

ICC-ES Evaluation Report

ESR-2941

Reissued August 2014

This report is subject to renewal August 1, 2016.

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

A Subsidiary of the International Code Council®

DIVISION: 05 00 00—METALS

Section: 05 05 23—Metal Fastenings

Section: 05 31 00—Steel Decking

REPORT HOLDER:

PNEUTEK, INC.

17 FRIARS DRIVE

HUDSON, NEW HAMPSHIRE 03051

(800) 431-8665

www.pneutek.com

EVALUATION SUBJECT:

**STEEL DECK DIAPHRAGMS ATTACHED WITH
PNEUTEK K66062, K66075, K64062, K64075, SDK63075,
AND SDK61075 FRAME FASTENERS**

1.0 EVALUATION SCOPE

Compliance with the following code:

2012, 2009 and 2006 *International Building Code®* (IBC)

Property evaluated:

Structural

2.0 USES

The Pneutek K66062, K66075, K64062, K64075, SDK63075 and SDK61075 fasteners attach steel deck panels to supporting steel framing (support) members for use as horizontal diaphragms.

3.0 DESCRIPTION

3.1 Pneutek Fasteners:

Pneutek fasteners are power-driven fasteners manufactured from carbon steel and heat-treated to a Rockwell C hardness of 52-56 and a minimum tensile strength of 240,000 psi (1,654,800 kPa). The fasteners have a nominal head diameter of $\frac{1}{2}$ inch and are coated with mechanically deposited zinc per ASTM B695-04 (2009). See Table 2 for Pneutek fastener properties.

3.2 Steel Roof Deck Diaphragms:

3.2.1 Steel Deck: Steel decks must be 16-gage [0.0598 inch (1.5 mm)], 18-gage [0.0478 (1.2 mm)], 20-gage [0.0359 (0.9 mm)], or 22-gage [0.0299 (0.8 mm)] B Deck-Standing Seams, B Deck-Nestable Seams, N Deck-Standing Seams, or N Deck-Nestable Seams. The steel decks must be cold-formed from ASTM A653 or ASTM A1008 SS Grade 33 steel. The steel decks must have dimensions in accordance with Figure 1.

3.2.2 Structural Steel Supports: Structural steel supports (panel ends, interior supports, and framing members) must be minimum ASTM A36 grade steel.

3.2.3 Structural Steel Support Connections: Connections of steel deck to supporting structural steel must be accomplished by the Pneutek fasteners. See Figure 2 for Pneutek Support Fastener Details.

3.2.4 Sidelap Connections of Steel Decks: Connections of steel deck sidelaps must be accomplished by using either button punches or No. 10 self-drilling screws. The No. 10 screws must be minimum $\frac{3}{4}$ -inch-long (19.1 mm), self-drilling, hex-washer head steel screws conforming to ASTM C1513 requirements and recognized in a current ICC-ES evaluation report. See Figure 3 for sidelap fastener details.

3.3 Concrete-filled Steel Deck Diaphragms:

3.3.1 Concrete-filled Steel Deck: The concrete-filled steel decks must be 16-gage (0.0598 inch) [1.5 mm], 18-gage (0.0478) [1.2 mm], 20-gage (0.0359) [0.9 mm], or 22-gage (0.0299) [0.8 mm] B Deck-Standing Seam, B Deck-Nestable Seam, N Deck-Standing Seam, N Deck-Nestable Seam, $1\frac{1}{2}$ -inch Deep Deck, 2-inch Deep Deck, or 3-inch Deep Deck. The steel decks must be cold-formed from ASTM A653 Grade 33 steel with a minimum G-60 galvanized coating designation complying with ASTM A653, or ASTM A1008 SS Grade 33 steel with a painted or phosphatized finish. The concrete-filled decks must have dimensions as noted in Figure 1.

3.3.2 Structural Steel Supports: Structural steel supports (panel ends, interior supports, and framing members) must be minimum ASTM A36 grade steel.

3.3.3 Structural Steel Support Connections: Connections of steel deck to supporting structural steel must be accomplished by the Pneutek fasteners. See Figure 2 for Pneutek Support Fastener Details.

3.3.4 Sidelap Connections of Steel Decks: Connections of steel deck sidelaps must be accomplished by using either button punches, No. 10 self-drilling screws, or $1\frac{1}{2}$ -inch-long (38.1 mm) top seam welds. The No. 10 screws must be minimum $\frac{3}{4}$ -inch-long (19.1 mm), self-drilling, hex-washer head steel screws conforming to ASTM C1513 requirements and recognized in a current ICC-ES evaluation report. See Figure 3 for sidelap fastener details.

3.3.5 Concrete Fill: Concrete fill must be either normal-weight or lightweight and have a minimum compressive strength (f'_c) of 3,000 psi (20,684 kPa). Concrete fill must

be specified in accordance with the applicable code. Lightweight concrete must be 110pcf (1760 kg/m^2) and normal-weight concrete must be 145pcf (2320 kg/m^2).

3.3.6 Welded Shear Stud Connectors: Welded shear stud connectors must be $\frac{3}{4}$ inch in diameter (19.1 mm) and have lengths complying with Figure 4. Shear studs must conform to the requirements of the Structural Welding Code — Steel, AWS D1.1, and have minimum tensile strength of 65,000 psi.

3.3.7 Welded Connections: Welded connections must use E60 or E70 filler metal and comply with AWS D1.3.

4.0 DESIGN AND INSTALLATION

4.1 Design:

Design information can be found in the general notes and table notes. However, the diaphragm design must also take into account the following considerations:

1. Diaphragm classification (flexible or rigid) must comply with Section 1602 of the IBC and the diaphragm deflection (Δ) must be calculated using the equations noted in the Diaphragm Flexibility Limitations Table (Table 1).
2. Diaphragm flexibility limitation must comply with Table 1.
3. Diaphragm deflection limits must comply with Sections 12.10.1 and 12.12.2 of ASCE 7.
4. Horizontal shears must be distributed in accordance with Section 12.8.4 of ASCE 7.
5. The allowable diaphragm shears may be adjusted based on the following:

DESIGN METHOD	FOR	MULTIPLY ALLOWABLE DIAPHRAGM SHEARS IN THE FOLLOWING TABLES	BY
ASD	Roof (bare) deck diaphragms subjected to wind loads or load combinations which include wind loads	4-7	1.06
	Roof (bare) deck diaphragms subject to all other load combinations	4-7	1.00
LRFD	Roof (bare) deck diaphragms subjected to earthquake loads or load combinations which include earthquake loads	4-7	1.63
	Roof (bare) deck diaphragms subjected to wind loads or load combinations which include wind loads	4-7	1.75
	Roof (bare) deck diaphragms subject to all other load combinations	4-7	1.63
	Floor (concrete-filled) deck diaphragms subjected to wind, earthquake or other combinations	10-13	1.63

4.2 Installation:

The steel roof deck and concrete-filled deck diaphragms must be installed using the materials described in Sections 3.2 and 3.3, respectively, and in accordance with the tables and table notes of this report. Pneutek fasteners must be placed not less than 0.50 inch (12.7 mm) from the panel ends and not less than $\frac{5}{16}$ inch (7.94 mm) from

panel edges parallel to corrugations at sidelaps, and must be spaced in accordance with the appropriate table. The distance between the last sidelap connection of a span to the perpendicular support member and from the perpendicular support member to the first sidelap connection of the next span must not be greater than one-half of the specified spacing. The sidelap connection spacing must not exceed 36 inches (914 mm) on center.

5.0 CONDITIONS OF USE

Steel deck panels attached to framing with Pneutek K66062, K66075, K64062, K64075, SDK63075, and SDK61075 fasteners described in this report comply with, or are suitable alternatives to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

- 5.1 The fasteners are manufactured, identified and installed in accordance with this report, the manufacturer's instructions and the approved construction documents. If there is a conflict, this report governs.
- 5.2 Allowable vertical loads must be limited by the steel deck panel section properties and allowable stresses for the specific steel deck panel and the uplift connection values. Composite design values are beyond the scope of this report.
- 5.3 Calculations demonstrating that the applied loads do not exceed the capacities in this report must be submitted to the code official for approval. The calculations must be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed.
- 5.4 A one-third stress increase must not be permitted for Allowable Stress Design (ASD), nor can a 0.75 reduction of resulting forces be permitted for Load Resistance Factor Design (LRFD) for load combinations containing wind or seismic forces, for shear values in diaphragm tables.
- 5.5 Steel deck diaphragms may be zoned by varying steel deck panel gage and/or connections across a diaphragm to meet varying shear and flexibility demands.
- 5.6 Pneutek fasteners may be used for attachment of steel deck roof and floor systems temporarily exposed to the exterior during construction prior to application of a built-up roof covering system or concrete fill. The fasteners on permanently exposed steel deck roof coverings must be covered with a corrosion-resistant paint or sealant. For permanently exposed steel deck roof covering installations, the roof covering system's compliance with IBC Chapter 15 must be justified to the satisfaction of the code official.

6.0 EVIDENCE SUBMITTED

Data in accordance with the ICC-ES Acceptance Criteria for Steel Deck Roof and Floor Systems (AC43), dated October 2010 (Editorially revised September 2013).

7.0 IDENTIFICATION

All Pneutek K66062, K66075, K64062, K64075, SDK63075 and SDK61075 fasteners are identified by an "P" stamped on the fastener head. Fasteners are packaged in containers noting the fastener type, the Pneutek, Inc., name and address, and the evaluation report number (ESR-2941).

TABLE NOTES

The notes below apply to all of the accompanying tables unless noted otherwise:

1. The steel deck panel length is assumed to equal the span length times the number of spans.
2. Interpolation of allowable diaphragm shear values, Q, between adjacent spans is permissible. For interpolated lengths, use diaphragm flexibility factor, F, for the closest span length.
3. For spacing of attachments to collector elements parallel to flutes: Pneutek fasteners may be used to attach the diaphragm to parallel members such as diaphragm chords, struts, ties or other collector elements, with spacing based on the allowable shear values shown in Table 3.
4. For bare deck diaphragms, the diaphragm capacity must consider Table 8.
5. For attachments at interior lines of shear transfer perpendicular to deck flutes: The shear transfer from a diaphragm to interior collector elements perpendicular to deck corrugations must not exceed the shear values indicated in the tables. Two lines of Pneutek fasteners are permitted to develop the actual shear transfer to these collector elements.
6. Where individual deck panels are cut, the partial panel must be fastened to fully transfer the shears at the point of the diaphragm to the adjacent full panels for the values specified in the tables.
7. Q = Allowable diaphragm shear in pounds per linear foot.
 Q_{LRFD} = LRFD diaphragm shear strength in pounds per linear foot
8. F = Flexibility Factor deflection in microinches of 1 foot element under a shear of 1 pound per foot.
9. **For SI dimensions:**

1 inch = 25.4 mm, 1 inch² = 645.16 mm², 1 inch³ = 16.4 x 10³ mm³, 1 inch⁴ = 41.6 x 10⁴ mm⁴, 1 plf = 14.6 N/m, 1 psf = 4.88 kg/m², 1 pcf = 16.018 kg/m³, 1 inch-kip = 0.113 kN-m, 1 kip = 4.448 kN, 1 ksi = 6.89 MPa, 1 foot = 304.8 mm.

TABLE OF CONTENTS**TABLE 1—DIAPHRAGM FLEXIBILITY LIMITATIONS****TABLE 2—PNEUTEK FASTENER PROPERTIES****TABLE 3—ALLOWABLE SHEAR AND TENSION LOADS FOR THE PNEUTEK FASTENERS INSTALLED IN B AND N DECK****ALLOWABLE SHEAR (Q) AND FLEXIBILITY (F) VALUES FOR STEEL ROOF DECK DIAPHRAGMS**

TABLE	PNEUTEK SUPPORT FASTENERS AND PATTERN	SIDELAP FASTENERS
B DECK - STANDING SEAM (16, 18, 20, 22 gage)		
4A	K66062, K66075, K64062, K64075, OR SDK63075 36/5, 36/7, 36/9, 36/11	BUTTON PUNCHES SPACED @ 6" & 12" O.C.
4B	K66062, K66075, K64062, K64075, OR SDK63075 36/5, 36/7, 36/9, 36/11	#10 SELF-DRILLING SCREWS SPACED @ 6" & 12" O.C.
4C	SDK61075 36/5, 36/7, 36/9, 36/11	BUTTON PUNCHES SPACED @ 6" & 12" O.C.
4D	SDK61075 36/5, 36/7, 36/9, 36/11	#10 SELF-DRILLING SCREWS SPACED @ 6" & 12" O.C.
B DECK - NESTABLE SEAM (16, 18, 20, 22 gage)		
5A	K66062, K66075, K64062, K64075, OR SDK63075 36/4, 36/5, 36/7, 36/9, 36/11	#10 SELF-DRILLING SCREWS # BETWEEN SUPPORTS 0, 2, 4, 6, 8, 10, 12
5B	SDK61075 36/4, 36/5, 36/7, 36/9, 36/11	#10 SELF- DRILLING SCREWS # BETWEEN SUPPORTS 0, 2, 4, 6, 8, 10, 12
N DECK - STANDING SEAM (16, 18, 20, 22 gage)		
6A	K66062, K66075, K64062, K64075, OR SDK63075 24/4, 24/6, 24/8	BUTTON PUNCHES SPACED @ 6" & 12" O.C.
6B	K66062, K66075, K64062, K64075, OR SDK63075 24/4, 24/6, 24/8	#10 SELF-DRILLING SCREWS SPACED @ 6" & 12" O.C.
6C	SDK61075 24/4, 24/6, 24/8	BUTTON PUNCHES SPACED @ 6" & 12" O.C.
6D	SDK61075 24/4, 24/6, 24/8	#10 SELF- DRILLING SCREWS SPACED @ 6" & 12" O.C.
N DECK - NESTABLE SEAM (16, 18, 20, 22 gage)		
7A	K66062, K66075, K64062, K64075, OR SDK63075 24/4, 24/6, 24/8	#10 SELF- DRILLING SCREWS # BETWEEN SUPPORTS 0, 1, 2, 3, 4, 6, 9, 12, 16
7B	SDK61075 24/4, 24/6, 24/8	#10 SELF- DRILLING SCREWS #BETWEEN SUPPORTS 0, 1, 2, 3, 4, 6, 9, 12, 16.

ALLOWABLE SHEAR (Q) BASED ON BUCKLING LIMITS

TABLE	DECK TYPE
8A	B DECK (STANDING AND NESTABLE SEAMS - 16, 18, 20, 22 gage)
8B	N DECK (STANDING AND NESTABLE SEAMS - 16, 18, 20, 22 gage)

(continued)

TABLE OF CONTENTS
(continued)

ALLOWABLE SHEAR (Q) AND FLEXIBILITY (F) VALUES FOR CONCRETE FILL AND SHEAR STUD CONNECTOR IN CONCRETE FILLED FLOOR DIAPHRAGMS

TABLE CONCRETE TYPE

9 NORMAL WEIGHT AND LIGHTWEIGHT

ALLOWABLE SHEAR (Q) AND FLEXIBILITY (F) VALUES FOR CONCRETE FILLED FLOOR DIAPHRAGMS

TABLE	CONCRETE FILL	PNEUTEK SUPPORT FASTENERS AND PATTERN	SIDELAP FASTENERS
B DECK - STANDING SEAM OR NESTABLE SEAM			
10A	Normal Weight	K66062, K66075, K64062, K64075, OR SDK63075 36/4	BUTTON PUNCHES, #10 by $\frac{3}{4}$ " SELF-DRILLING SCREWS, OR WELDS @ 36 O.C.
10B	Normal Weight	SDK61075 36/4	BUTTON PUNCHES, #10 by $\frac{3}{4}$ " SELF-DRILLING SCREWS, OR WELDS @ 36 O.C.
10C	Lightweight	K66062, K66075, K64062, K64075, OR SDK63075 36/4	BUTTON PUNCHES, #10 by $\frac{3}{4}$ " SELF-DRILLING SCREWS, OR WELDS @ 36 O.C.
10D	Lightweight	SDK61075 36/4	BUTTON PUNCHES, #10 by $\frac{3}{4}$ " SELF-DRILLING SCREWS, OR WELDS @ 36 O.C.
11A	Normal Weight	K66062, K66075, K64062, K64075, OR SDK63075 36/7	BUTTON PUNCHES, #10 by $\frac{3}{4}$ " SELF-DRILLING SCREWS, OR WELDS @ 36 O.C.
11B	Normal Weight	SDK61075 36/7	BUTTON PUNCHES, #10 by $\frac{3}{4}$ " SELF-DRILLING SCREWS, OR WELDS @ 36 O.C.
11C	Lightweight	K66062, K66075, K64062, K64075, OR SDK63075 36/7	BUTTON PUNCHES, #10 by $\frac{3}{4}$ " SELF-DRILLING SCREWS, OR WELDS @ 36 O.C.
11D	Lightweight	SDK61075 36/7	BUTTON PUNCHES, #10 by $\frac{3}{4}$ " SELF-DRILLING SCREWS, OR WELDS @ 36 O.C.
2" & 3" DEEP DECK			
12A	Normal Weight	K66062, K66075, K64062, K64075, OR SDK63075 24/3, 36/4	BUTTON PUNCHES, #10 by $\frac{3}{4}$ " SELF-DRILLING SCREWS, OR WELDS @ 36 O.C.
12B	Normal Weight	SDK61075 24/3, 36/4	BUTTON PUNCHES, #10 by $\frac{3}{4}$ " SELF-DRILLING SCREWS, OR WELDS @ 36 O.C.
12C	Lightweight	K66062, K66075, K64062, K64075, OR SDK63075 24/3, 36/4	BUTTON PUNCHES, #10 by $\frac{3}{4}$ " SELF-DRILLING SCREWS, OR WELDS @ 36 O.C.
12D	Lightweight	SDK61075 24/3, 36/4	BUTTON PUNCHES, #10 by $\frac{3}{4}$ " SELF-DRILLING SCREWS, OR WELDS @ 36 O.C.
N DECK - STANDING SEAM OR NESTABLE SEAM			
13A	Normal Weight	K66062, K66075, K64062, K64075, OR SDK63075 24/4	BUTTON PUNCHES, #10 by $\frac{3}{4}$ " SELF-DRILLING SCREWS, OR WELDS @ 36 O.C.
13B	Normal Weight	SDK61075 24/4	BUTTON PUNCHES, #10 by $\frac{3}{4}$ " SELF-DRILLING SCREWS, OR WELDS @ 36 O.C.
13C	Lightweight	K66062, K66075, K64062, K64075, OR SDK63075 24/4	BUTTON PUNCHES, #10 by $\frac{3}{4}$ " SELF-DRILLING SCREWS, OR WELDS @ 36 O.C.
13D	Lightweight	SDK61075 24/4	BUTTON PUNCHES, #10 by $\frac{3}{4}$ " SELF-DRILLING SCREWS, OR WELDS @ 36 O.C.

TABLE 1—DIAPHRAGM FLEXIBILITY LIMITATIONS

F	Maximum Diaphragm Span for Masonry or Concrete Walls (feet)	Diaphragm Span-Depth Limitations			
		Rotation Not Considered in Diaphragm		Rotation considered in Diaphragm	
		Masonry or Concrete Walls	Flexible Walls	Masonry or Concrete Walls	Flexible Walls
> 150	not used	not used	2:1	not used	1½:1
70-150	200	2:1 or as required for deflection	3:1	not used	2:1
10-70	400	2½:1 or as required for deflection	4:1	as required for deflection	2½:1
1-10	no limitation	3:1 or as required for deflection	5:1	as required for deflection	3:1
< 1	no limitation	as required for deflection	no limitation	as required for deflection	3½:1

¹Diaphragms are to be investigated regarding their flexibility and recommended span-depth limitations.

²Diaphragms supporting masonry or concrete walls are to have their deflection limited to the following amount:

$$\Delta_{\text{wall}} = \frac{H^2(f_c)}{0.01 E (t)}$$

where:

H = Unsupported height of wall (feet).

t = Thickness of wall (inch).

E = Modulus of elasticity of wall material for deflection determination (psi).

f_c = Allowable compression strength of wall material in flexure (psi)

For concrete, f_c = 0.45 f_{c'}

For masonry, f_c = F_b = 0.33 f_{m'}

³The total deflection of the diaphragm may be computed from the following equation:

$$\Delta_{\text{total}} = \Delta_{\text{flexural}} + \Delta_{\text{web}}$$

where:

Δ_{flexural} = Flexural deflection of the diaphragm determined in the same manner as the deflection of beams (inch).

Δ_{web} = The web deflection may be determined by the equation (inch):

$$\Delta_{\text{web}} = \frac{q_{\text{ave}}(L)(F)}{10^6}$$

where:

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

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

F = Flexibility Factor: The average micro inches (μm) a diaphragm web will deflect in a span of 1 foot under a shear of 1 pound per foot.

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

⁵Diaphragm classification (flexible or rigid) and deflection limits must comply with the Diaphragm Design Consideration listed in this evaluation report.

TABLE 2—PNEUTEK FASTENER PROPERTIES

PNEUTEK FASTENER NO.	NOMINAL HEAD DIAMETER		NOMINAL SHANK DIAMETER		NOMINAL SHANK LENGTH		SHANK STYLE	SHANK SURFACE
	inch	mm	inch	mm	inch	mm		
SDK61075	$\frac{1}{2}$	12.6	0.144	3.7	0.78	19.8	stepped down	diamond knurled
SDK63075			0.173	4.4	0.77	19.6		
K64062			0.181	4.6	0.63	16.0		
K64075			0.181	4.6	0.73	18.6	straight	helical knurled
K66062			0.199	5.1	0.64	16.2		
K66075			0.199	5.1	0.75	19.0		

TABLE 3—ALLOWABLE SHEAR AND TENSION LOADS
FOR PNEUTEK FASTENERS INSTALLED IN B AND N DECK¹

SPECIFIED YIELD STRENGTH OF B AND N DECKS (ksi)	ASTM A36 STEEL SPECIFIED SUBSTRATE THICKNESS RANGE (inches)	PNEUTEK FASTENER PART NUMBER	ALLOWABLE SHEAR STRENGTH ^{2,4} (lbs)				ALLOWABLE TENSION (UPLIFT) STRENGTH ^{3,5} (lbs)			
			Deck Gauge & Thickness				Deck Gauge & Thickness			
			22	20	18	16	22	20	18	16
33	0.281 and up	K66062 K66075	485	582	775	970	332	398	530	663
	0.187 to 0.312	K64062 K64075								646
	0.155 to 0.250	SDK63075								470
	0.113 to 0.155	SDK61075	317	381	507	634	332	373		

NOTES:

1. Pneutek fastener penetration must be through supporting steel or a minimum of 0.375 inch.
2. Allowable shear strengths are based on fasteners installed parallel to deck flutes.
3. Allowable tension strengths are based on the lesser of the allowable pullover or pullout strengths for deck gage, fastener and substrate thickness combination.
4. Allowable shear strength = Nominal shear strength/ Ω , where $\Omega = 3.0$.
5. Allowable tension strength = Nominal tension loads / Ω , where $\Omega = 3.0$ for pullover and $\Omega = 5.00$ for pullout.

TABLE 4A—Q (plf) & F (1x10⁻⁶ inches), B DECK (STANDING SEAM), F_y = 33 ksi

SUPPORT FASTENERS - PNEUTEK K66062 or K66075 (0.281 inch and up substrate); K64062 or K64075 (0.187 TO 0.312 inch substrate); or SDK63075 (0.155 TO 0.250 inch substrate)

SIDELAP FASTENERS – Button Punches

DECK GAGE	NUMBER OF SUPPORT FASTENERS	SPACING OF SIDELAP FASTENERS (inches)	Q (plf) F (10 ⁻⁶ in)	SPAN (ft-in) - 3 SPAN CONDITION									
				3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
22	11	6	Q	840	690	590	520	460	420	390	370	350	340
			F	18.0	16.1	15.3	14.9	14.9	14.9	15.1	15.4	15.6	15.9
		12	Q	780	620	510	430	380	340	310	290	270	250
			F	18.1	16.4	15.7	15.5	15.6	15.9	16.2	16.7	17.1	17.6
	9	6	Q	730	610	520	460	410	380	360	340	320	310
			F	18.6	16.8	16.1	15.9	15.9	16.1	16.3	16.6	16.9	17.2
		12	Q	660	530	440	370	330	290	270	250	240	220
			F	18.8	17.2	16.7	16.7	16.9	17.3	17.8	18.4	19.0	19.6
	7	6	Q	520	440	390	350	320	300	290	280	270	260
			F	20.0	18.6	18.1	18.1	18.3	18.6	18.9	19.3	19.7	20.0
		12	Q	450	360	300	270	240	220	200	190	180	170
			F	20.5	19.4	19.3	19.6	20.2	20.9	21.6	22.4	23.2	24.0
		5	Q	470	400	360	330	310	290	280	270	260	250
			F	76.4	61.2	52.5	47.0	43.3	40.7	38.7	37.3	36.1	35.3
		12	Q	400	330	290	250	230	210	190	180	170	170
			F	77.1	62.3	54.1	49.0	45.8	43.7	42.2	41.3	40.6	40.2
20	11	6	Q	1040	870	750	670	600	550	520	490	470	450
			F	12.9	12.0	11.7	11.7	11.9	12.1	12.4	12.7	13.1	13.4
		12	Q	950	760	630	540	480	430	390	360	340	320
			F	13.1	12.2	12.1	12.2	12.6	13.0	13.4	13.9	14.5	15.0
	9	6	Q	910	760	670	600	540	500	470	450	430	410
			F	13.4	12.7	12.5	12.6	12.8	13.2	13.5	13.9	14.2	14.6
		12	Q	810	660	550	470	420	380	350	320	310	290
			F	13.7	13.0	13.0	13.3	13.8	14.3	14.9	15.5	16.1	16.7
	7	6	Q	650	560	500	460	430	410	390	370	360	350
			F	14.8	14.3	14.3	14.6	15.0	15.4	15.9	16.3	16.8	17.2
		12	Q	550	450	390	340	310	280	260	250	240	230
			F	15.2	15.0	15.4	16.0	16.8	17.6	18.4	19.2	20.0	20.8
		5	Q	590	510	460	430	410	390	370	360	350	340
			F	50.1	41.1	36.1	33.0	31.0	29.6	28.6	27.9	27.4	27.0
		12	Q	500	420	360	320	290	270	250	240	230	220
			F	50.7	42.1	37.5	34.8	33.2	32.3	31.8	31.5	31.5	31.6
18	11	6	Q	1470	1240	1090	990	910	850	800	760	730	710
			F	8.2	8.1	8.2	8.5	8.8	9.2	9.5	9.9	10.3	10.6
		12	Q	1310	1060	900	780	700	630	580	540	510	490
			F	8.4	8.3	8.6	8.9	9.4	9.9	10.4	10.9	11.5	12.0
	9	6	Q	1290	1100	980	890	830	780	740	710	680	660
			F	8.7	8.7	8.9	9.3	9.7	10.1	10.5	10.9	11.3	11.6
		12	Q	1120	920	790	690	620	560	520	490	460	440
			F	8.9	9.0	9.4	9.9	10.5	11.1	11.7	12.3	12.9	13.5
	7	6	Q	950	830	760	710	670	640	620	600	590	570
			F	9.9	10.1	10.5	11.0	11.5	12.0	12.5	13.0	13.4	13.9
		12	Q	780	650	570	510	470	430	410	390	370	360
			F	10.3	10.7	11.4	12.2	13.0	13.9	14.7	15.5	16.3	17.0
		5	Q	850	760	700	660	630	600	580	570	560	540
			F	27.6	23.6	21.6	20.5	19.8	19.4	19.2	19.1	19.1	19.2
		12	Q	710	600	530	480	450	420	390	370	360	350
			F	28.1	24.5	22.8	22.0	21.8	21.8	22.0	22.3	22.7	23.1
16	11	6	Q	1940	1660	1480	1360	1270	1200	1140	1100	1050	1010
			F	6.0	6.2	6.4	6.8	7.2	7.5	7.9	8.3	8.6	9.0
		12	Q	1690	1380	1190	1050	940	860	800	750	710	680
			F	6.1	6.4	6.7	7.2	7.7	8.2	8.7	9.2	9.7	10.2
	9	6	Q	1700	1480	1330	1230	1160	1100	1060	1020	990	960
			F	6.4	6.7	7.1	7.5	7.9	8.3	8.8	9.2	9.5	9.9
		12	Q	1460	1210	1050	940	850	780	720	680	650	620
			F	6.6	7.0	7.5	8.0	8.6	9.2	9.8	10.4	11.0	11.5
	7	6	Q	1290	1150	1060	1000	950	920	890	870	850	840
			F	7.5	7.9	8.5	9.0	9.6	10.1	10.6	11.1	11.5	11.9
		12	Q	1030	880	770	710	660	610	580	560	530	520
			F	7.8	8.5	9.3	10.1	10.9	11.7	12.5	13.3	14.0	14.7
		5	Q	1140	1040	970	920	880	860	840	820	800	790
			F	17.6	15.8	15.0	14.7	14.6	14.6	14.7	14.9	15.0	15.2
		12	Q	930	800	720	660	620	580	560	540	520	500
			F	18.1	16.6	16.1	16.1	16.3	16.7	17.2	17.7	18.2	18.7

TABLE 4B—Q (plf) & F (1x10⁻⁶ inches), B DECK (STANDING SEAM), Fy = 33 ksi

SUPPORT FASTENERS - PNEUTEK K66062 or K66075 (0.281 inch and up substrate); K64062 or K64075 (0.187 TO 0.312 inch substrate); or SDK63075 (0.155 TO 0.250 inch substrate)

SIDELAP FASTENERS - #10 by 3/4" Self-Drilling Screws

DECK GAGE	NUMBER OF SUPPORT FASTENERS	SPACING OF SIDELAP FASTENERS (inches)	Q (plf) F (10 ⁻⁶ in)	SPAN (ft-in) - 3 SPAN CONDITION									
				3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
22	11	6	Q	1090	960	880	820	780	740	720	700	600	500
			F	16.5	14.0	12.5	11.5	10.8	10.3	9.9	9.6	9.3	9.1
		12	Q	910	760	670	600	550	510	480	460	440	420
			F	17.1	14.7	13.4	12.6	12.0	11.6	11.3	11.1	10.9	10.8
	9	6	Q	960	860	800	750	720	690	670	650	600	500
			F	16.7	14.1	12.6	11.6	10.9	10.4	10.0	9.7	9.4	9.2
		12	Q	790	670	600	540	500	470	440	420	410	400
			F	17.4	15.0	13.7	12.9	12.3	11.9	11.6	11.4	11.2	11.0
	7	6	Q	750	690	650	630	610	590	580	570	560	500
			F	16.9	14.3	12.8	11.8	11.1	10.6	10.1	9.8	9.5	9.3
		12	Q	580	510	460	430	400	390	370	360	350	340
			F	17.9	15.6	14.3	13.4	12.8	12.4	12.0	11.8	11.6	11.4
		5	Q	650	610	580	560	550	540	530	520	520	500
			F	72.6	56.1	46.2	39.7	35.0	31.5	28.7	26.5	24.7	23.3
		12	Q	520	460	420	400	380	360	350	340	330	330
			F	73.7	57.5	47.8	41.4	36.8	33.4	30.7	28.6	26.9	25.5
20	11	6	Q	1300	1150	1050	980	930	890	860	840	720	610
			F	11.6	10.1	9.2	8.6	8.2	7.9	7.7	7.5	7.3	7.2
		12	Q	1090	920	800	730	660	610	580	550	530	510
			F	12.1	10.8	10.0	9.6	9.3	9.1	9.0	8.9	8.8	8.7
	9	6	Q	1150	1030	950	900	860	830	800	780	720	610
			F	11.7	10.2	9.3	8.7	8.3	8.0	7.7	7.6	7.4	7.3
		12	Q	950	810	720	650	600	560	530	510	490	480
			F	12.4	11.0	10.3	9.8	9.5	9.3	9.2	9.1	9.0	8.9
	7	6	Q	900	830	790	750	730	710	700	690	680	610
			F	12.0	10.4	9.5	8.9	8.4	8.1	7.9	7.7	7.5	7.4
		12	Q	700	610	550	510	490	460	450	430	420	410
			F	12.9	11.5	10.8	10.3	10.0	9.8	9.6	9.5	9.4	9.3
	5	6	Q	780	730	700	680	660	650	640	630	620	610
			F	46.7	36.4	30.3	26.2	23.3	21.2	19.5	18.1	17.0	16.1
		12	Q	620	560	510	480	450	440	420	410	400	390
			F	47.7	37.7	31.8	27.8	25.0	22.9	21.3	20.0	19.0	18.1
18	11	6	Q	1730	1530	1400	1310	1240	1190	1150	1120	960	810
			F	7.1	6.4	6.0	5.8	5.6	5.5	5.4	5.3	5.3	5.2
		12	Q	1450	1220	1070	970	890	820	770	730	700	680
			F	7.5	7.0	6.8	6.6	6.6	6.5	6.5	6.5	6.5	6.5
	9	6	Q	1530	1370	1270	1200	1140	1100	1070	1040	960	810
			F	7.2	6.5	6.1	5.9	5.7	5.6	5.5	5.4	5.3	5.3
		12	Q	1270	1080	960	870	810	750	710	680	650	630
			F	7.8	7.3	7.0	6.9	6.8	6.8	6.7	6.7	6.7	6.7
	7	6	Q	1200	1110	1050	1000	970	950	930	910	900	810
			F	7.4	6.7	6.3	6.0	5.8	5.7	5.6	5.5	5.4	5.4
		12	Q	930	810	740	680	650	620	590	580	560	550
			F	8.2	7.7	7.4	7.3	7.2	7.1	7.1	7.1	7.1	7.0
	5	6	Q	1040	970	930	900	880	860	850	840	830	810
			F	24.6	19.6	16.6	14.6	13.2	12.2	11.3	10.7	10.1	9.7
		12	Q	830	740	680	640	600	580	560	550	530	520
			F	25.5	20.7	17.9	16.0	14.7	13.7	12.9	12.3	11.8	11.4
16	11	6	Q	2170	1920	1750	1640	1550	1490	1440	1400	1200	1010
			F	5.0	4.7	4.5	4.4	4.3	4.3	4.2	4.2	4.2	4.2
		12	Q	1820	1530	1340	1210	1110	1030	970	920	880	850
			F	5.4	5.2	5.1	5.1	5.2	5.2	5.2	5.3	5.3	5.3
	9	6	Q	1920	1720	1590	1500	1430	1380	1340	1310	1200	1010
			F	5.1	4.8	4.6	4.5	4.4	4.3	4.3	4.2	4.2	4.2
		12	Q	1580	1350	1200	1090	1010	950	900	850	820	790
			F	5.6	5.4	5.4	5.3	5.4	5.4	5.4	5.5	5.5	5.5
	7	6	Q	1500	1380	1310	1260	1220	1190	1160	1140	1130	1010
			F	5.3	4.9	4.7	4.6	4.5	4.4	4.4	4.4	4.3	4.3
		12	Q	1160	1020	920	860	810	770	740	720	700	690
			F	6.0	5.8	5.7	5.7	5.7	5.7	5.7	5.8	5.8	5.8
	5	6	Q	1300	1220	1170	1130	1100	1080	1060	1050	1040	1010
			F	14.9	12.2	10.5	9.4	8.7	8.1	7.6	7.3	7.0	6.7
		12	Q	1040	930	850	800	760	730	700	680	670	650
			F	15.8	13.2	11.7	10.7	10.0	9.5	9.1	8.7	8.5	8.3

TABLE 4C—Q (plf) & F (1×10^{-6} inches), B DECK (STANDING SEAM), $F_y = 33$ ksi

SUPPORT FASTENERS - PNEUTEK SDK61075 (0.113 to 0.155 inch substrate)

SIDELAP FASTENERS – Button Punches

DECK GAGE	NUMBER OF SUPPORT FASTENERS	SPACING OF SIDELAP FASTENERS (inches)	Q (plf)	SPAN (ft-in) - 3 SPAN CONDITION										
				F (10^{-6} in)	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
22	11	6	Q	600	500	440	400	360	340	320	300	290	280	
			F	20.7	19.4	19.1	19.1	19.3	19.6	20.0	20.4	20.8	21.2	
		12	Q	530	430	360	310	280	250	230	220	210	200	
			F	21.4	20.5	20.5	21.0	21.7	22.5	23.4	24.3	25.1	26.0	
	9	6	Q	520	440	390	360	330	310	290	280	270	260	
			F	21.7	20.6	20.3	20.4	20.7	21.1	21.5	21.9	22.3	22.6	
		12	Q	460	370	320	270	240	220	210	190	180	180	
	7	6	F	22.6	22.0	22.3	23.0	23.9	24.8	25.8	26.8	27.8	28.7	
			Q	380	340	300	280	270	260	250	240	230	230	
		12	F	24.0	23.1	23.1	23.3	23.6	24.0	24.4	24.7	25.1	25.4	
			Q	320	260	230	200	190	170	160	150	150	140	
		5	F	25.7	25.7	26.5	27.6	28.8	30.0	31.1	32.3	33.3	34.3	
			Q	340	300	280	260	250	240	230	230	220	220	
			F	80.7	66.1	57.7	52.4	48.7	46.1	44.2	42.6	41.4	40.5	
20	11	6	Q	750	640	560	510	480	450	420	410	390	380	
			F	15.4	15.0	15.2	15.5	16.0	16.4	16.9	17.3	17.8	18.2	
		12	Q	650	530	460	400	360	320	300	280	270	260	
			F	16.0	16.0	16.5	17.3	18.1	19.1	20.0	20.9	21.7	22.6	
	9	6	Q	650	560	510	470	440	410	390	380	370	360	
			F	16.3	16.1	16.3	16.8	17.2	17.7	18.2	18.7	19.1	19.5	
		12	Q	560	470	400	350	320	290	270	250	240	230	
	7	6	F	17.2	17.4	18.1	19.1	20.1	21.2	22.2	23.2	24.1	25.1	
			Q	490	430	400	370	360	340	330	320	320	310	
		12	F	18.4	18.4	18.8	19.3	19.9	20.4	20.9	21.3	21.7	22.1	
			Q	400	330	290	270	240	230	220	210	200	190	
		5	F	20.0	20.8	22.0	23.3	24.6	25.9	27.0	28.2	29.2	30.2	
			Q	430	390	370	350	330	320	310	300	300	290	
			F	54.1	45.6	40.8	37.9	35.9	34.5	33.6	32.8	32.3	31.8	
18	11	6	Q	360	310	270	250	230	220	210	200	190	190	
			F	56.1	48.5	44.8	42.7	41.7	41.2	41.0	41.0	41.1	41.3	
		12	Q	1070	930	840	780	730	700	670	640	630	610	
			F	10.4	10.7	11.2	11.8	12.3	12.9	13.4	13.9	14.3	14.8	
	9	6	Q	910	760	660	590	530	490	460	430	410	390	
			F	10.9	11.5	12.4	13.3	14.2	15.2	16.1	16.9	17.8	18.6	
		12	Q	940	830	760	710	670	640	620	600	590	570	
	7	6	F	11.2	11.6	12.2	12.9	13.5	14.0	14.6	15.0	15.5	15.9	
			Q	790	670	580	530	480	440	420	390	380	360	
		12	F	11.9	12.8	13.8	14.9	16.0	17.0	18.0	18.9	19.8	20.7	
			Q	730	660	610	580	560	550	530	520	510	500	
		5	F	13.0	13.7	14.4	15.1	15.7	16.3	16.8	17.3	17.7	18.1	
			Q	570	490	440	400	380	360	340	330	320	310	
			F	14.4	15.7	17.1	18.5	19.8	21.1	22.2	23.3	24.3	25.2	
16	11	6	Q	630	590	560	530	520	500	490	480	480	470	
			F	31.0	27.5	25.7	24.7	24.1	23.7	23.5	23.4	23.3	23.3	
		12	Q	510	450	410	380	360	340	330	320	310	300	
			F	32.8	30.1	29.1	28.9	29.1	29.5	30.0	30.5	31.0	31.5	
	9	6	Q	1430	1270	1160	1080	1030	990	950	920	900	880	
			F	8.0	8.5	9.1	9.7	10.3	10.9	11.4	11.8	12.3	12.7	
		12	Q	1190	1000	880	800	740	680	640	610	580	560	
	7	6	F	8.4	9.2	10.2	11.1	12.0	12.9	13.8	14.6	15.3	16.1	
			Q	1260	1130	1050	990	950	910	890	860	850	830	
		12	F	8.7	9.3	10.0	10.7	11.3	11.9	12.4	12.9	13.3	13.7	
			Q	1040	890	790	720	670	630	590	570	540	520	
	5	6	F	9.3	10.3	11.4	12.5	13.6	14.5	15.5	16.4	17.2	18.0	
			Q	990	910	870	830	810	790	770	760	750	740	
		12	F	10.3	11.1	12.0	12.7	13.3	13.9	14.4	14.9	15.3	15.7	
			Q	770	670	610	570	530	510	490	480	460	450	
		6	F	11.5	13.0	14.4	15.8	17.0	18.2	19.2	20.2	21.1	22.0	
			Q	850	800	770	750	730	710	700	690	690	680	
		12	F	20.7	19.2	18.6	18.4	18.4	18.4	18.5	18.7	18.8	18.9	
			Q	680	610	560	530	500	480	470	450	440	430	

TABLE 4D—Q (plf) & F (1×10^{-6} inches), B DECK (STANDING SEAM), $F_y = 33$ ksi

SUPPORT FASTENERS - PNEUTEK SDK61075 (0.113 to 0.155 inch substrate)

SIDELAP FASTENERS - #10 by $\frac{3}{4}$ " Self-Drilling Screws

DECK GAGE	NUMBER OF SUPPORT FASTENERS	SPACING OF SIDELAP FASTENERS (inches)	Q (plf)	SPAN (ft-in) - 3 SPAN CONDITION									
				F (10^{-6} in)	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"
22	11	6	Q	810	740	700	670	640	620	610	600	590	500
			F	17.0	14.4	12.9	11.9	11.2	10.6	10.2	9.9	9.6	9.4
		12	Q	660	570	510	470	440	420	400	390	380	370
			F	18.2	15.8	14.5	13.6	13.0	12.5	12.2	11.9	11.7	11.5
	9	6	Q	720	670	630	610	590	580	570	560	550	500
			F	17.1	14.5	13.0	12.0	11.2	10.7	10.3	9.9	9.6	9.4
		12	Q	580	510	460	430	410	390	370	360	350	340
			F	18.4	16.1	14.7	13.8	13.2	12.7	12.4	12.1	11.9	11.7
	7	6	Q	580	550	530	520	510	500	500	490	490	480
			F	17.3	14.7	13.1	12.1	11.3	10.8	10.3	10.0	9.7	9.5
		12	Q	440	400	370	350	340	330	320	310	310	300
			F	19.0	16.6	15.1	14.2	13.6	13.1	12.7	12.4	12.1	11.9
		5	Q	480	470	460	450	440	440	430	430	430	430
			F	72.9	56.4	46.5	39.9	35.2	31.6	28.9	26.7	24.9	23.4
			Q	390	360	340	320	310	300	300	290	290	280
		12	F	74.7	58.4	48.6	42.1	37.5	34.0	31.3	29.2	27.4	25.9
20	11	6	Q	980	890	840	800	770	750	730	720	710	610
			F	12.0	10.5	9.5	8.9	8.5	8.2	7.9	7.7	7.6	7.4
		12	Q	790	680	610	570	530	500	480	470	450	440
			F	13.1	11.7	11.0	10.5	10.2	9.9	9.8	9.6	9.5	9.4
	9	6	Q	860	800	760	730	710	690	680	670	660	610
			F	12.1	10.6	9.6	9.0	8.6	8.2	8.0	7.8	7.6	7.5
		12	Q	690	610	550	520	490	470	450	430	420	410
			F	13.3	12.0	11.2	10.7	10.4	10.1	9.9	9.8	9.7	9.6
	7	6	Q	700	660	640	620	610	600	600	590	590	580
			F	12.3	10.7	9.8	9.1	8.7	8.3	8.1	7.8	7.7	7.5
		12	Q	530	480	450	420	410	390	380	370	370	360
			F	13.8	12.4	11.6	11.1	10.7	10.4	10.2	10.0	9.9	9.8
		5	Q	580	560	550	540	530	520	520	510	510	510
			F	47.0	36.7	30.6	26.5	23.5	21.3	19.6	18.3	17.1	16.2
			Q	470	430	400	390	370	360	360	350	340	340
		12	F	48.6	38.5	32.5	28.5	25.6	23.5	21.8	20.5	19.4	18.5
18	11	6	Q	1300	1190	1120	1070	1030	1000	970	950	940	810
			F	7.5	6.8	6.4	6.1	5.9	5.7	5.6	5.5	5.5	5.4
		12	Q	1050	910	820	750	710	670	640	620	600	590
			F	8.4	7.9	7.6	7.4	7.3	7.3	7.2	7.2	7.1	7.1
	9	6	Q	1150	1070	1010	970	950	920	910	890	880	810
			F	7.6	6.9	6.4	6.1	5.9	5.8	5.7	5.6	5.5	5.5
		12	Q	920	810	740	690	650	620	600	580	560	550
			F	8.6	8.1	7.8	7.6	7.5	7.4	7.3	7.3	7.3	7.3
	7	6	Q	930	880	850	830	820	800	790	790	780	770
			F	7.7	7.0	6.5	6.2	6.0	5.9	5.8	5.7	5.6	5.5
		12	Q	710	640	590	560	540	520	510	500	490	480
			F	9.0	8.5	8.1	7.9	7.8	7.7	7.6	7.5	7.5	7.5
		5	Q	770	750	730	720	710	700	690	690	680	680
			F	24.9	19.8	16.8	14.8	13.4	12.3	11.5	10.8	10.2	9.8
			Q	620	570	540	520	500	480	470	470	460	450
		12	F	26.3	21.4	18.5	16.6	15.2	14.2	13.4	12.7	12.2	11.8
16	11	6	Q	1630	1490	1400	1330	1280	1250	1220	1190	1170	1010
			F	5.3	5.0	4.8	4.6	4.6	4.5	4.4	4.4	4.4	4.3
		12	Q	1320	1140	1020	940	880	840	800	780	750	730
			F	6.2	6.0	5.9	5.9	5.8	5.8	5.9	5.9	5.9	5.9
	9	6	Q	1440	1340	1270	1220	1180	1150	1130	1110	1100	1010
			F	5.4	5.1	4.8	4.7	4.6	4.5	4.5	4.4	4.4	4.4
		12	Q	1160	1020	920	860	810	780	750	720	700	690
			F	6.4	6.2	6.1	6.0	6.0	6.0	6.0	6.0	6.0	6.0
	7	6	Q	1160	1100	1070	1040	1020	1000	990	980	980	970
			F	5.6	5.2	4.9	4.8	4.7	4.6	4.5	4.5	4.4	4.4
		12	Q	890	800	740	700	680	650	640	620	610	600
			F	6.7	6.5	6.4	6.3	6.2	6.2	6.2	6.2	6.2	6.2
		5	Q	970	930	910	890	880	870	870	860	850	850
			F	15.2	12.4	10.7	9.6	8.8	8.2	7.7	7.4	7.1	6.8
			Q	780	720	670	640	620	610	590	580	570	570
		12	F	16.5	13.8	12.2	11.2	10.4	9.9	9.5	9.1	8.8	8.6

TABLE 5A—Q (plf) & F (1×10^{-6} inches), B DECK (NESTABLE SEAM), $F_y = 33$ ksi

SUPPORT FASTENERS - PNEUTEK K66062 or K66075 (0.281 inch and up substrate); K64062 or K64075 (0.187 to 0.312 inch substrate); or SDK63075 (0.155 TO 0.250 inch substrate)

SIDELAP FASTENERS - #10 by $\frac{3}{4}$ " Self-Drilling Screws (THE SPACING OF SIDELAP FASTENERS MUST NOT EXCEED 36" O.C., INCREASE THE NUMBER OF INSTALLED FASTENERS PER SPAN AS REQUIRED).

DECK GAGE	NUMBER OF SUPPORT FASTENERS	NO. OF SIDELAP FASTENERS PER SPAN	Q (plf) F (10^{-6} in)	SPAN (ft-in) - 3 SPAN CONDITION									
				3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
11	11	0	Q	700	540	430	350	300	260	230	210	190	170
			F	18.5	16.8	16.3	16.3	16.6	17.1	17.8	18.5	19.3	20.2
		2	Q	820	650	530	440	370	320	290	260	230	210
			F	17.6	15.6	14.7	14.4	14.4	14.6	15.0	15.4	15.9	16.5
		4	Q	930	750	620	520	440	390	340	310	280	260
			F	17.0	14.9	13.9	13.4	13.2	13.3	13.4	13.7	14.0	14.4
		6	Q	1020	830	700	600	520	450	400	360	330	300
			F	16.7	14.4	13.3	12.7	12.4	12.4	12.4	12.6	12.8	13.0
		8	Q	1100	920	770	660	580	510	450	410	370	340
			F	16.5	14.1	12.9	12.2	11.9	11.7	11.7	11.8	11.9	12.1
		10	Q	1180	990	840	730	640	570	510	460	420	380
			F	16.3	13.9	12.6	11.9	11.5	11.3	11.2	11.2	11.3	11.4
		12	Q	1240	1050	910	790	700	620	560	510	460	430
			F	16.2	13.7	12.4	11.6	11.2	10.9	10.8	10.8	10.8	10.9
9	9	0	Q	590	460	360	300	250	220	190	170	160	140
			F	19.2	17.8	17.5	17.8	18.3	19.1	20.0	21.0	22.0	23.1
		2	Q	700	560	460	380	320	280	250	220	200	190
			F	17.9	16.1	15.3	15.2	15.3	15.6	16.1	16.6	17.3	17.9
		4	Q	800	650	540	460	400	340	300	270	250	230
			F	17.3	15.2	14.2	13.8	13.7	13.8	14.1	14.4	14.8	15.3
		6	Q	880	730	620	530	470	410	360	320	300	270
			F	16.9	14.6	13.5	13.0	12.8	12.7	12.8	13.0	13.3	13.6
		8	Q	940	800	680	590	520	470	420	380	340	310
			F	16.6	14.3	13.1	12.4	12.1	12.0	12.0	12.1	12.3	12.5
		10	Q	1000	860	750	650	580	520	470	430	390	360
			F	16.4	14.0	12.7	12.0	11.7	11.5	11.4	11.5	11.6	11.7
		12	Q	1040	910	800	710	630	570	510	470	430	400
			F	16.2	13.8	12.5	11.7	11.3	11.1	11.0	11.0	11.0	11.1
7	7	0	Q	370	280	220	180	160	130	120	110	100	90
			F	21.3	20.5	20.9	21.8	23.1	24.5	26.1	27.8	29.5	31.3
		2	Q	510	400	330	270	230	200	180	160	140	130
			F	18.8	17.2	16.7	16.8	17.2	17.8	18.5	19.4	20.3	21.2
		4	Q	620	500	410	350	300	260	230	210	190	170
			F	17.7	15.8	15.0	14.7	14.8	15.0	15.4	15.9	16.4	17.0
		6	Q	710	580	490	420	370	330	290	260	240	220
			F	17.1	15.0	14.0	13.5	13.4	13.5	13.7	14.0	14.3	14.7
		8	Q	780	660	560	490	430	380	340	310	280	260
			F	16.8	14.5	13.4	12.8	12.6	12.5	12.6	12.7	13.0	13.3
		10	Q	840	720	620	550	480	430	390	350	320	300
			F	16.5	14.2	13.0	12.3	12.0	11.8	11.8	11.9	12.1	12.3
		12	Q	890	780	680	600	540	480	440	400	360	340
			F	16.3	13.9	12.7	12.0	11.5	11.3	11.3	11.3	11.4	11.5
5	5	0	Q	330	260	210	170	140	120	110	100	90	80
			F	78.8	64.4	56.7	52.4	50.1	48.9	48.5	48.7	49.3	50.2
		2	Q	440	360	300	250	220	190	170	150	140	120
			F	75.4	59.9	51.1	45.7	42.2	40.0	38.5	37.6	37.0	36.8
		4	Q	520	440	370	320	280	250	220	200	180	170
			F	74.2	58.2	49.1	43.2	39.3	36.6	34.7	33.4	32.5	31.8
		6	Q	580	500	430	380	340	300	270	250	230	210
			F	73.5	57.4	48.0	41.9	37.8	34.9	32.8	31.2	30.1	29.2
		8	Q	620	550	480	430	390	350	320	290	270	250
			F	73.1	56.8	47.3	41.1	36.9	33.8	31.6	29.9	28.6	27.6
		10	Q	650	590	530	480	430	390	360	330	300	280
			F	72.9	56.5	46.8	40.6	36.2	33.1	30.7	29.0	27.6	26.5
		12	Q	670	620	560	510	470	430	390	360	340	320
			F	72.7	56.2	46.5	40.2	35.8	32.6	30.2	28.3	26.9	25.8
4	4	0	Q	250	200	160	130	110	90	80	70	70	60
			F	108.8	87.9	76.7	70.2	66.4	64.3	63.4	63.3	63.7	64.6
		2	Q	360	290	250	210	180	160	140	120	110	100
			F	104.1	81.7	68.8	60.8	55.4	51.8	49.3	47.6	46.5	45.8
		4	Q	420	360	310	270	240	220	190	170	160	150
			F	102.6	79.7	66.3	57.7	51.9	47.8	44.8	42.6	41.0	39.8
		6	Q	460	410	370	330	290	260	240	220	200	190
			F	101.8	78.7	65.1	56.2	50.2	45.8	42.5	40.1	38.2	36.8
		8	Q	490	450	410	370	330	300	280	260	240	220
			F	101.4	78.1	64.3	55.4	49.1	44.6	41.2	38.6	36.6	35.0
		10	Q	510	470	440	400	370	340	310	290	270	250
			F	101.1	77.7	63.8	54.8	48.4	43.8	40.3	37.6	35.5	33.8
		12	Q	520	490	460	430	400	370	350	320	300	280
			F	100.9	77.4	63.5	54.3	47.9	43.2	39.7	36.9	34.7	33.0

TABLE 5A—Q (plf) & F (1×10^{-6} inches), B DECK (NESTABLE SEAM), $F_y = 33$ ksi

SUPPORT FASTENERS - PNEUTEK K66062 or K66075 (0.281 inch and up substrate); K64062 or K64075 (0.187 to 0.312 inch substrate); or SDK63075 (0.155 to 0.250 inch substrate)

SIDELAP FASTENERS - #10 by $\frac{3}{4}$ " Self-Drilling Screws (THE SPACING OF SIDELAP FASTENERS MUST NOT EXCEED 36" O.C., INCREASE THE NUMBER OF INSTALLED FASTENERS PER SPAN AS REQUIRED).

DECK GAGE	NUMBER OF SUPPORT FASTENERS	NO. OF SIDELAP FASTENERS PER SPAN	Q (plf) F (10^{-6} in)	SPAN (ft-in) - 3 SPAN CONDITION									
				3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
11	11	0	Q	850	660	530	430	370	320	280	250	230	210
			F	13.2	12.5	12.5	12.8	13.3	14.0	14.7	15.5	16.3	17.2
		2	Q	1000	790	650	540	460	390	350	310	280	260
			F	12.4	11.4	11.1	11.1	11.4	11.7	12.2	12.7	13.2	13.8
		4	Q	1130	900	750	640	540	470	420	370	340	310
			F	11.9	10.8	10.3	10.2	10.3	10.5	10.8	11.1	11.5	11.9
		6	Q	1240	1010	850	720	630	550	480	440	400	360
			F	11.6	10.4	9.8	9.6	9.6	9.7	9.8	10.1	10.4	10.7
		8	Q	1340	1110	940	810	710	630	550	500	450	410
			F	11.4	10.1	9.4	9.2	9.1	9.1	9.2	9.4	9.6	9.8
		10	Q	1430	1200	1020	880	780	690	620	560	510	470
			F	11.2	9.9	9.2	8.8	8.7	8.7	8.7	8.9	9.0	9.2
		12	Q	1500	1280	1100	960	850	750	680	620	560	520
			F	11.1	9.7	9.0	8.6	8.4	8.4	8.4	8.5	8.6	8.7
9	9	0	Q	710	560	440	360	310	270	230	210	190	170
			F	13.9	13.4	13.6	14.2	14.9	15.8	16.7	17.7	18.8	19.8
		2	Q	850	680	560	470	400	340	300	270	250	230
			F	12.7	11.8	11.6	11.8	12.2	12.6	13.2	13.8	14.5	15.1
		4	Q	970	790	660	560	480	420	370	330	300	280
			F	12.1	11.0	10.6	10.6	10.7	11.0	11.4	11.8	12.2	12.7
		6	Q	1060	880	750	650	570	500	440	390	360	330
			F	11.7	10.5	10.0	9.8	9.9	10.0	10.2	10.5	10.9	11.2
		8	Q	1140	970	830	720	640	570	510	460	410	380
			F	11.5	10.2	9.6	9.3	9.3	9.3	9.5	9.7	9.9	10.2
		10	Q	1210	1040	910	790	700	630	570	520	470	430
			F	11.3	10.0	9.3	9.0	8.9	8.9	8.9	9.1	9.3	9.5
		12	Q	1270	1110	970	860	760	690	620	570	520	480
			F	11.2	9.8	9.1	8.7	8.5	8.5	8.5	8.6	8.8	8.9
20	7	0	Q	450	350	270	230	190	170	150	130	120	110
			F	15.7	15.9	16.7	17.9	19.2	20.7	22.3	23.9	25.5	27.2
		2	Q	620	480	390	330	280	240	210	190	170	160
			F	13.4	12.8	12.9	13.3	13.9	14.6	15.4	16.3	17.2	18.1
		4	Q	750	600	500	420	370	320	280	250	230	210
			F	12.5	11.6	11.3	11.4	11.7	12.1	12.6	13.1	13.7	14.3
		6	Q	860	710	590	510	450	390	350	320	290	260
			F	12.0	10.9	10.4	10.3	10.4	10.7	11.0	11.4	11.8	12.2
		8	Q	950	800	680	590	520	460	410	380	340	310
			F	11.6	10.4	9.9	9.7	9.7	9.8	10.0	10.3	10.6	10.9
		10	Q	1020	880	760	660	590	520	470	430	390	360
			F	11.4	10.1	9.5	9.2	9.1	9.2	9.3	9.5	9.7	10.0
		12	Q	1080	940	830	730	650	580	530	480	440	410
			F	11.3	9.9	9.2	8.9	8.8	8.7	8.8	8.9	9.1	9.3
5	5	0	Q	400	320	250	210	180	150	130	120	110	100
			F	51.5	43.4	39.4	37.4	36.7	36.7	37.2	38.0	39.1	40.4
		2	Q	530	430	360	310	260	230	200	180	170	150
			F	48.5	39.3	34.3	31.3	29.6	28.6	28.0	27.9	27.9	28.2
		4	Q	630	530	450	390	340	300	270	240	220	200
			F	47.4	37.8	32.4	29.1	26.9	25.5	24.6	24.1	23.8	23.7
		6	Q	700	600	530	460	410	370	330	300	280	250
			F	46.8	37.0	31.4	27.9	25.6	24.0	22.9	22.1	21.6	21.3
		8	Q	750	660	590	520	470	420	380	350	320	300
			F	46.4	36.5	30.8	27.2	24.7	23.0	21.8	20.9	20.3	19.8
		10	Q	790	710	640	580	520	470	430	400	370	340
			F	46.2	36.2	30.4	26.7	24.1	22.3	21.0	20.1	19.4	18.8
		12	Q	810	750	680	620	570	520	480	440	410	380
			F	46.0	36.0	30.1	26.3	23.7	21.9	20.5	19.5	18.7	18.1
4	4	0	Q	310	240	190	160	130	110	100	90	80	70
			F	70.6	58.6	52.5	49.4	48.0	47.6	47.9	48.8	49.9	51.4
		2	Q	430	350	300	260	220	190	170	150	140	130
			F	66.3	52.9	45.4	40.9	38.0	36.2	35.1	34.5	34.3	34.3
		4	Q	510	440	380	330	290	260	240	210	190	180
			F	64.9	51.1	43.1	38.2	34.8	32.6	31.0	30.0	29.2	28.8
		6	Q	560	500	440	390	350	320	290	270	240	230
			F	64.2	50.2	42.0	36.8	33.3	30.8	29.0	27.7	26.8	26.1
		8	Q	600	540	490	450	410	370	340	310	290	270
			F	63.8	49.6	41.3	36.0	32.3	29.7	27.8	26.3	25.3	24.5
		10	Q	620	580	530	490	450	410	380	350	330	310
			F	63.6	49.3	40.9	35.4	31.7	29.0	27.0	25.4	24.3	23.4
		12	Q	640	600	560	520	480	450	420	390	370	340
			F	63.4	49.0	40.6	35.1	31.2	28.5	24.8	23.6	22.6	22.6

TABLE 5A—Q (plf) & F (1×10^{-6} inches), B DECK (NESTABLE SEAM), $F_y = 33$ ksi

SUPPORT FASTENERS - PNEUTEK K66062 or K66075 (0.281 inch and up substrate); K64062 or K64075 (0.187 to 0.312 inch substrate); or SDK63075 (0.155 TO 0.250 inch substrate)

SIDELAP FASTENERS - #10 by $\frac{3}{4}$ " Self-Drilling Screws (THE SPACING OF SIDELAP FASTENERS MUST NOT EXCEED 36" O.C., INCREASE THE NUMBER OF INSTALLED FASTENERS PER SPAN AS REQUIRED).

DECK GAGE	NUMBER OF SUPPORT FASTENERS	NO. OF SIDELAP FASTENERS PER SPAN	Q (plf) F (10^{-6} in)	SPAN (ft-in) - 3 SPAN CONDITION									
				3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
11	11	0	Q	1120	870	700	580	490	430	370	330	300	280
			F	8.5	8.6	8.9	9.5	10.1	10.8	11.5	12.3	13.1	13.9
		2	Q	1320	1040	860	710	610	530	460	410	380	340
			F	7.8	7.6	7.7	8.0	8.4	8.9	9.4	9.9	10.4	11.0
		4	Q	1490	1200	990	840	720	630	560	500	450	410
			F	7.4	7.1	7.0	7.2	7.5	7.8	8.1	8.5	8.9	9.3
		6	Q	1640	1340	1120	960	840	730	650	580	520	480
			F	7.1	6.7	6.6	6.7	6.8	7.1	7.3	7.6	7.9	8.3
		8	Q	1780	1470	1240	1070	930	830	740	660	600	550
			F	7.0	6.5	6.3	6.3	6.4	6.6	6.8	7.0	7.3	7.5
		10	Q	1890	1590	1350	1170	1030	920	820	740	670	620
			F	6.8	6.3	6.1	6.0	6.1	6.2	6.4	6.6	6.8	7.0
		12	Q	1990	1690	1460	1270	1120	1000	900	820	750	680
			F	6.7	6.1	5.9	5.8	5.8	5.9	6.0	6.2	6.4	6.6
9	9	0	Q	940	740	590	490	410	360	310	280	250	230
			F	9.1	9.4	9.9	10.6	11.5	12.4	13.3	14.3	15.2	16.2
		2	Q	1120	900	740	620	530	460	400	360	330	300
			F	8.1	8.0	8.2	8.6	9.1	9.6	10.2	10.8	11.5	12.1
		4	Q	1280	1040	870	750	650	560	490	440	400	370
			F	7.6	7.3	7.3	7.5	7.9	8.2	8.6	9.1	9.5	10.0
		6	Q	1410	1170	990	850	750	660	590	520	470	430
			F	7.3	6.9	6.8	6.9	7.1	7.4	7.7	8.0	8.4	8.7
		8	Q	1510	1280	1100	960	840	750	680	600	550	500
			F	7.0	6.6	6.4	6.5	6.6	6.8	7.0	7.3	7.6	7.9
		10	Q	1600	1380	1200	1050	930	830	750	680	620	570
			F	6.9	6.4	6.2	6.1	6.2	6.4	6.5	6.8	7.0	7.2
		12	Q	1680	1470	1290	1140	1010	910	820	750	690	640
			F	6.8	6.2	6.0	5.9	5.9	6.0	6.2	6.4	6.5	6.8
18	7	0	Q	600	460	360	300	260	220	190	170	160	140
			F	10.7	11.5	12.6	13.9	15.2	16.7	18.1	19.6	21.1	22.7
		2	Q	820	640	520	440	370	320	290	260	230	210
			F	8.8	8.8	9.3	9.9	10.6	11.4	12.2	13.0	13.8	14.7
		4	Q	990	800	660	560	490	430	380	340	310	280
			F	7.9	7.7	7.9	8.2	8.7	9.2	9.7	10.2	10.8	11.4
		6	Q	1140	940	790	680	590	520	470	420	380	350
			F	7.5	7.1	7.1	7.3	7.6	7.9	8.3	8.7	9.1	9.6
		8	Q	1260	1060	900	780	690	610	550	500	450	420
			F	7.2	6.8	6.7	6.8	6.9	7.2	7.5	7.8	8.1	8.4
		10	Q	1350	1160	1000	880	780	690	630	570	520	480
			F	7.0	6.5	6.3	6.4	6.5	6.7	6.9	7.1	7.4	7.7
		12	Q	1430	1250	1090	970	860	770	700	640	590	540
			F	6.8	6.3	6.1	6.1	6.3	6.4	6.6	6.8	7.1	7.1
5	5	0	Q	530	420	340	280	240	200	180	160	140	130
			F	28.9	25.7	24.5	24.4	24.8	25.7	26.7	28.0	29.4	30.8
		2	Q	710	570	480	410	350	310	270	240	220	200
			F	26.3	22.2	20.1	19.1	18.7	18.6	18.8	19.2	19.7	20.2
		4	Q	830	700	600	520	450	400	360	320	290	270
			F	25.3	20.8	18.5	17.1	16.4	16.0	15.9	15.9	16.1	16.3
		6	Q	930	800	700	610	540	480	440	400	370	340
			F	24.8	20.2	17.6	16.1	15.2	14.6	14.3	14.2	14.2	14.2
		8	Q	990	880	780	690	620	560	510	470	430	400
			F	24.4	19.7	17.1	15.5	14.4	13.8	13.4	13.1	13.0	13.0
		10	Q	1040	940	850	760	690	630	570	530	490	450
			F	24.2	19.4	16.7	15.0	13.9	13.2	12.7	12.4	12.2	12.1
		12	Q	1080	990	900	820	750	690	630	590	540	510
			F	24.1	19.2	16.5	14.7	13.6	12.8	12.3	11.9	11.6	11.5
4	4	0	Q	410	320	260	210	180	150	130	120	110	100
			F	38.9	34.1	32.1	31.6	31.9	32.8	34.0	35.4	37.0	38.8
		2	Q	570	470	390	340	290	250	220	200	180	170
			F	35.2	29.1	25.9	24.2	23.3	22.9	22.8	23.0	23.4	23.9
		4	Q	680	580	500	440	390	350	310	280	260	230
			F	34.0	27.5	23.9	21.8	20.5	19.7	19.3	19.1	19.0	19.2
		6	Q	750	660	590	520	470	420	380	350	320	300
			F	33.5	26.7	22.9	20.6	19.1	18.1	17.5	17.1	16.9	16.8
		8	Q	790	720	650	590	540	490	450	410	380	360
			F	33.1	26.3	22.4	19.9	18.3	17.2	16.4	15.9	15.6	15.4
		10	Q	820	760	700	650	590	550	510	470	440	410
			F	32.9	26.0	22.0	19.4	17.7	16.6	15.7	15.1	14.7	14.4
		12	Q	840	790	740	690	640	600	550	520	480	450
			F	32.7	25.7	21.7	19.1	17.3	16.1	15.2	14.6	14.1	13.8

TABLE 5A—Q (plf) & F (1×10^{-6} inches), B DECK (NESTABLE SEAM), $F_y = 33$ ksi

SUPPORT FASTENERS - PNEUTEK K66062 or K66075 (0.281 inch and up substrate); K64062 or K64075 (0.187 to 0.312 inch substrate); or SDK63075 (0.155 to 0.250 inch substrate)

SIDELAP FASTENERS - #10 by $\frac{3}{4}$ " Self-Drilling Screws (THE SPACING OF SIDELAP FASTENERS MUST NOT EXCEED 36" O.C., INCREASE THE NUMBER OF INSTALLED FASTENERS PER SPAN AS REQUIRED).

DECK GAGE	NUMBER OF SUPPORT FASTENERS	NO. OF SIDELAP FASTENERS PER SPAN	Q (plf) F (10^{-6} in)	SPAN (ft-in) - 3 SPAN CONDITION									
				3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
11	11	0	Q	1420	1100	890	740	620	540	480	430	380	350
			F	6.2	6.5	7.0	7.6	8.3	9.0	9.7	10.4	11.1	11.8
		2	Q	1660	1310	1080	910	770	670	590	530	480	430
			F	5.6	5.7	6.0	6.3	6.8	7.2	7.7	8.2	8.7	9.2
		4	Q	1880	1510	1250	1060	920	800	710	630	570	520
			F	5.2	5.2	5.3	5.6	5.9	6.2	6.6	7.0	7.4	7.8
		6	Q	2070	1690	1410	1210	1050	930	820	730	660	610
			F	5.0	4.9	4.9	5.1	5.4	5.6	5.9	6.2	6.5	6.8
		8	Q	2240	1860	1570	1350	1180	1050	930	840	760	690
			F	4.8	4.6	4.7	4.8	5.0	5.2	5.4	5.7	5.9	6.2
		10	Q	2380	2000	1710	1480	1300	1160	1040	940	850	780
			F	4.7	4.5	4.5	4.6	4.7	4.9	5.0	5.2	5.5	5.7
		12	Q	2510	2140	1840	1600	1410	1260	1140	1030	940	860
			F	4.6	4.4	4.3	4.4	4.5	4.6	4.8	4.9	5.1	5.3
9	9	0	Q	1190	930	750	620	530	460	400	360	320	290
			F	6.7	7.2	7.9	8.7	9.5	10.3	11.2	12.1	13.0	13.9
		2	Q	1420	1130	940	790	670	580	510	460	410	380
			F	5.8	6.0	6.4	6.8	7.4	7.9	8.5	9.1	9.7	10.3
		4	Q	1610	1320	1100	940	820	710	630	560	510	460
			F	5.4	5.4	5.6	5.9	6.3	6.7	7.1	7.5	7.9	8.4
		6	Q	1780	1480	1250	1080	940	840	740	670	600	550
			F	5.1	5.0	5.1	5.3	5.6	5.9	6.2	6.5	6.9	7.2
		8	Q	1910	1620	1390	1210	1060	950	850	770	690	630
			F	4.9	4.7	4.8	4.9	5.1	5.4	5.6	5.9	6.2	6.5
		10	Q	2020	1740	1510	1320	1170	1050	950	860	790	720
			F	4.7	4.6	4.6	4.7	4.8	5.0	5.2	5.4	5.7	5.9
		12	Q	2110	1850	1620	1430	1280	1150	1040	950	870	810
			F	4.6	4.4	4.4	4.4	4.6	4.7	4.9	5.1	5.3	5.5
16	7	0	Q	760	580	460	380	320	280	250	220	200	180
			F	8.2	9.1	10.3	11.5	12.8	14.2	15.5	16.9	18.3	19.6
		2	Q	1030	810	660	550	470	410	360	320	290	270
			F	6.4	6.8	7.3	8.0	8.7	9.4	10.2	11.0	11.8	12.6
		4	Q	1250	1010	830	710	620	540	480	430	390	350
			F	5.7	5.8	6.1	6.5	7.0	7.5	8.0	8.5	9.1	9.6
		6	Q	1440	1180	990	850	740	660	590	530	480	440
			F	5.3	5.3	5.4	5.7	6.0	6.4	6.8	7.2	7.6	8.0
		8	Q	1590	1340	1140	990	870	770	690	630	570	520
			F	5.0	4.9	5.0	5.2	5.4	5.7	6.0	6.3	6.7	7.0
		10	Q	1710	1470	1270	1110	980	870	790	720	660	610
			F	4.8	4.7	4.7	4.8	5.0	5.2	5.5	5.7	6.0	6.3
		12	Q	1800	1580	1380	1220	1080	970	880	810	740	680
			F	4.7	4.5	4.5	4.6	4.7	4.9	5.1	5.3	5.5	5.8
5	5	0	Q	670	530	430	350	300	260	230	200	180	170
			F	18.6	17.5	17.5	18.0	18.9	20.0	21.3	22.6	24.0	25.5
		2	Q	890	720	600	510	450	390	340	310	280	250
			F	16.3	14.3	13.5	13.3	13.4	13.8	14.2	14.8	15.4	16.1
		4	Q	1050	880	750	650	570	510	460	410	370	340
			F	15.4	13.2	12.1	11.6	11.4	11.4	11.6	11.8	12.2	12.6
		6	Q	1170	1010	880	770	680	610	550	500	460	420
			F	14.9	12.5	11.3	10.7	10.3	10.2	10.2	10.3	10.5	10.7
		8	Q	1250	1110	980	870	780	710	640	590	540	500
			F	14.6	12.2	10.8	10.1	9.7	9.4	9.4	9.4	9.5	9.6
		10	Q	1310	1190	1070	960	870	790	720	670	620	570
			F	14.5	11.9	10.5	9.7	9.2	8.9	8.8	8.7	8.8	8.8
		12	Q	1360	1250	1140	1040	950	870	800	740	690	640
			F	14.3	11.7	10.3	9.4	8.9	8.6	8.4	8.3	8.3	8.3
4	4	0	Q	510	400	320	270	230	200	170	150	140	120
			F	24.7	22.8	22.5	23.0	24.0	25.3	26.7	28.3	30.0	31.8
		2	Q	720	590	500	430	370	320	290	260	230	210
			F	21.4	18.4	17.0	16.4	16.3	16.5	16.8	17.3	17.9	18.6
		4	Q	850	730	630	550	490	440	390	360	320	300
			F	20.3	17.0	15.2	14.3	13.8	13.6	13.6	13.8	14.0	14.4
		6	Q	940	840	740	660	590	530	490	440	410	380
			F	19.8	16.3	14.3	13.2	12.6	12.2	12.1	12.0	12.1	12.3
		8	Q	1000	910	820	750	680	620	570	520	480	450
			F	19.5	15.8	13.8	12.6	11.9	11.4	11.1	11.0	11.0	11.0
		10	Q	1040	960	890	820	750	690	640	590	550	510
			F	19.3	15.6	13.5	12.2	11.4	10.8	10.5	10.3	10.2	10.2
		12	Q	1060	1000	940	870	810	750	700	650	610	570
			F	19.1	15.4	13.2	11.9	11.0	10.4	10.1	9.8	9.7	9.6

TABLE 5B—Q (plf) & F (1x10⁻⁶ inches), B DECK (NESTABLE SEAM), Fy = 33 ksi

SUPPORT FASTENERS - PNEUTEK SDK61075 (0.113 to 0.155 inch substrate)

SIDELAP FASTENERS - #10 by 3/4" Self-Drilling Screws (THE SPACING OF SIDELAP FASTENERS MUST NOT EXCEED 36" O.C., INCREASE THE NUMBER OF INSTALLED FASTENERS PER SPAN AS REQUIRED).

DECK GAGE	NUMBER OF SUPPORT FASTENERS	NO. OF SIDELAP FASTENERS PER SPAN	Q (plf) F (10 ⁻⁶ in)	SPAN (ft-in) - 3 SPAN CONDITION									
				3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
11			0	Q 460	360	280	230	200	170	150	140	120	110
			F 22.3	21.9	22.6	23.9	25.5	27.3	29.2	31.2	33.3	35.4	
			2	Q 580	460	380	320	270	230	210	190	170	150
			F 19.1	17.6	17.3	17.5	18.0	18.7	19.5	20.5	21.5	22.5	
			4	Q 670	550	460	390	340	300	260	240	220	200
			F 17.9	16.0	15.2	15.0	15.1	15.4	15.9	16.4	17.0	17.7	
			6	Q 750	630	530	460	400	360	320	290	260	240
			F 17.2	15.1	14.2	13.7	13.6	13.7	14.0	14.3	14.7	15.1	
			8	Q 810	690	600	520	460	410	370	340	310	280
			F 16.8	14.6	13.5	12.9	12.7	12.7	12.8	13.0	13.2	13.5	
			10	Q 860	750	660	580	510	460	420	380	350	320
			F 16.6	14.2	13.1	12.4	12.1	12.0	12.0	12.1	12.2	12.4	
9			12	Q 900	800	710	630	560	510	460	420	390	360
			F 16.4	14.0	12.7	12.0	11.6	11.4	11.4	11.4	11.5	11.7	11.7
			0	Q 380	300	240	190	160	140	130	110	100	90
			F 23.9	24.0	25.3	27.1	29.2	31.5	33.9	36.5	39.1	41.8	
			2	Q 490	400	330	280	240	210	180	160	150	140
			F 19.5	18.2	18.0	18.3	19.0	19.9	20.8	21.9	23.1	24.3	
			4	Q 580	480	410	350	310	270	240	210	190	180
			F 18.1	16.3	15.6	15.4	15.6	16.0	16.5	17.1	17.7	18.5	
			6	Q 640	550	470	410	360	330	290	270	240	220
			F 17.3	15.3	14.3	14.0	13.9	14.0	14.3	14.7	15.1	15.6	
			8	Q 690	600	530	470	420	370	340	310	280	260
			F 16.9	14.7	13.6	13.1	12.9	12.9	13.0	13.2	13.5	13.8	
7			10	Q 720	650	580	510	460	420	380	350	320	300
			F 16.6	14.3	13.1	12.5	12.2	12.1	12.1	12.2	12.4	12.6	
			12	Q 750	680	620	560	500	460	420	390	360	330
			F 16.4	14.0	12.8	12.1	11.7	11.5	11.5	11.5	11.7	11.8	
			0	Q 250	190	150	120	100	90	80	70	60	60
			F 28.3	29.8	32.5	35.8	39.4	43.1	47.0	51.0	55.1	59.2	
			2	Q 370	300	240	210	170	150	130	120	110	100
			F 20.4	19.4	19.4	20.1	21.0	22.2	23.5	24.8	26.3	27.8	
			4	Q 470	380	320	280	240	210	190	170	160	140
			F 18.4	16.7	16.2	16.2	16.4	16.9	17.6	18.3	19.1	19.9	
			6	Q 540	460	390	340	300	270	240	220	200	190
			F 17.5	15.6	14.7	14.4	14.4	14.6	14.9	15.3	15.8	16.4	
5			8	Q 590	510	450	400	350	320	290	260	240	220
			F 17.0	14.9	13.8	13.3	13.2	13.2	13.4	13.6	13.9	14.3	
			10	Q 620	560	500	440	400	360	330	300	280	260
			F 16.7	14.4	13.3	12.7	12.4	12.3	12.4	12.5	12.7	13.0	
			12	Q 650	590	540	490	440	400	370	340	320	290
			F 16.5	14.1	12.9	12.2	11.9	11.7	11.7	11.7	11.9	12.1	
			0	Q 220	170	140	110	90	80	70	60	60	50
			F 87.2	75.6	70.7	69.2	69.2	71.2	73.7	76.7	80.1	83.8	
			2	Q 320	260	220	190	170	140	130	120	110	100
			F 77.1	62.1	53.8	49.0	46.0	44.3	43.4	43.0	43.0	43.4	
			4	Q 380	330	290	250	220	200	180	160	150	140
4			F 74.9	59.2	50.2	44.6	40.9	38.4	36.8	35.7	35.0	34.6	
			6	Q 420	370	330	300	270	240	220	200	190	180
			F 73.9	57.9	48.6	42.7	38.7	35.9	33.9	32.5	31.4	30.7	
			8	Q 440	400	370	340	310	280	260	240	220	210
			F 73.4	57.2	47.7	41.6	37.4	34.4	32.3	30.7	29.5	28.6	
			10	Q 450	430	400	370	340	320	290	270	250	240
			F 73.0	56.7	47.1	40.9	36.6	33.5	31.2	29.5	28.2	27.2	
			12	Q 460	440	420	390	370	340	320	300	280	270
			F 72.8	56.4	46.7	40.4	36.0	32.9	30.5	28.7	27.3	26.2	
			0	Q 170	130	100	80	70	60	50	40	40	
			F 119.3	101.9	94.1	91.1	90.9	92.3	94.8	98.2	102.2	106.5	

TABLE 5B—Q (plf) & F (1x10⁻⁶ inches), B DECK (NESTABLE SEAM), Fy = 33 ksi

SUPPORT FASTENERS - PNEUTEK SDK61075 (0.113 to 0.155 inch substrate)

SIDELAP FASTENERS - #10 by 3/4" Self-Drilling Screws (THE SPACING OF SIDELAP FASTENERS MUST NOT EXCEED 36" O.C., INCREASE THE NUMBER OF INSTALLED FASTENERS PER SPAN AS REQUIRED).

DECK GAGE	NUMBER OF SUPPORT FASTENERS	NO. OF SIDELAP FASTENERS PER SPAN	Q (plf) F (10 ⁻⁶ in)	SPAN (ft-in) - 3 SPAN CONDITION									
				3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
11	11	0	Q	550	430	340	280	240	210	180	160	150	140
			F	16.7	17.1	18.3	19.7	21.4	23.2	25.1	27.0	29.0	31.0
			Q	700	560	460	390	330	280	250	230	210	190
			F	13.8	13.2	13.4	13.9	14.6	15.4	16.3	17.3	18.3	19.3
			Q	820	670	560	480	420	360	320	290	260	240
			F	12.6	11.8	11.5	11.7	12.0	12.5	13.0	13.6	14.2	14.9
		6	Q	910	760	650	560	490	430	390	350	320	290
			F	12.1	11.0	10.6	10.5	10.7	10.9	11.3	11.6	12.1	12.6
			Q	990	840	730	630	560	500	450	410	370	340
		8	F	11.7	10.5	10.0	9.8	9.8	10.0	10.2	10.4	10.8	11.1
			Q	1050	910	800	700	620	560	510	460	420	390
			F	11.5	10.2	9.6	9.3	9.2	9.3	9.4	9.6	9.9	10.1
		10	Q	1100	970	860	760	680	620	560	510	470	440
			F	11.3	9.9	9.3	9.0	8.8	8.8	8.9	9.0	9.2	9.4
			Q	470	360	290	240	200	170	150	140	120	110
		9	F	18.1	19.0	20.7	22.6	24.8	27.0	29.4	31.8	34.3	36.8
			Q	600	480	400	340	290	250	220	200	180	170
			F	14.1	13.8	14.1	14.7	15.5	16.5	17.5	18.6	19.7	20.9
			Q	700	580	490	430	370	330	290	260	240	220
			F	12.8	12.0	11.8	12.0	12.4	12.9	13.5	14.2	14.9	15.6
			Q	780	660	570	500	440	390	360	320	290	270
			F	12.2	11.1	10.7	10.7	10.9	11.2	11.6	12.0	12.5	13.0
			Q	830	730	640	570	500	450	410	380	350	320
			F	11.8	10.6	10.1	9.9	10.0	10.1	10.4	10.7	11.0	11.4
			Q	880	780	700	620	560	510	460	420	390	360
			F	11.5	10.2	9.6	9.4	9.4	9.4	9.6	9.8	10.0	10.3
			Q	910	830	750	680	610	560	510	470	440	400
			F	11.3	10.0	9.3	9.0	8.9	8.9	9.0	9.2	9.4	9.6
20	7	0	Q	300	230	180	150	120	110	90	90	80	70
			F	22.1	24.3	27.3	30.5	34.0	37.6	41.3	45.0	48.8	52.6
			Q	450	360	300	250	210	190	160	150	130	120
			F	14.9	14.8	15.4	16.3	17.4	18.6	19.9	21.2	22.6	24.1
			Q	570	470	390	340	290	260	230	210	190	170
			F	13.2	12.4	12.4	12.7	13.2	13.8	14.5	15.3	16.1	16.9
		6	Q	650	550	480	410	370	330	290	270	240	230
			F	12.3	11.4	11.0	11.1	11.3	11.7	12.1	12.6	13.1	13.7
			Q	710	620	550	480	430	390	350	320	290	270
			F	11.9	10.7	10.3	10.2	10.2	10.4	10.7	11.1	11.4	11.8
			Q	750	680	600	540	490	440	400	370	340	310
			F	11.6	10.3	9.8	9.6	9.5	9.6	9.8	10.1	10.3	10.6
		8	Q	780	720	650	590	540	490	450	410	380	360
			F	11.4	10.1	9.4	9.1	9.0	9.1	9.2	9.4	9.6	9.8
			Q	260	210	170	140	120	100	90	80	70	70
			F	59.1	53.5	52.0	52.6	54.4	57.0	60.0	63.4	67.0	70.8
			Q	380	320	270	230	200	180	160	140	130	120
			F	50.0	41.3	36.8	34.3	33.0	32.5	32.5	32.8	33.4	34.1
5	5	0	Q	460	400	350	300	270	240	220	200	180	170
			F	48.0	38.6	33.4	30.3	28.4	27.2	26.5	26.1	26.0	26.1
			Q	500	450	410	360	330	300	270	250	230	210
			F	47.1	37.5	32.0	28.6	26.3	24.9	23.9	23.2	22.8	22.6
			Q	530	490	450	410	380	340	320	290	270	250
			F	46.6	36.8	31.2	27.6	25.2	23.6	22.4	21.6	21.0	20.7
		10	Q	550	520	480	450	410	380	360	330	310	290
			F	46.3	36.4	30.6	27.0	24.5	22.7	21.5	20.6	19.9	19.4
			Q	560	540	510	470	440	420	390	370	340	320
			F	46.1	36.1	30.3	26.5	24.0	22.1	20.8	19.8	19.1	18.6
			Q	200	160	120	100	90	70	60	60	50	50
			F	80.1	71.3	68.4	68.5	70.2	73.0	76.5	80.5	84.8	89.4
4	4	0	Q	310	260	220	190	170	150	130	120	110	100
			F	67.7	54.8	47.8	43.8	41.4	40.1	39.4	39.3	39.5	40.0
			Q	370	330	290	260	230	210	190	180	160	150
			F	65.5	51.8	44.1	39.3	36.1	34.1	32.7	31.8	31.3	31.0
			Q	400	370	340	310	280	260	240	220	200	190
			F	64.5	50.6	42.5	37.4	33.9	31.6	29.9	28.7	27.8	27.3
		8	Q	420	390	370	340	320	300	280	260	240	230
			F	64.0	49.9	41.6	36.3	32.7	30.2	28.3	26.9	25.9	25.2
			Q	430	410	390	370	350	330	310	290	270	260
			F	63.7	49.4	41.1	35.7	32.0	29.3	27.3	25.9	24.7	23.9
			Q	430	420	400	390	370	350	330	320	300	280
			F	63.5	49.1	40.7	35.2	31.4	28.7	26.7	25.1	23.9	23.0

TABLE 5B—Q (plf) & F (1×10^{-6} inches), B DECK (NESTABLE SEAM), $F_y = 33$ ksi

SUPPORT FASTENERS - PNEUTEK SDK61075 (0.113 to 0.155 inch substrate)

SIDELAP FASTENERS - #10 by $\frac{3}{4}$ " Self-Drilling Screws (THE SPACING OF SIDELAP FASTENERS MUST NOT EXCEED 36" O.C., INCREASE THE NUMBER OF INSTALLED FASTENERS PER SPAN AS REQUIRED).

DECK GAGE	NUMBER OF SUPPORT FASTENERS	NO. OF SIDELAP FASTENERS PER SPAN	Q (plf) F (10^{-6} in)	SPAN (ft-in) - 3 SPAN CONDITION									
				3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
11		0	Q	730	570	460	380	320	280	240	220	200	180
			F	11.6	12.6	14.0	15.5	17.1	18.8	20.6	22.3	24.1	25.9
		2	Q	920	740	610	510	440	380	340	300	270	250
			F	9.0	9.2	9.7	10.4	11.2	12.1	13.0	13.9	14.8	15.8
		4	Q	1080	880	740	630	550	480	430	380	350	320
			F	8.1	7.9	8.1	8.5	9.0	9.5	10.1	10.7	11.3	11.9
		6	Q	1210	1010	860	740	650	580	520	460	420	380
			F	7.5	7.2	7.3	7.5	7.8	8.1	8.5	9.0	9.4	9.9
		8	Q	1310	1120	960	840	740	660	600	540	490	450
			F	7.2	6.8	6.8	6.9	7.1	7.3	7.6	7.9	8.3	8.6
		10	Q	1390	1210	1050	930	820	740	670	610	560	520
			F	7.0	6.5	6.4	6.4	6.6	6.7	7.0	7.2	7.5	7.8
		12	Q	1450	1280	1140	1010	900	820	740	680	620	580
			F	6.9	6.3	6.1	6.1	6.2	6.3	6.5	6.7	6.9	7.2
9		0	Q	620	480	390	320	270	230	210	180	160	150
			F	12.8	14.3	16.0	18.0	20.1	22.2	24.3	26.5	28.7	30.9
		2	Q	790	640	530	450	390	340	300	260	240	220
			F	9.4	9.7	10.3	11.1	12.0	13.0	14.0	15.0	16.1	17.1
		4	Q	930	770	650	560	490	440	390	350	310	290
			F	8.2	8.1	8.4	8.8	9.3	9.9	10.5	11.2	11.9	12.6
		6	Q	1030	880	760	660	580	520	470	430	390	350
			F	7.6	7.4	7.4	7.7	8.0	8.4	8.8	9.3	9.8	10.3
		8	Q	1100	970	850	750	670	600	540	500	460	420
			F	7.3	6.9	6.9	7.0	7.2	7.5	7.8	8.1	8.5	8.9
		10	Q	1160	1040	920	830	740	670	610	560	520	480
			F	7.1	6.6	6.5	6.5	6.7	6.9	7.1	7.4	7.7	8.0
		12	Q	1200	1090	990	890	810	740	680	620	580	540
			F	6.9	6.4	6.2	6.2	6.3	6.4	6.6	6.8	7.1	7.3
18		0	Q	390	300	240	200	170	140	130	110	100	90
			F	16.2	18.8	21.8	24.9	28.1	31.4	34.7	38.0	41.3	44.7
		2	Q	600	470	390	330	280	250	220	200	180	160
			F	10.0	10.6	11.4	12.5	13.6	14.8	16.1	17.3	18.6	19.9
		4	Q	750	620	520	450	390	350	310	280	250	230
			F	8.5	8.5	8.9	9.4	10.0	10.7	11.4	12.1	12.9	13.7
		6	Q	860	730	630	550	480	430	390	350	320	300
			F	7.8	7.6	7.7	8.0	8.4	8.8	9.3	9.8	10.3	10.9
		8	Q	940	820	720	640	570	510	460	420	390	360
			F	7.4	7.0	7.0	7.2	7.4	7.7	8.1	8.5	8.9	9.3
		10	Q	1000	890	800	710	640	580	530	490	450	420
			F	7.1	6.7	6.6	6.6	6.8	7.0	7.3	7.6	7.9	8.2
		12	Q	1040	950	860	780	710	650	590	550	510	470
			F	6.9	6.4	6.3	6.3	6.4	6.5	6.8	7.0	7.2	7.5
5		0	Q	350	270	220	180	150	130	120	100	90	90
			F	35.5	34.5	35.5	37.6	40.3	43.3	46.6	50.0	53.6	57.3
		2	Q	510	420	350	300	270	240	210	190	170	150
			F	27.5	23.9	22.3	21.7	21.7	22.1	22.7	23.5	24.4	25.4
		4	Q	610	530	460	400	360	320	290	260	240	220
			F	25.8	21.6	19.4	18.2	17.6	17.4	17.5	17.7	18.0	18.5
		6	Q	670	600	540	480	430	390	360	330	300	280
			F	25.1	20.5	18.1	16.7	15.9	15.4	15.2	15.2	15.2	15.4
		8	Q	710	650	590	540	500	460	420	390	360	330
			F	24.6	20.0	17.4	15.8	14.9	14.3	13.9	13.7	13.7	13.7
		10	Q	730	690	640	590	550	510	470	440	410	380
			F	24.4	19.6	16.9	15.3	14.2	13.5	13.1	12.8	12.7	12.6
		12	Q	750	710	670	630	590	550	520	480	450	430
			F	24.2	19.4	16.6	14.9	13.8	13.0	12.5	12.2	12.0	11.9
4		0	Q	270	210	170	140	120	100	90	80	70	60
			F	47.2	45.1	45.9	48.1	51.2	54.8	58.8	63.0	67.3	71.8
		2	Q	410	350	300	260	230	200	180	160	140	130
			F	36.5	30.8	28.0	26.7	26.2	26.2	26.6	27.2	28.0	28.9
		4	Q	490	440	390	340	310	280	250	230	210	200
			F	34.5	28.2	24.7	22.8	21.6	21.0	20.7	20.7	20.8	21.1
		6	Q	530	490	450	410	370	340	320	290	270	250
			F	33.7	27.1	23.4	21.1	19.7	18.8	18.3	17.9	17.8	17.8
		8	Q	550	520	490	450	420	390	370	340	320	300
			F	33.3	26.5	22.6	20.2	18.6	17.6	16.9	16.4	16.2	16.0
		10	Q	570	540	520	490	460	430	410	380	360	340
			F	33.0	26.1	22.1	19.6	18.0	16.8	16.0	15.5	15.1	14.9
		12	Q	580	560	530	510	490	460	440	420	400	380
			F	32.8	25.8	21.8	19.3	17.5	16.3	15.5	14.8	14.4	14.1

TABLE 5B—Q (plf) & F (1×10^{-6} inches), B DECK (NESTABLE SEAM), $F_y = 33$ ksi

SUPPORT FASTENERS - PNEUTEK SDK61075 (0.113 to 0.155 inch substrate)

SIDELAP FASTENERS - #10 by $\frac{3}{4}$ " Self-Drilling Screws (THE SPACING OF SIDELAP FASTENERS MUST NOT EXCEED 36" O.C., INCREASE THE NUMBER OF INSTALLED FASTENERS PER SPAN AS REQUIRED).

DECK GAGE	NUMBER OF SUPPORT FASTENERS	NO. OF SIDELAP FASTENERS PER SPAN	Q (plf) F (10^{-6} in)	SPAN (ft-in) - 3 SPAN CONDITION									
				3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
11	11	0	Q	930	720	580	480	410	350	310	280	250	230
			F	8.9	10.1	11.5	13.0	14.5	16.1	17.7	19.3	20.9	22.5
			Q	1170	930	770	650	560	480	430	380	340	310
			F	6.6	7.1	7.7	8.5	9.2	10.1	10.9	11.8	12.6	13.5
			Q	1360	1110	930	800	690	610	540	480	440	400
			F	5.8	6.0	6.3	6.7	7.2	7.8	8.3	8.9	9.5	10.1
		6	Q	1520	1270	1080	930	820	730	650	590	530	490
			F	5.3	5.4	5.6	5.8	6.2	6.6	7.0	7.4	7.8	8.3
			Q	1650	1410	1210	1060	930	830	750	680	620	570
		8	F	5.1	5.0	5.1	5.3	5.5	5.8	6.1	6.5	6.8	7.2
			Q	1750	1520	1330	1170	1040	930	840	770	710	650
			F	4.9	4.7	4.8	4.9	5.1	5.3	5.6	5.8	6.1	6.4
		10	Q	1830	1620	1430	1270	1140	1030	930	850	790	730
			F	4.7	4.5	4.5	4.6	4.8	5.0	5.2	5.4	5.6	5.9
			Q	780	610	490	410	340	300	260	230	210	190
		9	F	10.0	11.6	13.4	15.2	17.1	19.1	21.0	23.0	25.0	27.0
			Q	1000	810	670	570	490	430	380	340	300	280
			F	7.0	7.5	8.2	9.1	10.0	10.9	11.8	12.8	13.8	14.7
			Q	1170	970	820	710	620	550	490	440	400	360
			F	5.9	6.1	6.5	7.0	7.6	8.2	8.8	9.4	10.0	10.6
			Q	1290	1110	960	840	740	660	590	540	490	450
			F	5.4	5.5	5.7	6.0	6.4	6.8	7.2	7.7	8.1	8.6
			Q	1390	1220	1070	950	840	760	690	630	580	530
			F	5.1	5.0	5.2	5.4	5.7	6.0	6.3	6.7	7.0	7.4
			Q	1460	1310	1170	1040	940	850	770	710	650	610
			F	4.9	4.8	4.8	5.0	5.2	5.4	5.7	6.0	6.3	6.6
			Q	1520	1380	1250	1130	1020	930	850	790	730	680
			F	4.8	4.6	4.6	4.7	4.9	5.0	5.3	5.5	5.7	6.0
16	7	0	Q	500	380	300	250	210	180	160	140	130	120
			F	13.1	15.7	18.5	21.3	24.3	27.2	30.2	33.2	36.2	39.3
			Q	750	600	490	420	360	310	280	250	220	200
			F	7.6	8.3	9.3	10.3	11.4	12.5	13.7	14.8	16.0	17.2
			Q	950	780	660	560	490	440	390	350	320	290
			F	6.2	6.5	7.0	7.5	8.2	8.8	9.5	10.2	10.9	11.7
		6	Q	1090	930	800	690	610	540	490	450	410	380
			F	5.6	5.6	5.9	6.3	6.7	7.2	7.6	8.1	8.6	9.2
			Q	1190	1040	910	800	720	640	580	530	490	450
			F	5.2	5.2	5.3	5.6	5.9	6.2	6.6	6.9	7.3	7.7
			Q	1260	1130	1010	900	810	740	670	610	570	530
			F	5.0	4.9	4.9	5.1	5.3	5.6	5.9	6.2	6.5	6.8
		8	Q	1310	1200	1090	980	900	820	750	690	640	590
			F	4.8	4.6	4.7	4.8	5.0	5.2	5.4	5.6	5.9	6.1
			Q	440	340	280	230	200	170	150	130	120	110
			F	24.5	25.3	27.3	29.8	32.7	35.7	38.9	42.2	45.6	49.0
			Q	640	530	450	380	340	300	260	240	210	200
			F	17.4	15.9	15.4	15.6	16.1	16.8	17.6	18.6	19.6	20.6
		4	Q	770	660	580	510	450	400	370	330	310	280
			F	15.9	13.8	12.9	12.5	12.5	12.7	13.0	13.4	13.9	14.5
			Q	840	760	680	610	550	500	450	420	380	360
			F	15.2	12.9	11.8	11.2	10.9	10.9	11.0	11.2	11.4	11.8
			Q	890	820	750	690	630	570	530	490	450	420
			F	14.8	12.4	11.1	10.4	10.1	9.9	9.9	10.1	10.2	10.2
		10	Q	920	860	800	750	690	640	590	550	520	480
			F	14.6	12.1	10.7	9.9	9.5	9.2	9.1	9.1	9.2	9.3
			Q	940	900	840	790	740	700	650	610	570	540
			F	14.4	11.8	10.4	9.6	9.1	8.8	8.6	8.6	8.6	8.6
			Q	340	260	210	170	150	130	110	100	90	80
			F	32.0	32.6	34.7	37.7	41.2	44.9	48.8	52.9	57.0	61.3
		8	Q	520	440	380	320	290	250	230	200	180	170
			F	22.5	19.8	18.8	18.6	18.9	19.4	20.2	21.0	22.0	23.0
			Q	620	550	490	440	390	350	320	290	270	250
			F	20.8	17.5	15.9	15.1	14.8	14.8	14.9	15.2	15.6	16.1
			Q	670	620	560	520	470	430	400	370	340	320
			F	20.0	16.6	14.7	13.7	13.1	12.8	12.8	12.8	13.0	13.2
		12	Q	700	660	620	570	530	500	460	430	400	380
			F	19.6	16.0	14.0	12.9	12.2	11.8	11.6	11.5	11.5	11.6
			Q	710	680	650	610	580	550	510	480	460	430
			F	19.4	15.7	13.6	12.4	11.6	11.1	10.8	10.6	10.6	10.6

TABLE 6A—Q (plf) & F (1x10⁻⁶ inches), N DECK (STANDING SEAM), Fy = 33 ksi

SUPPORT FASTENERS - PNEUTEK K66062 or K66075 (0.281 inch and up substrate); K64062 or K64075 (0.187 to 0.312 inch substrate); or SDK63075 (0.155 to 0.250 inch substrate)

SIDELAP FASTENERS – Button Punches

DECK GAGE	NUMBER OF SUPPORT FASTENERS	SPACING OF SIDELAP FASTENERS (inches)	Q (plf) F (10 ⁻⁶ in)	SPAN (ft-in) - 3 SPAN CONDITION									
				6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	13'-0"	14'-0"	16'-0"
22	8	6	Q	400	370	340	320	310	300	290	280	270	260
			F	51.8	47.9	45.2	43.3	41.9	40.9	40.1	39.5	39.1	38.6
		12	Q	310	280	260	240	220	210	200	190	180	170
			F	53.3	49.8	47.5	46.1	45.1	44.6	44.3	44.2	44.3	44.7
	6	6	Q	380	350	330	310	300	290	280	270	260	250
			F	52.9	49.1	46.5	44.6	43.3	42.3	41.5	41.0	40.6	40.1
		12	Q	300	270	250	230	210	200	190	180	180	170
			F	54.8	51.5	49.4	48.0	47.2	46.8	46.6	46.6	46.7	47.3
	4	6	Q	290	270	260	250	240	230	230	220	220	210
			F	58.2	54.7	52.2	50.5	49.2	48.2	47.5	47.0	46.6	46.0
		12	Q	200	180	170	160	150	150	140	140	130	130
			F	62.4	59.8	58.3	57.5	57.1	57.1	57.2	57.5	57.8	58.8
20	8	6	Q	520	480	450	430	410	400	380	370	360	350
			F	36.4	34.3	33.0	32.1	31.5	31.2	31.0	30.9	30.8	30.9
		12	Q	400	360	330	310	290	270	260	250	240	230
			F	37.7	36.0	35.1	34.6	34.5	34.6	34.8	35.1	35.5	36.5
	6	6	Q	500	470	440	420	400	390	380	370	360	340
			F	37.4	35.4	34.2	33.3	32.8	32.5	32.3	32.2	32.2	32.3
		12	Q	380	340	320	290	280	260	250	240	230	220
			F	39.1	37.6	36.8	36.4	36.4	36.6	36.9	37.3	37.8	38.8
	4	6	Q	380	360	350	340	330	320	320	310	310	300
			F	42.2	40.5	39.4	38.7	38.2	37.9	37.7	37.6	37.6	37.6
		12	Q	260	240	230	210	210	200	190	190	180	170
			F	46.1	45.2	44.9	45.1	45.4	46.0	46.6	47.2	47.9	49.3
18	8	6	Q	800	750	710	680	660	640	620	610	590	570
			F	22.6	22.0	21.8	21.7	21.8	21.9	22.1	22.4	22.6	23.2
		12	Q	580	530	490	460	440	420	400	390	380	360
			F	23.8	23.5	23.6	23.9	24.4	24.9	25.5	26.1	26.7	28.0
	6	6	Q	780	730	690	670	640	620	610	600	580	570
			F	23.5	23.0	22.8	22.8	22.9	23.1	23.3	23.5	23.8	24.3
		12	Q	560	510	470	450	420	400	390	380	370	350
			F	25.0	24.9	25.1	25.5	26.0	26.6	27.3	28.0	28.6	30.0
	4	6	Q	610	590	570	550	540	530	520	520	510	500
			F	27.7	27.4	27.3	27.4	27.6	27.8	28.0	28.3	28.5	29.0
		12	Q	400	380	360	340	330	320	310	300	300	290
			F	31.0	31.5	32.2	33.0	33.8	34.8	35.7	36.5	37.4	39.1
16	8	6	Q	1140	1080	1030	990	960	930	910	900	880	860
			F	16.2	16.2	16.4	16.7	17.0	17.3	17.7	18.0	18.4	19.0
		12	Q	800	730	680	650	620	590	570	550	540	510
			F	17.3	17.6	18.1	18.6	19.3	19.9	20.6	21.3	22.0	23.3
	6	6	Q	1110	1050	1010	970	940	920	900	880	870	850
			F	17.0	17.1	17.3	17.6	18.0	18.3	18.7	19.0	19.4	20.1
		12	Q	770	710	660	630	600	580	560	540	530	500
			F	18.3	18.8	19.4	20.0	20.7	21.5	22.2	23.0	23.7	25.2
	4	6	Q	880	850	830	810	800	780	770	760	760	740
			F	20.8	21.0	21.4	21.8	22.1	22.5	22.9	23.3	23.6	24.2
		12	Q	570	540	510	490	480	470	460	450	440	430
			F	23.7	24.7	25.7	26.7	27.7	28.8	29.7	30.7	31.6	33.3

TABLE 6B—Q (plf) & F (1×10^{-6} inches), N DECK (STANDING SEAM), $F_y = 33$ ksi

SUPPORT FASTENERS - PNEUTEK K66062 or K66075 (0.281 inch and up substrate); K64062 or K64075 (0.187 to 0.312 inch substrate); or SDK63075 (0.155 to 0.250 inch substrate)

SIDELAP FASTENERS - #10 by $\frac{3}{4}$ " Self-Drilling Screws

DECK GAGE	NUMBER OF SUPPORT FASTENERS	SPACING OF SIDELAP FASTENERS (inches)	Q (plf) F (10^{-6} in)	SPAN (ft-in) - 3 SPAN CONDITION									
				6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	13'-0"	14'-0"	16'-0"
22	8	6	Q	740	710	680	660	650	630	620	610	610	590
			F	44.5	39.4	35.6	32.6	30.3	28.4	26.8	25.4	24.3	22.4
		12	Q	480	450	430	410	390	380	370	360	350	340
			F	46.5	41.6	38.0	35.2	33.0	31.2	29.6	28.4	27.3	25.5
	6	6	Q	700	670	650	640	620	610	600	590	590	570
			F	44.6	39.5	35.7	32.7	30.4	28.4	26.8	25.5	24.3	22.4
		12	Q	470	440	420	400	380	370	360	360	350	340
			F	46.8	41.9	38.3	35.4	33.2	31.4	29.8	28.6	27.5	25.7
	4	6	Q	570	550	540	540	530	520	520	520	510	510
			F	44.9	39.8	36.0	33.0	30.6	28.7	27.0	25.7	24.5	22.6
		12	Q	370	350	340	330	320	320	310	310	300	300
			F	47.8	42.8	39.1	36.2	34.0	32.1	30.5	29.2	28.1	26.3
20	8	6	Q	890	850	820	800	780	760	750	740	730	710
			F	29.7	26.6	24.2	22.4	21.0	19.8	18.8	18.0	17.2	16.1
		12	Q	580	540	510	490	470	460	450	430	430	410
			F	31.6	28.6	26.4	24.7	23.4	22.3	21.4	20.7	20.0	19.0
	6	6	Q	840	810	780	760	750	730	720	710	700	690
			F	29.8	26.6	24.3	22.5	21.0	19.8	18.8	18.0	17.3	16.1
		12	Q	560	530	500	480	460	450	440	430	420	400
			F	31.8	28.8	26.7	25.0	23.6	22.5	21.6	20.8	20.2	19.1
	4	6	Q	680	660	650	640	640	630	620	620	620	610
			F	30.1	26.9	24.6	22.7	21.2	20.0	19.0	18.2	17.5	16.3
		12	Q	440	420	410	400	390	380	370	370	360	360
			F	32.7	29.7	27.4	25.7	24.3	23.2	22.2	21.4	20.7	19.6
18	8	6	Q	1180	1130	1090	1060	1030	1010	1000	980	970	950
			F	16.8	15.3	14.2	13.3	12.6	12.1	11/6	11.2	10.9	10.3
		12	Q	770	720	680	650	630	610	590	580	570	550
			F	18.4	17.1	16.1	15.3	14.7	14.3	13.9	13.5	13.3	12.8
	6	6	Q	1120	1080	1040	1020	990	980	960	950	940	920
			F	16.9	15.4	14.3	13.4	12.7	12.1	11.6	11.2	10.9	10.3
		12	Q	750	700	670	640	620	600	580	570	560	540
			F	18.7	17.3	16.3	15.5	14.9	14.4	14.0	13.7	13.4	12.9
	4	6	Q	900	880	870	860	850	840	830	820	820	810
			F	17.2	15.6	14.5	13.6	12.9	12.3	11.8	11.4	11.0	10.5
		12	Q	590	570	550	530	520	510	500	490	480	470
			F	19.4	18.0	17.0	16.2	15.5	15.0	14.6	14.2	13.9	13.4
16	8	6	Q	1480	1410	1360	1330	1290	1270	1250	1230	1210	1190
			F	11.0	10.2	9.6	9.2	8.8	8.5	8.2	8.0	7.8	7.5
		12	Q	970	900	860	820	790	760	740	720	710	680
			F	12.5	11.8	11.3	11.0	10.7	10.4	10.3	10.1	10.0	9.8
	6	6	Q	1400	1350	1300	1270	1240	1220	1200	1190	1170	1150
			F	11.1	10.3	9.7	9.2	8.8	8.5	8.3	8.1	7.9	7.6
		12	Q	940	880	830	800	770	750	730	710	700	670
			F	12.7	12.0	11.5	11.1	10.8	10.6	10.4	10.2	10.1	9.9
	4	6	Q	1130	1110	1090	1070	1060	1050	1040	1030	1030	1020
			F	11.3	10.5	9.9	9.4	9.0	8.7	8.4	8.2	8.0	7.7
		12	Q	740	710	680	660	650	630	620	610	610	590
			F	13.4	12.7	12.1	11.7	11.4	11.1	10.9	10.7	10.5	10.3

TABLE 6C—Q (plf) & F (1×10^{-6} inches), N DECK (STANDING SEAM), $F_y = 33$ ksi

SUPPORT FASTENERS - PNEUTEK SDK61075 (0.113 to 0.155 inch substrate)

SIDELAP FASTENERS - Button Punches

DECK GAGE	NUMBER OF SUPPORT FASTENERS	SPACING OF SIDELAP FASTENERS (inches)	Q (plf) F (10^{-6} in)	SPAN (ft-in) - 3 SPAN CONDITION									
				6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	13'-0"	14'-0"	16'-0"
22	8	6	Q	320	300	280	270	260	250	250	240	240	230
			F	58.9	55.4	53.0	51.2	49.9	49.0	48.3	47.7	47.3	46.7
		12	Q	230	210	200	180	180	170	160	150	150	140
			F	63.5	61.0	59.6	58.8	58.5	58.5	58.6	58.9	59.3	60.3
	6	6	Q	310	290	280	260	260	250	240	240	230	220
			F	60.4	56.9	54.5	52.7	51.4	50.4	49.7	49.1	48.7	48.0
		12	Q	230	210	190	180	170	160	160	150	150	140
			F	65.9	63.6	62.2	61.6	61.3	61.4	61.6	61.9	62.3	63.2
	4	6	Q	240	230	230	220	210	210	210	200	200	200
			F	66.4	62.8	60.3	58.4	57.0	55.8	54.9	54.2	53.6	52.7
		12	Q	160	150	140	140	130	130	120	120	120	110
			F	76.8	74.9	73.8	73.4	73.2	73.3	73.5	73.8	74.1	74.9
20	8	6	Q	430	400	380	370	350	340	340	330	320	310
			F	42.9	41.2	40.1	39.4	38.9	38.6	38.4	38.3	38.3	38.3
		12	Q	300	280	260	240	230	220	210	210	200	190
			F	47.1	46.3	46.1	46.3	46.7	47.2	47.9	48.5	49.2	50.7
	6	6	Q	410	390	370	360	350	340	330	320	320	310
			F	44.2	42.5	41.4	40.7	40.2	39.9	39.7	39.6	39.5	39.5
		12	Q	290	270	250	240	220	210	210	200	200	190
			F	49.3	48.6	48.5	48.8	49.3	49.9	50.5	51.2	52.0	53.4
	4	6	Q	330	320	310	300	290	290	280	280	280	270
			F	49.7	47.9	46.7	45.9	45.3	44.8	44.5	44.2	44.0	43.7
		12	Q	210	200	190	180	180	170	170	160	160	160
			F	59.2	58.9	59.1	59.6	60.2	60.8	61.4	62.1	62.8	64.0
18	8	6	Q	680	640	620	600	580	570	560	550	540	530
			F	28.3	28.0	27.9	28.0	28.2	28.4	28.6	28.8	29.1	29.5
		12	Q	460	420	400	380	360	350	340	330	320	310
			F	31.9	32.4	33.2	34.0	34.9	35.9	36.8	37.7	38.6	40.3
	6	6	Q	660	620	600	580	570	550	540	540	530	520
			F	29.4	29.2	29.1	29.2	29.3	29.5	29.7	29.9	30.2	30.6
		12	Q	440	410	390	370	350	340	330	320	310	300
			F	33.8	34.4	35.3	36.2	37.2	38.2	39.1	40.0	40.9	42.6
	4	6	Q	520	510	500	490	480	470	470	460	460	460
			F	34.2	33.8	33.7	33.7	33.7	33.8	33.9	34.0	34.1	34.3
		12	Q	340	320	310	300	290	280	270	270	260	
			F	42.4	43.4	44.4	45.5	46.6	47.6	48.6	49.5	50.3	51.8
16	8	6	Q	980	940	900	880	860	840	830	820	810	790
			F	21.3	21.6	21.9	22.3	22.7	23.1	13.4	23.8	24.1	24.7
		12	Q	640	600	570	540	520	510	490	480	470	450
			F	24.5	25.5	26.6	27.7	28.7	29.8	30.8	31.7	32.6	34.3
	6	6	Q	930	890	860	840	820	810	800	790	780	760
			F	22.3	22.6	23.0	23.3	23.7	24.1	24.4	24.8	25.1	25.7
		12	Q	620	580	550	530	510	500	480	470	460	450
			F	26.2	27.3	28.5	29.6	30.7	31.8	32.8	33.8	34.7	36.4
	4	6	Q	750	730	720	710	700	700	690	680	680	670
			F	26.5	26.8	27.1	27.4	27.6	27.9	28.1	28.4	28.6	29.0
		12	Q	490	470	450	440	430	420	410	410	400	390
			F	33.9	35.3	36.7	38.0	39.1	40.3	41.3	42.2	43.1	44.7

TABLE 6D—Q (plf) & F (1×10^{-6} inches), N DECK (NESTABLE SEAM), $F_y = 33$ ksi

SUPPORT FASTENERS - PNEUTEK SDK61075 (0.113 to 0.155 inch substrate)

SIDELAP FASTENERS - #10 by $\frac{3}{4}$ " Self-Drilling Screws

DECK GAGE	NUMBER OF SUPPORT FASTENERS	SPACING OF SIDELAP FASTENERS (inches)	Q (plf) F (10^{-6} in)	SPAN (ft-in) - 3 SPAN CONDITION									
				6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	13'-0"	14'-0"	16'-0"
22	8	6	Q	630	610	590	580	570	570	560	550	550	540
			F	44.9	39.8	36.0	33.0	30.6	28.7	27.1	25.7	24.5	22.6
		12	Q	410	380	370	360	350	340	330	330	320	310
			F	47.9	42.9	39.2	36.3	34.0	32.2	30.6	29.3	28.1	26.3
	6	6	Q	580	570	560	550	540	530	530	520	520	510
			F	45.0	39.9	36.0	33.1	30.7	28.7	27.1	25.7	24.5	22.6
		12	Q	400	380	360	350	340	330	330	320	310	310
			F	48.1	43.1	39.4	36.5	34.2	32.3	30.7	29.4	28.3	26.4
	4	6	Q	470	470	460	460	450	450	450	450	450	440
			F	45.2	40.0	36.2	33.2	30.8	28.8	27.2	25.8	24.6	22.7
		12	Q	310	300	300	290	290	280	280	280	270	270
			F	48.7	43.7	39.9	37.0	34.6	32.7	31.1	29.7	28.6	26.7
20	8	6	Q	750	730	710	700	690	680	670	660	660	650
			F	30.1	26.9	24.6	22.7	21.3	20.1	19.1	18.2	17.5	16.3
		12	Q	490	460	440	430	420	410	400	390	390	380
			F	32.8	29.8	27.5	25.8	24.4	23.2	22.3	21.5	20.8	19.7
	6	6	Q	700	680	670	660	650	640	630	630	620	620
			F	30.2	27.0	24.6	22.8	21.3	20.1	19.1	18.2	17.5	16.3
		12	Q	480	450	430	420	410	400	390	380	380	370
			F	33.0	29.9	27.7	25.9	24.5	23.4	22.4	21.6	20.9	19.8
	4	6	Q	570	560	550	550	540	540	540	540	540	530
			F	30.3	27.2	24.8	22.9	21.4	20.2	19.2	18.3	17.6	16.4
		12	Q	380	370	360	350	340	340	340	330	330	330
			F	33.6	30.5	28.2	26.3	24.9	23.7	22.7	21.9	21.2	20.0
18	8	6	Q	1000	970	950	930	920	900	890	890	880	870
			F	17.2	15.7	14.5	13.6	12.9	12.3	11.8	11.4	11.1	10.5
		12	Q	650	610	590	570	550	540	530	520	510	500
			F	19.5	18.1	17.0	16.2	15.6	15.1	14.6	14.3	13.9	13.4
	6	6	Q	930	910	890	880	860	850	850	840	830	820
			F	17.2	15.7	14.5	13.6	12.9	12.3	11.8	11.4	11.1	10.5
		12	Q	630	600	580	560	540	530	520	510	500	490
			F	19.7	18.2	17.2	16.4	15.7	15.2	14.7	14.3	14.0	13.5
	4	6	Q	750	740	740	730	730	720	720	720	710	710
			F	17.4	15.8	14.7	13.8	13.0	12.4	11.9	11.5	11.2	10.6
		12	Q	500	490	470	470	460	450	450	440	440	430
			F	20.2	18.7	17.6	16.7	16.1	15.5	15.0	14.6	14.3	13.7
16	8	6	Q	1250	1220	1190	1160	1150	1130	1120	1110	1100	1080
			F	11.4	10.5	9.9	9.4	9.0	8.7	8.4	8.2	8.0	7.7
		12	Q	810	770	740	710	690	680	660	650	640	630
			F	13.5	12.7	12.2	11.8	11.4	11.2	10.9	10.7	10.6	10.3
	6	6	Q	1170	1140	1110	1100	1080	1070	1060	1050	1040	1030
			F	11.4	10.6	9.9	9.4	9.0	8.7	8.5	8.2	8.0	7.7
		12	Q	790	750	720	700	680	660	650	640	630	610
			F	13.6	12.8	12.3	11.9	11.5	11.2	11.0	10.8	10.7	10.4
	4	6	Q	940	930	920	910	910	900	900	900	890	890
			F	11.6	10.7	10.0	9.5	9.1	8.8	8.5	8.3	8.1	7.8
		12	Q	630	610	590	580	570	570	560	550	550	540
			F	14.1	13.3	12.7	12.2	11.8	11.5	11.3	11.1	10.9	10.6

TABLE 7A—Q (plf) & F (1×10^{-6} inches), N DECK (NESTABLE SEAM), $F_y = 33$ ksi

SUPPORT FASTENERS - PNEUTEK K66062 or K66075 (0.281 inch and up substrate); K64062 or K64075 (0.187 to 0.312 inch substrate); or SDK63075 (0.155 to 0.250 inch substrate)

SIDELAP FASTENERS - #10 by $\frac{3}{4}$ " Self-Drilling Screws (THE SPACING OF SIDELAP FASTENERS MUST NOT EXCEED 36" O.C., INCREASE THE NUMBER OF INSTALLED FASTENERS PER SPAN AS REQUIRED).

DECK GAGE	NUMBER OF SUPPORT FASTENERS	NO. OF SIDELAP FASTENERS PER SPAN	Q (plf) F (10^{-6} in)	SPAN (ft-in) - 3 SPAN CONDITION									
				6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	13'-0"	14'-0"	16'-0"
8	8	0	Q	240	210	180	160	150	130	120	110	100	90
			F	55.4	52.5	50.8	50.1	49.9	50.2	50.8	51.7	52.8	55.4
		1	Q	290	250	220	190	170	160	140	130	120	110
			F	52.6	49.2	47.0	45.8	45.2	45.0	45.1	45.5	46.1	47.8
		2	Q	330	280	250	220	200	180	160	150	140	120
			F	50.7	47.0	44.5	43.0	42.0	41.5	41.4	41.4	41.7	42.8
		3	Q	370	320	280	250	220	200	190	170	160	140
			F	49.4	45.4	42.8	41.0	39.8	39.1	38.7	38.6	38.7	39.2
		4	Q	410	350	310	280	250	230	210	190	180	160
			F	48.4	44.3	41.5	39.5	38.2	37.3	36.7	36.4	36.4	36.6
		6	Q	500	430	370	330	300	270	250	230	210	190
			F	47.0	42.7	39.6	37.5	35.9	34.8	34.0	33.5	33.2	33.0
		9	Q	620	540	470	420	380	340	310	290	270	230
			F	45.8	41.2	38.0	35.6	33.8	32.5	31.5	30.8	30.2	29.6
		12	Q	720	630	560	500	450	410	380	350	320	280
			F	45.0	40.3	36.9	34.4	32.5	31.1	29.9	29.1	28.4	27.6
		16	Q	840	740	660	600	550	500	460	430	390	350
			F	44.3	39.5	36.0	33.4	31.4	29.8	28.6	27.6	26.9	25.8
22	6	0	Q	230	200	170	150	140	130	120	110	100	90
			F	57.4	54.8	53.5	53.0	53.2	53.8	54.8	56.0	57.4	60.6
		1	Q	270	230	200	180	160	150	140	130	120	100
			F	53.8	50.5	48.6	47.6	47.1	47.2	47.5	48.1	48.9	51.0
		2	Q	320	270	240	210	190	170	160	150	140	120
			F	51.5	47.9	45.6	44.2	43.4	43.0	43.0	43.2	43.6	44.9
		3	Q	360	310	270	240	210	200	180	170	150	130
			F	50.0	46.1	43.5	41.9	40.8	40.2	39.9	39.8	40.0	40.8
		4	Q	400	340	300	270	240	220	200	180	170	150
			F	48.8	44.8	42.0	40.2	38.9	38.1	37.6	37.4	37.4	37.8
		6	Q	480	420	360	320	290	260	240	220	210	180
			F	47.3	43.0	40.0	37.9	36.4	35.3	34.5	34.1	33.8	33.7
		9	Q	570	500	450	410	370	330	310	280	260	230
			F	45.9	41.4	38.2	35.8	34.1	32.8	31.8	31.1	30.6	30.1
		12	Q	640	580	520	470	430	400	370	340	320	280
			F	45.1	40.4	37.1	34.6	32.7	31.3	30.2	29.3	28.7	27.8
		16	Q	730	660	600	550	510	470	440	410	380	340
			F	44.4	39.6	36.1	33.5	31.5	30.0	28.7	27.8	27.0	26.0
4	4	0	Q	120	100	90	80	70	70	60	60	50	50
			F	69.2	68.5	69.2	70.7	72.8	75.4	78.3	81.5	84.9	92.1
		1	Q	160	140	120	110	100	90	80	80	70	60
			F	59.7	57.5	56.6	56.5	57.1	58.1	59.4	61.0	62.8	66.8
		2	Q	210	180	160	140	120	110	100	100	90	80
			F	55.1	52.1	50.4	49.6	49.4	49.6	50.2	51.0	52.0	54.5
		3	Q	250	210	190	170	150	140	120	120	110	90
			F	52.4	48.9	46.8	45.5	44.8	44.6	44.7	45.1	45.6	47.2
		4	Q	290	250	220	190	170	160	150	130	120	110
			F	50.6	46.8	44.3	42.8	41.8	41.3	41.1	41.1	41.4	42.4
		6	Q	360	320	280	250	230	210	190	170	160	140
			F	48.3	44.2	41.3	39.4	38.0	37.1	36.6	36.3	36.2	36.4
		9	Q	450	400	360	320	290	270	250	230	220	190
			F	46.5	42.0	38.9	36.7	35.0	33.8	32.9	32.3	31.9	31.5
		12	Q	520	470	420	390	350	330	300	280	260	230
			F	45.5	40.8	37.5	35.1	33.3	31.9	30.9	30.1	29.5	28.8
		16	Q	590	540	500	460	430	400	370	350	320	290
			F	44.6	39.9	36.4	33.8	31.9	30.4	29.2	28.2	27.5	26.5

TABLE 7A—Q (plf) & F (1×10^{-6} inches), N DECK (NESTABLE SEAM), $F_y = 33$ ksi

SUPPORT FASTENERS - PNEUTEK K66062 or K66075 (0.281 inch and up substrate); K64062 or K64075 (0.187 to 0.312 inch substrate); or SDK63075 (0.155 to 0.250 inch substrate)

SIDELAP FASTENERS - #10 by $\frac{3}{4}$ " Self-Drilling Screws (THE SPACING OF SIDELAP FASTENERS MUST NOT EXCEED 36" O.C., INCREASE THE NUMBER OF INSTALLED FASTENERS PER SPAN AS REQUIRED).

DECK GAGE	NUMBER OF SUPPORT FASTENERS	NO. OF SIDELAP FASTENERS PER SPAN	Q (plf) F (10^{-6} in)	SPAN (ft-in) - 3 SPAN CONDITION									
				6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	13'-0"	14'-0"	16'-0"
8	8	0	Q	300	250	220	200	180	160	150	140	130	110
			F	39.2	38.1	37.7	37.9	38.5	39.3	40.4	41.6	42.9	45.9
		1	Q	350	300	260	230	210	190	170	160	150	130
			F	36.6	35.0	34.2	34.0	34.1	34.6	35.2	36.0	36.9	38.9
		2	Q	400	340	300	270	240	220	200	180	170	150
			F	34.9	33.0	32.0	31.5	31.3	31.4	31.8	32.3	32.9	34.4
		3	Q	450	390	340	300	270	250	230	210	190	170
			F	33.7	31.6	30.4	29.7	29.3	29.2	29.4	29.7	30.1	31.2
		4	Q	500	430	380	340	300	270	250	230	220	190
			F	32.8	30.6	29.2	28.3	27.8	27.6	27.6	27.7	28.0	28.8
		6	Q	610	520	450	400	360	330	300	280	260	230
			F	31.6	29.1	27.5	26.4	25.7	25.3	25.1	25.0	25.1	25.5
		9	Q	750	650	570	510	460	410	380	350	330	280
			F	30.4	27.8	26.0	24.7	23.9	23.2	22.8	22.6	22.4	22.5
		12	Q	870	770	680	610	550	500	460	420	390	340
			F	29.7	27.0	25.1	23.7	22.7	21.9	21.4	21.0	20.8	20.6
		16	Q	1020	900	810	730	660	610	560	520	480	420
			F	29.1	26.3	24.3	22.8	21.7	20.8	20.2	19.7	19.4	19.0
20	6	0	Q	280	240	210	190	170	150	140	130	120	110
			F	41.0	40.1	40.1	40.6	41.4	42.6	43.9	45.4	47.1	50.6
		1	Q	330	280	250	220	200	180	170	150	140	120
			F	37.7	36.3	35.7	35.6	36.0	36.6	37.4	38.3	39.4	41.8
		2	Q	380	330	290	260	230	210	190	180	160	140
			F	35.6	33.9	33.0	32.6	32.5	32.8	33.2	33.9	34.6	36.4
		3	Q	430	370	330	290	260	240	220	200	190	160
			F	34.2	32.3	31.1	30.4	30.2	30.2	30.4	30.8	31.3	32.6
		4	Q	490	420	360	320	290	260	240	220	210	180
			F	33.2	31.1	29.7	28.9	28.5	28.3	28.4	28.6	28.9	29.9
		6	Q	580	500	440	390	350	320	290	270	250	220
			F	31.8	29.4	27.9	26.8	26.2	25.8	25.6	25.6	25.7	26.2
		9	Q	690	610	540	490	450	400	370	340	320	280
			F	30.6	28.0	26.2	25.0	24.1	23.5	23.1	22.9	22.8	22.9
		12	Q	780	700	630	570	520	480	450	410	380	340
			F	29.8	27.1	25.2	23.8	22.8	22.1	21.6	21.3	21.0	20.8
		16	Q	890	800	730	670	620	570	530	500	460	410
			F	29.2	26.4	24.3	22.9	21.8	20.9	20.3	19.9	19.5	19.1
4	4	0	Q	150	130	110	100	90	80	70	70	60	60
			F	51.7	52.6	54.4	56.6	59.3	62.2	65.3	68.6	72.1	79.2
		1	Q	200	170	150	130	120	110	100	90	90	70
			F	43.1	42.6	42.9	43.7	45.0	46.5	48.2	50.0	52.0	56.2
		2	Q	250	220	190	170	150	140	130	120	110	90
			F	38.9	37.7	37.3	37.4	38.0	38.8	39.8	40.9	42.2	45.1
		3	Q	300	260	230	200	180	170	150	140	130	110
			F	36.4	34.8	34.0	33.7	33.8	34.2	34.8	35.5	36.4	38.4
		4	Q	350	300	270	240	210	190	180	160	150	130
			F	34.8	32.9	31.8	31.3	31.1	31.2	31.5	32.0	32.6	34.1
		6	Q	440	380	340	300	270	250	230	210	200	170
			F	32.7	30.5	29.1	28.2	27.7	27.5	27.4	27.6	27.8	28.6
		9	Q	540	480	430	390	360	330	300	280	260	230
			F	31.1	28.6	26.9	25.7	24.9	24.4	24.1	24.0	24.0	24.2
		12	Q	630	570	510	470	430	400	370	340	320	280
			F	30.1	27.5	25.6	24.3	23.4	22.7	22.2	21.9	21.8	21.7
		16	Q	720	660	610	560	520	480	450	420	390	350
			F	29.4	26.6	24.6	23.2	22.1	21.3	20.7	20.3	20.0	19.7

TABLE 7A—Q (plf) & F (1×10^{-6} inches), N DECK (NESTABLE SEAM), $F_y = 33$ ksi

SUPPORT FASTENERS - PNEUTEK K66062 or K66075 (0.281 inch and up substrate); K64062 or K64075 (0.187 to 0.312 inch substrate); or SDK63075 (0.155 to 0.250 inch substrate)

SIDELAP FASTENERS - #10 by $\frac{3}{4}$ " Self-Drilling Screws (THE SPACING OF SIDELAP FASTENERS MUST NOT EXCEED 36" O.C., INCREASE THE NUMBER OF INSTALLED FASTENERS PER SPAN AS REQUIRED).

DECK GAGE	NUMBER OF SUPPORT FASTENERS	NO. OF SIDELAP FASTENERS PER SPAN	Q (plf) F (10^{-6} in)	SPAN (ft-in) - 3 SPAN CONDITION									
				6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	13'-0"	14'-0"	16'-0"
8	8	0	Q	390	340	300	260	240	210	200	180	170	150
			F	25.2	25.4	26.0	26.8	27.9	29.1	30.4	31.8	33.2	36.2
		1	Q	460	400	350	310	280	250	230	210	200	170
			F	22.9	22.7	23.0	23.5	24.1	25.0	25.9	26.9	27.9	30.2
		2	Q	530	450	400	350	320	290	260	240	230	200
			F	21.4	21.0	21.0	21.2	21.7	22.2	22.9	23.7	24.5	26.3
		3	Q	600	510	450	400	360	330	300	280	260	220
			F	20.4	19.8	19.6	19.7	19.9	20.3	20.8	21.4	22.1	23.5
		4	Q	670	570	500	440	400	360	330	310	290	250
			F	19.6	18.9	18.6	18.5	18.6	18.9	19.3	19.7	20.2	21.4
		6	Q	800	690	600	530	480	440	400	370	340	300
			F	18.5	17.6	17.1	16.9	16.8	16.9	17.1	17.4	17.7	18.5
		9	Q	1000	860	750	670	600	550	500	460	430	380
			F	17.5	16.5	15.8	15.4	15.2	15.1	15.1	15.3	15.4	15.9
		12	Q	1150	1010	900	810	730	660	600	560	520	450
			F	16.9	15.8	15.0	14.5	14.2	14.0	13.9	13.9	14.0	14.3
		16	Q	1350	1190	1070	960	880	800	740	680	630	560
			F	16.4	15.1	14.3	13.7	13.3	13.0	12.9	12.8	12.8	12.9
18	6	0	Q	370	320	280	250	220	200	190	170	160	140
			F	26.7	27.2	28.0	29.2	30.5	31.9	33.5	35.1	36.8	40.4
		1	Q	440	380	330	290	260	240	220	200	190	160
			F	23.8	23.8	24.2	24.9	25.7	26.7	27.8	28.9	30.2	32.7
		2	Q	510	430	380	340	300	280	250	230	220	190
			F	22.1	21.7	21.8	22.2	22.7	23.4	24.2	25.1	26.0	28.0
		3	Q	570	490	430	380	340	310	290	270	250	220
			F	20.8	20.3	20.2	20.4	20.7	21.2	21.7	22.4	23.1	24.7
		4	Q	640	550	480	430	390	350	320	300	280	240
			F	19.9	19.3	19.0	19.0	19.2	19.5	20.0	20.5	21.0	22.3
		6	Q	760	670	580	520	470	420	390	360	330	290
			F	18.7	17.9	17.4	17.2	17.2	17.3	17.6	17.9	18.2	19.1
		9	Q	910	800	720	650	590	540	490	450	420	370
			F	17.7	16.6	16.0	15.6	15.4	15.3	15.4	15.5	15.7	16.2
		12	Q	1030	920	830	760	690	640	590	550	510	440
			F	17.0	15.8	15.1	14.6	14.3	14.1	14.1	14.1	14.2	14.5
		16	Q	1170	1060	970	890	820	760	700	660	610	540
			F	16.4	15.2	14.4	13.8	13.4	13.1	13.0	12.9	12.9	13.0
4	4	0	Q	200	170	150	130	120	110	100	90	80	70
			F	36.0	38.0	40.4	43.1	46.0	49.0	52.1	55.3	58.5	65.2
		1	Q	260	230	200	180	160	140	130	120	110	100
			F	28.5	29.3	30.5	31.9	33.5	35.3	37.2	39.1	41.1	45.2
		2	Q	330	290	250	220	200	180	170	150	140	120
			F	24.9	25.1	25.6	26.4	27.5	28.6	29.9	31.2	32.6	35.5
		3	Q	400	340	300	270	240	220	200	180	170	150
			F	22.7	22.5	22.7	23.2	23.9	24.7	25.6	26.5	27.6	29.8
		4	Q	470	400	350	310	280	260	230	220	200	180
			F	21.3	20.9	20.8	21.1	21.5	22.0	22.7	23.4	24.2	26.0
		6	Q	580	510	450	400	360	330	300	280	260	230
			F	19.5	18.8	18.5	18.4	18.5	18.8	19.2	19.6	20.1	21.2
		9	Q	720	640	570	520	470	430	400	370	350	300
			F	18.1	17.1	16.6	16.3	16.1	16.2	16.3	16.5	16.7	17.4
		12	Q	830	750	680	620	570	530	490	450	430	380
			F	17.3	16.2	15.5	15.0	14.8	14.7	14.6	14.7	14.8	15.2
		16	Q	950	870	800	740	690	640	590	560	520	460
			F	16.6	15.4	14.6	14.0	13.7	13.4	13.3	13.3	13.3	13.4

TABLE 7A—Q (plf) & F (1×10^{-6} inches), N DECK (NESTABLE SEAM), $F_y = 33$ ksi

SUPPORT FASTENERS - PNEUTEK K66062 or K66075 (0.281 inch and up substrate); K64062 or K64075 (0.187 to 0.312 inch substrate); or SDK63075 (0.155 to 0.250 inch substrate)

SIDELAP FASTENERS - #10 by $\frac{3}{4}$ " Self-Drilling Screws (THE SPACING OF SIDELAP FASTENERS MUST NOT EXCEED 36" O.C., INCREASE THE NUMBER OF INSTALLED FASTENERS PER SPAN AS REQUIRED).

DECK GAGE	NUMBER OF SUPPORT FASTENERS	NO. OF SIDELAP FASTENERS PER SPAN	Q (plf) F (10^{-6} in)	SPAN (ft-in) - 3 SPAN CONDITION									
				6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	13'-0"	14'-0"	16'-0"
8	8	0	Q	500	430	370	330	300	270	250	230	210	190
			F	18.4	19.1	20.0	21.1	22.3	23.6	24.9	26.3	27.7	30.5
		1	Q	580	500	440	390	350	320	290	270	250	220
			F	16.3	16.7	17.3	18.1	18.9	19.9	20.9	21.9	23.0	25.2
		2	Q	670	570	500	450	400	360	330	310	290	250
			F	15.0	15.2	15.6	16.1	16.7	17.5	18.2	19.1	19.9	21.7
		3	Q	750	650	570	500	450	410	380	350	320	280
			F	14.1	14.1	14.3	14.7	15.2	15.8	16.4	17.0	17.7	19.2
		4	Q	840	720	630	560	500	460	420	390	360	310
			F	13.4	13.3	13.4	13.7	14.0	14.5	15.0	15.5	16.1	17.4
		6	Q	1010	870	760	670	610	550	510	470	430	380
			F	12.4	12.2	12.1	12.2	12.4	12.7	13.1	13.5	13.9	14.8
		9	Q	1260	1090	950	850	760	690	630	590	540	480
			F	11.6	11.1	11.0	10.9	11.0	11.1	11.3	11.6	11.8	12.4
		12	Q	1460	1280	1140	1020	920	830	760	700	650	570
			F	11.0	10.5	10.2	10.1	10.1	10.1	10.2	10.4	10.6	11.0
		16	Q	1700	1500	1350	1220	1110	1020	930	860	800	700
			F	10.5	10.0	9.6	9.4	9.3	9.3	9.3	9.4	9.5	9.7
16	6	0	Q	470	400	350	310	280	260	230	220	200	180
			F	19.7	20.7	21.9	23.2	24.6	26.1	27.6	29.2	30.9	34.2
		1	Q	550	470	420	370	330	300	280	260	240	210
			F	17.2	17.7	18.5	19.3	20.3	21.4	22.6	23.7	24.9	27.4
		2	Q	640	550	480	430	380	350	320	300	270	240
			F	15.6	15.8	16.3	17.0	17.7	18.5	19.4	20.3	21.2	23.2
		3	Q	730	620	540	480	440	400	360	330	310	270
			F	14.5	14.6	14.9	15.3	15.9	16.5	17.2	17.9	18.7	20.3
		4	Q	810	690	610	540	490	440	410	370	350	300
			F	13.7	13.7	13.8	14.1	14.6	15.1	15.6	16.2	16.8	18.2
		6	Q	960	840	740	650	590	540	490	450	420	370
			F	12.6	12.4	12.4	12.5	12.8	13.1	13.5	13.9	14.3	15.3
		9	Q	1150	1020	910	820	740	680	620	570	530	460
			F	11.7	11.3	11.1	11.1	11.2	11.3	11.5	11.8	12.1	12.7
		12	Q	1300	1170	1050	960	870	810	750	690	640	560
			F	11.1	10.6	10.3	10.2	10.2	10.3	10.4	10.5	10.7	11.2
		16	Q	1480	1340	1220	1120	1030	950	890	830	770	690
			F	10.6	10.0	9.7	9.5	9.4	9.3	9.4	9.5	9.6	9.9
4	4	0	Q	250	210	190	170	150	140	120	110	110	90
			F	28.0	30.3	32.9	35.6	38.4	41.3	44.2	47.2	50.2	56.3
		1	Q	330	290	250	220	200	180	170	150	140	130
			F	21.4	22.6	24.0	25.6	27.3	29.1	30.9	32.8	34.7	38.6
		2	Q	420	360	310	280	250	230	210	190	180	160
			F	18.1	18.8	19.7	20.7	21.9	23.1	24.4	25.7	27.1	29.9
		3	Q	510	430	380	340	300	280	250	230	220	190
			F	16.2	16.6	17.1	17.9	18.7	19.6	20.6	21.6	22.6	24.8
		4	Q	590	510	440	390	350	320	300	270	250	220
			F	14.9	15.1	15.4	16.0	16.6	17.3	18.0	18.8	19.7	21.4
		6	Q	730	640	570	510	460	420	380	350	330	290
			F	13.3	13.2	13.3	13.6	14.0	14.4	14.9	15.4	16.0	17.2
		9	Q	900	800	720	650	600	550	510	470	440	380
			F	12.1	11.7	11.6	11.7	11.8	12.0	12.3	12.6	13.0	13.8
		12	Q	1050	950	860	780	720	660	620	570	540	470
			F	11.3	10.9	10.7	10.6	10.6	10.7	10.9	11.1	11.3	11.8
		16	Q	1200	1100	1010	930	860	800	750	700	660	590
			F	10.7	10.2	9.9	9.7	9.6	9.6	9.7	9.8	9.9	10.3

TABLE 7B—Q (plf) & F (1×10^{-6} inches), N DECK (NESTABLE SEAM), $F_y = 33$ ksi

SUPPORT FASTENERS - PNEUTEK SDK61075 (0.113 to 0.155 inch substrate)

SIDELAP FASTENERS - #10 by $\frac{3}{4}$ " Self-Drilling Screws (THE SPACING OF SIDELAP FASTENERS MUST NOT EXCEED 36" O.C., INCREASE THE NUMBER OF INSTALLED FASTENERS PER SPAN AS REQUIRED).

DECK GAGE	NUMBER OF SUPPORT FASTENERS	NO. OF SIDELAP FASTENERS PER SPAN	Q (plf) F (10^{-6} in)	SPAN (ft-in) - 3 SPAN CONDITION									
				6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	13'-0"	14'-0"	16'-0"
8	8	0	Q	160	140	120	110	100	90	80	70	70	60
			F	71.2	70.8	71.8	73.7	76.1	79.0	82.3	85.8	89.5	97.3
		1	Q	200	170	150	140	120	110	100	90	90	80
			F	60.6	58.4	57.7	57.7	58.4	59.6	61.0	62.8	64.7	69.0
		2	Q	240	210	180	160	150	130	120	110	100	90
			F	55.6	52.6	51.0	50.2	50.1	50.4	51.1	52.0	53.1	55.7
		3	Q	290	250	220	190	170	160	140	130	120	110
			F	52.7	49.2	47.1	45.9	45.3	45.1	45.3	45.7	46.3	48.0
		4	Q	330	280	250	220	200	180	160	150	140	120
			F	50.8	47.0	44.6	43.0	42.1	41.6	41.5	41.6	41.9	42.9
		6	Q	410	350	310	280	250	230	210	190	180	160
			F	48.4	44.3	41.5	39.5	38.2	37.3	36.8	36.5	36.4	36.7
		9	Q	510	450	400	360	320	300	270	250	230	200
			F	46.6	42.1	39.0	36.7	35.1	33.9	33.0	32.4	32.0	31.7
		12	Q	590	530	470	430	390	360	330	310	290	250
			F	45.5	40.9	37.6	35.1	33.3	32.0	30.9	30.1	29.6	28.9
		16	Q	680	620	560	510	470	430	400	380	350	310
			F	44.6	39.9	36.4	33.9	31.9	30.4	29.2	28.3	27.6	26.6
22	6	0	Q	150	130	110	100	90	80	80	70	60	60
			F	75.4	75.7	77.4	80.0	83.1	86.7	90.7	94.9	99.3	108.6
		1	Q	190	170	140	130	120	110	100	90	80	70
			F	62.2	60.4	59.8	60.2	61.2	62.6	64.3	66.3	68.5	73.4
		2	Q	240	200	180	160	140	130	120	110	100	90
			F	56.4	53.6	52.2	51.5	51.6	52.0	52.8	53.8	55.1	58.0
		3	Q	280	240	210	190	170	150	140	130	120	100
			F	53.2	49.9	47.8	46.7	46.2	46.1	46.3	46.8	47.5	49.4
		4	Q	310	270	240	210	190	170	160	150	140	120
			F	51.1	47.4	45.1	43.6	42.7	42.3	42.2	42.3	42.7	43.9
		6	Q	370	330	300	270	240	220	200	190	170	150
			F	48.6	44.5	41.8	39.8	38.6	37.7	37.2	36.9	36.9	37.2
		9	Q	450	400	360	330	310	280	260	240	230	200
			F	46.7	42.2	39.1	36.9	35.3	34.1	33.2	32.7	32.3	32.0
		12	Q	510	460	420	390	360	330	310	290	270	240
			F	45.6	41.0	37.7	35.2	33.4	32.1	31.1	30.3	29.7	29.0
		16	Q	560	520	490	450	420	400	370	350	330	290
			F	44.7	39.9	36.5	33.9	32.0	30.5	29.3	28.4	27.7	26.7
4	4	0	Q	80	70	60	50	50	40	40	40	30	30
			F	100.6	105.2	111.1	117.9	125.2	133.1	141.2	149.6	158.2	175.9
		1	Q	120	100	90	80	70	70	60	60	50	50
			F	69.4	68.8	69.5	71.1	73.2	75.8	78.8	82.0	85.4	92.7
		2	Q	160	140	120	110	100	90	80	80	70	60
			F	59.8	57.6	56.7	57.2	58.2	59.6	61.2	63.0	67.1	
		3	Q	200	180	160	140	120	110	100	100	90	80
			F	55.2	52.2	50.5	49.7	49.5	49.7	50.3	51.1	52.1	54.7
		4	Q	240	210	190	170	150	140	120	120	110	90
			F	52.4	48.9	46.8	45.5	44.9	44.6	44.8	45.1	45.7	47.3
		6	Q	290	260	240	210	190	180	170	150	140	130
			F	49.3	45.3	42.6	40.9	39.7	38.9	38.5	38.4	38.4	39.0
		9	Q	360	330	300	280	250	230	220	200	190	170
			F	47.0	42.6	39.6	37.4	35.8	34.7	33.9	33.4	33.1	32.9
		12	Q	410	380	350	330	300	280	260	250	230	210
			F	45.8	41.2	37.9	35.5	33.8	32.4	31.5	30.7	30.2	29.6
		16	Q	450	430	400	380	360	340	320	300	280	260
			F	44.8	40.1	36.6	34.1	32.2	30.7	29.5	28.6	27.9	27.0

TABLE 7B—Q (plf) & F (1x10⁻⁶ inches), N DECK (NESTABLE SEAM), Fy = 33 ksi

SUPPORT FASTENERS - PNEUTEK SDK61075 (0.113 to 0.155 inch substrate)

SIDELAP FASTENERS - #10 by 3/4" Self-Drilling Screws (THE SPACING OF SIDELAP FASTENERS MUST NOT EXCEED 36" O.C., INCREASE THE NUMBER OF INSTALLED FASTENERS PER SPAN AS REQUIRED).

DECK GAGE	NUMBER OF SUPPORT FASTENERS	NO. OF SIDELAP FASTENERS PER SPAN	Q (plf) F (10 ⁻⁶ in)	SPAN (ft-in) - 3 SPAN CONDITION									
				6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	13'-0"	14'-0"	16'-0"
8	8	0	Q	190	170	150	130	120	110	100	90	80	70
			F	53.5	54.7	56.7	59.3	62.3	65.5	68.9	72.5	76.2	83.9
		1	Q	250	210	180	160	150	130	120	110	110	90
			F	43.8	43.5	43.9	44.9	46.2	47.8	49.6	51.6	53.7	58.2
		2	Q	300	250	220	200	180	160	150	140	130	110
			F	39.3	38.2	37.9	38.1	38.7	39.5	40.6	41.8	43.2	46.1
		3	Q	350	300	260	230	210	190	170	160	150	130
			F	36.7	35.1	34.3	34.1	34.3	34.7	35.3	36.1	37.0	39.1
		4	Q	400	340	300	270	240	220	200	180	170	150
			F	35.0	33.1	32.0	31.5	31.4	31.5	31.9	32.4	33.0	34.5
		6	Q	500	430	380	330	300	270	250	230	220	190
			F	32.8	30.6	29.2	28.3	27.9	27.6	27.6	27.8	28.1	28.9
		9	Q	610	540	480	430	390	360	330	300	280	250
			F	31.1	28.6	26.9	25.8	25.0	24.5	24.2	24.1	24.1	24.3
		12	Q	720	640	570	520	470	430	400	370	350	300
			F	30.2	27.5	25.7	24.4	23.4	22.8	22.3	22.0	21.8	21.8
		16	Q	830	750	680	620	570	530	490	460	430	380
			F	29.4	26.6	24.6	23.2	22.1	21.3	20.8	20.3	20.0	19.7
20	6	0	Q	180	160	140	120	110	100	90	80	80	70
			F	57.3	59.2	61.8	65.0	68.6	72.5	76.6	80.8	85.1	94.1
		1	Q	230	200	180	160	140	130	120	110	100	90
			F	45.3	45.2	45.9	47.1	48.7	50.6	52.6	54.9	57.2	62.2
		2	Q	290	250	210	190	170	160	140	130	120	110
			F	40.1	39.1	38.9	39.2	40.0	41.0	42.2	43.5	45.0	48.2
		3	Q	340	290	250	220	200	180	170	160	140	130
			F	37.2	35.7	35.0	34.8	35.1	35.6	36.3	37.2	38.1	40.4
		4	Q	380	330	290	260	230	210	190	180	170	150
			F	35.3	33.5	32.5	32.0	31.9	32.1	32.5	33.1	33.8	35.4
		6	Q	450	400	360	320	290	270	250	230	210	180
			F	33.0	30.8	29.5	28.6	28.2	28.0	28.0	28.2	28.5	29.4
		9	Q	540	490	440	400	370	340	320	290	280	240
			F	31.2	28.7	27.1	25.9	25.2	24.7	24.4	24.3	24.3	24.6
		12	Q	610	560	510	470	440	410	380	350	330	290
			F	30.2	27.6	25.7	24.4	23.5	22.9	22.4	22.1	22.0	21.9
		16	Q	680	640	590	550	510	480	450	420	400	360
			F	29.4	26.6	24.7	23.2	22.2	21.4	20.8	20.4	20.1	19.8
4	4	0	Q	100	80	70	60	60	50	50	40	40	40
			F	80.2	85.9	92.4	99.4	106.9	114.5	122.4	130.5	138.6	155.3
		1	Q	150	130	110	100	90	80	70	70	60	60
			F	51.9	52.9	54.6	56.9	59.6	62.6	65.8	69.1	72.5	79.7
		2	Q	200	170	150	130	120	110	100	90	90	70
			F	43.2	42.7	43.0	43.9	45.1	46.6	48.3	50.2	52.2	56.5
		3	Q	250	220	190	170	150	140	130	120	110	90
			F	39.0	37.8	37.4	37.5	38.1	38.9	39.9	41.0	42.3	45.2
		4	Q	290	250	220	200	180	170	150	140	130	110
			F	36.5	34.8	34.0	33.8	33.9	34.3	34.9	35.6	36.5	38.5
		6	Q	360	320	290	260	240	220	200	190	170	150
			F	33.6	31.5	30.3	29.5	29.2	29.1	29.2	29.5	29.9	31.0
		9	Q	440	400	360	330	310	280	260	250	230	210
			F	31.5	29.1	27.5	26.4	25.7	25.2	25.0	25.0	25.0	25.4
		12	Q	500	460	430	400	370	340	320	300	280	250
			F	30.4	27.8	26.0	24.7	23.8	23.2	22.8	22.5	22.4	22.4
		16	Q	550	520	490	460	430	410	390	360	350	310
			F	29.5	26.8	24.8	23.4	22.4	21.6	21.0	20.6	20.4	20.1

TABLE 7B—Q (plf) & F (1×10^{-6} inches), N DECK (NESTABLE SEAM), $F_y = 33$ ksi

SUPPORT FASTENERS - PNEUTEK SDK61075 (0.113 to 0.155 inch substrate)

SIDELAP FASTENERS - #10 by $\frac{3}{4}$ " Self-Drilling Screws (THE SPACING OF SIDELAP FASTENERS MUST NOT EXCEED 36" O.C., INCREASE THE NUMBER OF INSTALLED FASTENERS PER SPAN AS REQUIRED).

DECK GAGE	NUMBER OF SUPPORT FASTENERS	NO. OF SIDELAP FASTENERS PER SPAN	Q (plf) F (10^{-6} in)	SPAN (ft-in) - 3 SPAN CONDITION									
				6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	13'-0"	14'-0"	16'-0"
8	8	0	Q	260	220	190	170	150	140	130	120	110	100
			F	37.6	39.8	42.5	45.4	48.6	51.8	55.2	58.6	62.1	69.3
		1	Q	330	280	240	220	200	180	160	150	140	120
			F	29.2	30.1	31.3	32.9	34.6	36.5	38.5	40.5	42.6	47.0
		2	Q	390	340	300	260	240	210	200	180	170	150
			F	25.3	25.5	26.1	27.0	28.1	29.3	30.6	32.0	33.4	36.5
		3	Q	460	400	350	310	280	250	230	210	200	170
			F	23.0	22.8	23.0	23.5	24.2	25.1	26.0	27.0	28.1	30.4
		4	Q	530	450	400	350	320	290	260	240	230	200
			F	21.5	21.1	21.0	21.3	21.7	22.3	23.0	23.8	24.6	26.4
		6	Q	660	570	500	440	400	360	330	310	290	250
			F	19.6	18.9	18.6	18.5	18.7	18.9	19.3	19.8	20.3	21.5
		9	Q	810	720	640	570	520	470	430	400	370	330
			F	18.1	17.2	16.6	16.3	16.2	16.2	16.4	16.6	16.8	17.5
		12	Q	950	840	760	690	630	580	530	490	460	400
			F	17.3	16.2	15.5	15.1	14.8	14.7	14.7	14.8	14.9	15.3
		16	Q	1100	990	900	820	760	700	650	600	560	500
			F	16.6	15.4	14.6	14.1	13.7	13.5	13.3	13.3	13.3	13.5
18	6	0	Q	240	210	180	160	150	130	120	110	100	90
			F	40.9	43.7	46.9	50.4	54.1	57.9	61.8	65.8	69.9	78.2
		1	Q	310	270	230	210	190	170	160	140	130	120
			F	30.5	31.6	33.1	34.8	36.8	38.9	41.0	43.3	45.6	50.4
		2	Q	380	320	280	250	230	210	190	170	160	140
			F	25.9	26.3	27.0	28.0	29.2	30.5	31.9	33.5	35.0	38.3
		3	Q	450	380	330	300	270	240	220	210	190	170
			F	23.4	23.3	23.6	24.2	24.9	25.8	26.8	27.9	29.1	31.5
		4	Q	500	440	390	340	310	280	260	240	220	190
			F	21.7	21.4	21.4	21.7	22.2	22.8	23.6	24.4	25.3	27.1
		6	Q	600	530	480	430	390	350	330	300	280	240
			F	19.8	19.1	18.8	18.8	18.9	19.2	19.6	20.1	20.7	21.9
		9	Q	720	650	590	530	490	450	420	390	370	320
			F	18.2	17.3	16.7	16.4	16.3	16.4	16.5	16.7	17.0	17.7
		12	Q	810	740	680	630	580	540	500	470	440	390
			F	17.4	16.3	15.6	15.1	14.9	14.8	14.8	14.9	15.0	15.4
		16	Q	910	840	780	730	680	640	600	560	530	470
			F	16.7	15.5	14.6	14.1	13.7	13.5	13.4	13.4	13.4	13.6
4	4	0	Q	130	110	100	90	80	70	60	60	60	50
			F	60.8	67.0	73.5	80.3	87.3	94.5	101.7	109.0	116.4	131.3
		1	Q	200	170	150	130	120	110	100	90	80	70
			F	36.2	38.2	40.7	43.4	46.3	49.3	52.5	55.7	59.0	65.7
		2	Q	260	230	200	180	160	140	130	120	110	100
			F	28.6	29.4	30.6	32.0	33.7	35.4	37.3	39.3	41.3	45.4
		3	Q	330	290	250	220	200	180	170	150	140	120
			F	24.9	25.1	25.7	26.5	27.5	28.7	30.0	31.3	32.7	35.6
		4	Q	380	330	300	270	240	220	200	180	170	150
			F	22.8	22.6	22.8	23.2	23.9	24.7	25.6	26.6	27.6	29.8
		6	Q	470	420	380	340	310	290	270	250	230	200
			F	20.3	19.7	19.5	19.6	19.8	20.2	20.7	21.3	21.9	23.3
		9	Q	580	530	480	440	410	380	350	330	310	270
			F	18.5	17.6	17.1	16.8	16.8	16.9	17.1	17.3	17.6	18.4
		12	Q	660	610	560	520	490	450	430	400	380	340
			F	17.5	16.4	15.8	15.4	15.2	15.1	15.1	15.2	15.4	15.8
		16	Q	730	690	650	610	570	540	510	480	460	410
			F	16.8	15.6	14.8	14.2	13.9	13.7	13.6	13.6	13.6	13.8

TABLE 7B—Q (plf) & F (1x10⁻⁶ inches), N DECK (NESTABLE SEAM), Fy = 33 ksi

SUPPORT FASTENERS - PNEUTEK SDK61075 (0.113 to 0.155 inch substrate)

SIDELAP FASTENERS - #10 by 3/4" Self-Drilling Screws (THE SPACING OF SIDELAP FASTENERS MUST NOT EXCEED 36" O.C., INCREASE THE NUMBER OF INSTALLED FASTENERS PER SPAN AS REQUIRED).

DECK GAGE	NUMBER OF SUPPORT FASTENERS	NO. OF SIDELAP FASTENERS PER SPAN	Q (plf) F (10 ⁻⁶ in)	SPAN (ft-in) - 3 SPAN CONDITION									
				6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	13'-0"	14'-0"	16'-0"
8	8	0	Q	320	280	240	220	190	180	160	150	140	120
			F	29.4	32.0	34.7	37.7	40.7	43.8	47.0	50.2	53.4	60.0
		1	Q	410	350	310	270	250	220	210	190	180	150
			F	21.9	23.3	24.8	26.5	28.3	30.1	32.1	34.0	36.0	40.1
		2	Q	500	430	370	330	300	270	250	230	210	190
			F	18.4	19.2	20.1	21.2	22.4	23.7	25.1	26.4	27.9	30.8
		3	Q	580	500	440	390	350	320	290	270	250	220
			F	16.4	16.8	17.4	18.2	19.0	20.0	21.0	22.0	23.1	25.3
		4	Q	670	570	500	450	400	360	330	310	290	250
			F	15.1	15.2	15.6	16.2	16.8	17.5	18.3	19.1	20.0	21.8
		6	Q	830	720	630	560	500	460	420	390	360	310
			F	13.4	13.3	13.4	13.7	14.1	14.5	15.0	15.6	16.2	17.4
		9	Q	1020	900	800	730	660	600	550	510	470	410
			F	12.1	11.8	11.7	11.7	11.9	12.1	12.4	12.7	13.1	13.9
		12	Q	1200	1060	960	870	790	730	670	620	580	510
			F	11.4	10.9	10.7	10.6	10.6	10.7	10.9	11.1	11.4	11.9
		16	Q	1390	1250	1140	1040	950	880	820	760	710	630
			F	10.8	10.2	9.9	9.7	9.6	9.6	9.7	9.8	10.0	10.3
16	6	0	Q	310	260	230	200	180	170	150	140	130	110
			F	32.4	35.4	38.7	42.1	45.6	49.2	52.9	56.6	60.3	67.9
		1	Q	390	340	290	260	240	210	200	180	170	150
			F	23.1	24.6	26.3	28.2	30.2	32.3	34.4	36.5	38.7	43.2
		2	Q	480	410	360	320	290	260	240	220	200	180
			F	19.0	19.9	20.9	22.1	23.4	24.8	26.3	27.8	29.3	32.4
		3	Q	560	480	420	380	340	310	280	260	240	210
			F	16.8	17.2	17.9	18.7	19.7	20.7	21.7	22.8	24.0	26.3
		4	Q	640	560	490	430	390	350	320	300	280	240
			F	15.3	15.5	16.0	16.5	17.2	18.0	18.8	19.7	20.6	22.5
		6	Q	760	670	600	540	490	450	410	380	350	310
			F	13.6	13.5	13.6	13.9	14.3	14.8	15.3	15.9	16.5	17.8
		9	Q	910	820	740	670	620	570	530	490	460	400
			F	12.2	11.9	11.8	11.8	12.0	12.2	12.5	12.9	13.3	14.1
		12	Q	1020	940	860	790	730	680	630	590	550	490
			F	11.4	11.0	10.7	10.7	10.7	10.8	11.0	11.2	11.5	12.0
		16	Q	1140	1060	990	920	860	800	750	710	670	600
			F	10.8	10.2	9.9	9.8	9.7	9.7	9.8	9.9	10.0	10.4
4	4	0	Q	160	140	120	110	100	90	80	70	70	60
			F	50.1	56.1	62.3	68.7	75.2	81.8	88.4	95.0	101.7	115.2
		1	Q	250	210	190	170	150	140	120	110	110	90
			F	28.2	30.5	33.1	35.8	38.7	41.6	44.5	47.5	50.6	56.7
		2	Q	330	290	250	220	200	180	170	150	140	130
			F	21.4	22.7	24.1	25.7	27.4	29.2	31.0	32.9	34.8	38.8
		3	Q	410	360	310	280	250	230	210	190	180	160
			F	18.2	18.8	19.7	20.8	22.0	23.2	24.5	25.8	27.2	30.0
		4	Q	480	420	380	340	300	280	250	230	220	190
			F	16.2	16.6	17.2	17.9	18.7	19.7	20.6	21.6	22.7	24.9
		6	Q	600	530	480	430	400	360	340	310	290	250
			F	14.0	14.0	14.3	14.6	15.1	15.6	16.3	16.9	17.6	19.0
		9	Q	730	670	610	560	510	480	440	410	390	340
			F	12.4	12.1	12.1	12.2	12.4	12.7	13.0	13.4	13.8	14.7
		12	Q	830	770	710	660	610	570	540	500	470	420
			F	11.5	11.1	10.9	10.9	11.0	11.1	11.3	11.5	11.8	12.4
		16	Q	920	870	820	770	720	680	640	610	580	520
			F	10.9	10.3	10.0	9.9	9.8	9.8	9.9	10.0	10.2	10.6

TABLE 8A—BUCKLING LIMIT FOR ALLOWABLE DIAPHRAGM SHEAR

STEEL DECK TYPE	DECK GAGE	SPAN (ft)									
		3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
		Q (plf)									
B DECK (STANDING SEAM)	22	8050	4528	2898	2013	1479	1132	894	725	599	503
	20	9686	5448	3487	2421	1779	1362	1076	872	720	605
	18	12914	7264	4649	3229	2372	1816	1435	1162	961	807
	16	16184	9104	5826	4046	2973	2276	1798	1457	1204	1012
B DECK (NESTABLE SEAM)	22	7631	4292	2747	1908	1402	1073	848	687	568	477
	20	9266	5212	3336	2317	1702	1303	1030	834	689	579
	18	12285	6910	4423	3071	2256	1728	1365	1106	914	768
	16	15514	8726	5585	3878	2849	2182	1724	1396	1154	970
Q _{LRFD} (plf)											
B DECK (STANDING SEAM)	22	12800	7200	4608	3200	2351	1800	1422	1152	952	800
	20	15400	8663	5544	3850	2829	2166	1711	1386	1145	963
	18	20533	11550	7392	5133	3771	2888	2281	1848	1527	1283
	16	25733	14475	9264	6433	4727	3619	2859	2316	1914	1608
B DECK (NESTABLE SEAM)	22	12133	6825	4368	3033	2229	1706	1348	1092	902	758
	20	14733	8288	5304	3683	2706	2072	1637	1326	1096	921
	18	19533	10988	7032	4883	3588	2747	2170	1758	1453	1221
	16	24667	13875	8880	6167	4531	3469	2741	2220	1835	1542

TABLE 8B—BUCKLING LIMIT FOR ALLOWABLE DIAPHRAGM SHEAR

STEEL DECK TYPE	DECK GAGE	SPAN (ft)									
		6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	13'-0"	14'-0"	16'-0"
		Q (plf)									
N DECK (STANDING SEAM)	22	9030	6635	5080	4014	3251	2687	2258	1924	1659	1270
	20	10818	7948	6085	4808	3894	3218	2704	2304	1987	1521
	18	14340	10535	8066	6373	5162	4266	3585	3055	2634	2017
	16	17856	13119	10044	7936	6428	5313	4464	3804	3280	2511
N DECK (NESTABLE SEAM)	22	9413	6916	5295	4184	3389	2801	2353	2005	1729	1324
	20	11426	8394	6427	5078	4113	3399	2856	2434	2099	1607
	18	15157	11136	8526	6737	5457	4510	3789	3229	2784	2131
	16	19151	14070	10772	8512	6894	5698	4788	4079	3518	2693
Q _{LRFD} (plf)											
N DECK (STANDING SEAM)	22	14358	10549	8077	6381	5169	4272	3590	3059	2637	2019
	20	17200	12637	9675	7644	6192	5117	4300	3664	3159	2419
	18	22800	16751	12825	10133	8208	6783	5700	4857	4188	3206
	16	28392	20859	15970	12619	10221	8447	7098	6048	5215	3993
N DECK (NESTABLE SEAM)	22	14967	10996	8419	6652	5388	4453	3742	3188	2749	2105
	20	18167	13347	10219	8074	6540	5405	4542	3870	3337	2555
	18	24100	17706	13556	10711	8676	7170	6025	5134	4427	3389
	16	30450	22371	17128	13533	10962	9060	7613	6486	5593	4282

TABLE 9—Q (plf) AND F (1×10^{-6} inches), $1\frac{1}{2}$, 2 OR 3-INCH DEEP DECK WITH $\frac{3}{4}$ " WELDED SHEAR STUD CONNECTORS¹⁻¹⁰

CONCRETE TYPE ¹	THICKNESS ABOVE DECK (inches)	SPACING OF STUD SHEAR CONNECTORS (inches o.c.)							F
		12	16	18	24	30	32	36	
NW	2				3110 (1320)			2870 (1320)	0.40
	$2\frac{1}{2}$	3890 (1640)			3450 (1640)	3230 (1640)	2870 (1640)	0.32	
	3	4670 (1970)			4310 (1970)	3450 (1970)	3230 (1970)	2870 (1970)	0.26
	$3\frac{1}{2}$	5450 (2300)			4310 (2300)	3450 (2300)	3230 (2300)	2870 (2300)	0.23
	4	6230 (2630)		5740 (2630)	4310 (2630)	3450 (2630)	3230 (2630)	2870 (2630)	0.20
	$4\frac{1}{2}$	7010 (2960)	6460 (2960)	5740 (2960)	4310 (2960)	3450 (2960)	3230 (2960)	2870 (2870)	0.18
	6	8610 (3940)	6460 (3940)	5740 (3940)	4310 (3940)	3450 (3450)	3230 (3230)	2870 (2870)	0.13
LW	2				2920 (1120)			2850 (1120)	0.60
	$2\frac{1}{2}$	3650 (1400)			3420 (1400)	3210 (1400)	2850 (1400)	0.48	
	3	4380 (1680)			4280 (1680)	3420 (1680)	3210 (1680)	2850 (1680)	0.40
	$3\frac{1}{4}$	4740 (1820)			4280 (1820)	3420 (1820)	3210 (1820)	2850 (1820)	0.37
	$3\frac{1}{2}$	5110 (1960)			4280 (1960)	3420 (1960)	3210 (1960)	2850 (1960)	0.34
	$4\frac{1}{4}$	6200 (2370)		5700 (2370)	4280 (2370)	3420 (2370)	3210 (2370)	2850 (2370)	0.28
	6	8550 (3350)	6410 (3350)	5700 (3350)	4280 (3350)	3420 (3350)	3210 (3210)	2850 (2850)	0.20

Notes:

- Thickness above deck is measured from the top of steel deck to the top of concrete.
- Reinforcing must have minimum yield strength of 60,000 psi and meet the requirements of ACI 318 for ASTM standard reinforcing bars or WRI standard welded wire reinforcement.
- Reinforcement in each direction must have an area of 0.0025 times the gross area of the concrete above the top of steel deck to use the tabulated values. 6x6-W4xW4 wire mesh meets this requirement for 2" and 2.5" thick slabs. 4x4-W4xW4 wire mesh meets this requirement for 3", 3.25" and 3.5" thick slabs, 4x4-W4.5xW4.5 wire mesh meets this requirement for 4.25" and 4.5" thick slabs, 4x4-W6xW6 wire mesh meets this requirement for 6" thick slab.
- For the values in (parenthesis)** - reinforcement in each direction must have an area of 0.00075 times the area of concrete fill above the top of steel deck to use the tabulated values in parenthesis. 6x6-W1.4xW1.4 wire mesh meets this requirement for 2", 2.5", and 3" thick slabs. 6x6-W2.1xW2.1 wire mesh meets this requirement for 3.25", 3.5", 4.25" and 4.5" thick slabs. 6x6-W2.9xW2.9 meets this requirement for 6" thick slabs.
- See Figure 1 for qualified floor deck types.
- Welded shear stud diameter must be less than or equal to 2.5 times the steel support thickness unless connector is located directly over the support web.
- The maximum center-to-center spacing of stud shear connectors must not exceed eight times the total slab thickness h (see Figure 4) nor 36 inches.
- For local shear transfer within the field of the diaphragm to members parallel to deck flute; $\frac{3}{4}$ " diameter welded shear studs must have an allowable shear value of 11.0 kips per stud for normal weight concrete fills and 10.2 kips per stud for lightweight concrete fills;
- Tabulated values must be multiplied by $\phi/0.75$ per Section 9.3.4(b) of ACI 318-05, where $\phi < 0.75$.
- For LRFD diaphragm shear strength, multiply tabulated values by 1.50.

TABLE 10A—Q (plf) & F (1×10^{-6} inches), B DECK (STANDING OR NESTABLE SEAM), Fy = 33 ksi

SUPPORT FASTENERS - PNEUTEK K66062 or K66075 (0.281 inch and up substrate); K64062 or K64075 (0.187 to 0.312 inch substrate); or SDK63075 (0.155 to 0.250 inch substrate). 36/4 pattern

SIDELAP FASTENERS – Button Punches, #10 by $\frac{3}{4}$ " Self-Drilling Screws, or Welds @ 36 o.c.

CONCRETE FILL – Normal Weight (145pcf), $f'_c = 3,000$ psi

TABLE 10B—Q (plf) & F (1×10^{-6} inches), B DECK (STANDING OR NESTABLE SEAM), Fy = 33 ksi

SUPPORT FASTENERS - PNEUTEK SDK61075 (0.113 TO 0.155 inch SUBSTRATE), 36/4 PATTERN

SIDELAP FASTENERS - Button Punches, #10 by $\frac{3}{4}$ " Self-Drilling Screws, or Welds @ 36 o.c.

CONCRETE FILL – Normal Weight (145 pcf), $f'c = 3,000$ psi

TABLE 10C—Q (plf) & F (1×10^{-6} inches), B DECK (STANDING OR NESTABLE SEAM), $F_y = 33$ ksi

SUPPORT FASTENERS - PNEUTEK K66062 OR K66075 (0.281 inch AND UP SUBSTRATE); K64062 OR K64075 (0.187 TO 0.312 inch SUBSTRATE); OR SDK63075 (0.155 TO 0.250 inch SUBSTRATE), 36/4 PATTERN

SIDELAP FASTENERS - Button Punches, #10 by $\frac{3}{4}$ " Self-Drilling Screws, or Welds @ 36 o.c.

CONCRETE FILL - Lightweight (110 pcf), $f'_c = 3,000$ psi

DEPTH OF FILL ABOVE TOP OF DECK (inches)	DECK GAGE	Q (plf) F (10^{-6} in)	SPAN (ft-in) - 3 SPAN CONDITION									
			5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	13'-0"	14'-0"
2 LW	22	Q	940	920	910	900	890	880	880	870	870	860
		F	0.51	0.51	0.51	0.52	0.52	0.52	0.52	0.52	0.52	0.52
	20	Q	980	950	940	920	910	910	900	890	890	880
		F	0.51	0.51	0.51	0.51	0.52	0.52	0.52	0.52	0.52	0.52
	18	Q	1060	1020	1010	980	960	960	950	930	940	930
		F	0.51	0.51	0.51	0.51	0.51	0.51	0.52	0.52	0.52	0.52
	16	Q	1150	1090	1090	1050	1020	1020	1000	990	990	980
		F	0.50	0.51	0.51	0.51	0.51	0.51	0.51	0.52	0.52	0.52
$2\frac{1}{2}$ LW	22	Q	1140	1120	1110	1100	1090	1080	1080	1070	1070	1060
		F	0.41	0.41	0.41	0.41	0.42	0.42	0.42	0.42	0.42	0.42
	20	Q	1180	1150	1140	1120	1110	1110	1100	1090	1090	1080
		F	0.41	0.41	0.41	0.41	0.41	0.41	0.42	0.42	0.42	0.42
	18	Q	1260	1220	1210	1180	1160	1160	1150	1130	1140	1130
		F	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.42
	16	Q	1350	1290	1280	1250	1220	1220	1200	1190	1190	1180
		F	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41
$3\frac{1}{4}$ LW	22	Q	1440	1420	1410	1400	1380	1380	1370	1370	1370	1360
		F	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32
	20	Q	1480	1450	1440	1420	1410	1410	1400	1390	1390	1380
		F	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32
	18	Q	1560	1520	1510	1480	1460	1460	1450	1430	1440	1430
		F	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32
	16	Q	1650	1590	1580	1550	1520	1520	1500	1490	1490	1480
		F	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32
$4\frac{1}{4}$ LW	22	Q	1840	1820	1810	1790	1780	1780	1770	1770	1770	1760
		F	0.24	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
	20	Q	1880	1850	1840	1820	1810	1800	1790	1790	1790	1780
		F	0.24	0.24	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
	18	Q	1960	1910	1910	1880	1860	1860	1840	1830	1830	1820
		F	0.24	0.24	0.24	0.24	0.25	0.25	0.25	0.25	0.25	0.25
	16	Q	2050	1990	1980	1950	1920	1920	1900	1880	1890	1880
		F	0.24	0.24	0.24	0.24	0.24	0.24	0.25	0.25	0.25	0.25

TABLE 10D—Q (plf) & F (1x10⁻⁶ inches), B DECK (STANDING OR NESTABLE SEAM), Fy = 33 ksi

SUPPORT FASTENERS - PNEUTEK SDK61075 (0.113 TO 0.155 inch SUBSTRATE), 36/4 PATTERN

SIDEI AP FASTENERS - Button Punches, #10 by $\frac{3}{4}$ " Self-Drilling Screws, or Welds @ 36 o.c.

CONCRETE EII L - Lightweight (110pcf), $f'c = 3,000$ psi

TABLE 11A—Q (plf) & F (1×10^{-6} inches). B DECK (STANDING OR NESTABLE SEAM), Fy = 33 ksi

SUPPORT FASTENERS - PNEUTEK K66062 OR K66075 (0.281 inch AND UP SUBSTRATE); K64062 OR K64075 (0.187 TO 0.312 inch SUBSTRATE); OR SDK63075 (0.155 TO 0.250 inch SUBSTRATE). 36/7 PATTERN

SIDELAP FASTENERS - Button Punches, #10 by $\frac{3}{4}$ " Self-Drilling Screws, or Welds @ 36 o.c.

CONCRETE FILL – Normal Weight (145 pcf). $f'c \equiv 3,000 \text{ psi}$

TABLE 11B—Q (plf) & F (1x10⁻⁶ inches), B DECK (STANDING OR NESTABLE SEAM), Fy = 33 ksi

SUPPORT FASTENERS - PNEUTEK SDK61075 (0.113 TO 0.155 inch SUBSTRATE), 36/7 PATTERN

SIDELAP FASTENERS Button Punches, #10 by $\frac{3}{4}$ " Self-Drilling Screws, or Welds @ 36 o.c.

CONCRETE FILL – Normal Weight (145 pcf), $f'c = 3,000 \text{ psi}$

TABLE 11C—Q (plf) & F (1×10^{-6} inches), B DECK (STANDING OR NESTABLE SEAM), $F_y = 33$ ksi

SUPPORT FASTENERS - PNEUTEK K66062 OR K66075 (0.281 inch AND UP SUBSTRATE); K64062 OR K64075 (0.187 TO 0.312 inch SUBSTRATE); OR SDK63075 (0.155 TO 0.250 inch SUBSTRATE), 36/7 PATTERN

SIDELAP FASTENERS - Button Punches, #10 by $\frac{3}{4}$ " Self-Drilling Screws, or Welds @ 36 o.c.

CONCRETE FILL - Lightweight (110pcf), f'c = 3,000 psi

TABLE 11D—Q (plf) & F (1x10⁻⁶ inches), B DECK (STANDING OR NESTABLE SEAM), Fy = 33 ksi

SUPPORT FASTENERS - PNEUTEK SDK61075 (0.113 TO 0.155 inch SUBSTRATE), 36/7 PATTERN

SIDEI AP FASTENERS - Button Punches, #10 by $\frac{3}{8}$ " Self-Drilling Screws, or Welds @ 36 o.c.

CONCRETE EII L - Lightweight (110pcf), $f'c = 3,000$ psi

TABLE 12A—Q (plf) & F (1×10^{-6} inches), 2 AND 3 INCH DEEP DECK, $F_y = 33$ ksi

SUPPORT FASTENERS - PNEUTEK K66062 OR K66075 (0.281 inch AND UP SUBSTRATE); K64062 OR K64075 (0.187 TO 0.312 inch SUBSTRATE); OR SDK63075 (0.155 TO 0.250 inch SUBSTRATE), 24/3 AND 36/4 PATTERN

SIDELAP FASTENERS - Button Punches, #10 by $\frac{3}{4}$ " Self-Drilling Screws, or Welds @ 36 o.c.

CONCRETE FILL – Normal Weight (145 pcf). $f'c \equiv 3,000 \text{ psi}$

TABLE 12B—Q (plf) & F (1×10^{-6} inches), 2 AND 3 INCH DEEP DECK, $F_y = 33$ ksi

SUPPORT FASTENERS - PNEUTEK SDK61075 (0.113 TO 0.155 inch SUBSTRATE), 24/3 AND 36/4 PATTERN

SIDELAP FASTENERS - Button Punches, #10 by $\frac{3}{4}$ " Self-Drilling Screws, or Welds @ 36 o.c.

CONCRETE FILL – Normal Weight (145 pcf), $f'c = 3,000 \text{ psi}$

TABLE 12C—Q (plf) & F (1×10^{-6} inches), 2 AND 3 INCH DEEP DECK, $F_y = 33$ ksi

SUPPORT FASTENERS - PNEUTEK K66062 or K66075 (0.281 inch and up substrate); K64062 or K64075 (0.187 to 0.312 inch substrate); or SDK63075 (0.155 to 0.250 inch substrate), 24/3 and 36/4 pattern

SIDELAP FASTENERS - Button Punches, #10 by $\frac{3}{4}$ " Self-Drilling Screws, or Welds @ 36 o.c.

CONCRETE FILL - Lightweight (110pcf). $f'_c = 3,000$ psi

TABLE 12D—Q (plf) & F (1×10^{-6} inches), 2 AND 3 INCH DEEP DECK, $F_y = 33$ ksi

SUPPORT FASTENERS - PNEUTEK SDK61075 (0.113 TO 0.155 inch substrate), 24/3 and 36/4 pattern.

SIDELAP FASTENERS - Button Punches, #10 by $\frac{3}{4}$ " Self-Drilling Screws, or Welds @ 36 o.c.

CONCRETE FILL - Lightweight (110pcf). $f'c = 3,000 \text{ psi}$

TABLE 13A—Q (plf) & F (1×10^{-6} inches), N DECK (STANDING OR NESTABLE), $F_y = 33$ ksi

SUPPORT FASTENERS - PNEUTEK K66062 or K66075 (0.281 inch and up substrate); K64062 or K64075 (0.187 to 0.312 inch substrate); or SDK63075 (0.155 to 0.250 inch substrate), 24/4 pattern

SIDELAP FASTENERS - Button Punches, #10 by $\frac{3}{4}$ " Self-Drilling Screws, or Welds @ 36 o.c.

CONCRETE FILL - Normal Weight (145 pcf). $f'c \equiv 3,000 \text{ psi}$

TABLE 13B—Q (plf) & F (1x10⁻⁶ inches), N DECK (STANDING OR NESTABLE), Fy = 33 ksi,

SUPPORT FASTENERS - PNEUTEK SDK61075 (0.113 to 0.155 inch substrate), 24/4 pattern

SIDELAP FASTENERS - Button Punches, #10 by $\frac{3}{4}$ " Self-Drilling Screws, or Welds @ 36 o.c.

CONCRETE FILL - Normal Weight (145 pcf), $f'_c = 3,000$ psi

TABLE 13C—Q (plf) & F (1x10⁻⁶ inches), N DECK (STANDING OR NESTABLE), Fy = 33 ksi

SUPPORT FASTENERS - PNEUTEK K66062 or K66075 (0.281 inch and up substrate); K64062 or K64075 (0.187 to 0.312 inch substrate); or SDK63075 (0.155 to 0.250 inch substrate), 24/4 Pattern

SIDELAP FASTENERS - Button Punches, #10 by $\frac{3}{4}$ " Self-Drilling Screws, or Welds @ 36 o.c.

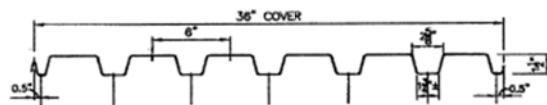
CONCRETE FILL - Lightweight (110pcf). $f'_c = 3,000 \text{ psi}$

TABLE 13D—Q (plf) & F (1×10^{-6} inches), N DECK (STANDING OR NESTABLE), $F_y = 33$ ksi

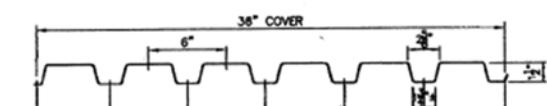
SUPPORT FASTENERS - PNEUTEK SDK61075 (0.113 to 0.155 inch substrate), 24/4 pattern

SIDELAP FASTENERS - Button Punches, #10 by $\frac{3}{4}$ " Self-Drilling Screws, or Welds @ 36 o.c.

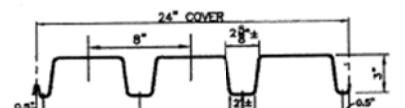
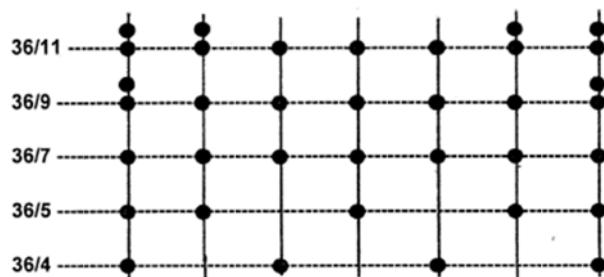
CONCRETE FILL - Lightweight (110pcf), $f'c = 3,000 \text{ psi}$

FASTENER PATTERNSTEEL ROOF DECKS AND CONCRETE-FILLED FLOOR DECKS

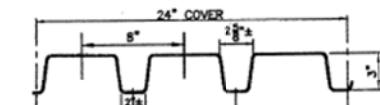
B DECK - STANDING SEAM - 36" WIDE



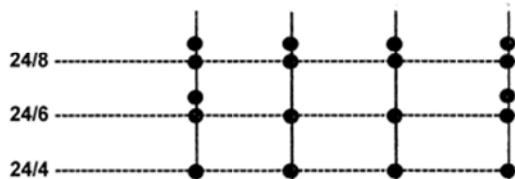
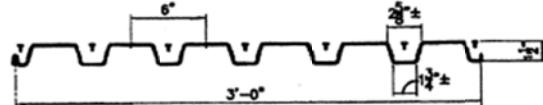
B DECK - NESTABLE SEAM - 36" WIDE



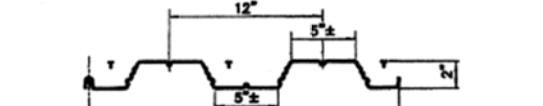
N DECK - STANDING SEAM - 24" WIDE



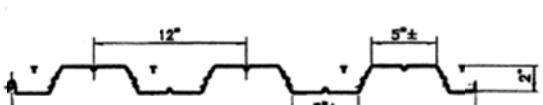
N DECK - NESTABLE SEAM - 24" WIDE

CONCRETE-FILLED STEEL FLOOR DECKS

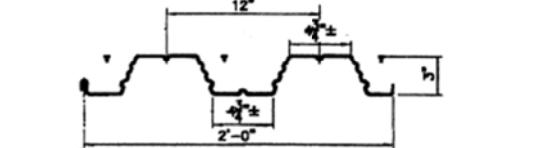
1 1/2" DEEP DECK - 36" WIDE - 36/7 PATTERN



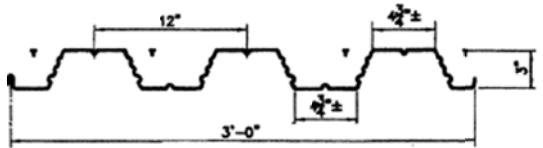
2" DEEP DECK - 24" WIDE - 24/3 PATTERN



2" DEEP DECK - 36" WIDE - 36/4 PATTERN



3" DEEP DECK - 24" WIDE - 24/3 PATTERN



3" DEEP DECK - 36" WIDE - 36/4 PATTERN

FIGURE 1—PNEUTEK SUPPORT FASTENER PATTERNS AND DECK PROFILES

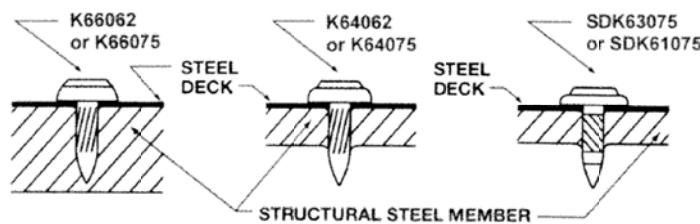
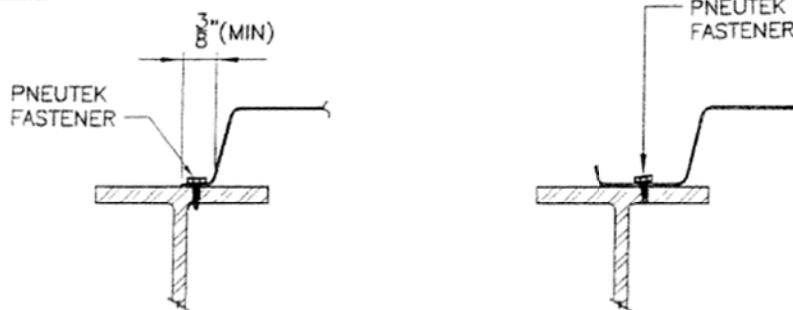
DIAPHRAGM EDGES

FIGURE 2—PNEUTEK FRAME (SUPPORT) FASTENER DETAILS

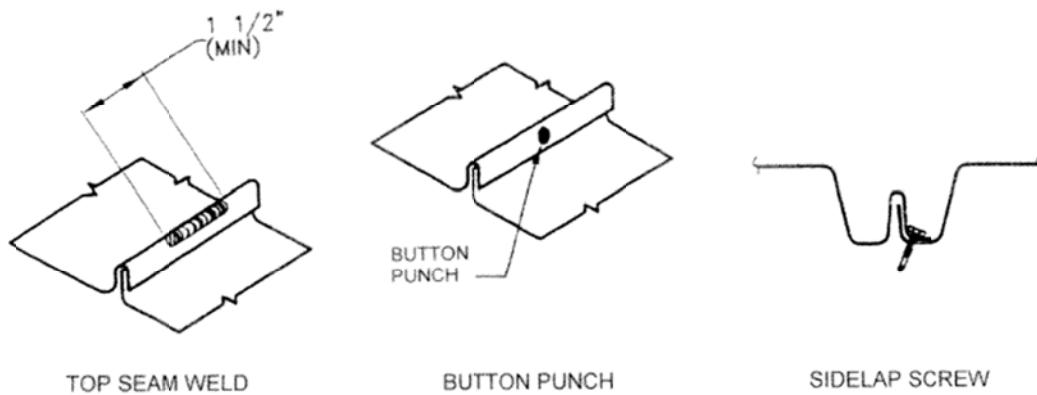
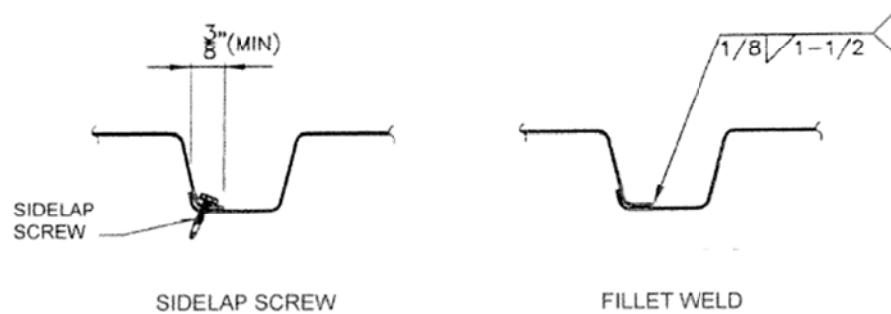
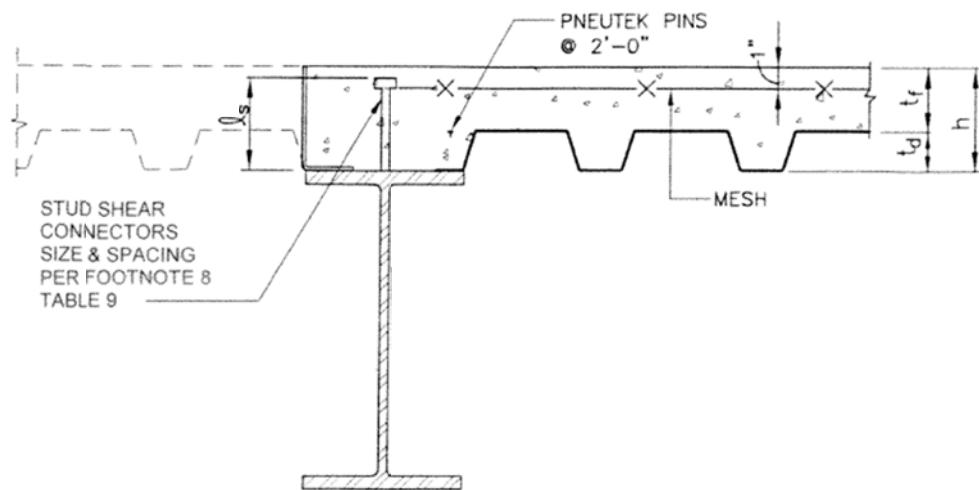
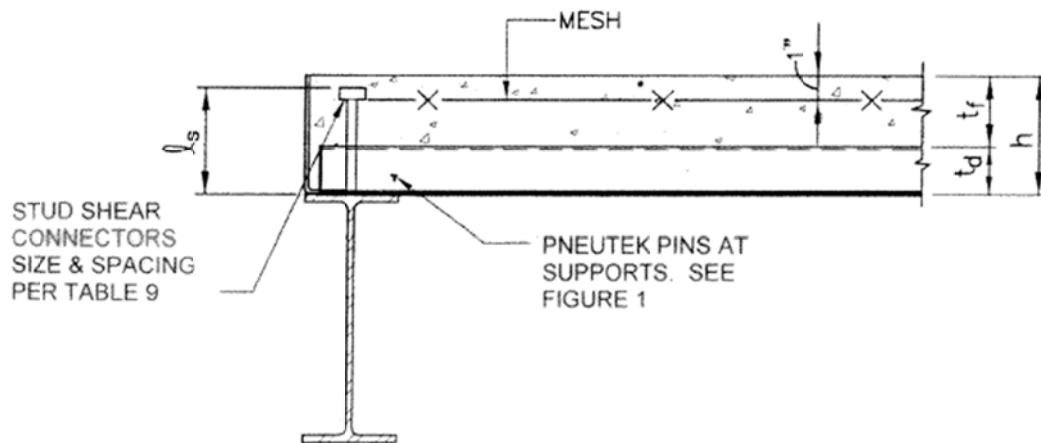
STANDING SEAM SIDELAPSNESTABLE SIDELAPS

FIGURE 3—SIDELAP FASTENER DETAILS



WELDED SHEAR STUD CONNECTORS AT SUPPORTS PARRELLEL TO FLUTES



WELDED SHEAR STUD CONNECTOR AT SUPPORTS PERPENDICUALR TO FLUTES

t_d (inch)	MINIMUM STUD LENGTH (inch)
1 $\frac{1}{2}$	3
2	3 $\frac{1}{2}$
3	4 $\frac{1}{2}$

TYPICAL STUD SHEAR CONNECTOR LENGTH

FIGURE 4—STUD SHEAR CONNECTOR DETAILS