.1-0.9R		7.2-0.8R		7.3-0.8R		7.4-0.7R	
	18	q _a q _f	1220	1982	1207	1961	1110	1804	1116	1813	1120	1820	1053	1711	1064	1729	1072	1743	1021	1660
		F	6.8-1.5R		7-1.4R		7.9-1.6R		8-1.5R		8-1.3R		8.7-1.5R		8.7-1.3R		8.7-1.2R		9.1-1.2R	
	24	q _a q _f	1088	1769	1101	1790	995	1617	1021	1659	940	1528	969	1574	905	1471	933	1516	880	1430
		F	7.7-2.1R		7.8-1.8R		8.9-2.2R		8.8-1.9R		9.7-2.1R		9.5-1.9R		10.3-2R		10.1-1.8R		10.6-1.7R	
	36	q _a q _f	1088	1769	956	1554	846	1375	902	1465	821	1334	751	1221	806	1309	749	1218	700	1137
		F	7.7-2.1R		8.9-2.6R		10.2-3.1R		9.9-2.5R		10.9-2.9R		11.9-3.2R		11.4-2.6R		12.3-2.9R		12.9-2.6R	
	60	q _a q _f	893	1452	760	1235	846	1375	754	1226	679	1103	614	998	547	889	639	1039	587	954
		F	9-3.2R		10.6-4R		10.2-3.1R		11.4-3.6R		12.7-4R		13.9-4.5R		15.1-4.9R		14-3.9R		14.7-3.4R	
4	4	q _a q _f	1231	2000	1230	1998	1229	1997	1228	1996	1228	1995	1227	1995	1227	1994	1227	1994	1227	1993
		F	4.3-0.2R		4.3-0.2R		4.3-0.2R		4.4-0.1R		4.4-0.1R		4.4-0.1R		4.4-0.1R		4.4-0.1R		4.4-0.1R	
	8	q _a q _f	1165	1893	1169	1899	1154	1876	1159	1883	1149	1867	1153	1874	1145	1861	1149	1867	1142	1856
		F	5.5-0.6R		5.5-0.5R		5.8-0.5R		5.7-0.4R		5.9-0.4R		5.9-0.4R		6-0.4R		6-0.3R		6.1-0.3R	
	12	q _a q _f	1093	1776	1080	1754	1070	1738	1062	1726	1057	1717	1052	1709	1048	1703	1045	1698	1042	1693
		F	6.4-1.1R		6.7-1R		6.9-0.9R		7.1-0.9R		7.2-0.8R		7.3-0.8R		7.4-0.7R		7.5-0.7R		7.6-0.6R	
	18	q _a q _f	1027	1668	1023	1663	954	1550	963	1564	969	1574	920	1495	931	1512	939	1526	901	1465
		F	7.2-1.5R		7.4-1.3R		8.4-1.6R		8.4-1.4R		8.4-1.2R		9.1-1.4R		9-1.2R		9-1.1R		9.5-1.1R	
	24	q _a q _f	921	1496	941	1529	861	1399	888	1442	826	1342	853	1386	803	1305	829	1347	788	1280
		F	8.3-2.2R		8.4-1.8R		9.5-2.2R		9.3-1.8R		10.3-2.1R		10-1.8R		10.8-1.9R		10.6-1.7R		11.2-1.6R	
	36	q _a q _f	921	1496	819	1331	731	1188	788	1280	723	1175	666	1083	718	1167	672	1092	631	1025
		F	8.3-2.2R		9.8-2.7R		11.2-3.3R		10.6-2.5R		11.8-2.9R		12.9-3.2R		12.2-2.6R		13.1-2.8R		13.9-2.6R	
	60	q _a q _f	747	1213	639	1038	731	1188	657	1067	594	965	540	878	484	787	572	930	533	867
		F	10.2-3.5R		12-4.4R		11.2-3.3R		12.6-3.8R		14-4.2R		15.4-4.7R		16.8-5.2R		15.2-3.9R		16-3.5R	

**TABLE 7-2—ALLOWABLE DIAPHRAGM SHEARS (qa), (in plf), FACTORED
DIAPHRAGM SHEARS (qf), (in plf), AND FLEXIBILITY FACTOR (F)**

16 ga.			DGB-36 AND DGBF-36 INTERLOCK DECK WITH HILTI X-EDNK22 PINS AND DELTAGRIP™ SIDE SEAM ATTACHMENT (See DelatGrip™ system notes)																	
Support Fasteners	Seam Spacing (in)	Span																		
			4		5		6		7		8		9		10		11		12	
9	4	q _a q _f	3284	5336	3270	5315	3261	5299	3254	5288	3249	5279	3244	5272	3241	5266	2931	4690	2463	3941
		F	3-0.2R		3.1-0.2R		3.1-0.1R		3.1-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R	
	8	q _a q _f	2940	4777	2935	4770	2853	4637	2863	4652	2803	4555	2817	4578	2771	4503	2786	4528	2463	3941
		F	3.7-0.5R		3.7-0.4R		3.9-0.4R		3.9-0.4R		4-0.4R		4-0.3R		4.1-0.3R		4.1-0.3R		4.2-0.3R	
	12	q _a q _f	2658	4319	2572	4180	2509	4078	2461	3999	2423	3937	2392	3886	2366	3845	2345	3810	2327	3781
		F	4.1-0.7R		4.3-0.7R		4.5-0.7R		4.6-0.7R		4.7-0.6R		4.8-0.6R		4.9-0.6R		4.9-0.6R		5-0.5R	
	18	q _a q _f	2447	3977	2387	3879	2147	3489	2141	3479	2136	3471	1977	3213	1990	3234	2001	3251	1884	3061
		F	4.4-0.9R		4.6-0.9R		5.1-1.1R		5.2-1R		5.3-0.9R		5.7-1R		5.7-0.9R		5.7-0.9R		6-0.8R	
	24	q _a q _f	2169	3524	2156	3503	1910	3104	1939	3151	1761	2862	1803	2930	1665	2706	1710	2779	1598	2597
		F	4.9-1.2R		5-1.1R		5.6-1.4R		5.6-1.2R		6.1-1.4R		6.1-1.2R		6.5-1.3R		6.5-1.2R		6.8-1.1R	
	36	q _a q _f	2169	3524	1868	3036	1629	2647	1706	2772	1536	2495	1393	2264	1477	2401	1361	2212	1238	2012
		F	4.9-1.2R		5.6-1.5R		6.2-1.8R		6.2-1.6R		6.8-1.8R		7.3-2R		7.1-1.7R		7.6-1.9R		8-1.6R	
	60	q _a q _f	1804	2931	1517	2465	1629	2647	1438	2337	1260	2048	1107	1798	984	1599	1123	1824	1019	1656
		F	5.5-1.7R		6.3-2.2R		6.2-1.8R		6.9-2.1R		7.6-2.4R		8.3-2.7R		9-2.9R		8.5-2.4R		8.8-2.1R	
7	4	q _a q _f	2605	4234	2601	4226	2597	4221	2595	4217	2593	4213	2591	4211	2590	4209	2589	4207	2463	3941
		F	3.1-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R	
	8	q _a q _f	2375	3860	2385	3876	2337	3798	2351	3821	2316	3764	2330	3787	2303	3742	2316	3764	2294	3727
		F	3.9-0.4R		3.9-0.3R		4.1-0.3R		4.1-0.3R		4.2-0.3R		4.1-0.3R		4.2-0.2R		4.2-0.2R		4.3-0.2R	
	12	q _a q _f	2155	3501	2112	3432	2081	3381	2057	3343	2039	3314	2025	3290	2013	3270	2003	3254	1994	3240
		F	4.5-0.7R		4.7-0.7R		4.8-0.6R		4.9-0.6R		5-0.5R		5.1-0.5R		5.1-0.5R		5.2-0.5R		5.2-0.4R	
	18	q _a q _f	1973	3206	1957	3181	1777	2887	1794	2916	1807	2937	1686	2740	1709	2777	1728	2807	1637	2660
		F	4.9-0.9R		5.1-0.9R		5.7-1R		5.7-0.9R		5.7-0.8R		6.2-0.9R		6.1-0.8R		6.1-0.7R		6.4-0.7R	
	24	q _a q _f	1712	2782	1751	2846	1561	2537	1617	2627	1477	2399	1533	2491	1423	2312	1476	2398	1386	2251
		F	5.6-1.4R		5.6-1.2R		6.4-1.4R		6.3-1.2R		6.9-1.3R		6.7-1.2R		7.2-1.3R		7.1-1.1R		7.4-1R	
	36	q _a q _f	1712	2782	1478	2402	1291	2098	1400	2275	1265	2055	1151	1870	1249	2029	1157	1879	1076	1748
		F	5.6-1.4R		6.5-1.7R		7.4-2.1R		7.1-1.6R		7.8-1.8R		8.5-2.1R		8-1.7R		8.6-1.8R		9.1-1.7R	
	60	q _a q _f	1342	2182	1124	1827	1291	2098	1141	1854	1020	1657	917	1491	820	1332	970	1577	892	1449
		F	6.7-2.2R		7.8-2.7R		7.4-2.1R		8.2-2.4R		9.1-2.7R		10-3R		10.8-3.3R		9.9-2.5R		10.4-2.2R	
5	4	q _a q _f	1902	3091	1900	3088	1899	3086	1898	3084	1897	3083	1897	3082	1896	3082	1896	3081	1896	3080
		F	3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.3-0.1R		3.3-0.1R	
	8	q _a q _f	1804	2931	1809	2940	1788	2905	1794	2916	1779	2890	1785	2901	1773	2881	1779	2891	1769	2875
		F	4-0.4R		4-0.3R		4.1-0.3R		4.1-0.3R		4.2-0.3R		4.2-0.2R		4.3-0.2R		4.3-0.2R		4.3-0.2R	
	12	q _a q _f	1697	2757	1676	2723	1661	2699	1649	2680	1640	2665	1633	2654	1627	2644	1622	2636	1618	2629
		F	4.6-0.7R		4.8-0.6R		4.9-0.6R		5-0.5R		5.1-0.5R		5.2-0.5R		5.2-0.4R		5.3-0.4R		5.3-0.4R	
	18	q _a q _f	1598	2596	1592	2586	1486	2415	1499	2436	1508	2450	1433	2329	1449	2355	1461	2375	1404	2282
		F	5.2-0.9R		5.3-0.8R		5.9-1R		5.9-0.9R		5.9-0.8R		6.4-0.8R		6.3-0.7R		6.2-0.7R		6.6-0.7R	
	24	q _a q _f	1439	2338	1468	2386	1346	2187	1385	2251	1291	2098	1332	2164	1255	2040	1294	2103	1230	2000
		F	5.9-1.4R		5.9-1.2R		6.7-1.4R		6.5-1.1R		7.2-1.3R		7-1.1R		7.5-1.2R		7.3-1R		7.7-1R	
	36	q _a q _f	1439	2338	1284	2087	1149	1867	1234	2005	1134	1843	1046	1700	1126	1829	1054	1713	990	1608
		F	5.9-1.4R		6.9-1.8R		7.9-2.1R		7.5-1.6R		8.2-1.8R		9-2R		8.4-1.6R		9.1-1.8R		9.6-1.6R	
	60	q _a q _f	1177	1913	1010	1642	1149	1867	1034	1680	936	1521	853	1386	782	1270	900	1462	839	1364
		F	7.3-2.4R		8.6-3R		7.9-2.1R		8.8-2.4R		9.8-2.7R		10.7-3.1R		11.7-3.3R		10.5-2.5R		11.1-2.2R	
4	4	q _a q _f	1534	2492	1533	2491	1532	2490	1532	2490	1532	2489	1532	2489	1531	2488	1531	2488	1531	2488
		F	3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.3-0.1R		3.3-0.1R		3.3+0R		3.3+0R	
	8	q _a q _f	1476	2398	1480	2405	1468	2386	1473	2393	1464	2379	1468	2386	1461	2375	1465	2381	1460	2372
		F	4.1-0.3R		4-0.3R		4.2-0.3R		4.2-0.2R		4.3-0.2R		4.2-0.2R		4.3-0.2R		4.3-0.2R		4.4-0.2R	
	12	q _a q _f	1406	2285	1395	2268	1388	2255	1382	2246	1377	2238	1374	2232	1371	2228	1368	2224	1366	2220
		F	4.8-0.6R		5-0.6R		5.1-0.5R		5.2-0.5R		5.2-0.4R		5.3-0.4R		5.3-0.4R		5.4-0.3R		5.4-0.3R	
	18	q _a q _f	1337	2172	1337	2173	1266	2057	1279	2078	1288	2092	1236	2009	1249	2030	1260	2047	1220	1983
		F	5.4-0.9R		5.5-0.8R		6.2-0.9R		6.1-0.8R		6.1-0.7R		6.6-0.8R		6.5-0.7R		6.4-0.6R		6.8-0.6R	
	24	q _a q _f	1215	1974	1247	2026	1158	1882	1194	1941	1125	1829	1160	1886	1104	1794	1137	1847	1089	1770
		F	6.4-1.4R		6.2-1.1R		7.1-1.3R		6.8-1.1R		7.5-1.2R		7.3-1R		7.8-1.1R		7.6-0.9R		8-0.9R	
	36	q _a q _f	1215	1974	1100	1787	995	1617	1075	1746	997	1621	927	1507	999	1623	942	1531	890	1446
		F	6.4-1.4R		7.4-1.8R		8.5-2.1R		7.9-1.6R		8.7-1.8R		9.6-2R		8.9-1.5R		9.6-1.6R		10.1-1.6R	
	60	q _a q _f	990	1609	857	1393	995	1617	903	1468	823	1338	754	1226	694	1128	807	1312	756	1229
		F	8.1-2.6R		9.6-3.2R		8.5-2.1R		9.6-2.4R		10.6-2.8R		11.7-3.1R		12.7-3.4R		11.2-2.4R		11.9-2.2R	

**TABLE 7-3—ALLOWABLE DIAPHRAGM SHEARS (q_a), (in plf), FACTORED
DIAPHRAGM SHEARS (q_f), (in plf), AND FLEXIBILITY FACTOR (F)**

22 ga.			DGB-36 AND DGBF-36 INTERLOCK DECK WITH HILTI X-EDN19 PINS AND DELTAGRIP™ SIDE SEAM ATTACHMENT (See DelatGrip™ system notes)																	
Support Fasteners	Seam Spacing (in)	Span																		
			4		5		6		7		8		9		10		11		12	
9	4	q _a q _r	1579	2566	1548	2515	1525	2478	1507	2449	1457	2331	1151	1842	932	1492	771	1233	647	1036
		F	6.9-0.9R		7.2-0.9R		7.4-0.9R		7.6-0.9R		7.7-0.8R		7.8-0.8R		7.9-0.8R		8-0.7R		8.1-0.6R	
	8	q _a q _r	1306	2122	1268	2060	1190	1934	1176	1911	1122	1824	1118	1817	932	1492	771	1233	647	1036
		F	8-1.7R		8.4-1.7R		9-1.8R		9.2-1.8R		9.7-1.8R		9.9-1.8R		10.2-1.8R		10.3-1.7R		10.5-1.5R	
	12	q _a q _r	1158	1882	1072	1743	1009	1640	962	1562	924	1501	894	1452	869	1412	771	1233	647	1036
		F	8.6-2.1R		9.3-2.4R		9.9-2.5R		10.5-2.6R		10.9-2.6R		11.4-2.7R		11.8-2.7R		12.1-2.7R		12.2-2.2R	
	18	q _a q _r	1069	1737	993	1614	864	1404	830	1348	796	1294	698	1134	684	1112	673	1094	609	990
		F	8.9-2.4R		9.7-2.7R		10.8-3.2R		11.3-3.2R		11.8-3.2R		12.8-3.6R		13.1-3.6R		13.5-3.5R		14-3R	
	24	q _a q _r	969	1575	907	1474	764	1242	736	1196	632	1027	625	1015	553	898	554	900	500	812
		F	9.3-2.8R		10.1-3R		11.3-3.6R		11.8-3.7R		12.9-4.1R		13.3-4.1R		14.3-4.4R		14.6-4.3R		15.1-3.6R	
	36	q _a q _r	969	1575	805	1307	655	1064	642	1043	550	894	479	778	487	792	434	706	391	635
		F	9.3-2.8R		10.6-3.5R		11.9-4.2R		12.4-4.2R		13.6-4.6R		14.8-5.2R		15-5R		16.1-5.4R		16.6-4.4R	
	60	q _a q _r	857	1393	673	1094	655	1064	548	891	468	761	406	659	356	578	375	609	336	546
		F	9.8-3.2R		11.2-4R		11.9-4.2R		13.1-4.8R		14.4-5.3R		15.6-6R		16.8-6.4R		17-6.2R		17.5-4.9R	
7	4	q _a q _f	1278	2077	1264	2054	1254	2037	1246	2025	1240	2015	1151	1842	932	1492	771	1233	647	1036
		F	7.4-0.9R		7.7-0.9R		7.8-0.8R		8-0.8R		8.1-0.7R		8.2-0.7R		8.3-0.6R		8.3-0.6R		8.4-0.5R	
	8	q _a q _f	1049	1705	1038	1686	985	1601	986	1602	949	1543	954	1550	926	1492	771	1233	647	1036
		F	9-1.8R		9.4-1.8R		10-1.9R		10.2-1.7R		10.7-1.8R		10.8-1.7R		11.1-1.7R		11.2-1.6R		11.4-1.4R	
	12	q _a q _f	908	1476	857	1393	820	1333	793	1288	771	1253	754	1225	740	1202	728	1183	647	1036
		F	9.9-2.5R		10.7-2.7R		11.4-2.8R		12-2.8R		12.5-2.8R		12.9-2.8R		13.3-2.7R		13.6-2.7R		13.7-2.2R	
	18	q _a q _f	819	1331	780	1268	679	1103	668	1086	660	1073	599	973	599	974	599	974	553	899
		F	10.5-3R		11.4-3.1R		12.8-3.8R		13.3-3.7R		13.8-3.6R		15-4R		15.3-3.8R		15.5-3.7R		16.3-3.3R	
	24	q _a q _f	715	1162	694	1127	598	972	598	972	525	853	534	868	476	774	488	794	444	721
		F	11.3-3.6R		12.1-3.7R		13.7-4.5R		14.2-4.3R		15.6-4.9R		15.9-4.7R		17.2-5.1R		17.4-4.8R		18.1-4.2R	
	36	q _a q _f	715	1162	597	970	496	807	513	833	443	719	388	631	411	667	369	600	334	543
		F	11.3-3.6R		13-4.5R		14.8-5.4R		15.3-5.1R		16.8-5.8R		18.4-6.5R		18.4-5.9R		19.8-6.5R		20.6-5.4R	
	60	q _a q _f	596	969	474	770	496	807	419	681	361	586	315	513	279	454	309	503	280	454
		F	12.2-4.5R		14.2-5.6R		14.8-5.4R		16.5-6.2R		18.3-6.9R		20-7.8R		21.7-8.4R		21.4-7.7R		22.2-6.3R	
5	4	q _a q _f	978	1589	972	1579	967	1572	964	1566	961	1562	959	1559	932	1492	771	1233	647	1036
		F	7.6-0.9R		7.8-0.8R		8-0.7R		8.1-0.7R		8.2-0.6R		8.3-0.6R		8.4-0.6R		8.4-0.5R		8.5-0.5R	
	8	q _a q _f	857	1393	852	1385	822	1336	823	1337	801	1302	805	1307	788	1280	771	1233	647	1036
		F	9.5-1.9R		9.8-1.8R		10.4-1.8R		10.6-1.7R		11.1-1.7R		11.1-1.6R		11.5-1.6R		11.5-1.4R		11.8-1.3R	
	12	q _a q _f	769	1250	737	1197	713	1159	695	1129	680	1105	669	1086	659	1071	651	1058	644	1036
		F	10.6-2.7R		11.4-2.8R		12.1-2.8R		12.7-2.8R		13.1-2.7R		13.6-2.7R		13.9-2.6R		14.2-2.6R		14.4-2.2R	
	18	q _a q _f	707	1149	682	1108	607	987	601	976	596	968	548	890	549	892	550	894	515	837
		F	11.3-3.2R		12.2-3.3R		13.8-4R		14.3-3.8R		14.7-3.7R		16-4.1R		16.3-3.9R		16.5-3.7R		17.3-3.3R	
	24	q _a q _f	629	1023	616	1001	542	880	544	885	491	799	499	812	459	746	469	762	432	702
		F	12.3-4R		13.1-4R		14.9-4.8R		15.4-4.6R		16.9-5.1R		17.2-4.8R		18.6-5.3R		18.6-4.9R		19.5-4.3R	
	36	q _a q _f	629	1023	538	874	467	759	481	782	425	690	373	605	396	644	356	579	323	524
		F	12.3-4R		14.4-5R		16.4-6R		16.7-5.6R		18.5-6.2R		20.2-7R		20.1-6.3R		21.7-6.9R		22.6-5.9R	
	60	q _a q _f	533	866	445	723	467	759	398	647	343	557	300	487	265	431	296	482	268	435
		F	13.6-5.1R		15.9-6.4R		16.4-6R		18.4-6.9R		20.4-7.7R		22.4-8.7R		24.3-9.4R		23.7-8.3R		24.6-6.9R	
4	4	q _a q _f	802	1304	799	1299	797	1296	796	1293	794	1291	793	1289	793	1288	771	1233	647	1036
		F	7.8-0.8R		8-0.7R		8.2-0.7R		8.3-0.6R		8.4-0.6R		8.5-0.5R		8.5-0.5R		8.6-0.4R		8.6-0.4R	
	8	q _a q _f	719	1169	719	1168	699	1136	702	1141	688	1118	691	1123	680	1106	684	1112	647	1036
		F	10-1.9R		10.3-1.7R		11-1.8R		11-1.6R		11.5-1.6R		11.5-1.4R		11.9-1.4R		11.9-1.3R		12.2-1.2R	
	12	q _a q _f	650	1056	630	1024	615	1000	604	981	595	967	588	955	582	946	577	938	573	931
		F	11.4-2.8R		12.3-2.8R		12.9-2.8R		13.5-2.8R		13.9-2.7R		14.3-2.6R		14.7-2.5R		15-2.4R		15.1-2.1R	
	18	q _a q _f	598	971	584	949	526	854	525	853	525	852	486	789	490	795	492	800	464	754
		F	12.4-3.5R		13.2-3.5R		15.1-4.2R		15.5-3.9R		15.8-3.7R		17.3-4.1R		17.4-3.8R		17.6-3.6R		18.6-3.3R	
	24	q _a q _f	528	858	527	856	467	759	475	772	432	701	443	719	409	665	421	683	393	639
		F	13.7-4.5R		14.5-4.4R		16.6-5.2R		16.9-4.8R		18.6-5.4R		18.7-5R		20.3-5.4R		20.2-5R		21.2-4.5R	
	36	q _a q _f	528	858	455	739	397	645	417	678	371	604	325	528	354	574	317	515	287	466
		F	13.7-4.5R		16.1-5.6R		18.5-6.7R		18.6-6R		20.6-6.7R		22.7-7.6R		22.2-6.6R		24-7.2R		25.1-6.3R	
	60	q _a q _f	436	709	360	584	397	645	337	548	289	470	252	410	222	361	257	418	232	377
		F	15.5-6R		18.4-7.5R		18.5-6.7R		20.9-7.7R		23.2-8.7R		25.6-9.7R		27.8-10.5R		26.7-9R		27.8-7.6R	

**TABLE 7-3—ALLOWABLE DIAPHRAGM SHEARS (qa), (ln plf), FACTORED
DIAPHRAGM SHEARS (qf), (in plf), AND FLEXIBILITY FACTOR (F)**

20 ga.			DGB-36 AND DGBF-36 INTERLOCK DECK WITH HILTI X-EDN19 PINS AND DELTAGRIP™ SIDE SEAM ATTACHMENT (See DelatGrip™ system notes)																	
Support Fasteners	Seam Spacing (in)	Span																		
			4		5		6		7		8		9		10		11		12	
9	4	q _a q _f	1964	3191	1936	3146	1915	3112	1900	3087	1888	3065	1514	2422	1226	1962	1013	1621	852	1362
		F	5.6-0.6R		5.8-0.6R		5.9-0.6R		6-0.5R		6.1-0.5R		6.2-0.5R		6.2-0.5R		6.3-0.4R		6.3-0.4R	
	8	q _a q _f	1648	2678	1615	2625	1530	2486	1520	2471	1461	2374	1461	2374	1226	1962	1013	1621	852	1362
		F	6.6-1.3R		6.9-1.2R		7.3-1.3R		7.4-1.2R		7.8-1.3R		7.9-1.2R		8.1-1.2R		8.2-1.1R		8.3-1R	
	12	q _a q _f	1461	2374	1368	2224	1300	2113	1249	2029	1208	1963	1175	1909	1148	1865	1013	1621	852	1362
		F	7.1-1.7R		7.7-1.8R		8.2-1.9R		8.5-1.9R		8.9-1.9R		9.2-1.9R		9.5-1.9R		9.7-1.9R		9.8-1.5R	
	18	q _a q _f	1344	2183	1264	2055	1106	1797	1075	1748	1052	1709	951	1545	940	1528	932	1514	846	1362
		F	7.5-2R		8.1-2.1R		9-2.5R		9.4-2.5R		9.7-2.4R		10.5-2.7R		10.7-2.6R		10.9-2.6R		11.4-2.2R	
	24	q _a q _f	1208	1963	1148	1865	995	1617	979	1590	846	1374	846	1374	751	1220	760	1234	688	1118
		F	7.9-2.3R		8.5-2.4R		9.5-2.9R		9.9-2.9R		10.8-3.2R		11-3.1R		11.8-3.4R		12-3.3R		12.5-2.8R	
	36	q _a q _f	1208	1963	1018	1655	846	1374	846	1374	727	1182	635	1032	656	1066	587	955	530	861
		F	7.9-2.3R		9-2.9R		10.2-3.5R		10.5-3.4R		11.5-3.7R		12.5-4.2R		12.6-3.9R		13.5-4.3R		13.9-3.6R	
	60	q _a q _f	1052	1709	846	1374	846	1374	710	1154	609	990	530	861	467	759	501	815	451	733
		F	8.4-2.8R		9.7-3.5R		10.2-3.5R		11.2-4R		12.3-4.4R		13.4-5R		14.4-5.4R		14.4-5R		14.8-4.1R	
7	4	q _a q _f	1583	2573	1571	2553	1563	2540	1556	2529	1551	2521	1514	2422	1226	1962	1013	1621	852	1362
		F	5.9-0.6R		6.1-0.5R		6.2-0.5R		6.3-0.5R		6.3-0.4R		6.4-0.4R		6.4-0.4R		6.5-0.3R		6.5-0.3R	
	8	q _a q _f	1332	2165	1326	2154	1270	2064	1274	2071	1235	2007	1243	2019	1213	1962	1013	1621	852	1362
		F	7.3-1.3R		7.5-1.2R		8-1.3R		8-1.1R		8.4-1.2R		8.4-1.1R		8.7-1R		8.7-1R		8.9-0.9R	
	12	q _a q _f	1160	1886	1107	1799	1068	1736	1039	1689	1017	1652	998	1623	984	1598	971	1578	852	1362
		F	8.1-1.9R		8.7-1.9R		9.2-2R		9.6-1.9R		9.9-1.9R		10.2-1.9R		10.4-1.8R		10.7-1.7R		10.7-1.5R	
	18	q _a q _f	1046	1699	1008	1638	884	1437	877	1426	872	1418	796	1293	800	1300	803	1305	748	1216
		F	8.7-2.3R		9.3-2.3R		10.5-2.8R		10.8-2.7R		11.1-2.5R		12.1-2.9R		12.2-2.7R		12.3-2.5R		12.9-2.3R	
	24	q _a q _f	907	1474	893	1452	775	1259	784	1274	702	1140	717	1166	655	1064	673	1094	616	1001
		F	9.5-2.9R		10.1-2.9R		11.4-3.5R		11.7-3.2R		12.8-3.6R		12.9-3.4R		13.9-3.7R		13.9-3.4R		14.6-3R	
	36	q _a q _f	907	1474	762	1238	651	1059	681	1107	594	966	523	849	560	910	504	820	458	745
		F	9.5-2.9R		11-3.7R		12.5-4.4R		12.7-4R		14-4.5R		15.3-5R		15.1-4.4R		16.3-4.9R		16.9-4.2R	
	60	q _a q _f	742	1206	603	979	651	1059	551	896	476	773	417	678	371	602	418	680	379	616
		F	10.5-3.8R		12.3-4.8R		12.5-4.4R		14-5R		15.5-5.6R		17-6.3R		18.4-6.8R		17.8-6R		18.5-5R	
5	4	q _a q _f	1194	1940	1189	1932	1185	1926	1182	1922	1180	1918	1179	1915	1177	1913	1013	1621	852	1362
		F	6-0.5R		6.2-0.5R		6.3-0.4R		6.4-0.4R		6.4-0.4R		6.5-0.3R		6.5-0.3R		6.5-0.3R		6.6-0.3R	
	8	q _a q _f	1069	1737	1067	1733	1037	1685	1040	1690	1018	1654	1023	1662	1006	1634	1011	1621	852	1362
		F	7.6-1.3R		7.8-1.2R		8.2-1.2R		8.3-1.1R		8.6-1.1R		8.6-1R		8.9-1R		8.9-0.9R		9.1-0.8R	
	12	q _a q _f	967	1572	936	1520	912	1482	894	1453	880	1430	868	1411	859	1396	851	1383	844	1362
		F	8.6-1.9R		9.2-2R		9.7-2R		10-1.9R		10.4-1.8R		10.6-1.8R		10.8-1.7R		11-1.7R		11.1-1.4R	
	18	q _a q _f	892	1449	869	1412	782	1270	779	1265	776	1262	719	1168	723	1175	726	1181	684	1111
		F	9.4-2.4R		9.9-2.4R		11.2-2.9R		11.5-2.7R		11.7-2.5R		12.8-2.9R		12.8-2.6R		12.9-2.5R		13.6-2.3R	
	24	q _a q _f	792	1287	786	1277	697	1132	706	1147	641	1042	656	1066	606	984	621	1010	581	944
		F	10.3-3.2R		10.8-3.1R		12.3-3.7R		12.5-3.3R		13.8-3.8R		13.8-3.4R		14.9-3.7R		14.8-3.4R		15.6-3.1R	
	36	q _a q _f	792	1287	683	1110	596	968	622	1011	560	910	504	819	538	874	489	795	444	722
		F	10.3-3.2R		12-4R		13.8-4.8R		13.8-4.2R		15.2-4.7R		16.7-5.3R		16.3-4.6R		17.6-5.1R		18.4-4.4R	
	60	q _a q _f	662	1075	557	905	596	968	526	855	455	739	399	648	354	575	403	655	365	593
		F	11.7-4.3R		13.7-5.4R		13.8-4.8R		15.4-5.5R		17.1-6.1R		18.8-6.9R		20.4-7.5R		19.5-6.3R		20.4-5.4R	
4	4	q _a q _f	974	1583	972	1579	970	1576	969	1574	968	1573	967	1572	966	1571	966	1570	852	1362
		F	6.2-0.5R		6.3-0.4R		6.4-0.4R		6.5-0.4R		6.5-0.3R		6.5-0.3R		6.6-0.3R		6.6-0.3R		6.6-0.2R	
	8	q _a q _f	891	1449	893	1451	874	1421	878	1427	864	1405	869	1412	858	1394	862	1401	852	1362
		F	8-1.3R		8.1-1.1R		8.6-1.1R		8.6-1R		8.9-1R		8.9-0.9R		9.2-0.9R		9.1-0.8R		9.3-0.7R	
	12	q _a q _f	816	1325	797	1295	783	1272	772	1255	764	1241	757	1230	751	1221	747	1214	743	1207
		F	9.2-2R		9.8-1.9R		10.2-1.9R		10.6-1.8R		10.9-1.7R		11.1-1.7R		11.3-1.6R		11.5-1.5R		11.6-1.3R	
	18	q _a q _f	754	1226	743	1208	677	1100	679	1104	681	1107	636	1033	642	1044	647	1052	613	997
		F	10.1-2.6R		10.7-2.5R		12.1-2.9R		12.3-2.7R		12.5-2.5R		13.6-2.8R		13.6-2.5R		13.6-2.3R		14.4-2.2R	
	24	q _a q _f	668	1085	673	1094	602	979	617	1003	565	918	582	945	540	878	557	906	523	851
		F	11.4-3.5R		11.8-3.2R		13.5-3.8R		13.5-3.4R		14.9-3.8R		14.8-3.4R		16.1-3.7R		15.8-3.3R		16.7-3.1R	
	36	q _a q _f	668	1085	581	944	510	829	542	881	491	798	447	726	479	778	443	719	402	652
		F	11.4-3.5R		13.4-4.3R		15.4-5.2R		15.1-4.4R		16.8-5R		18.4-5.6R		17.8-4.7R		19.2-5.2R		20.2-4.6R	
	60	q _a q _f	546	887	461	749	510	829	452	735	391	635	342	555	303	492	357	579	323	524
		F	13.3-5R		15.7-6.2R		15.4-5.2R		17.3-6R		19.3-6.7R		21.2-7.6R		23.1-8.2R		21.7-6.7R		22.7-5.8R	

**TABLE 7-3—ALLOWABLE DIAPHRAGM SHEARS (qa), (in plf), FACTORED
DIAPHRAGM SHEARS (qf), (in plf), AND FLEXIBILITY FACTOR (F)**

18 ga.			DGB-36 AND DGBF-36 INTERLOCK DECK WITH HILTI X-EDN19 PINS AND DELTAGRIP™ SIDE SEAM ATTACHMENT (See DelatGrip™ system notes)																	
Support Fasteners	Seam Spacing (in)	Span																		
			4		5		6		7		8		9		10		11		12	
9	4	q _a q _r	2722	4423	2701	4388	2685	4363	2673	4344	2664	4330	2317	3707	1877	3003	1551	2481	1303	2085
		F	4-0.3R		4.1-0.3R		4.1-0.3R		4.2-0.3R		4.2-0.2R		4.3-0.2R		4.3-0.2R		4.3-0.2R		4.3-0.2R	
	8	q _a q _r	2355	3827	2335	3794	2242	3644	2243	3644	2177	3537	2185	3550	1877	3003	1551	2481	1303	2085
		F	4.8-0.7R		4.9-0.7R		5.2-0.7R		5.2-0.6R		5.4-0.6R		5.4-0.6R		5.6-0.6R		5.6-0.5R		5.7-0.5R	
	12	q _a q _r	2100	3413	2002	3253	1929	3135	1874	3045	1830	2974	1795	2916	1766	2869	1551	2481	1303	2085
		F	5.3-1.1R		5.6-1.1R		5.9-1.1R		6.1-1.1R		6.3-1.1R		6.4-1R		6.6-1R		6.7-1R		6.7-0.8R	
	18	q _a q _r	1927	3132	1849	3005	1637	2661	1614	2623	1597	2595	1463	2377	1463	2378	1464	2378	1303	2085
		F	5.6-1.3R		6-1.3R		6.6-1.6R		6.8-1.5R		7-1.4R		7.5-1.6R		7.6-1.5R		7.6-1.4R		8-1.3R	
	24	q _a q _r	1715	2787	1669	2712	1461	2374	1462	2375	1316	2138	1333	2166	1222	1985	1246	2025	1139	1851
		F	6.1-1.7R		6.4-1.6R		7.1-2R		7.3-1.8R		7.9-2.1R		8-1.9R		8.6-2.1R		8.6-1.9R		9-1.7R	
	36	q _a q _r	1715	2787	1460	2372	1262	2051	1293	2101	1137	1847	998	1621	1054	1713	948	1540	859	1396
		F	6.1-1.7R		6.9-2.1R		7.8-2.5R		7.9-2.3R		8.6-2.5R		9.4-2.9R		9.3-2.5R		9.9-2.8R		10.3-2.4R	
	60	q _a q _r	1458	2369	1216	1977	1262	2051	1076	1748	927	1506	811	1318	718	1167	795	1292	719	1169
		F	6.7-2.2R		7.7-2.7R		7.8-2.5R		8.7-2.9R		9.5-3.2R		10.4-3.6R		11.2-3.9R		10.8-3.4R		11.2-2.9R	
7	4	q _a q _f	2177	3538	2169	3524	2163	3515	2159	3508	2155	3502	2152	3498	1877	3003	1551	2481	1303	2085
		F	4.1-0.3R		4.2-0.2R		4.3-0.2R		4.3-0.2R		4.3-0.2R		4.3-0.2R		4.4-0.2R		4.4-0.1R		4.4-0.1R	
	8	q _a q _f	1910	3103	1913	3108	1855	3015	1866	3033	1825	2966	1837	2986	1805	2934	1551	2481	1303	2085
		F	5.2-0.7R		5.2-0.6R		5.5-0.6R		5.5-0.5R		5.7-0.5R		5.7-0.5R		5.8-0.5R		5.8-0.4R		5.9-0.4R	
	12	q _a q _f	1692	2750	1639	2663	1600	2601	1571	2553	1548	2516	1530	2487	1515	2462	1503	2442	1303	2085
		F	5.9-1.1R		6.2-1.1R		6.4-1.1R		6.6-1R		6.8-1R		6.9-0.9R		7-0.9R		7.1-0.8R		7.2-0.7R	
	18	q _a q _f	1532	2489	1501	2440	1337	2173	1341	2180	1345	2185	1238	2013	1252	2034	1263	2052	1185	1926
		F	6.4-1.4R		6.7-1.4R		7.5-1.7R		7.6-1.5R		7.7-1.4R		8.4-1.6R		8.4-1.4R		8.4-1.3R		8.8-1.2R	
	24	q _a q _f	1323	2150	1332	2164	1169	1899	1199	1949	1083	1760	1118	1817	1028	1671	1063	1728	991	1610
		F	7.1-2R		7.4-1.8R		8.3-2.2R		8.3-1.9R		9.1-2.2R		9.1-1.9R		9.8-2.1R		9.6-1.9R		10.1-1.7R	
	36	q _a q _f	1323	2150	1125	1828	972	1579	1036	1684	928	1508	839	1363	901	1465	830	1348	756	1228
		F	7.1-2R		8.3-2.5R		9.4-3R		9.2-2.5R		10.2-2.8R		11.1-3.2R		10.7-2.6R		11.6-2.9R		12.1-2.6R	
	60	q _a q _f	1056	1716	877	1425	972	1579	853	1386	743	1208	654	1063	583	947	677	1101	616	1001
		F	8.2-2.9R		9.6-3.6R		9.4-3R		10.5-3.4R		11.6-3.8R		12.7-4.3R		13.8-4.6R		13-3.8R		13.6-3.3R	
5	4	q _a q _f	1611	2617	1607	2612	1605	2608	1603	2605	1602	2603	1601	2602	1600	2600	1551	2481	1303	2085
		F	4.2-0.3R		4.3-0.2R		4.3-0.2R		4.3-0.2R		4.4-0.2R		4.4-0.1R		4.4-0.1R		4.4-0.1R		4.4-0.1R	
	8	q _a q _f	1488	2419	1491	2423	1463	2377	1469	2387	1449	2354	1455	2365	1439	2339	1446	2350	1303	2085
		F	5.3-0.7R		5.4-0.6R		5.6-0.6R		5.6-0.5R		5.8-0.5R		5.8-0.4R		5.9-0.4R		5.9-0.4R		6-0.4R	
	12	q _a q _f	1372	2230	1344	2183	1323	2149	1306	2123	1294	2102	1283	2085	1275	2072	1268	2060	1262	2050
		F	6.1-1.1R		6.4-1.1R		6.7-1R		6.9-1R		7-0.9R		7.1-0.9R		7.2-0.8R		7.3-0.8R		7.4-0.7R	
	18	q _a q _f	1276	2074	1260	2047	1154	1875	1159	1883	1162	1889	1090	1770	1100	1788	1109	1802	1054	1712
		F	6.8-1.5R		7-1.4R		7.9-1.6R		8-1.5R		8-1.3R		8.7-1.5R		8.7-1.3R		8.7-1.2R		9.1-1.2R	
	24	q _a q _f	1137	1847	1147	1864	1033	1678	1058	1719	972	1579	1000	1626	932	1515	961	1561	905	1470
		F	7.7-2.1R		7.8-1.8R		8.9-2.2R		8.8-1.9R		9.7-2.1R		9.5-1.9R		10.3-2R		10.1-1.8R		10.6-1.7R	
	36	q _a q _f	1137	1847	995	1617	878	1427	933	1516	848	1378	775	1259	829	1347	770	1252	718	1167
		F	7.7-2.1R		8.9-2.6R		10.2-3.1R		9.9-2.5R		10.9-2.9R		11.9-3.2R		11.4-2.6R		12.3-2.9R		12.9-2.6R	
	60	q _a q _f	935	1519	794	1290	878	1427	781	1270	702	1140	629	1023	561	911	657	1068	597	971
		F	9-3.2R		10.6-4R		10.2-3.1R		11.4-3.6R		12.7-4R		13.9-4.5R		15.1-4.9R		14-3.9R		14.7-3.4R	
4	4	q _a q _f	1305	2121	1304	2118	1303	2117	1302	2116	1301	2115	1301	2114	1301	2113	1300	2113	1300	2085
		F	4.3-0.2R		4.3-0.2R		4.3-0.2R		4.4-0.1R		4.4-0.1R		4.4-0.1R		4.4-0.1R		4.4-0.1R		4.4-0.1R	
	8	q _a q _f	1229	1997	1233	2003	1216	1977	1221	1985	1209	1965	1214	1973	1205	1958	1210	1966	1202	1953
		F	5.5-0.6R		5.5-0.5R		5.8-0.5R		5.7-0.4R		5.9-0.4R		5.9-0.4R		6-0.4R		6-0.3R		6.1-0.3R	
	12	q _a q _f	1148	1866	1132	1840	1121	1821	1112	1807	1105	1796	1100	1787	1095	1780	1091	1773	1088	1768
		F	6.4-1.1R		6.7-1R		6.9-0.9R		7.1-0.9R		7.2-0.8R		7.3-0.8R		7.4-0.7R		7.5-0.7R		7.6-0.6R	
	18	q _a q _f	1075	1748	1070	1739	994	1615	1002	1629	1008	1639	955	1551	966	1569	974	1583	933	1516
		F	7.2-1.5R		7.4-1.3R		8.4-1.6R		8.4-1.4R		8.4-1.2R		9.1-1.4R		9-1.2R		9-1.1R		9.5-1.1R	
	24	q _a q _f	961	1562	981	1594	894	1452	921	1497	855	1389	883	1434	829	1347	856	1391	811	1319
		F	8.3-2.2R		8.4-1.8R		9.5-2.2R		9.3-1.8R		10.3-2.1R		10-1.8R		10.8-1.9R		10.6-1.7R		11.2-1.6R	
	36	q _a q _f	961	1562	852	1384	758	1232	816	1325	747	1213	686	1115	740	1202	691	1123	647	1052
		F	8.3-2.2R		9.8-2.7R		11.2-3.3R		10.6-2.5R		11.8-2.9R		12.9-3.2R		12.2-2.6R		13.1-2.8R		13.9-2.6R	
	60	q _a q _f	780	1267	666	1082	758	1232	679	1103	613	996	555	901	493	802	588	955	541	880
		F	10.2-3.5R		12-4.4R		11.2-3.3R		12.6-3.8R		14-4.2R		15.4-4.7R		16.8-5.2R		15.2-3.9R		16-3.5R	

**TABLE 7-3—ALLOWABLE DIAPHRAGM SHEARS (q_a), (in plf), FACTORED
DIAPHRAGM SHEARS (q_f), (in plf), AND FLEXIBILITY FACTOR (F)**

16 ga.			DGB-36 AND DGBF-36 INTERLOCK DECK WITH HILTI X-EDN19 PINS AND DELTAGRIP™ SIDE SEAM ATTACHMENT (See DelatGrip™ system notes)																	
Support Fasteners	Seam Spacing (in)	Span																		
			4		5		6		7		8		9		10		11		12	
9	4	q _a q _f	3469	5637	3453	5611	3441	5592	3432	5578	3426	5567	3420	5558	3416	5551	2931	4690	2463	3941
		F	3-0.2R		3.1-0.2R		3.1-0.1R		3.1-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R	
	8	q _a q _f	3084	5011	3075	4998	2983	4847	2991	4861	2924	4752	2938	4775	2886	4690	2902	4690	2463	3941
		F	3.7-0.5R		3.7-0.4R		3.9-0.4R		3.9-0.4R		4-0.4R		4-0.3R		4.1-0.3R		4.1-0.3R		4.2-0.3R	
	12	q _a q _f	2779	4515	2681	4357	2610	4241	2555	4151	2511	4081	2476	4023	2447	3976	2423	3937	2402	3903
		F	4.1-0.7R		4.3-0.7R		4.5-0.7R		4.6-0.7R		4.7-0.6R		4.8-0.6R		4.9-0.6R		4.9-0.6R		5-0.5R	
	18	q _a q _f	2556	4153	2485	4038	2227	3619	2216	3601	2208	3588	2039	3313	2050	3331	2059	3346	1935	3145
		F	4.4-0.9R		4.6-0.9R		5.1-1.1R		5.2-1R		5.3-0.9R		5.7-1R		5.7-0.9R		5.7-0.9R		6-0.8R	
	24	q _a q _f	2265	3681	2243	3644	1981	3220	2006	3260	1818	2954	1858	3019	1713	2784	1757	2855	1640	2665
		F	4.9-1.2R		5-1.1R		5.6-1.4R		5.6-1.2R		6.1-1.4R		6.1-1.2R		6.5-1.3R		6.5-1.2R		6.8-1.1R	
	36	q _a q _f	2265	3681	1946	3162	1694	2752	1766	2869	1587	2579	1432	2327	1521	2472	1387	2254	1261	2049
		F	4.9-1.2R		5.6-1.5R		6.2-1.8R		6.2-1.6R		6.8-1.8R		7.3-2R		7.1-1.7R		7.6-1.9R		8-1.6R	
	60	q _a q _f	1892	3074	1588	2581	1694	2752	1493	2426	1298	2110	1140	1852	1013	1647	1148	1866	1042	1693
		F	5.5-1.7R		6.3-2.2R		6.2-1.8R		6.9-2.1R		7.6-2.4R		8.3-2.7R		9-2.9R		8.5-2.4R		8.8-2.1R	
7	4	q _a q _f	2757	4479	2751	4470	2746	4463	2743	4458	2741	4454	2739	4451	2738	4449	2736	4447	2463	3941
		F	3.1-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R	
	8	q _a q _f	2494	4053	2504	4069	2449	3980	2464	4004	2424	3939	2439	3964	2408	3913	2423	3937	2397	3895
		F	3.9-0.4R		3.9-0.3R		4.1-0.3R		4.1-0.3R		4.2-0.3R		4.1-0.3R		4.2-0.2R		4.2-0.2R		4.3-0.2R	
	12	q _a q _f	2251	3658	2202	3578	2166	3519	2139	3475	2118	3441	2101	3414	2087	3391	2075	3372	2065	3356
		F	4.5-0.7R		4.7-0.7R		4.8-0.6R		4.9-0.6R		5-0.5R		5.1-0.5R		5.1-0.5R		5.2-0.5R		5.2-0.4R	
	18	q _a q _f	2055	3340	2035	3307	1840	2989	1856	3016	1868	3035	1737	2823	1761	2861	1779	2891	1682	2734
		F	4.9-0.9R		5.1-0.9R		5.7-1R		5.7-0.9R		5.7-0.8R		6.2-0.9R		6.1-0.8R		6.1-0.7R		6.4-0.7R	
	24	q _a q _f	1780	2893	1816	2952	1613	2622	1668	2711	1520	2470	1576	2562	1460	2373	1514	2460	1419	2306
		F	5.6-1.4R		5.6-1.2R		6.4-1.4R		6.3-1.2R		6.9-1.3R		6.7-1.2R		7.2-1.3R		7.1-1.1R		7.4-1R	
	36	q _a q _f	1780	2893	1532	2489	1335	2169	1443	2345	1301	2114	1182	1920	1281	2081	1184	1925	1100	1788
		F	5.6-1.4R		6.5-1.7R		7.4-2.1R		7.1-1.6R		7.8-1.8R		8.5-2.1R		8-1.7R		8.6-1.8R		9.1-1.7R	
	60	q _a q _f	1400	2275	1170	1901	1335	2169	1178	1914	1051	1708	939	1525	838	1362	995	1616	907	1474
		F	6.7-2.2R		7.8-2.7R		7.4-2.1R		8.2-2.4R		9.1-2.7R		10-3R		10.8-3.3R		9.9-2.5R		10.4-2.2R	
5	4	q _a q _f	2017	3278	2015	3274	2013	3272	2012	3270	2011	3268	2011	3267	2010	3266	2010	3265	2009	3265
		F	3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.3-0.1R		3.3-0.1R	
	8	q _a q _f	1904	3093	1909	3102	1884	3062	1892	3074	1873	3044	1881	3056	1866	3033	1873	3044	1861	3025
		F	4-0.4R		4-0.3R		4.1-0.3R		4.1-0.3R		4.2-0.3R		4.2-0.2R		4.3-0.2R		4.3-0.2R		4.3-0.2R	
	12	q _a q _f	1783	2898	1759	2858	1741	2829	1727	2807	1717	2789	1708	2775	1701	2764	1695	2754	1690	2746
		F	4.6-0.7R		4.8-0.6R		4.9-0.6R		5-0.5R		5.1-0.5R		5.2-0.5R		5.2-0.4R		5.3-0.4R		5.3-0.4R	
	18	q _a q _f	1675	2721	1666	2707	1549	2518	1562	2537	1570	2552	1488	2419	1505	2445	1517	2466	1455	2364
		F	5.2-0.9R		5.3-0.8R		5.9-1R		5.9-0.9R		5.9-0.8R		6.4-0.8R		6.3-0.7R		6.2-0.7R		6.6-0.7R	
	24	q _a q _f	1504	2444	1532	2489	1399	2273	1439	2338	1337	2172	1379	2241	1297	2107	1337	2173	1269	2061
		F	5.9-1.4R		5.9-1.2R		6.7-1.4R		6.5-1.1R		7.2-1.3R		7-1.1R		7.5-1.2R		7.3-1R		7.7-1R	
	36	q _a q _f	1504	2444	1337	2172	1192	1937	1278	2077	1172	1905	1079	1753	1160	1885	1084	1762	1016	1652
		F	5.9-1.4R		6.9-1.8R		7.9-2.1R		7.5-1.6R		8.2-1.8R		9-2R		8.4-1.6R		9.1-1.8R		9.6-1.6R	
	60	q _a q _f	1231	2000	1054	1712	1192	1937	1070	1738	967	1571	880	1429	806	1309	925	1503	862	1400
		F	7.3-2.4R		8.6-3R		7.9-2.1R		8.8-2.4R		9.8-2.7R		10.7-3.1R		11.7-3.3R		10.5-2.5R		11.1-2.2R	
4	4	q _a q _f	1628	2645	1627	2644	1626	2643	1626	2642	1625	2641	1625	2641	1625	2640	1625	2640	1625	2640
		F	3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.3-0.1R		3.3-0.1R		3.3+0R		3.3+0R	
	8	q _a q _f	1560	2535	1565	2543	1551	2520	1556	2529	1546	2512	1551	2520	1543	2507	1547	2514	1540	2503
		F	4.1-0.3R		4-0.3R		4.2-0.3R		4.2-0.2R		4.3-0.2R		4.2-0.2R		4.3-0.2R		4.3-0.2R		4.4-0.2R	
	12	q _a q _f	1481	2406	1468	2386	1459	2371	1452	2360	1447	2351	1442	2344	1439	2338	1436	2333	1433	2329
		F	4.8-0.6R		5-0.6R		5.1-0.5R		5.2-0.5R		5.2-0.4R		5.3-0.4R		5.3-0.4R		5.4-0.3R		5.4-0.3R	
	18	q _a q _f	1403	2281	1403	2280	1323	2150	1336	2171	1346	2187	1288	2094	1302	2117	1313	2134	1269	2063
		F	5.4-0.9R		5.5-0.8R		6.2-0.9R		6.1-0.8R		6.1-0.7R		6.6-0.8R		6.5-0.7R		6.4-0.6R		6.8-0.6R	
	24	q _a q _f	1271	2065	1303	2118	1206	1959	1244	2021	1168	1898	1205	1958	1144	1858	1178	1915	1126	1830
		F	6.4-1.4R		6.2-1.1R		7.1-1.3R		6.8-1.1R		7.5-1.2R		7.3-1R		7.8-1.1R		7.6-0.9R		8-0.9R	
	36	q _a q _f	1271	2065	1145	1860	1032	1677	1115	1811	1032	1676	957	1554	1031	1676	971	1577	915	1487
		F	6.4-1.4R		7.4-1.8R		8.5-2.1R		7.9-1.6R		8.7-1.8R		9.6-2R		8.9-1.5R		9.6-1.6R		10.1-1.6R	
	60	q _a q _f	1034	1680	892	1449	1032	1677	934	1518	850	1380	777	1262	714	1161	830	1348	776	1261
		F	8.1-2.6R		9.6-3.2R		8.5-2.1R		9.6-2.4R		10.6-2.8R		11.7-3.1R		12.7-3.4R		11.2-2.4R		11.9-2.2R	

**TABLE 7-4—ALLOWABLE DIAPHRAGM SHEARS (q_a), (ln plf), FACTORED
DIAPHRAGM SHEARS (q_f), (ln plf), AND FLEXIBILITY FACTOR (F)**

22 ga.			DGB-36 AND DGBF-36 INTERLOCK DECK WITH HILTI X-ENP19 PINS AND DELTAGRIP™ SIDE SEAM ATTACHMENT (See DelatGrip™ system notes)																		
Support Fasteners	Seam Spacing (in)	Span																			
				4		5		6		7		8		9		10		11		12	
9	4	q _a q _r	1595	2591	1562	2539	1538	2500	1520	2470	1457	2331	1151	1842	932	1492	771	1233	647	1036	
		F	6.3-0.9R		6.6-0.9R		6.8-0.9R		7-0.9R		7.1-0.9R		7.3-0.9R		7.4-0.9R		7.5-0.9R		7.6-0.7R		
	8	q _a q _r	1318	2141	1278	2077	1199	1948	1184	1924	1130	1836	1125	1829	932	1492	771	1233	647	1036	
		F	6.9-1.3R		7.3-1.4R		7.7-1.6R		8-1.6R		8.4-1.7R		8.6-1.7R		9-1.8R		9.1-1.7R		9.3-1.4R		
	12	q _a q _r	1169	1899	1081	1757	1017	1653	968	1573	930	1511	899	1461	874	1420	771	1233	647	1036	
		F	7.1-1.6R		7.7-1.8R		8.2-2R		8.7-2.1R		9.1-2.2R		9.5-2.3R		9.9-2.4R		10.2-2.4R		10.3-2R		
	18	q _a q _r	1079	1754	1002	1628	871	1415	834	1355	800	1300	701	1139	687	1116	676	1098	612	994	
		F	7.3-1.7R		7.9-2R		8.6-2.4R		9.1-2.5R		9.6-2.6R		10.2-2.9R		10.6-2.9R		10.9-3R		11.2-2.5R		
	24	q _a q _r	979	1590	915	1487	770	1251	740	1203	636	1034	628	1020	556	903	556	904	502	816	
		F	7.5-1.9R		8.1-2.1R		8.9-2.6R		9.4-2.7R		10.1-3R		10.5-3.1R		11.2-3.4R		11.5-3.4R		11.8-2.8R		
	36	q _a q _r	979	1590	811	1319	661	1073	647	1051	554	900	482	783	490	796	437	710	393	638	
		F	7.5-1.9R		8.3-2.3R		9.1-2.8R		9.6-2.9R		10.4-3.3R		11.2-3.7R		11.5-3.6R		12.2-4R		12.5-3.2R		
	60	q _a q _r	867	1408	680	1105	661	1073	553	898	472	767	409	665	359	583	377	613	338	549	
		F	7.7-2.1R		8.5-2.6R		9.1-2.8R		9.9-3.2R		10.7-3.6R		11.5-4R		12.3-4.3R		12.6-4.3R		12.9-3.4R		
7	4	q _a q _f	1291	2098	1276	2074	1265	2056	1257	2043	1251	2033	1151	1842	932	1492	771	1233	647	1036	
		F	6.8-0.9R		7.1-0.9R		7.3-0.9R		7.5-0.9R		7.6-0.9R		7.7-0.8R		7.8-0.8R		7.9-0.8R		8-0.6R		
	8	q _a q _f	1058	1719	1046	1699	992	1613	992	1613	956	1553	960	1560	932	1492	771	1233	647	1036	
		F	7.7-1.6R		8.2-1.7R		8.7-1.8R		9-1.8R		9.4-1.8R		9.6-1.8R		10-1.8R		10.1-1.7R		10.3-1.5R		
	12	q _a q _f	915	1488	863	1403	826	1342	797	1296	776	1260	758	1232	744	1208	732	1189	647	1036	
		F	8.2-2R		8.9-2.2R		9.5-2.4R		10.1-2.5R		10.5-2.6R		11-2.6R		11.3-2.6R		11.7-2.7R		11.8-2.2R		
	18	q _a q _f	826	1342	786	1277	683	1111	672	1092	664	1079	602	979	602	979	602	979	555	901	
		F	8.5-2.3R		9.2-2.5R		10.3-3R		10.8-3.1R		11.3-3.1R		12.2-3.5R		12.5-3.4R		12.9-3.4R		13.4-2.9R		
	24	q _a q _f	721	1172	699	1136	602	979	602	979	527	857	536	872	478	777	490	796	445	724	
		F	8.9-2.6R		9.6-2.8R		10.7-3.4R		11.3-3.5R		12.2-3.9R		12.7-3.9R		13.6-4.2R		13.9-4.2R		14.4-3.5R		
	36	q _a q _f	721	1172	602	979	500	812	516	838	445	723	391	635	412	670	371	602	336	546	
		F	8.9-2.6R		10-3.2R		11.2-3.8R		11.8-3.9R		12.8-4.3R		13.9-4.9R		14.2-4.7R		15.2-5.1R		15.6-4.2R		
	60	q _a q _f	602	978	478	777	500	812	422	685	363	590	318	516	281	457	311	505	281	457	
		F	9.2-2.9R		10.5-3.7R		11.2-3.8R		12.3-4.4R		13.5-4.9R		14.6-5.5R		15.7-5.9R		16-5.8R		16.4-4.6R		
5	4	q _a q _f	989	1607	982	1596	978	1589	974	1583	971	1578	969	1575	932	1492	771	1233	647	1036	
		F	7-0.9R		7.3-0.9R		7.5-0.9R		7.7-0.8R		7.8-0.8R		7.9-0.8R		8-0.7R		8.1-0.7R		8.1-0.6R		
	8	q _a q _f	866	1407	860	1397	829	1347	830	1349	808	1313	811	1318	794	1290	771	1233	647	1036	
		F	8.2-1.7R		8.6-1.7R		9.2-1.9R		9.4-1.8R		9.9-1.8R		10-1.8R		10.4-1.8R		10.5-1.7R		10.7-1.5R		
	12	q _a q _f	776	1261	743	1207	719	1168	700	1137	685	1113	673	1094	663	1078	655	1064	647	1036	
		F	8.8-2.2R		9.5-2.4R		10.2-2.6R		10.7-2.6R		11.2-2.7R		11.7-2.7R		12-2.7R		12.4-2.7R		12.5-2.2R		
	18	q _a q _f	713	1159	688	1117	612	994	605	983	600	975	551	896	552	897	553	899	518	842	
		F	9.2-2.5R		10-2.8R		11.1-3.3R		11.7-3.3R		12.2-3.3R		13.2-3.7R		13.5-3.6R		13.8-3.6R		14.4-3.1R		
	24	q _a q _f	635	1032	621	1010	546	887	548	891	495	804	503	817	462	751	472	766	433	704	
		F	9.6-2.9R		10.4-3.2R		11.7-3.8R		12.3-3.8R		13.4-4.2R		13.8-4.2R		14.8-4.5R		15.1-4.4R		15.7-3.8R		
	36	q _a q _f	635	1032	543	882	471	765	485	787	427	694	374	609	398	647	358	581	324	526	
		F	9.6-2.9R		11-3.7R		12.4-4.4R		12.9-4.3R		14.1-4.8R		15.4-5.5R		15.6-5.1R		16.8-5.7R		17.3-4.6R		
	60	q _a q _f	538	874	449	730	471	765	401	652	345	561	302	490	267	433	298	484	269	437	
		F	10.2-3.4R		11.7-4.3R		12.4-4.4R		13.7-5R		15-5.6R		16.4-6.3R		17.6-6.8R		17.8-6.5R		18.3-5.2R		
4	4	q _a q _f	811	1319	808	1314	806	1310	804	1307	803	1305	802	1304	801	1302	771	1233	647	1036	
		F	7.3-0.9R		7.5-0.9R		7.7-0.8R		7.9-0.8R		8-0.7R		8.1-0.7R		8.2-0.7R		8.3-0.6R		8.3-0.5R		
	8	q _a q _f	726	1180	726	1179	706	1147	708	1151	694	1127	697	1133	686	1115	690	1121	647	1036	
		F	8.7-1.8R		9.1-1.8R		9.8-1.9R		10-1.8R		10.4-1.8R		10.5-1.7R		10.9-1.7R		11-1.6R		11.2-1.4R		
	12	q _a q _f	656	1066	635	1032	620	1008	609	989	599	974	592	962	586	952	581	944	577	937	
		F	9.6-2.4R		10.4-2.6R		11-2.7R		11.6-2.8R		12.1-2.7R		12.5-2.8R		12.9-2.7R		13.2-2.7R		13.4-2.2R		
	18	q _a q _f	603	980	589	957	530	861	529	859	528	858	489	794	492	800	495	805	466	758	
		F	10.1-2.9R		10.9-3R		12.3-3.6R		12.8-3.6R		13.3-3.5R		14.4-4R		14.7-3.8R		15-3.7R		15.7-3.3R		
	24	q _a q _f	533	866	531	863	470	764	478	777	434	706	445	724	411	668	423	687	395	642	
		F	10.7-3.4R		11.6-3.6R		13.1-4.3R		13.6-4.2R		14.9-4.7R		15.3-4.5R		16.4-4.9R		16.7-4.7R		17.3-4.1R		
	36	q _a q _f	533	866	459	745	400	650	420	682	373	606	326	530	355	576	318	517	288	468	
		F	10.7-3.4R		12.4-4.3R		14-5.1R		14.5-4.9R		15.9-5.5R		17.4-6.2R		17.5-5.7R		18.9-6.3R		19.5-5.2R		
	60	q _a q _f	441	716	362	589	400	650	339	551	291	473	253	412	223	363	258	420	233	379	
		F	11.5-4.1R		13.4-5.2R		14-5.1R		15.6-5.8R		17.2-6.5R		18.8-7.3R		20.3-7.9R		20.3-7.3R		20.9-6R		

**TABLE 7-4—ALLOWABLE DIAPHRAGM SHEARS (q_a), (ln plf), FACTORED
DIAPHRAGM SHEARS (q_f), (ln plf), AND FLEXIBILITY FACTOR (F)**

20 ga.			DGB-36 AND DGBF-36 INTERLOCK DECK WITH HILTI X-ENP19 PINS AND DELTAGRIP™ SIDE SEAM ATTACHMENT																	
Support Fasteners	Seam Spacing (in)	Span																		
			4		5		6		7		8		9		10		11		12	
9	4	q _a q _f	1984	3223	1955	3176	1933	3142	1917	3116	1905	3065	1514	2422	1226	1962	1013	1621	852	1362
		F	5.2-0.6R		5.4-0.7R		5.5-0.7R		5.7-0.6R		5.8-0.6R		5.8-0.6R		5.9-0.6R		6-0.5R		6-0.5R	
	8	q _a q _f	1663	2702	1629	2647	1542	2505	1532	2489	1471	2390	1471	2390	1226	1962	1013	1621	852	1362
		F	5.7-1.1R		6-1.1R		6.4-1.2R		6.6-1.2R		6.9-1.3R		7-1.2R		7.3-1.2R		7.4-1.2R		7.5-1R	
	12	q _a q _f	1474	2395	1380	2242	1310	2129	1257	2043	1216	1975	1182	1921	1155	1876	1013	1621	852	1362
		F	6-1.3R		6.5-1.5R		6.9-1.6R		7.2-1.7R		7.6-1.7R		7.9-1.8R		8.1-1.8R		8.4-1.8R		8.4-1.5R	
	18	q _a q _f	1356	2203	1275	2072	1115	1811	1083	1760	1059	1721	955	1552	944	1534	935	1519	848	1362
		F	6.2-1.4R		6.7-1.6R		7.3-1.9R		7.7-2R		8-2R		8.6-2.3R		8.8-2.3R		9.1-2.3R		9.4-1.9R	
	24	q _a q _f	1219	1981	1158	1881	1004	1631	986	1602	850	1382	850	1381	754	1226	763	1239	691	1122
		F	6.4-1.6R		6.9-1.8R		7.6-2.2R		7.9-2.2R		8.6-2.5R		8.9-2.5R		9.4-2.7R		9.7-2.7R		9.9-2.3R	
	36	q _a q _f	1219	1981	1028	1670	852	1385	851	1383	732	1189	639	1039	660	1072	590	960	533	866
		F	6.4-1.6R		7.1-2R		7.8-2.4R		8.2-2.5R		8.9-2.8R		9.6-3.1R		9.8-3R		10.4-3.3R		10.7-2.7R	
	60	q _a q _f	1063	1728	854	1388	852	1385	716	1163	614	997	534	868	470	765	504	820	454	738
		F	6.6-1.8R		7.4-2.3R		7.8-2.4R		8.6-2.8R		9.2-3.1R		10-3.5R		10.6-3.7R		10.9-3.7R		11.1-2.9R	
7	4	q _a q _f	1600	2600	1587	2579	1578	2565	1572	2554	1567	2546	1514	2422	1226	1962	1013	1621	852	1362
		F	5.5-0.7R		5.7-0.6R		5.8-0.6R		6-0.6R		6-0.5R		6.1-0.5R		6.2-0.5R		6.2-0.5R		6.3-0.4R	
	8	q _a q _f	1344	2183	1337	2172	1280	2080	1284	2087	1244	2021	1252	2034	1221	1962	1013	1621	852	1362
		F	6.4-1.2R		6.7-1.2R		7.1-1.3R		7.3-1.2R		7.6-1.3R		7.7-1.2R		7.9-1.2R		8-1.2R		8.2-1R	
	12	q _a q _f	1170	1901	1115	1812	1076	1748	1046	1700	1023	1662	1004	1632	989	1607	976	1587	852	1362
		F	6.9-1.6R		7.4-1.7R		7.9-1.8R		8.3-1.9R		8.6-1.9R		8.9-1.9R		9.2-1.9R		9.4-1.9R		9.5-1.5R	
	18	q _a q _f	1054	1713	1015	1650	890	1446	883	1435	877	1426	800	1300	804	1306	807	1312	752	1222
		F	7.2-1.8R		7.7-2R		8.6-2.4R		9-2.4R		9.3-2.4R		10.1-2.7R		10.3-2.6R		10.5-2.5R		10.9-2.2R	
	24	q _a q _f	915	1486	900	1462	780	1268	789	1282	706	1147	721	1172	657	1067	677	1100	618	1004
		F	7.5-2.2R		8.1-2.3R		9.1-2.8R		9.4-2.7R		10.3-3.1R		10.5-3R		11.3-3.3R		11.5-3.2R		11.9-2.7R	
	36	q _a q _f	915	1486	768	1248	656	1066	686	1114	597	971	525	854	562	914	506	823	460	748
		F	7.5-2.2R		8.6-2.7R		9.6-3.2R		10-3.2R		10.9-3.5R		11.8-4R		11.9-3.7R		12.8-4.1R		13.2-3.4R	
	60	q _a q _f	750	1218	608	988	656	1066	555	901	479	778	420	683	373	606	420	683	381	619
		F	8-2.6R		9.1-3.2R		9.6-3.2R		10.6-3.7R		11.6-4.1R		12.6-4.6R		13.5-5R		13.6-4.7R		13.9-3.8R	
5	4	q _a q _f	1207	1962	1202	1953	1198	1947	1195	1943	1193	1939	1192	1936	1190	1934	1013	1621	852	1362
		F	5.7-0.6R		5.8-0.6R		6-0.6R		6.1-0.5R		6.2-0.5R		6.2-0.5R		6.3-0.4R		6.3-0.4R		6.4-0.4R	
	8	q _a q _f	1079	1754	1077	1750	1046	1700	1049	1705	1027	1669	1032	1677	1014	1648	1013	1621	852	1362
		F	6.7-1.3R		7-1.2R		7.4-1.3R		7.6-1.2R		7.9-1.2R		8-1.2R		8.2-1.2R		8.3-1.1R		8.4-1R	
	12	q _a q _f	976	1587	944	1534	920	1494	901	1464	886	1441	875	1421	865	1405	857	1392	850	1362
		F	7.3-1.7R		7.9-1.8R		8.4-1.9R		8.7-1.9R		9.1-1.9R		9.4-1.9R		9.6-1.9R		9.9-1.9R		10-1.5R	
	18	q _a q _f	900	1462	876	1424	788	1280	784	1274	782	1270	723	1175	727	1182	731	1188	688	1118
		F	7.7-2R		8.3-2.1R		9.3-2.6R		9.6-2.5R		10-2.5R		10.8-2.8R		11-2.6R		11.2-2.6R		11.7-2.3R	
	24	q _a q _f	799	1299	792	1288	702	1140	711	1156	646	1049	660	1072	609	990	625	1016	584	949
		F	8.2-2.4R		8.8-2.5R		9.8-3R		10.2-2.9R		11.1-3.3R		11.4-3.2R		12.2-3.5R		12.4-3.3R		12.9-2.9R	
	36	q _a q _f	799	1299	689	1119	600	976	627	1018	564	917	506	822	541	880	491	798	446	724
		F	8.2-2.4R		9.4-3R		10.6-3.6R		10.9-3.5R		11.9-3.9R		13-4.4R		13-4R		14-4.4R		14.5-3.7R	
	60	q _a q _f	668	1086	562	914	600	976	530	861	457	743	401	652	356	578	405	658	367	596
		F	8.8-3R		10.1-3.7R		10.6-3.6R		11.7-4.2R		12.8-4.7R		14-5.2R		15.1-5.6R		15-5.2R		15.5-4.3R	
4	4	q _a q _f	985	1601	983	1597	981	1594	980	1592	979	1591	978	1589	978	1588	977	1588	852	1362
		F	5.9-0.6R		6-0.6R		6.1-0.5R		6.2-0.5R		6.3-0.4R		6.3-0.4R		6.4-0.4R		6.4-0.4R		6.5-0.3R	
	8	q _a q _f	901	1463	902	1466	883	1434	887	1441	873	1418	877	1425	866	1407	870	1414	852	1362
		F	7.1-1.3R		7.3-1.2R		7.8-1.3R		7.9-1.2R		8.2-1.2R		8.3-1.1R		8.6-1.1R		8.6-1R		8.7-0.9R	
	12	q _a q _f	823	1338	804	1306	789	1283	779	1265	770	1251	763	1240	757	1231	752	1223	748	1216
		F	7.9-1.8R		8.5-1.9R		8.9-2R		9.3-1.9R		9.7-1.9R		10-1.9R		10.2-1.8R		10.4-1.8R		10.5-1.5R	
	18	q _a q _f	761	1237	750	1218	682	1108	684	1112	686	1115	640	1040	646	1050	652	1059	617	1003
		F	8.4-2.2R		9-2.3R		10.1-2.8R		10.5-2.7R		10.7-2.5R		11.7-2.9R		11.8-2.7R		12-2.6R		12.6-2.3R	
	24	q _a q _f	674	1095	679	1103	607	986	622	1010	568	924	585	951	544	883	561	911	526	855
		F	9.1-2.8R		9.7-2.8R		10.9-3.3R		11.2-3.2R		12.3-3.6R		12.4-3.4R		13.4-3.6R		13.5-3.4R		14.1-3R	
	36	q _a q _f	674	1095	585	951	514	835	546	887	494	803	449	729	482	783	444	721	403	654
		F	9.1-2.8R		10.5-3.5R		11.9-4.2R		12.1-3.8R		13.3-4.3R		14.5-4.8R		14.4-4.3R		15.5-4.8R		16.2-4R	
	60	q _a q _f	551	896	465	756	514	835	455	740	393	638	344	558	304	494	358	581	324	526
		F	9.9-3.5R		11.6-4.4R		11.9-4.2R		13.3-4.8R		14.6-5.3R		16-6R		17.3-6.5R		16.9-5.8R		17.5-4.8R	

**TABLE 7-4—ALLOWABLE DIAPHRAGM SHEARS (q_a), (ln plf), FACTORED
DIAPHRAGM SHEARS (q_f), (ln plf), AND FLEXIBILITY FACTOR (F)**

18 ga.			DGB-36 AND DGBF-36 INTERLOCK DECK WITH HILTI X-ENP19 PINS AND DELTAGRIP™ SIDE SEAM ATTACHMENT																	
Support Fasteners	Seam Spacing (in)	Span																		
			4		5		6		7		8		9		10		11		12	
9	4	q _a q _f	2751	4470	2729	4435	2713	4408	2701	4389	2691	4373	2317	3707	1877	3003	1551	2481	1303	2085
		F	3.8-0.4R		3.9-0.4R		4-0.3R		4-0.3R		4.1-0.3R		4.1-0.3R		4.1-0.3R		4.2-0.3R		4.2-0.2R	
	8	q _a q _f	2377	3863	2356	3828	2261	3674	2261	3674	2193	3564	2201	3577	1877	3003	1551	2481	1303	2085
		F	4.3-0.7R		4.4-0.7R		4.7-0.7R		4.8-0.7R		5-0.7R		5-0.7R		5.2-0.7R		5.2-0.6R		5.3-0.6R	
	12	q _a q _f	2119	3444	2018	3280	1944	3159	1887	3067	1842	2994	1806	2935	1776	2887	1551	2481	1303	2085
		F	4.6-0.9R		4.9-1R		5.1-1R		5.3-1.1R		5.5-1.1R		5.7-1.1R		5.9-1.1R		6-1.1R		6-0.9R	
	18	q _a q _f	1945	3160	1864	3029	1650	2681	1626	2641	1607	2612	1472	2392	1472	2392	1472	2391	1303	2085
		F	4.7-1.1R		5.1-1.1R		5.6-1.4R		5.8-1.4R		6-1.3R		6.4-1.5R		6.5-1.5R		6.6-1.4R		6.9-1.2R	
	24	q _a q _f	1731	2813	1683	2735	1472	2392	1472	2392	1324	2152	1341	2180	1227	1993	1253	2036	1143	1857
		F	5-1.2R		5.3-1.3R		5.8-1.6R		6-1.6R		6.5-1.7R		6.7-1.7R		7.1-1.9R		7.2-1.8R		7.4-1.5R	
	36	q _a q _f	1731	2813	1472	2393	1273	2068	1302	2117	1143	1857	1003	1630	1059	1721	952	1547	863	1402
		F	5-1.2R		5.5-1.6R		6.1-1.9R		6.3-1.8R		6.9-2R		7.4-2.3R		7.5-2.1R		7.9-2.3R		8.2-1.9R	
	60	q _a q _f	1473	2393	1228	1995	1273	2068	1083	1760	933	1517	817	1327	723	1175	799	1299	723	1175
		F	5.2-1.5R		5.9-1.9R		6.1-1.9R		6.7-2.1R		7.3-2.4R		7.9-2.7R		8.4-2.9R		8.4-2.7R		8.6-2.2R	
7	4	q _a q _f	2201	3577	2193	3563	2186	3553	2182	3546	2178	3540	2176	3535	1877	3003	1551	2481	1303	2085
		F	4-0.3R		4-0.3R		4.1-0.3R		4.2-0.3R		4.2-0.2R		4.2-0.2R		4.3-0.2R		4.3-0.2R		4.3-0.2R	
	8	q _a q _f	1928	3132	1930	3137	1872	3041	1882	3059	1840	2990	1853	3011	1820	2957	1551	2481	1303	2085
		F	4.7-0.7R		4.8-0.7R		5.1-0.7R		5.1-0.7R		5.3-0.7R		5.3-0.6R		5.5-0.6R		5.5-0.6R		5.6-0.5R	
	12	q _a q _f	1707	2773	1652	2684	1612	2620	1582	2571	1559	2533	1540	2503	1525	2478	1512	2457	1303	2085
		F	5.1-1R		5.5-1.1R		5.7-1.1R		5.9-1.1R		6.1-1.1R		6.3-1.1R		6.4-1R		6.6-1R		6.6-0.8R	
	18	q _a q _f	1544	2510	1513	2458	1346	2188	1350	2194	1353	2198	1245	2024	1259	2045	1269	2063	1191	1936
		F	5.4-1.3R		5.8-1.3R		6.4-1.6R		6.6-1.5R		6.7-1.4R		7.3-1.6R		7.4-1.5R		7.4-1.4R		7.8-1.3R	
	24	q _a q _f	1334	2168	1341	2180	1176	1912	1207	1961	1089	1770	1124	1826	1034	1680	1069	1736	996	1618
		F	5.8-1.6R		6.1-1.6R		6.8-1.9R		7-1.8R		7.6-2R		7.7-1.9R		8.3-2.1R		8.3-1.9R		8.6-1.7R	
	36	q _a q _f	1334	2168	1133	1841	979	1591	1043	1695	934	1517	844	1371	906	1472	833	1353	758	1232
		F	5.8-1.6R		6.6-2R		7.4-2.4R		7.5-2.2R		8.2-2.4R		8.9-2.8R		8.9-2.5R		9.5-2.7R		9.8-2.3R	
	60	q _a q _f	1065	1731	885	1438	979	1591	859	1395	747	1214	658	1069	586	952	680	1105	619	1005
		F	6.3-2R		7.2-2.5R		7.4-2.4R		8.2-2.7R		9-3R		9.8-3.4R		10.5-3.7R		10.3-3.3R		10.6-2.7R	
5	4	q _a q _f	1630	2648	1626	2643	1624	2639	1622	2636	1621	2634	1620	2632	1619	2630	1551	2481	1303	2085
		F	4-0.3R		4.1-0.3R		4.2-0.3R		4.2-0.2R		4.2-0.2R		4.3-0.2R		4.3-0.2R		4.3-0.2R		4.3-0.2R	
	8	q _a q _f	1504	2444	1507	2448	1478	2401	1484	2411	1463	2377	1470	2388	1453	2361	1460	2372	1303	2085
		F	4.9-0.7R		5-0.7R		5.2-0.7R		5.3-0.6R		5.5-0.6R		5.5-0.6R		5.6-0.6R		5.6-0.5R		5.7-0.5R	
	12	q _a q _f	1386	2251	1356	2204	1334	2168	1318	2141	1304	2120	1294	2102	1285	2088	1278	2076	1271	2066
		F	5.4-1.1R		5.7-1.1R		6-1.1R		6.2-1.1R		6.4-1R		6.5-1R		6.7-1R		6.8-1R		6.8-0.8R	
	18	q _a q _f	1288	2093	1271	2065	1163	1890	1168	1897	1171	1903	1097	1783	1108	1800	1116	1814	1060	1723
		F	5.8-1.3R		6.1-1.3R		6.8-1.6R		7-1.5R		7.1-1.4R		7.7-1.6R		7.7-1.5R		7.8-1.4R		8.2-1.3R	
	24	q _a q _f	1147	1864	1157	1880	1040	1691	1065	1731	978	1590	1007	1636	938	1524	967	1571	910	1479
		F	6.3-1.7R		6.6-1.7R		7.4-2R		7.5-1.9R		8.2-2.1R		8.2-1.9R		8.8-2.1R		8.8-1.9R		9.2-1.7R	
	36	q _a q _f	1147	1864	1003	1631	885	1438	940	1527	853	1387	779	1267	834	1355	775	1259	722	1173
		F	6.3-1.7R		7.2-2.2R		8.1-2.6R		8.1-2.3R		8.9-2.6R		9.7-2.9R		9.5-2.6R		10.2-2.8R		10.7-2.4R	
	60	q _a q _f	944	1534	801	1301	885	1438	787	1279	707	1148	633	1028	563	916	659	1072	600	974
		F	6.9-2.3R		8-2.9R		8.1-2.6R		9-3R		9.9-3.3R		10.8-3.7R		11.6-4R		11.2-3.5R		11.7-2.9R	
4	4	q _a q _f	1321	2146	1319	2144	1318	2142	1317	2141	1317	2140	1316	2139	1316	2139	1316	2138	1303	2085
		F	4.1-0.3R		4.2-0.3R		4.2-0.2R		4.3-0.2R		4.3-0.2R		4.3-0.2R		4.3-0.2R		4.4-0.2R		4.4-0.1R	
	8	q _a q _f	1242	2019	1246	2025	1229	1998	1234	2006	1222	1986	1227	1994	1217	1978	1222	1986	1214	1973
		F	5.1-0.7R		5.1-0.6R		5.4-0.7R		5.4-0.6R		5.6-0.6R		5.6-0.5R		5.8-0.5R		5.7-0.5R		5.8-0.4R	
	12	q _a q _f	1160	1885	1143	1858	1132	1839	1122	1824	1115	1812	1110	1803	1105	1795	1101	1789	1097	1783
		F	5.7-1.1R		6.1-1.1R		6.3-1.1R		6.5-1R		6.7-1R		6.8-1R		6.9-0.9R		7-0.9R		7.1-0.8R	
	18	q _a q _f	1086	1764	1080	1755	1002	1628	1010	1642	1017	1652	962	1563	973	1581	982	1595	940	1527
		F	6.2-1.4R		6.5-1.4R		7.3-1.7R		7.4-1.5R		7.5-1.4R		8.1-1.6R		8.2-1.4R		8.2-1.4R		8.6-1.3R	
	24	q _a q _f	970	1576	990	1608	901	1464	928	1508	861	1398	889	1444	835	1356	861	1400	816	1326
		F	6.9-1.9R		7.1-1.8R		8-2.1R		8.1-1.9R		8.8-2.2R		8.8-1.9R		9.5-2.1R		9.4-1.9R		9.8-1.7R	
	36	q _a q _f	970	1576	859	1395	764	1241	821	1335	752	1221	691	1122	744	1209	695	1129	651	1057
		F	6.9-1.9R		7.9-2.4R		9-2.9R		8.9-2.5R		9.8-2.8R		10.7-3.1R		10.4-2.6R		11.2-2.9R		11.7-2.6R	
	60	q _a q _f	787	1279	671	1091	764	1241	684	1111	617	1002	557	905	495	805	591	960	543	882
		F	7.8-2.7R		9.1-3.4R		9-2.9R		10-3.3R		11.1-3.7R		12.1-4.1R		13.1-4.5R		12.4-3.7R		13-3.2R	

**TABLE 7-4—ALLOWABLE DIAPHRAGM SHEARS (q_a), (ln plf), FACTORED
DIAPHRAGM SHEARS (q_f), (ln plf), AND FLEXIBILITY FACTOR (F)**

16 ga.			DGB-36 AND DGBF-36 INTERLOCK DECK WITH HILTI X-ENP19 PINS AND DELTAGRIP™ SIDE SEAM ATTACHMENT																	
Support Fasteners	Seam Spacing (in)	Span																		
			4		5		6		7		8		9		10		11		12	
9	4	q _a q _f	3508	5700	3491	5673	3479	5653	3470	5638	3463	5627	3457	5618	3453	5611	2931	4690	2463	3941
		F	2.9-0.2R		3-0.2R		3-0.2R		3.1-0.2R		3.1-0.2R		3.1-0.2R		3.1-0.1R		3.1-0.1R		3.1-0.1R	
	8	q _a q _f	3114	5060	3105	5045	3009	4890	3018	4904	2949	4792	2963	4816	2910	4729	2926	4690	2463	3941
		F	3.4-0.5R		3.4-0.4R		3.6-0.5R		3.7-0.4R		3.8-0.4R		3.8-0.4R		3.9-0.4R		3.9-0.4R		4-0.3R	
	12	q _a q _f	2804	4556	2704	4394	2630	4274	2574	4183	2529	4110	2493	4052	2463	4003	2439	3963	2417	3928
		F	3.6-0.7R		3.8-0.7R		4-0.7R		4.1-0.7R		4.3-0.7R		4.4-0.7R		4.5-0.7R		4.5-0.7R		4.6-0.5R	
	18	q _a q _f	2578	4190	2505	4071	2244	3646	2232	3627	2223	3612	2051	3334	2062	3351	2071	3366	1946	3162
		F	3.8-0.8R		4-0.8R		4.4-1R		4.5-0.9R		4.6-0.9R		5-1R		5-1R		5.1-0.9R		5.3-0.8R	
	24	q _a q _f	2286	3714	2261	3674	1996	3244	2020	3283	1830	2974	1869	3038	1723	2800	1767	2871	1649	2679
		F	4-1R		4.2-1R		4.7-1.2R		4.8-1.1R		5.2-1.3R		5.2-1.2R		5.6-1.3R		5.6-1.2R		5.8-1.1R	
	36	q _a q _f	2286	3714	1962	3189	1707	2774	1778	2890	1598	2597	1439	2338	1530	2486	1393	2263	1266	2057
		F	4-1R		4.5-1.2R		5-1.5R		5.1-1.4R		5.5-1.5R		5.9-1.7R		5.9-1.5R		6.3-1.7R		6.5-1.4R	
	60	q _a q _f	1910	3104	1604	2606	1707	2774	1505	2445	1306	2123	1147	1864	1019	1657	1154	1875	1047	1701
		F	4.3-1.2R		4.9-1.5R		5-1.5R		5.5-1.7R		6-1.9R		6.4-2.1R		6.9-2.3R		6.8-2R		7-1.7R	
7	4	q _a q _f	2788	4531	2782	4521	2778	4514	2775	4509	2772	4505	2770	4502	2769	4499	2767	4497	2463	3941
		F	3-0.2R		3.1-0.2R		3.1-0.2R		3.1-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R	
	8	q _a q _f	2519	4094	2529	4109	2473	4018	2487	4042	2446	3976	2462	4001	2430	3949	2445	3973	2418	3930
		F	3.6-0.5R		3.7-0.4R		3.8-0.4R		3.9-0.4R		4-0.4R		4-0.3R		4.1-0.3R		4.1-0.3R		4.1-0.3R	
	12	q _a q _f	2271	3691	2220	3608	2183	3548	2155	3503	2134	3467	2116	3439	2102	3416	2090	3396	2080	3380
		F	4-0.7R		4.2-0.7R		4.4-0.7R		4.5-0.7R		4.6-0.6R		4.7-0.6R		4.8-0.6R		4.9-0.6R		4.9-0.5R	
	18	q _a q _f	2072	3368	2051	3333	1853	3010	1868	3036	1880	3055	1748	2841	1771	2878	1790	2908	1692	2749
		F	4.3-0.9R		4.5-0.9R		5-1.1R		5.1-1R		5.1-0.9R		5.5-1R		5.5-0.9R		5.6-0.9R		5.8-0.8R	
	24	q _a q _f	1795	2917	1830	2974	1624	2639	1679	2728	1529	2484	1585	2576	1468	2385	1522	2473	1426	2317
		F	4.7-1.2R		4.8-1.1R		5.4-1.3R		5.4-1.2R		5.9-1.4R		5.9-1.2R		6.3-1.4R		6.3-1.2R		6.6-1.1R	
	36	q _a q _f	1795	2917	1543	2508	1344	2184	1452	2360	1309	2127	1188	1931	1287	2092	1190	1934	1106	1797
		F	4.7-1.2R		5.3-1.5R		6-1.8R		5.9-1.5R		6.5-1.7R		7-2R		6.9-1.7R		7.3-1.8R		7.7-1.6R	
	60	q _a q _f	1412	2295	1180	1917	1344	2184	1185	1926	1057	1718	943	1532	842	1369	999	1623	910	1479
		F	5.2-1.6R		6-2R		6-1.8R		6.6-2R		7.2-2.3R		7.9-2.6R		8.5-2.8R		8.1-2.3R		8.4-2R	
5	4	q _a q _f	2041	3317	2039	3313	2037	3311	2036	3309	2035	3307	2035	3306	2034	3305	2033	3304	2033	3304
		F	3.1-0.2R		3.1-0.2R		3.1-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R	
	8	q _a q _f	1925	3128	1930	3136	1904	3095	1912	3107	1893	3076	1901	3088	1886	3064	1893	3076	1881	3056
		F	3.7-0.5R		3.8-0.4R		3.9-0.4R		3.9-0.3R		4.1-0.3R		4-0.3R		4.1-0.3R		4.1-0.3R		4.2-0.3R	
	12	q _a q _f	1801	2927	1776	2886	1758	2856	1744	2833	1732	2815	1723	2801	1716	2788	1710	2778	1705	2770
		F	4.2-0.7R		4.4-0.7R		4.5-0.7R		4.7-0.6R		4.8-0.6R		4.9-0.6R		4.9-0.6R		5-0.5R		5-0.5R	
	18	q _a q _f	1691	2748	1681	2732	1562	2539	1574	2559	1583	2573	1500	2437	1516	2463	1529	2484	1465	2380
		F	4.5-0.9R		4.7-0.9R		5.2-1.1R		5.3-1R		5.4-0.9R		5.8-1R		5.8-0.9R		5.8-0.8R		6.1-0.8R	
	24	q _a q _f	1518	2466	1545	2511	1410	2290	1450	2356	1346	2188	1389	2256	1305	2121	1346	2187	1276	2074
		F	5-1.3R		5.1-1.2R		5.7-1.4R		5.8-1.2R		6.3-1.4R		6.2-1.2R		6.7-1.3R		6.6-1.2R		6.9-1.1R	
	36	q _a q _f	1518	2466	1347	2190	1201	1952	1288	2092	1180	1917	1085	1764	1167	1896	1091	1772	1022	1661
		F	5-1.3R		5.7-1.6R		6.4-1.9R		6.3-1.6R		6.9-1.8R		7.6-2R		7.3-1.7R		7.8-1.9R		8.2-1.7R	
	60	q _a q _f	1242	2018	1063	1727	1201	1952	1077	1751	973	1581	885	1439	811	1317	930	1511	866	1408
		F	5.7-1.8R		6.6-2.3R		6.4-1.9R		7.2-2.2R		7.9-2.4R		8.6-2.7R		9.3-3R		8.7-2.4R		9.1-2.1R	
4	4	q _a q _f	1648	2678	1647	2676	1646	2675	1646	2674	1645	2673	1645	2673	1645	2673	1644	2672	1644	2672
		F	3.1-0.2R		3.1-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R	
	8	q _a q _f	1578	2564	1583	2572	1568	2549	1574	2557	1563	2540	1568	2548	1560	2534	1564	2542	1557	2531
		F	3.8-0.4R		3.9-0.4R		4-0.4R		4-0.3R		4.1-0.3R		4.1-0.3R		4.2-0.3R		4.2-0.2R		4.3-0.2R	
	12	q _a q _f	1497	2432	1483	2411	1474	2395	1467	2383	1461	2374	1456	2367	1453	2361	1450	2355	1447	2351
		F	4.4-0.7R		4.6-0.7R		4.7-0.6R		4.8-0.6R		4.9-0.6R		5-0.5R		5.1-0.5R		5.1-0.5R		5.2-0.4R	
	18	q _a q _f	1417	2303	1417	2302	1335	2169	1348	2191	1358	2206	1299	2111	1313	2134	1325	2152	1279	2079
		F	4.8-0.9R		5-0.9R		5.5-1R		5.6-0.9R		5.6-0.8R		6-0.9R		6-0.8R		6-0.8R		6.3-0.7R	
	24	q _a q _f	1283	2084	1315	2137	1216	1975	1254	2038	1177	1912	1214	1973	1152	1872	1187	1928	1134	1843
		F	5.4-1.3R		5.5-1.2R		6.2-1.4R		6.1-1.2R		6.7-1.4R		6.6-1.2R		7.1-1.3R		6.9-1.1R		7.3-1.1R	
	36	q _a q _f	1283	2084	1154	1876	1040	1690	1123	1825	1039	1688	963	1564	1038	1686	976	1587	920	1495
		F	5.4-1.3R		6.2-1.7R		7.1-2R		6.8-1.6R		7.5-1.8R		8.2-2.1R		7.8-1.7R		8.4-1.8R		8.8-1.7R	
	60	q _a q _f	1043	1694	899	1461	1040	1690	941	1528	855	1389	782	1270	718	1167	834	1356	780	1268
		F	6.3-2.1R		7.4-2.6R		7.1-2R		7.9-2.3R		8.7-2.6R		9.5-2.9R		10.3-3.2R		9.5-2.5R		10-2.2R	

**TABLE 7-5—ALLOWABLE DIAPHRAGM SHEARS (q_a), (ln plf), FACTORED
DIAPHRAGM SHEARS (q_f), (ln plf), AND FLEXIBILITY FACTOR (F)**

22 ga.			DGB-36 AND DGBF-36 INTERLOCK DECK WITH PNEUTEK SDK61 PINS AND DELTAGRIP™ SIDE SEAM ATTACHMENT (See DelatGrip™ system notes)																	
Support Fasteners	Seam Spacing (in)	Span	4		5		6		7		8		9		10		11		12	
9	4	q _a q _f	1535	2495	1507	2448	1486	2414	1469	2388	1457	2331	1151	1842	932	1492	771	1233	647	1036
		F	7.9-0.8R		8.1-0.7R		8.2-0.6R		8.3-0.6R		8.4-0.5R		8.5-0.5R		8.5-0.5R		8.6-0.4R		8.6-0.4R	
	8	q _a q _f	1273	2068	1238	2012	1164	1891	1152	1871	1101	1789	1098	1783	932	1492	771	1233	647	1036
		F	10.2-1.9R		10.4-1.7R		11.1-1.7R		11.2-1.5R		11.6-1.5R		11.6-1.4R		12-1.4R		12-1.3R		12.3-1.1R	
	12	q _a q _f	1128	1833	1047	1702	987	1605	942	1531	906	1473	878	1427	854	1388	771	1233	647	1036
		F	11.7-2.8R		12.5-2.8R		13.2-2.8R		13.7-2.7R		14.1-2.6R		14.5-2.6R		14.9-2.4R		15.1-2.4R		15.3-2R	
	18	q _a q _f	1041	1691	969	1575	844	1371	814	1323	785	1276	688	1118	676	1099	666	1083	603	980
		F	12.7-3.5R		13.5-3.5R		15.4-4.2R		15.8-3.9R		16.1-3.7R		17.6-4.1R		17.8-3.8R		17.9-3.6R		18.9-3.3R	
	24	q _a q _f	942	1530	884	1437	749	1217	723	1174	621	1010	615	1000	545	885	547	889	494	802
		F	14.1-4.6R		14.9-4.4R		17-5.3R		17.3-4.8R		19.1-5.4R		19.1-5R		20.8-5.4R		20.6-4.9R		21.7-4.5R	
	36	q _a q _f	942	1530	785	1276	639	1039	629	1022	539	876	469	763	479	779	427	695	384	625
		F	14.1-4.6R		16.7-5.8R		19.2-6.9R		19.1-6.1R		21.2-6.8R		23.4-7.7R		22.8-6.6R		24.7-7.3R		25.9-6.4R	
	60	q _a q _f	831	1350	654	1062	639	1039	535	870	457	743	396	644	348	565	368	598	330	536
		F	16.1-6.3R		19.1-7.9R		19.2-6.9R		21.6-8R		24-8.9R		26.5-10R		28.9-10.8R		27.5-9.2R		28.7-7.8R	
7	4	q _a q _f	1242	2018	1229	1997	1220	1982	1213	1971	1207	1962	1151	1842	932	1492	771	1233	647	1036
		F	8.2-0.6R		8.4-0.6R		8.5-0.5R		8.6-0.4R		8.6-0.4R		8.7-0.4R		8.7-0.3R		8.8-0.3R		8.8-0.3R	
	8	q _a q _f	1024	1664	1014	1648	965	1568	966	1569	931	1513	936	1521	910	1478	771	1233	647	1036
		F	11.1-1.7R		11.2-1.5R		11.9-1.5R		11.8-1.3R		12.3-1.3R		12.2-1.1R		12.6-1.1R		12.5-1R		12.8-0.9R	
	12	q _a q _f	887	1442	839	1363	804	1307	778	1265	758	1232	742	1205	728	1184	717	1166	647	1036
		F	13.2-2.8R		13.9-2.7R		14.5-2.6R		15-2.5R		15.4-2.3R		15.7-2.2R		16-2.1R		16.2-2R		16.3-1.7R	
	18	q _a q _f	800	1299	764	1241	665	1081	656	1066	649	1055	589	958	590	959	591	960	549	892
		F	14.7-3.8R		15.4-3.5R		17.7-4.2R		17.8-3.8R		18-3.4R		19.7-3.8R		19.6-3.4R		19.6-3.2R		20.8-3R	
	24	q _a q _f	697	1133	678	1102	585	951	587	954	518	841	528	858	471	765	484	786	440	714
		F	17-5.3R		17.4-4.7R		20-5.6R		19.9-4.9R		22.1-5.5R		21.7-4.8R		23.7-5.2R		23.1-4.6R		24.6-4.3R	
	36	q _a q _f	697	1133	583	947	486	790	504	819	436	708	382	621	405	658	364	592	330	537
		F	17-5.3R		20.2-6.6R		23.4-8R		22.7-6.5R		25.3-7.3R		27.9-8.2R		26.6-6.7R		28.8-7.4R		30.5-6.7R	
	60	q _a q _f	579	941	461	749	486	790	410	667	354	575	309	503	274	445	305	495	276	448
		F	20.5-8R		24.5-10R		23.4-8R		26.6-9.1R		29.7-10.3R		32.9-11.5R		36-12.5R		33.1-9.9R		34.9-8.7R	
5	4	q _a q _f	947	1539	942	1530	938	1524	935	1519	932	1515	930	1512	929	1492	771	1233	647	1036
		F	8.4-0.6R		8.5-0.5R		8.6-0.4R		8.7-0.4R		8.7-0.4R		8.8-0.3R		8.8-0.3R		8.8-0.3R		8.8-0.2R	
	8	q _a q _f	834	1355	830	1348	801	1302	803	1304	782	1271	786	1277	770	1251	771	1233	647	1036
		F	11.5-1.6R		11.5-1.4R		12.2-1.4R		12.1-1.2R		12.6-1.1R		12.5-1R		12.8-1R		12.7-0.9R		13-0.8R	
	12	q _a q _f	749	1217	719	1169	697	1132	680	1105	666	1083	656	1065	647	1051	639	1038	633	1028
		F	13.8-2.7R		14.6-2.6R		15.1-2.5R		15.5-2.3R		15.9-2.1R		16.2-2R		16.4-1.9R		16.6-1.8R		16.7-1.6R	
	18	q _a q _f	689	1120	666	1082	594	965	589	956	584	950	538	874	540	877	541	879	507	824
		F	15.7-3.8R		16.2-3.4R		18.6-4.1R		18.7-3.6R		18.7-3.2R		20.6-3.6R		20.4-3.2R		20.3-2.9R		21.6-2.8R	
	24	q _a q _f	613	996	602	978	530	861	533	867	482	783	490	797	451	733	461	750	428	696
		F	18.4-5.5R		18.5-4.7R		21.4-5.7R		21-4.8R		23.4-5.4R		22.8-4.6R		24.9-5R		24.2-4.4R		25.8-4.2R	
	36	q _a q _f	613	996	525	853	456	741	471	765	418	680	367	596	391	636	352	572	319	518
		F	18.4-5.5R		21.9-6.9R		25.5-8.3R		24.3-6.5R		27.1-7.3R		30-8.3R		28.2-6.6R		30.6-7.3R		32.5-6.7R	
	60	q _a q _f	517	841	434	705	456	741	391	635	336	547	294	478	260	423	292	475	264	429
		F	22.7-8.8R		27.4-11R		25.5-8.3R		29-9.5R		32.5-10.7R		36-12R		39.4-13.1R		35.6-9.9R		37.7-8.9R	
4	4	q _a q _f	776	1261	774	1257	772	1254	770	1252	769	1250	768	1249	768	1247	767	1233	647	1036
		F	8.5-0.5R		8.6-0.4R		8.7-0.4R		8.7-0.3R		8.8-0.3R		8.8-0.3R		8.9-0.2R		8.9-0.2R		8.9-0.2R	
	8	q _a q _f	699	1135	699	1135	681	1106	683	1110	670	1089	674	1095	663	1078	667	1084	647	1036
		F	11.9-1.5R		11.8-1.2R		12.5-1.2R		12.4-1R		12.8-1R		12.7-0.9R		13.1-0.8R		12.9-0.7R		13.2-0.7R	
	12	q _a q _f	633	1029	614	998	601	976	590	959	582	946	576	935	570	926	565	919	562	913
		F	14.6-2.6R		15.2-2.4R		15.7-2.2R		16.1-2.1R		16.4-1.9R		16.7-1.8R		16.9-1.7R		17-1.6R		17.2-1.4R	
	18	q _a q _f	583	947	570	927	514	836	514	836	514	836	477	775	481	781	484	786	456	742
		F	16.7-3.7R		17.2-3.3R		19.8-3.9R		19.7-3.4R		19.6-2.9R		21.5-3.3R		21.2-2.9R		21-2.6R		22.4-2.6R	
	24	q _a q _f	515	837	515	836	457	742	466	757	424	688	435	707	402	653	414	672	387	629
		F	20.1-5.6R		19.9-4.6R		23-5.5R		22.4-4.5R		24.9-5.1R		24.1-4.3R		26.3-4.7R		25.4-4R		27.1-3.9R	
	36	q _a q _f	515	837	444	722	388	630	409	664	367	596	321	522	350	569	314	511	284	462
		F	20.1-5.6R		24.1-7.1R		28.1-8.5R		26.2-6.4R		29.3-7.2R		32.4-8.1R		30.1-6.3R		32.7-6.9R		34.8-6.5R	
	60	q _a q _f	424	690	351	571	388	630	332	539	285	463	248	403	219	356	255	414	230	373
		F	25.8-9.7R		31.2-12.1R		28.1-8.5R		32-9.8R		35.9-11R		39.9-12.4R		43.7-13.4R		38.6-9.8R		41.1-8.9R	

**TABLE 7-5—ALLOWABLE DIAPHRAGM SHEARS (q_a), (ln plf), FACTORED
DIAPHRAGM SHEARS (q_f), (ln plf), AND FLEXIBILITY FACTOR (F)**

20 ga.			DGB-36 AND DGBF-36 INTERLOCK DECK WITH PNEUTEK SDK61 PINS AND DELTAGRIP™ SIDE SEAM ATTACHMENT (See DelatGrip™ system notes)																	
Support Fasteners	Seam Spacing (in)	Span	4		5		6		7		8		9		10		11		12	
9	4	q _a q _f	1897	3082	1872	3042	1854	3012	1840	2990	1829	2972	1514	2422	1226	1962	1013	1621	852	1362
		F	6.2-0.5R		6.3-0.4R		6.4-0.4R		6.5-0.3R		6.5-0.3R		6.6-0.3R		6.6-0.3R		6.6-0.2R		6.6-0.2R	
	8	q _a q _f	1598	2597	1569	2550	1489	2420	1482	2408	1426	2317	1427	2319	1226	1962	1013	1621	852	1362
		F	8.1-1.2R		8.2-1.1R		8.6-1.1R		8.6-0.9R		9-0.9R		8.9-0.8R		9.2-0.8R		9.2-0.7R		9.4-0.7R	
	12	q _a q _f	1417	2303	1331	2163	1267	2060	1219	1981	1181	1919	1150	1869	1125	1828	1013	1621	852	1362
		F	9.4-2R		9.9-1.9R		10.4-1.9R		10.7-1.8R		11-1.7R		11.2-1.6R		11.4-1.5R		11.6-1.5R		11.7-1.3R	
	18	q _a q _f	1302	2116	1229	1997	1077	1750	1049	1705	1028	1671	936	1520	928	1509	921	1497	836	1359
		F	10.4-2.6R		10.9-2.5R		12.3-2.9R		12.5-2.7R		12.7-2.4R		13.8-2.7R		13.8-2.5R		13.8-2.3R		14.6-2.2R	
	24	q _a q _f	1169	1899	1115	1811	968	1572	954	1550	830	1348	832	1352	739	1201	749	1217	679	1103
		F	11.7-3.5R		12.1-3.2R		13.8-3.9R		13.8-3.4R		15.3-3.8R		15.1-3.4R		16.4-3.7R		16.1-3.3R		17-3.1R	
	36	q _a q _f	1169	1899	987	1603	823	1338	827	1344	711	1156	622	1010	644	1047	577	938	521	847
		F	11.7-3.5R		13.8-4.4R		15.9-5.3R		15.5-4.5R		17.2-5R		18.9-5.6R		18.2-4.7R		19.7-5.2R		20.7-4.6R	
	60	q _a q _f	1014	1648	818	1329	823	1338	692	1124	593	964	516	839	455	740	491	798	442	718
		F	13.7-5.2R		16.3-6.5R		15.9-5.3R		17.9-6.1R		19.9-6.9R		21.9-7.7R		23.9-8.4R		22.3-6.7R		23.4-5.9R	
7	4	q _a q _f	1528	2482	1517	2465	1510	2453	1504	2444	1500	2437	1496	2422	1226	1962	1013	1621	852	1362
		F	6.4-0.4R		6.5-0.3R		6.6-0.3R		6.6-0.3R		6.6-0.2R		6.7-0.2R		6.7-0.2R		6.7-0.2R		6.7-0.2R	
	8	q _a q _f	1293	2101	1288	2094	1237	2009	1241	2017	1205	1958	1213	1970	1184	1925	1013	1621	852	1362
		F	8.6-1.1R		8.6-0.9R		9.1-0.9R		9-0.8R		9.4-0.8R		9.3-0.7R		9.6-0.6R		9.5-0.6R		9.7-0.5R	
	12	q _a q _f	1128	1834	1079	1753	1043	1695	1016	1652	995	1618	979	1590	965	1568	953	1549	852	1362
		F	10.4-1.9R		10.9-1.8R		11.2-1.6R		11.5-1.5R		11.7-1.4R		11.9-1.3R		12.1-1.2R		12.2-1.2R		12.3-1R	
	18	q _a q _f	1017	1653	983	1597	864	1404	859	1396	855	1390	781	1269	786	1277	790	1283	737	1197
		F	11.7-2.6R		12.1-2.3R		13.8-2.8R		13.8-2.4R		13.8-2.2R		15.1-2.4R		15-2.1R		14.9-1.9R		15.8-1.9R	
	24	q _a q _f	881	1432	871	1415	756	1229	767	1246	687	1117	704	1144	644	1047	662	1076	610	991
		F	13.8-3.9R		13.8-3.3R		15.9-3.9R		15.5-3.2R		17.3-3.7R		16.8-3.1R		18.2-3.4R		17.7-2.9R		18.8-2.8R	
	36	q _a q _f	881	1432	741	1205	636	1034	666	1082	584	949	514	835	552	897	498	809	452	735
		F	13.8-3.9R		16.4-4.8R		19-5.8R		17.9-4.5R		20-5.1R		22.1-5.7R		20.7-4.5R		22.4-5R		23.8-4.6R	
	60	q _a q _f	718	1168	585	951	636	1034	539	876	466	757	409	664	363	590	412	669	373	607
		F	17.2-6.4R		20.6-8R		19-5.8R		21.5-6.7R		24-7.5R		26.6-8.5R		29.1-9.2R		26.1-6.9R		27.7-6.2R	
5	4	q _a q _f	1148	1866	1144	1859	1141	1854	1138	1850	1137	1847	1135	1845	1134	1843	1013	1621	852	1362
		F	6.5-0.3R		6.6-0.3R		6.6-0.2R		6.7-0.2R		6.7-0.2R		6.7-0.2R		6.7-0.2R		6.7-0.1R		6.8-0.1R	
	8	q _a q _f	1033	1679	1032	1677	1004	1632	1008	1637	987	1605	992	1613	977	1587	982	1596	852	1362
		F	8.9-1R		8.8-0.8R		9.3-0.8R		9.2-0.7R		9.5-0.7R		9.4-0.6R		9.7-0.6R		9.6-0.5R		9.8-0.5R	
	12	q _a q _f	937	1523	908	1476	887	1441	870	1414	857	1393	847	1376	838	1362	831	1350	825	1340
		F	10.8-1.8R		11.2-1.6R		11.6-1.5R		11.8-1.4R		12-1.3R		12.2-1.2R		12.3-1.1R		12.5-1R		12.5-0.9R	
	18	q _a q _f	865	1405	845	1372	762	1238	760	1234	758	1232	703	1142	708	1150	712	1156	671	1090
		F	12.3-2.5R		12.6-2.2R		14.4-2.7R		14.4-2.3R		14.3-2R		15.6-2.2R		15.4-2R		15.3-1.8R		16.3-1.7R	
	24	q _a q _f	768	1248	764	1242	679	1103	689	1120	627	1019	642	1043	593	964	610	990	570	927
		F	14.8-3.9R		14.6-3.2R		16.8-3.8R		16.3-3.1R		18.1-3.5R		17.5-2.9R		19-3.2R		18.3-2.7R		19.5-2.6R	
	36	q _a q _f	768	1248	663	1078	580	942	607	987	547	889	496	806	527	857	483	785	439	713
		F	14.8-3.9R		17.6-4.9R		20.4-5.9R		19-4.4R		21.2-5R		23.4-5.6R		21.7-4.3R		23.5-4.7R		25.1-4.5R	
	60	q _a q _f	640	1040	539	876	580	942	512	833	445	724	391	635	347	563	397	645	360	585
		F	18.9-6.9R		22.8-8.6R		20.4-5.9R		23.2-6.8R		26-7.6R		28.8-8.6R		31.5-9.4R		27.8-6.7R		29.5-6.2R	
4	4	q _a q _f	936	1520	934	1517	932	1515	931	1513	930	1512	930	1511	929	1510	929	1509	852	1362
		F	6.6-0.3R		6.6-0.2R		6.7-0.2R		6.7-0.2R		6.7-0.2R		6.7-0.1R		6.8-0.1R		6.8-0.1R		6.8-0.1R	
	8	q _a q _f	860	1398	862	1401	845	1373	849	1379	836	1359	841	1366	831	1350	835	1357	827	1344
		F	9.1-0.9R		9-0.7R		9.5-0.7R		9.3-0.6R		9.7-0.6R		9.5-0.5R		9.8-0.5R		9.7-0.4R		9.9-0.4R	
	12	q _a q _f	789	1283	772	1255	760	1235	750	1219	743	1207	737	1197	732	1189	727	1182	724	1176
		F	11.2-1.6R		11.7-1.5R		12-1.3R		12.2-1.2R		12.3-1.1R		12.5-1R		12.6-1R		12.7-0.9R		12.8-0.8R	
	18	q _a q _f	731	1188	722	1173	659	1071	662	1076	664	1080	622	1010	628	1020	633	1029	601	976
		F	13-2.4R		13.2-2.1R		15.1-2.5R		14.9-2.1R		14.8-1.8R		16.2-2R		15.9-1.7R		15.7-1.5R		16.7-1.5R	
	24	q _a q _f	648	1053	655	1064	587	954	602	979	552	897	569	925	530	861	546	888	514	835
		F	15.9-3.9R		15.4-3R		17.8-3.6R		17.1-2.9R		19-3.2R		18.2-2.6R		19.8-2.9R		19-2.4R		20.3-2.4R	
	36	q _a q _f	648	1053	565	918	497	807	529	860	480	780	438	712	470	763	436	708	398	647
		F	15.9-3.9R		19-4.9R		22.1-5.8R		20.2-4.2R		22.6-4.7R		25-5.3R		22.9-4R		24.8-4.4R		26.5-4.2R	
	60	q _a q _f	529	859	447	727	497	807	441	717	384	625	336	546	298	484	352	573	319	518
		F	21.2-7.3R		25.6-9.2R		22.1-5.8R		25.2-6.8R		28.3-7.6R		31.4-8.6R		34.4-9.3R		29.7-6.4R		31.7-6R	

**TABLE 7-5—ALLOWABLE DIAPHRAGM SHEARS (q_a), (ln plf), FACTORED
DIAPHRAGM SHEARS (q_f), (ln plf), AND FLEXIBILITY FACTOR (F)**

18 ga.			DGB-36 AND DGBF-36 INTERLOCK DECK WITH PNEUTEK SDK61 PINS AND DELTAGRIP™ SIDE SEAM ATTACHMENT (See DelatGrip™ system notes)																	
Support Fasteners	Seam Spacing (in)	Span																		
			4		5		6		7		8		9		10		11		12	
9	4	q _a q _f	2593	4213	2575	4184	2562	4163	2552	4147	2544	4134	2317	3707	1877	3003	1551	2481	1303	2085
		F	4.3-0.2R		4.3-0.2R		4.4-0.2R		4.4-0.1R		4.4-0.1R		4.4-0.1R		4.4-0.1R		4.4-0.1R		4.4-0.1R	
	8	q _a q _f	2258	3669	2242	3644	2159	3508	2161	3511	2101	3414	2109	3428	1877	3003	1551	2481	1303	2085
		F	5.5-0.6R		5.5-0.5R		5.8-0.5R		5.8-0.4R		5.9-0.4R		5.9-0.4R		6-0.4R		6-0.3R		6.1-0.3R	
	12	q _a q _f	2018	3279	1929	3135	1864	3029	1814	2948	1774	2883	1743	2832	1716	2789	1551	2481	1303	2085
		F	6.5-1R		6.8-1R		7-0.9R		7.2-0.9R		7.3-0.8R		7.4-0.7R		7.5-0.7R		7.6-0.7R		7.6-0.6R	
	18	q _a q _f	1852	3009	1783	2897	1583	2572	1564	2542	1550	2519	1423	2312	1425	2316	1427	2319	1303	2085
		F	7.3-1.5R		7.5-1.3R		8.5-1.6R		8.5-1.4R		8.5-1.2R		9.2-1.4R		9.1-1.2R		9.1-1.1R		9.6-1.1R	
	24	q _a q _f	1646	2675	1609	2614	1411	2292	1416	2301	1276	2074	1296	2106	1190	1934	1215	1974	1122	1824
		F	8.5-2.2R		8.5-1.8R		9.7-2.2R		9.5-1.8R		10.4-2.1R		10.2-1.7R		11-1.9R		10.7-1.6R		11.3-1.6R	
	36	q _a q _f	1646	2675	1404	2281	1215	1975	1250	2032	1109	1801	973	1582	1033	1678	929	1510	843	1369
		F	8.5-2.2R		10-2.7R		11.5-3.3R		10.9-2.5R		12-2.9R		13.2-3.2R		12.4-2.5R		13.4-2.8R		14.2-2.6R	
	60	q _a q _f	1393	2263	1165	1893	1215	1975	1043	1694	899	1460	787	1279	697	1133	777	1262	703	1142
		F	10.5-3.6R		12.4-4.5R		11.5-3.3R		12.9-3.8R		14.4-4.3R		15.8-4.8R		17.3-5.2R		15.5-3.9R		16.4-3.5R	
7	4	q _a q _f	2071	3365	2064	3353	2059	3345	2055	3339	2052	3335	2050	3331	1877	3003	1551	2481	1303	2085
		F	4.4-0.2R		4.4-0.1R		4.4-0.1R		4.4-0.1R		4.4-0.1R		4.5-0.1R		4.5-0.1R		4.5-0.1R		4.5-0.1R	
	8	q _a q _f	1830	2974	1835	2981	1783	2898	1794	2915	1757	2855	1769	2875	1740	2828	1551	2481	1303	2085
		F	5.8-0.5R		5.7-0.4R		6-0.4R		5.9-0.3R		6.1-0.3R		6-0.3R		6.2-0.3R		6.1-0.2R		6.2-0.2R	
	12	q _a q _f	1629	2647	1581	2570	1547	2514	1521	2472	1501	2439	1485	2413	1472	2391	1460	2373	1303	2085
		F	7-0.9R		7.2-0.8R		7.4-0.8R		7.5-0.7R		7.6-0.6R		7.7-0.6R		7.8-0.5R		7.8-0.5R		7.9-0.4R	
	18	q _a q _f	1477	2400	1451	2358	1297	2108	1303	2118	1308	2125	1207	1962	1221	1984	1233	2003	1159	1883
		F	8-1.4R		8.1-1.1R		9.2-1.4R		9.1-1.2R		9-1R		9.8-1.1R		9.6-1R		9.5-0.9R		10.1-0.9R	
	24	q _a q _f	1276	2073	1289	2094	1134	1843	1166	1895	1055	1714	1091	1772	1005	1633	1040	1690	970	1577
		F	9.7-2.2R		9.4-1.7R		10.8-2R		10.3-1.6R		11.4-1.8R		10.9-1.5R		11.9-1.6R		11.4-1.4R		12.1-1.3R	
	36	q _a q _f	1276	2073	1087	1767	941	1530	1007	1637	904	1468	818	1328	880	1431	812	1319	745	1211
		F	9.7-2.2R		11.4-2.7R		13.2-3.3R		12.1-2.4R		13.5-2.7R		14.8-3R		13.6-2.2R		14.7-2.5R		15.7-2.4R	
	60	q _a q _f	1014	1647	843	1370	941	1530	827	1344	725	1178	639	1038	569	925	665	1081	605	983
		F	12.7-4.2R		15.2-5.2R		13.2-3.3R		15-3.8R		16.7-4.3R		18.5-4.8R		20.2-5.3R		17.5-3.6R		18.6-3.4R	
5	4	q _a q _f	1527	2482	1525	2477	1523	2474	1521	2472	1520	2470	1519	2469	1519	2468	1518	2467	1303	2085
		F	4.4-0.1R		4.4-0.1R		4.4-0.1R		4.4-0.1R		4.5-0.1R		4.5-0.1R		4.5-0.1R		4.5-0.1R		4.5-0.1R	
	8	q _a q _f	1419	2306	1422	2311	1398	2271	1403	2280	1385	2251	1392	2261	1377	2238	1384	2248	1303	2085
		F	5.9-0.4R		5.8-0.3R		6.1-0.3R		6-0.3R		6.2-0.3R		6.1-0.2R		6.2-0.2R		6.1-0.2R		6.3-0.2R	
	12	q _a q _f	1313	2134	1288	2094	1270	2064	1256	2041	1245	2023	1236	2009	1229	1997	1223	1987	1217	1978
		F	7.2-0.8R		7.4-0.8R		7.6-0.7R		7.7-0.6R		7.7-0.6R		7.8-0.5R				7.9-0.4R		7.9-0.4R	
	18	q _a q _f	1224	1989	1211	1968	1113	1809	1119	1818	1123	1825	1056	1715	1066	1733	1075	1747	1024	1664
		F	8.3-1.3R		8.4-1.1R		9.5-1.3R		9.3-1R		9.2-0.9R		10-1R		9.8-0.9R		9.7-0.8R		10.3-0.8R	
	24	q _a q _f	1092	1774	1105	1795	998	1621	1023	1663	943	1532	971	1578	907	1474	935	1519	882	1433
		F	10.2-2.1R		9.8-1.6R		11.2-1.9R		10.7-1.5R		11.8-1.7R		11.2-1.3R		12.2-1.5R		11.7-1.2R		12.5-1.2R	
	36	q _a q _f	1092	1774	959	1559	848	1378	904	1469	823	1337	753	1224	807	1312	751	1220	701	1139
		F	10.2-2.1R		12.1-2.7R		14-3.2R		12.6-2.2R		14-2.5R		15.5-2.8R		14.1-2.1R		15.2-2.3R		16.3-2.2R	
	60	q _a q _f	896	1457	762	1239	848	1378	756	1229	680	1105	615	999	548	891	641	1041	588	955
		F	13.8-4.3R		16.6-5.4R		14-3.2R		15.9-3.7R		17.7-4.2R		19.6-4.7R		21.5-5.2R		18.3-3.4R		19.6-3.2R	
4	4	q _a q _f	1236	2009	1235	2007	1234	2006	1234	2005	1233	2004	1233	2003	1232	2003	1232	2002	1232	2002
		F	4.4-0.1R		4.4-0.1R		4.5-0.1R		4.5-0.1R		4.5-0.1R		4.5-0.1R		4.5-0.1R		4.5+0R		4.5+0R	
	8	q _a q _f	1170	1900	1173	1907	1159	1883	1164	1891	1153	1874	1158	1881	1149	1868	1154	1875	1147	1863
		F	6-0.4R		5.9-0.3R		6.2-0.3R		6-0.2R		6.2-0.2R		6.1-0.2R		6.3-0.2R		6.2-0.2R		6.3-0.2R	
	12	q _a q _f	1097	1783	1083	1761	1074	1745	1066	1732	1060	1723	1055	1715	1052	1709	1048	1703	1046	1699
		F	7.4-0.7R		7.6-0.7R		7.7-0.6R		7.8-0.5R		7.9-0.5R		7.9-0.4R		8-0.4R		8-0.4R		8-0.3R	
	18	q _a q _f	1030	1674	1027	1668	957	1555	965	1569	972	1579	923	1499	933	1516	941	1530	904	1469
		F	8.7-1.2R		8.6-0.9R		9.8-1.1R		9.6-0.9R		9.4-0.8R		10.3-0.9R		10-0.7R		9.8-0.6R		10.5-0.7R	
	24	q _a q _f	924	1501	944	1534	863	1403	890	1446	828	1346	855	1390	805	1309	831	1350	789	1283
		F	10.8-2R		10.2-1.4R		11.7-1.7R		11-1.3R		12.2-1.5R		11.6-1.2R		12.6-1.3R		12-1R		12.8-1.1R	
	36	q _a q _f	924	1501	821	1335	733	1191	790	1284	725	1178	668	1085	720	1170	674	1095	632	1027
		F	10.8-2R		12.8-2.5R		14.9-3R		13.2-2R		14.7-2.3R		16.2-2.6R		14.6-1.8R		15.8-2R		16.9-2R	
	60	q _a q _f	749	1217	641	1041	733	1191	658	1070	595	967	542	880	485	788	573	931	534	868
		F	15.1-4.4R		18.3-5.5R		14.9-3R		16.9-3.5R		18.9-4R		21-4.5R		23-4.9R		19.2-3.1R		20.6-3R	

**TABLE 7-5—ALLOWABLE DIAPHRAGM SHEARS (q_a), (ln plf), FACTORED
DIAPHRAGM SHEARS (q_f), (ln plf), AND FLEXIBILITY FACTOR (F)**

16 ga.			DGB-36 AND DGBF-36 INTERLOCK DECK WITH PNEUTEK SDK61 PINS AND DELTAGRIP™ SIDE SEAM ATTACHMENT (See DelatGrip™ system notes)																	
Support Fasteners	Seam Spacing (in)	Span																		
			4		5		6		7		8		9		10		11		12	
9	4	q _a q _f	3255	5290	3243	5269	3234	5255	3227	5243	3221	5235	3217	5228	3214	5222	2931	4690	2463	3941
		F	3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.3-0.1R		3.3+0R		3.3+0R		3.3+0R	
	8	q _a q _f	2918	4741	2914	4735	2833	4604	2843	4620	2785	4525	2799	4548	2753	4474	2768	4498	2463	3941
		F	4.1-0.3R		4.1-0.3R		4.2-0.3R		4.2-0.2R		4.3-0.2R		4.3-0.2R		4.4-0.2R		4.3-0.2R		4.4-0.1R	
	12	q _a q _f	2639	4289	2556	4153	2494	4052	2446	3975	2409	3914	2379	3865	2354	3824	2333	3790	2315	3761
		F	4.8-0.6R		5-0.5R		5.1-0.5R		5.2-0.5R		5.3-0.4R		5.3-0.4R		5.4-0.4R		5.4-0.3R		5.4-0.3R	
	18	q _a q _f	2431	3950	2372	3855	2135	3469	2129	3460	2125	3453	1968	3197	1981	3219	1992	3237	1876	3048
		F	5.5-0.9R		5.5-0.8R		6.2-0.9R		6.2-0.8R		6.1-0.7R		6.6-0.7R		6.5-0.6R		6.4-0.6R		6.8-0.6R	
	24	q _a q _f	2154	3500	2143	3482	1899	3086	1929	3135	1752	2847	1794	2916	1658	2694	1703	2767	1592	2586
		F	6.5-1.4R		6.3-1.1R		7.2-1.3R		6.9-1R		7.6-1.2R		7.3-1R		7.9-1.1R		7.6-0.9R		8.1-0.9R	
	36	q _a q _f	2154	3500	1857	3017	1619	2631	1696	2757	1528	2483	1386	2253	1471	2390	1357	2206	1234	2006
		F	6.5-1.4R		7.6-1.8R		8.7-2.1R		8-1.5R		8.9-1.7R		9.7-1.9R		9-1.5R		9.7-1.6R		10.3-1.5R	
	60	q _a q _f	1790	2909	1506	2447	1619	2631	1430	2323	1254	2038	1102	1790	980	1592	1119	1818	1016	1650
		F	8.3-2.6R		9.9-3.3R		8.7-2.1R		9.8-2.4R		10.9-2.8R		12-3.1R		13-3.4R		11.4-2.3R		12.1-2.2R	
7	4	q _a q _f	2582	4196	2578	4189	2575	4184	2572	4180	2570	4177	2569	4174	2568	4172	2567	4171	2463	3941
		F	3.2-0.1R		3.2-0.1R		3.3-0.1R		3.3+0R		3.3+0R		3.3+0R		3.3+0R		3.3+0R		3.3+0R	
	8	q _a q _f	2357	3830	2367	3846	2320	3770	2334	3792	2300	3737	2313	3759	2287	3716	2300	3737	2278	3701
		F	4.2-0.3R		4.2-0.2R		4.3-0.2R		4.3-0.2R		4.4-0.2R		4.3-0.1R		4.4-0.1R		4.4-0.1R		4.4-0.1R	
	12	q _a q _f	2140	3477	2098	3409	2068	3360	2045	3323	2027	3294	2013	3271	2001	3252	1991	3236	1983	3222
		F	5.1-0.5R		5.2-0.4R		5.3-0.4R		5.4-0.3R		5.4-0.3R		5.5-0.3R		5.5-0.3R		5.5-0.2R		5.5-0.2R	
	18	q _a q _f	1960	3185	1945	3161	1767	2872	1785	2900	1798	2922	1678	2727	1701	2764	1720	2794	1630	2648
		F	5.9-0.8R		5.9-0.6R		6.6-0.7R		6.5-0.6R		6.4-0.5R		6.9-0.6R		6.8-0.5R		6.7-0.4R		7.1-0.4R	
	24	q _a q _f	1702	2765	1741	2830	1553	2524	1609	2614	1470	2389	1526	2480	1417	2302	1470	2388	1380	2243
		F	7.2-1.3R		6.8-1R		7.8-1.1R		7.4-0.9R		8.1-1R		7.7-0.8R		8.4-0.9R		8-0.7R		8.5-0.7R	
	36	q _a q _f	1702	2765	1470	2389	1285	2087	1394	2265	1259	2046	1146	1862	1244	2022	1152	1872	1072	1742
		F	7.2-1.3R		8.5-1.7R		9.7-2R		8.7-1.3R		9.7-1.5R		10.6-1.7R		9.6-1.2R		10.4-1.3R		11.1-1.3R	
	60	q _a q _f	1334	2167	1117	1815	1285	2087	1136	1845	1015	1649	914	1486	817	1327	967	1571	890	1446
		F	9.8-2.8R		11.7-3.5R		9.7-2R		11-2.3R		12.3-2.6R		13.5-2.9R		14.8-3.2R		12.5-2.1R		13.4-2R	
5	4	q _a q _f	1884	3062	1883	3060	1882	3058	1881	3056	1880	3055	1880	3054	1879	3054	1879	3053	1878	3052
		F	3.2-0.1R		3.3-0.1R		3.3+0R		3.3+0R		3.3+0R		3.3+0R		3.3+0R		3.3+0R		3.3+0R	
	8	q _a q _f	1788	2906	1794	2915	1773	2881	1780	2892	1764	2867	1771	2877	1759	2858	1765	2868	1755	2851
		F	4.3-0.2R		4.2-0.2R		4.4-0.2R		4.3-0.1R		4.4-0.1R		4.3-0.1R		4.4-0.1R		4.4-0.1R		4.5-0.1R	
	12	q _a q _f	1683	2735	1663	2703	1648	2679	1637	2661	1628	2646	1621	2635	1616	2625	1611	2617	1606	2610
		F	5.2-0.4R		5.3-0.4R		5.4-0.3R		5.4-0.3R		5.5-0.3R		5.5-0.3R		5.5-0.2R		5.6-0.2R		5.6-0.2R	
	18	q _a q _f	1586	2577	1580	2568	1477	2400	1489	2420	1498	2435	1425	2315	1440	2341	1453	2360	1396	2269
		F	6-0.7R		6-0.6R		6.8-0.7R		6.6-0.5R		6.5-0.5R		7-0.5R		6.9-0.4R		6.8-0.4R		7.2-0.4R	
	24	q _a q _f	1429	2322	1458	2370	1338	2173	1377	2238	1284	2086	1324	2152	1249	2030	1288	2092	1225	1990
		F	7.5-1.3R		7-0.9R		8-1.1R		7.6-0.8R		8.3-0.9R		7.9-0.7R		8.5-0.8R		8.1-0.6R		8.7-0.6R	
	36	q _a q _f	1429	2322	1276	2074	1142	1856	1227	1994	1129	1834	1041	1692	1120	1820	1050	1705	986	1602
		F	7.5-1.3R		8.8-1.6R		10.2-1.9R		9-1.2R		10-1.4R		11-1.6R		9.9-1.1R		10.7-1.2R		11.4-1.2R	
	60	q _a q _f	1169	1900	1004	1631	1142	1856	1028	1671	931	1513	849	1379	778	1265	896	1456	836	1358
		F	10.5-2.8R		12.6-3.5R		10.2-1.9R		11.5-2.2R		12.8-2.5R		14.2-2.8R		15.5-3R		13-1.9R		13.9-1.9R	
4	4	q _a q _f	1519	2469	1519	2468	1518	2467	1518	2467	1518	2466	1517	2466	1517	2465	1517	2465	1517	2465
		F	3.3-0.1R		3.3+0R		3.3+0R		3.3+0R		3.3+0R		3.3+0R		3.3+0R		3.3+0R		3.3+0R	
	8	q _a q _f	1463	2377	1467	2384	1455	2365	1460	2373	1451	2359	1456	2366	1449	2355	1453	2361	1447	2352
		F	4.3-0.2R		4.2-0.1R		4.4-0.1R		4.3-0.1R		4.4-0.1R		4.4-0.1R		4.5-0.1R		4.4-0.1R		4.5-0.1R	
	12	q _a q _f	1395	2266	1384	2249	1377	2237	1371	2228	1367	2221	1363	2215	1360	2211	1358	2207	1356	2203
		F	5.3-0.4R		5.4-0.3R		5.5-0.3R		5.5-0.3R		5.5-0.2R		5.6-0.2R		5.6-0.2R		5.6-0.2R		5.6-0.2R	
	18	q _a q _f	1326	2155	1327	2157	1257	2043	1270	2063	1279	2078	1228	1996	1241	2017	1251	2033	1212	1970
		F	6.2-0.6R		6.1-0.5R		6.9-0.6R		6.7-0.5R		6.6-0.4R		7.2-0.4R		7-0.4R		6.8-0.3R		7.3-0.3R	
	24	q _a q _f	1206	1961	1238	2012	1151	1870	1187	1929	1119	1818	1153	1874	1098	1784	1130	1836	1083	1760
		F	7.8-1.1R		7.2-0.8R		8.3-0.9R		7.7-0.7R		8.5-0.8R		8.1-0.6R		8.7-0.7R		8.3-0.5R		8.8-0.5R	
	36	q _a q _f	1206	1961	1093	1776	989	1608	1068	1736	992	1612	923	1499	994	1615	938	1524	886	1440
		F	7.8-1.1R		9.2-1.4R		10.6-1.7R		9.3-1.1R		10.3-1.2R		11.4-1.4R		10.2-1R		11-1.1R		11.7-1.1R	
	60	q _a q _f	984	1599	852	1384	989	1608	898	1460	819	1331	751	1220	691	1123	804	1306	753	1224
		F	11.3-2.8R		13.6-3.5R		10.6-1.7R		12.1-2R		13.5-2.3R		14.9-2.5R		16.3-2.8R		13.4-1.7R		14.4-1.7R	

**TABLE 7-6—ALLOWABLE DIAPHRAGM SHEARS (qa), (ln plf), FACTORED
DIAPHRAGM SHEARS (qf), (ln plf), AND FLEXIBILITY FACTOR (F)**

22 ga.			DGB-36 AND DGBF-36 INTERLOCK DECK WITH PNEUTEK SDK63 PINS AND DELTAGRIP™ SIDE SEAM ATTACHMENT (See DelatGrip™ system notes)																	
Support Fasteners	Seam Spacing (in)	Span																		
			4		5		6		7		8		9		10		11		12	
9	4	q _a q _r	1672	2717	1634	2655	1606	2610	1585	2576	1457	2331	1151	1842	932	1492	771	1233	647	1036
		F	7.9-0.8R		8.1-0.7R		8.2-0.6R		8.3-0.6R		8.4-0.5R		8.5-0.5R		8.5-0.5R		8.6-0.4R		8.6-0.4R	
	8	q _a q _r	1376	2236	1331	2162	1244	2022	1226	1992	1167	1897	1151	1842	932	1492	771	1233	647	1036
		F	10.2-1.9R		10.4-1.7R		11.1-1.7R		11.2-1.5R		11.6-1.5R		11.6-1.4R		12-1.4R		12-1.3R		12.3-1.1R	
	12	q _a q _r	1222	1985	1126	1829	1056	1716	1002	1629	961	1561	927	1507	899	1460	771	1233	647	1036
		F	11.7-2.8R		12.5-2.8R		13.2-2.8R		13.7-2.7R		14.1-2.6R		14.5-2.6R		14.9-2.4R		15.1-2.4R		15.3-2R	
	18	q _a q _r	1130	1836	1045	1697	906	1473	858	1393	820	1332	718	1166	702	1140	688	1119	623	1012
		F	12.7-3.5R		13.5-3.5R		15.4-4.2R		15.8-3.9R		16.1-3.7R		17.6-4.1R		17.8-3.8R		17.9-3.6R		18.9-3.3R	
	24	q _a q _r	1028	1670	956	1554	798	1297	764	1241	656	1066	645	1048	570	927	569	925	513	834
		F	14.1-4.6R		14.9-4.4R		17-5.3R		17.3-4.8R		19.1-5.4R		19.1-5R		20.8-5.4R		20.6-4.9R		21.7-4.5R	
	36	q _a q _r	1028	1670	847	1376	689	1119	670	1089	574	932	499	811	505	820	450	731	404	656
		F	14.1-4.6R		16.7-5.8R		19.2-6.9R		19.1-6.1R		21.2-6.8R		23.4-7.7R		22.8-6.6R		24.7-7.3R		25.9-6.4R	
	60	q _a q _r	915	1486	715	1162	689	1119	576	936	492	799	426	692	373	607	390	634	349	567
		F	16.1-6.3R		19.1-7.9R		19.2-6.9R		21.6-8R		24-8.9R		26.5-10R		28.9-10.8R		27.5-9.2R		28.7-7.8R	
7	4	q _a q _f	1354	2201	1337	2172	1324	2152	1315	2136	1307	2124	1151	1842	932	1492	771	1233	647	1036
		F	8.2-0.6R		8.4-0.6R		8.5-0.5R		8.6-0.4R		8.6-0.4R		8.7-0.4R		8.7-0.3R		8.8-0.3R		8.8-0.3R	
	8	q _a q _f	1102	1790	1086	1765	1028	1670	1027	1668	986	1603	990	1609	932	1492	771	1233	647	1036
		F	11.1-1.7R		11.2-1.5R		11.9-1.5R		11.8-1.3R		12.3-1.3R		12.2-1.1R		12.6-1.1R		12.5-1R		12.8-0.9R	
	12	q _a q _f	952	1548	895	1454	853	1387	822	1336	798	1297	779	1265	763	1240	750	1219	647	1036
		F	13.2-2.8R		13.9-2.7R		14.5-2.6R		15-2.5R		15.4-2.3R		15.7-2.2R		16-2.1R		16.2-2R		16.3-1.7R	
	18	q _a q _f	860	1397	815	1324	707	1149	693	1127	683	1110	619	1006	618	1004	617	1003	562	914
		F	14.7-3.8R		15.4-3.5R		17.7-4.2R		17.8-3.8R		18-3.4R		19.7-3.8R		19.6-3.4R		19.6-3.2R		20.8-3R	
	24	q _a q _f	753	1224	726	1179	624	1015	622	1011	540	878	547	890	488	792	498	810	453	736
		F	17-5.3R		17.4-4.7R		20-5.6R		19.9-4.9R		22.1-5.5R		21.7-4.8R		23.7-5.2R		23.1-4.6R		24.6-4.3R	
	36	q _a q _f	753	1224	628	1020	518	842	531	862	458	744	402	652	422	686	379	616	343	558
		F	17-5.3R		20.2-6.6R		23.4-8R		22.7-6.5R		25.3-7.3R		27.9-8.2R		26.6-6.7R		28.8-7.4R		30.5-6.7R	
	60	q _a q _f	633	1028	500	813	518	842	437	710	376	611	329	534	291	472	319	519	289	469
		F	20.5-8R		24.5-10R		23.4-8R		26.6-9.1R		29.7-10.3R		32.9-11.5R		36-12.5R		33.1-9.9R		34.9-8.7R	
5	4	q _a q _f	1043	1695	1035	1682	1030	1673	1025	1666	1022	1661	1019	1656	932	1492	771	1233	647	1036
		F	8.4-0.6R		8.5-0.5R		8.6-0.4R		8.7-0.4R		8.7-0.4R		8.8-0.3R		8.8-0.3R		8.8-0.3R		8.8-0.2R	
	8	q _a q _f	907	1474	899	1461	865	1405	865	1405	840	1365	843	1370	824	1339	771	1233	647	1036
		F	11.5-1.6R		11.5-1.4R		12.2-1.4R		12.1-1.2R		12.6-1.1R		12.5-1R		12.8-1R		12.7-0.9R		13-0.8R	
	12	q _a q _f	811	1318	774	1258	746	1213	725	1179	709	1152	695	1130	684	1112	675	1097	647	1036
		F	13.8-2.7R		14.6-2.6R		15.1-2.5R		15.5-2.3R		15.9-2.1R		16.2-2R		16.4-1.9R		16.6-1.8R		16.7-1.6R	
	18	q _a q _f	745	1211	716	1163	635	1032	626	1018	620	1007	568	923	569	924	569	924	532	864
		F	15.7-3.8R		16.2-3.4R		18.6-4.1R		18.7-3.6R		18.7-3.2R		20.6-3.6R		20.4-3.2R		20.3-2.9R		21.6-2.8R	
	24	q _a q _f	664	1080	647	1051	567	922	568	922	511	831	518	842	472	768	485	787	440	715
		F	18.4-5.5R		18.5-4.7R		21.4-5.7R		21-4.8R		23.4-5.4R		22.8-4.6R		24.9-5R		24.2-4.4R		25.8-4.2R	
	36	q _a q _f	664	1080	567	921	491	797	503	817	439	713	384	625	407	661	365	593	331	537
		F	18.4-5.5R		21.9-6.9R		25.5-8.3R		24.3-6.5R		27.1-7.3R		30-8.3R		28.2-6.6R		30.6-7.3R		32.5-6.7R	
	60	q _a q _f	566	919	469	763	491	797	415	674	357	580	312	506	275	447	305	496	276	448
		F	22.7-8.8R		27.4-11R		25.5-8.3R		29-9.5R		32.5-10.7R		36-12R		39.4-13.1R		35.6-9.9R		37.7-8.9R	
4	4	q _a q _f	858	1394	854	1387	851	1383	849	1380	847	1377	846	1375	845	1373	771	1233	647	1036
		F	8.5-0.5R		8.6-0.4R		8.7-0.4R		8.7-0.3R		8.8-0.3R		8.8-0.3R		8.9-0.2R		8.9-0.2R		8.9-0.2R	
	8	q _a q _f	762	1238	761	1236	738	1199	740	1203	724	1177	728	1183	715	1162	719	1168	647	1036
		F	11.9-1.5R		11.8-1.2R		12.5-1.2R		12.4-1R		12.8-1R		12.7-0.9R		13.1-0.8R		12.9-0.7R		13.2-0.7R	
	12	q _a q _f	686	1114	662	1076	645	1048	632	1027	621	1010	613	996	606	985	600	975	595	967
		F	14.6-2.6R		15.2-2.4R		15.7-2.2R		16.1-2.1R		16.4-1.9R		16.7-1.8R		16.9-1.7R		17-1.6R		17.2-1.4R	
	18	q _a q _f	630	1023	613	996	549	893	547	889	546	887	504	819	507	824	510	829	479	779
		F	16.7-3.7R		17.2-3.3R		19.8-3.9R		19.7-3.4R		19.6-2.9R		21.5-3.3R		21.2-2.9R		21-2.6R		22.4-2.6R	
	24	q _a q _f	557	904	552	897	488	793	495	804	448	729	459	746	423	688	434	706	402	653
		F	20.1-5.6R		19.9-4.6R		23-5.5R		22.4-4.5R		24.9-5.1R		24.1-4.3R		26.3-4.7R		25.4-4R		27.1-3.9R	
	36	q _a q _f	557	904	478	776	415	675	435	706	381	619	333	542	361	586	323	525	292	475
		F	20.1-5.6R		24.1-7.1R		28.1-8.5R		26.2-6.4R		29.3-7.2R		32.4-8.1R		30.1-6.3R		32.7-6.9R		34.8-6.5R	
	60	q _a q _f	462	751	377	613	415	675	349	567	299	486	260	423	229	373	264	428	237	386
		F	25.8-9.7R		31.2-12.1R		28.1-8.5R		32-9.8R		35.9-11R		39.9-12.4R		43.7-13.4R		38.6-9.8R		41.1-8.9R	

**TABLE 7-6—ALLOWABLE DIAPHRAGM SHEARS (q_a), (ln plf), FACTORED
DIAPHRAGM SHEARS (q_f), (ln plf), AND FLEXIBILITY FACTOR (F)**

20 ga.			DGB-36 AND DGBF-36 INTERLOCK DECK WITH PNEUTEK SDK63 PINS AND DELTAGRIP™ SIDE SEAM ATTACHMENT (See DelatGrip™ system notes)																	
Support Fasteners	Seam Spacing (in)	Span																		
			4		5		6		7		8		9		10		11		12	
9	4	q _a q _f	2015 3274	1985 3225	1962 3189	1945 3161	1916 3065	1514 2422	1226 1962	1013 1621	852 1362									
		F	6.2-0.5R		6.3-0.4R		6.4-0.4R		6.5-0.3R		6.5-0.3R		6.6-0.3R		6.6-0.3R		6.6-0.2R		6.6-0.2R	
	8	q _a q _f	1686 2740	1650 2681	1560 2536	1549 2518	1487 2417	1486 2415	1226 1962	1013 1621	852 1362									
		F	8.1-1.2R		8.2-1.1R		8.6-1.1R		8.6-0.9R		9-0.9R		8.9-0.8R		9.2-0.8R		9.2-0.7R		9.4-0.7R	
	12	q _a q _f	1495 2429	1397 2270	1326 2154	1271 2065	1228 1996	1194 1940	1165 1893	1013 1621	852 1362									
		F	9.4-2R		9.9-1.9R		10.4-1.9R		10.7-1.8R		11-1.7R		11.2-1.6R		11.4-1.5R		11.6-1.5R		11.7-1.3R	
	18	q _a q _f	1375 2235	1291 2099	1128 1834	1095 1780	1070 1739	961 1562	949 1543	940 1527	852 1362									
		F	10.4-2.6R		10.9-2.5R		12.3-2.9R		12.5-2.7R		12.7-2.4R		13.8-2.7R		13.8-2.5R		13.8-2.3R		14.6-2.2R	
	24	q _a q _f	1238 2012	1173 1907	1017 1652	995 1617	858 1394	856 1391	760 1235	768 1247	695 1129									
		F	11.7-3.5R		12.1-3.2R		13.8-3.9R		13.8-3.4R		15.3-3.8R		15.1-3.4R		16.4-3.7R		16.1-3.3R		17-3.1R	
	36	q _a q _f	1238 2012	1043 1694	863 1402	860 1398	740 1202	646 1049	665 1081	595 968	537 873									
		F	11.7-3.5R		13.8-4.4R		15.9-5.3R		15.5-4.5R		17.2-5R		18.9-5.6R		18.2-4.7R		19.7-5.2R		20.7-4.6R	
	60	q _a q _f	1081 1757	867 1409	863 1402	725 1178	621 1009	541 878	476 774	509 828	458 745									
		F	13.7-5.2R		16.3-6.5R		15.9-5.3R		17.9-6.1R		19.9-6.9R		21.9-7.7R		23.9-8.4R		22.3-6.7R		23.4-5.9R	
7	4	q _a q _f	1626 2642	1613 2621	1603 2605	1596 2594	1591 2585	1514 2422	1226 1962	1013 1621	852 1362									
		F	6.4-0.4R		6.5-0.3R		6.6-0.3R		6.6-0.3R		6.6-0.2R		6.7-0.2R		6.7-0.2R		6.7-0.2R		6.7-0.2R	
	8	q _a q _f	1362 2213	1354 2200	1295 2105	1299 2111	1258 2044	1265 2056	1226 1962	1013 1621	852 1362									
		F	8.6-1.1R		8.6-0.9R		9.1-0.9R		9-0.8R		9.4-0.8R		9.3-0.7R		9.6-0.6R		9.5-0.6R		9.7-0.5R	
	12	q _a q _f	1185 1925	1128 1833	1087 1767	1056 1717	1033 1678	1013 1647	998 1621	985 1600	852 1362									
		F	10.4-1.9R		10.9-1.8R		11.2-1.6R		11.5-1.5R		11.7-1.4R		11.9-1.3R		12.1-1.2R		12.2-1.2R		12.3-1R	
	18	q _a q _f	1067 1735	1027 1669	899 1462	891 1449	885 1439	807 1311	810 1317	813 1322	757 1231									
		F	11.7-2.6R		12.1-2.3R		13.8-2.8R		13.8-2.4R		13.8-2.2R		15.1-2.4R		15-2.1R		14.9-1.9R		15.8-1.9R	
	24	q _a q _f	927 1506	911 1480	789 1282	796 1294	713 1158	728 1183	661 1073	682 1108	621 1009									
		F	13.8-3.9R		13.8-3.3R		15.9-3.9R		15.5-3.2R		17.3-3.7R		16.8-3.1R		18.2-3.4R		17.7-2.9R		18.8-2.8R	
	36	q _a q _f	927 1506	778 1264	662 1077	693 1126	602 978	529 860	566 920	510 828	463 752									
		F	13.8-3.9R		16.4-4.8R		19-5.8R		17.9-4.5R		20-5.1R		22.1-5.7R		20.7-4.5R		22.4-5R		23.8-4.6R	
	60	q _a q _f	761 1237	616 1001	662 1077	560 911	484 786	424 689	377 612	424 689	384 624									
		F	17.2-6.4R		20.6-8R		19-5.8R		21.5-6.7R		24-7.5R		26.6-8.5R		29.1-9.2R		26.1-6.9R		27.7-6.2R	
5	4	q _a q _f	1229 1997	1223 1988	1219 1981	1216 1976	1214 1973	1212 1970	1211 1962	1013 1621	852 1362									
		F	6.5-0.3R		6.6-0.3R		6.6-0.2R		6.7-0.2R		6.7-0.2R		6.7-0.2R		6.7-0.2R		6.7-0.1R		6.8-0.1R	
	8	q _a q _f	1096 1781	1093 1777	1061 1725	1064 1729	1041 1692	1046 1700	1028 1670	1013 1621	852 1362									
		F	8.9-1R		8.8-0.8R		9.3-0.8R		9.2-0.7R		9.5-0.7R		9.4-0.6R		9.7-0.6R		9.6-0.5R		9.8-0.5R	
	12	q _a q _f	990 1610	957 1554	931 1514	912 1482	897 1457	885 1437	874 1421	866 1407	852 1362									
		F	10.8-1.8R		11.2-1.6R		11.6-1.5R		11.8-1.4R		12-1.3R		12.2-1.2R		12.3-1.1R		12.5-1R		12.5-0.9R	
	18	q _a q _f	913 1483	888 1443	797 1295	793 1289	790 1284	730 1187	734 1193	738 1199	694 1127									
		F	12.3-2.5R		12.6-2.2R		14.4-2.7R		14.4-2.3R		14.3-2R		15.6-2.2R		15.4-2R		15.3-1.8R		16.3-1.7R	
	24	q _a q _f	811 1317	803 1304	710 1154	719 1168	652 1060	666 1083	615 999	631 1025	589 957									
		F	14.8-3.9R		14.6-3.2R		16.8-3.8R		16.3-3.1R		18.1-3.5R		17.5-2.9R		19-3.2R		18.3-2.7R		19.5-2.6R	
	36	q _a q _f	811 1317	698 1134	608 988	634 1030	570 926	510 829	546 888	494 802	448 728									
		F	14.8-3.9R		17.6-4.9R		20.4-5.9R		19-4.4R		21.2-5R		23.4-5.6R		21.7-4.3R		23.5-4.7R		25.1-4.5R	
	60	q _a q _f	679 1103	571 927	608 988	535 870	462 751	405 658	359 583	408 663	369 600									
		F	18.9-6.9R		22.8-8.6R		20.4-5.9R		23.2-6.8R		26-7.6R		28.8-8.6R		31.5-9.4R		27.8-6.7R		29.5-6.2R	
4	4	q _a q _f	1003 1630	1001 1626	999 1623	998 1621	997 1619	996 1618	995 1617	995 1616	852 1362									
		F	6.6-0.3R		6.6-0.2R		6.7-0.2R		6.7-0.2R		6.7-0.2R		6.7-0.1R		6.8-0.1R		6.8-0.1R		6.8-0.1R	
	8	q _a q _f	915 1487	916 1489	896 1456	900 1463	886 1439	890 1446	879 1428	883 1435	852 1362									
		F	9.1-0.9R		9-0.7R		9.5-0.7R		9.3-0.6R		9.7-0.6R		9.5-0.5R		9.8-0.5R		9.7-0.4R		9.9-0.4R	
	12	q _a q _f	835 1358	815 1325	800 1300	789 1282	780 1267	772 1255	766 1245	761 1237	757 1230									
		F	11.2-1.6R		11.7-1.5R		12-1.3R		12.2-1.2R		12.3-1.1R		12.5-1R		12.6-1R		12.7-0.9R		12.8-0.8R	
	18	q _a q _f	772 1254	760 1235	690 1122	692 1125	694 1127	647 1051	653 1061	658 1069	623 1012									
		F	13-2.4R		13.2-2.1R		15.1-2.5R		14.9-2.1R		14.8-1.8R		16.2-2R		15.9-1.7R		15.7-1.5R		16.7-1.5R	
	24	q _a q _f	683 1110	687 1117	614 998	628 1021	574 933	591 961	549 892	566 919	531 862									
		F	15.9-3.9R		15.4-3R		17.8-3.6R		17.1-2.9R		19-3.2R		18.2-2.6R		19.8-2.9R		19-2.4R		20.3-2.4R	
	36	q _a q _f	683 1110	593 963	520 845	552 896	499 811	451 733	486 790	446 724	404 657									
		F	15.9-3.9R		19-4.9R		22.1-5.8R		20.2-4.2R		22.6-4.7R		25-5.3R		22.9-4R		24.8-4.4R		26.5-4.2R	
	60	q _a q _f	559 909	472 767	520 845	460 747	396 643	346 563	306 498	360 585	325 529									
		F	21.2-7.3R		25.6-9.2R		22.1-5.8R		25.2-6.8R		28.3-7.6R		31.4-8.6R		34.4-9.3R		29.7-6.4R		31.7-6R	

**TABLE 7-6—ALLOWABLE DIAPHRAGM SHEARS (qa), (ln plf), FACTORED
DIAPHRAGM SHEARS (qf), (ln plf), AND FLEXIBILITY FACTOR (F)**

18 ga.			DGB-36 AND DGBF-36 INTERLOCK DECK WITH PNEUTEK SDK63 PINS AND DELTAGRIP™ SIDE SEAM ATTACHMENT (See DelatGrip™ system notes)																	
Support Fasteners	Seam Spacing (in)	Span																		
			4		5		6		7		8		9		10		11		12	
9	4	q _a q _r	2630	4273	2611	4242	2597	4220	2587	4203	2579	4190	2317	3707	1877	3003	1551	2481	1303	2085
		F	4.3-0.2R		4.3-0.2R		4.4-0.2R		4.4-0.1R		4.4-0.1R		4.4-0.1R		4.4-0.1R		4.4-0.1R		4.4-0.1R	
	8	q _a q _r	2286	3714	2269	3687	2183	3547	2184	3550	2123	3449	2131	3463	1877	3003	1551	2481	1303	2085
		F	5.5-0.6R		5.5-0.5R		5.8-0.5R		5.8-0.4R		5.9-0.4R		5.9-0.4R		6-0.4R		6-0.3R		6.1-0.3R	
	12	q _a q _r	2041	3317	1950	3169	1883	3059	1831	2976	1790	2909	1758	2856	1730	2812	1551	2481	1303	2085
		F	6.5-1R		6.8-1R		7-0.9R		7.2-0.9R		7.3-0.8R		7.4-0.7R		7.5-0.7R		7.6-0.7R		7.6-0.6R	
	18	q _a q _r	1873	3044	1802	2928	1599	2598	1579	2565	1564	2541	1434	2331	1436	2334	1438	2336	1303	2085
		F	7.3-1.5R		7.5-1.3R		8.5-1.6R		8.5-1.4R		8.5-1.2R		9.2-1.4R		9.1-1.2R		9.1-1.1R		9.6-1.1R	
	24	q _a q _r	1666	2707	1626	2642	1425	2316	1429	2322	1287	2092	1307	2123	1199	1949	1224	1989	1127	1831
		F	8.5-2.2R		8.5-1.8R		9.7-2.2R		9.5-1.8R		10.4-2.1R		10.2-1.7R		11-1.9R		10.7-1.6R		11.3-1.6R	
	36	q _a q _r	1666	2707	1419	2307	1229	1997	1263	2052	1116	1814	980	1593	1039	1688	934	1518	847	1377
		F	8.5-2.2R		10-2.7R		11.5-3.3R		10.9-2.5R		12-2.9R		13.2-3.2R		12.4-2.5R		13.4-2.8R		14.2-2.6R	
	60	q _a q _r	1411	2293	1180	1918	1229	1997	1052	1710	907	1473	794	1290	703	1143	782	1270	707	1150
		F	10.5-3.6R		12.4-4.5R		11.5-3.3R		12.9-3.8R		14.4-4.3R		15.8-4.8R		17.3-5.2R		15.5-3.9R		16.4-3.5R	
7	4	q _a q _f	2101	3414	2094	3402	2088	3394	2085	3388	2082	3383	2079	3379	1877	3003	1551	2481	1303	2085
		F	4.4-0.2R		4.4-0.1R		4.4-0.1R		4.4-0.1R		4.4-0.1R		4.5-0.1R		4.5-0.1R		4.5-0.1R		4.5-0.1R	
	8	q _a q _f	1853	3011	1857	3018	1804	2932	1815	2949	1777	2887	1789	2907	1759	2859	1551	2481	1303	2085
		F	5.8-0.5R		5.7-0.4R		6-0.4R		5.9-0.3R		6.1-0.3R		6-0.3R		6.2-0.3R		6.1-0.2R		6.2-0.2R	
	12	q _a q _f	1647	2676	1598	2597	1562	2539	1536	2495	1515	2461	1498	2434	1484	2412	1473	2393	1303	2085
		F	7-0.9R		7.2-0.8R		7.4-0.8R		7.5-0.7R		7.6-0.6R		7.7-0.6R		7.8-0.5R		7.8-0.5R		7.9-0.4R	
	18	q _a q _f	1493	2425	1466	2382	1309	2127	1314	2136	1318	2142	1216	1976	1230	1999	1241	2017	1166	1895
		F	8-1.4R		8.1-1.1R		9.2-1.4R		9.1-1.2R		9-1R		9.8-1.1R		9.6-1R		9.5-0.9R		10.1-0.9R	
	24	q _a q _f	1289	2095	1301	2114	1144	1859	1175	1910	1063	1727	1098	1785	1012	1644	1047	1701	976	1587
		F	9.7-2.2R		9.4-1.7R		10.8-2R		10.3-1.6R		11.4-1.8R		10.9-1.5R		11.9-1.6R		11.4-1.4R		12.1-1.3R	
	36	q _a q _f	1289	2095	1098	1784	950	1544	1016	1650	911	1480	824	1338	886	1441	817	1327	748	1216
		F	9.7-2.2R		11.4-2.7R		13.2-3.3R		12.1-2.4R		13.5-2.7R		14.8-3R		13.6-2.2R		14.7-2.5R		15.7-2.4R	
	60	q _a q _f	1026	1667	853	1386	950	1544	834	1355	730	1187	643	1045	573	931	669	1086	608	988
		F	12.7-4.2R		15.2-5.2R		13.2-3.3R		15-3.8R		16.7-4.3R		18.5-4.8R		20.2-5.3R		17.5-3.6R		18.6-3.4R	
5	4	q _a q _f	1551	2520	1548	2516	1546	2512	1545	2510	1544	2508	1543	2507	1542	2506	1541	2481	1303	2085
		F	4.4-0.1R		4.4-0.1R		4.4-0.1R		4.4-0.1R		4.5-0.1R		4.5-0.1R		4.5-0.1R		4.5-0.1R		4.5-0.1R	
	8	q _a q _f	1439	2338	1442	2343	1416	2302	1422	2311	1403	2281	1410	2291	1395	2267	1402	2277	1303	2085
		F	5.9-0.4R		5.8-0.3R		6.1-0.3R		6-0.3R		6.2-0.3R		6.1-0.2R		6.2-0.2R		6.1-0.2R		6.3-0.2R	
	12	q _a q _f	1330	2161	1304	2119	1285	2088	1271	2065	1259	2046	1250	2031	1242	2018	1236	2008	1230	1999
		F	7.2-0.8R		7.4-0.8R		7.6-0.7R		7.7-0.6R		7.7-0.6R		7.8-0.5R		7.9-0.5R		7.9-0.4R		7.9-0.4R	
	18	q _a q _f	1239	2013	1225	1990	1125	1828	1130	1837	1135	1844	1065	1731	1076	1749	1085	1763	1032	1678
		F	8.3-1.3R		8.4-1.1R		9.5-1.3R		9.3-1R		9.2-0.9R		10-1R		9.8-0.9R		9.7-0.8R		10.3-0.8R	
	24	q _a q _f	1105	1795	1117	1815	1008	1637	1033	1679	951	1546	980	1592	914	1486	942	1532	889	1444
		F	10.2-2.1R		9.8-1.6R		11.2-1.9R		10.7-1.5R		11.8-1.7R		11.2-1.3R		12.2-1.5R		11.7-1.2R		12.5-1.2R	
	36	q _a q _f	1105	1795	970	1576	857	1392	912	1483	830	1349	759	1234	814	1322	757	1229	706	1147
		F	10.2-2.1R		12.1-2.7R		14-3.2R		12.6-2.2R		14-2.5R		15.5-2.8R		14.1-2.1R		15.2-2.3R		16.3-2.2R	
	60	q _a q _f	907	1474	771	1253	857	1392	764	1241	686	1115	619	1006	552	896	645	1049	590	959
		F	13.8-4.3R		16.6-5.4R		14-3.2R		15.9-3.7R		17.7-4.2R		19.6-4.7R		21.5-5.2R		18.3-3.4R		19.6-3.2R	
4	4	q _a q _f	1256	2041	1255	2039	1254	2037	1253	2036	1253	2035	1252	2035	1252	2034	1252	2034	1251	2033
		F	4.4-0.1R		4.4-0.1R		4.5-0.1R		4.5-0.1R		4.5-0.1R		4.5-0.1R		4.5-0.1R		4.5+0R		4.5+0R	
	8	q _a q _f	1187	1928	1190	1934	1175	1910	1180	1918	1169	1900	1174	1908	1165	1894	1170	1901	1162	1889
		F	6-0.4R		5.9-0.3R		6.2-0.3R		6-0.2R		6.2-0.2R		6.1-0.2R		6.3-0.2R		6.2-0.2R		6.3-0.2R	
	12	q _a q _f	1112	1806	1097	1783	1087	1767	1079	1754	1073	1744	1068	1736	1064	1729	1061	1724	1058	1719
		F	7.4-0.7R		7.6-0.7R		7.7-0.6R		7.8-0.5R		7.9-0.5R		7.9-0.4R		8-0.4R		8-0.4R		8-0.3R	
	18	q _a q _f	1043	1695	1039	1689	967	1572	976	1586	982	1596	932	1514	943	1532	951	1545	912	1482
		F	8.7-1.2R		8.6-0.9R		9.8-1.1R		9.6-0.9R		9.4-0.8R		10.3-0.9R		10-0.7R		9.8-0.6R		10.5-0.7R	
	24	q _a q _f	934	1518	955	1551	872	1417	899	1461	836	1358	863	1403	812	1320	838	1362	796	1293
		F	10.8-2R		10.2-1.4R		11.7-1.7R		11-1.3R		12.2-1.5R		11.6-1.2R		12.6-1.3R		12-1R		12.8-1.1R	
	36	q _a q _f	934	1518	830	1349	740	1203	797	1296	731	1188	673	1094	726	1179	679	1103	636	1034
		F	10.8-2R		12.8-2.5R		14.9-3R		13.2-2R		14.7-2.3R		16.2-2.6R		14.6-1.8R		15.8-2R		16.9-2R	
	60	q _a q _f	758	1231	648	1053	740	1203	664	1079	600	975	546	887	487	792	577	938	537	872
		F	15.1-4.4R		18.3-5.5R		14.9-3R		16.9-3.5R		18.9-4R		21-4.5R		23-4.9R		19.2-3.1R		20.6-3R	

**TABLE 7-6—ALLOWABLE DIAPHRAGM SHEARS (q_a), (ln plf), FACTORED
DIAPHRAGM SHEARS (q_f), (ln plf), AND FLEXIBILITY FACTOR (F)**

16 ga.			DGB-36 AND DGBF-36 INTERLOCK DECK WITH PNEUTEK SDK63 PINS AND DELTAGRIP™ SIDE SEAM ATTACHMENT (See DelatGrip™ system notes)																	
Support Fasteners	Seam Spacing (in)	Span																		
			4		5		6		7		8		9		10		11		12	
9	4	q _a q _r	3171	5153	3160	5134	3151	5121	3145	5111	3140	5103	3136	5097	3133	5092	2931	4690	2463	3941
		F	3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.3-0.1R		3.3+0R		3.3+0R		3.3+0R	
	8	q _a q _r	2851	4634	2849	4630	2773	4507	2783	4523	2728	4433	2742	4456	2699	4386	2714	4410	2463	3941
		F	4.1-0.3R		4.1-0.3R		4.2-0.3R		4.2-0.2R		4.3-0.2R		4.3-0.2R		4.4-0.2R		4.3-0.2R		4.4-0.1R	
	12	q _a q _r	2584	4199	2505	4071	2447	3977	2403	3904	2367	3847	2339	3801	2315	3763	2296	3731	2279	3703
		F	4.8-0.6R		5-0.5R		5.1-0.5R		5.2-0.5R		5.3-0.4R		5.3-0.4R		5.4-0.4R		5.4-0.3R		5.4-0.3R	
	18	q _a q _r	2381	3870	2327	3782	2098	3409	2094	3403	2092	3399	1939	3151	1953	3174	1964	3192	1851	3009
		F	5.5-0.9R		5.5-0.8R		6.2-0.9R		6.2-0.8R		6.1-0.7R		6.6-0.7R		6.5-0.6R		6.4-0.6R		6.8-0.6R	
	24	q _a q _r	2110	3429	2103	3417	1867	3033	1898	3084	1726	2805	1769	2875	1635	2657	1681	2731	1572	2555
		F	6.5-1.4R		6.3-1.1R		7.2-1.3R		6.9-1R		7.6-1.2R		7.3-1R		7.9-1.1R		7.6-0.9R		8.1-0.9R	
	36	q _a q _r	2110	3429	1821	2960	1590	2584	1669	2712	1504	2444	1366	2220	1451	2358	1341	2179	1224	1989
		F	6.5-1.4R		7.6-1.8R		8.7-2.1R		8-1.5R		8.9-1.7R		9.7-1.9R		9-1.5R		9.7-1.6R		10.3-1.5R	
	60	q _a q _r	1751	2845	1474	2395	1590	2584	1405	2283	1237	2010	1087	1766	967	1571	1107	1799	1005	1633
		F	8.3-2.6R		9.9-3.3R		8.7-2.1R		9.8-2.4R		10.9-2.8R		12-3.1R		13-3.4R		11.4-2.3R		12.1-2.2R	
7	4	q _a q _f	2514	4085	2510	4078	2507	4073	2504	4070	2503	4067	2502	4065	2500	4063	2500	4062	2463	3941
		F	3.2-0.1R		3.2-0.1R		3.3-0.1R		3.3+0R		3.3+0R		3.3+0R		3.3+0R		3.3+0R		3.3+0R	
	8	q _a q _f	2302	3741	2312	3757	2268	3686	2281	3707	2250	3655	2263	3677	2238	3636	2250	3656	2229	3623
		F	4.2-0.3R		4.2-0.2R		4.3-0.2R		4.3-0.2R		4.4-0.2R		4.3-0.1R		4.4-0.1R		4.4-0.1R		4.4-0.1R	
	12	q _a q _f	2095	3405	2056	3341	2028	3295	2007	3261	1990	3234	1977	3212	1966	3195	1957	3180	1949	3167
		F	5.1-0.5R		5.2-0.4R		5.3-0.4R		5.4-0.3R		5.4-0.3R		5.5-0.3R		5.5-0.3R		5.5-0.2R		5.5-0.2R	
	18	q _a q _f	1922	3123	1909	3103	1738	2824	1756	2854	1769	2875	1654	2687	1677	2724	1695	2754	1608	2613
		F	5.9-0.8R		5.9-0.6R		6.6-0.7R		6.5-0.6R		6.4-0.5R		6.9-0.6R		6.8-0.5R		6.7-0.4R		7.1-0.4R	
	24	q _a q _f	1670	2714	1711	2781	1529	2485	1584	2575	1450	2356	1505	2446	1399	2274	1452	2359	1364	2217
		F	7.2-1.3R		6.8-1R		7.8-1.1R		7.4-0.9R		8.1-1R		7.7-0.8R		8.4-0.9R		8-0.7R		8.5-0.7R	
	36	q _a q _f	1670	2714	1446	2349	1265	2055	1374	2232	1243	2019	1131	1839	1229	1997	1139	1851	1060	1723
		F	7.2-1.3R		8.5-1.7R		9.7-2R		8.7-1.3R		9.7-1.5R		10.6-1.7R		9.6-1.2R		10.4-1.3R		11.1-1.3R	
	60	q _a q _f	1308	2125	1096	1782	1265	2055	1119	1818	1001	1626	903	1468	808	1314	956	1553	883	1435
		F	9.8-2.8R		11.7-3.5R		9.7-2R		11-2.3R		12.3-2.6R		13.5-2.9R		14.8-3.2R		12.5-2.1R		13.4-2R	
5	4	q _a q _f	1833	2978	1831	2975	1830	2974	1829	2972	1829	2971	1828	2971	1828	2970	1827	2969	1827	2969
		F	3.2-0.1R		3.3-0.1R		3.3+0R		3.3+0R		3.3+0R		3.3+0R		3.3+0R		3.3+0R		3.3+0R	
	8	q _a q _f	1743	2832	1748	2841	1729	2809	1735	2819	1721	2796	1727	2806	1716	2788	1722	2797	1712	2782
		F	4.3-0.2R		4.2-0.2R		4.4-0.2R		4.3-0.1R		4.4-0.1R		4.3-0.1R		4.4-0.1R		4.4-0.1R		4.5-0.1R	
	12	q _a q _f	1644	2671	1625	2641	1611	2619	1601	2602	1593	2589	1586	2578	1581	2569	1577	2562	1573	2556
		F	5.2-0.4R		5.3-0.4R		5.4-0.3R		5.4-0.3R		5.5-0.3R		5.5-0.3R		5.5-0.2R		5.6-0.2R		5.6-0.2R	
	18	q _a q _f	1551	2520	1546	2512	1447	2352	1460	2372	1469	2387	1399	2273	1414	2298	1426	2318	1372	2230
		F	6-0.7R		6-0.6R		6.8-0.7R		6.6-0.5R		6.5-0.5R		7-0.5R		6.9-0.4R		6.8-0.4R		7.2-0.4R	
	24	q _a q _f	1399	2274	1429	2322	1313	2134	1352	2197	1263	2052	1302	2116	1230	1998	1267	2059	1206	1961
		F	7.5-1.3R		7-0.9R		8-1.1R		7.6-0.8R		8.3-0.9R		7.9-0.7R		8.5-0.8R		8.1-0.6R		8.7-0.6R	
	36	q _a q _f	1399	2274	1252	2034	1123	1824	1207	1961	1111	1806	1026	1668	1104	1794	1035	1683	973	1581
		F	7.5-1.3R		8.8-1.6R		10.2-1.9R		9-1.2R		10-1.4R		11-1.6R		9.9-1.1R		10.7-1.2R		11.4-1.2R	
	60	q _a q _f	1145	1861	984	1600	1123	1824	1012	1644	917	1490	836	1359	767	1247	885	1437	826	1342
		F	10.5-2.8R		12.6-3.5R		10.2-1.9R		11.5-2.2R		12.8-2.5R		14.2-2.8R		15.5-3R		13-1.9R		13.9-1.9R	
4	4	q _a q _f	1477	2400	1476	2399	1476	2398	1476	2398	1475	2397	1475	2397	1475	2397	1475	2397	1475	2396
		F	3.3-0.1R		3.3+0R		3.3+0R		3.3+0R		3.3+0R		3.3+0R		3.3+0R		3.3+0R		3.3+0R	
	8	q _a q _f	1424	2314	1428	2321	1418	2304	1422	2311	1414	2298	1418	2304	1412	2294	1415	2300	1410	2292
		F	4.3-0.2R		4.2-0.1R		4.4-0.1R		4.3-0.1R		4.4-0.1R		4.4-0.1R		4.5-0.1R		4.4-0.1R		4.5-0.1R	
	12	q _a q _f	1360	2210	1351	2195	1344	2184	1339	2176	1335	2169	1332	2164	1329	2160	1327	2156	1325	2153
		F	5.3-0.4R		5.4-0.3R		5.5-0.3R		5.5-0.3R		5.5-0.2R		5.6-0.2R		5.6-0.2R		5.6-0.2R		5.6-0.2R	
	18	q _a q _f	1296	2105	1297	2108	1231	2000	1243	2020	1252	2034	1204	1956	1216	1977	1226	1992	1189	1932
		F	6.2-0.6R		6.1-0.5R		6.9-0.6R		6.7-0.5R		6.6-0.4R		7.2-0.4R		7-0.4R		6.8-0.3R		7.3-0.3R	
	24	q _a q _f	1181	1919	1212	1969	1129	1834	1164	1891	1099	1785	1132	1840	1079	1754	1110	1804	1065	1731
		F	7.8-1.1R		7.2-0.8R		8.3-0.9R		7.7-0.7R		8.5-0.8R		8.1-0.6R		8.7-0.7R		8.3-0.5R		8.8-0.5R	
	36	q _a q _f	1181	1919	1072	1742	972	1580	1050	1706	976	1586	909	1477	979	1590	924	1502	874	1421
		F	7.8-1.1R		9.2-1.4R		10.6-1.7R		9.3-1.1R		10.3-1.2R		11.4-1.4R		10.2-1R		11-1.1R		11.7-1.1R	
	60	q _a q _f	964	1567	836	1358	972	1580	884	1436	807	1311	740	1203	682	1109	794	1289	744	1209
		F	11.3-2.8R		13.6-3.5R		10.6-1.7R		12.1-2R		13.5-2.3R		14.9-2.5R		16.3-2.8R		13.4-1.7R		14.4-1.7R	

**TABLE 7-7—ALLOWABLE DIAPHRAGM SHEARS (qa), (ln plf),
FACTORED DIAPHRAGM SHEARS (qf), (ln plf), AND FLEXIBILITY FACTOR (F)**

22 ga.			DGB-36 AND DGBF-36 INTERLOCK DECK WITH PNEUTEK K64 PINS AND DELTAGRIP™ SIDE SEAM ATTACHMENT (See DelatGrip™ system notes)																	
Support Fasteners	Seam Spacing (in)	Span																		
			4		5		6		7		8		9		10		11		12	
9	4	q _a q _f	1676	2724	1638	2662	1610	2617	1589	2582	1457	2331	1151	1842	932	1492	771	1233	647	1036
		F	7.9-0.8R		8.1-0.7R		8.2-0.6R		8.3-0.6R		8.4-0.5R		8.5-0.5R		8.6-0.4R		8.6-0.4R			
	8	q _a q _f	1380	2242	1334	2167	1247	2026	1229	1996	1170	1900	1151	1842	932	1492	771	1233	647	1036
		F	10.2-1.9R		10.4-1.7R		11.1-1.7R		11.2-1.5R		11.6-1.5R		11.6-1.4R		12-1.4R		12-1.3R		12.3-1.1R	
	12	q _a q _f	1225	1990	1128	1834	1058	1719	1004	1632	963	1564	929	1509	899	1462	771	1233	647	1036
		F	11.7-2.8R		12.5-2.8R		13.2-2.8R		13.7-2.7R		14.1-2.6R		14.5-2.6R		14.9-2.4R		15.1-2.4R		15.3-2R	
	18	q _a q _f	1133	1841	1047	1702	908	1476	859	1396	821	1334	719	1168	702	1141	689	1120	623	1013
		F	12.7-3.5R		13.5-3.5R		15.4-4.2R		15.8-3.9R		16.1-3.7R		17.6-4.1R		17.8-3.8R		17.9-3.6R		18.9-3.3R	
	24	q _a q _f	1031	1675	959	1558	800	1300	765	1243	657	1068	646	1049	571	928	570	926	514	835
		F	14.1-4.6R		14.9-4.4R		17-5.3R		17.3-4.8R		19.1-5.4R		19.1-5R		20.8-5.4R		20.6-4.9R		21.7-4.5R	
	36	q _a q _f	1031	1675	849	1379	691	1122	671	1091	575	934	500	812	505	821	450	732	405	657
		F	14.1-4.6R		16.7-5.8R		19.2-6.9R		19.1-6.1R		21.2-6.8R		23.4-7.7R		22.8-6.6R		24.7-7.3R		25.9-6.4R	
	60	q _a q _f	917	1491	717	1166	691	1122	578	938	493	801	427	694	374	608	391	635	350	568
		F	16.1-6.3R		19.1-7.9R		19.2-6.9R		21.6-8R		24-8.9R		26.5-10R		28.9-10.8R		27.5-9.2R		28.7-7.8R	
7	4	q _a q _f	1358	2207	1340	2178	1328	2157	1318	2142	1311	2130	1151	1842	932	1492	771	1233	647	1036
		F	8.2-0.6R		8.4-0.6R		8.5-0.5R		8.6-0.4R		8.6-0.4R		8.7-0.4R		8.7-0.3R		8.8-0.3R		8.8-0.3R	
	8	q _a q _f	1104	1794	1089	1769	1030	1674	1029	1671	988	1606	992	1612	932	1492	771	1233	647	1036
		F	11.1-1.7R		11.2-1.5R		11.9-1.5R		11.8-1.3R		12.3-1.3R		12.2-1.1R		12.6-1.1R		12.5-1R		12.8-0.9R	
	12	q _a q _f	955	1551	897	1457	855	1389	824	1338	799	1299	780	1267	764	1242	751	1220	647	1036
		F	13.2-2.8R		13.9-2.7R		14.5-2.6R		15-2.5R		15.4-2.3R		15.7-2.2R		16-2.1R		16.2-2R		16.3-1.7R	
	18	q _a q _f	862	1400	816	1327	708	1151	695	1129	684	1112	620	1008	619	1006	618	1004	563	914
		F	14.7-3.8R		15.4-3.5R		17.7-4.2R		17.8-3.8R		18-3.4R		19.7-3.8R		19.6-3.4R		19.6-3.2R		20.8-3R	
	24	q _a q _f	755	1227	727	1182	626	1017	623	1013	541	879	548	891	488	793	499	811	453	737
		F	17-5.3R		17.4-4.7R		20-5.6R		19.9-4.9R		22.1-5.5R		21.7-4.8R		23.7-5.2R		23.1-4.6R		24.6-4.3R	
	36	q _a q _f	755	1227	629	1022	519	843	531	864	459	745	402	654	423	687	380	617	344	559
		F	17-5.3R		20.2-6.6R		23.4-8R		22.7-6.5R		25.3-7.3R		27.9-8.2R		26.6-6.7R		28.8-7.4R		30.5-6.7R	
	60	q _a q _f	634	1031	501	815	519	843	438	711	377	612	329	535	291	473	320	520	289	470
		F	20.5-8R		24.5-10R		23.4-8R		26.6-9.1R		29.7-10.3R		32.9-11.5R		36-12.5R		33.1-9.9R		34.9-8.7R	
5	4	q _a q _f	1046	1700	1038	1687	1033	1678	1028	1671	1025	1665	1022	1661	932	1492	771	1233	647	1036
		F	8.4-0.6R		8.5-0.5R		8.6-0.4R		8.7-0.4R		8.7-0.4R		8.8-0.3R		8.8-0.3R		8.8-0.3R		8.8-0.2R	
	8	q _a q _f	909	1478	902	1465	867	1408	867	1409	842	1368	845	1373	826	1342	771	1233	647	1036
		F	11.5-1.6R		11.5-1.4R		12.2-1.4R		12.1-1.2R		12.6-1.1R		12.5-1R		12.8-1R		12.7-0.9R		13-0.8R	
	12	q _a q _f	813	1321	776	1261	748	1216	727	1181	710	1154	697	1132	686	1114	676	1099	647	1036
		F	13.8-2.7R		14.6-2.6R		15.1-2.5R		15.5-2.3R		15.9-2.1R		16.2-2R		16.4-1.9R		16.6-1.8R		16.7-1.6R	
	18	q _a q _f	747	1214	717	1166	636	1034	628	1020	621	1009	569	925	569	925	570	926	533	865
		F	15.7-3.8R		16.2-3.4R		18.6-4.1R		18.7-3.6R		18.7-3.2R		20.6-3.6R		20.4-3.2R		20.3-2.9R		21.6-2.8R	
	24	q _a q _f	666	1083	649	1054	568	924	569	924	512	833	519	844	473	768	485	788	440	716
		F	18.4-5.5R		18.5-4.7R		21.4-5.7R		21-4.8R		23.4-5.4R		22.8-4.6R		24.9-5R		24.2-4.4R		25.8-4.2R	
	36	q _a q _f	666	1083	568	923	492	799	504	818	439	714	385	626	407	662	366	594	331	538
		F	18.4-5.5R		21.9-6.9R		25.5-8.3R		24.3-6.5R		27.1-7.3R		30-8.3R		28.2-6.6R		30.6-7.3R		32.5-6.7R	
	60	q _a q _f	567	922	471	765	492	799	416	675	357	581	312	507	276	448	306	497	276	449
		F	22.7-8.8R		27.4-11R		25.5-8.3R		29-9.5R		32.5-10.7R		36-12R		39.4-13.1R		35.6-9.9R		37.7-8.9R	
4	4	q _a q _f	860	1398	857	1392	854	1387	852	1384	850	1381	849	1379	848	1378	771	1233	647	1036
		F	8.5-0.5R		8.6-0.4R		8.7-0.4R		8.7-0.3R		8.8-0.3R		8.8-0.3R		8.9-0.2R		8.9-0.2R		8.9-0.2R	
	8	q _a q _f	764	1242	763	1239	740	1202	742	1206	726	1179	730	1185	717	1165	721	1171	647	1036
		F	11.9-1.5R		11.8-1.2R		12.5-1.2R		12.4-1R		12.8-1R		12.7-0.9R		13.1-0.8R		12.9-0.7R		13.2-0.7R	
	12	q _a q _f	688	1117	664	1079	647	1051	633	1029	623	1012	614	998	607	987	601	977	596	969
		F	14.6-2.6R		15.2-2.4R		15.7-2.2R		16.1-2.1R		16.4-1.9R		16.7-1.8R		16.9-1.7R		17-1.6R		17.2-1.4R	
	18	q _a q _f	631	1026	615	999	551	895	548	891	547	889	505	821	508	826	511	830	480	780
		F	16.7-3.7R		17.2-3.3R		19.8-3.9R		19.7-3.4R		19.6-2.9R		21.5-3.3R		21.2-2.9R		21-2.6R		22.4-2.6R	
	24	q _a q _f	558	907	554	900	489	794	496	806	449	730	460	747	424	689	435	707	402	653
		F	20.1-5.6R		19.9-4.6R		23-5.5R		22.4-4.5R		24.9-5.1R		24.1-4.3R		26.3-4.7R		25.4-4R		27.1-3.9R	
	36	q _a q _f	558	907	479	778	416	676	435	708	382	620	334	542	361	587	324	526	292	475
		F	20.1-5.6R		24.1-7.1R		28.1-8.5R		26.2-6.4R		29.3-7.2R		32.4-8.1R		30.1-6.3R		32.7-6.9R		34.8-6.5R	
	60	q _a q _f	463	753	378	614	416	676	350	568	300	487	261	424	230	373	264	429	238	386
		F	25.8-9.7R		31.2-12.1R		28.1-8.5R		32-9.8R		35.9-11R		39.9-12.4R		43.7-13.4R		38.6-9.8R		41.1-8.9R	

**TABLE 7-7—ALLOWABLE DIAPHRAGM SHEARS (qa), (ln plf),
FACTORED DIAPHRAGM SHEARS (qf), (ln plf), AND FLEXIBILITY FACTOR (F)**

18 ga.			DGB-36 AND DGBF-36 INTERLOCK DECK WITH PNEUTEK K64 PINS AND DELTAGRIP™ SIDE SEAM ATTACHMENT (See DelatGrip™ system notes)																	
Support Fasteners	Seam Spacing (in)	Span																		
			4		5		6		7		8		9		10		11		12	
9	4	q _a q _f	3159	5133	3123	5075	3097	5033	3077	5001	2932	4692	2317	3707	1877	3003	1551	2481	1303	2085
		F	4.3-0.2R		4.3-0.2R		4.4-0.2R		4.4-0.1R		4.4-0.1R		4.4-0.1R		4.4-0.1R		4.4-0.1R		4.4-0.1R	
	8	q _a q _f	2682	4358	2642	4293	2516	4089	2508	4076	2420	3933	2317	3707	1877	3003	1551	2481	1303	2085
		F	5.5-0.6R		5.5-0.5R		5.8-0.5R		5.8-0.4R		5.9-0.4R		5.9-0.4R		6-0.4R		6-0.3R		6.1-0.3R	
	12	q _a q _f	2381	3868	2246	3650	2147	3489	2071	3365	2011	3269	1963	3190	1877	3003	1551	2481	1303	2085
		F	6.5-1R		6.8-1R		7-0.9R		7.2-0.9R		7.3-0.8R		7.4-0.7R		7.5-0.7R		7.6-0.7R		7.6-0.6R	
	18	q _a q _f	2186	3552	2074	3370	1822	2961	1782	2896	1751	2846	1597	2594	1589	2582	1551	2481	1303	2085
		F	7.3-1.5R		7.5-1.3R		8.5-1.6R		8.5-1.4R		8.5-1.2R		9.2-1.4R		9.1-1.2R		9.1-1.1R		9.6-1.1R	
	24	q _a q _f	1956	3179	1877	3050	1633	2654	1618	2628	1445	2349	1456	2366	1297	2107	1319	2143	1197	1946
		F	8.5-2.2R		8.5-1.8R		9.7-2.2R		9.5-1.8R		10.4-2.1R		10.2-1.7R		11-1.9R		10.7-1.6R		11.3-1.6R	
	36	q _a q _f	1956	3179	1655	2689	1414	2297	1432	2327	1236	2008	1083	1760	1129	1834	1014	1647	918	1491
		F	8.5-2.2R		10-2.7R		11.5-3.3R		10.9-2.5R		12-2.9R		13.2-3.2R		12.4-2.5R		13.4-2.8R		14.2-2.6R	
	60	q _a q _f	1687	2741	1389	2256	1414	2297	1192	1937	1026	1667	897	1457	793	1289	861	1399	778	1264
		F	10.5-3.6R		12.4-4.5R		11.5-3.3R		12.9-3.8R		14.4-4.3R		15.8-4.8R		17.3-5.2R		15.5-3.9R		16.4-3.5R	
7	4	q _a q _f	2539	4126	2524	4102	2514	4085	2506	4072	2500	4063	2317	3707	1877	3003	1551	2481	1303	2085
		F	4.4-0.2R		4.4-0.1R		4.4-0.1R		4.4-0.1R		4.4-0.1R		4.5-0.1R		4.5-0.1R		4.5-0.1R		4.5-0.1R	
	8	q _a q _f	2172	3530	2169	3524	2089	3394	2098	3410	2041	3317	2055	3339	1877	3003	1551	2481	1303	2085
		F	5.8-0.5R		5.7-0.4R		6-0.4R		5.9-0.3R		6.1-0.3R		6-0.3R		6.2-0.3R		6.1-0.2R		6.2-0.2R	
	12	q _a q _f	1904	3093	1828	2970	1773	2881	1731	2813	1699	2761	1673	2719	1652	2684	1551	2481	1303	2085
		F	7-0.9R		7.2-0.8R		7.4-0.8R		7.5-0.7R		7.6-0.6R		7.7-0.6R		7.8-0.5R		7.8-0.5R		7.9-0.4R	
	18	q _a q _f	1717	2790	1667	2709	1471	2390	1466	2383	1463	2378	1339	2176	1350	2193	1358	2207	1269	2062
		F	8-1.4R		8.1-1.1R		9.2-1.4R		9.1-1.2R		9-1R		9.8-1.1R		9.6-1R		9.5-0.9R		10.1-0.9R	
	24	q _a q _f	1485	2414	1477	2399	1286	2090	1309	2127	1176	1911	1207	1962	1106	1798	1139	1852	1058	1720
		F	9.7-2.2R		9.4-1.7R		10.8-2R		10.3-1.6R		11.4-1.8R		10.9-1.5R		11.9-1.6R		11.4-1.4R		12.1-1.3R	
	36	q _a q _f	1485	2414	1253	2036	1078	1751	1134	1843	1012	1644	896	1455	967	1571	873	1418	794	1291
		F	9.7-2.2R		11.4-2.7R		13.2-3.3R		12.1-2.4R		13.5-2.7R		14.8-3R		13.6-2.2R		14.7-2.5R		15.7-2.4R	
	60	q _a q _f	1203	1954	995	1618	1078	1751	931	1513	806	1310	709	1152	631	1026	720	1170	654	1063
		F	12.7-4.2R		15.2-5.2R		13.2-3.3R		15-3.8R		16.7-4.3R		18.5-4.8R		20.2-5.3R		17.5-3.6R		18.6-3.4R	
5	4	q _a q _f	1898	3085	1892	3075	1888	3068	1885	3063	1883	3059	1881	3056	1877	3003	1551	2481	1303	2085
		F	4.4-0.1R		4.4-0.1R		4.4-0.1R		4.4-0.1R		4.5-0.1R		4.5-0.1R		4.5-0.1R		4.5-0.1R		4.5-0.1R	
	8	q _a q _f	1722	2799	1722	2799	1681	2731	1687	2742	1657	2692	1665	2706	1641	2667	1551	2481	1303	2085
		F	5.9-0.4R		5.8-0.3R		6.1-0.3R		6-0.3R		6.2-0.3R		6.1-0.2R		6.2-0.2R		6.1-0.2R		6.3-0.2R	
	12	q _a q _f	1570	2551	1527	2481	1495	2429	1470	2389	1451	2357	1435	2332	1422	2310	1411	2293	1303	2085
		F	7.2-0.8R		7.4-0.8R		7.6-0.7R		7.7-0.6R		7.7-0.6R		7.8-0.5R		7.9-0.5R		7.9-0.4R		7.9-0.4R	
	18	q _a q _f	1451	2359	1423	2312	1289	2094	1288	2094	1288	2093	1198	1947	1208	1962	1215	1975	1148	1866
		F	8.3-1.3R		8.4-1.1R		9.5-1.3R		9.3-1R		9.2-0.9R		10-1R		9.8-0.9R		9.7-0.8R		10.3-0.8R	
	24	q _a q _f	1289	2095	1289	2095	1149	1867	1171	1902	1068	1735	1095	1780	1015	1649	1044	1696	978	1590
		F	10.2-2.1R		9.8-1.6R		11.2-1.9R		10.7-1.5R		11.8-1.7R		11.2-1.3R		12.2-1.5R		11.7-1.2R		12.5-1.2R	
	36	q _a q _f	1289	2095	1118	1817	979	1592	1031	1675	931	1513	847	1377	901	1465	834	1355	772	1254
		F	10.2-2.1R		12.1-2.7R		14-3.2R		12.6-2.2R		14-2.5R		15.5-2.8R		14.1-2.1R		15.2-2.3R		16.3-2.2R	
	60	q _a q _f	1069	1738	903	1467	979	1592	867	1409	773	1256	679	1104	605	982	696	1131	632	1027
		F	13.8-4.3R		16.6-5.4R		14-3.2R		15.9-3.7R		17.7-4.2R		19.6-4.7R		21.5-5.2R		18.3-3.4R		19.6-3.2R	
4	4	q _a q _f	1544	2509	1542	2505	1540	2502	1538	2500	1537	2498	1536	2497	1536	2495	1535	2481	1303	2085
		F	4.4-0.1R		4.4-0.1R		4.5-0.1R		4.5-0.1R		4.5-0.1R		4.5-0.1R		4.5-0.1R		4.5+0R		4.5+0R	
	8	q _a q _f	1431	2325	1434	2331	1409	2290	1415	2300	1397	2270	1404	2281	1389	2257	1396	2268	1303	2085
		F	6-0.4R		5.9-0.3R		6.2-0.3R		6-0.2R		6.2-0.2R		6.1-0.2R		6.3-0.2R		6.2-0.2R		6.3-0.2R	
	12	q _a q _f	1320	2145	1295	2104	1277	2075	1263	2052	1252	2034	1243	2019	1235	2007	1229	1997	1224	1989
		F	7.4-0.7R		7.6-0.7R		7.7-0.6R		7.8-0.5R		7.9-0.5R		7.9-0.4R		8-0.4R		8-0.4R		8-0.3R	
	18	q _a q _f	1227	1993	1214	1973	1114	1810	1121	1822	1126	1830	1057	1718	1068	1736	1078	1751	1025	1666
		F	8.7-1.2R		8.6-0.9R		9.8-1.1R		9.6-0.9R		9.4-0.8R		10.3-0.9R		10-0.7R		9.8-0.6R		10.5-0.7R	
	24	q _a q _f	1089	1770	1104	1794	995	1617	1023	1662	941	1528	970	1577	905	1471	934	1518	881	1431
		F	10.8-2R		10.2-1.4R		11.7-1.7R		11-1.3R		12.2-1.5R		11.6-1.2R		12.6-1.3R		12-1R		12.8-1.1R	
	36	q _a q _f	1089	1770	954	1550	842	1368	900	1462	818	1330	748	1215	804	1306	747	1214	697	1133
		F	10.8-2R		12.8-2.5R		14.9-3R		13.2-2R		14.7-2.3R		16.2-2.6R		14.6-1.8R		15.8-2R		16.9-2R	
	60	q _a q _f	886	1440	752	1221	842	1368	749	1218	673	1093	590	959	524	852	623	1012	565	919
		F	15.1-4.4R		18.3-5.5R		14.9-3R		16.9-3.5R		18.9-4R		21-4.5R		23-4.9R		19.2-3.1R		20.6-3R	

**TABLE 7-7—ALLOWABLE DIAPHRAGM SHEARS (qa), (ln plf),
FACTORED DIAPHRAGM SHEARS (qf), (ln plf), AND FLEXIBILITY FACTOR (F)**

16 ga.			DGB-36 AND DGBF-36 INTERLOCK DECK WITH PNEUTEK K64 PINS AND DELTAGRIP™ SIDE SEAM ATTACHMENT (See DelatGrip™ system notes)																			
Support Fasteners	Seam Spacing (in)	Span																				
			4		5		6		7		8		9		10		11		12			
9	4	q _a q _f	4025	6540	3997	6496	3978	6464	3963	6440	3951	6421	3942	6406	3546	5674	2931	4690	2463	3941		
		F	3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.3-0.1R		3.3+0R		3.3+0R		3.3+0R			
	8	q _a q _f	3509	5702	3485	5664	3357	5455	3361	5461	3269	5311	3282	5333	3211	5218	2931	4690	2463	3941		
		F	4.1-0.3R		4.1-0.3R		4.2-0.3R		4.2-0.2R		4.3-0.2R		4.3-0.2R		4.4-0.2R		4.3-0.2R		4.4-0.1R			
	12	q _a q _f	3137	5098	3001	4877	2900	4713	2824	4588	2763	4490	2714	4410	2673	4344	2639	4289	2463	3941		
		F	4.8-0.6R		5-0.5R		5.1-0.5R		5.2-0.5R		5.3-0.4R		5.3-0.4R		5.4-0.4R		5.4-0.3R		5.4-0.3R			
	18	q _a q _f	2879	4679	2773	4506	2464	4003	2436	3958	2414	3923	2216	3602	2221	3609	2224	3614	2081	3382		
		F	5.5-0.9R		5.5-0.8R		6.2-0.9R		6.2-0.8R		6.1-0.7R		6.6-0.7R		6.5-0.6R		6.4-0.6R		6.8-0.6R			
	24	q _a q _f	2558	4158	2502	4066	2195	3567	2204	3582	1988	3230	2019	3281	1854	3013	1894	3077	1762	2863		
		F	6.5-1.4R		6.3-1.1R		7.2-1.3R		6.9-1R		7.6-1.2R		7.3-1R		7.9-1.1R		7.6-0.9R		8.1-0.9R			
	36	q _a q _f	2558	4158	2182	3546	1890	3072	1946	3163	1743	2832	1535	2494	1629	2647	1467	2384	1332	2165		
		F	6.5-1.4R		7.6-1.8R		8.7-2.1R		8-1.5R		8.9-1.7R		9.7-1.9R		9-1.5R		9.7-1.6R		10.3-1.5R			
	60	q _a q _f	2163	3515	1810	2941	1890	3072	1641	2667	1417	2303	1243	2020	1104	1794	1228	1996	1114	1810		
		F	8.3-2.6R		9.9-3.3R		8.7-2.1R		9.8-2.4R		10.9-2.8R		12-3.1R		13-3.4R		11.4-2.3R		12.1-2.2R			
7	4	q _a q _f	3213	5222	3203	5205	3195	5193	3190	5184	3186	5177	3182	5171	3180	5167	2931	4690	2463	3941		
		F	3.2-0.1R		3.2-0.1R		3.3-0.1R		3.3+0R		3.3+0R		3.3+0R		3.3+0R		3.3+0R		3.3+0R			
	8	q _a q _f	2844	4622	2851	4633	2773	4506	2789	4533	2733	4440	2751	4470	2707	4399	2725	4428	2463	3941		
		F	4.2-0.3R		4.2-0.2R		4.3-0.2R		4.3-0.2R		4.4-0.2R		4.3-0.1R		4.4-0.1R		4.4-0.1R		4.4-0.1R			
	12	q _a q _f	2533	4116	2460	3998	2408	3912	2368	3848	2337	3798	2312	3757	2292	3724	2275	3697	2260	3673		
		F	5.1-0.5R		5.2-0.4R		5.3-0.4R		5.4-0.3R		5.4-0.3R		5.5-0.3R		5.5-0.3R		5.5-0.2R		5.5-0.2R			
	18	q _a q _f	2297	3733	2259	3670	2020	3282	2030	3298	2037	3310	1881	3057	1903	3093	1921	3122	1807	2936		
		F	5.9-0.8R		5.9-0.6R		6.6-0.7R		6.5-0.6R		6.4-0.5R		6.9-0.6R		6.8-0.5R		6.7-0.4R		7.1-0.4R			
	24	q _a q _f	1985	3225	2006	3259	1766	2869	1816	2952	1644	2671	1700	2762	1567	2546	1621	2635	1513	2459		
		F	7.2-1.3R		6.8-1R		7.8-1.1R		7.4-0.9R		8.1-1R		7.7-0.8R		8.4-0.9R		8-0.7R		8.5-0.7R			
	36	q _a q _f	1985	3225	1692	2750	1465	2381	1569	2550	1408	2288	1274	2070	1373	2231	1266	2056	1172	1905		
		F	7.2-1.3R		8.5-1.7R		9.7-2R		8.7-1.3R		9.7-1.5R		10.6-1.7R		9.6-1.2R		10.4-1.3R		11.1-1.3R			
	60	q _a q _f	1576	2561	1311	2131	1465	2381	1287	2092	1139	1851	1004	1632	896	1457	1047	1701	953	1549		
		F	9.8-2.8R		11.7-3.5R		9.7-2R		11-2.3R		12.3-2.6R		13.5-2.9R		14.8-3.2R		12.5-2.1R		13.4-2R			
5	4	q _a q _f	2369	3850	2365	3843	2362	3839	2360	3835	2358	3833	2357	3830	2356	3829	2355	3827	2355	3826		
		F	3.2-0.1R		3.3-0.1R		3.3+0R		3.3+0R		3.3+0R		3.3+0R		3.3+0R		3.3+0R		3.3+0R			
	8	q _a q _f	2203	3580	2208	3588	2171	3527	2180	3542	2152	3497	2162	3513	2140	3477	2149	3493	2132	3464		
		F	4.3-0.2R		4.2-0.2R		4.4-0.2R		4.3-0.1R		4.4-0.1R		4.3-0.1R		4.4-0.1R		4.4-0.1R		4.5-0.1R			
	12	q _a q _f	2040	3316	2002	3254	1974	3208	1953	3174	1936	3146	1922	3124	1911	3106	1902	3090	1894	3077		
		F	5.2-0.4R		5.3-0.4R		5.4-0.3R		5.4-0.3R		5.5-0.3R		5.5-0.3R		5.5-0.2R		5.6-0.2R		5.6-0.2R			
	18	q _a q _f	1902	3091	1882	3059	1732	2814	1741	2829	1748	2840	1643	2671	1660	2698	1674	2720	1595	2591		
		F	6-0.7R		6-0.6R		6.8-0.7R		6.6-0.5R		6.5-0.5R		7-0.5R		6.9-0.4R		6.8-0.4R		7.2-0.4R			
	24	q _a q _f	1697	2758	1718	2792	1552	2523	1593	2588	1468	2385	1512	2458	1413	2296	1457	2367	1374	2233		
		F	7.5-1.3R		7-0.9R		8-1.1R		7.6-0.8R		8.3-0.9R		7.9-0.7R		8.5-0.8R		8.1-0.6R		8.7-0.6R			
	36	q _a q _f	1697	2758	1492	2425	1320	2145	1407	2287	1282	2083	1173	1906	1258	2044	1170	1902	1093	1776		
		F	7.5-1.3R		8.8-1.6R		10.2-1.9R		9-1.2R		10-1.4R		11-1.6R		9.9-1.1R		10.7-1.2R		11.4-1.2R			
	60	q _a q _f	1393	2264	1185	1926	1320	2145	1177	1913	1059	1721	960	1561	864	1403	998	1622	926	1505		
		F	10.5-2.8R		12.6-3.5R		10.2-1.9R		11.5-2.2R		12.8-2.5R		14.2-2.8R		15.5-3R		13-1.9R		13.9-1.9R			
4	4	q _a q _f	1917	3116	1915	3113	1914	3111	1913	3109	1913	3108	1912	3107	1912	3106	1911	3106	1911	3105		
		F	3.3-0.1R		3.3+0R		3.3+0R		3.3+0R		3.3+0R		3.3+0R		3.3+0R		3.3+0R		3.3+0R			
	8	q _a q _f	1815	2950	1821	2959	1799	2924	1806	2935	1790	2909	1797	2921	1785	2900	1791	2911	1781	2894		
		F	4.3-0.2R		4.2-0.1R		4.4-0.1R		4.3-0.1R		4.4-0.1R		4.4-0.1R		4.5-0.1R		4.4-0.1R		4.5-0.1R			
	12	q _a q _f	1704	2769	1683	2735	1668	2711	1657	2692	1648	2677	1640	2666	1635	2656	1630	2648	1625	2641		
		F	5.3-0.4R		5.4-0.3R		5.5-0.3R		5.5-0.3R		5.5-0.2R		5.6-0.2R		5.6-0.2R		5.6-0.2R		5.6-0.2R			
	18	q _a q _f	1601	2602	1596	2593	1488	2418	1502	2440	1512	2456	1436	2333	1452	2360	1465	2381	1407	2286		
		F	6.2-0.6R		6.1-0.5R		6.9-0.6R		6.7-0.5R		6.6-0.4R		7.2-0.4R		7-0.4R		6.8-0.3R		7.3-0.3R			
	24	q _a q _f	1436	2333	1468	2385	1343	2182	1385	2251	1289	2095	1331	2164	1254	2038	1294	2103	1230	1998		
		F	7.8-1.1R		7.2-0.8R		8.3-0.9R		7.7-0.7R		8.5-0.8R		8.1-0.6R		8.7-0.7R		8.3-0.5R		8.8-0.5R			
	36	q _a q _f	1436	2333	1278	2076	1141	1854	1230	1998	1129	1835	1040	1690	1122	1823	1050	1706	985	1601		
		F	7.8-1.1R		9.2-1.4R		10.6-1.7R		9.3-1.1R		10.3-1.2R		11.4-1.4R		10.2-1R		11-1.1R		11.7-1.1R			
	60	q _a q _f	1164	1892	997	1620	1141	1854	1025	1665	927	1506	844	1371	765	1244	893	1452	833	1353		
		F	11.3-2.8R		13.6-3.5R		10.6-1.7R		12.1-2R		13.5-2.3R		14.9-2.5R		16.3-2.8R		13.4-1.7R		14.4-1.7R			

**TABLE 7-8—ALLOWABLE DIAPHRAGM SHEARS (qa), (ln plf),
FACTORED DIAPHRAGM SHEARS (qf), (ln plf), AND FLEXIBILITY FACTOR (F)**

22 ga.			DGB-36 AND DGBF-36 INTERLOCK DECK WITH PNEUTEK K66 PINS AND DELTAGRIP™ SIDE SEAM ATTACHMENT (See DelatGrip™ system notes)																	
Support Fasteners	Seam Spacing (in)	Span																		
			4		5		6		7		8		9		10		11		12	
9	4	q _a q _r	1753	2849	1709	2778	1677	2726	1653	2686	1457	2331	1151	1842	932	1492	771	1233	647	1036
		F	7.9-0.8R		8.1-0.7R		8.2-0.6R		8.3-0.6R		8.4-0.5R		8.5-0.5R		8.5-0.5R		8.6-0.4R		8.6-0.4R	
	8	q _a q _r	1439	2338	1386	2252	1292	2099	1270	2064	1206	1961	1151	1842	932	1492	771	1233	647	1036
		F	10.2-1.9R		10.4-1.7R		11.1-1.7R		11.2-1.5R		11.6-1.5R		11.6-1.4R		12-1.4R		12-1.3R		12.3-1.1R	
	12	q _a q _r	1278	2077	1174	1907	1097	1783	1039	1688	993	1614	955	1552	914	1486	771	1233	647	1036
		F	11.7-2.8R		12.5-2.8R		13.2-2.8R		13.7-2.7R		14.1-2.6R		14.5-2.6R		14.9-2.4R		15.1-2.4R		15.3-2R	
	18	q _a q _r	1184	1925	1090	1772	938	1525	883	1435	841	1367	736	1196	717	1166	702	1141	635	1032
		F	12.7-3.5R		13.5-3.5R		15.4-4.2R		15.8-3.9R		16.1-3.7R		17.6-4.1R		17.8-3.8R		17.9-3.6R		18.9-3.3R	
	24	q _a q _r	1081	1756	1001	1626	829	1347	789	1282	677	1100	663	1077	586	952	583	947	525	854
		F	14.1-4.6R		14.9-4.4R		17-5.3R		17.3-4.8R		19.1-5.4R		19.1-5R		20.8-5.4R		20.6-4.9R		21.7-4.5R	
	36	q _a q _r	1081	1756	885	1438	719	1169	695	1130	595	967	517	840	520	846	463	753	416	676
		F	14.1-4.6R		16.7-5.8R		19.2-6.9R		19.1-6.1R		21.2-6.8R		23.4-7.7R		22.8-6.6R		24.7-7.3R		25.9-6.4R	
	60	q _a q _r	967	1571	753	1224	719	1169	601	977	513	834	444	722	389	632	404	656	361	587
		F	16.1-6.3R		19.1-7.9R		19.2-6.9R		21.6-8R		24-8.9R		26.5-10R		28.9-10.8R		27.5-9.2R		28.7-7.8R	
7	4	q _a q _f	1421	2309	1400	2275	1385	2251	1374	2233	1365	2219	1151	1842	932	1492	771	1233	647	1036
		F	8.2-0.6R		8.4-0.6R		8.5-0.5R		8.6-0.4R		8.6-0.4R		8.7-0.4R		8.7-0.3R		8.8-0.3R		8.8-0.3R	
	8	q _a q _f	1148	1865	1129	1834	1065	1730	1062	1725	1018	1654	1021	1659	932	1492	771	1233	647	1036
		F	11.1-1.7R		11.2-1.5R		11.9-1.5R		11.8-1.3R		12.3-1.3R		12.2-1.1R		12.6-1.1R		12.5-1R		12.8-0.9R	
	12	q _a q _f	992	1611	928	1508	882	1434	848	1378	822	1335	800	1301	783	1272	769	1233	647	1036
		F	13.2-2.8R		13.9-2.7R		14.5-2.6R		15-2.5R		15.4-2.3R		15.7-2.2R		16-2.1R		16.2-2R		16.3-1.7R	
	18	q _a q _f	896	1456	846	1374	732	1190	716	1163	704	1143	632	1027	629	1023	627	1019	570	927
		F	14.7-3.8R		15.4-3.5R		17.7-4.2R		17.8-3.8R		18-3.4R		19.7-3.8R		19.6-3.4R		19.6-3.2R		20.8-3R	
	24	q _a q _f	787	1280	755	1226	647	1051	641	1041	554	900	559	909	498	809	508	825	461	749
		F	17-5.3R		17.4-4.7R		20-5.6R		19.9-4.9R		22.1-5.5R		21.7-4.8R		23.7-5.2R		23.1-4.6R		24.6-4.3R	
	36	q _a q _f	787	1280	655	1065	537	873	547	889	472	767	413	672	432	703	388	631	351	571
		F	17-5.3R		20.2-6.6R		23.4-8R		22.7-6.5R		25.3-7.3R		27.9-8.2R		26.6-6.7R		28.8-7.4R		30.5-6.7R	
	60	q _a q _f	665	1081	524	852	537	873	453	736	390	633	340	553	301	489	329	534	297	482
		F	20.5-8R		24.5-10R		23.4-8R		26.6-9.1R		29.7-10.3R		32.9-11.5R		36-12.5R		33.1-9.9R		34.9-8.7R	
5	4	q _a q _f	1101	1789	1091	1773	1084	1762	1079	1754	1075	1747	1072	1742	932	1492	771	1233	647	1036
		F	8.4-0.6R		8.5-0.5R		8.6-0.4R		8.7-0.4R		8.7-0.4R		8.8-0.3R		8.8-0.3R		8.8-0.3R		8.8-0.2R	
	8	q _a q _f	950	1544	941	1528	902	1465	901	1464	873	1419	876	1424	855	1389	771	1233	647	1036
		F	11.5-1.6R		11.5-1.4R		12.2-1.4R		12.1-1.2R		12.6-1.1R		12.5-1R		12.8-1R		12.7-0.9R		13-0.8R	
	12	q _a q _f	848	1378	807	1311	776	1261	752	1222	734	1192	719	1168	706	1147	696	1131	647	1036
		F	13.8-2.7R		14.6-2.6R		15.1-2.5R		15.5-2.3R		15.9-2.1R		16.2-2R		16.4-1.9R		16.6-1.8R		16.7-1.6R	
	18	q _a q _f	780	1267	746	1212	660	1072	649	1054	640	1041	586	953	586	952	585	951	546	888
		F	15.7-3.8R		16.2-3.4R		18.6-4.1R		18.7-3.6R		18.7-3.2R		20.6-3.6R		20.4-3.2R		20.3-2.9R		21.6-2.8R	
	24	q _a q _f	696	1131	674	1096	590	959	588	956	529	860	535	869	482	783	493	801	447	727
		F	18.4-5.5R		18.5-4.7R		21.4-5.7R		21-4.8R		23.4-5.4R		22.8-4.6R		24.9-5R		24.2-4.4R		25.8-4.2R	
	36	q _a q _f	696	1131	592	962	510	829	522	848	451	733	395	642	416	676	373	607	338	549
		F	18.4-5.5R		21.9-6.9R		25.5-8.3R		24.3-6.5R		27.1-7.3R		30-8.3R		28.2-6.6R		30.6-7.3R		32.5-6.7R	
	60	q _a q _f	595	968	491	799	510	829	430	698	369	600	322	524	285	463	314	510	283	460
		F	22.7-8.8R		27.4-11R		25.5-8.3R		29-9.5R		32.5-10.7R		36-12R		39.4-13.1R		35.6-9.9R		37.7-8.9R	
4	4	q _a q _f	907	1474	902	1466	899	1461	896	1457	894	1453	893	1451	892	1449	771	1233	647	1036
		F	8.5-0.5R		8.6-0.4R		8.7-0.4R		8.7-0.3R		8.8-0.3R		8.8-0.3R		8.9-0.2R		8.9-0.2R		8.9-0.2R	
	8	q _a q _f	800	1300	797	1296	772	1254	774	1257	755	1227	759	1233	745	1210	749	1217	647	1036
		F	11.9-1.5R		11.8-1.2R		12.5-1.2R		12.4-1R		12.8-1R		12.7-0.9R		13.1-0.8R		12.9-0.7R		13.2-0.7R	
	12	q _a q _f	717	1166	691	1122	671	1090	656	1066	644	1047	635	1031	627	1018	620	1008	615	999
		F	14.6-2.6R		15.2-2.4R		15.7-2.2R		16.1-2.1R		16.4-1.9R		16.7-1.8R		16.9-1.7R		17-1.6R		17.2-1.4R	
	18	q _a q _f	658	1069	638	1038	570	927	567	921	564	917	520	845	523	849	525	853	492	800
		F	16.7-3.7R		17.2-3.3R		19.8-3.9R		19.7-3.4R		19.6-2.9R		21.5-3.3R		21.2-2.9R		21-2.6R		22.4-2.6R	
	24	q _a q _f	582	945	575	934	506	823	512	832	463	753	473	769	433	703	447	726	406	660
		F	20.1-5.6R		19.9-4.6R		23-5.5R		22.4-4.5R		24.9-5.1R		24.1-4.3R		26.3-4.7R		25.4-4R		27.1-3.9R	
	36	q _a q _f	582	945	498	809	428	696	450	731	390	634	341	554	367	596	329	534	297	483
		F	20.1-5.6R		24.1-7.1R		28.1-8.5R		26.2-6.4R		29.3-7.2R		32.4-8.1R		30.1-6.3R		32.7-6.9R		34.8-6.5R	
	60	q _a q _f	485	788	393	639	428	696	359	584	308	500	268	435	236	383	269	437	242	394
		F	25.8-9.7R		31.2-12.1R		28.1-8.5R		32-9.8R		35.9-11R		39.9-12.4R		43.7-13.4R		38.6-9.8R		41.1-8.9R	

**TABLE 7-8—ALLOWABLE DIAPHRAGM SHEARS (q_a), (In plf),
FACTORED DIAPHRAGM SHEARS (q_f), (In plf), AND FLEXIBILITY FACTOR (F)**

20 ga.			DGB-36 AND DGBF-36 INTERLOCK DECK WITH PNEUTEK K66 PINS AND DELTAGRIP™ SIDE SEAM ATTACHMENT (See DelatGrip™ system notes)																	
Support Fasteners	Seam Spacing (in)	Span																		
			4		5		6		7		8		9		10		11		12	
9	4	q _a q _f	2236	3633	2193	3563	2161	3512	2137	3473	1916	3065	1514	2422	1226	1962	1013	1621	852	1362
		F	6.2-0.5R		6.3-0.4R		6.4-0.4R		6.5-0.3R		6.5-0.3R		6.6-0.3R		6.6-0.3R		6.6-0.2R		6.6-0.2R	
	8	q _a q _f	1852	3009	1800	2925	1691	2748	1672	2718	1598	2596	1514	2422	1226	1962	1013	1621	852	1362
		F	8.1-1.2R		8.2-1.1R		8.6-1.1R		8.6-0.9R		9-0.9R		8.9-0.8R		9.2-0.8R		9.2-0.7R		9.4-0.7R	
	12	q _a q _f	1642	2668	1522	2474	1435	2331	1368	2223	1316	2138	1274	2070	1226	1962	1013	1621	852	1362
		F	9.4-2R		9.9-1.9R		10.4-1.9R		10.7-1.8R		11-1.7R		11.2-1.6R		11.4-1.5R		11.6-1.5R		11.7-1.3R	
	18	q _a q _f	1515	2461	1410	2291	1227	1993	1183	1922	1149	1867	1008	1638	990	1609	975	1585	852	1362
		F	10.4-2.6R		10.9-2.5R		12.3-2.9R		12.5-2.7R		12.7-2.4R		13.8-2.7R		13.8-2.5R		13.8-2.3R		14.6-2.2R	
	24	q _a q _f	1371	2229	1286	2090	1099	1785	1060	1722	913	1483	903	1467	801	1301	803	1305	726	1180
		F	11.7-3.5R		12.1-3.2R		13.8-3.9R		13.8-3.4R		15.3-3.8R		15.1-3.4R		16.4-3.7R		16.1-3.3R		17-3.1R	
	36	q _a q _f	1371	2229	1152	1871	941	1529	925	1503	794	1291	693	1126	706	1148	631	1026	569	924
		F	11.7-3.5R		13.8-4.4R		15.9-5.3R		15.5-4.5R		17.2-5R		18.9-5.6R		18.2-4.7R		19.7-5.2R		20.7-4.6R	
	60	q _a q _f	1211	1968	964	1566	941	1529	789	1283	676	1098	588	955	517	840	545	886	490	796
		F	13.7-5.2R		16.3-6.5R		15.9-5.3R		17.9-6.1R		19.9-6.9R		21.9-7.7R		23.9-8.4R		22.3-6.7R		23.4-5.9R	
7	4	q _a q _f	1809	2939	1789	2908	1775	2885	1765	2868	1757	2855	1514	2422	1226	1962	1013	1621	852	1362
		F	6.4-0.4R		6.5-0.3R		6.6-0.3R		6.6-0.3R		6.6-0.2R		6.7-0.2R		6.7-0.2R		6.7-0.2R		6.7-0.2R	
	8	q _a q _f	1489	2419	1474	2395	1401	2277	1402	2278	1352	2196	1358	2207	1226	1962	1013	1621	852	1362
		F	8.6-1.1R		8.6-0.9R		9.1-0.9R		9-0.8R		9.4-0.8R		9.3-0.7R		9.6-0.6R		9.5-0.6R		9.7-0.5R	
	12	q _a q _f	1290	2096	1219	1980	1168	1897	1129	1835	1099	1786	1075	1748	1056	1716	1013	1621	852	1362
		F	10.4-1.9R		10.9-1.8R		11.2-1.6R		11.5-1.5R		11.7-1.4R		11.9-1.3R		12.1-1.2R		12.2-1.2R		12.3-1R	
	18	q _a q _f	1163	1889	1109	1802	966	1570	952	1547	941	1529	855	1389	856	1390	856	1391	795	1293
		F	11.7-2.6R		12.1-2.3R		13.8-2.8R		13.8-2.4R		13.8-2.2R		15.1-2.4R		15-2.1R		14.9-1.9R		15.8-1.9R	
	24	q _a q _f	1014	1648	986	1602	850	1382	852	1385	756	1228	770	1252	687	1117	705	1146	642	1043
		F	13.8-3.9R		13.8-3.3R		15.9-3.9R		15.5-3.2R		17.3-3.7R		16.8-3.1R		18.2-3.4R		17.7-2.9R		18.8-2.8R	
	36	q _a q _f	1014	1648	848	1377	712	1157	737	1197	637	1036	560	910	593	963	533	867	484	786
		F	13.8-3.9R		16.4-4.8R		19-5.8R		17.9-4.5R		20-5.1R		22.1-5.7R		20.7-4.5R		22.4-5R		23.8-4.6R	
	60	q _a q _f	844	1371	677	1100	712	1157	602	978	519	843	455	739	403	655	447	727	405	658
		F	17.2-6.4R		20.6-8R		19-5.8R		21.5-6.7R		24-7.5R		26.6-8.5R		29.1-9.2R		26.1-6.9R		27.7-6.2R	
5	4	q _a q _f	1381	2244	1373	2231	1367	2221	1362	2214	1359	2208	1356	2203	1226	1962	1013	1621	852	1362
		F	6.5-0.3R		6.6-0.3R		6.6-0.2R		6.7-0.2R		6.7-0.2R		6.7-0.2R		6.7-0.2R		6.7-0.1R		6.8-0.1R	
	8	q _a q _f	1214	1973	1207	1962	1166	1894	1168	1897	1137	1848	1142	1856	1119	1819	1013	1621	852	1362
		F	8.9-1R		8.8-0.8R		9.3-0.8R		9.2-0.7R		9.5-0.7R		9.4-0.6R		9.7-0.6R		9.6-0.5R		9.8-0.5R	
	12	q _a q _f	1090	1771	1046	1699	1013	1646	988	1605	968	1573	952	1546	938	1525	927	1507	852	1362
		F	10.8-1.8R		11.2-1.6R		11.6-1.5R		11.8-1.4R		12-1.3R		12.2-1.2R		12.3-1.1R		12.5-1R		12.5-0.9R	
	18	q _a q _f	1002	1629	968	1573	863	1403	855	1389	848	1378	780	1268	783	1272	784	1274	735	1194
		F	12.3-2.5R		12.6-2.2R		14.4-2.7R		14.4-2.3R		14.3-2R		15.6-2.2R		15.4-2R		15.3-1.8R		16.3-1.7R	
	24	q _a q _f	892	1449	875	1421	770	1251	774	1258	700	1137	712	1156	654	1063	669	1087	623	1013
		F	14.8-3.9R		14.6-3.2R		16.8-3.8R		16.3-3.1R		18.1-3.5R		17.5-2.9R		19-3.2R		18.3-2.7R		19.5-2.6R	
	36	q _a q _f	892	1449	763	1240	663	1077	684	1111	612	995	538	874	572	930	515	837	467	759
		F	14.8-3.9R		17.6-4.9R		20.4-5.9R		19-4.4R		21.2-5R		23.4-5.6R		21.7-4.3R		23.5-4.7R		25.1-4.5R	
	60	q _a q _f	753	1224	632	1027	663	1077	573	931	494	803	432	703	383	623	429	697	388	631
		F	18.9-6.9R		22.8-8.6R		20.4-5.9R		23.2-6.8R		26-7.6R		28.8-8.6R		31.5-9.4R		27.8-6.7R		29.5-6.2R	
4	4	q _a q _f	1132	1840	1128	1833	1125	1829	1123	1825	1122	1823	1120	1821	1119	1819	1013	1621	852	1362
		F	6.6-0.3R		6.6-0.2R		6.7-0.2R		6.7-0.2R		6.7-0.2R		6.7-0.1R		6.8-0.1R		6.8-0.1R		6.8-0.1R	
	8	q _a q _f	1018	1654	1017	1653	991	1610	995	1616	975	1584	980	1593	965	1568	970	1577	852	1362
		F	9.1-0.9R		9-0.7R		9.5-0.7R		9.3-0.6R		9.7-0.6R		9.5-0.5R		9.8-0.5R		9.7-0.4R		9.9-0.4R	
	12	q _a q _f	921	1497	894	1452	873	1419	858	1394	846	1374	836	1358	828	1345	821	1334	815	1325
		F	11.2-1.6R		11.7-1.5R		12-1.3R		12.2-1.2R		12.3-1.1R		12.5-1R		12.6-1R		12.7-0.9R		12.8-0.8R	
	18	q _a q _f	848	1377	829	1348	747	1214	747	1214	747	1213	692	1125	698	1134	702	1141	662	1075
		F	13-2.4R		13.2-2.1R		15.1-2.5R		14.9-2.1R		14.8-1.8R		16.2-2R		15.9-1.7R		15.7-1.5R		16.7-1.5R	
	24	q _a q _f	749	1217	748	1216	664	1078	676	1099	615	999	631	1025	583	948	600	975	561	912
		F	15.9-3.9R		15.4-3R		17.8-3.6R		17.1-2.9R		19-3.2R		18.2-2.6R		19.8-2.9R		19-2.4R		20.3-2.4R	
	36	q _a q _f	749	1217	646	1049	564	916	593	964	535	869	471	765	512	832	460	748	417	678
		F	15.9-3.9R		19-4.9R		22.1-5.8R		20.2-4.2R		22.6-4.7R		25-5.3R		22.9-4R		24.8-4.4R		26.5-4.2R	
	60	q _a q _f	618	1004	516	839	564	916	487	791	419	680	365	594	323	525	374	608	338	549
		F	21.2-7.3R		25.6-9.2R		22.1-5.8R		25.2-6.8R		28.3-7.6R		31.4-8.6R		34.4-9.3R		29.7-6.4R		31.7-6R	

**TABLE 7-8—ALLOWABLE DIAPHRAGM SHEARS (qa), (ln plf),
FACTORED DIAPHRAGM SHEARS (qf), (ln plf), AND FLEXIBILITY FACTOR (F)**

18 ga.			DGB-36 AND DGBF-36 INTERLOCK DECK WITH PNEUTEK K66 PINS AND DELTAGRIP™ SIDE SEAM ATTACHMENT (See DelatGrip™ system notes)																		
Support Fasteners	Seam Spacing (in)	Span																			
				4		5		6		7		8		9		10		11		12	
9	4	q _a	q _f	3264	5303	3224	5239	3195	5191	3173	5155	2932	4692	2317	3707	1877	3003	1551	2481	1303	2085
		F		4.3-0.2R		4.3-0.2R		4.4-0.2R		4.4-0.1R		4.4-0.1R		4.4-0.1R		4.4-0.1R		4.4-0.1R		4.4-0.1R	
	8	q _a	q _f	2760	4485	2714	4410	2580	4193	2570	4176	2476	4024	2317	3707	1877	3003	1551	2481	1303	2085
		F		5.5-0.6R		5.5-0.5R		5.8-0.5R		5.8-0.4R		5.9-0.4R		5.9-0.4R		6-0.4R		6-0.3R		6.1-0.3R	
	12	q _a	q _f	2448	3978	2304	3745	2198	3572	2117	3441	2054	3337	2002	3254	1877	3003	1551	2481	1303	2085
		F		6.5-1R		6.8-1R		7-0.9R		7.2-0.9R		7.3-0.8R		7.4-0.7R		7.5-0.7R		7.6-0.7R		7.6-0.6R	
	18	q _a	q _f	2249	3655	2128	3458	1867	3034	1822	2961	1788	2906	1629	2646	1619	2631	1551	2481	1303	2085
		F		7.3-1.5R		7.5-1.3R		8.5-1.6R		8.5-1.4R		8.5-1.2R		9.2-1.4R		9.1-1.2R		9.1-1.1R		9.6-1.1R	
	24	q _a	q _f	2015	3275	1928	3133	1675	2722	1655	2690	1470	2389	1477	2401	1315	2137	1335	2170	1212	1970
		F		8.5-2.2R		8.5-1.8R		9.7-2.2R		9.5-1.8R		10.4-2.1R		10.2-1.7R		11-1.9R		10.7-1.6R		11.3-1.6R	
	36	q _a	q _f	2015	3275	1703	2767	1449	2354	1461	2374	1260	2048	1105	1795	1148	1865	1030	1674	932	1515
		F		8.5-2.2R		10-2.7R		11.5-3.3R		10.9-2.5R		12-2.9R		13.2-3.2R		12.4-2.5R		13.4-2.8R		14.2-2.6R	
	60	q _a	q _f	1744	2834	1432	2326	1449	2354	1221	1985	1051	1707	918	1492	812	1319	878	1426	793	1288
		F		10.5-3.6R		12.4-4.5R		11.5-3.3R		12.9-3.8R		14.4-4.3R		15.8-4.8R		17.3-5.2R		15.5-3.9R		16.4-3.5R	
7	4	q _a	q _f	2626	4268	2610	4240	2598	4221	2589	4207	2582	4196	2317	3707	1877	3003	1551	2481	1303	2085
		F		4.4-0.2R		4.4-0.1R		4.4-0.1R		4.4-0.1R		4.4-0.1R		4.5-0.1R		4.5-0.1R		4.5-0.1R		4.5-0.1R	
	8	q _a	q _f	2234	3631	2228	3621	2142	3481	2152	3496	2091	3397	2104	3419	1877	3003	1551	2481	1303	2085
		F		5.8-0.5R		5.7-0.4R		6-0.4R		5.9-0.3R		6.1-0.3R		6-0.3R		6.2-0.3R		6.1-0.2R		6.2-0.2R	
	12	q _a	q _f	1954	3175	1872	3041	1812	2945	1768	2873	1733	2816	1705	2771	1682	2734	1551	2481	1303	2085
		F		7-0.9R		7.2-0.8R		7.4-0.8R		7.5-0.7R		7.6-0.6R		7.7-0.6R		7.8-0.5R		7.8-0.5R		7.9-0.4R	
	18	q _a	q _f	1761	2862	1706	2772	1502	2441	1495	2430	1490	2422	1363	2214	1372	2230	1380	2242	1288	2085
		F		8-1.4R		8.1-1.1R		9.2-1.4R		9.1-1.2R		9-1R		9.8-1.1R		9.6-1R		9.5-0.9R		10.1-0.9R	
	24	q _a	q _f	1525	2478	1511	2456	1314	2136	1335	2170	1198	1947	1228	1996	1125	1827	1157	1880	1074	1746
		F		9.7-2.2R		9.4-1.7R		10.8-2R		10.3-1.6R		11.4-1.8R		10.9-1.5R		11.9-1.6R		11.4-1.4R		12.1-1.3R	
	36	q _a	q _f	1525	2478	1284	2087	1103	1793	1158	1882	1032	1677	909	1478	979	1591	883	1436	804	1306
		F		9.7-2.2R		11.4-2.7R		13.2-3.3R		12.1-2.4R		13.5-2.7R		14.8-3R		13.6-2.2R		14.7-2.5R		15.7-2.4R	
	60	q _a	q _f	1239	2013	1023	1662	1103	1793	950	1543	822	1336	723	1175	643	1045	731	1188	664	1079
		F		12.7-4.2R		15.2-5.2R		13.2-3.3R		15-3.8R		16.7-4.3R		18.5-4.8R		20.2-5.3R		17.5-3.6R		18.6-3.4R	
5	4	q _a	q _f	1969	3199	1962	3188	1957	3180	1953	3174	1951	3170	1948	3166	1877	3003	1551	2481	1303	2085
		F		4.4-0.1R		4.4-0.1R		4.4-0.1R		4.4-0.1R		4.5-0.1R		4.5-0.1R		4.5-0.1R		4.5-0.1R		4.5-0.1R	
	8	q _a	q _f	1779	2890	1777	2888	1732	2815	1738	2825	1705	2771	1714	2785	1688	2743	1551	2481	1303	2085
		F		5.9-0.4R		5.8-0.3R		6.1-0.3R		6-0.3R		6.2-0.3R		6.1-0.2R		6.2-0.2R		6.1-0.2R		6.3-0.2R	
	12	q _a	q _f	1617	2628	1570	2551	1535	2494	1508	2450	1487	2416	1469	2388	1455	2365	1443	2345	1303	2085
		F		7.2-0.8R		7.4-0.8R		7.6-0.7R		7.7-0.6R		7.7-0.6R		7.8-0.5R		7.9-0.5R		7.9-0.4R		7.9-0.4R	
	18	q _a	q _f	1493	2427	1461	2374	1320	2146	1319	2143	1317	2141	1223	1988	1232	2002	1239	2014	1169	1900
		F		8.3-1.3R		8.4-1.1R		9.5-1.3R		9.3-1R		9.2-0.9R		10-1R		9.8-0.9R		9.7-0.8R		10.3-0.8R	
	24	q _a	q _f	1327	2156	1323	2150	1177	1912	1197	1945	1090	1772	1117	1816	1034	1681	1063	1727	995	1617
		F		10.2-2.1R		9.8-1.6R		11.2-1.9R		10.7-1.5R		11.8-1.7R		11.2-1.3R		12.2-1.5R		11.7-1.2R		12.5-1.2R	
	36	q _a	q _f	1327	2156	1148	1865	1004	1632	1054	1713	951	1546	865	1405	918	1492	849	1380	781	1269
		F		10.2-2.1R		12.1-2.7R		14-3.2R		12.6-2.2R		14-2.5R		15.5-2.8R		14.1-2.1R		15.2-2.3R		16.3-2.2R	
	60	q _a	q _f	1103	1792	930	1511	1004	1632	888	1444	787	1279	692	1124	616	1000	706	1147	641	1041
		F		13.8-4.3R		16.6-5.4R		14-3.2R		15.9-3.7R		17.7-4.2R		19.6-4.7R		21.5-5.2R		18.3-3.4R		19.6-3.2R	
4	4	q _a	q _f	1603	2605	1600	2600	1598	2596	1596	2594	1595	2592	1594	2590	1593	2589	1551	2481	1303	2085
		F		4.4-0.1R		4.4-0.1R		4.5-0.1R		4.5-0.1R		4.5-0.1R		4.5-0.1R		4.5-0.1R		4.5+0R		4.5+0R	
	8	q _a	q _f	1479	2404	1483	2409	1455	2364	1462	2375	1441	2342	1448	2354	1432	2328	1439	2339	1303	2085
		F		6-0.4R		5.9-0.3R		6.2-0.3R		6-0.2R		6.2-0.2R		6.1-0.2R		6.3-0.2R		6.2-0.2R		6.3-0.2R	
	12	q _a	q _f	1361	2212	1333	2167	1313	2134	1298	2109	1285	2089	1276	2073	1267	2060	1261	2048	1255	2039
		F		7.4-0.7R		7.6-0.7R		7.7-0.6R		7.8-0.5R		7.9-0.5R		7.9-0.4R		8-0.4R		8-0.4R		8-0.3R	
	18	q _a	q _f	1263	2052	1248	2028	1142	1856	1148	1866	1153	1874	1080	1755	1092	1774	1101	1789	1046	1700
		F		8.7-1.2R		8.6-0.9R		9.8-1.1R		9.6-0.9R		9.4-0.8R		10.3-0.9R		10-0.7R		9.8-0.6R		10.5-0.7R	
	24	q _a	q _f	1120	1820	1133	1842	1019	1656	1046	1700	960	1561	990	1609	923	1499	952	1547	896	1457
		F		10.8-2R		10.2-1.4R		11.7-1.7R		11-1.3R		12.2-1.5R		11.6-1.2R		12.6-1.3R		12-1R		12.8-1.1R	
	36	q _a	q _f	1120	1820	978	1590	862	1400	920	1495	835	1357	763	1239	819	1330	760	1235	709	1152
		F		10.8-2R		12.8-2.5R		14.9-3R		13.2-2R		14.7-2.3R		16.2-2.6R		14.6-1.8R		15.8-2R		16.9-2R	
	60	q _a	q _f	913	1483	773	1256	862	1400	766	1245	683	1110	599	974	532	865	630	1023	571	928
		F		15.1-4.4R		18.3-5.5R		14.9-3R		16.9-3.5R		18.9-4R		21-4.5R		23-4.9R		19.2-3.1R		20.6-3R	

**TABLE 7-8—ALLOWABLE DIAPHRAGM SHEARS (q_a), (ln plf),
FACTORED DIAPHRAGM SHEARS (q_f), (ln plf), AND FLEXIBILITY FACTOR (F)**

16 ga.			DGB-36 AND DGBF-36 INTERLOCK DECK WITH PNEUTEK K66 PINS AND DELTAGRIP™ SIDE SEAM ATTACHMENT (See DelatGrip™ system notes)																	
Support Fasteners	Seam Spacing (in)	Span																		
			4		5		6		7		8		9		10		11		12	
9	4	q _a q _f	4384	7125	4348	7065	4321	7021	4301	6989	4285	6963	4272	6942	3546	5674	2931	4690	2463	3941
		F	3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.3-0.1R		3.3+0R		3.3+0R		3.3+0R	
	8	q _a q _f	3780	6142	3743	6082	3589	5832	3588	5830	3478	5652	3490	5671	3406	5535	2931	4690	2463	3941
		F	4.1-0.3R		4.1-0.3R		4.2-0.3R		4.2-0.2R		4.3-0.2R		4.3-0.2R		4.4-0.2R		4.3-0.2R		4.4-0.1R	
	12	q _a q _f	3367	5471	3203	5205	3082	5009	2990	4859	2917	4740	2858	4645	2810	4566	2769	4500	2463	3941
		F	4.8-0.6R		5-0.5R		5.1-0.5R		5.2-0.5R		5.3-0.4R		5.3-0.4R		5.4-0.4R		5.4-0.3R		5.4-0.3R	
	18	q _a q _f	3090	5021	2958	4806	2615	4250	2574	4183	2543	4133	2328	3783	2326	3780	2325	3778	2171	3528
		F	5.5-0.9R		5.5-0.8R		6.2-0.9R		6.2-0.8R		6.1-0.7R		6.6-0.7R		6.5-0.6R		6.4-0.6R		6.8-0.6R	
	24	q _a q _f	2752	4472	2671	4340	2335	3794	2332	3789	2097	3407	2122	3448	1945	3160	1980	3218	1818	2955
		F	6.5-1.4R		6.3-1.1R		7.2-1.3R		6.9-1R		7.6-1.2R		7.3-1R		7.9-1.1R		7.6-0.9R		8.1-0.9R	
	36	q _a q _f	2752	4472	2339	3801	2021	3284	2065	3355	1826	2967	1605	2608	1690	2747	1521	2472	1381	2244
		F	6.5-1.4R		7.6-1.8R		8.7-2.1R		8-1.5R		8.9-1.7R		9.7-1.9R		9-1.5R		9.7-1.6R		10.3-1.5R	
	60	q _a q _f	2345	3811	1959	3183	2021	3284	1736	2820	1498	2434	1313	2133	1165	1893	1283	2084	1162	1888
		F	8.3-2.6R		9.9-3.3R		8.7-2.1R		9.8-2.4R		10.9-2.8R		12-3.1R		13-3.4R		11.4-2.3R		12.1-2.2R	
7	4	q _a q _f	3510	5704	3496	5681	3486	5664	3478	5651	3472	5642	3467	5634	3463	5628	2931	4690	2463	3941
		F	3.2-0.1R		3.2-0.1R		3.3-0.1R		3.3+0R		3.3+0R		3.3+0R		3.3+0R		3.3+0R		3.3+0R	
	8	q _a q _f	3065	4980	3068	4986	2972	4830	2989	4857	2920	4745	2940	4778	2887	4691	2907	4690	2463	3941
		F	4.2-0.3R		4.2-0.2R		4.3-0.2R		4.3-0.2R		4.4-0.2R		4.3-0.1R		4.4-0.1R		4.4-0.1R		4.4-0.1R	
	12	q _a q _f	2710	4403	2620	4257	2555	4152	2506	4073	2468	4011	2437	3961	2412	3920	2391	3886	2374	3857
		F	5.1-0.5R		5.2-0.4R		5.3-0.4R		5.4-0.3R		5.4-0.3R		5.5-0.3R		5.5-0.3R		5.5-0.2R		5.5-0.2R	
	18	q _a q _f	2451	3982	2398	3896	2132	3464	2136	3471	2139	3476	1968	3198	1988	3231	2005	3258	1880	3055
		F	5.9-0.8R		5.9-0.6R		6.6-0.7R		6.5-0.6R		6.4-0.5R		6.9-0.6R		6.8-0.5R		6.7-0.4R		7.1-0.4R	
	24	q _a q _f	2117	3440	2126	3454	1862	3027	1908	3101	1721	2797	1776	2885	1632	2652	1686	2740	1571	2552
		F	7.2-1.3R		6.8-1R		7.8-1.1R		7.4-0.9R		8.1-1R		7.7-0.8R		8.4-0.9R		8-0.7R		8.5-0.7R	
	36	q _a q _f	2117	3440	1796	2919	1551	2520	1650	2681	1476	2399	1334	2167	1431	2325	1317	2140	1204	1956
		F	7.2-1.3R		8.5-1.7R		9.7-2R		8.7-1.3R		9.7-1.5R		10.6-1.7R		9.6-1.2R		10.4-1.3R		11.1-1.3R	
	60	q _a q _f	1693	2752	1406	2284	1551	2520	1360	2209	1190	1934	1049	1704	936	1520	1082	1758	985	1600
		F	9.8-2.8R		11.7-3.5R		9.7-2R		11-2.3R		12.3-2.6R		13.5-2.9R		14.8-3.2R		12.5-2.1R		13.4-2R	
5	4	q _a q _f	2602	4228	2596	4219	2592	4212	2589	4207	2587	4203	2585	4200	2583	4198	2582	4196	2463	3941
		F	3.2-0.1R		3.3-0.1R		3.3+0R		3.3+0R		3.3+0R		3.3+0R		3.3+0R		3.3+0R		3.3+0R	
	8	q _a q _f	2396	3894	2400	3900	2353	3823	2362	3839	2328	3782	2339	3800	2311	3756	2322	3774	2300	3738
		F	4.3-0.2R		4.2-0.2R		4.4-0.2R		4.3-0.1R		4.4-0.1R		4.3-0.1R		4.4-0.1R		4.4-0.1R		4.5-0.1R	
	12	q _a q _f	2204	3582	2156	3503	2120	3445	2092	3400	2071	3365	2053	3336	2039	3313	2027	3293	2016	3276
		F	5.2-0.4R		5.3-0.4R		5.4-0.3R		5.4-0.3R		5.5-0.3R		5.5-0.3R		5.5-0.2R		5.6-0.2R		5.6-0.2R	
	18	q _a q _f	2047	3327	2019	3280	1845	2998	1851	3009	1856	3016	1737	2823	1754	2850	1767	2871	1677	2726
		F	6-0.7R		6-0.6R		6.8-0.7R		6.6-0.5R		6.5-0.5R		7-0.5R		6.9-0.4R		6.8-0.4R		7.2-0.4R	
	24	q _a q _f	1822	2961	1836	2984	1649	2680	1688	2743	1549	2517	1594	2589	1483	2411	1528	2483	1438	2336
		F	7.5-1.3R		7-0.9R		8-1.1R		7.6-0.8R		8.3-0.9R		7.9-0.7R		8.5-0.8R		8.1-0.6R		8.7-0.6R	
	36	q _a q _f	1822	2961	1593	2588	1403	2280	1488	2419	1351	2195	1233	2004	1319	2143	1224	1989	1141	1853
		F	7.5-1.3R		8.8-1.6R		10.2-1.9R		9-1.2R		10-1.4R		11-1.6R		9.9-1.1R		10.7-1.2R		11.4-1.2R	
	60	q _a q _f	1501	2439	1273	2068	1403	2280	1247	2027	1119	1819	1009	1639	899	1462	1045	1698	954	1551
		F	10.5-2.8R		12.6-3.5R		10.2-1.9R		11.5-2.2R		12.8-2.5R		14.2-2.8R		15.5-3R		13-1.9R		13.9-1.9R	
4	4	q _a q _f	2110	3428	2107	3424	2105	3421	2104	3419	2103	3417	2102	3416	2102	3415	2101	3414	2101	3414
		F	3.3-0.1R		3.3+0R		3.3+0R		3.3+0R		3.3+0R		3.3+0R		3.3+0R		3.3+0R		3.3+0R	
	8	q _a q _f	1981	3219	1987	3229	1959	3183	1967	3197	1947	3163	1955	3177	1939	3151	1947	3163	1933	3142
		F	4.3-0.2R		4.2-0.1R		4.4-0.1R		4.3-0.1R		4.4-0.1R		4.4-0.1R		4.5-0.1R		4.4-0.1R		4.5-0.1R	
	12	q _a q _f	1846	3000	1819	2956	1799	2924	1784	2900	1773	2880	1763	2865	1755	2852	1749	2841	1743	2832
		F	5.3-0.4R		5.4-0.3R		5.5-0.3R		5.5-0.3R		5.5-0.2R		5.6-0.2R		5.6-0.2R		5.6-0.2R		5.6-0.2R	
	18	q _a q _f	1727	2806	1717	2790	1590	2584	1603	2605	1613	2621	1524	2477	1542	2505	1556	2528	1488	2418
		F	6.2-0.6R		6.1-0.5R		6.9-0.6R		6.7-0.5R		6.6-0.4R		7.2-0.4R		7-0.4R		6.8-0.3R		7.3-0.3R	
	24	q _a q _f	1541	2504	1571	2553	1428	2321	1471	2391	1363	2214	1407	2287	1320	2145	1363	2215	1291	2097
		F	7.8-1.1R		7.2-0.8R		8.3-0.9R		7.7-0.7R		8.5-0.8R		8.1-0.6R		8.7-0.7R		8.3-0.5R		8.8-0.5R	
	36	q _a q _f	1541	2504	1362	2214	1210	1967	1301	2114	1189	1933	1092	1775	1177	1912	1098	1784	1028	1670
		F	7.8-1.1R		9.2-1.4R		10.6-1.7R		9.3-1.1R		10.3-1.2R		11.4-1.4R		10.2-1R		11-1.1R		11.7-1.1R	
	60	q _a q _f	1250	2032	1066	1732	1210	1967	1083	1759	976	1586	887	1441	791	1285	933	1517	864	1404
		F	11.3-2.8R		13.6-3.5R		10.6-1.7R		12.1-2R		13.5-2.3R		14.9-2.5R		16.3-2.8R		13.4-1.7R		14.4-1.7R	

**TABLE 7-9—ALLOWABLE DIAPHRAGM SHEARS (q_a), (In plf),
FACTORED DIAPHRAGM SHEARS (q_f), (In plf), AND FLEXIBILITY FACTOR (F)**

22 ga.			DGB-36 AND DGBF-36 INTERLOCK DECK WITH BUILDEX SELF DRILLING SCREWS AND DELTAGRIP™ SIDE SEAM ATTACHMENT (See DeltaGrip™ System Notes)																	
Support Fasteners	Seam Spacing (in)	Span	4		5		6		7		8		9		10		11		12	
9	4	q _a q _f	1438	2337	1415	2299	1398	2272	1385	2251	1375	2234	1151	1842	932	1492	771	1233	647	1036
		F	7-0.9R		7.2-0.9R		7.5-0.9R		7.6-0.9R		7.8-0.8R		7.9-0.8R		8-0.7R		8.1-0.7R		8.1-0.6R	
	8	q _a q _f	1200	1950	1172	1905	1107	1798	1098	1784	1052	1710	1051	1708	932	1492	771	1233	647	1036
		F	8.1-1.7R		8.5-1.7R		9.1-1.9R		9.3-1.8R		9.8-1.8R		10-1.8R		10.3-1.8R		10.4-1.7R		10.6-1.5R	
	12	q _a q _f	1063	1728	992	1612	939	1527	899	1462	868	1410	843	1369	822	1336	771	1233	647	1036
		F	8.7-2.2R		9.4-2.4R		10.1-2.5R		10.6-2.6R		11.1-2.7R		11.5-2.7R		11.9-2.7R		12.3-2.7R		12.4-2.2R	
	18	q _a q _f	979	1591	917	1491	801	1301	776	1260	757	1229	668	1086	659	1070	651	1058	590	959
		F	9-2.5R		9.8-2.7R		10.9-3.2R		11.5-3.3R		12-3.3R		13-3.7R		13.3-3.6R		13.7-3.6R		14.2-3.1R	
	24	q _a q _f	883	1435	834	1356	715	1162	695	1129	598	971	595	967	527	857	532	864	480	781
		F	9.5-2.9R		10.3-3.1R		11.5-3.7R		12.1-3.7R		13.1-4.2R		13.6-4.1R		14.6-4.5R		14.9-4.4R		15.4-3.7R	
	36	q _a q _f	883	1435	743	1207	605	984	601	977	516	838	449	730	462	750	412	670	371	603
		F	9.5-2.9R		10.8-3.6R		12.1-4.3R		12.7-4.3R		13.9-4.7R		15.1-5.3R		15.3-5.1R		16.5-5.6R		16.9-4.5R	
	60	q _a q _f	773	1257	612	994	605	984	507	824	434	705	376	611	330	537	353	573	316	514
		F	10-3.3R		11.4-4.2R		12.1-4.3R		13.4-4.9R		14.7-5.5R		16-6.1R		17.2-6.6R		17.4-6.3R		17.9-5.1R	
7	4	q _a q _f	1161	1887	1151	1871	1144	1859	1139	1850	1134	1843	1131	1838	932	1492	771	1233	647	1036
		F	7.5-0.9R		7.7-0.8R		7.9-0.8R		8-0.7R		8.1-0.7R		8.2-0.6R		8.3-0.6R		8.4-0.6R		8.4-0.5R	
	8	q _a q _f	968	1573	962	1562	918	1492	920	1496	890	1446	895	1455	872	1417	771	1233	647	1036
		F	9.1-1.9R		9.5-1.8R		10.1-1.9R		10.3-1.7R		10.8-1.8R		10.8-1.6R		11.2-1.6R		11.3-1.5R		11.5-1.4R	
	12	q _a q _f	841	1367	799	1299	769	1250	746	1213	729	1184	715	1161	703	1142	693	1127	647	1036
		F	10.1-2.5R		10.9-2.7R		11.6-2.8R		12.1-2.8R		12.6-2.8R		13-2.7R		13.4-2.7R		13.7-2.6R		13.9-2.2R	
	18	q _a q _f	758	1231	727	1182	636	1034	629	1023	624	1015	568	924	570	927	572	930	532	865
		F	10.7-3R		11.5-3.2R		13-3.8R		13.5-3.7R		14-3.6R		15.2-4.1R		15.5-3.8R		15.7-3.7R		16.5-3.3R	
	24	q _a q _f	659	1071	645	1049	558	907	563	914	502	817	513	834	459	747	474	770	431	700
		F	11.5-3.7R		12.3-3.8R		14-4.6R		14.5-4.4R		15.9-4.9R		16.2-4.7R		17.5-5.1R		17.6-4.8R		18.4-4.2R	
	36	q _a q _f	659	1071	552	897	465	755	486	790	420	683	369	600	394	640	354	576	321	522
		F	11.5-3.7R		13.3-4.6R		15.1-5.6R		15.6-5.2R		17.1-5.9R		18.8-6.6R		18.8-6R		20.2-6.6R		21-5.5R	
	60	q _a q _f	543	882	435	706	465	755	393	638	338	550	296	481	262	426	295	479	267	433
		F	12.5-4.6R		14.6-5.8R		15.1-5.6R		16.9-6.4R		18.7-7.1R		20.5-8R		22.2-8.6R		21.9-7.8R		22.7-6.4R	
5	4	q _a q _f	880	1430	876	1423	873	1418	870	1414	869	1411	867	1409	866	1407	771	1233	647	1036
		F	7.7-0.9R		7.9-0.8R		8-0.7R		8.2-0.7R		8.3-0.6R		8.3-0.6R		8.4-0.5R		8.5-0.5R		8.5-0.4R	
	8	q _a q _f	782	1271	779	1267	755	1228	757	1231	740	1203	744	1208	730	1186	734	1193	647	1036
		F	9.5-1.9R		9.9-1.7R		10.5-1.8R		10.7-1.7R		11.2-1.7R		11.2-1.5R		11.6-1.5R		11.6-1.4R		11.9-1.3R	
	12	q _a q _f	705	1146	680	1105	661	1074	647	1051	635	1032	626	1017	619	1005	612	995	607	986
		F	10.7-2.7R		11.6-2.8R		12.2-2.8R		12.8-2.8R		13.3-2.7R		13.7-2.7R		14-2.6R		14.4-2.5R		14.5-2.1R	
	18	q _a q _f	649	1055	631	1025	565	918	562	912	559	908	516	838	518	842	520	846	489	795
		F	11.5-3.3R		12.4-3.3R		14-4R		14.5-3.9R		14.9-3.7R		16.3-4.1R		16.5-3.9R		16.7-3.7R		17.5-3.3R	
	24	q _a q _f	577	938	570	926	504	818	509	827	461	749	471	765	434	705	444	722	415	674
		F	12.5-4.1R		13.4-4.1R		15.2-4.9R		15.6-4.6R		17.2-5.2R		17.4-4.9R		18.9-5.3R		18.9-4.9R		19.8-4.4R	
	36	q _a q _f	577	938	496	806	432	701	449	729	403	655	355	577	381	619	343	557	311	505
		F	12.5-4.1R		14.7-5.1R		16.8-6.2R		17-5.6R		18.8-6.3R		20.7-7.1R		20.4-6.3R		22.1-7R		23-5.9R	
	60	q _a q _f	484	787	407	661	432	701	374	609	323	524	282	458	250	406	283	460	256	416
		F	13.9-5.3R		16.3-6.6R		16.8-6.2R		18.8-7.1R		20.8-7.9R		22.9-8.9R		24.9-9.6R		24.2-8.5R		25.1-7.1R	
4	4	q _a q _f	719	1169	717	1166	716	1163	715	1162	714	1160	713	1159	713	1158	712	1158	647	1036
		F	7.9-0.8R		8.1-0.7R		8.2-0.7R		8.3-0.6R		8.4-0.5R		8.5-0.5R		8.5-0.5R		8.6-0.4R		8.6-0.4R	
	8	q _a q _f	654	1062	654	1063	639	1039	642	1043	631	1025	634	1031	626	1016	629	1022	622	1010
		F	10.1-1.9R		10.4-1.7R		11-1.7R		11.1-1.6R		11.6-1.6R		11.6-1.4R		12-1.4R		12-1.3R		12.2-1.2R	
	12	q _a q _f	595	967	580	942	569	924	560	910	553	899	548	890	543	883	539	876	536	871
		F	11.6-2.8R		12.4-2.8R		13.1-2.8R		13.6-2.7R		14.1-2.6R		14.5-2.6R		14.8-2.5R		15.1-2.4R		15.2-2R	
	18	q _a q _f	549	893	540	877	489	795	490	797	491	798	457	743	461	750	465	755	439	714
		F	12.6-3.5R		13.4-3.5R		15.3-4.2R		15.7-3.9R		16-3.7R		17.5-4.1R		17.6-3.8R		17.8-3.6R		18.8-3.3R	
	24	q _a q _f	486	789	488	793	435	707	445	723	406	659	417	678	387	629	399	648	374	608
		F	14-4.6R		14.7-4.4R		16.9-5.3R		17.1-4.8R		18.9-5.4R		19-5R		20.6-5.4R		20.4-4.9R		21.5-4.5R	
	36	q _a q _f	486	789	421	684	369	599	390	634	353	573	313	509	343	557	308	501	279	454
		F	14-4.6R		16.5-5.7R		18.9-6.9R		18.9-6.1R		21-6.8R		23.1-7.7R		22.6-6.6R		24.4-7.3R		25.6-6.3R	
	60	q _a q _f	399	648	334	542	369	599	320	521	275	447	240	390	212	344	249	404	224	365
		F	15.9-6.2R		18.8-7.8R		18.9-6.9R		21.3-7.9R		23.7-8.8R		26.1-9.9R		28.5-10.7R		27.2-9.1R		28.4-7.7R	

**TABLE 7-9—ALLOWABLE DIAPHRAGM SHEARS (qa), (In plf),
FACTORED DIAPHRAGM SHEARS (qf), (In plf), AND FLEXIBILITY FACTOR (F)**

20 ga.			DGB-36 AND DGBF-36 INTERLOCK DECK WITH BUILDEX SELF DRILLING SCREWS AND DELTAGRIP™ SIDE SEAM ATTACHMENT (See DeltaGrip™ System Notes)																	
Support Fasteners	Seam Attachment	Span	4		5		6		7		8		9		10		11		12	
			q _a	q _r																
9	4	q _a q _r	1790	2909	1770	2876	1755	2852	1744	2834	1735	2819	1514	2422	1226	1962	1013	1621	852	1362
		F	5.6-0.6R		5.8-0.6R		6-0.6R		6.1-0.5R		6.1-0.5R		6.2-0.5R		6.3-0.4R		6.3-0.4R		6.3-0.4R	
	8	q _a q _r	1519	2469	1496	2431	1425	2315	1420	2307	1370	2226	1372	2230	1226	1962	1013	1621	852	1362
		F	6.7-1.3R		6.9-1.2R		7.4-1.3R		7.5-1.2R		7.8-1.2R		7.9-1.2R		8.2-1.2R		8.2-1.1R		8.4-1R	
	12	q _a q _r	1348	2191	1272	2067	1215	1975	1172	1905	1138	1849	1111	1805	1088	1768	1013	1621	852	1362
		F	7.2-1.7R		7.8-1.8R		8.3-1.9R		8.7-1.9R		9-1.9R		9.3-1.9R		9.6-1.9R		9.8-1.9R		9.9-1.5R	
	18	q _a q _r	1238	2012	1174	1908	1032	1676	1008	1639	991	1610	903	1468	899	1461	895	1455	822	1336
		F	7.6-2R		8.2-2.1R		9.1-2.5R		9.5-2.5R		9.8-2.4R		10.6-2.8R		10.8-2.6R		11-2.6R		11.5-2.3R	
	24	q _a q _r	1108	1801	1063	1727	925	1503	916	1488	805	1309	811	1318	721	1171	733	1191	665	1080
		F	8.1-2.4R		8.6-2.5R		9.7-3R		10.1-2.9R		11-3.3R		11.2-3.2R		12-3.4R		12.2-3.3R		12.7-2.8R	
	36	q _a q _r	1108	1801	937	1523	788	1281	798	1297	687	1116	601	976	626	1018	561	912	507	824
		F	8.1-2.4R		9.2-3R		10.4-3.6R		10.7-3.4R		11.7-3.8R		12.7-4.3R		12.8-4R		13.7-4.4R		14.2-3.6R	
	60	q _a q _r	956	1554	775	1259	788	1281	663	1077	569	924	496	805	437	710	475	772	428	695
		F	8.6-2.9R		9.9-3.6R		10.4-3.6R		11.5-4.1R		12.6-4.6R		13.7-5.1R		14.8-5.5R		14.7-5.1R		15.2-4.2R	
7	4	q _a q _r	1439	2339	1431	2325	1425	2316	1420	2308	1417	2303	1414	2298	1226	1962	1013	1621	852	1362
		F	6-0.6R		6.1-0.5R		6.2-0.5R		6.3-0.4R		6.4-0.4R		6.4-0.4R		6.4-0.4R		6.5-0.3R		6.5-0.3R	
	8	q _a q _r	1230	2000	1228	1996	1183	1922	1188	1931	1156	1878	1163	1890	1138	1850	1013	1621	852	1362
		F	7.4-1.3R		7.6-1.2R		8-1.3R		8.1-1.1R		8.4-1.1R		8.5-1R		8.7-1R		8.7-0.9R		8.9-0.9R	
	12	q _a q _r	1078	1752	1034	1681	1003	1630	980	1592	961	1562	946	1538	934	1518	924	1502	852	1362
		F	8.3-1.9R		8.8-2R		9.3-2R		9.7-1.9R		10-1.9R		10.3-1.8R		10.5-1.8R		10.7-1.7R		10.8-1.5R	
	18	q _a q _r	972	1580	944	1533	832	1352	829	1348	828	1345	757	1231	763	1240	768	1248	717	1166
		F	8.9-2.3R		9.4-2.4R		10.6-2.8R		11-2.7R		11.2-2.6R		12.2-2.9R		12.3-2.7R		12.5-2.5R		13.1-2.3R	
	24	q _a q _r	841	1367	836	1358	728	1182	741	1203	665	1081	683	1109	625	1016	644	1047	598	972
		F	9.7-3R		10.2-2.9R		11.6-3.5R		11.8-3.3R		13-3.7R		13.1-3.4R		14.1-3.7R		14.1-3.4R		14.8-3.1R	
	36	q _a q _r	841	1367	709	1153	610	991	642	1043	568	924	500	813	540	878	487	792	443	720
		F	9.7-3R		11.2-3.7R		12.8-4.5R		12.9-4R		14.2-4.5R		15.6-5.1R		15.3-4.5R		16.5-4.9R		17.2-4.2R	
	60	q _a q _r	681	1107	558	907	610	991	521	846	450	731	395	642	351	570	401	652	364	591
		F	10.7-3.9R		12.6-4.9R		12.8-4.5R		14.3-5.1R		15.8-5.7R		17.3-6.4R		18.8-6.9R		18.2-6.1R		18.9-5.1R	
5	4	q _a q _r	1077	1749	1073	1744	1071	1740	1069	1737	1068	1735	1066	1733	1066	1731	1013	1621	852	1362
		F	6.1-0.5R		6.2-0.5R		6.3-0.4R		6.4-0.4R		6.4-0.4R		6.5-0.3R		6.5-0.3R		6.5-0.3R		6.6-0.3R	
	8	q _a q _r	976	1586	976	1586	952	1548	956	1553	939	1525	943	1533	930	1511	934	1519	852	1362
		F	7.7-1.3R		7.8-1.2R		8.3-1.2R		8.3-1.1R		8.7-1.1R		8.7-1R		9-0.9R		8.9-0.9R		9.1-0.8R	
	12	q _a q _r	889	1445	865	1405	846	1375	832	1353	821	1334	812	1320	805	1308	799	1298	793	1289
		F	8.7-1.9R		9.3-2R		9.8-1.9R		10.1-1.9R		10.4-1.8R		10.7-1.8R		10.9-1.7R		11.1-1.6R		11.2-1.4R	
	18	q _a q _r	822	1336	806	1309	730	1185	729	1185	729	1185	678	1102	683	1110	687	1117	649	1055
		F	9.5-2.5R		10.1-2.4R		11.4-2.9R		11.6-2.7R		11.9-2.5R		12.9-2.8R		13-2.6R		13.1-2.5R		13.8-2.3R	
	24	q _a q _r	730	1187	730	1186	650	1057	662	1076	604	982	620	1007	574	933	590	959	553	899
		F	10.5-3.2R		11-3.1R		12.5-3.7R		12.7-3.4R		14-3.8R		14-3.4R		15.1-3.8R		15-3.4R		15.8-3.1R	
	36	q _a q _r	730	1187	633	1029	554	901	583	948	527	856	479	779	510	828	472	767	430	699
		F	10.5-3.2R		12.3-4.1R		14-4.9R		14-4.3R		15.5-4.8R		17-5.4R		16.6-4.6R		17.9-5.1R		18.7-4.4R	
	60	q _a q _r	606	985	512	831	554	901	491	798	431	701	378	615	336	546	387	629	351	571
		F	11.9-4.4R		14-5.6R		14-4.9R		15.8-5.6R		17.5-6.2R		19.2-7R		20.9-7.6R		19.9-6.4R		20.8-5.5R	
4	4	q _a q _r	876	1423	874	1421	873	1419	872	1418	872	1417	871	1416	871	1415	871	1415	852	1362
		F	6.2-0.5R		6.3-0.4R		6.4-0.4R		6.5-0.3R		6.5-0.3R		6.6-0.3R		6.6-0.3R		6.6-0.2R		6.6-0.2R	
	8	q _a q _r	811	1318	813	1321	799	1298	802	1304	792	1286	795	1293	787	1279	791	1285	784	1274
		F	8-1.3R		8.1-1.1R		8.6-1.1R		8.6-1R		9-1R		8.9-0.9R		9.2-0.8R		9.1-0.8R		9.3-0.7R	
	12	q _a q _r	748	1215	734	1192	723	1175	715	1162	709	1152	704	1143	699	1137	696	1131	693	1126
		F	9.3-2R		9.9-1.9R		10.3-1.9R		10.7-1.8R		10.9-1.7R		11.2-1.6R		11.4-1.5R		11.6-1.5R		11.6-1.3R	
	18	q _a q _r	695	1129	688	1118	631	1025	635	1031	637	1036	598	972	605	983	610	991	580	943
		F	10.3-2.6R		10.8-2.5R		12.3-2.9R		12.4-2.7R		12.6-2.4R		13.7-2.8R		13.7-2.5R		13.7-2.3R		14.5-2.2R	
	24	q _a q _r	617	1002	625	1016	563	915	579	940	532	865	549	892	512	832	529	859	498	809
		F	11.6-3.5R		12-3.2R		13.7-3.9R		13.7-3.4R		15.1-3.8R		15-3.4R		16.3-3.7R		16-3.3R		16.9-3.1R	
	36	q _a q _r	617	1002	540	878	476	774	509	828	463	752	423	688	455	739	423	687	392	637
		F	11.6-3.5R		13.6-4.4R		15.7-5.3R		15.4-4.4R		17-5R		18.7-5.6R		18-4.7R		19.5-5.2R		20.5-4.6R	
	60	q _a q _r	502	816	426	692	476	774	424	689	374	608	328	532	290	472	346	562	313	509
		F	13.6-5.1R		16.1-6.4R		15.7-5.3R		17.7-6.1R		19.7-6.8R		21.7-7.7R		23.6-8.3R		22.1-6.7R		23.1-5.8R	

**TABLE 7-9—ALLOWABLE DIAPHRAGM SHEARS (qa), (ln plf),
FACTORED DIAPHRAGM SHEARS (qf), (ln plf), AND FLEXIBILITY FACTOR (F)**

18 ga.			DGB-36 AND DGBF-36 INTERLOCK DECK WITH BUILDEX SELF DRILLING SCREWS AND DELTAGRIP™ SIDE SEAM ATTACHMENT (See DeltaGrip™ System Notes)																	
Support Fasteners	Seam Attachment	Span																		
			4		5		6		7		8		9		10		11		12	
9	4	q _a q _f	2494	4053	2478	4027	2467	4009	2459	3995	2452	3984	2317	3707	1877	3003	1551	2481	1303	2085
		F	4-0.3R		4.1-0.3R		4.2-0.3R		4.2-0.2R		4.2-0.2R		4.3-0.2R		4.3-0.2R		4.3-0.2R		4.3-0.2R	
	8	q _a q _f	2183	3548	2171	3527	2094	3402	2097	3408	2042	3318	2051	3332	1877	3003	1551	2481	1303	2085
		F	4.8-0.7R		4.9-0.7R		5.2-0.7R		5.2-0.6R		5.4-0.6R		5.4-0.6R		5.6-0.6R		5.6-0.5R		5.7-0.5R	
	12	q _a q _f	1955	3176	1873	3044	1813	2947	1767	2872	1731	2813	1702	2766	1678	2726	1551	2481	1303	2085
		F	5.3-1.1R		5.7-1.1R		5.9-1.1R		6.2-1.1R		6.3-1.1R		6.5-1R		6.6-1R		6.7-1R		6.8-0.8R	
	18	q _a q _f	1795	2916	1732	2814	1541	2505	1526	2480	1514	2461	1392	2262	1396	2268	1399	2273	1303	2085
		F	5.7-1.3R		6-1.3R		6.7-1.6R		6.9-1.5R		7-1.4R		7.6-1.6R		7.7-1.5R		7.7-1.4R		8.1-1.3R	
	24	q _a q _f	1593	2589	1563	2539	1373	2231	1381	2244	1246	2025	1268	2060	1165	1893	1191	1936	1109	1802
		F	6.2-1.7R		6.5-1.7R		7.3-2R		7.4-1.9R		8.1-2.1R		8.1-1.9R		8.7-2.1R		8.7-1.9R		9.1-1.7R	
	36	q _a q _f	1593	2589	1361	2212	1180	1918	1218	1980	1087	1767	955	1552	1017	1653	915	1487	830	1349
		F	6.2-1.7R		7.1-2.1R		8-2.6R		8-2.3R		8.8-2.6R		9.5-2.9R		9.4-2.5R		10.1-2.8R		10.5-2.4R	
	60	q _a q _f	1344	2183	1125	1828	1180	1918	1018	1654	878	1426	769	1249	681	1107	763	1239	690	1122
		F	6.8-2.3R		7.8-2.8R		8-2.6R		8.8-2.9R		9.7-3.3R		10.6-3.7R		11.4-4R		11-3.5R		11.5-2.9R	
7	4	q _a q _f	1989	3233	1983	3223	1979	3216	1976	3211	1974	3207	1972	3204	1877	3003	1551	2481	1303	2085
		F	4.2-0.3R		4.2-0.2R		4.3-0.2R		4.3-0.2R		4.3-0.2R		4.3-0.2R		4.4-0.1R		4.4-0.1R		4.4-0.1R	
	8	q _a q _f	1769	2875	1774	2883	1728	2807	1738	2824	1704	2769	1716	2788	1689	2745	1551	2481	1303	2085
		F	5.2-0.7R		5.3-0.6R		5.5-0.6R		5.5-0.5R		5.7-0.5R		5.7-0.5R		5.8-0.5R		5.8-0.4R		5.9-0.4R	
	12	q _a q _f	1580	2567	1537	2497	1506	2447	1482	2408	1464	2379	1449	2355	1437	2335	1427	2319	1303	2085
		F	5.9-1.1R		6.2-1.1R		6.5-1.1R		6.7-1R		6.8-1R		7-0.9R		7.1-0.9R		7.2-0.8R		7.2-0.7R	
	18	q _a q _f	1434	2331	1413	2295	1266	2057	1273	2069	1279	2078	1183	1922	1197	1945	1209	1964	1138	1849
		F	6.5-1.5R		6.8-1.4R		7.6-1.7R		7.7-1.5R		7.8-1.4R		8.4-1.5R		8.4-1.4R		8.4-1.3R		8.9-1.2R	
	24	q _a q _f	1240	2014	1256	2040	1107	1799	1140	1853	1033	1679	1069	1738	987	1603	1022	1660	954	1551
		F	7.2-2R		7.5-1.8R		8.4-2.2R		8.4-1.9R		9.2-2.2R		9.2-1.9R		9.9-2.1R		9.7-1.9R		10.2-1.7R	
	36	q _a q _f	1240	2014	1059	1721	918	1492	985	1601	885	1438	801	1302	864	1405	797	1296	737	1197
		F	7.2-2R		8.4-2.5R		9.6-3R		9.4-2.5R		10.3-2.8R		11.3-3.2R		10.9-2.6R		11.7-2.9R		12.3-2.6R	
	60	q _a q _f	982	1596	818	1329	918	1492	807	1312	712	1157	627	1019	559	908	656	1066	597	970
		F	8.4-2.9R		9.8-3.6R		9.6-3R		10.7-3.4R		11.8-3.9R		13-4.3R		14.1-4.7R		13.2-3.8R		13.8-3.3R	
5	4	q _a q _f	1464	2379	1462	2375	1460	2373	1459	2371	1458	2369	1457	2368	1457	2367	1456	2367	1303	2085
		F	4.2-0.2R		4.3-0.2R		4.3-0.2R		4.3-0.2R		4.4-0.2R		4.4-0.1R		4.4-0.1R		4.4-0.1R		4.4-0.1R	
	8	q _a q _f	1366	2220	1369	2225	1347	2189	1353	2198	1337	2172	1342	2182	1330	2161	1335	2170	1303	2085
		F	5.3-0.7R		5.4-0.6R		5.6-0.6R		5.6-0.5R		5.8-0.5R		5.8-0.4R		5.9-0.4R		5.9-0.4R		6-0.3R	
	12	q _a q _f	1268	2061	1246	2025	1230	1998	1217	1978	1207	1962	1199	1949	1193	1938	1187	1929	1182	1921
		F	6.2-1.1R		6.5-1.1R		6.7-1R		6.9-0.9R		7-0.9R		7.2-0.8R		7.3-0.8R		7.4-0.8R		7.4-0.7R	
	18	q _a q _f	1184	1924	1173	1906	1082	1757	1088	1768	1093	1776	1029	1672	1040	1690	1049	1704	1000	1625
		F	6.8-1.5R		7.1-1.4R		8-1.6R		8.1-1.5R		8.1-1.3R		8.8-1.5R		8.7-1.3R		8.7-1.2R		9.2-1.2R	
	24	q _a q _f	1058	1719	1072	1742	971	1578	997	1620	920	1495	948	1541	887	1442	915	1486	864	1404
		F	7.8-2.1R		7.9-1.8R		9-2.2R		8.9-1.9R		9.8-2.1R		9.6-1.9R		10.4-2R		10.1-1.8R		10.7-1.7R	
	36	q _a q _f	1058	1719	932	1514	826	1342	881	1432	804	1306	737	1197	790	1284	736	1196	688	1118
		F	7.8-2.1R		9.1-2.6R		10.4-3.2R		10-2.6R		11.1-2.9R		12.1-3.2R		11.5-2.6R		12.4-2.9R		13.1-2.6R	
	60	q _a q _f	867	1409	739	1200	826	1342	737	1198	664	1079	602	979	539	876	628	1020	580	943
		F	9.2-3.2R		10.9-4R		10.4-3.2R		11.6-3.6R		12.9-4.1R		14.2-4.6R		15.4-5R		14.2-3.9R		14.9-3.4R	
4	4	q _a q _f	1184	1924	1183	1923	1182	1921	1182	1921	1182	1920	1181	1920	1181	1919	1181	1919	1181	1919
		F	4.3-0.2R		4.3-0.2R		4.3-0.2R		4.4-0.1R		4.4-0.1R		4.4-0.1R		4.4-0.1R		4.4-0.1R		4.4-0.1R	
	8	q _a q _f	1124	1827	1128	1833	1115	1812	1119	1819	1110	1804	1114	1811	1107	1798	1111	1805	1105	1795
		F	5.5-0.6R		5.5-0.5R		5.8-0.5R		5.7-0.4R		5.9-0.4R		5.9-0.4R		6-0.4R		6-0.3R		6.1-0.3R	
	12	q _a q _f	1058	1719	1046	1699	1037	1685	1030	1674	1025	1666	1021	1659	1018	1654	1015	1649	1012	1645
		F	6.5-1.1R		6.8-1R		7-0.9R		7.1-0.9R		7.3-0.8R		7.4-0.8R		7.5-0.7R		7.5-0.7R		7.6-0.6R	
	18	q _a q _f	996	1618	993	1614	928	1508	937	1523	943	1533	897	1458	908	1475	916	1488	880	1431
		F	7.3-1.5R		7.5-1.3R		8.5-1.6R		8.4-1.4R		8.4-1.2R		9.2-1.4R		9.1-1.2R		9-1.1R		9.6-1.1R	
	24	q _a q _f	895	1454	915	1487	839	1364	866	1407	807	1312	834	1355	787	1278	811	1319	772	1254
		F	8.4-2.2R		8.4-1.8R		9.6-2.2R		9.4-1.8R		10.4-2.1R		10.1-1.8R		10.9-1.9R		10.6-1.7R		11.3-1.6R	
	36	q _a q _f	895	1454	798	1297	714	1160	770	1251	708	1151	653	1062	705	1145	660	1073	620	1007
		F	8.4-2.2R		9.9-2.7R		11.4-3.3R		10.8-2.5R		11.9-2.9R		13.1-3.2R		12.3-2.5R		13.3-2.8R		14.1-2.6R	
	60	q _a q _f	726	1179	622	1011	714	1160	642	1044	581	945	530	861	478	777	562	914	524	852
		F	10.4-3.6R		12.3-4.5R		11.4-3.3R		12.8-3.8R		14.2-4.2R		15.7-4.8R		17.1-5.2R		15.4-3.9R		16.3-3.5R	

**TABLE 7-9—ALLOWABLE DIAPHRAGM SHEARS (qa), (ln plf),
FACTORED DIAPHRAGM SHEARS (qf), (ln plf), AND FLEXIBILITY FACTOR (F)**

16 ga.			DGB-36 AND DGBF-36 INTERLOCK DECK WITH BUILDEX SELF DRILLING SCREWS AND DELTAGRIP™ SIDE SEAM ATTACHMENT (See DeltaGrip™ System Notes)																							
Support Fasteners	Seam Attachment	Span																								
			4		5		6		7		8		9		10		11		12							
9	4	q _a	q _f	3203	5205	3191	5185	3182	5171	3176	5161	3171	5153	3167	5146	3164	5141	2931	4690	2463	3941					
		F		3.1-0.2R		3.1-0.2R		3.1-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R						
	8	q _a	q _f	2876	4674	2874	4669	2796	4544	2806	4560	2750	4468	2764	4491	2720	4419	2734	4443	2463	3941					
		F		3.7-0.5R		3.7-0.4R		3.9-0.4R		3.9-0.4R		4-0.4R		4-0.3R		4.1-0.3R		4.1-0.3R		4.2-0.3R						
	12	q _a	q _f	2605	4233	2524	4102	2465	4005	2419	3931	2383	3873	2354	3825	2330	3786	2310	3753	2293	3725					
		F		4.1-0.7R		4.3-0.7R		4.5-0.7R		4.6-0.7R		4.7-0.6R		4.8-0.6R		4.9-0.6R		5-0.5R		5-0.5R						
	18	q _a	q _f	2400	3900	2344	3810	2112	3432	2108	3425	2104	3419	1950	3169	1964	3191	1975	3209	1861	3024					
		F		4.5-0.9R		4.7-0.9R		5.2-1.1R		5.3-1R		5.3-0.9R		5.7-1R		5.7-0.9R		5.7-0.8R		6-0.8R						
	24	q _a	q _f	2127	3456	2118	3442	1879	3053	1910	3103	1736	2821	1779	2890	1644	2671	1689	2745	1580	2567					
		F		4.9-1.3R		5.1-1.2R		5.7-1.4R		5.7-1.2R		6.2-1.4R		6.2-1.2R		6.6-1.3R		6.5-1.2R		6.8-1.1R						
	36	q _a	q _f	2127	3456	1835	2981	1601	2602	1679	2729	1513	2459	1374	2232	1458	2370	1347	2189	1228	1995					
		F		4.9-1.3R		5.6-1.6R		6.4-1.9R		6.3-1.6R		6.9-1.8R		7.4-2R		7.2-1.7R		7.7-1.9R		8.1-1.6R						
	60	q _a	q _f	1766	2869	1486	2414	1601	2602	1414	2298	1244	2021	1092	1775	972	1579	1111	1806	1009	1640					
		F		5.6-1.8R		6.5-2.2R		6.4-1.9R		7.1-2.2R		7.7-2.4R		8.5-2.7R		9.1-2.9R		8.6-2.4R		9-2.1R						
7	4	q _a	q _f	2540	4127	2535	4120	2532	4115	2530	4111	2528	4109	2527	4106	2526	4105	2525	4103	2463	3941					
		F		3.1-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R						
	8	q _a	q _f	2323	3775	2333	3791	2288	3718	2301	3740	2269	3686	2282	3708	2256	3666	2269	3687	2248	3653					
		F		3.9-0.4R		3.9-0.3R		4.1-0.3R		4.1-0.3R		4.2-0.3R		4.2-0.2R		4.3-0.2R		4.2-0.2R		4.3-0.2R						
	12	q _a	q _f	2112	3432	2072	3367	2043	3320	2021	3284	2004	3257	1990	3235	1979	3216	1970	3201	1962	3188					
		F		4.5-0.7R		4.7-0.6R		4.8-0.6R		4.9-0.6R		5-0.5R		5.1-0.5R		5.1-0.5R		5.2-0.4R		5.2-0.4R						
	18	q _a	q _f	1936	3146	1923	3125	1749	2842	1767	2871	1780	2893	1663	2702	1686	2740	1704	2769	1616	2627					
		F		5-0.9R		5.1-0.9R		5.7-1R		5.7-0.9R		5.7-0.8R		6.2-0.9R		6.2-0.8R		6.1-0.7R		6.5-0.7R						
	24	q _a	q _f	1682	2733	1723	2800	1538	2499	1594	2590	1457	2368	1513	2459	1406	2285	1458	2370	1370	2227					
		F		5.7-1.4R		5.7-1.2R		6.4-1.4R		6.3-1.2R		6.9-1.3R		6.8-1.1R		7.3-1.3R		7.1-1.1R		7.5-1R						
	36	q _a	q _f	1682	2733	1455	2364	1272	2067	1381	2245	1249	2030	1137	1847	1235	2007	1144	1859	1065	1730					
		F		5.7-1.4R		6.6-1.7R		7.5-2.1R		7.1-1.6R		7.9-1.8R		8.6-2.1R		8.1-1.6R		8.7-1.8R		9.2-1.7R						
	60	q _a	q _f	1318	2141	1104	1794	1272	2067	1125	1829	1006	1635	908	1476	812	1319	960	1560	886	1439					
		F		6.8-2.2R		8-2.8R		7.5-2.1R		8.3-2.4R		9.2-2.7R		10.1-3R		11-3.3R		10-2.5R		10.5-2.2R						
5	4	q _a	q _f	1852	3010	1851	3007	1849	3005	1849	3004	1848	3003	1848	3002	1847	3002	1847	3001	1846	3001					
		F		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.3-0.1R		3.3-0.1R						
	8	q _a	q _f	1760	2860	1765	2869	1745	2836	1752	2847	1737	2823	1744	2833	1732	2814	1738	2824	1728	2809					
		F		4-0.4R		4-0.3R		4.2-0.3R		4.1-0.3R		4.2-0.3R		4.2-0.2R		4.3-0.2R		4.3-0.2R		4.3-0.2R						
	12	q _a	q _f	1659	2695	1639	2664	1625	2641	1615	2624	1606	2611	1600	2600	1594	2591	1590	2583	1586	2577					
		F		4.7-0.7R		4.8-0.6R		5-0.6R		5.1-0.5R		5.1-0.5R		5.2-0.5R		5.2-0.4R		5.3-0.4R		5.3-0.3R						
	18	q _a	q _f	1564	2542	1559	2533	1458	2370	1471	2390	1480	2405	1409	2289	1424	2314	1436	2334	1381	2245					
		F		5.2-0.9R		5.3-0.8R		6-1R		5.9-0.8R		5.9-0.7R		6.4-0.8R		6.3-0.7R		6.3-0.7R		6.6-0.7R						
	24	q _a	q _f	1411	2292	1440	2340	1322	2149	1362	2213	1271	2065	1311	2130	1237	2010	1275	2072	1213	1972					
		F		6-1.4R		6-1.2R		6.8-1.4R		6.6-1.1R		7.2-1.3R		7-1.1R		7.6-1.2R		7.3-1R		7.8-1R						
	36	q _a	q _f	1411	2292	1261	2049	1130	1836	1214	1974	1118	1816	1032	1677	1110	1804	1041	1691	978	1589					
		F		6-1.4R		7-1.8R		8-2.1R		7.5-1.6R		8.3-1.8R		9.1-2R		8.5-1.6R		9.2-1.7R		9.7-1.6R						
	60	q _a	q _f	1154	1875	992	1612	1130	1836	1018	1654	922	1499	841	1367	771	1254	889	1445	830	1348					
		F		7.4-2.4R		8.7-3R		8-2.1R		9-2.4R		9.9-2.7R		10.9-3.1R		11.9-3.4R		10.6-2.4R		11.2-2.2R						
4	4	q _a	q _f	1493	2426	1492	2425	1492	2424	1492	2424	1491	2423	1491	2423	1491	2423	1491	2423	1491	2422					
		F		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.2-0.1R		3.3-0.1R		3.3-0.1R		3.3+0R		3.3+0R						
	8	q _a	q _f	1439	2338	1443	2345	1432	2327	1436	2334	1428	2321	1432	2328	1426	2317	1430	2323	1424	2314					
		F		4.1-0.3R		4.1-0.3R		4.2-0.3R		4.2-0.2R		4.3-0.2R		4.3-0.2R		4.3-0.2R		4.3-0.2R		4.4-0.1R						
	12	q _a	q _f	1373	2231	1363	2216	1356	2204	1351	2196	1347	2189	1344	2183	1341	2179	1339	2175	1337	2172					
		F		4.8-0.6R		5-0.6R		5.1-0.5R		5.2-0.5R		5.2-0.4R		5.3-0.4R		5.3-0.4R		5.4-0.3R		5.4-0.3R						
	18	q _a	q _f	1307	2124	1309	2126	1241	2016	1253	2036	1262	2050	1213	1971	1226	1992	1236	2008	1198	1947					
		F		5.5-0.9R		5.5-0.8R		6.2-0.9R		6.1-0.8R		6.1-0.7R		6.6-0.7R		6.5-0.6R		6.4-0.6R		6.8-0.6R						
	24	q _a	q _f	1191	1935	1222	1986	1137	1848	1172	1905	1106	1798	1140	1853	1086	1765	1118	1816	1072	1742					
		F		6.4-1.4R		6.3-1.1R		7.1-1.3R		6.9-1.1R		7.6-1.2R		7.3-1R		7.9-1.1R		7.6-0.9R		8.1-0.9R						
	36	q _a	q _f	1191	1935	1080	1754	979	1590	1057	1717	982	1596	914	1486	984	1600	929	1510	879	1428					
		F		6.4-1.4R		7.5-1.8R		8.6-2.1R		8-1.5R		8.8-1.7R		9.7-2R		9-1.5R		9.6-1.6R		10.2-1.6R						
	60	q _a	q _f	971	1579	842	1368	979	1590	889	1445	812	1319	744	1209	686	1114	797	1296	748	1215					
		F		8.2-2.6R		9.7-3.2R		8.6-2.1R		9.7-2.4R		10.8-2.8R		11.9-3.1R		12.9-3.4R		11.3-2.4R		12-2.2R						

**TABLE 8—ALLOWABLE DIAPHRAGM SHEARS (q_a) (In Pounds per Lineal Foot) AND FLEXIBILITY FACTOR (F)
FOR B-36 AND BF-36 INTERLOCK DECK^{1,2,3,4}**

DECK GAGE	SEAM ATTACHMENT	PUDDLE WELDS ⁴		DECK SPAN (Feet)					
				5	6	7	8	9	10
16	Button Punch At 12" O.C.	4	q	1155	991	874	788	721	668
			F	4.3 + 28R	4.9 + 23R	5.5 + 20R	6.1 + 17R	6.7 + 15R	7.3 + 14R
	Button Punch At 24" O.C.	4	q	1077	912	794	706	639	584
			F	4.5 + 28R	5.2 + 23R	5.9 + 20R	6.6 + 17R	7.4 + 15R	8.1 + 14R
	Top Seam Weld At 12" O.C.	4	q	1683	1529	1421	1344	1286	1242
			F	3.8 + 28R	3.6 + 23R	3.5 + 20R	3.4 + 17R	3.4 + 15R	3.3 + 14R
	Top Seam Weld At 24" O.C.	4	q	1341	1181	1068	984	920	871
			F	4.4 + 28R	4.3 + 23R	4.3 + 20R	4.2 + 17R	4.1 + 15R	4.1 + 14R
	Side Seam Weld At 12" O.C.	4	q	2138	1992	1893	1823	1773	1736
			F	3.3 + 28R	3.1 + 23R	3.0 + 20R	2.9 + 17R	2.8 + 15R	2.7 + 14R
	Side Seam Weld At 24" O.C.	4	q	1570	1412	1303	1224	1164	1118
			F	3.9 + 28R	3.8 + 23R	3.7 + 20R	3.7 + 17R	3.6 + 15R	3.5 + 14R
	Button Punch At 12" O.C.	7	q	1652	1408	1234	1105	1005	927
			F	3.7 + 6.9R	4.2 + 5.8R	4.7 + 5.0R	5.3 + 4.3R	5.8 + 3.9R	6.4 + 3.5R
	Button Punch At 24" O.C.	7	q	1570	1323	1150	1018	916	835
			F	3.8 + 6.9R	4.4 + 5.8R	5.0 + 5.0R	5.6 + 4.3R	6.3 + 3.9R	6.9 + 3.5R
18	Top Seam Weld At 12" O.C.	7	q	2212	1982	1821	1705	1617	1550
			F	3.4 + 6.9R	3.4 + 5.8R	3.3 + 5.0R	3.3 + 4.3R	3.2 + 3.9R	3.2 + 3.5R
	Top Seam Weld At 24" O.C.	7	q	1850	1610	1442	1317	1221	1147
			F	3.8 + 6.9R	3.8 + 5.8R	3.8 + 5.0R	3.8 + 4.3R	3.8 + 3.9R	3.8 + 3.5R
	Side Seam Weld At 12" O.C.	7	q	2696	2476	2326	2221	2144	1895
			F	3.1 + 6.9R	3.0 + 5.8R	2.9 + 5.0R	2.8 + 4.3R	2.8 + 3.9R	2.7 + 3.5R
	Side Seam Weld At 24" O.C.	7	q	2091	1858	1694	1575	1485	1415
			F	3.5 + 6.9R	3.5 + 5.8R	3.5 + 5.0R	3.4 + 4.3R	3.4 + 3.9R	3.4 + 3.5R
	Button Punch At 12" O.C.	4	q	806	697	619	562	517	482
			F	5.9 + 54R	6.7 + 45R	7.5 + 39R	8.2 + 34R	9.0 + 30R	9.7 + 27R
	Button Punch At 24" O.C.	4	q	736	626	548	489	444	408
			F	6.3 + 54R	7.2 + 45R	8.2 + 39R	9.2 + 34R	10.2 + 30R	11.2 + 27R
	Top Seam Weld At 12" O.C.	4	q	1215	1112	1032	968	917	878
			F	5.0 + 54R	4.8 + 45R	4.7 + 39R	4.5 + 34R	4.4 + 30R	4.2 + 27R
	Top Seam Weld At 24" O.C.	4	q	940	834	752	688	638	598
			F	6.0 + 54R	5.9 + 45R	5.7 + 39R	5.6 + 34R	5.5 + 30R	5.4 + 27R
18	Side Seam Weld At 12" O.C.	4	q	1580	1482	1406	1341	1291	1251
			F	4.3 + 54R	4.1 + 45R	3.9 + 39R	3.7 + 34R	3.6 + 30R	3.5 + 27R
	Side Seam Weld At 24" O.C.	4	q	1123	1018	940	875	826	785
			F	5.3 + 54R	5.1 + 45R	5.0 + 39R	4.8 + 34R	4.7 + 30R	4.5 + 27R
	Button Punch At 12" O.C.	7	q	1176	1008	889	800	731	677
			F	5.0 + 14R	5.7 + 11R	6.4 + 10R	7.1 + 9R	7.9 + 8R	8.6 + 7R
	Button Punch At 24" O.C.	7	q	1102	932	811	721	651	596
			F	5.2 + 14R	6.0 + 11R	6.9 + 10R	7.7 + 9R	8.6 + 8R	9.5 + 7R
	Top Seam Weld At 12" O.C.	7	q	1538	1359	1232	1138	1064	1007
			F	4.6 + 14R	4.5 + 11R	4.4 + 10R	4.3 + 9R	4.2 + 8R	4.1 + 7R
	Top Seam Weld At 24" O.C.	7	q	1258	1079	952	858	785	727
			F	5.2 + 14R	5.2 + 11R	5.2 + 10R	5.1 + 9R	5.1 + 8R	5.1 + 7R
	Side Seam Weld At 12" O.C.	7	q	1911	1732	1606	1511	1438	1380
			F	4.0 + 14R	3.9 + 11R	3.8 + 10R	3.7 + 9R	3.6 + 8R	3.5 + 7R
	Side Seam Weld At 24" O.C.	7	q	1445	1266	1139	1044	971	913
			F	4.8 + 14R	4.7 + 11R	4.6 + 10R	4.5 + 9R	4.5 + 8R	4.4 + 7R

For **SI**: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 plf = 14.594 N/m.

¹ R is the vertical load span of deck units (L_v) divided by the length (L_2) of the deck unit. $R = L_v/L_2$.

²See **Table 22** of this report for diaphragm flexibility limitations and definition of F .

³Deck end laps to be 2 inches minimum over supports.

⁴See **Figure 3** for support weld patterns.

**TABLE 8—ALLOWABLE DIAPHRAGM SHEARS (q_a) (In Pounds per Lineal Foot) AND FLEXIBILITY FACTOR (F)
FOR B-36 and BF-36 INTERLOCK DECK^{1,2,3,4} (Continued)**

DECK GAGE	SEAM ATTACHMENTS	PUDDLE WELDS ⁴		DECK SPAN (feet)					
				5	6	7	8	9	10
20	Button Punch At 12" O.C.	4	q	420	420	410	410	380	350
			F	11.0 + 129R	11.2 + 107R	11.3 + 92R	11.5 + 80R	11.7 + 71R	11.8 + 64R
	Button Punch At 24" O.C.	4	q	340	340	340	330	310	280
			F	13.0 + 129R	13.2 + 107R	13.4 + 92R	13.6 + 80R	13.8 + 71R	14.1 + 64R
	Top Seam Weld At 12" O.C.	4	q	450	450	450	440	440	440
			F	5.4 + 129R	5.0 + 107R	4.6 + 92R	4.4 + 80R	4.1 + 71R	4.0 + 64R
	Top Seam Weld At 24" O.C.	4	q	340	340	340	340	340	340
			F	6.4 + 129R	5.8 + 107R	5.3 + 92R	5.0 + 80R	4.7 + 71R	4.5 + 64R
	Side Seam Weld At 12" O.C.	4	q	805	756	721	694	674	658
			F	5.9 + 129R	5.5 + 107R	5.3 + 92R	5.0 + 80R	4.8 + 71R	4.6 + 64R
	Side Seam Weld At 24" O.C.	4	q	543	494	458	432	412	395
			F	7.7 + 129R	7.3 + 107R	6.9 + 92R	6.6 + 80R	6.4 + 71R	6.2 + 64R
	Button Punch At 12" O.C.	7	q	740	740	710	630	560	500
			F	10.4 + 32R	10.6 + 27R	10.8 + 23R	11.0 + 20R	11.3 + 18R	11.5 + 16R
	Button Punch At 24" O.C."	7	q	670	660	640	560	500	450
			F	11.3 + 32R	11.6 + 27R	11.8 + 23R	12.1 + 20R	12.4 + 18R	12.6 + 16R
	Top Seam Weld At 12" O.C.	7	q	900	890	880	840	750	680
			F	9.6 + 32R	8.5 + 27R	7.8 + 23R	7.2 + 20R	6.7 + 18R	6.4 + 16R
22	Button Punch At 12" O.C.	4	q	320	320	320	320	310	280
			F	14.5 + 222R	14.7 + 185R	14.8 + 159R	15.0 + 139R	15.2 + 123R	15.4 + 111R
	Button Punch At 24" O.C.	4	q	260	260	260	250	250	220
			F	17.4 + 222R	17.6 + 185R	17.9 + 159R	18.1 + 139R	18.4 + 123R	18.6 + 111R
	Top Seam Weld At 12" O.C.	4	q	360	360	360	360	360	360
			F	6.9 + 222R	6.1 + 185R	5.7 + 159R	5.4 + 139R	5.1 + 123R	4.9 + 111R
	Top Seam Weld At 24" O.C.	4	q	280	280	270	270	270	270
			F	8.1 + 222R	7.2 + 185R	6.6 + 159R	6.2 + 139R	5.8 + 123R	5.6 + 111R
	Side Seam Weld At 12" O.C.	4	q	519	492	473	458	447	438
			F	7.1 + 222R	6.6 + 185R	6.2 + 159R	5.9 + 139R	5.7 + 123R	5.5 + 111R
	Side Seam Weld At 24" O.C.	4	q	337	309	290	276	264	256
			F	9.5 + 222R	8.9 + 185R	8.4 + 159R	8.0 + 139R	7.7 + 123R	7.4 + 111R
	Button Punch At 12" O.C.	7	q	570	570	560	500	450	410
			F	13.8 + 56R	14.1 + 46R	14.3 + 39R	14.6 + 34R	14.8 + 31R	15.1 + 28R
	Button Punch At 24" O.C."	7	q	510	500	500	450	400	360
			F	15.2 + 56R	15.5 + 46R	15.8 + 39R	16.2 + 34R	16.5 + 31R	16.8 + 28R
	Top Seam Weld At 12" O.C.	7	q	700	700	690	690	620	560
			F	12.5 + 56R	11.1 + 46R	10.0 + 39R	9.2 + 34R	8.6 + 31R	8.2 + 28R
	Top Seam Weld At 24" O.C.	7	q	610	610	600	600	540	490
			F	13.9 + 56R	12.3 + 46R	11.1 + 39R	10.2 + 34R	9.5 + 31R	9.0 + 28R
	Side Seam Weld At 12" O.C.	7	q	596	555	525	504	487	473
			F	6.9 + 56R	6.5 + 46R	6.2 + 39R	6.0 + 34R	5.7 + 31R	5.6 + 28R
	Side Seam Weld At 24" O.C.	7	q	414	372	343	321	304	291
			F	8.8 + 56R	8.4 + 46R	8.1 + 39R	7.8 + 34R	7.5 + 31R	7.3 + 28R

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 plf = 14.594 N/m.

¹ R is the vertical load span of deck units (L_1) divided by the length (L_2) of the deck unit. $R = L_1/L_2$.

²See Table 22 of this report for diaphragm flexibility limitations and definition of F .

³Deck end laps to be 2 inches minimum over supports.

⁴See Figure 3 for support weld patterns.

TABLE 9—ALLOWABLE DIAPHRAGM SHEARS (q) (in pounds per foot) AND FLEXIBILITY FACTOR (F) FOR GALVANIZED TYPE B DECK WITH 2 INCHES OF LIGHTWEIGHT INSULATING FILL^{1,2,3,4,5}

DECK GAGE	NUMBER OF END PUDDLE WELDS			
	5		7	
	Shear (q)	Flexibility (F)	Shear (q)	Flexibility (F)
16	$(5362/L)+272$	$1277/[(5362/L)+272]$	$(6767/L)+273$	$1283/[(6767/L)+273]$
18	$(4139/L)+297$	$1403/[(4139/L)+297]$	$(5288/L)+301$	$1419/[(5288/L)+301]$
20	$(2786/L)+323$	$1533/[(2786/L)+323]$	$(3688/L)+332$	$1577/[(3688/L)+332]$
22	$(2027/L)+331$	$1570/[(2027/L)+331]$	$(2784/L)+346$	$1645/[(2784/L)+346]$

For SI: 1 inch = 25.4 mm.

¹Fill is the same as for the concrete pan (CP-32) deck with a minimum density of 25 pounds per cubic foot. An anchor washer must be installed in each deck unit at diaphragm perimeter supports and at points of shear transfer. The anchor washers shall consist of No. 14 gauge steel angular member, 2 inches high, spaced 2 feet 0 inches on center. The base contains $\frac{1}{2}$ -inch diameter hole for a $\frac{1}{2}$ -inch plug weld to beam connection. The anchor bar is notched to support a $\frac{3}{8}$ -inch diameter continuous reinforcing bar.

²Seam attachments: For B-36 deck-button punch at 36 inches o.c.

³L = vertical load span of deck unit in feet.

⁴Minimum span L to compute diaphragm shears must be 6 feet 0 inches for all gauges.

⁵Flexibility and span-to-depth ratios of diaphragm are limited by the values given in Table 20.

**TABLE 10A—ALLOWABLE DIAPHRAGM SHEARS (qa), (ln plf), FACTORED DIAPHRAGM SHEARS (qf), (ln plf),
AND FLEXIBILITY FACTOR (F)**

Gage	Support	Fasteners	Seam Spacing (in)	DGN-24 AND DGNF-24 INTERLOCK DECK WITH ARC SPOT/SEAM WELDS AND DELTAGRIP™ SIDE SEAM ATTACHMENT (See DeltaGrip™ System Notes)																		
				Span (ft)		4		6		8		10		12		14		16		18		20
22	4	4	q _a	q _f	1265	2088	1204	1986	1170	1930	1149	1895	1134	1871	1123	1853	1098	1756	867	1388	702	1124
			F	10.5-1.2R		11-1R		11.3-0.9R		11.5-0.8R		11.7-0.6R		11.8-0.6R		11.8-0.5R		11.9-0.5R		12-0.4R		
		8	q _a	q _f	951	1568	828	1366	750	1238	703	1160	672	1109	650	1072	633	1045	620	1023	610	1006
			F	13.6-2.8R		15-2.7R		15.9-2.4R		16.5-2.2R		16.9-1.8R		17.3-1.7R		17.5-1.6R		17.8-1.5R		18-1.4R		
		12	q _a	q _f	768	1267	612	1010	534	881	487	804	456	753	434	716	417	689	404	667	394	650
			F	15.6-4.1R		17.8-4.2R		19.4-4R		20.5-3.8R		21.1-3.1R		21.8-3R		22.3-2.8R		22.8-2.7R		23.2-2.6R		
		18	q _a	q _f	660	1089	468	773	426	703	358	591	312	515	311	513	282	466	260	430	264	436
			F	17-5.1R		20.8-6.2R		22.1-5.5R		24.4-5.8R		26.1-5R		26.3-4.6R		27.7-4.5R		29.1-4.6R		28.9-4.2R		
		24	q _a	q _f	552	911	396	654	318	525	272	448	240	397	218	360	201	332	188	311	178	294
			F	18.8-6.5R		22.9-7.7R		26-8R		28.5-8.1R		29.9-6.6R		31.7-6.7R		32.9-6.4R		34.2-6.4R		35.3-6.3R		
		36	q _a	q _f	552	911	324	535	264	436	228	377	168	278	156	258	147	243	116	192	113	187
			F	18.8-6.5R		25.6-9.8R		28.7-9.9R		31.2-9.7R		35.4-9.2R		36.9-9.1R		37.8-8.5R		42-9.5R		42.7-9.2R		
60	q _a	q _f	444	733	324	535	210	347	142	234	132	219	95	156	93	154	69	113	49	80		
	F	21.2-8.6R		25.6-9.8R		32.3-12.6R		38.9-15.3R		39.1-11.1R		44.7-13R		44.9-11.7R		49.9-13.1R		54.8-14.6R				
20	4	4	q _a	q _f	1614	2664	1556	2567	1524	2514	1503	2480	1489	2457	1479	2441	1442	2306	1139	1822	923	1476
			F	8.2-0.8R		8.5-0.6R		8.7-0.5R		8.8-0.4R		8.9-0.4R		9-0.3R		9-0.3R		9.1-0.3R		9.1-0.2R		
		8	q _a	q _f	1228	2025	1117	1844	1057	1745	1014	1672	976	1611	950	1567	930	1535	915	1509	902	1476
			F	10.8-1.9R		11.7-1.7R		12.3-1.5R		12.6-1.3R		12.9-1.1R		13.1-1R		13.2-0.9R		13.4-0.9R		13.5-0.8R		
		12	q _a	q _f	1036	1709	851	1404	758	1251	702	1159	665	1098	639	1054	619	1021	603	996	591	975
			F	12.6-2.9R		14.1-2.9R		15.1-2.6R		15.8-2.4R		16.2-2R		16.6-1.9R		16.9-1.7R		17.2-1.6R		17.4-1.5R		
		18	q _a	q _f	881	1454	643	1062	603	994	516	851	458	755	461	761	424	700	396	653	404	667
			F	13.9-3.8R		16.8-4.4R		17.4-3.7R		19.1-3.8R		20.3-3.4R		20.2-3R		21.2-2.9R		22.1-2.9R		21.9-2.6R		
		24	q _a	q _f	725	1197	540	891	447	737	391	645	354	584	328	540	308	508	292	482	280	462
			F	15.6-5.1R		18.7-5.7R		20.9-5.7R		22.6-5.6R		23.6-4.6R		24.7-4.6R		25.5-4.3R		26.3-4.2R		27-4.1R		
		36	q _a	q _f	725	1197	436	719	369	609	329	543	250	413	239	394	230	379	188	311	186	308
			F	15.6-5.1R		21.3-7.6R		23.5-7.4R		25-7R		28.5-6.8R		29.4-6.5R		29.8-5.9R		33-6.7R		33.3-6.3R		
60	q _a	q _f	570	940	436	719	291	481	204	337	198	328	150	247	152	251	119	197	93	154		
	F	18.1-7.2R		21.3-7.6R		26.9-9.8R		32.5-12R		32-8.5R		36.7-9.9R		36.2-8.6R		40.2-9.7R		44.2-10.8R				
18	4	4	q _a	q _f	2320	3828	2271	3747	2244	3703	2227	3675	2216	3656	2207	3642	2201	3532	1744	2791	1413	2260
			F	5.6-0.3R		5.7-0.3R		5.8-0.2R		5.9-0.2R		5.9-0.1R		5.9-0.1R		5.9-0.1R		5.9-0.1R		6-0.1R		
		8	q _a	q _f	1825	3011	1708	2819	1645	2714	1605	2648	1577	2602	1557	2569	1542	2544	1530	2524	1413	2260
			F	7.4-1R		7.8-0.8R		8.1-0.7R		8.2-0.6R		8.3-0.5R		8.4-0.4R		8.5-0.4R		8.5-0.4R		8.6-0.3R		
		12	q _a	q _f	1539	2539	1386	2288	1304	2151	1233	2035	1184	1954	1150	1897	1124	1854	1103	1821	1087	1794
			F	8.8-1.6R		9.6-1.4R		10-1.3R		10.3-1.1R		10.5-0.9R		10.7-0.8R		10.8-0.8R		10.9-0.7R		11-0.7R		
		18	q _a	q _f	1365	2252	1060	1749	1030	1700	902	1488	817	1348	834	1377	779	1285	736	1214	756	1248
			F	9.9-2.2R		11.6-2.4R		11.7-1.9R		12.7-1.9R		13.4-1.7R		13.1-1.4R		13.7-1.4R		14.2-1.4R		13.9-1.2R		
		24	q _a	q _f	1119	1846	876	1445	754	1245	681	1124	633	1044	598	987	572	944	552	910	536	884
			F	11.4-3.2R		13.2-3.3R		14.4-3.2R		15.3-3R		15.8-2.5R		16.3-2.3R		16.7-2.2R		17.1-2.1R		17.4-2R		
		36	q _a	q _f	1119	1846	692	1142	616	1017	571	942	449	741	440	727	434	716	368	607	370	611
			F	11.4-3.2R		15.6-4.8R		16.5-4.3R		17.2-3.9R		19.7-3.9R		19.9-3.6R		19.9-3.2R		22-3.6R		21.9-3.3R		
60	q _a	q _f	843	1391	692	1142	479	790	350	578	357	589	283	467	296	489	245	405	205	337		
	F	14-5.1R		15.6-4.8R		19.7-6.3R		23.7-7.6R		22.7-5.2R		26-6.1R		25-5R		27.8-5.6R		30.5-6.3R				
16	4	4	q _a	q _f	3024	4989	2985	4925	2964	4890	2950	4868	2941	4853	2935	4842	2929	4834	2433	3893	1971	3153
			F	4.2-0.2R		4.2-0.1R		4.3-0.1R		4.3-0.1R		4.3-0.1R		4.3-0.1R		4.3-0.1R		4.3+0R		4.3+0R		
		8	q _a	q _f	2465	4068	2353	3882	2291	3780	2251	3715	2225	3670	2205	3638	2190	3613	2178	3594	1971	3153
			F	5.5-0.5R		5.7-0.4R		5.8-0.3R		5.9-0.3R		5.9-0.2R		6-0.2R		6-0.2R		6-0.2R		6.1-0.2R		
		12	q _a	q _f	2096	3459	1934	3191	1846	3045	1790	2953	1752	2890	1724	2844	1703	2809	1686	2782	1673	2760
			F	6.5-0.9R		7-0.8R		7.2-0.7R		7.3-0.6R		7.4-0.5R		7.5-0.4R		7.6-0.4R		7.7-0.4R		7.7-0.3R		
		18	q _a	q _f	1856	3062	1564	2580	1560	2573	1390	2293	1272	2099	1312	2164	1233	2035	1172	1935	1210	1997
			F	7.4-1.4R		8.5-1.4R		8.4-1.1R		9-1R		9.5-0.9R		9.3-0.8R		9.6-0.7R		9.9-0.7R		9.7-0.6R		
		24	q _a	q _f	1572	2593	1283	2118	1134	1871	1044	1723	984	1624	942	1554	910	1501	885	1460	865	1427
			F	8.8-2.1R		9.9-2R		10.5-1.9R		11-1.7R		11.3-1.4R		11.6-1.3R		11.8-1.2R		12-1.1R		12.1-1.1R		
		36	q _a	q _f	1572	2593	996	1643	918	1515	871	1438	697	1149	695	1147	694	1145	597	985	606	999
			F	8.8-2.1R		11.9-3.2R		12.3-2.7R		12.5-2.3R		14.4-2.4R		14.3-2.1R		14.2-1.8R		15.7-2.1R		15.5-1.8R		
60	q _a	q _f	1151	1899	996	1643	702	1159	526	868	553	912	448	740	478	788	405	668	347	572		
	F	11.1-3.8R		11.9-3.2R		15-4.1R		18-5.1R		16.9-3.3R		19.3-3.9R		18.2-3.1R		20.2-3.5R		22.2-3.9R				

**TABLE 10B—ALLOWABLE DIAPHRAGM SHEARS (qa), (In plf), FACTORED DIAPHRAGM SHEARS (qf), (In plf),
AND FLEXIBILITY FACTOR (F)**

Gage	Support	Eastings Seam Spacing (in)	DGN-24 AND DGNF-24 INTERLOCK DECK WITH PINS AND DELTAGRIP™ SIDE SEAM ATTACHMENT (See DeltaGrip™ System Notes)															
			Span (ft)		4		6		8		10		12		14		16	
			qa	qf	qa	qf	qa	qf	qa	qf	qa	qf	qa	qf	qa	qf	qa	qf
22	4	4	qa	qf	1013	1646	995	1618	986	1602	980	1592	976	1585	973	1580	970	1577
			F		11.6-0.7R		11.8-0.5R		12-0.4R		12.1-0.4R		12.1-0.3R		12.2-0.3R		12.2-0.2R	
		8	qa	qf	808	1313	763	1239	738	1199	722	1173	711	1156	703	1143	697	1133
			F		16.7-2.2R		17.6-1.8R		18.1-1.5R		18.4-1.2R		18.6-1R		18.8-0.9R		18.9-0.8R	
		12	qa	qf	683	1110	622	1010	586	952	555	902	534	868	520	844	508	826
			F		20.7-3.9R		22.5-3.3R		23.5-2.8R		24.2-2.5R		24.6-2R		24.9-1.8R		25.2-1.7R	
		18	qa	qf	605	983	465	756	457	742	400	649	362	588	372	604	347	563
			F		24-5.5R		28.6-5.8R		28.3-4.4R		30.7-4.3R		32.5-3.8R		31.7-3.2R		33.1-3.1R	
		24	qa	qf	482	784	379	616	327	532	296	481	275	447	261	423	249	405
			F		29.1-8.5R		33.5-8.3R		36.4-7.6R		38.4-7R		39.6-5.8R		40.8-5.4R		41.6-5R	
		36	qa	qf	482	784	293	475	262	426	244	397	189	307	187	303	185	300
			F		29.1-8.5R		41.2-12.7R		43-10.8R		44.1-9.4R		51.3-9.7R		51.2-8.6R		50.9-7.5R	
		60	qa	qf	353	573	293	475	198	321	141	228	146	237	113	183	120	195
			F		37.8-14.6R		41.2-12.7R		53-16.5R		64.8-20.2R		60.7-13.4R		70-15.6R		66.4-12.5R	
20	4	4	qa	qf	1261	2049	1246	2025	1238	2012	1233	2004	1230	1998	1227	1994	1225	1991
			F		8.9-0.4R		9-0.3R		9.1-0.2R		9.1-0.2R		9.2-0.2R		9.2-0.1R		9.2-0.1R	
		8	qa	qf	1036	1683	991	1611	967	1572	952	1547	941	1530	934	1517	928	1507
			F		12.7-1.3R		13.2-1R		13.5-0.8R		13.7-0.7R		13.8-0.6R		13.9-0.5R		14-0.5R	
		12	qa	qf	883	1434	818	1329	782	1272	760	1235	745	1210	734	1192	725	1178
			F		15.9-2.4R		17-2R		17.6-1.7R		17.9-1.4R		18.2-1.2R		18.4-1.1R		18.5-0.9R	
		18	qa	qf	782	1270	650	1056	650	1057	576	936	526	855	544	885	511	831
			F		18.6-3.6R		21.8-3.7R		21.2-2.6R		22.9-2.6R		24.2-2.3R		23.4-1.9R		24.3-1.8R	
		24	qa	qf	649	1055	525	854	464	754	427	693	402	653	384	625	371	603
			F		23-5.8R		25.9-5.4R		27.6-4.8R		28.8-4.3R		29.6-3.6R		30.3-3.3R		30.8-3R	
		36	qa	qf	649	1055	401	652	370	602	352	572	277	451	278	451	278	451
			F		23-5.8R		32.4-8.8R		33.1-7.1R		33.5-5.9R		39-6.3R		38.4-5.4R		38-4.7R	
		60	qa	qf	462	751	401	652	277	450	203	329	215	350	171	278	184	300
			F		31.1-11.1R		32.4-8.8R		41.7-11.4R		51-14R		46.8-9R		53.9-10.5R		50.4-8.2R	
18	4	4	qa	qf	1743	2832	1733	2816	1727	2807	1724	2801	1721	2797	1720	2795	1719	2793
			F		5.9-0.2R		5.9-0.1R		6-0.1R		6-0.1R		6-0.1R		6-0.1R		6+0R	
		8	qa	qf	1503	2443	1465	2380	1443	2345	1430	2323	1421	2308	1414	2297	1409	2289
			F		8.3-0.6R		8.5-0.4R		8.6-0.3R		8.7-0.3R		8.7-0.2R		8.8-0.2R		8.8-0.2R	
		12	qa	qf	1309	2127	1243	2021	1208	1962	1185	1925	1169	1900	1158	1881	1149	1867
			F		10.4-1.1R		10.8-0.9R		11.1-0.7R		11.2-0.6R		11.3-0.5R		11.4-0.4R		11.5-0.4R	
		18	qa	qf	1166	1895	1018	1654	1035	1683	965	1568	915	1487	941	1530	906	1473
			F		12.3-1.7R		14-1.7R		13.4-1.1R		14.3-1.1R		15-1R		14.4-0.8R		15-0.7R	
		24	qa	qf	983	1597	875	1422	797	1296	749	1217	716	1164	693	1126	676	1098
			F		15.5-3R		16.8-2.6R		17.6-2.2R		18.1-1.9R		18.5-1.6R		18.7-1.4R		19-1.3R	
		36	qa	qf	983	1597	658	1069	632	1027	616	1001	496	805	504	819	510	829
			F		15.5-3R		21.6-4.5R		21.4-3.4R		21.2-2.7R		24.7-3R		24.1-2.5R		23.5-2.1R	
		60	qa	qf	710	1154	658	1069	466	758	351	571	385	626	315	511	345	560
			F		22.1-6.6R		21.6-4.5R		27.7-5.9R		33.9-7.3R		30.2-4.5R		34.8-5.3R		31.8-3.9R	
16	4	4	qa	qf	2193	3564	2186	3553	2183	3547	2180	3543	2179	3541	2178	3539	2177	3537
			F		4.3-0.1R		4.3-0.1R		4.3+0R		4.3+0R		4.3+0R		4.4+0R		4.4+0R	
		8	qa	qf	1964	3192	1933	3141	1916	3113	1905	3095	1897	3083	1892	3074	1888	3068
			F		5.9-0.3R		6-0.2R		6.1-0.2R		6.1-0.1R		6.1-0.1R		6.1-0.1R		6.2-0.1R	
		12	qa	qf	1749	2843	1690	2746	1657	2692	1636	2658	1622	2635	1611	2618	1603	2605
			F		7.4-0.6R		7.6-0.4R		7.7-0.3R		7.8-0.3R		7.8-0.2R		7.9-0.2R		7.9-0.2R	
		18	qa	qf	1576	2561	1411	2293	1447	2351	1365	2218	1305	2121	1344	2184	1302	2115
			F		8.7-0.9R		9.8-0.9R		9.3-0.6R		9.9-0.5R		10.3-0.5R		9.9-0.4R		10.2-0.4R	
		24	qa	qf	1334	2168	1219	1981	1156	1879	1117	1815	1090	1771	1070	1739	1055	1715
			F		11.1-1.7R		11.8-1.4R		12.2-1.1R		12.5-1R		12.7-0.8R		12.8-0.7R		12.9-0.6R	
		36	qa	qf	1334	2168	970	1576	957	1555	949	1542	771	1253	792	1287	808	1313
			F		11.1-1.7R		15.4-2.6R		14.9-1.8R		14.7-1.4R		17.1-1.6R		16.5-1.3R		16-1.1R	
		60	qa	qf	996	1618	970	1576	698	1134	535	869	598	972	496	806	549	892
			F		16.5-4.2R		15.4-2.6R		19.7-3.4R		24-4.2R		21.1-2.5R		24.1-2.9R		21.9-2.1R	

**TABLE 10C—ALLOWABLE DIAPHRAGM SHEARS (qa), (in plf), FACTORED DIAPHRAGM SHEARS (qf), (in plf),
AND FLEXIBILITY FACTOR (F)**

Gage	Support	Fasteners Seam	DGN-24 AND DGNF-24 INTERLOCK DECK WITH BUILDEX SELF DRILING SCREWS AND DELTAGRIP™ SIDE SEAM ATTACHMENT (See DeltaGrip™ System Notes)																			
			Span (ft)	4		6		8		10		12		14		16		18		20		
22	4	4	q _a	q _f	819	1330	811	1317	806	1310	804	1306	802	1303	800	1301	799	1299	799	1298	702	1124
			F	10.6-1.2R		11.2-1R		11.4-0.8R		11.6-0.7R		11.7-0.6R		11.8-0.5R		11.9-0.5R		12-0.4R		12-0.4R		
		8	q _a	q _f	681	1107	656	1066	642	1043	633	1029	627	1019	622	1011	619	1006	616	1001	614	998
			F	14-2.8R		15.4-2.6R		16.3-2.3R		16.8-2.1R		17.2-1.7R		17.5-1.6R		17.8-1.5R		18-1.4R		18.2-1.3R		
		12	q _a	q _f	584	948	545	885	523	851	510	829	501	814	494	803	489	795	485	788	482	783
			F	16.3-4.2R		18.5-4.2R		20-3.9R		21-3.7R		21.7-3R		22.3-2.9R		22.8-2.7R		23.2-2.5R		23.6-2.4R		
		18	q _a	q _f	517	841	437	710	440	716	391	635	358	581	371	603	349	567	331	539	343	558
			F	17.8-5.3R		21.9-6.3R		23-5.5R		25.4-5.7R		27.1-5R		27.2-4.5R		28.6-4.4R		29.9-4.4R		29.7-4R		
		24	q _a	q _f	429	698	350	569	311	505	287	467	271	441	260	423	252	409	245	398	240	390
			F	20-6.9R		24.3-7.9R		27.4-8.1R		29.9-8.1R		31.3-6.7R		33-6.7R		34.2-6.4R		35.4-6.3R		36.5-6.2R		
36	q _a	q _f	429	698	264	429	246	400	235	383	185	301	186	303	187	304	159	258	162	264		
	F	20-6.9R		27.4-10.4R		30.5-10.2R		32.9-10R		37.5-9.5R		38.9-9.2R		39.7-8.5R		44.1-9.6R		44.7-9.2R				
60	q _a	q _f	300	487	264	429	181	295	132	214	142	231	112	182	122	199	101	165	84	137		
	F	22.9-9.4R		27.4-10.4R		34.7-13.3R		41.9-16.2R		41.8-11.7R		47.9-13.6R		47.7-12.1R		53-13.6R		58.4-15.1R				
20	4	4	q _a	q _f	1012	1645	1006	1635	1002	1629	1000	1625	999	1623	998	1621	997	1620	996	1619	923	1476
			F	8.3-0.7R		8.6-0.6R		8.8-0.5R		8.9-0.4R		9-0.3R		9-0.3R		9.1-0.3R		9.1-0.2R		9.1-0.2R		
		8	q _a	q _f	868	1411	845	1372	831	1351	823	1338	818	1328	813	1322	810	1317	808	1312	806	1309
			F	11.1-1.9R		12-1.6R		12.5-1.4R		12.8-1.3R		13-1R		13.2-0.9R		13.4-0.9R		13.5-0.8R		13.6-0.7R		
		12	q _a	q _f	754	1225	714	1161	693	1126	679	1103	670	1088	663	1077	657	1068	653	1062	650	1056
			F	13-2.9R		14.5-2.8R		15.5-2.5R		16.1-2.3R		16.5-1.9R		16.9-1.8R		17.2-1.6R		17.4-1.5R		17.6-1.4R		
		18	q _a	q _f	671	1090	584	949	593	963	552	896	520	845	537	873	512	831	488	793	507	824
			F	14.5-3.9R		17.5-4.4R		18-3.7R		19.7-3.7R		20.9-3.3R		20.8-2.9R		21.7-2.8R		22.6-2.8R		22.3-2.5R		
		24	q _a	q _f	565	919	490	796	443	719	414	673	395	642	382	620	372	604	364	591	357	581
			F	16.5-5.3R		19.7-5.8R		21.9-5.7R		23.5-5.6R		24.5-4.6R		25.6-4.5R		26.4-4.2R		27.1-4.1R		27.8-4R		
36	q _a	q _f	565	919	366	594	349	568	340	552	271	440	275	447	278	452	239	389	245	399		
	F	16.5-5.3R		22.7-8R		24.7-7.5R		26.2-7R		30-6.9R		30.7-6.5R		31-5.9R		34.4-6.6R		34.6-6.2R				
60	q _a	q _f	398	647	366	594	256	416	190	309	209	339	168	274	185	300	156	254	133	217		
	F	19.5-7.7R		22.7-8R		28.7-10.3R		34.7-12.5R		34-8.8R		39-10.3R		38.2-8.8R		42.5-9.9R		46.7-11R				
18	4	4	q _a	q _f	1394	2265	1389	2258	1387	2254	1386	2252	1385	2250	1384	2249	1384	2248	1383	2248	1383	2247
			F	5.7-0.3R		5.8-0.2R		5.8-0.2R		5.9-0.2R		5.9-0.1R		5.9-0.1R		5.9-0.1R		6-0.1R		6-0.1R		
		8	q _a	q _f	1249	2030	1229	1998	1219	1980	1212	1969	1207	1962	1204	1956	1201	1952	1199	1949	1198	1946
			F	7.6-0.9R		7.9-0.8R		8.2-0.6R		8.3-0.5R		8.4-0.4R		8.5-0.4R		8.5-0.4R		8.6-0.3R		8.6-0.3R		
		12	q _a	q _f	1113	1809	1076	1748	1055	1714	1042	1693	1033	1678	1026	1668	1021	1660	1017	1653	1014	1648
			F	9-1.6R		9.8-1.4R		10.2-1.2R		10.5-1R		10.7-0.9R		10.8-0.8R		10.9-0.7R		11-0.7R		11.1-0.6R		
		18	q _a	q _f	1003	1630	899	1460	922	1498	870	1413	832	1352	857	1392	830	1348	808	1313	828	1346
			F	10.2-2.2R		12-2.4R		12-1.8R		12.9-1.8R		13.6-1.6R		13.4-1.3R		13.9-1.3R		14.4-1.3R		14.1-1.1R		
		24	q _a	q _f	850	1381	777	1262	737	1197	712	1157	695	1129	682	1109	673	1093	662	1076	654	1062
			F	12-3.3R		13.7-3.3R		14.9-3.1R		15.7-2.9R		16.2-2.4R		16.7-2.2R		17.1-2.1R		17.4-2R		17.7-1.9R		
36	q _a	q _f	850	1381	610	991	602	978	597	970	483	786	497	808	507	824	441	717	455	739		
	F	12-3.3R		16.4-4.9R		17.2-4.3R		17.8-3.8R		20.5-3.9R		20.5-3.5R		20.5-3.1R		22.7-3.5R		22.5-3.1R				
60	q _a	q _f	626	1017	610	991	436	709	332	540	373	606	308	500	342	555	294	478	256	417		
	F	14.9-5.4R		16.4-4.9R		20.7-6.4R		25.1-7.8R		23.8-5.2R		27.2-6.1R		26.1-5R		28.9-5.6R		31.8-6.2R				
16	4	4	q _a	q _f	1775	2884	1772	2879	1770	2876	1769	2875	1768	2874	1768	2873	1768	2872	1767	2872	1767	2871
			F	4.2-0.2R		4.2-0.1R		4.3-0.1R		4.3-0.1R		4.3-0.1R		4.3-0.1R		4.3+0R		4.3+0R		4.3+0R		
		8	q _a	q _f	1637	2660	1621	2635	1613	2621	1607	2612	1604	2606	1601	2601	1599	2598	1597	2595	1596	2593
			F	5.5-0.5R		5.7-0.4R		5.9-0.3R		5.9-0.3R		6-0.2R		6-0.2R		6-0.2R		6.1-0.2R		6.1-0.1R		
		12	q _a	q _f	1492	2424	1458	2369	1439	2339	1428	2320	1420	2307	1414	2297	1409	2290	1406	2284	1403	2280
			F	6.7-0.9R		7.1-0.8R		7.3-0.6R		7.4-0.5R		7.5-0.4R		7.6-0.4R		7.7-0.4R		7.7-0.3R		7.7-0.3R		
		18	q _a	q _f	1363	2215	1248	2028	1284	2086	1225	1990	1181	1919	1214	1973	1183	1922	1157	1879	1184	1923
			F	7.6-1.3R		8.7-1.4R		8.6-1R		9.2-1R		9.6-0.9R		9.4-0.7R		9.7-0.7R		10-0.7R		9.8-0.6R		
		24	q _a	q _f	1167	1897	1090	1771	1047	1701	1020	1658	1002	1628	988	1606	978	1589	970	1576	964	1566
			F	9.1-2.1R		10.2-2R		10.8-1.8R		11.3-1.6R		11.5-1.3R		11.8-1.2R		12-1.1R		12.2-1.1R		12.3-1R		
36	q _a	q _f	1167	1897	883	1435	888	1443	891	1448	755	1226	781	1270	801	1302	702	1141	726	1180		
	F	9.1-2.1R		12.4-3.2R		12.7-2.6R		12.9-2.2R		14.8-2.3R		14.7-2R		14.5-1.7R		16-2R		15.8-1.7R				
60	q _a	q _f	873	1419	883	1435	661	1074	510	829	582	946	485	789	542	881	472	767	415	675		
	F	11.8-3.9R		12.4-3.2R		15.6-4.1R		18.9-5.1R		17.5-3.3R		20-3.8R		18.8-3R		20.9-3.4R		22.9-3.7R				

**TABLE 11—ALLOWABLE DIAPHRAGM SHEARS (q) (In Pounds per Lineal Foot)
AND FLEXIBILITY FACTOR (F) FOR N-24 and NF-24-DECK^{1,2,3}
(Interlock)**

DECK GAGE	SEAM ATTACHMENTS	PUDDLE WELDS		DECK SPAN (feet)				
				6	8	10	12	14
16	Button Punch @ 12" O.C.	4	q	1000	800	680	600	550
			F	6.9 + 20.6R	8.8 + 15.4R	10.7 + 12.4R	12.7 + 10.3R	14.6 + 8.8R
	Button Punch @ 24" O.C.	4	q	920	710	590	510	450
			F	7.4 + 20.6R	9.7 + 15.4R	12.1 + 12.4R	14.6 + 10.3R	17.3 + 8.8R
	1½" Seam Weld @ 12" O.C.	4	q	1560	1370	1270	1210	1180
			F	4.9 + 20.6R	4.6 + 15.4R	4.4 + 12.4R	4.2 + 10.3R	4.0 + 8.8R
18	Button Punch @ 12" O.C.	4	q	710	580	500	440	410
			F	9.5 + 40.2R	12.0 + 30.1R	14.4 + 24.1R	16.7 + 20.1R	18.9 + 17.2R
	Button Punch @ 24" O.C.	4	q	640	500	420	360	330
			F	10.4 + 40.2R	13.5 + 30.1R	16.7 + 24.1R	19.9 + 20.1R	23.2 + 17.2R
	1½" Seam Weld @ 12" O.C.	4	q	1110	960	870	810	770
			F	6.6 + 40.2R	6.1 + 30.1R	5.7 + 24.1R	5.4 + 80.1R	5.1 + 17.2R
20	Button Punch @ 12" O.C.	4	q	420	350	300	280	260
			F	14.1 + 95.3R	17.3 + 71.4R	20.2 + 57.2R	22.8 + 47.6R	25.2 + 40.8R
	Button Punch @ 24" O.C.	4	q	360	280	240	210	190
			F	16.1 + 95.3R	20.5 + 71.4R	24.8 + 57.2R	28.9 + 47.6R	33.0 + 40.8R
	1½" Seam Weld @ 12" O.C.	4	q	550	480	450	420	410
			F	9.3 + 95.3R	8.4 + 71.4R	7.7 + 57.2R	7.2 + 47.6R	6.7 + 40.8R
22	Button Punch @ 12" O.C.	4	q	290	240	220	200	190
			F	17.8 + 165R	21.3 + 123R	24.3 + 98.3R	27.0 + 82.3R	29.4 + 70.6R
	Button Punch @ 24" O.C.	4	q	240	190	160	150	130
			F	21.0 + 165R	26.3 + 123R	31.2 + 98.3R	35.9 + 82.3R	40.3 + 70.6R
	1½" Seam Weld @ 12" O.C.	4	q	350	310	290	280	270
			F	11.3 + 165R	10.1 + 123R	9.1 + 98.3R	8.4 + 82.3R	7.9 + 70.6R
22	1½" Seam Weld @ 24" O.C.	4	q	240	200	180	170	160
			F	15.3 + 165R	14.0 + 123R	12.9 + 98.3R	12.1 + 82.3R	11.4 + 70.6R

For **SI**: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 plf = 14.594 N/m.

¹Minimum yield strength is 38 ksi.

²R is the vertical load span (L_v) of deck units divided by the length (L_2) of the deck unit. Both units in feet. $R = L_v / L_2$.

³See **Table 20** for diaphragm flexibility limitations and definition of F.

**TABLE 12A—ALLOWABLE DIAPHRAGM SHEARS (qa), (ln plf), FACTORED DIAPHRAGM SHEARS (qf), (ln plf),
AND FLEXIBILITY FACTOR (F)**

Gage	Support	Fasteners	Seam	Spacing (in)	DG2W-36, DG2WF-36, DG3W-36, AND DG3WF-36 INTERLOCK DECK WITH ARC SPOT/SEAM WELDS AND DELTAGRIP™ SIDE SEAM ATTACHMENT (See DeltaGrip™ System Notes)																	
					Span (ft)		4		6		8		10		12		14		16		18	
22	4	4	q _a	q _f	973	1605	939	1549	919	1517	907	1496	898	1481	798	1277	611	978	483	773	391	626
			F	9.4-1.3R		10-1.1R		10.3-1R		10.5-0.8R		10.7-0.7R		10.8-0.6R		10.9-0.6R		11-0.5R		11-0.5R		
		8	q _a	q _f	811	1338	739	1219	696	1149	669	1104	650	1072	635	1048	611	978	483	773	391	626
			F	12.6-3R		14.1-2.9R		15.1-2.6R		15.8-2.4R		16.2-2R		16.6-1.8R		16.9-1.7R		17.1-1.6R		17.3-1.5R		
		12	q _a	q _f	723	1193	630	1040	575	948	524	864	490	808	465	768	447	738	433	715	391	626
			F	14.6-4.3R		17-4.5R		18.7-4.3R		19.8-4.1R		20.6-3.4R		21.3-3.2R		21.8-3R		22.4-2.9R		22.8-2.8R		
		18	q _a	q _f	670	1105	524	865	473	781	402	663	354	585	349	576	320	529	298	491	300	495
			F	16-5.4R		20.1-6.5R		21.4-5.9R		23.9-6.1R		25.7-5.3R		26-4.9R		27.4-4.8R		28.9-4.9R		28.8-4.5R		
		24	q _a	q _f	610	1006	457	753	372	613	321	529	287	473	262	433	244	403	230	379	219	361
			F	17.8-6.8R		22.2-8R		25.4-8.4R		28-8.5R		29.6-7R		31.4-7.1R		32.7-6.8R		34.1-6.8R		35.3-6.7R		
36	q _a	q _f	610	1006	389	642	321	529	280	462	219	361	204	337	193	319	162	268	158	260		
	F	17.8-6.8R		24.9-10.2R		28.2-10.4R		30.8-10.3R		35.1-9.7R		36.8-9.6R		37.8-8.9R		42.1-10.1R		42.9-9.7R				
60	q _a	q _f	525	866	389	642	270	446	199	328	185	305	146	241	143	235	117	193	97	160		
	F	20.2-8.9R		24.9-10.2R		31.7-13.1R		38.5-15.8R		38.8-11.6R		44.7-13.6R		44.9-12.2R		50.1-13.7R		55.2-15.3R				
20	4	4	q _a	q _f	1213	2001	1183	1952	1166	1924	1155	1906	1147	1893	1060	1696	811	1298	641	1026	519	831
			F	7.3-0.8R		7.6-0.7R		7.8-0.5R		7.9-0.5R		8-0.4R		8.1-0.3R		8.1-0.3R		8.1-0.3R		8.2-0.3R		
		8	q _a	q _f	1026	1693	953	1572	910	1502	882	1455	862	1423	848	1399	811	1298	641	1026	519	831
			F	9.9-2R		10.9-1.8R		11.5-1.6R		11.9-1.4R		12.1-1.2R		12.3-1.1R		12.5-1R		12.6-0.9R		12.8-0.9R		
		12	q _a	q _f	914	1508	814	1344	756	1248	719	1186	692	1142	672	1109	650	1073	633	1026	519	831
			F	11.7-3.1R		13.3-3R		14.4-2.8R		15.1-2.6R		15.6-2.1R		16-2R		16.3-1.9R		16.6-1.8R		16.9-1.7R		
		18	q _a	q _f	844	1392	696	1149	655	1080	564	931	504	831	503	830	465	768	436	719	442	729
			F	13-4R		16-4.6R		16.7-4R		18.5-4.1R		19.8-3.6R		19.7-3.2R		20.8-3.1R		21.7-3.1R		21.5-2.8R		
		24	q _a	q _f	762	1257	609	1004	507	836	446	736	405	668	376	620	354	585	337	557	324	534
			F	14.8-5.3R		18-6R		20.3-6R		22.1-5.9R		23.1-4.9R		24.3-4.8R		25.2-4.6R		26.1-4.5R		26.8-4.4R		
36	q _a	q _f	762	1257	510	841	433	714	387	638	307	506	292	481	280	463	239	394	235	388		
	F	14.8-5.3R		20.7-7.9R		22.9-7.7R		24.6-7.4R		28.2-7.1R		29.1-6.8R		29.6-6.3R		32.9-7R		33.2-6.7R				
60	q _a	q _f	664	1096	510	841	359	592	268	443	257	424	207	342	206	340	173	285	146	241		
	F	17.3-7.4R		20.7-7.9R		26.4-10.2R		32.1-12.4R		31.7-8.9R		36.5-10.3R		36.1-9R		40.2-10.1R		44.4-11.3R				
18	4	4	q _a	q _f	1687	2783	1665	2747	1653	2727	1645	2714	1639	2705	1635	2618	1253	2004	990	1584	802	1283
			F	4.8-0.4R		4.9-0.3R		5-0.2R		5.1-0.2R		5.1-0.2R		5.1-0.1R		5.1-0.1R		5.2-0.1R		5.2-0.1R		
		8	q _a	q _f	1471	2428	1403	2315	1363	2249	1337	2206	1318	2175	1305	2153	1253	2004	990	1584	802	1283
			F	6.7-1R		7.1-0.8R		7.3-0.7R		7.5-0.6R		7.6-0.5R		7.7-0.5R		7.8-0.4R		7.8-0.4R		7.9-0.3R		
		12	q _a	q _f	1320	2177	1215	2004	1153	1903	1113	1836	1085	1790	1064	1755	1048	1729	990	1584	802	1283
			F	8-1.7R		8.8-1.5R		9.3-1.3R		9.7-1.2R		9.9-1R		10-0.9R		10.2-0.8R		10.3-0.8R		10.4-0.7R		
		18	q _a	q _f	1216	2006	1037	1710	1010	1667	927	1529	867	1430	875	1444	828	1366	783	1292	801	1283
			F	9.1-2.3R		10.9-2.5R		11-2R		12-2R		12.8-1.8R		12.5-1.5R		13.1-1.4R		13.6-1.4R		13.4-1.3R		
		24	q _a	q _f	1087	1793	928	1531	829	1368	749	1235	695	1146	656	1083	628	1036	605	999	587	969
			F	10.7-3.3R		12.6-3.4R		13.8-3.3R		14.7-3.1R		15.2-2.6R		15.8-2.4R		16.2-2.3R		16.6-2.2R		16.9-2.1R		
36	q _a	q _f	1087	1793	786	1296	696	1148	642	1059	517	853	504	832	494	816	427	705	427	705		
	F	10.7-3.3R		15-5R		16-4.5R		16.7-4R		19.2-4.1R		19.4-3.7R		19.5-3.3R		21.6-3.7R		21.5-3.4R				
60	q _a	q _f	929	1533	786	1296	562	928	428	707	428	706	352	580	361	596	309	510	267	441		
	F	13.3-5.3R		15-5R		19.1-6.4R		23.2-7.9R		22.3-5.4R		25.6-6.3R		24.7-5.2R		27.5-5.8R		30.3-6.5R				
16	4	4	q _a	q _f	2146	3540	2130	3514	2121	3499	2115	3490	2111	3483	2108	3478	1757	2812	1388	2222	1125	1799
			F	3.5-0.2R		3.6-0.1R		3.6-0.1R		3.6-0.1R		3.6-0.1R		3.6-0.1R		3.7-0.1R		3.7-0.1R		3.7+0R		
		8	q _a	q _f	1922	3171	1862	3072	1827	3015	1804	2977	1788	2951	1777	2931	1757	2812	1388	2222	1125	1799
			F	4.8-0.6R		5.1-0.4R		5.2-0.4R		5.3-0.3R		5.3-0.3R		5.4-0.2R		5.4-0.2R		5.4-0.2R		5.4-0.2R		
		12	q _a	q _f	1742	2875	1640	2706	1580	2607	1541	2542	1513	2497	1493	2463	1477	2437	1388	2222	1125	1799
			F	5.9-1R		6.3-0.8R		6.6-0.7R		6.8-0.6R		6.9-0.5R		7-0.5R		7-0.4R		7.1-0.4R		7.1-0.3R		
		18	q _a	q _f	1609	2654	1408	2324	1396	2303	1298	2142	1227	2025	1247	2057	1198	1977	1158	1911	1125	1799
			F	6.8-1.4R		8-1.5R		7.9-1.1R		8.5-1.1R		8.9-1R		8.7-0.8R		9.1-0.8R		9.4-0.7R		9.2-0.6R		
		24	q _a	q _f	1433	2365	1258	2075	1156	1907	1090	1798	1044	1722	1007	1661	971	1602	943	1557	921	1520
			F	8.2-2.2R		9.3-2.1R		10-1.9R		10.5-1.8R		10.8-1.5R		11.1-1.4R		11.3-1.3R		11.5-1.2R		11.7-1.1R		
36	q _a	q _f	1433	2365	1080	1781	1010	1666	952	1571	774	1277	766	1265	761	1256	663	1094	669	1104		
	F	8.2-2.2R		11.3-3.3R		11.8-2.7R		12-2.4R		13.9-2.5R		13.9-2.2R		13.8-1.9R		15.2-2.1R		15-1.9R				
60	q _a	q _f	1204	1987	1080	1781	799	1319	616	1016	634	1046	526	868	551	909	476	786	417	688		
	F	10.6-3.8R		11.3-3.3R		14.5-4.2R		17.6-5.2R		16.4-3.4R		18.9-4R		17.9-3.2R		19.9-3.6R		21.9-4R				

**TABLE 12B—ALLOWABLE DIAPHRAGM SHEARS (qa), (ln plf), FACTORED DIAPHRAGM SHEARS (qf), (ln plf),
AND FLEXIBILITY FACTOR (F)**

Gage	Support	Fasteners Seam	Spacing (in)	DG2W-36, DG2WF-36, DG3W-36, AND DG3WF-36 INTERLOCK DECK WITH PINS OR SCREWS AND DELTAGRIP™ SIDE SEAM ATTACHMENT (See DeltaGrip™ System Notes)																		
				Span (ft)		4		6		8		10		12		14		16		18		20
22	4	4	q _a	q _f	716	1164	709	1152	704	1145	702	1140	700	1137	698	1135	611	978	483	773	391	626
			F		10.6-0.8R		10.9-0.6R		11.1-0.5R		11.2-0.4R		11.2-0.3R		11.3-0.3R		11.3-0.3R		11.3-0.2R		11.4-0.2R	
		8	q _a	q _f	631	1025	605	983	590	959	580	943	573	931	568	923	564	917	483	773	391	626
			F		15.9-2.4R		16.9-1.9R		17.5-1.6R		17.8-1.4R		18.1-1.1R		18.3-1R		18.4-0.9R		18.5-0.8R		18.6-0.8R	
		12	q _a	q _f	567	922	527	856	503	817	487	791	476	773	468	760	461	750	456	742	391	626
			F		20.1-4.2R		22-3.6R		23.1-3.1R		23.9-2.7R		24.3-2.2R		24.7-2R		25-1.8R		25.3-1.7R		25.5-1.6R	
		18	q _a	q _f	523	850	450	731	441	717	407	661	380	618	387	628	362	589	343	557	352	571
			F		23.5-5.9R		28.3-6.3R		28.1-4.7R		30.7-4.7R		32.7-4.2R		31.8-3.5R		33.3-3.4R		34.6-3.3R		33.7-2.9R	
		24	q _a	q _f	467	758	402	654	356	578	322	523	299	486	283	460	271	440	262	425	254	413
			F		28.7-9R		33.5-8.9R		36.5-8.2R		38.7-7.6R		40-6.3R		41.3-5.9R		42.2-5.4R		43.1-5.1R		43.8-4.9R	
		36	q _a	q _f	467	758	331	537	295	479	273	444	218	354	213	347	210	341	180	293	181	294
			F		28.7-9R		41.2-13.5R		43.3-11.6R		44.7-10.1R		52.1-10.4R		52.1-9.3R		51.9-8.1R		57.9-9.1R		57.2-8.2R	
60	q _a	q _f	397	644	331	537	234	380	176	285	177	288	144	234	149	242	126	205	108	175		
	F		37.5-15.3R		41.2-13.5R		53.6-17.5R		65.9-21.4R		61.8-14.2R		71.5-16.6R		67.9-13.4R		75.9-15.1R		83.9-16.7R			
20	4	4	q _a	q _f	879	1428	873	1418	869	1412	867	1409	866	1407	864	1405	811	1298	641	1026	519	831
			F		7.9-0.5R		8.1-0.3R		8.2-0.3R		8.2-0.2R		8.3-0.2R		8.3-0.2R		8.3-0.1R		8.3-0.1R		8.4-0.1R	
		8	q _a	q _f	790	1284	767	1246	753	1224	745	1210	738	1200	734	1192	730	1187	641	1026	519	831
			F		11.9-1.4R		12.5-1.1R		12.8-0.9R		13-0.8R		13.2-0.6R		13.3-0.6R		13.3-0.5R		13.4-0.5R		13.5-0.4R	
		12	q _a	q _f	717	1166	677	1101	654	1062	638	1037	627	1020	619	1007	613	997	608	989	519	831
			F		15.3-2.6R		16.4-2.2R		17-1.8R		17.4-1.5R		17.7-1.3R		17.9-1.1R		18.1-1R		18.2-0.9R		18.3-0.9R	
		18	q _a	q _f	663	1077	583	947	578	940	539	876	510	829	519	843	499	811	483	785	492	799
			F		18.1-3.8R		21.4-3.9R		20.8-2.8R		22.6-2.8R		23.9-2.5R		23.1-2R		24.1-1.9R		25-1.9R		24.3-1.6R	
		24	q _a	q _f	591	960	520	845	479	779	453	736	428	695	408	664	394	640	383	622	374	607
			F		22.5-6.2R		25.6-5.7R		27.5-5.1R		28.8-4.6R		29.6-3.8R		30.3-3.5R		30.9-3.2R		31.3-3R		31.7-2.8R	
		36	q _a	q _f	591	960	445	723	407	661	384	624	309	503	307	499	305	496	264	429	267	434
			F		22.5-6.2R		32.3-9.2R		33-7.5R		33.5-6.4R		39.3-6.7R		38.8-5.8R		38.3-5R		42.7-5.6R		41.9-5R	
60	q _a	q _f	495	805	445	723	318	516	242	393	250	407	206	334	216	352	185	301	161	261		
	F		30.7-11.5R		32.3-9.2R		41.9-12R		51.5-14.8R		47.3-9.5R		54.7-11.1R		51.1-8.7R		57.1-9.8R		63.1-10.8R			
18	4	4	q _a	q _f	1195	1942	1191	1936	1189	1932	1188	1930	1187	1929	1186	1928	1186	1927	990	1584	802	1283
			F		5.1-0.2R		5.1-0.1R		5.2-0.1R		5.2-0.1R		5.2-0.1R		5.2-0.1R		5.2-0.1R		5.2+0R		5.2+0R	
		8	q _a	q _f	1109	1802	1091	1772	1080	1756	1074	1745	1069	1737	1066	1732	1063	1727	990	1584	802	1283
			F		7.5-0.6R		7.8-0.4R		7.9-0.4R		8-0.3R		8-0.2R		8.1-0.2R		8.1-0.2R		8.1-0.2R		8.1-0.2R	
		12	q _a	q _f	1026	1667	990	1609	969	1575	956	1553	946	1537	939	1526	933	1517	929	1510	802	1283
			F		9.7-1.2R		10.2-0.9R		10.4-0.7R		10.6-0.6R		10.7-0.5R		10.8-0.5R		10.9-0.4R		10.9-0.4R		10.9-0.3R	
		18	q _a	q _f	956	1554	868	1410	874	1420	828	1346	794	1291	810	1316	786	1277	766	1245	781	1269
			F		11.6-1.8R		13.4-1.8R		12.8-1.2R		13.8-1.1R		14.5-1R		13.9-0.8R		14.5-0.8R		14.9-0.8R		14.4-0.6R	
		24	q _a	q _f	855	1389	778	1265	734	1192	704	1145	684	1112	669	1087	657	1068	648	1053	641	1041
			F		14.9-3.2R		16.3-2.7R		17.2-2.3R		17.7-2R		18.1-1.7R		18.4-1.5R		18.6-1.4R		18.8-1.3R		18.9-1.2R	
		36	q _a	q _f	855	1389	664	1079	642	1042	628	1020	535	869	539	876	543	882	475	771	484	787
			F		14.9-3.2R		21.2-4.7R		21-3.6R		20.9-2.9R		24.5-3.1R		23.8-2.6R		23.3-2.2R		25.9-2.5R		25.2-2.1R	
60	q _a	q _f	706	1147	664	1079	518	841	400	650	428	695	356	579	383	622	332	540	292	475		
	F		21.6-6.9R		21.2-4.7R		27.5-6.2R		33.8-7.6R		30.1-4.7R		34.8-5.5R		31.8-4.1R		35.5-4.6R		39.2-5.1R			
16	4	4	q _a	q _f	1488	2419	1486	2415	1485	2412	1484	2411	1483	2410	1483	2409	1482	2409	1388	2222	1125	1799
			F		3.6-0.1R		3.7-0.1R		3.7+0R		3.7+0R		3.7+0R		3.7+0R		3.7+0R		3.7+0R		3.7+0R	
		8	q _a	q _f	1410	2292	1397	2270	1390	2258	1385	2250	1381	2245	1379	2241	1377	2238	1376	2222	1125	1799
			F		5.3-0.3R		5.4-0.2R		5.4-0.2R		5.5-0.1R		5.5-0.1R		5.5-0.1R		5.5-0.1R		5.5-0.1R		5.6-0.1R	
		12	q _a	q _f	1326	2155	1297	2107	1280	2080	1269	2062	1261	2049	1255	2040	1251	2033	1247	2027	1125	1799
			F		6.8-0.6R		7-0.4R		7.1-0.4R		7.2-0.3R		7.3-0.2R		7.3-0.2R		7.3-0.2R		7.4-0.2R		7.4-0.2R	
		18	q _a	q _f	1249	2030	1160	1886	1176	1911	1129	1834	1093	1776	1114	1810	1088	1769	1067	1734	1086	1764
			F		8.2-1R		9.3-0.9R		8.8-0.6R		9.4-0.6R		9.8-0.5R		9.4-0.4R		9.7-0.4R		10-0.4R		9.7-0.3R	
		24	q _a	q _f	1127	1831	1051	1708	1007	1636	978	1589	957	1556	942	1531	931	1512	921	1497	914	1485
			F		10.6-1.8R		11.4-1.4R		11.8-1.2R		12-1R		12.2-0.8R		12.4-0.8R		12.5-0.7R		12.6-0.6R		12.6-0.6R	
		36	q _a	q _f	1127	1831	900	1462	886	1439	877	1425	771	1252	781	1270	789	1282	722	1173	735	1194
			F		10.6-1.8R		15-2.7R		14.5-1.9R		14.3-1.5R		16.7-1.7R		16.1-1.3R		15.7-1.1R		17.4-1.3R		16.9-1.1R	
60	q _a	q _f	926	1506	900	1462	733	1190	589	958	646	1050	543	882	591	961	517	840	457	743		
	F		16-4.3R		15-2.7R		19.4-3.5R		23.8-4.3R		20.8-2.6R		23.9-3R		21.6-2.2R		24.1-2.4R		26.6-2.7R			

**TABLE 13—ALLOWABLE DIAPHRAGM SHEARS (q) (in pounds per foot) AND FLEXIBILITY FACTOR (F)
FOR 2W36 AND 2WF36 DECK WITHOUT CONCRETE FILL^{1,2,3}**

DECK GAGE	SEAM ATTACHMENTS	PUDDLE WELDS		DECK SPAN (feet)						
				6	7	8	9	10	11	12
16	Button Punch At 12" o.c.	4	q	870	770	700	640	600	560	530
			F	5.4+34R	5.4+30R	5.4+26R	5.4+23R	5.4+21R	5.3+19R	5.3+17R
	Button Punch At 18" o.c.	4	q	820	720	650	590	540	500	470
			F	5.6+34R	5.7+30R	5.7+26R	5.7+23R	5.8+21R	5.8+19R	5.8+17R
	Button Punch At 24" o.c.	4	q	790	690	620	560	510	480	440
			F	5.8+34R	5.8+30R	5.9+26R	5.9+23R	6.0+21R	6.1+19R	6.1+17R
	Top Seam Weld At 12" o.c.	4	q	1400	1310	1240	1200	1160	1130	1110
			F	3.9+34R	3.8+30R	3.6+26R	3.5+23R	3.4+21R	3.4+19R	3.3+17R
	Top Seam Weld At 18" o.c.	4	q	1170	1080	1010	960	920	880	860
			F	4.4+34R	4.3+30R	4.2+26R	4.1+23R	4.0+21R	3.9+19R	3.8+17R
	Top Seam Weld At 24" o.c.	4	q	1060	960	890	840	790	760	730
			F	4.7+34R	4.6+30R	4.5+26R	4.1+23R	4.4+21R	4.3+19R	4.2+17R
18	Button Punch At 12" o.c.	4	q	590	530	480	450	420	400	380
			F	7.4+68R	7.3+58R	7.2+51R	7.2+45R	7.1+41R	7.0+37R	6.9+34R
	Button Punch At 18" o.c.	4	q	550	480	440	400	370	350	330
			F	7.8+68R	7.8+58R	7.8+51R	7.8+45R	7.8+41R	7.7+37R	7.7+34R
	Button Punch At 24" o.c.	4	q	520	460	410	380	350	320	300
			F	8.1+68R	8.4+58R	8.2+51R	8.2+45R	8.2+41R	8.2+37R	8.2+34R
	Top Seam Weld At 12" o.c.	4	q	990	920	870	830	800	770	750
			F	5.1+68R	4.9+58R	4.7+51R	4.6+45R	4.4+41R	4.3+37R	4.2+34R
	Top Seam Weld At 18" o.c.	4	q	810	750	690	650	620	590	570
			F	5.9+68R	5.7+58R	5.5+51R	5.3+45R	5.2+41R	5.1+37R	4.9+34R
	Top Seam Weld At 24" o.c.	4	q	720	660	600	560	530	500	480
			F	6.3+68R	6.2+58R	6.0+51R	5.9+45R	5.8+41R	5.6+37R	5.5+34R
20	Button Punch At 12" o.c.	4	q	330	300	280	260	250	230	230
			F	10.8+165R	10.5+142R	10.3+124R	10.0+110R	9.8+99R	9.6+90R	9.4+83R
	Button Punch At 18" o.c.	4	q	290	260	240	220	210	200	190
			F	11.9+165R	11.7+142R	11.5+124R	11.3+110R	11.1+99R	10.9+90R	10.8+83R
	Button Punch At 24" o.c.	4	q	280	240	220	200	190	180	170
			F	12.5+165R	12.4+142R	12.2+124R	12.1+110R	12.0+99R	11.9+90R	11.7+83R
	Top Seam Weld At 12" o.c.	4	q	480	450	430	410	400	390	380
			F	7.1+165R	6.7+142R	6.4+124R	6.2+110R	5.9+99R	5.7+90R	5.5+83R
	Top Seam Weld At 18" o.c.	4	q	380	350	330	320	300	290	280
			F	8.4+165R	8.0+142R	7.6+124R	7.3+110R	7.1+99R	6.9+90R	6.6+83R
	Top Seam Weld At 24" o.c.	4	q	330	300	280	270	250	240	230
			F	9.3+165R	8.9+142R	8.6+124R	8.3+110R	8.0+99R	7.8+90R	7.6+83R
22	Button Punch At 12" o.c.	4	q	220	200	190	180	170	170	160
			F	13.5+290R	12.9+249R	12.5+218R	12.0+194R	11.7+174R	11.3+158R	11.0+145R
	Button Punch At 18" o.c.	4	q	190	170	160	150	140	130	130
			F	15.1+290R	14.7+249R	14.3+218R	13.9+194R	13.6+174R	13.3+158R	13.0+145R
	Button Punch At 24" o.c.	4	q	180	160	140	130	130	120	110
			F	16.2+290R	15.9+249R	15.5+218R	15.2+194R	14.9+174R	14.7+158R	14.4+145R
	Top Seam Weld At 12" o.c.	4	q	300	290	280	270	260	250	250
			F	8.6+290R	8.1+249R	7.7+218R	7.3+194R	7.0+174R	6.8+158R	6.5+145R
	Top Seam Weld At 18" o.c.	4	q	230	220	210	200	190	190	180
			F	10.3+290R	9.7+249R	9.3+218R	8.8+194R	8.5+174R	8.2+158R	7.9+145R
	Top Seam Weld At 24" o.c.	4	q	200	180	170	170	160	150	150
			F	11.4+290R	11.0+249R	10.5+218R	10.1+194R	9.7+174R	9.4+158R	9.0+145R

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 plf = 14.594 N/m.

¹R is the vertical load span of deck units (L_v) divided by the length (L_2) of the deck unit. $R = L_v/L_2$.

²See Table 20 of this report for diaphragm flexibility limitations and definition of F.

³See Figure 3 for support weld patterns.

**TABLE 14—ALLOWABLE DIAPHRAGM SHEARS (q) (in pounds per foot) AND FLEXIBILITY FACTOR (F)
FOR 3W36 AND 3WF36 DECK WITHOUT CONCRETE FILL^{1,2,3}**

DECK GAGE	SEAM ATTACHMENTS	PUDDLE WELDS		DECK SPAN (Feet)						
				6	7	8	9	10	11	12
16	Button Punch at 12" o.c.	4	q	820	720	650	600	560	520	500
			F	5.2 + 49R	5.2 + 42R	5.2 + 37R	5.2 + 32R	5.2 + 29R	5.2 + 27R	5.2 + 24R
	Button Punch at 18" o.c.	4	q	770	670	600	550	510	470	440
			F	5.5 + 49R	5.5 + 42R	5.5 + 37R	5.6 + 32R	5.6 + 29R	5.6 + 27R	5.6 + 24R
	Button Punch at 24" o.c.	4	q	740	650	580	520	480	440	410
			F	5.6 + 49R	5.7 + 42R	5.7 + 37R	5.8 + 32R	5.8 + 29R	5.9 + 27R	5.9 + 24R
	Top Seam Weld at 12" o.c.	4	q	1320	1230	1170	1130	1090	1060	1040
			F	3.8 + 49R	3.7 + 42R	3.5 + 37R	3.4 + 32R	3.3 + 29R	3.3 + 27R	3.2 + 24R
	Top Seam Weld at 18" o.c.	4	q	1100	1010	950	900	860	830	810
			F	4.3 + 49R	4.1 + 42R	4.0 + 37R	4.0 + 32R	3.9 + 29R	3.8 + 27R	3.7 + 24R
	Top Seam Weld at 24" o.c.	4	q	990	900	840	790	750	710	690
			F	4.6 + 49R	4.5 + 42R	4.4 + 37R	4.3 + 32R	4.2 + 29R	4.2 + 27R	4.1 + 24R
18	Button Punch at 12" o.c.	4	q	540	480	440	410	380	360	340
			F	7.2 + 96R	7.1 + 83R	7.0 + 72R	6.9 + 64R	6.8 + 58R	6.8 + 53R	6.7 + 48R
	Button Punch at 18" o.c.	4	q	490	440	390	360	340	310	300
			F	7.7 + 96R	7.6 + 83R	7.6 + 72R	7.6 + 64R	7.5 + 58R	7.5 + 53R	7.4 + 48R
	Button Punch at 24" o.c.	4	q	470	420	370	340	310	290	270
			F	7.9 + 96R	7.9 + 83R	7.9 + 72R	7.9 + 64R	7.9 + 58R	7.9 + 53R	7.9 + 48R
	Top Seam Weld at 12" o.c.	4	q	910	860	820	790	770	750	740
			F	5.0 + 96R	4.8 + 83R	4.6 + 72R	4.4 + 64R	4.3 + 58R	4.1 + 53R	4.0 + 48R
	Top Seam Weld at 18" o.c.	4	q	740	690	650	620	600	580	560
			F	5.7 + 96R	5.5 + 83R	5.3 + 72R	5.1 + 64R	5.0 + 58R	4.9 + 53R	4.8 + 48R
	Top Seam Weld at 24" o.c.	4	q	660	600	560	530	510	490	470
			F	6.2 + 96R	6.0 + 83R	5.8 + 72R	5.7 + 64R	5.6 + 58R	5.4 + 53R	5.3 + 48R
20	Button Punch at 12" o.c.	4	q	290	260	240	230	220	210	200
			F	10.5 + 233R	10.2 + 200R	9.9 + 175R	9.6 + 155R	9.4 + 140R	9.2 + 127R	8.9 + 117R
	Button Punch at 18" o.c.	4	q	260	230	210	200	180	170	170
			F	11.5 + 233R	11.3 + 200R	11.1 + 175R	10.9 + 155R	10.7 + 140R	10.5 + 127R	10.3 + 117R
	Button Punch at 24" o.c.	4	q	240	210	190	180	170	160	150
			F	12.1 + 233R	12.0 + 200R	11.8 + 175R	11.7 + 155R	11.5 + 140R	11.4 + 127R	11.3 + 117R
	Top Seam Weld at 12" o.c.	4	q	470	440	420	410	400	390	380
			F	6.9 + 233R	6.5 + 200R	6.2 + 175R	5.9 + 155R	5.7 + 140R	5.5 + 127R	5.3 + 117R
	Top Seam Weld at 18" o.c.	4	q	370	340	320	310	300	290	280
			F	8.1 + 233R	7.7 + 200R	7.3 + 175R	7.0 + 155R	6.8 + 140R	6.6 + 127R	6.4 + 117R
	Top Seam Weld at 24" o.c.	4	q	320	290	270	260	250	240	230
			F	8.9 + 233R	8.6 + 200R	8.2 + 175R	7.9 + 155R	7.7 + 140R	7.4 + 127R	7.2 + 117R
22	Button Punch at 12" o.c.	4	q	200	180	170	160	150	150	140
			F	13.0 + 410R	12.4 + 351R	12.0 + 308R	11.5 + 273R	11.1 + 246R	10.8 + 224R	10.5 + 205R
	Button Punch at 18" o.c.	4	q	170	150	140	130	120	120	110
			F	14.6 + 410R	14.2 + 351R	13.8 + 308R	13.4 + 273R	13.0 + 246R	12.7 + 224R	12.4 + 205R
	Button Punch at 24" o.c.	4	q	150	140	130	120	110	100	100
			F	15.7 + 410R	15.3 + 351R	15.0 + 308R	14.7 + 273R	14.3 + 246R	14.1 + 224R	13.8 + 205R
	Top Seam Weld at 12" o.c.	4	q	290	280	270	260	260	250	250
			F	8.3 + 410R	7.8 + 351R	7.3 + 308R	7.0 + 273R	6.7 + 246R	6.5 + 224R	6.2 + 205R
	Top Seam Weld at 18" o.c.	4	q	230	210	200	200	190	180	180
			F	9.9 + 410R	9.3 + 351R	8.8 + 308R	8.4 + 273R	8.1 + 246R	7.8 + 224R	7.5 + 205R
	Top Seam Weld at 24" o.c.	4	q	190	180	170	160	150	150	150
			F	11.1 + 410R	10.5 + 351R	10.0 + 308R	9.6 + 273R	9.2 + 246R	8.9 + 224R	8.6 + 205R

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 plf = 14.594 N/m.

¹R is the vertical load span of deck units (L_v) divided by the length (L_2) of the deck unit. $R = L_v/L_2$.

²See Table 20 of this report for diaphragm flexibility limitations and definition of F.

³See Figure 3 for support weld patterns.

TABLE 15A—ALLOWABLE DIAPHRAGM SHEAR (q) (in pounds per foot) AND FLEXIBILITY FACTOR (F) FOR 4 $\frac{1}{2}$ -INCH, 6-INCH AND 7 $\frac{1}{2}$ -INCH-DEEP DECKS TWO ARC SPOT (Puddle) WELDS TO SUPPORT MEMBERS BUTT PUNCH SEAMS AT 12 INCHES O.C.^{1,2,3}

GAGE	SPAN													
	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	13'-0"	14'-0"	15'-0"	16'-0"	17'-0"	18'-0"	
20	q	300	280	260	240	230	220	210	200	200	190	190	190	
	F	31.4 + 583R	34.9 + 500R	38.1 + 437R	41.0 + 389R	43.8 + 350R	46.4 + 318R	48.8 + 292R	51.1 + 269R	53.3 + 250R	55.4 + 233R	57.4 + 219R	59.3 + 206R	
18	q	530	480	440	410	380	360	350	320	310	310	300	290	
	F	21.4 + 241R	24.2 + 206R	27.0 + 181R	29.6 + 161R	32.1 + 144R	34.5 + 131R	36.9 + 120R	39.2 + 111R	41.3 + 103R	43.5 + 96R	45.5 + 90R	47.5 + 85R	
16	q	780	690	630	580	540	510	490	450	430	420	410	400	
	F	15.4 + 122R	17.7 + 104R	19.9 + 91R	22.1 + 81R	24.2 + 73R	26.3 + 66R	28.4 + 60R	30.4 + 56R	32.4 + 52R	34.4 + 48R	36.3 + 45R	38.2 + 43R	
14	q	780	690	630	580	540	510	490	450	430	420	410	400	
	F	15.4 + 122R	17.7 + 104R	19.9 + 91R	22.1 + 81R	24.2 + 73R	26.3 + 66R	28.4 + 60R	30.4 + 56R	32.4 + 52R	34.4 + 48R	36.3 + 45R	38.2 + 43R	

GAGE	SPAN											
	19'-0"	20'-0"	21'-0"	22'-0"	23'-0"	24'-0"	25'-0"	26'-0"	27'-0"	28'-0"	29'-0"	30'-0"
20	q	190	180	180	180	170	170	170	170	160	160	160
	F	62.9 + 184R	64.5 + 175R	66.2 + 167R	67.7 + 159R	69.2 + 152R	70.7 + 146R	72.1 + 140R	73.5 + 135R	74.8 + 130R	77.4 + 121R	78.6 + 117R
18	q	290	280	280	280	270	270	260	260	250	250	240
	F	51.3 + 76R	53.2 + 72R	54.9 + 68R	56.7 + 65R	58.3 + 62R	60.0 + 60R	61.6 + 57R	63.1 + 55R	64.7 + 53R	67.6 + 49R	69.0 + 48R
16	q	390	380	370	370	360	360	350	350	340	340	330
	F	41.8 + 38R	43.6 + 36R	45.3 + 34R	47.0 + 33R	48.7 + 31R	50.3 + 30R	51.9 + 29R	53.5 + 28R	55.0 + 27R	58.0 + 25R	59.5 + 24R
14	q	390	380	370	370	360	360	350	350	340	340	330
	F	41.8 + 38R	43.6 + 36R	45.3 + 34R	47.0 + 33R	48.7 + 31R	50.3 + 30R	51.9 + 29R	53.5 + 28R	55.0 + 27R	58.0 + 25R	59.5 + 24R

For S1: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 plf = 14.594 N/m.

TABLE 15B—ALLOWABLE DIAPHRAGM SHEAR (q) (in pounds per foot) AND FLEXIBILITY FACTOR (F) FOR 4 $\frac{1}{2}$ -INCH, 6-INCH AND 7 $\frac{1}{2}$ -INCH-DEEP DECKS TWO ARC SPOT (Puddle) WELDS TO SUPPORT MEMBERS TOP SEAM WELDS AT 12 INCHES O.C.^{1,2,3}

GAGE	SPAN												
	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	13'-0"	14'-0"	15'-0"	16'-0"	17'-0"	18'-0"
20	<i>q</i>	450	430	410	400	390	380	370	360	350	350	350	340
	<i>F</i>	17.9 + 583R	16.6 + 500R	15.5 + 437R	14.5 + 389R	13.7 + 350R	13.0 + 318R	12.4 + 292R	11.9 + 269R	11.4 + 250R	11.0 + 233R	10.3 + 206R	10.0 + 194R
18	<i>q</i>	920	860	820	780	760	730	720	700	690	660	660	650
	<i>F</i>	12.9 + 241R	12.1 + 206R	11.4 + 181R	10.9 + 161R	10.4 + 144R	9.9 + 131R	9.5 + 120R	9.2 + 111R	8.9 + 103R	8.6 + 96R	8.1 + 85R	7.9 + 80R
16	<i>q</i>	1320	1250	1190	1150	1120	1100	1080	1070	1060	1050	1040	1040
	<i>F</i>	9.7 + 122R	9.2 + 104R	8.8 + 91R	8.4 + 81R	8.1 + 73R	7.8 + 66R	7.5 + 60R	7.3 + 56R	7.0 + 52R	6.8 + 48R	6.5 + 43R	6.3 + 40R
14	<i>q</i>	1320	1250	1190	1150	1120	1100	1080	1070	1060	1050	1040	1040
	<i>F</i>	9.7 + 122R	9.2 + 104R	8.8 + 91R	8.4 + 81R	8.1 + 73R	7.8 + 66R	7.5 + 60R	7.3 + 56R	7.0 + 52R	6.8 + 48R	6.5 + 43R	6.3 + 40R

GAGE	SPAN											
	19'-0"	20'-0"	21'-0"	22'-0"	23'-0"	24'-0"	25'-0"	26'-0"	27'-0"	28'-0"	29'-0"	30'-0"
20	q	340	340	330	330	330	330	330	320	320	320	320
	F	9.7 + 184R	9.5 + 175R	9.2 + 167R	9.0 + 159R	8.8 + 152R	8.6 + 146R	8.4 + 140R	8.3 + 135R	8.1 + 130R	7.9 + 121R	7.7 + 117R
18	q	640	630	630	620	620	620	610	600	600	600	600
	F	7.7 + 76R	7.5 + 72R	7.3 + 66R	7.2 + 65R	7.0 + 62R	6.9 + 60R	6.8 + 57R	6.6 + 55R	6.4 + 51R	6.3 + 49R	6.2 + 48R
16	q	1040	1030	1020	1010	1000	990	980	970	970	960	960
	F	6.2 + 38R	6.1 + 36R	5.9 + 34R	5.8 + 33R	5.7 + 31R	5.6 + 30R	5.5 + 29R	5.4 + 28R	5.3 + 27R	5.2 + 25R	5.1 + 24R
14	q	1040	1030	1020	1010	1000	990	980	970	970	960	960
	F	6.2 + 36R	6.1 + 36R	5.9 + 34R	5.8 + 33R	5.7 + 31R	5.6 + 30R	5.5 + 29R	5.4 + 26R	5.3 + 27R	5.2 + 25R	5.1 + 24R

For S1: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 plf = 14.594 N/m.

¹ R is the vertical load span of deck units (L_v) divided by the length (L_2) of the deck unit. $R = L_v/L_2$.² See Table 20 for diaphragm flexibility limitations and definition of F .³ Decking units are welded to supports at each valley with two arc spot or arc seam welds.

TABLE 16—ALLOWABLE DIAPHRAGM SHEAR FOR CP-32 DECK WITH 2 INCHES OF INSULATION LIGHTWEIGHT CONCRETE FILL^{1,2,3,4,5,6,7,8} WITH AND WITHOUT REINFORCING MESH (in pounds per linear foot)

DECK GAGE	MINIMUM SPAN L ⁶ FOR COMPUTING SHEAR	ATTACHMENTS ⁷				
		2-2	3-2	4-2	5-2	5-3
18	7'	4301/L+252	5222/L+252	5017/L+294	6119/L+296	7445/L+297
		4301/L+252	5222/L+252	5017/L+294	6119/L+296	7445/L+297
20	7'	2517/L+267	3186/L+268	3383/L+296	4284/L+298	5209/L+526
		2525/L+281	3209/L+305	3381/L+311	4282/L+336	5209/L+537
22	6'	1845/L+262	2380/L+264	2483/L+291	3202/L+293	3964/L+518
		1856/L+292	2404/L+316	2480/L+323	3203/L+347	3964/L+553
24	5'	1168/L+254	1544/L+256	1574/L+282	2081/L+285	2642/L+505
		1181/L+292	1568/L+335	1572/L+342	2081/L+367	2642/L+583
26	4'	594/L+243	804/L+245	803/L+271	1083/L+273	1415/L+484
		605/L+340	821/L+365	802/L+372	1086/L+399	1415/L+634

For SI: 1 inch = 25.4 mm, 1 plf = 14.594 N/m, 1 psi = 6894 Pa.

¹The allowable tabulated values are based on decks being filled with a minimum 2-inch depth over the top flange of lightweight insulating concrete having a minimum 28 day ultimate compressive strength of 140 psi. No increases are permitted for seismic or wind forces.

²The formulas above the line are for fill without mesh and those below the line are for fill with 2-inch hexagonal wire mesh woven from No. 19 gauge galvanized wire with additional longitudinal No. 16 gage wire spaced 3½ inches on center placed at the approximate center of the concrete.

³Spacing of weld washers to members parallel to flutes must be as follows:

- Two feet zero inch on center for diaphragms without anchor bar supports having shear less than 400 pounds per foot.
- One foot zero inch on center for diaphragms without anchor bar supports having shear 400 pounds per foot or greater but less than 950 pounds per foot.
- Eight inches on center for diaphragms with anchor bar supports having shears 950 pounds per foot or greater.
- Diaphragms with 5-2 and 5-3 weld patterns to supports shall be attached at boundaries by alternating weld washers and anchor bar supports at 1 foot intervals.

⁴Flexibility factors for this table shall be assumed to be 5 to 10.

⁵See Table 20 for diaphragm flexibility limitations.

⁶L = Span, in feet, between members supporting vertical loads.

⁷For weld patterns, see Table 17 and Figure 7. The first letter of the attachment indicates welding pattern to exterior supports and the second letter indicates welding pattern to interior supports. Provide No. 3 bars continuous at exterior supports where anchor bar supports are required (Type 5 weld pattern).

⁸Welds are ½-inch effective diameter in lieu of washer welds. Anchor washers are made with ⅞-inch diameter hole for welding.

TABLE 17—CP-32 DECK ATTACHMENT^{1,2}

CONNECTION TYPE	DESCRIPTION OF 32-INCH WIDE DECK END CONNECTION TO SUPPORTING MEMBERS
2	One fastener ¹ at each lap and two intermediate fasteners.
3	One fastener at each lap and fastener in each remaining corrugation.
4	One anchor bar ² support at each lap and two intermediate anchor bar supports.
5	One anchor bar support at each lap, two intermediate anchor bar supports and fasteners in each remaining corrugation.

For SI: 1 inch = 25.4 mm.

¹Fasteners consist of No. 14 gauge sheet washers attached by plug welds to supporting members through a ⅜-inch diameter hole in the washer. (Weld washer may be omitted on No. 18 gauge.)

²Anchor bar supports consists of No. 16 gauge steel ear type washers with varying height. The anchor bar support is connected to the deck and supporting member with a plug weld through a ⅞-inch-diameter hole. The anchor bar support is designed to support a No. 3 reinforcing bar running transverse to the direction of the corrugations.

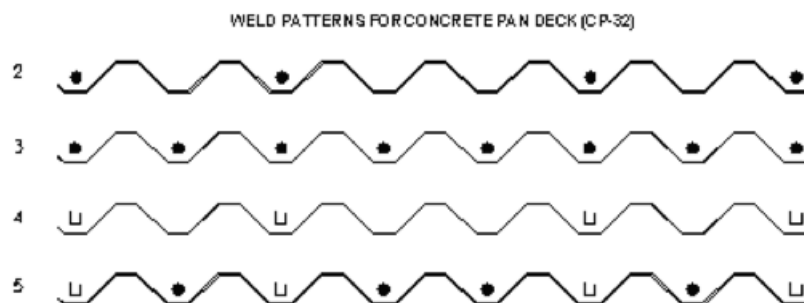


FIGURE 7

**TABLE 18—ALLOWABLE DIAPHRAGM SHEARS (q) AND FLEXIBILITY FACTOR (F)
FOR INVERTED CP-32, CF-1³/₈ INCHES WITH TEK SCREWS^{1,2,3,4,5}**

DECK GAGE	SEAM ATTACHMENTS	NO. TEKS @ SUPPORTS		DECK SPAN (FEET)			
				4	6	8	10
26	TEKS @ 12" O.C.	4	q	210	210	210	210
			F	13.2 + 465R	10.9 + 310R	9.8 + 233R	9.1 + 186R
	TEKS @ 18" O.C.	4	q	140	140	140	140
			F	17.1 + 465R	13.3 + 310R	11.6 + 233R	10.5 + 186R
	TEKS @ 24" O.C.	4	q	100	100	100	100
			F	21.3 + 465R	15.9 + 310R	13.4 + 233R	12.0 + 186R
	TEKS @ MID-SPAN	4	q	100	60	50	40
			F	21.3 + 465R	21.6 + 310R	21.9 + 233R	22.1 + 186R
	TEKS @ THIRD POINTS	4	q	150	100	80	60
			F	15.8 + 465R	15.9 + 310R	16.1 + 233R	16.2 + 186R
	TEKS @ QUARTER POINTS	4	q	210	140	110	80
			F	13.2 + 465R	13.3 + 310R	13.4 + 233R	13.5 + 186R
	TEKS @ 12" O.C.	7	q	230	230	230	230
			F	12.8 + 58.2R	10.8 + 38.8R	9.7 + 29.1R	9.1 + 23.3R
	TEKS @ 18" O.C.	7	q	150	150	150	150
			F	16.1 + 58.2R	13.0 + 38.8R	11.4 + 29.1R	10.5 + 23.3R
	TEKS @ 24" O.C.	7	q	110	110	110	110
			F	19.4 + 58.2R	15.2 + 38.8R	13.1 + 29.1R	11.9 + 23.3R
24	TEKS @ 12" O.C.	4	q	290	290	290	290
			F	9.9 + 313R	8.3 + 209R	7.5 + 156R	7.0 + 185R
	TEKS @ 18" O.C.	4	q	190	190	190	190
			F	18.5 + 313R	10.0 + 209R	8.8 + 156R	8.1 + 185R
	TEKS @ 24" O.C.	4	q	140	140	140	140
			F	15.8 + 313R	11.8 + 209R	10.1 + 156R	9.1 + 185R
	TEKS @ MID-SPAN	4	q	140	90	70	60
			F	15.2 + 313R	15.5 + 209R	15.7 + 156R	16.0 + 185R
	TEKS @ THIRD POINTS	4	q	220	140	110	90
			F	11.7 + 313R	11.8 + 209R	12.0 + 156R	12.6 + 185R
	TEKS @ QUARTER POINTS	4	q	290	190	140	120
			F	9.9 + 313R	10.0 + 209R	10.1 + 156R	10.2 + 185R
	TEKS @ 12" O.C.	7	q	320	310	310	300
			F	9.6 + 39.1R	8.2 + 26.1R	7.4 + 19.6R	7.0 + 15.7R
	TEKS @ 18" O.C.	7	q	220	210	210	200
			F	11.7 + 39.1R	9.7 + 26.1R	8.7 + 19.6R	8.0 + 15.7R
	TEKS @ 24" O.C.	7	q	170	160	160	150
			F	13.8 + 39.1R	11.2 + 26.1R	9.9 + 19.6R	9.0 + 15.7R
22	TEKS @ MID-SPAN	7	q	170	110	80	60
			F	13.8 + 39.1R	14.1 + 26.1R	14.4 + 19.6R	14.7 + 15.7R
	TEKS @ THIRD POINTS	7	q	240	160	120	90
			F	11.0 + 39.1R	11.2 + 26.1R	11.4 + 19.6R	11.6 + 15.7R
	TEKS @ QUARTER POINTS	7	q	320	210	160	120
			F	9.6 + 39.1R	9.7 + 26.1R	9.9 + 19.6R	10.0 + 15.7R

**TABLE 18—ALLOWABLE DIAPHRAGM SHEARS (q) AND FLEXIBILITY FACTOR (F)
FOR INVERTED CP-32, CF $1\frac{3}{8}$ INCHES WITH TEK SCREWS^{1,2,3,4,5} (Continued)**

DECK GAGE	SEAM ATTACHMENTS	NO. TEKS @ SUPPORTS		DECK SPAN (FEET)			
				4	6	8	10
22	TEKS @ 12" O.C.	4	q	380	370	370	370
			F	7.9 + 228R	6.7 + 152R	6.0 + 114R	5.7 + 91.1R
	TEKS @ 18" O.C.	4	q	260	250	250	250
			F	9.7 + 228R	8.0 + 152R	7.1 + 114R	6.5 + 91.1R
	TEKS @ 24" O.C.	4	q	190	190	190	190
			F	11.6 + 228R	9.3 + 152R	8.1 + 114R	7.3 + 91.1R
	TEKS @ MID-SPAN	4	q	190	130	90	80
			F	11.6 + 228R	11.8 + 152R	12.0 + 114R	12.3 + 91.1R
	TEKS @ THIRD POINTS	4	q	290	190	140	110
			F	9.1 + 228R	9.3 + 152R	9.4 + 114R	9.5 + 91.1R
	TEKS @ QUARTER POINTS	4	q	380	250	190	150
			F	7.9 + 228R	8.0 + 152R	8.1 + 114R	8.2 + 91.1R
	TEKS @ 12" O.C.	7	q	420	400	390	380
			F	7.6 + 28.5R	6.5 + 19.0R	6.0 + 14.2R	5.7 + 11.4R
	TEKS @ 18" O.C.	7	q	290	280	270	260
			F	9.1 + 28.5R	7.7 + 19.0R	6.9 + 14.2R	6.5 + 11.4R
	TEKS @ 24" O.C.	7	q	230	210	200	200
			F	10.4 + 28.5R	8.8 + 19.0R	7.8 + 14.2R	7.2 + 11.4R
	TEKS @ MID-SPAN	7	q	230	150	110	90
			F	10.4 + 28.5R	10.7 + 19.0R	11.0 + 14.2R	11.3 + 11.4R
20	TEKS @ 12" O.C.	4	q	470	460	450	450
			F	6.5 + 175R	5.5 + 117R	5.1 + 87.6R	4.8 + 70.1R
	TEKS @ 18" O.C.	4	q	330	310	310	300
			F	7.9 + 175R	6.6 + 117R	5.9 + 87.6R	5.4 + 70.1R
	TEKS @ 24" O.C.	4	q	250	240	230	230
			F	9.2 + 175R	7.6 + 117R	6.7 + 87.6R	6.1 + 70.1R
	TEKS @ MID-SPAN	4	q	250	170	120	100
			F	9.2 + 175R	9.4 + 117R	9.6 + 87.6R	9.8 + 70.1R
	TEKS @ THIRD POINTS	4	q	360	240	180	140
			F	7.4 + 175R	7.6 + 117R	7.7 + 87.6R	7.8 + 70.1R
	TEKS @ QUARTER POINTS	4	q	470	310	230	190
			F	6.5 + 175R	6.6 + 117R	6.7 + 87.6R	6.8 + 70.1R
	TEKS @ 12" O.C.	7	q	530	490	480	470
			F	6.2 + 21.9R	5.4 + 14.6R	5.0 + 11.0R	4.8 + 8.8R
	TEKS @ 18" O.C.	7	q	380	350	330	320
			F	7.3 + 21.9R	6.3 + 14.6R	5.8 + 11.0R	5.4 + 8.8R
	TEKS @ 24" O.C.	7	q	310	270	260	250
			F	8.3 + 21.9R	7.1 + 14.6R	6.5 + 11.0R	6.0 + 8.8R
	TEKS @ MID-SPAN	7	q	310	200	150	120
			F	8.3 + 21.9R	8.5 + 14.6R	8.8 + 11.0R	9.0 + 8.8R
	TEKS @ THIRD POINTS	7	q	420	270	200	160
			F	7.0 + 21.9R	7.1 + 14.6R	7.3 + 11.0R	7.5 + 8.8R
	TEKS @ QUARTER POINTS	7	q	530	350	260	200
			F	6.2 + 21.9R	6.3 + 14.6R	6.5 + 11.0R	6.6 + 8.8R

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 plf = 14.594 N/m.

TABLE 18—ALLOWABLE DIAPHRAGM SHEARS (*q*) AND FLEXIBILITY FACTOR (*F*)
FOR INVERTED CP-32, CF 1 3⁄8 INCHES WITH TEK SCREWS^{1,2,3,4,5} (Continued)

Footnotes to Table:

q = Allowable shear on diaphragm in pounds per foot.
F = Flexibility factor. The average micro-inches a diaphragm web will deflect in a span of 1 foot under a shear of 1 pound per foot.
R = Ratio of vertical load span of deck, *L_v*, to length of each deck panel *L₂*. *R* = *L_v*/*L₂*, both units in feet.
The spacing of screws as to chords, struts, shear transfer elements, parallel to the panel flutes is equal to:
s = 11,600/*qs*, where
t = Base metal thickness of deck sheet in inches
qs = Actual shear on diaphragm in pounds per foot
The equation is also applicable for the spacing of fasteners at overlapping seams in which either adjacent panel is cut to less than 32 inches in width. The number of screws indicated does not include those in the seams at the interior bearings and perimeter supports normal to the flutes required by footnote no. 2 above. Place one screw in each seam and in each flute at all decking interior bearings and perimeter supports normal to the flutes.
Screws must be No. 12-24 Self-drilling for decks to supporting members and No. 12-14 Stitch for deck to deck attachment.
For the four-screw pattern to supporting members place one screw in the first, third, fifth and seventh flutes. For the seven-screw pattern to supporting members place one screw at each flute. For flute numbers see sketch below.
See Table 20 for diaphragm flexibility limitations

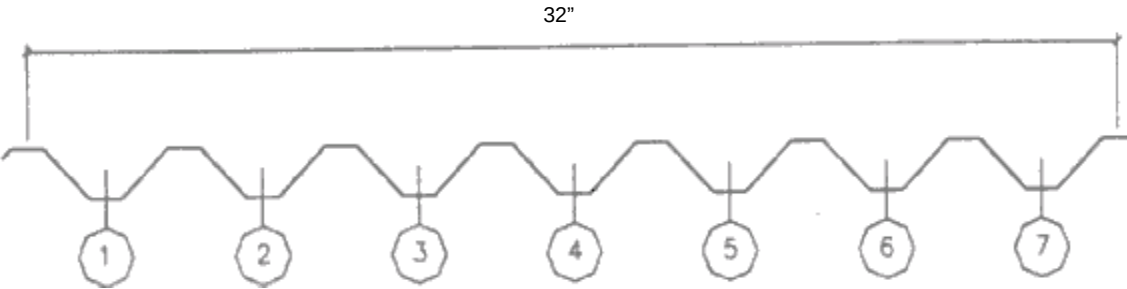


TABLE 19—FIRE RESISTIVE RATINGS^{1,2,3}

TYPE OF DECK	CONCRETE TYPE	CONCRETE THICKNESS	RESTRAINED FIRE RESISTIVE RATING
CP-32, B-36, BR-36, BF-36, N-24, NR-24, AND NF-24	See UBC Table 7-C	2 1⁄4 inches 2 inches	2 hour 1 hour

For **SI**: 1 inch = 25.4 mm, 1 pcf = 16.02 kg/m³, 1 psi = 6.895 kPa.
¹For maximum clear spans, steel requirements, attachments and concrete reinforcing see Section 4.5 of this report.
²For reduced concrete thickness, see [ESR-1649](#).
³Thickness of concrete above top of deck flute.

TABLE 20—DIAPHRAGM FLEXIBILITY LIMITATION^{1,2,3,4,5}

F	MAXIMUM SPAN FOR MASONRY OR CONCRETE WALLS (feet)	SPAN-DEPTH LIMITATION			
		Rotation Not Considered In Diaphragm		Rotation Considered In Diaphragm	
		Masonry or Concrete Walls	Flexible Walls ⁴	Masonry or Concrete Walls	Flexible Walls ⁴
More than 150	Not used	Not used	2:1	Not used	1 ¹ / ₂ :1
70-150	200	2:1 or as required for deflection	3:1	Not used	2:1
10-70	400	2 ¹ / ₂ :1 or as required for deflection	4:1	As required for deflection	2 ¹ / ₂ :1
1-10	No limitation	3:1 or as required for deflection	5:1	As required for deflection	3:1
Less than 1	No limitation	As required for deflection	No limitation	As required for deflection	3 ¹ / ₂ :1

For SI: 1 inch = 25.4 mm, 1 plf = 14.594 N/m, 1 psi = 6894 Pa.

¹Diaphragms shall be investigated regarding their flexibility and recommended span-depth limitations. Refer to above table for determination of value of F.

²Diaphragms supporting masonry or concrete walls must have their deflections limited to the following amount:

$$\Delta_{wall} = \frac{H^2 f_c}{0.01Et}$$

Where:

H = Unsupported height of wall in feet.

t = Thickness of wall in inches.

E = Modulus of elasticity of wall material for deflection determination in pounds per square inch.

f_c = Allowable compressive strength of wall material in flexure in pounds per square inch. For concrete, f_c = 0.45f'_c.
For masonry, f_c = F_b = 0.33f'_m.

³The total deflection Δ of the diaphragm may be computed from the equation: Δ = Δ_f + Δ_w

Where:

Δ_f = Flexural deflection of the diaphragm determined in the same manner as the deflection of beams.

Δ_w = The web deflection may be determined by the equation:

$$\Delta_w = \frac{q_{ave} LF}{10^6}$$

Where:

L = Distance in feet between vertical resisting element (such as shear wall) and the point to which the deflection is to be determined.

q_{ave} = Average shear in diaphragm in pounds per foot over length L.

F = Flexibility factor: The average microinches a diaphragm web will deflect in a span of 1 foot under a shear of 1 pound per foot.

⁴When applying these limitations to cantilevered diaphragms, the allowable span-depth ratio will be half that shown.

⁵Diaphragm classification (flexible or rigid) and deflection limits must comply with Section 4.4.