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DIVISION: 05 00 00—METALS
SECTION: 05 31 00—STEEL DECKING
SECTION: 05 31 23—STEEL ROOF DECKING

REPORT HOLDER:

NEW LIMMENNIUM BUILDING SYSTEMS, LLC

7575 WEST JEFFERSON BOULEVARD
FT. WAYNE, INDIANA 46804

EVALUATION SUBJECT:

NEW MILLENNIUM STEEL ROOF DECK PANELS: D4.5, D6 AND D7.5 DEEP-DEK®; D4.5A, D6A AND D7.5A DEEP-DEK® ACOUSTICAL; D4.5C, D6C AND D7.5C DEEP-DEK® CELLULAR; D4.5CA, D6CA AND D7.5CA DEEP-DEK® CELLULAR ACOUSTICAL; VERSA-DEK® ROOF DECK PANELS; AND VERSA-DEK® ACOUSTICAL ROOF DECK PANELS

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

REPORT HOLDER:

NEW MILLENNIUM BUILDING SYSTEMS, LLC
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EVALUATION SUBJECT:

NEW MILLENNIUM STEEL ROOF DECK PANELS: D4.5, D6 AND D7.5 DEEP-DEK®; D4.5A, D6A AND D7.5A DEEP-DEK® ACOUSTICAL; D4.5C, D6C AND D7.5C DEEP-DEK® CELLULAR; D4.5CA, D6CA AND D7.5CA DEEP-DEK® CELLULAR ACOUSTICAL; VERSA-DEK® ROOF DECK PANELS; AND VERSA-DEK® ACOUSTICAL ROOF DECK PANELS

1.0 EVALUATION SCOPE

Compliance with the following code:

2015, 2012, 2009, and 2006 *International Building Code®* (IBC)

Property evaluated:

Structural

2.0 USES

The New Millennium Deep-Dek®, Deep-Dek® Cellular, Deep-Dek® Acoustical, Deep-Dek® Cellular Acoustical, Versa-Dek and Versa-Dek Acoustical steel deck panels are used as roof decks to support the code-required roof loads, and as components of horizontal diaphragms.

3.0 DESCRIPTION

3.1 General:

The deck panels with dimensions and profiles as shown in Figure 1 are cold-formed from steel sheets complying with the following:

- ASTM A653 SS Grade 40 steel with a G40 galvanization. An optional prime paint is available for the bottom surface which is applied over the galvanization. Also applicable for cellular deck panels.
- ASTM A1008-15 SS Grade 40 steel with a mill finished (bare steel) top surface primed painted bottom surface. Optional coatings are available for the top surface.

3.2 D4.5, D6 and D7.5 Deep-Dek® Panels:

The D4.5, D6, and D7.5 deck panels are fluted, hat sections as shown in Figure 1, and are available in design thicknesses ranging from No. 14 to No. 20 gage [0.0747 inch (1.90 mm) to 0.0358 inch (0.909 mm)].

3.3 D4.5C, D6C and D7.5C Deep-Dek® Cellular Panels:

The deck panels consist of fluted, hat sections that are factory-welded to pan, liner sections, as shown in Figure 1. The deck panels are available with hat section design thicknesses ranging from No. 14 to No. 20 gage [0.0747 inch (1.90 mm) to 0.0358 inch (0.909 mm)] and liner section design thicknesses ranging from No. 14 to No. 20 gage [0.0747 inch (1.90 mm) to 0.0358 inch (0.909 mm)].

3.4 D4.5A, D6A and D7.5A Deep-Dek® Acoustical Panels:

These deck panels are the same as the D4.5, D6 and D7.5 Deep-Dek® panels described in Section 3.2 above, except the webs of the panels are perforated with holes. See Figure 3 for perforation patterns.

3.5 D4.5CA, D6CA and D7.5CA Deep-Dek® Cellular Acoustical Panels:

These deck panels are the same as the D4.5C, D6C and D7.5C Deep-Dek® Cellular panels described in Section 3.3 above, except the bottom liner sections of the panels are perforated with holes. See Figure 3 for perforation patterns.

3.6 Versa-Dek® S, S ES, LS, LS ES and 3.5 LS Deck Panels:

The deck panels are fluted sections as shown in Figure 1 and are available in design thicknesses ranging from No. 16 to No. 22 gage [0.0598 inch (1.52 mm) to 0.0295 inch (0.749 mm)]. 3.5LS panels are available in design thicknesses ranging from No. 16 to No. 20 gage [0.0598 inch (1.52 mm) to 0.0358 inch (0.909 mm)].

3.7 Versa-Dek® S Acoustical, S ES Acoustical, LS Acoustical, LS ES Acoustical and 3.5 LS Acoustical Deck Panels:

These deck panels are the same as those described in Section 3.6, except that the bottom flange of the panels is perforated with holes. See Figure 2 for perforation patterns.

3.8 Support Connections:

3.8.1 Arc Spot (Puddle) Welds: Arc spot (puddle) welds must have a minimum effective fusion area to supporting members of at least $^1/_2$ inch (13 mm) in diameter. Arc spot

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welds must be made using E60 or E70 filler metal and must comply with AWS D1.3.

3.8.2 Hilti X-ENP-19-L15 Powder-Driven Fastener: The fastener must be as recognized in ESR-2197 and ESR-2776.

3.8.3 Hilti X-HSN 24 Powder-Driven Fastener: The fastener must be as recognized in ESR-2197, and ESR-2776.

3.9 Seam (Sidelap) Connections:

3.9.1 Arc Seam Welds: Arc seam welds must have a minimum length of 1.5 inches (38 mm).

3.9.2 Fillet Welds: Fillet welds must have a minimum length of 1.5 inches (38 mm).

3.9.3 #10 Screws: Screws must be self-drilling or self-piercing tapping screws complying with ASTM C1513. The screws must be long enough to penetrate through the connected steel panels with a minimum of three threads protruding past the back side of the connected deck panels.

3.9.4 #12 Screws: Screws must be self-drilling or self-piercing tapping screws complying with ASTM C1513. The screws must be long enough to penetrate through the connected steel panels with a minimum of three threads protruding past the back side of the connected deck panels.

3.9.5 Hilti S-SLC01 M HWH Self-Piercing Screw and Hilti S-SLC02 M HWH Self-Drilling Screw: The fasteners must be as recognized in ESR-2776. The screws must be long enough to penetrate through the connected steel panels with a minimum of three threads protruding past the back side of the connected panels.

4.0 TABULATED DESIGN VALUES:

4.1 Section Properties: Deck panel section properties are provided in Table 1.

4.1.1 Support Reactions: Support reactions must not exceed the allowable reactions based on web crippling of the deck panels provided in Table 2.

4.1.2 Diaphragm Design:

4.1.2.1 Shear and Flexibility Factors.

Allowable diaphragm shear and shear stiffness (G') values are provided in Tables 4 through 54. The flexibility factor (F) is equal to 1000/G', where G' is in kips per inch and F is in micro-inches/lbf.

4.1.2.2 Flexibility Limitations: Diaphragm span/depth limitations based on diaphragm flexibility must comply with Table 3.

4.1.2.3 Deflections: Diaphragm deflection (Δ) must be calculated using the equation noted in Table 3.

5.0 CONDITIONS OF USE

The New Millennium steel roof deck panels described in this report comply with, or are suitable alternatives to what is specified in, the code noted in Section 1.0 of this report, subject to the following conditions:

5.1 The deck panels are manufactured, identified and installed in accordance with this report, the approved plans and New Millennium's published installation guidelines and instructions. If there is a conflict between the manufacturer's published installation guidelines and instructions and this report, the most restrictive governs.

5.2 The design base-metal thicknesses for all steel deck panels are indicated in Table 1. The thickness delivered to the jobsite must be at least 95 percent of the design base-metal thickness.

5.3 The minimum loads of IBC Section 1607 must be considered by the design professional based on the specific occupancy or use, as applicable.

5.4 Special inspection must be provided in accordance with Chapter 17 of the IBC.

5.5 Use of New Millennium steel roof panels without a roof covering has not been evaluated.

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

5.7 The cellular deck panels are fabricated in Memphis, Tennessee; and Phoenix, Arizona under a quality program with regular ongoing inspections by ICC-ES.

The other deck panels are also fabricated in Memphis, Tennessee; and Phoenix, Arizona under a quality program with annual inspections by ICC-ES.

6.0 EVIDENCE SUBMITTED

6.1 Data in accordance with ICC-ES Acceptance Criteria for Steel Deck Roof and Floor Systems (AC43), dated October 2015.

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

7.0 IDENTIFICATION

Each bundle of the New Millenium steel deck panels described in this report is identified by labeling bearing the manufacturer's name (New Millenium Building Systems, LLC) and the manufacturing location (MD—Memphis, Tennessee or PD—Phoenix, Arizona).; the deck panel profile name; the design thickness; the minimum specified yield strength; the cover width of the panel; and the evaluation report number (ESR-2657).

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3 Diaphragm Flexibility Limitations 9

ALLOWABLE DIAPHRAGM SHEAR VALUES AND SHEAR STIFFNESS FACTORS

TABLE	DECK PANEL	SUPPORT CONNECTION	SIDELAP CONNECTIONS	PAGE
4	Deep Dek 4.5	½" Effective Weld Diameter	$1^1/_2$" Seam Welds	10
5		½" Effective Weld Diameter	#10 Screws	11
6		Hilti X-ENP-19-L15	Hilti S-SLC01 M HWH, S-SLC02 M HWH or #12 self-drilling screws	12
7	Deep Dek 6	½" Effective Weld Diameter	$1^1/_2$" Seam Welds	13
8		½" Effective Weld Diameter	#10 Screws	14
9		Hilti X-ENP-19-L15	Hilti S-SLC01 M HWH, S-SLC02 M HWH or #12 self-drilling screws	15
10	Deep Dek 7.5	½" Effective Weld Diameter	$1^1/_2$" Seam Welds	16
11		½" Effective Weld Diameter	#10 Screws	17
12		Hilti X-ENP-19-L15	Hilti S-SLC01 M HWH, S-SLC02 M HWH or #12 self-drilling screws	18
13	Deep Dek 4.5 Cellular	½" Effective Weld Diameter	#10 Screws & $1^1/_2$" Seam Welds	19
14		Hilti X-ENP-19-L15	Hilti S-SLC01 M HWH, S-SLC02 M HWH or #12 self-drilling screws	20
15	Deep Dek 6 Cellular	½" Effective Weld Diameter	#10 Screws & $1^1/_2$" Seam Welds	21
16		Hilti X-ENP-19-L15	Hilti S-SLC01 M HWH, S-SLC02 M HWH or #12 self-drilling screws	22
17	Deep Dek 7.5 Cellular	$^1/_2$" Effective Weld Diameter	#10 Screws & $1^1/_2$" Seam Welds	23
18		Hilti X-ENP-19-L15	Hilti S-SLC01 M HWH, S-SLC02 M HWH or #12 self-drilling screws	24
19	Deep Dek 4.5 Acoustical	$^1/_2$" Effective Weld Diameter	#10 Screws & $1^1/_2$" Seam Welds	25
20		Hilti X-ENP-19-L15	Hilti S-SLC01 M HWH, S-SLC02 M HWH or #12 self-drilling screws	26
21	Deep Dek 6 Acoustical	$^1/_2$" Effective Weld Diameter	#10 Screws & $1^1/_2$" Seam Welds	27
22		Hilti X-ENP-19-L15	Hilti S-SLC01 M HWH, S-SLC02 M HWH or #12 self-drilling screws	28
23	Deep Dek 7.5 Acoustical	$^1/_2$" Effective Weld Diameter	#10 Screws & $1^1/_2$" Seam Welds	29
24		Hilti X-ENP-19-L15	Hilti S-SLC01 M HWH, S-SLC02 M HWH or #12 self-drilling screws	30
25	Deep Dek 4.5 Cellular Acoustical	$^1/_2$" Effective Weld Diameter	#10 Screws & $1^1/_2$" Seam Welds	31
26		Hilti X-ENP-19-L15	Hilti S-SLC01 M HWH, S-SLC02 M HWH or #12 self-drilling screws	32
27	Deep Dek 6 Cellular Acoustical	$^1/_2$" Effective Weld Diameter	#10 Screws & $1^1/_2$" Seam Welds	33
28		Hilti X-ENP-19-L15	Hilti S-SLC01 M HWH, S-SLC02 M HWH or #12 self-drilling screws	34
29	Deep Dek 7.5 Cellular Acoustical	$^1/_2$" Effective Weld Diameter	#10 Screws& $1^1/_2$" Seam Welds	35
30		Hilti X-ENP-19-L15	Hilti S-SLC01 M HWH, S-SLC02 M HWH or #12 self-drilling screws	36

ALLOWABLE DIAPHRAGM SHEAR VALUES AND SHEAR STIFFNESS FACTORS (CONTINUED)

TABLE	DECK PANEL	SUPPORT CONNECTION	SIDELAP CONNECTIONS	PAGE
31	Versa-Dek S & LS	1/2" Effective Weld Diameter	#10 Screws	37
32		1/2" Effective Weld Diameter	1 1/2" Fillet Welds or 1 1/2" Seam Welds	38
33		Hilti X-ENP-19-L15	Hilti S-SLC01 M HWH, S-SLC02 M HWH or #12 self-drilling screws	39
34		Hilti X-HSN24	Hilti S-SLC01 M HWH, S-SLC02 M HWH or #12 self-drilling screws	40
35	Versa-Dek S ES & LS ES	1/2" Effective Weld Diameter	#10 Screws	41
36		1/2" Effective Weld Diameter	1 1/2" Fillet Welds or 1 1/2" Seam Welds	42
37		Hilti X-ENP-19-L15	Hilti S-SLC01 M HWH, S-SLC02 M HWH or #12 self-drilling screws	43
38		Hilti X-HSN24	Hilti S-SLC01 M HWH, S-SLC02 M HWH or #12 self-drilling screws	44
39	Versa-Dek 3.5 LS	1/2" Effective Weld Diameter	#10 Screws	45
40		1/2" Effective Weld Diameter	1 1/2" Fillet Welds or 1 1/2" Seam Welds	46
41		Hilti X-ENP-19-L15	Hilti S-SLC01 M HWH, S-SLC02 M HWH or #12 self-drilling screws	47
42		Hilti X-HSN24	Hilti S-SLC01 M HWH, S-SLC02 M HWH or #12 self-drilling screws	48
43	Versa-Dek S Acoustical & LS Acoustical	1/2" Effective Weld Diameter	#10 Screws	49
44		1/2" Effective Weld Diameter	1 1/2" Fillet Welds or 1 1/2" Seam Welds	50
45		Hilti X-ENP-19-L15	Hilti S-SLC01 M HWH, S-SLC02 M HWH or #12 self-drilling screws	51
46		Hilti X-HSN24	Hilti S-SLC01 M HWH, S-SLC02 M HWH or #12 self-drilling screws	52
47	Versa-Dek S ES Acoustical & LS ES Acoustical	1/2" Effective Weld Diameter	#10 Screws	53
48		1/2" Effective Weld Diameter	1 1/2" Fillet Welds or 1 1/2" Seam Welds	54
49		Hilti X-ENP-19-L15	Hilti S-SLC01 M HWH, S-SLC02 M HWH or #12 self-drilling screws	55
50		Hilti X-HSN24	Hilti S-SLC01 M HWH, S-SLC02 M HWH or #12 self-drilling screws	56
51	Versa-Dek 3.5 LS Acoustical	1/2" Effective Weld Diameter	#10 Screws	57
52		1/2" Effective Weld Diameter	1 1/2" Fillet Welds or 1 1/2" Seam Welds	58
53		Hilti X-ENP-19-L15	Hilti S-SLC01 M HWH, S-SLC02 M HWH or #12 self-drilling screws	59
54		Hilti X-HSN24	Hilti S-SLC01 M HWH, S-SLC02 M HWH or #12 self-drilling screws	60

Figure **Page**

1 Steel Deck Panel Profiles and Attachment Patterns at Supports 61

2 Perforation Patterns of Versa-Dek Acoustical Profiles 62

3 Perforation Patterns of Deep-Dek Acoustical & Deep-Dek Cellular Acoustical Profiles 63

For **SI** dimensions: 1 inch = 25.4 mm; 1 plf = 14.6 N/m; 1 inch^2 = 645.16 mm^2; 1 inch^3 = 16.4 × 10^4 mm^3; 1 inch^4 = 41.6 × 10^4 mm^4;1 psf = 4.88 kg/m^2; 1 psf = 47.88 N; 1 pcf = 16.018 kg/m^3; 1 inch-kip = 0.113 kN-m; 1 kip = 4.448 kN; 1 ksi = 6.89 MPa; 1 foot = 304.8 mm.

TABLE 1A—SECTION PROPERTIES [1, 2, 3, 4]

DECK PANEL	GAGE	BASE METAL DESIGN THICKNESS (inches)	EFFECTIVE MOMENT OF INERTIA (in^4/ft width)		EFFECTIVE MOMENT OF INERTIA for DEFLECTION, I_D (in^4/ft width)		EFFECTIVE SECTION MODULUS (in^3/ft width)	
		t	Normal, I_{on}	Inverted, I_{oi}	Simple Span	Multiple Span	Normal, S_{en}	Inverted, S_{ei}
Deep-Dek® 4.5	20	0.0358	2.613	2.978	2.735	2.978	0.984	1.207
	18	0.0474	3.778	3.939	3.832	3.939	1.491	1.596
	16	0.0598	4.963	4.963	4.963	4.963	1.972	2.011
	14	0.0747	6.191	6.191	6.191	6.191	2.507	2.507
Deep-Dek® 6	20	0.0358	5.083	5.629	5.304	5.668	1.367	1.711
	18	0.0474	7.292	7.601	7.395	7.601	2.172	2.358
	16	0.0598	9.579	9.579	9.579	9.579	2.915	2.971
	14	0.0747	11.950	11.950	11.950	11.950	3.705	3.705
Deep-Dek® 7.5	20	0.0358	8.446	9.131	8.828	9.285	1.712	2.162
	18	0.0474	12.191	12.420	12.357	12.510	2.909	3.049
	16	0.0598	15.992	15.992	15.992	15.992	3.936	4.009
	14	0.0747	19.952	19.952	19.952	19.952	5.000	5.000
Deep-Dek® 4.5 Cellular	20/20	0.0358/ 0.0358	4.083	4.058	4.343	4.343	1.051	1.545
	20/18	0.0358/ 0.0474	4.322	4.628	4.634	4.839	1.054	1.603
	18/20	0.0474/ 0.0358	5.638	4.995	5.750	5.750	1.728	2.008
	18/18	0.0474/ 0.0474	6.085	5.626	6.210	6.210	1.727	2.076
	18/16	0.0474/ 0.0598	6.491	6.277	6.629	6.629	1.726	2.141
	16/18	0.0598/ 0.0474	7.655	6.647	7.655	7.655	2.449	2.574
	16/16	0.0598/ 0.0598	8.180	7.378	8.180	8.180	2.493	2.651
	16/14	0.0598/ 0.0747	8.730	8.157	8.730	8.730	2.539	2.726
	14/16	0.0747/ 0.0598	9.619	8.638	9.619	9.619	3.353	3.254
	14/14	0.0747/ 0.0747	10.264	9.511	10.264	10.264	3.413	3.345
Deep-Dek® 6 Cellular	20/20	0.0358/ 0.0358	7.351	7.645	7.912	8.107	1.417	2.207
	20/18	0.0358/ 0.0474	7.759	8.626	8.430	9.008	1.418	2.286
	18/20	0.0474/ 0.0358	10.524	9.414	10.713	10.713	2.346	2.862
	18/18	0.0474/ 0.0474	11.248	10.507	11.495	11.495	2.335	2.958
	18/16	0.0474/ 0.0598	11.814	11.624	12.146	12.146	2.331	3.047
	16/18	0.0598/ 0.0474	14.204	12.437	14.204	14.204	3.514	3.665
	16/16	0.0598/ 0.0598	15.167	13.682	15.167	15.167	3.500	3.772
	16/14	0.0598/ 0.0747	16.178	15.086	16.178	16.178	3.485	3.879
	14/16	0.0747/ 0.0598	17.832	16.050	17.832	17.832	4.779	4.627
	14/14	0.0747/ 0.0747	19.010	17.597	19.010	19.010	4.867	4.755
Deep-Dek® 7.5 Cellular	20/20	0.0358/ 0.0358	11.608	12.445	12.639	13.197	1.787	2.922
	20/18	0.0358/ 0.0474	12.234	13.997	13.461	14.636	1.787	3.030
	18/20	0.0474/ 0.0358	16.796	15.352	17.211	17.211	2.958	3.785
	18/18	0.0474/ 0.0474	17.772	17.060	18.349	18.349	2.948	3.916
	18/16	0.0474/ 0.0598	18.646	18.832	19.380	19.503	2.942	4.038
	16/18	0.0598/ 0.0474	23.094	20.217	23.094	23.094	4.447	4.846
	16/16	0.0598/ 0.0598	24.659	22.170	24.659	24.659	4.422	4.992
	16/14	0.0598/ 0.0747	25.934	24.426	26.059	26.059	4.404	5.141
	14/16	0.0747/ 0.0598	28.977	26.028	28.977	28.977	6.346	6.118
	14/14	0.0747/ 0.0747	30.884	28.493	30.884	30.884	6.436	6.295

Notes:

[1] Effective properties are based on yield stress of 40 ksi.

[2] The design thickness is the uncoated base-metal thickness of the deck panel.

[3] For the cellular deck panels, the first number is the design base metal thickness of the profiled deck panel and the second number is the design base metal thickness of the bottom flat sheet.

[4] Tabulated I_D values calculated using the following equations are permitted for deflection calculations of deck under uniform loads:

- I_D for a simple span is permitted to be equal to $(I_x + 2*I_{on})/3$ or I_{on}.
- I_D for multiple spans is permitted to be equal to $(I_x + 2*I_{oi})/3$, $(I_x + 2*I_{on})/3$ or the minimum of I_{on} and I_{oi}.

TABLE 1B—SECTION PROPERTIES [1, 2, 3, 4]

DECK PANEL	GAGE	BASE METAL DESIGN THICKNESS (inches)	EFFECTIVE MOMENT OF INERTIA (in^4/ft width)		EFFECTIVE MOMENT OF INERTIA for DEFLECTION, I_D (in^4/ft width)		EFFECTIVE SECTION MODULUS (in^3/ft width)	
		t	Normal, I_{on}	Inverted, I_{oi}	Simple Span	Multiple Span	Normal, S_{en}	Inverted, S_{ei}
Deep-Dek® 4.5 Acoustical	20	0.0358	2.425	2.789	2.546	2.789	0.904	1.127
	18	0.0474	3.533	3.690	3.586	3.690	1.385	1.491
	16	0.0598	4.652	4.652	4.652	4.652	1.840	1.879
	14	0.0747	5.806	5.806	5.806	5.806	2.344	2.344
Deep-Dek® 6 Acoustical	20	0.0358	4.615	5.143	4.836	5.188	1.195	1.542
	18	0.0474	6.680	6.983	6.781	6.983	1.972	2.159
	16	0.0598	8.804	8.804	8.804	8.804	2.665	2.721
	14	0.0747	10.989	10.989	10.989	10.989	3.395	3.395
Deep-Dek® 7.5 Acoustical	20	0.0358	7.417	8.126	7.829	8.301	1.448	1.897
	18	0.0474	10.959	11.132	11.122	11.238	2.528	2.710
	16	0.0598	14.434	14.434	14.434	14.434	3.531	3.606
	14	0.0747	18.017	18.017	18.017	18.017	4.500	4.500
Deep-Dek® 4.5 Cellular Acoustical	20/20	0.0358/ 0.0358	4.001	4.061	4.243	4.283	1.051	1.545
	20/18	0.0358/ 0.0474	4.235	4.624	4.528	4.787	1.053	1.603
	18/20	0.0474/ 0.0358	5.490	4.998	5.597	5.597	1.723	2.008
	18/18	0.0474/ 0.0474	5.920	5.623	6.040	6.040	1.728	2.075
	18/16	0.0474/ 0.0598	6.315	6.261	6.447	6.447	1.726	2.139
	16/18	0.0598/ 0.0474	7.446	6.646	7.446	7.446	2.430	2.574
	16/16	0.0598/ 0.0598	7.951	7.363	7.951	7.951	2.474	2.650
	16/14	0.0598/ 0.0747	8.485	8.117	8.485	8.485	2.520	2.723
	14/16	0.0747/ 0.0598	9.354	8.624	9.354	9.354	3.327	3.252
	14/14	0.0747/ 0.0747	9.975	9.472	9.975	9.975	3.387	3.342
Deep-Dek® 6 Cellular Acoustical	20/20	0.0358/ 0.0358	7.210	7.647	7.735	8.026	1.417	2.207
	20/18	0.0358/ 0.0474	7.612	8.615	8.242	8.910	1.417	2.285
	18/20	0.0474/ 0.0358	10.252	9.417	10.434	10.434	2.350	2.863
	18/18	0.0474/ 0.0474	11.012	10.497	11.228	11.228	2.338	2.957
	18/16	0.0474/ 0.0598	11.570	11.590	11.865	11.878	2.332	3.044
	16/18	0.0598/ 0.0474	13.824	12.429	13.824	13.824	3.486	3.665
	16/16	0.0598/ 0.0598	14.749	13.649	14.749	14.749	3.508	3.769
	16/14	0.0598/ 0.0747	15.728	15.008	15.728	15.728	3.490	3.874
	14/16	0.0747/ 0.0598	17.351	16.019	17.351	17.351	4.741	4.624
	14/14	0.0747/ 0.0747	18.482	17.520	18.482	18.482	4.827	4.750
Deep-Dek® 7.5 Cellular Acoustical	20/20	0.0358/ 0.0358	11.391	12.445	12.361	13.064	1.787	2.922
	20/18	0.0358/ 0.0474	12.008	13.976	13.164	14.476	1.786	3.029
	18/20	0.0474/ 0.0358	16.474	15.354	16.840	16.840	2.961	3.785
	18/18	0.0474/ 0.0474	17.416	17.041	17.934	17.934	2.950	3.914
	18/16	0.0474/ 0.0598	18.270	18.775	18.937	19.273	2.943	4.035
	16/18	0.0598/ 0.0474	22.483	20.200	22.483	22.483	4.458	4.845
	16/16	0.0598/ 0.0598	23.982	22.115	23.982	23.982	4.430	4.988
	16/14	0.0598/ 0.0747	25.392	24.299	25.453	25.453	4.410	5.134
	14/16	0.0747/ 0.0598	28.205	25.976	28.205	28.205	6.292	6.114
	14/14	0.0747/ 0.0747	30.032	28.368	30.032	30.032	6.414	6.287

See Table 1A notes.

TABLE 1C—SECTION PROPERTIES [1, 2, 3, 4]

DECK PANEL	GAGE	BASE METAL DESIGN THICKNESS (inches)	EFFECTIVE MOMENT OF INERTIA (in^4/ft width)		EFFECTIVE MOMENT OF INERTIA for DEFLECTION, I_D (in^4/ft width)		EFFECTIVE SECTION MODULUS (in^3/ft width)	
		t	Normal, I_{on}	Inverted, I_{oi}	Simple Span	Multiple Span	Normal, S_{en}	Inverted, S_{ei}
Versa-Dek® S	22	0.0295	0.398	0.322	0.399	0.399	0.286	0.256
	20	0.0358	0.485	0.416	0.485	0.485	0.356	0.319
	18	0.0474	0.640	0.596	0.640	0.640	0.473	0.438
	16	0.0598	0.805	0.786	0.805	0.805	0.595	0.567
Versa-Dek® S Acoustical	22	0.0295	0.376	0.315	0.377	0.377	0.281	0.256
	20	0.0358	0.457	0.406	0.457	0.457	0.350	0.318
	18	0.0474	0.604	0.577	0.604	0.604	0.465	0.436
	16	0.0598	0.760	0.753	0.760	0.760	0.585	0.564
Versa-Dek® S ES	22	0.0295	0.422	0.337	0.422	0.422	0.307	0.273
	20	0.0358	0.511	0.437	0.511	0.511	0.390	0.346
	18	0.0474	0.674	0.627	0.674	0.674	0.514	0.475
	16	0.0598	0.848	0.828	0.848	0.848	0.646	0.615
Versa-Dek® S ES Acoustical	22	0.0295	0.399	0.331	0.399	0.399	0.302	0.269
	20	0.0358	0.483	0.427	0.483	0.483	0.383	0.345
	18	0.0474	0.638	0.607	0.638	0.638	0.506	0.473
	16	0.0598	0.802	0.794	0.802	0.802	0.636	0.612
Versa-Dek® LS	22	0.0295	0.396	0.370	0.397	0.397	0.284	0.280
	20	0.0358	0.482	0.464	0.482	0.482	0.354	0.345
	18	0.0474	0.637	0.637	0.637	0.637	0.471	0.463
	16	0.0598	0.801	0.801	0.801	0.801	0.593	0.589
Versa-Dek® LS Acoustical	22	0.0295	0.374	0.365	0.375	0.375	0.279	0.281
	20	0.0358	0.455	0.454	0.455	0.455	0.348	0.344
	18	0.0474	0.601	0.601	0.601	0.601	0.463	0.461
	16	0.0598	0.755	0.755	0.755	0.755	0.582	0.582
Versa-Dek® LS ES	22	0.0295	0.417	0.406	0.417	0.417	0.304	0.309
	20	0.0358	0.505	0.506	0.505	0.506	0.386	0.379
	18	0.0474	0.667	0.667	0.667	0.667	0.510	0.507
	16	0.0598	0.838	0.838	0.838	0.838	0.640	0.640
Versa-Dek® LS ES Acoustical	22	0.0295	0.393	0.393	0.393	0.393	0.298	0.308
	20	0.0358	0.476	0.476	0.476	0.476	0.379	0.377
	18	0.0474	0.628	0.628	0.628	0.628	0.500	0.500
	16	0.0598	0.789	0.789	0.789	0.789	0.629	0.629
Versa-Dek® 3.5 LS	20	0.0358	1.917	1.766	1.959	1.959	0.775	0.910
	19	0.0418	2.296	2.129	2.324	2.324	0.946	1.072
	18	0.0474	2.648	2.475	2.664	2.664	1.113	1.226
	16	0.0568	3.394	3.262	3.394	3.394	1.504	1.573
Versa-Dek® 3.5 LS Acoustical	20	0.0358	1.766	1.742	1.803	1.803	0.754	0.909
	19	0.0418	2.113	2.089	2.139	2.139	0.921	1.072
	18	0.0474	2.436	2.418	2.451	2.451	1.084	1.224
	16	0.0598	3.122	3.123	3.122	3.123	1.466	1.564

See Table 1A notes.

TABLE 2—ALLOWABLE REACTIONS BASED ON WEB CRIPPLING, plf (ASD)[1,2,3]

DECK TYPE	HAT GAGE	HAT BASE METAL THICKNESS	BEARING LENGTH (inch)									
			2		3		4		5		6	
		(in)	Interior	End	Interior	End	Interior	End	Interior	End	Interior	End
Deep-Dek® 4.5 Deep-Dek® 4.5 Cellular Deep-Dek® 4.5 Cellular Acoustical	20	0.0358	-	463	930	531	1018	588	1095	638	1164	684
	18	0.0474	-	788	1555	898	1693	990	1815	1072	1925	1145
	16	0.0598	-	1219	2379	1381	2580	1518	2757	1638	2917	1747
	14	0.0747	-	1847	3574	2082	3860	2279	4113	2453	4341	2610
Deep-Dek® 6 Deep-Dek® 6 Cellular Deep-Dek® 6 Cellular Acoustical	20	0.0358	-	435	923	499	1010	552	1087	600	1156	642
	18	0.0474	-	748	1545	852	1682	940	1803	1018	1913	1087
	16	0.0598	-	1166	2365	1321	2565	1452	2741	1567	2900	1671
	14	0.0747	-	1778	3556	2003	3841	2193	4092	2360	4319	2512
Deep-Dek® 7.5 Deep-Dek® 7.5 Cellular Deep-Dek® 7.5 Cellular Acoustical	20	0.0358	-	398	683	411	748	422	806	432	858	441
	18	0.0474	-	714	1536	813	1673	896	1793	970	1902	1037
	16	0.0598	-	1120	2353	1269	2552	1394	2727	1505	2886	1605
	14	0.0747	-	1716	3540	1934	3824	2117	4074	2279	4300	2425
Deep-Dek® 4.5 Acoustical	20	0.0358	-	463	673	531	737	588	794	638	845	684
	18	0.0474	-	788	1120	898	1221	990	1310	1071	1391	1145
	16	0.0598	-	1219	1706	1381	1853	1518	1982	1638	2099	1747
	14	0.0747	-	1847	2554	2082	2763	2279	2947	2453	3113	2610
Deep-Dek® 6 Acoustical	20	0.0358	-	433	671	447	736	460	792	470	843	480
	18	0.0474	-	748	1117	843	1218	863	1307	881	1387	898
	16	0.0598	-	1166	1703	1321	1849	1438	1978	1465	2094	1490
	14	0.0747	-	1778	2550	2003	2758	2193	2942	2360	3107	2403
Deep-Dek® 7.5 Acoustical	20	0.0358	-	398	683	411	748	422	806	432	858	441
	18	0.0474	-	714	1134	788	1236	807	1326	824	1408	840
	16	0.0598	-	1120	1725	1269	1873	1360	2004	1385	2122	1409
	14	0.0747	-	1716	2580	1934	2790	2117	2976	2256	3144	2291
Versa-Dek® S Versa-Dek® LS Versa-Dek® S Acoustical Versa-Dek® LS Acoustical	22	0.0295	-	705	1260	812	1383	902	1491	981	-	-
	20	0.0358	-	1004	1794	1151	1963	1275	2112	1384	-	-
	18	0.0474	-	1673	2993	1905	3260	2101	3494	2274	-	-
	16	0.0598	-	2550	4572	2889	4958	3175	5298	3426	-	-
Versa-Dek® S ES Versa-Dek® LS ES Versa-Dek® S ES Acoustical Versa-Dek® LS ES Acoustical	22	0.0295	-	718	1282	826	1408	918	1518	999	-	-
	20	0.0358	-	1022	1827	1172	1999	1298	2150	1409	-	-
	18	0.0474	-	1702	3047	1939	3318	2139	3557	2315	-	-
	16	0.0598	-	2596	4654	2941	5047	3231	5393	3487	-	-
Versa-Dek® 3.5 LS Versa-Dek® 3.5 LS Acoustical	20	0.0358	-	681	1313	781	1437	865	1546	939	1645	1006
	19	0.0418	-	911	1744	1040	1903	1150	2043	1246	2170	1333
	18	0.0474	-	1151	2194	1311	2390	1446	2561	1565	2717	1672
	16	0.0598	-	1771	3355	2007	3638	2205	3888	2380	4114	2538

Notes:

[1]Tabulated values are based on a yield stress of 40 ksi and one-flange loading with fasteners at supports.

[2]Support reactions must not be greater than the tabulated values.

[3]For the cellular deck panels, the tabulated values are based on the base metal thickness of the top fluted hat section.

TABLE 3—DIAPHRAGM FLEXIBILITY LIMITATIONS[1,2,3,4]

F	MAXIMUM DIAPHRAGM SPAN FOR MASONRY OR CONCRETE WALLS (feet)	DIAPHRAGM SPAN-DEPTH LIMITATION			
		Rotation Not Considered in Diaphragm		Rotation Considered in Diaphragm	
		Masonry or Concrete Walls	Flexible Walls	Masonry or Concrete Walls	Flexible Walls
More than 150	Not used	Not used	2:1	Not used	$1^1/_2$:1
70-150	200	2:1 or as required for deflection	3:1	Not used	2:1
10-70	400	$2^1/_2$:1 or as required for deflection	4:1	As required for deflection	$2^1/_2$:1
1-10	No limitation	3:1 or as required for deflection	5:1	As required for deflection	3:1
Less than 1	No limitation	As required for deflection	No limitation	As required for deflection	$3^1/_2$:1

[1]Diaphragms must be investigated regarding their flexibility and recommended span-depth limitations.

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

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

where:

H = Unsupported height of wall in feet.
t = Thickness of wall in inches.
E = Modulus of elasticity of wall material for deflection determination in pounds per square inch.
f_c = Allowable compression strength of wall material in flexure in pounds per square inch. For concrete, $f_c = 0.45\ f'_c$. For masonry, $f_c = F_b = 0.33\ f'_m$.

[3]The total deflection Δ of the diaphragm may be computed from the equation: $\Delta = \Delta_f + \Delta_w$

where:

Δ_f = Flexural deflection of the diaphragm determined in the same manner as the deflection of beams.
Δ_w = The web deflection may be determined by the equation:

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

where:

L = Distance in feet between vertical resisting element (such as shear wall) and the point to which the deflection is to be determined.
q_{ave} = Average shear in diaphragm in pounds per foot over length L.
F = Flexibility factor: The average micro inches (μm) a diaphragm web will deflect in a span of 1 foot (m) under a shear of 1 pound per foot (N/m). $F = \frac{10^3}{G'}$, Where G' = effective shear modules based on profile and thickness of deck panel and type and spacing of connectors.

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

TABLE 4—DEEP-DEK® 4.5 – ALLOWABLE DIAPHRAGM SHEAR[1-3]

SUPPORT CONNECTION: 1/2" Effective Weld Diameter
SIDELAP CONNECTION: 1 1/2" Seam Welds

S = Allowable Diaphragm Shear (plf)
G' = Stiffness Factor (kips/in.)

ATTACHMENT PATTERN: 12 / 2			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	12' - 0"	14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"
20 0.0358"	6"	S	1321	1312	1306	1301	1297	1294	1291	1289
		G'	9.1	10.5	11.8	13.1	14.4	15.7	16.9	18.2
	12"	S	1049	1027	1010	996	986	977	969	963
		G'	8.9	10.2	11.4	12.7	13.9	15.0	16.1	17.2
	18"	S	775	754	739	727	717	710	703	697
		G'	8.7	9.9	11.1	12.3	13.4	14.4	15.5	16.4
	24"	S	617	597	581	569	560	552	545	540
		G'	8.5	9.7	10.8	11.9	13.0	13.9	14.9	15.8
	30"	S	523	502	487	475	465	457	451	445
		G'	8.4	9.5	10.6	11.6	12.6	13.5	14.4	15.2
	36"	S	460	439	424	412	402	394	388	382
		G'	8.3	9.4	10.4	11.4	12.3	13.1	13.9	14.7
18 0.0474"	6"	S	1725	1714	1706	1699	1694	1690	1686	1684
		G'	17.5	20.1	22.6	25.0	27.3	29.5	31.7	33.7
	12"	S	1370	1341	1319	1301	1287	1276	1266	1258
		G'	16.9	19.2	21.4	23.5	25.5	27.4	29.3	31.0
	18"	S	1012	985	965	950	937	927	918	911
		G'	16.3	18.4	20.4	22.3	24.1	25.8	27.4	28.9
	24"	S	806	780	759	744	731	721	712	705
		G'	15.8	17.8	19.6	21.3	22.9	24.4	25.8	27.1
	30"	S	683	656	636	620	608	597	589	582
		G'	15.5	17.3	19.0	20.5	21.9	23.3	24.5	25.6
	36"	S	601	574	553	538	525	515	506	499
		G'	15.1	16.8	18.4	19.8	21.1	22.3	23.4	24.4
16 0.0598"	6"	S	2145	2131	2121	2113	2107	2101	2097	2093
		G'	29.8	33.9	37.8	41.5	45.1	48.4	51.7	54.8
	12"	S	1704	1667	1640	1618	1601	1586	1574	1564
		G'	28.1	31.6	34.9	38.0	40.9	43.7	46.2	48.6
	18"	S	1259	1225	1200	1181	1165	1152	1142	1133
		G'	26.7	29.9	32.7	35.3	37.8	40.0	42.1	44.0
	24"	S	1003	969	944	925	909	896	886	877
		G'	25.6	28.4	30.9	33.2	35.3	37.1	38.9	40.4
	30"	S	849	816	791	771	755	743	732	723
		G'	24.8	27.3	29.5	31.4	33.2	34.8	36.2	37.6
	36"	S	747	713	688	669	653	640	630	621
		G'	24.0	26.3	28.2	30.0	31.5	32.9	34.1	35.2
14 0.0747"	6"	S	2632	2615	2603	2593	2585	2579	2573	2569
		G'	48.5	54.7	60.5	65.9	70.9	75.7	80.2	84.4
	12"	S	2091	2046	2012	1986	1964	1947	1932	1919
		G'	44.6	49.6	54.1	58.3	62.1	65.6	68.9	71.9
	18"	S	1545	1504	1473	1449	1430	1414	1401	1390
		G'	41.6	45.8	49.5	52.8	55.8	58.5	60.9	63.2
	24"	S	1230	1189	1159	1135	1116	1100	1087	1076
		G'	39.3	42.8	45.9	48.6	51.0	53.1	55.0	56.7
	30"	S	1042	1001	970	946	927	911	898	887
		G'	37.4	40.5	43.0	45.3	47.2	48.9	50.4	51.7
	36"	S	916	875	844	820	801	786	773	762
		G'	35.9	38.5	40.7	42.6	44.2	45.5	46.7	47.8

ATTACHMENT PATTERN: 12 / 4			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	12' - 0"	14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"
20 0.0358"	6"	S	1485	1453	1429	1410	1395	1383	1373	1365
		G'	9.1	10.5	11.8	13.2	14.5	15.7	17.0	18.2
	12"	S	1156	1126	1103	1086	1072	1060	1051	1043
		G'	8.9	10.2	11.5	12.7	13.9	15.1	16.2	17.3
	18"	S	840	810	788	771	757	745	736	728
		G'	8.7	10.0	11.2	12.3	13.5	14.5	15.6	16.6
	24"	S	683	653	630	613	599	588	578	570
		G'	8.6	9.8	10.9	12.0	13.1	14.1	15.0	15.9
	30"	S	588	558	536	518	504	493	483	475
		G'	8.5	9.7	10.7	11.8	12.8	13.7	14.6	15.4
	36"	S	525	495	473	455	441	430	420	412
		G'	8.4	9.5	10.6	11.6	12.5	13.3	14.2	14.9
18 0.0474"	6"	S	1940	1898	1867	1842	1823	1807	1794	1783
		G'	17.6	20.1	22.6	25.0	27.3	29.5	31.7	33.8
	12"	S	1509	1470	1441	1418	1400	1385	1373	1362
		G'	16.9	19.3	21.5	23.6	25.6	27.6	29.4	31.2
	18"	S	1098	1059	1029	1006	988	973	961	950
		G'	16.5	18.6	20.6	22.5	24.3	26.0	27.6	29.2
	24"	S	892	853	823	801	782	767	755	744
		G'	16.1	18.1	19.9	21.7	23.3	24.8	26.2	27.5
	30"	S	768	729	700	677	659	644	631	621
		G'	15.7	17.6	19.4	20.9	22.4	23.7	25.0	26.2
	36"	S	686	647	617	595	576	561	549	539
		G'	15.5	17.3	18.9	20.3	21.7	22.9	24.0	25.0
16 0.0598"	6"	S	2412	2360	2321	2291	2267	2247	2230	2216
		G'	29.9	34.0	37.9	41.6	45.2	48.5	51.8	54.9
	12"	S	1877	1828	1792	1763	1741	1722	1707	1694
		G'	28.3	31.9	35.2	38.3	41.2	44.0	46.6	49.0
	18"	S	1365	1316	1280	1251	1229	1210	1195	1182
		G'	27.1	30.3	33.2	35.8	38.3	40.6	42.7	44.6
	24"	S	1109	1060	1024	995	973	954	939	926
		G'	26.2	29.0	31.6	33.9	36.0	37.9	39.6	41.2
	30"	S	955	906	870	842	819	800	785	772
		G'	25.4	28.0	30.3	32.3	34.1	35.8	37.2	38.6
	36"	S	853	804	768	739	717	698	683	670
		G'	24.8	27.2	29.2	31.0	32.6	34.0	35.3	36.4
14 0.0747"	6"	S	2960	2896	2848	2811	2782	2757	2737	2720
		G'	48.7	54.9	60.7	66.1	71.1	75.9	80.4	84.6
	12"	S	2303	2244	2199	2164	2136	2114	2095	2079
		G'	45.0	50.1	54.7	58.9	62.7	66.3	69.5	72.6
	18"	S	1675	1615	1570	1536	1508	1485	1466	1450
		G'	42.4	46.6	50.4	53.8	56.8	59.5	62.0	64.2
	24"	S	1360	1301	1256	1221	1194	1171	1152	1136
		G'	40.4	44.0	47.2	49.9	52.3	54.5	56.4	58.1
	30"	S	1172	1112	1068	1033	1005	982	963	947
		G'	38.8	41.9	44.6	46.9	48.9	50.6	52.1	53.5
	36"	S	1046	987	942	907	879	857	838	822
		G'	37.5	40.3	42.6	44.5	46.2	47.5	48.7	49.8

Notes:

1.) Tabulated values based on a "SINGLE SPAN CONDITION".
2.) Tabulated S values include a safety factor (Ω) of 3 for welded support connections and 2.5 for powder actuated fastener support connections which represent seismic loading (worst case). The following resistance (ϕ) and safety (Ω) factors shown are from Table D5 of AISI S100:

LOAD TYPE OR COMBINATIONS INCLUDING	CONNECTION TYPE	CONNETION RELATED	
		Ω (ASD)	Φ (LRFD)
Earthquake	Welds	3.00	0.55
	Screws or Powder Actuated	2.50	0.65
Wind	Welds	2.35	0.70
	Screws or Powder Actuated	2.35	0.70
All Others	Welds	2.65	0.60
	Screws or Powder Actuated	2.50	0.65

3.) Support connections parallel to deck flutes spaced at 12 inches o.c.

4.) See ESR-2776 for support steel requierments/limitations in regards to Hilti fasteners support connections (Hilti X-ENP-19-L15 & Hilti X-HSN24).

5.) For 22 to 18 gage non-cellular decks and 20 to 18 gage liner sections of cellular decks, use S-SLC 01 M HWH, S-SLC02 M HWH or #12 screws for sidelaps. For 16 gage non-cellular decks and 16 gage liner sections of cellular decks, use S-SLC02 M HWH or #12 screws for sidelaps. For 14 gage non-cellular decks and 14 gage liner sections of cellular decks, use #12 screws for sidelaps.

TABLE 5—DEEP-DEK® 4.5 – ALLOWABLE DIAPHRAGM SHEAR[1-3]

SUPPORT CONNECTION: $^1/_2$" Effective Weld Diameter
SIDELAP CONNECTION: #10 Screws

S = Allowable Diaphragm Shear (plf)
G' = Stiffness Factor (kips/in.)

ATTACHMENT PATTERN: 12 / 2			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	12' - 0"	14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"
20 0.0358"	6"	S	600	587	578	571	565	560	556	553
		G'	8.8	10.0	11.3	12.5	13.6	14.7	15.8	16.9
	12"	S	343	331	322	314	309	304	300	297
		G'	8.4	9.5	10.6	11.6	12.5	13.4	14.3	15.1
	18"	S	258	246	236	229	223	219	215	211
		G'	8.1	9.1	10.0	10.9	11.7	12.5	13.2	13.9
	24"	S	215	203	194	186	181	176	172	169
		G'	7.8	8.7	9.6	10.4	11.1	11.7	12.3	12.9
	30"	S	190	177	168	161	155	150	146	143
		G'	7.6	8.5	9.2	9.9	10.6	11.1	11.7	12.1
	36"	S	172	160	151	144	138	133	129	126
		G'	7.5	8.3	9.0	9.6	10.1	10.6	11.1	11.5
18 0.0474"	6"	S	792	776	764	755	747	741	736	731
		G'	16.5	18.8	20.9	22.9	24.8	26.6	28.3	30.0
	12"	S	453	437	425	415	408	402	396	392
		G'	15.3	17.1	18.8	20.4	21.8	23.1	24.4	25.5
	18"	S	340	324	312	302	295	289	283	279
		G'	14.4	16.0	17.4	18.6	19.7	20.7	21.7	22.5
	24"	S	284	267	255	246	238	232	227	222
		G'	13.8	15.1	16.3	17.3	18.2	19.0	19.7	20.4
	30"	S	250	233	221	212	204	198	193	189
		G'	13.3	14.4	15.4	16.3	17.0	17.7	18.2	18.7
	36"	S	227	211	199	189	182	175	170	166
		G'	12.9	13.9	14.7	15.5	16.1	16.6	17.0	17.4
16 0.0598"	6"	S	998	978	963	951	941	934	927	922
		G'	27.3	30.6	33.7	36.6	39.3	41.8	44.1	46.3
	12"	S	570	550	535	523	513	506	499	494
		G'	24.4	26.9	29.1	31.1	32.9	34.5	36.0	37.4
	18"	S	427	407	392	380	371	363	357	351
		G'	22.5	24.4	26.1	27.5	28.8	29.9	30.9	31.8
	24"	S	356	336	321	309	299	292	285	280
		G'	21.1	22.6	23.9	25.0	26.0	26.8	27.5	28.1
	30"	S	313	293	278	266	257	249	243	237
		G'	20.0	21.3	22.3	23.2	23.9	24.4	24.9	25.3
	36"	S	285	265	249	238	228	220	214	209
		G'	19.2	20.3	21.1	21.7	22.2	22.7	23.0	23.3
14 0.0747"	6"	S	1244	1219	1201	1186	1174	1165	1157	1150
		G'	42.8	47.4	51.6	55.4	58.8	61.9	64.8	67.5
	12"	S	710	685	666	652	640	630	622	616
		G'	36.7	39.8	42.4	44.7	46.7	48.4	50.0	51.4
	18"	S	532	507	488	473	462	452	444	437
		G'	32.9	35.0	36.8	38.3	39.5	40.6	41.5	42.3
	24"	S	442	417	399	384	373	363	355	348
		G'	30.3	31.8	33.1	34.0	34.8	35.5	36.0	36.5
	30"	S	389	364	345	331	319	310	302	295
		G'	28.4	29.5	30.4	31.0	31.5	31.9	32.2	32.4
	36"	S	353	328	310	295	283	274	266	259
		G'	26.9	27.8	28.3	28.7	29.0	29.2	29.3	29.4

ATTACHMENT PATTERN: 12 / 4			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	12' - 0"	14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"
20 0.0358"	6"	S	665	643	627	614	604	596	589	583
		G'	8.8	10.1	11.3	12.5	13.7	14.8	15.9	16.9
	12"	S	409	387	371	358	348	340	333	327
		G'	8.5	9.6	10.7	11.7	12.7	13.6	14.5	15.4
	18"	S	323	301	285	273	262	254	247	241
		G'	8.2	9.3	10.3	11.2	12.0	12.8	13.6	14.2
	24"	S	280	259	242	230	220	211	205	199
		G'	8.1	9.0	9.9	10.7	11.5	12.2	12.8	13.4
	30"	S	255	233	217	204	194	186	179	173
		G'	7.9	8.8	9.7	10.4	11.1	11.7	12.3	12.8
	36"	S	238	216	200	187	177	169	162	156
		G'	7.8	8.7	9.5	10.1	10.8	11.3	11.8	12.2
18 0.0474"	6"	S	878	849	828	811	798	787	778	771
		G'	16.7	18.9	21.0	23.1	25.0	26.8	28.5	30.2
	12"	S	538	510	489	472	459	448	439	431
		G'	15.6	17.5	19.2	20.8	22.3	23.6	24.9	26.1
	18"	S	425	397	376	359	346	335	326	318
		G'	14.9	16.6	18.0	19.3	20.5	21.5	22.5	23.4
	24"	S	369	340	319	303	289	279	269	262
		G'	14.5	15.9	17.1	18.2	19.2	20.0	20.8	21.5
	30"	S	335	307	285	269	255	245	236	228
		G'	14.1	15.4	16.5	17.4	18.2	18.9	19.5	20.0
	36"	S	312	284	263	246	233	222	213	205
		G'	13.8	15.0	16.0	16.8	17.4	18.0	18.5	18.9
16 0.0598"	6"	S	1104	1069	1042	1022	1005	992	980	971
		G'	27.6	31.0	34.1	37.0	39.7	42.2	44.6	46.8
	12"	S	676	641	614	594	577	564	552	543
		G'	25.1	27.7	30.0	32.0	33.9	35.5	37.0	38.4
	18"	S	533	498	472	451	434	421	410	400
		G'	23.6	25.6	27.4	28.9	30.3	31.4	32.4	33.3
	24"	S	462	427	400	380	363	350	338	329
		G'	22.5	24.2	25.6	26.8	27.8	28.6	29.3	29.9
	30"	S	419	384	357	337	320	307	295	286
		G'	21.7	23.2	24.3	25.3	26.0	26.6	27.1	27.5
	36"	S	391	355	329	308	292	278	267	257
		G'	21.1	22.4	23.3	24.1	24.6	25.1	25.4	25.7
14 0.0747"	6"	S	1374	1331	1298	1273	1253	1236	1222	1210
		G'	43.5	48.1	52.3	56.1	59.6	62.8	65.7	68.3
	12"	S	840	796	764	738	718	701	687	676
		G'	38.2	41.4	44.1	46.4	48.4	50.2	51.8	53.2
	18"	S	662	618	585	560	540	523	509	498
		G'	35.0	37.3	39.2	40.7	42.0	43.0	44.0	44.7
	24"	S	572	529	496	471	451	434	420	408
		G'	33.0	34.7	36.0	37.0	37.8	38.4	39.0	39.4
	30"	S	519	475	443	417	397	381	367	355
		G'	31.5	32.8	33.7	34.4	34.9	35.2	35.5	35.7
	36"	S	483	440	407	382	362	345	331	319
		G'	30.3	31.4	32.0	32.5	32.7	32.9	32.9	32.9

See Table 4 notes.

TABLE 6—DEEP-DEK® 4.5 – ALLOWABLE DIAPHRAGM SHEAR[1-5]

SUPPORT CONNECTION: Hilti X-ENP-19-L15 (steel substrate thickness ≥ 0.25 inch)
SIDELAP CONNECTION: Hilti S-SLC01 M HWH, S-SLC02 M HWH or #12 self-drilling screws

S = Allowable Diaphragm Shear (plf)
G' = Stiffness Factor (kips/in.)

ATTACHMENT PATTERN: 12 / 2

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT							
			12' - 0"	14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"
20 0.0358"	6"	S	713	702	694	688	682	678	675	672
		G'	8.8	10.1	11.3	12.5	13.6	14.8	15.8	16.9
	12"	S	417	407	400	394	390	386	383	380
		G'	8.4	9.6	10.6	11.7	12.6	13.6	14.4	15.3
	18"	S	301	291	284	278	274	270	267	264
		G'	8.2	9.2	10.1	11.0	11.9	12.7	13.4	14.1
	24"	S	243	233	226	220	216	212	209	206
		G'	8.0	8.9	9.8	10.6	11.3	12.0	12.6	13.2
	30"	S	209	199	191	186	181	177	174	171
		G'	7.8	8.7	9.5	10.2	10.9	11.5	12.0	12.5
	36"	S	185	175	168	162	158	154	151	148
		G'	7.7	8.5	9.3	9.9	10.5	11.0	11.5	11.9
18 0.0474"	6"	S	941	927	916	908	901	895	891	887
		G'	16.6	18.8	21.0	23.0	24.9	26.7	28.4	30.1
	12"	S	551	539	529	521	515	510	506	503
		G'	15.5	17.3	19.0	20.6	22.1	23.4	24.7	25.8
	18"	S	398	385	375	368	362	357	353	349
		G'	14.7	16.3	17.7	19.0	20.1	21.2	22.1	23.0
	24"	S	321	308	299	291	285	280	276	272
		G'	14.2	15.5	16.8	17.8	18.7	19.6	20.3	21.0
	30"	S	275	262	253	245	239	234	230	226
		G'	13.7	15.0	16.0	16.9	17.7	18.3	18.9	19.4
	36"	S	245	232	222	214	208	203	199	196
		G'	13.4	14.5	15.4	16.2	16.8	17.4	17.9	18.3
16 0.0598"	6"	S	1182	1165	1151	1141	1133	1126	1120	1115
		G'	27.5	30.8	33.9	36.8	39.5	42.0	44.4	46.6
	12"	S	695	679	666	657	649	643	638	634
		G'	24.8	27.4	29.6	31.6	33.4	35.1	36.6	37.9
	18"	S	501	485	473	463	456	450	444	440
		G'	23.1	25.1	26.8	28.3	29.6	30.7	31.8	32.7
	24"	S	404	388	376	367	359	353	348	343
		G'	21.9	23.5	24.9	26.0	27.0	27.8	28.5	29.1
	30"	S	346	330	318	308	301	295	290	285
		G'	21.0	22.4	23.5	24.3	25.0	25.6	26.1	26.5
	36"	S	308	291	279	270	262	256	251	246
		G'	20.3	21.5	22.4	23.0	23.6	24.0	24.3	24.6
14 0.0747"	6"	S	1469	1448	1432	1419	1409	1401	1394	1388
		G'	43.2	47.8	52.0	55.8	59.2	62.4	65.3	67.9
	12"	S	866	846	831	820	810	803	796	791
		G'	37.5	40.7	43.3	45.6	47.6	49.4	51.0	52.4
	18"	S	625	605	589	578	568	561	554	549
		G'	34.1	36.3	38.1	39.6	40.9	41.9	42.8	43.6
	24"	S	504	484	469	457	448	440	433	428
		G'	31.8	33.4	34.7	35.7	36.5	37.1	37.6	38.1
	30"	S	431	411	396	384	375	367	361	356
		G'	30.1	31.3	32.2	32.9	33.4	33.7	34.0	34.2
	36"	S	383	363	348	336	327	319	313	307
		G'	28.9	29.8	30.4	30.8	31.0	31.2	31.3	31.3

ATTACHMENT PATTERN: 12 / 4

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT							
			12' - 0"	14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"
20 0.0358"	6"	S	805	789	778	768	761	755	750	746
		G'	8.8	10.1	11.4	12.6	13.7	14.9	15.9	17.0
	12"	S	457	442	430	421	414	408	403	398
		G'	8.6	9.7	10.8	11.9	12.9	13.8	14.7	15.6
	18"	S	341	326	314	305	298	292	287	283
		G'	8.4	9.5	10.5	11.4	12.3	13.1	13.9	14.6
	24"	S	283	268	256	247	240	234	229	225
		G'	8.2	9.3	10.2	11.1	11.9	12.6	13.2	13.9
	30"	S	249	233	221	212	205	199	194	190
		G'	8.1	9.1	10.0	10.8	11.5	12.2	12.8	13.3
	36"	S	225	210	198	189	182	176	171	167
		G'	8.1	9.0	9.9	10.6	11.3	11.9	12.4	12.9
18 0.0474"	6"	S	1064	1044	1028	1016	1007	999	993	987
		G'	16.8	19.0	21.2	23.2	25.2	27.0	28.7	30.4
	12"	S	604	583	568	556	547	539	532	527
		G'	15.9	17.8	19.6	21.2	22.7	24.1	25.4	26.6
	18"	S	450	430	415	403	393	385	379	373
		G'	15.4	17.1	18.6	19.9	21.1	22.3	23.3	24.2
	24"	S	374	353	338	326	316	309	302	297
		G'	15.0	16.5	17.9	19.0	20.1	21.0	21.8	22.5
	30"	S	328	307	292	280	270	263	256	251
		G'	14.7	16.1	17.3	18.4	19.3	20.0	20.7	21.2
	36"	S	297	277	261	249	240	232	225	220
		G'	14.5	15.8	16.9	17.9	18.6	19.3	19.8	20.3
16 0.0598"	6"	S	1341	1315	1296	1281	1269	1259	1251	1244
		G'	27.9	31.3	34.4	37.4	40.1	42.6	45.0	47.2
	12"	S	760	734	715	700	688	679	671	664
		G'	25.8	28.4	30.8	32.9	34.8	36.5	38.0	39.4
	18"	S	566	541	522	507	495	485	477	470
		G'	24.5	26.7	28.6	30.2	31.6	32.8	33.9	34.8
	24"	S	470	444	425	410	398	388	380	373
		G'	23.7	25.6	27.1	28.4	29.5	30.4	31.1	31.7
	30"	S	411	386	367	352	340	330	322	315
		G'	23.1	24.7	26.1	27.1	27.9	28.6	29.1	29.6
	36"	S	373	347	328	313	301	292	283	277
		G'	22.6	24.1	25.3	26.1	26.8	27.3	27.7	27.9
14 0.0747"	6"	S	1672	1640	1617	1598	1584	1572	1562	1553
		G'	44.1	48.8	53.1	56.9	60.4	63.6	66.5	69.2
	12"	S	947	915	891	873	858	846	836	828
		G'	39.5	42.8	45.6	48.0	50.1	51.9	53.5	54.9
	18"	S	705	673	650	631	616	604	594	586
		G'	36.9	39.4	41.4	43.0	44.3	45.4	46.3	47.1
	24"	S	584	552	529	510	496	484	474	465
		G'	35.2	37.2	38.7	39.8	40.6	41.3	41.8	42.2
	30"	S	511	480	456	438	423	411	401	392
		G'	34.0	35.6	36.7	37.5	38.0	38.4	38.6	38.8
	36"	S	463	431	408	389	375	363	353	344
		G'	33.2	34.5	35.3	35.9	36.2	36.3	36.3	36.3

See Table 4 notes

TABLE 7—DEEP-DEK® 6 – ALLOWABLE DIAPHRAGM SHEAR[1-3]

SUPPORT CONNECTION: $^1/_2$" Effective Weld Diameter
SIDELAP CONNECTION: $1^1/_2$" Seam Welds

S = Allowable Diaphragm Shear (plf)
G' = Stiffness Factor (kips/in.)

ATTACHMENT PATTERN: 12 / 2

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT							
			14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"	28' - 0"
20 0.0358"	6"	S	1312	1306	1301	1297	1294	1291	1289	1287
		G'	6.6	7.5	8.3	9.2	10.0	10.9	11.7	12.5
	12"	S	1027	1010	996	986	977	969	963	958
		G'	6.5	7.3	8.2	9.0	9.8	10.5	11.3	12.0
	18"	S	754	739	727	717	710	703	697	692
		G'	6.4	7.2	8.0	8.8	9.5	10.2	10.9	11.6
	24"	S	597	581	569	560	552	545	540	535
		G'	6.3	7.1	7.8	8.6	9.3	10.0	10.6	11.3
	30"	S	502	487	475	465	457	451	445	441
		G'	6.2	7.0	7.7	8.4	9.1	9.7	10.4	11.0
	36"	S	439	424	412	402	394	388	382	377
		G'	6.2	6.9	7.6	8.3	8.9	9.5	10.1	10.7
18 0.0474"	6"	S	1714	1706	1699	1694	1690	1686	1684	1681
		G'	12.9	14.5	16.1	17.7	19.2	20.8	22.2	23.7
	12"	S	1341	1319	1301	1287	1276	1266	1258	1251
		G'	12.5	14.0	15.5	17.0	18.4	19.7	21.0	22.3
	18"	S	985	965	950	937	927	918	911	904
		G'	12.2	13.6	15.0	16.3	17.6	18.8	20.0	21.2
	24"	S	780	759	744	731	721	712	705	699
		G'	11.9	13.2	14.5	15.8	17.0	18.1	19.1	20.2
	30"	S	656	636	620	608	597	589	582	575
		G'	11.6	12.9	14.2	15.3	16.4	17.4	18.4	19.3
	36"	S	574	553	538	525	515	506	499	493
		G'	11.4	12.7	13.8	14.9	15.9	16.9	17.7	18.6
16 0.0598"	6"	S	2131	2121	2113	2107	2101	2097	2093	2090
		G'	22.1	24.8	27.4	29.9	32.4	34.8	37.1	39.3
	12"	S	1667	1640	1618	1601	1586	1574	1564	1555
		G'	21.1	23.5	25.8	28.1	30.2	32.2	34.2	36.0
	18"	S	1225	1200	1181	1165	1152	1142	1133	1124
		G'	20.3	22.5	24.6	26.5	28.4	30.2	31.8	33.4
	24"	S	969	944	925	909	896	886	877	869
		G'	19.6	21.6	23.5	25.3	26.9	28.5	29.9	31.3
	30"	S	816	791	771	755	743	732	723	715
		G'	19.0	20.9	22.6	24.2	25.7	27.0	28.3	29.5
	36"	S	713	688	669	653	640	630	621	613
		G'	18.6	20.3	21.9	23.3	24.6	25.8	27.0	28.0
14 0.0747"	6"	S	2615	2603	2593	2585	2579	2573	2569	2565
		G'	36.4	40.6	44.7	48.5	52.2	55.7	59.1	62.3
	12"	S	2046	2012	1986	1964	1947	1932	1919	1909
		G'	34.1	37.7	41.1	44.2	47.2	50.0	52.7	55.2
	18"	S	1504	1473	1449	1430	1414	1401	1390	1379
		G'	32.2	35.4	38.3	40.9	43.4	45.7	47.8	49.8
	24"	S	1189	1159	1135	1116	1100	1087	1076	1066
		G'	30.7	33.5	36.0	38.3	40.4	42.3	44.0	45.7
	30"	S	1001	970	946	927	911	898	887	878
		G'	29.5	32.0	34.1	36.1	37.9	39.5	41.0	42.3
	36"	S	875	844	820	801	786	773	762	752
		G'	28.5	30.7	32.6	34.3	35.8	37.2	38.5	39.6

ATTACHMENT PATTERN: 12 / 4

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT							
			14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"	28' - 0"
20 0.0358"	6"	S	1453	1429	1410	1395	1383	1373	1365	1357
		G'	6.6	7.5	8.3	9.2	10.0	10.9	11.7	12.5
	12"	S	1126	1103	1086	1072	1060	1051	1043	1036
		G'	6.5	7.3	8.2	9.0	9.8	10.6	11.3	12.1
	18"	S	810	788	771	757	745	736	728	721
		G'	6.4	7.2	8.0	8.8	9.5	10.3	11.0	11.7
	24"	S	653	630	613	599	588	578	570	563
		G'	6.3	7.1	7.9	8.6	9.3	10.0	10.7	11.4
	30"	S	558	536	518	504	493	483	475	468
		G'	6.3	7.0	7.8	8.5	9.2	9.8	10.5	11.1
	36"	S	495	473	455	441	430	420	412	405
		G'	6.2	7.0	7.7	8.4	9.0	9.7	10.3	10.8
18 0.0474"	6"	S	1898	1867	1842	1823	1807	1794	1783	1773
		G'	12.9	14.5	16.1	17.7	19.3	20.8	22.3	23.7
	12"	S	1470	1441	1418	1400	1385	1373	1362	1353
		G'	12.5	14.1	15.6	17.0	18.4	19.8	21.1	22.4
	18"	S	1059	1029	1006	988	973	961	950	941
		G'	12.2	13.7	15.1	16.4	17.7	19.0	20.1	21.3
	24"	S	853	823	801	782	767	755	744	735
		G'	12.0	13.4	14.7	15.9	17.1	18.3	19.3	20.4
	30"	S	729	700	677	659	644	631	621	612
		G'	11.8	13.1	14.4	15.5	16.6	17.7	18.7	19.6
	36"	S	647	617	595	576	561	549	539	530
		G'	11.6	12.9	14.1	15.2	16.2	17.2	18.1	18.9
16 0.0598"	6"	S	2360	2321	2291	2267	2247	2230	2216	2204
		G'	22.1	24.8	27.4	30.0	32.5	34.8	37.1	39.4
	12"	S	1828	1792	1763	1741	1722	1707	1694	1683
		G'	21.2	23.6	26.0	28.2	30.3	32.4	34.3	36.2
	18"	S	1316	1280	1251	1229	1210	1195	1182	1170
		G'	20.5	22.7	24.8	26.8	28.7	30.5	32.1	33.7
	24"	S	1060	1024	995	973	954	939	926	914
		G'	19.9	21.9	23.9	25.7	27.3	28.9	30.4	31.7
	30"	S	906	870	842	819	800	785	772	761
		G'	19.4	21.3	23.1	24.7	26.2	27.6	28.9	30.1
	36"	S	804	768	739	717	698	683	670	658
		G'	19.0	20.8	22.4	23.9	25.3	26.5	27.7	28.7
14 0.0747"	6"	S	2896	2848	2811	2782	2757	2737	2720	2705
		G'	36.5	40.7	44.8	48.6	52.3	55.8	59.2	62.5
	12"	S	2244	2199	2164	2136	2114	2095	2079	2065
		G'	34.3	38.0	41.4	44.5	47.5	50.4	53.0	55.6
	18"	S	1615	1570	1536	1508	1485	1466	1450	1436
		G'	32.7	35.8	38.8	41.5	44.0	46.3	48.4	50.5
	24"	S	1301	1256	1221	1194	1171	1152	1136	1122
		G'	31.4	34.2	36.7	39.0	41.2	43.1	44.9	46.5
	30"	S	1112	1068	1033	1005	982	963	947	933
		G'	30.3	32.8	35.1	37.1	38.9	40.6	42.1	43.4
	36"	S	987	942	907	879	857	838	822	808
		G'	29.4	31.7	33.7	35.5	37.1	38.5	39.7	40.9

See Table 4 notes.

TABLE 8—DEEP-DEK® 6 – ALLOWABLE DIAPHRAGM SHEAR[1-3]

SUPPORT CONNECTION: $^1/_2$" **Effective Weld Diameter**

SIDELAP CONNECTION: **#10 Screws**

S = Allowable Diaphragm Shear (plf)

G' = Stiffness Factor (kips/in.)

ATTACHMENT PATTERN: 12 / 2

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT							
			14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"	28' - 0"
20 0.0358"	6"	S	587	578	571	565	560	556	553	550
		G'	6.4	7.3	8.1	8.9	9.6	10.4	11.1	11.8
	12"	S	331	322	314	309	304	300	297	294
		G'	6.2	7.0	7.7	8.4	9.1	9.7	10.4	11.0
	18"	S	246	236	229	223	219	215	211	208
		G'	6.0	6.7	7.4	8.0	8.6	9.2	9.8	10.3
	24"	S	203	194	186	181	176	172	169	166
		G'	5.9	6.5	7.1	7.7	8.3	8.8	9.3	9.7
	30"	S	177	168	161	155	150	146	143	140
		G'	5.8	6.4	6.9	7.5	8.0	8.4	8.9	9.3
	36"	S	160	151	144	138	133	129	126	123
		G'	5.7	6.2	6.8	7.3	7.7	8.1	8.5	8.9
18 0.0474"	6"	S	776	764	755	747	741	736	731	728
		G'	12.3	13.8	15.2	16.6	18.0	19.3	20.5	21.7
	12"	S	437	425	415	408	402	396	392	388
		G'	11.6	12.9	14.1	15.2	16.3	17.4	18.3	19.3
	18"	S	324	312	302	295	289	283	279	275
		G'	11.0	12.2	13.2	14.2	15.1	15.9	16.7	17.5
	24"	S	267	255	246	238	232	227	222	219
		G'	10.6	11.6	12.5	13.4	14.1	14.9	15.5	16.1
	30"	S	233	221	212	204	198	193	189	185
		G'	10.3	11.2	12.0	12.7	13.4	14.0	14.5	15.1
	36"	S	211	199	189	182	175	170	166	162
		G'	10.0	10.8	11.6	12.2	12.8	13.3	13.8	14.2
16 0.0598"	6"	S	978	963	951	941	934	927	922	917
		G'	20.6	23.0	25.2	27.3	29.3	31.2	33.0	34.8
	12"	S	550	535	523	513	506	499	494	489
		G'	18.9	20.7	22.5	24.1	25.5	26.9	28.2	29.4
	18"	S	407	392	380	371	363	357	351	347
		G'	17.6	19.2	20.5	21.8	22.9	24.0	24.9	25.8
	24"	S	336	321	309	299	292	285	280	275
		G'	16.7	18.0	19.1	20.1	21.0	21.8	22.6	23.2
	30"	S	293	278	266	257	249	243	237	232
		G'	15.9	17.0	18.0	18.8	19.6	20.2	20.8	21.3
	36"	S	265	249	238	228	220	214	209	204
		G'	15.4	16.3	17.1	17.8	18.4	18.9	19.4	19.8
14 0.0747"	6"	S	1219	1201	1186	1174	1165	1157	1150	1145
		G'	33.1	36.4	39.6	42.5	45.3	47.9	50.3	52.6
	12"	S	685	666	652	640	630	622	616	610
		G'	29.2	31.6	33.8	35.8	37.6	39.3	40.8	42.2
	18"	S	507	488	473	462	452	444	437	432
		G'	26.5	28.4	30.0	31.4	32.7	33.8	34.8	35.8
	24"	S	417	399	384	373	363	355	348	343
		G'	24.6	26.1	27.3	28.4	29.3	30.1	30.8	31.4
	30"	S	364	345	331	319	310	302	295	289
		G'	23.2	24.4	25.3	26.1	26.8	27.4	27.9	28.3
	36"	S	328	310	295	283	274	266	259	254
		G'	22.1	23.1	23.8	24.4	24.9	25.3	25.6	25.9

ATTACHMENT PATTERN: 12 / 4

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT							
			14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"	28' - 0"
20 0.0358"	6"	S	643	627	614	604	596	589	583	578
		G'	6.4	7.3	8.1	8.9	9.7	10.4	11.2	11.9
	12"	S	387	371	358	348	340	333	327	322
		G'	6.3	7.0	7.8	8.5	9.2	9.8	10.5	11.1
	18"	S	301	285	273	262	254	247	241	236
		G'	6.1	6.8	7.5	8.2	8.8	9.4	9.9	10.5
	24"	S	259	242	230	220	211	205	199	194
		G'	6.0	6.7	7.3	7.9	8.5	9.0	9.5	10.0
	30"	S	233	217	204	194	186	179	173	168
		G'	5.9	6.6	7.2	7.7	8.2	8.7	9.2	9.6
	36"	S	216	200	187	177	169	162	156	151
		G'	5.9	6.5	7.0	7.6	8.0	8.5	8.9	9.3
18 0.0474"	6"	S	849	828	811	798	787	778	771	764
		G'	12.4	13.9	15.3	16.7	18.1	19.4	20.6	21.9
	12"	S	510	489	472	459	448	439	431	425
		G'	11.7	13.1	14.3	15.5	16.6	17.6	18.6	19.6
	18"	S	397	376	359	346	335	326	318	312
		G'	11.3	12.5	13.6	14.6	15.5	16.4	17.2	18.0
	24"	S	340	319	303	289	279	269	262	255
		G'	11.0	12.1	13.0	13.9	14.7	15.5	16.1	16.8
	30"	S	307	285	269	255	245	236	228	221
		G'	10.7	11.7	12.6	13.4	14.1	14.7	15.3	15.9
	36"	S	284	263	246	233	222	213	205	199
		G'	10.6	11.5	12.3	13.0	13.6	14.2	14.7	15.1
16 0.0598"	6"	S	1069	1042	1022	1005	992	980	971	963
		G'	20.8	23.1	25.4	27.5	29.5	31.4	33.3	35.0
	12"	S	641	614	594	577	564	552	543	535
		G'	19.3	21.2	22.9	24.6	26.1	27.5	28.8	30.0
	18"	S	498	472	451	434	421	410	400	392
		G'	18.2	19.9	21.3	22.6	23.8	24.9	25.8	26.8
	24"	S	427	400	380	363	350	338	329	321
		G'	17.5	18.9	20.1	21.2	22.2	23.0	23.8	24.4
	30"	S	384	357	337	320	307	295	286	278
		G'	17.0	18.2	19.2	20.1	20.9	21.6	22.2	22.7
	36"	S	355	329	308	292	278	267	257	249
		G'	16.5	17.6	18.5	19.3	20.0	20.5	21.0	21.4
14 0.0747"	6"	S	1331	1298	1273	1253	1236	1222	1210	1200
		G'	33.4	36.8	40.0	42.9	45.7	48.3	50.7	53.0
	12"	S	796	764	738	718	701	687	676	666
		G'	30.0	32.5	34.8	36.8	38.7	40.3	41.9	43.3
	18"	S	618	585	560	540	523	509	498	487
		G'	27.8	29.8	31.5	33.0	34.3	35.4	36.5	37.4
	24"	S	529	496	471	451	434	420	408	398
		G'	26.3	27.9	29.2	30.3	31.3	32.1	32.8	33.4
	30"	S	475	443	417	397	381	367	355	345
		G'	25.2	26.5	27.6	28.4	29.1	29.7	30.2	30.6
	36"	S	440	407	382	362	345	331	319	309
		G'	24.4	25.5	26.3	27.0	27.5	27.9	28.2	28.5

See Table 4 notes.

TABLE 9—DEEP-DEK® 6 – ALLOWABLE DIAPHRAGM SHEAR[1-5]

SUPPORT CONNECTION: Hilti X-ENP-19-L15 (steel substrate thickness ≥ 0.25 inch)
SIDELAP CONNECTION: Hilti S-SLC01 M HWH, S-SLC02 M HWH or #12 self-drilling screws

S = Allowable Diaphragm Shear (plf)
G' = Stiffness Factor (kips/in.)

ATTACHMENT PATTERN: 12 / 2

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT							
			14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"	28' - 0"
20 0.0358"	6"	S	702	694	688	682	678	675	672	669
		G'	6.4	7.3	8.1	8.9	9.6	10.4	11.1	11.9
	12"	S	407	400	394	390	386	383	380	378
		G'	6.2	7.0	7.7	8.4	9.1	9.8	10.4	11.0
	18"	S	291	284	278	274	270	267	264	262
		G'	6.1	6.8	7.5	8.1	8.7	9.3	9.9	10.4
	24"	S	233	226	220	216	212	209	206	204
		G'	5.9	6.6	7.2	7.8	8.4	8.9	9.4	9.9
	30"	S	199	191	186	181	177	174	171	169
		G'	5.9	6.5	7.1	7.6	8.1	8.6	9.0	9.5
	36"	S	175	168	162	158	154	151	148	146
		G'	5.8	6.4	6.9	7.4	7.9	8.3	8.7	9.1
18 0.0474"	6"	S	927	916	908	901	895	891	887	883
		G'	12.3	13.8	15.3	16.7	18.0	19.3	20.6	21.8
	12"	S	539	529	521	515	510	506	503	500
		G'	11.7	13.0	14.2	15.4	16.5	17.5	18.5	19.4
	18"	S	385	375	368	362	357	353	349	346
		G'	11.2	12.3	13.4	14.4	15.3	16.2	17.0	17.8
	24"	S	308	299	291	285	280	276	272	270
		G'	10.8	11.9	12.8	13.7	14.5	15.2	15.9	16.5
	30"	S	262	253	245	239	234	230	226	223
		G'	10.5	11.5	12.3	13.1	13.8	14.4	15.0	15.5
	36"	S	232	222	214	208	203	199	196	193
		G'	10.3	11.2	12.0	12.6	13.2	13.8	14.3	14.7
16 0.0598"	6"	S	1165	1151	1141	1133	1126	1120	1115	1111
		G'	20.7	23.1	25.3	27.4	29.4	31.3	33.2	34.9
	12"	S	679	666	657	649	643	638	634	630
		G'	19.1	21.0	22.7	24.3	25.8	27.2	28.5	29.7
	18"	S	485	473	463	456	450	444	440	436
		G'	18.0	19.5	21.0	22.2	23.4	24.5	25.4	26.3
	24"	S	388	376	367	359	353	348	343	340
		G'	17.1	18.5	19.7	20.7	21.6	22.5	23.2	23.9
	30"	S	330	318	308	301	295	290	285	281
		G'	16.5	17.7	18.7	19.6	20.3	21.0	21.6	22.1
	36"	S	291	279	270	262	256	251	246	243
		G'	16.0	17.1	17.9	18.7	19.3	19.8	20.3	20.7
14 0.0747"	6"	S	1448	1432	1419	1409	1401	1394	1388	1382
		G'	33.2	36.6	39.8	42.8	45.5	48.1	50.5	52.8
	12"	S	846	831	820	810	803	796	791	786
		G'	29.6	32.1	34.3	36.4	38.2	39.9	41.4	42.8
	18"	S	605	589	578	568	561	554	549	544
		G'	27.3	29.2	30.8	32.3	33.6	34.7	35.7	36.6
	24"	S	484	469	457	448	440	433	428	423
		G'	25.6	27.1	28.4	29.5	30.4	31.2	31.9	32.5
	30"	S	411	396	384	375	367	361	356	351
		G'	24.4	25.6	26.6	27.4	28.1	28.7	29.1	29.6
	36"	S	363	348	336	327	319	313	307	303
		G'	23.4	24.4	25.2	25.8	26.3	26.7	27.1	27.3

ATTACHMENT PATTERN: 12 / 4

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT							
			14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"	28' - 0"
20 0.0358"	6"	S	789	778	768	761	755	750	746	742
		G'	6.5	7.3	8.1	8.9	9.7	10.4	11.2	11.9
	12"	S	442	430	421	414	408	403	398	395
		G'	6.3	7.1	7.8	8.5	9.2	9.9	10.6	11.2
	18"	S	326	314	305	298	292	287	283	279
		G'	6.2	6.9	7.6	8.3	8.9	9.5	10.1	10.6
	24"	S	268	256	247	240	234	229	225	221
		G'	6.1	6.8	7.5	8.1	8.7	9.2	9.7	10.2
	30"	S	233	221	212	205	199	194	190	186
		G'	6.0	6.7	7.3	7.9	8.5	9.0	9.5	9.9
	36"	S	210	198	189	182	176	171	167	163
		G'	6.0	6.6	7.2	7.8	8.3	8.8	9.3	9.7
18 0.0474"	6"	S	1044	1028	1016	1007	999	993	987	982
		G'	12.4	13.9	15.4	16.8	18.1	19.5	20.7	22.0
	12"	S	583	568	556	547	539	532	527	522
		G'	11.9	13.2	14.5	15.7	16.8	17.9	18.9	19.9
	18"	S	430	415	403	393	385	379	373	369
		G'	11.5	12.7	13.9	14.9	15.9	16.8	17.6	18.4
	24"	S	353	338	326	316	309	302	297	292
		G'	11.3	12.4	13.4	14.4	15.2	16.0	16.7	17.4
	30"	S	307	292	280	270	263	256	251	246
		G'	11.1	12.2	13.1	13.9	14.7	15.4	16.0	16.6
	36"	S	277	261	249	240	232	225	220	215
		G'	11.0	12.0	12.8	13.6	14.3	14.9	15.5	16.0
16 0.0598"	6"	S	1315	1296	1281	1269	1259	1251	1244	1238
		G'	20.9	23.3	25.5	27.7	29.7	31.6	33.5	35.2
	12"	S	734	715	700	688	679	671	664	658
		G'	19.6	21.6	23.4	25.0	26.6	28.0	29.4	30.6
	18"	S	541	522	507	495	485	477	470	464
		G'	18.8	20.5	22.0	23.3	24.6	25.7	26.7	27.6
	24"	S	444	425	410	398	388	380	373	367
		G'	18.2	19.7	21.0	22.2	23.2	24.1	24.9	25.6
	30"	S	386	367	352	340	330	322	315	309
		G'	17.8	19.1	20.3	21.3	22.1	22.9	23.5	24.1
	36"	S	347	328	313	301	292	283	277	271
		G'	17.5	18.7	19.7	20.6	21.3	22.0	22.5	22.9
14 0.0747"	6"	S	1640	1617	1598	1584	1572	1562	1553	1546
		G'	33.7	37.2	40.4	43.4	46.2	48.8	51.2	53.5
	12"	S	915	891	873	858	846	836	828	820
		G'	30.7	33.4	35.7	37.8	39.7	41.4	43.0	44.4
	18"	S	673	650	631	616	604	594	586	579
		G'	28.9	31.0	32.8	34.4	35.8	37.0	38.0	39.0
	24"	S	552	529	510	496	484	474	465	458
		G'	27.7	29.5	30.9	32.1	33.2	34.0	34.7	35.4
	30"	S	480	456	438	423	411	401	392	385
		G'	26.9	28.4	29.5	30.5	31.3	31.9	32.4	32.8
	36"	S	431	408	389	375	363	353	344	337
		G'	26.2	27.5	28.5	29.3	29.9	30.3	30.7	30.9

See Table 4 notes.

TABLE 10—DEEP-DEK® 7.5 – ALLOWABLE DIAPHRAGM SHEAR[1-3]

SUPPORT CONNECTION: $^1/_2$" Effective Weld Diameter
SIDELAP CONNECTION: $1^1/_2$" Seam Welds

S = Allowable Diaphragm Shear (plf)
G' = Stiffness Factor (kips/in.)

ATTACHMENT PATTERN: 12 / 2			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"	28' - 0"	30' - 0"
20 0.0358"	6"	S	1306	1301	1297	1294	1291	1289	1287	1285
		G'	5.2	5.8	6.4	7.0	7.6	8.1	8.7	9.3
	12"	S	1010	996	986	977	969	963	958	953
		G'	5.1	5.7	6.3	6.8	7.4	7.9	8.5	9.0
	18"	S	739	727	717	710	703	697	692	687
		G'	5.0	5.6	6.2	6.7	7.2	7.8	8.3	8.8
	24"	S	581	569	560	552	545	540	535	531
		G'	5.0	5.5	6.1	6.6	7.1	7.6	8.1	8.6
	30"	S	487	475	465	457	451	445	441	436
		G'	4.9	5.5	6.0	6.5	7.0	7.5	8.0	8.4
	36"	S	424	412	402	394	388	382	377	373
		G'	4.9	5.4	5.9	6.4	6.9	7.4	7.8	8.3
18 0.0474"	6"	S	1706	1699	1694	1690	1686	1684	1681	1679
		G'	10.1	11.3	12.4	13.5	14.6	15.7	16.8	17.8
	12"	S	1319	1301	1287	1276	1266	1258	1251	1245
		G'	9.9	11.0	12.0	13.1	14.1	15.1	16.1	17.0
	18"	S	965	950	937	927	918	911	904	897
		G'	9.7	10.7	11.7	12.7	13.6	14.6	15.5	16.3
	24"	S	759	744	731	721	712	705	699	694
		G'	9.5	10.5	11.4	12.3	13.2	14.1	14.9	15.7
	30"	S	636	620	608	597	589	582	575	570
		G'	9.3	10.3	11.2	12.0	12.9	13.7	14.5	15.2
	36"	S	553	538	525	515	506	499	493	488
		G'	9.2	10.1	11.0	11.8	12.6	13.3	14.0	14.7
16 0.0598"	6"	S	2121	2113	2107	2101	2097	2093	2090	2087
		G'	17.4	19.4	21.2	23.1	24.9	26.6	28.3	30.0
	12"	S	1640	1618	1601	1586	1574	1564	1555	1548
		G'	16.8	18.6	20.3	21.9	23.5	25.1	26.6	28.0
	18"	S	1200	1181	1165	1152	1142	1133	1124	1116
		G'	16.3	17.9	19.5	21.0	22.4	23.8	25.1	26.4
	24"	S	944	925	909	896	886	877	869	862
		G'	15.8	17.3	18.8	20.2	21.5	22.7	23.9	25.0
	30"	S	791	771	755	743	732	723	715	709
		G'	15.4	16.9	18.2	19.5	20.7	21.8	22.9	23.9
	36"	S	688	669	653	640	630	621	613	606
		G'	15.1	16.4	17.7	18.8	19.9	21.0	21.9	22.9
14 0.0747"	6"	S	2603	2593	2585	2579	2573	2569	2565	2562
		G'	29.0	32.1	35.0	37.9	40.7	43.3	45.9	48.4
	12"	S	2012	1986	1964	1947	1932	1919	1909	1899
		G'	27.5	30.2	32.8	35.2	37.5	39.8	41.9	44.0
	18"	S	1473	1449	1430	1414	1401	1390	1379	1369
		G'	26.2	28.6	30.9	33.0	35.0	36.9	38.7	40.5
	24"	S	1159	1135	1116	1100	1087	1076	1066	1058
		G'	25.2	27.4	29.4	31.2	33.0	34.6	36.2	37.6
	30"	S	970	946	927	911	898	887	878	870
		G'	24.3	26.3	28.1	29.7	31.3	32.7	34.0	35.3
	36"	S	844	820	801	786	773	762	752	744
		G'	23.6	25.4	27.0	28.5	29.8	31.1	32.3	33.3

ATTACHMENT PATTERN: 12 / 4			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"	28' - 0"	30' - 0"
20 0.0358"	6"	S	1429	1410	1395	1383	1373	1365	1357	1351
		G'	5.2	5.8	6.4	7.0	7.6	8.1	8.7	9.3
	12"	S	1103	1086	1072	1060	1051	1043	1036	1030
		G'	5.1	5.7	6.3	6.8	7.4	8.0	8.5	9.0
	18"	S	788	771	757	745	736	728	721	715
		G'	5.0	5.6	6.2	6.7	7.3	7.8	8.3	8.8
	24"	S	630	613	599	588	578	570	563	557
		G'	5.0	5.6	6.1	6.6	7.1	7.7	8.2	8.6
	30"	S	536	518	504	493	483	475	468	463
		G'	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5
	36"	S	473	455	441	430	420	412	405	399
		G'	4.9	5.4	6.0	6.5	7.0	7.4	7.9	8.3
18 0.0474"	6"	S	1867	1842	1823	1807	1794	1783	1773	1765
		G'	10.1	11.3	12.4	13.5	14.6	15.7	16.8	17.8
	12"	S	1441	1418	1400	1385	1373	1362	1353	1345
		G'	9.9	11.0	12.1	13.1	14.1	15.1	16.1	17.1
	18"	S	1029	1006	988	973	961	950	941	934
		G'	9.7	10.7	11.8	12.7	13.7	14.6	15.5	16.4
	24"	S	823	801	782	767	755	744	735	728
		G'	9.5	10.5	11.5	12.4	13.3	14.2	15.0	15.9
	30"	S	700	677	659	644	631	621	612	604
		G'	9.4	10.4	11.3	12.2	13.0	13.8	14.6	15.4
	36"	S	617	595	576	561	549	539	530	522
		G'	9.3	10.2	11.1	11.9	12.7	13.5	14.2	15.0
16 0.0598"	6"	S	2321	2291	2267	2247	2230	2216	2204	2194
		G'	17.5	19.4	21.3	23.1	24.9	26.7	28.4	30.0
	12"	S	1792	1763	1741	1722	1707	1694	1683	1673
		G'	16.9	18.6	20.4	22.0	23.6	25.2	26.7	28.1
	18"	S	1280	1251	1229	1210	1195	1182	1170	1161
		G'	16.4	18.0	19.6	21.1	22.6	24.0	25.3	26.6
	24"	S	1024	995	973	954	939	926	914	905
		G'	16.0	17.5	19.0	20.4	21.7	23.0	24.2	25.3
	30"	S	870	842	819	800	785	772	761	751
		G'	15.7	17.1	18.5	19.8	21.0	22.1	23.2	24.2
	36"	S	768	739	717	698	683	670	658	649
		G'	15.4	16.7	18.0	19.2	20.3	21.4	22.4	23.3
14 0.0747"	6"	S	2848	2811	2782	2757	2737	2720	2705	2693
		G'	29.1	32.1	35.1	38.0	40.7	43.4	46.0	48.5
	12"	S	2199	2164	2136	2114	2095	2079	2065	2053
		G'	27.6	30.3	32.9	35.4	37.7	40.0	42.1	44.2
	18"	S	1570	1536	1508	1485	1466	1450	1436	1424
		G'	26.5	28.9	31.2	33.4	35.4	37.3	39.1	40.8
	24"	S	1256	1221	1194	1171	1152	1136	1122	1110
		G'	25.6	27.8	29.8	31.7	33.5	35.2	36.7	38.2
	30"	S	1068	1033	1005	982	963	947	933	922
		G'	24.8	26.8	28.7	30.4	31.9	33.4	34.8	36.0
	36"	S	942	907	879	857	838	822	808	796
		G'	24.2	26.0	27.7	29.2	30.6	31.9	33.1	34.2

See Table 4 notes.

TABLE 11—DEEP-DEK® 7.5 – ALLOWABLE DIAPHRAGM SHEAR[1-3]

SUPPORT CONNECTION: $^1/_2$" Effective Weld Diameter
SIDELAP CONNECTION: #10 Screws

S = Allowable Diaphragm Shear (plf)
G' = Stiffness Factor (kips/in.)

ATTACHMENT PATTERN: 12 / 2			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"	28' - 0"	30' - 0"
20 0.0358"	6"	S	578	571	565	560	556	553	550	548
		G'	5.1	5.6	6.2	6.8	7.3	7.9	8.4	8.9
	12"	S	322	314	309	304	300	297	294	291
		G'	4.9	5.5	6.0	6.5	7.0	7.5	8.0	8.4
	18"	S	236	229	223	219	215	211	208	206
		G'	4.8	5.3	5.8	6.3	6.7	7.2	7.6	8.0
	24"	S	194	186	181	176	172	169	166	163
		G'	4.7	5.2	5.6	6.1	6.5	6.9	7.3	7.7
	30"	S	168	161	155	150	146	143	140	138
		G'	4.6	5.1	5.5	5.9	6.3	6.7	7.0	7.4
	36"	S	151	144	138	133	129	126	123	121
		G'	4.5	5.0	5.4	5.8	6.1	6.5	6.8	7.1
18 0.0474"	6"	S	764	755	747	741	736	731	728	724
		G'	9.8	10.8	11.9	12.9	13.9	14.8	15.8	16.7
	12"	S	425	415	408	402	396	392	388	385
		G'	9.3	10.2	11.1	12.0	12.8	13.7	14.4	15.2
	18"	S	312	302	295	289	283	279	275	272
		G'	8.9	9.8	10.6	11.3	12.1	12.8	13.4	14.0
	24"	S	255	246	238	232	227	222	219	216
		G'	8.6	9.4	10.1	10.8	11.4	12.0	12.6	13.1
	30"	S	221	212	204	198	193	189	185	182
		G'	8.4	9.1	9.7	10.3	10.9	11.4	11.9	12.4
	36"	S	199	189	182	175	170	166	162	159
		G'	8.2	8.8	9.4	10.0	10.5	10.9	11.4	11.8
16 0.0598"	6"	S	963	951	941	934	927	922	917	913
		G'	16.5	18.2	19.9	21.5	23.0	24.5	25.9	27.3
	12"	S	535	523	513	506	499	494	489	485
		G'	15.3	16.8	18.1	19.4	20.6	21.7	22.8	23.8
	18"	S	392	380	371	363	357	351	347	342
		G'	14.5	15.7	16.8	17.8	18.8	19.7	20.6	21.4
	24"	S	321	309	299	292	285	280	275	271
		G'	13.8	14.8	15.8	16.7	17.5	18.2	18.9	19.5
	30"	S	278	266	257	249	243	237	232	228
		G'	13.2	14.2	15.0	15.7	16.4	17.0	17.6	18.1
	36"	S	249	238	228	220	214	209	204	200
		G'	12.8	13.6	14.3	15.0	15.6	16.1	16.5	17.0
14 0.0747"	6"	S	1201	1186	1174	1165	1157	1150	1145	1140
		G'	26.8	29.4	31.8	34.1	36.3	38.4	40.4	42.3
	12"	S	666	652	640	630	622	616	610	605
		G'	24.1	26.1	27.9	29.6	31.1	32.6	33.9	35.2
	18"	S	488	473	462	452	444	437	432	427
		G'	22.2	23.8	25.2	26.5	27.6	28.7	29.7	30.6
	24"	S	399	384	373	363	355	348	343	338
		G'	20.8	22.1	23.2	24.2	25.1	25.9	26.6	27.3
	30"	S	345	331	319	310	302	295	289	284
		G'	19.7	20.7	21.7	22.5	23.2	23.8	24.3	24.8
	36"	S	310	295	283	274	266	259	254	249
		G'	18.8	19.7	20.5	21.1	21.7	22.1	22.6	22.9

ATTACHMENT PATTERN: 12 / 4			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"	28' - 0"	30' - 0"
20 0.0358"	6"	S	627	614	604	596	589	583	578	574
		G'	5.1	5.7	6.2	6.8	7.3	7.9	8.4	8.9
	12"	S	371	358	348	340	333	327	322	317
		G'	4.9	5.5	6.0	6.5	7.0	7.5	8.0	8.5
	18"	S	285	273	262	254	247	241	236	232
		G'	4.8	5.4	5.9	6.3	6.8	7.3	7.7	8.1
	24"	S	242	230	220	211	205	199	194	189
		G'	4.8	5.3	5.7	6.2	6.6	7.0	7.4	7.8
	30"	S	217	204	194	186	179	173	168	164
		G'	4.7	5.2	5.6	6.1	6.5	6.8	7.2	7.6
	36"	S	200	187	177	169	162	156	151	147
		G'	4.7	5.1	5.5	5.9	6.3	6.7	7.0	7.4
18 0.0474"	6"	S	828	811	798	787	778	771	764	758
		G'	9.8	10.9	11.9	12.9	13.9	14.9	15.8	16.7
	12"	S	489	472	459	448	439	431	425	419
		G'	9.4	10.3	11.3	12.1	13.0	13.8	14.6	15.4
	18"	S	376	359	346	335	326	318	312	306
		G'	9.1	10.0	10.8	11.6	12.3	13.0	13.7	14.3
	24"	S	319	303	289	279	269	262	255	250
		G'	8.8	9.7	10.4	11.1	11.8	12.4	13.0	13.5
	30"	S	285	269	255	245	236	228	221	216
		G'	8.7	9.4	10.1	10.8	11.4	11.9	12.4	12.9
	36"	S	263	246	233	222	213	205	199	193
		G'	8.5	9.2	9.9	10.5	11.0	11.5	12.0	12.4
16 0.0598"	6"	S	1042	1022	1005	992	980	971	963	956
		G'	16.6	18.3	20.0	21.6	23.1	24.6	26.0	27.4
	12"	S	614	594	577	564	552	543	535	528
		G'	15.6	17.0	18.4	19.7	20.9	22.1	23.2	24.2
	18"	S	472	451	434	421	410	400	392	385
		G'	14.9	16.1	17.3	18.4	19.4	20.3	21.2	22.0
	24"	S	400	380	363	350	338	329	321	314
		G'	14.3	15.4	16.4	17.4	18.2	19.0	19.7	20.4
	30"	S	357	337	320	307	295	286	278	271
		G'	13.9	14.9	15.8	16.6	17.3	18.0	18.6	19.1
	36"	S	329	308	292	278	267	257	249	242
		G'	13.6	14.5	15.3	16.0	16.6	17.2	17.7	18.1
14 0.0747"	6"	S	1298	1273	1253	1236	1222	1210	1200	1192
		G'	27.0	29.6	32.0	34.4	36.6	38.7	40.6	42.6
	12"	S	764	738	718	701	687	676	666	657
		G'	24.6	26.7	28.5	30.2	31.8	33.3	34.7	36.0
	18"	S	585	560	540	523	509	498	487	479
		G'	23.0	24.7	26.1	27.5	28.7	29.8	30.8	31.7
	24"	S	496	471	451	434	420	408	398	390
		G'	21.9	23.3	24.5	25.5	26.5	27.3	28.1	28.7
	30"	S	443	417	397	381	367	355	345	336
		G'	21.0	22.2	23.2	24.1	24.8	25.5	26.0	26.5
	36"	S	407	382	362	345	331	319	309	301
		G'	20.4	21.4	22.2	22.9	23.5	24.0	24.5	24.9

See Table 4 notes.

TABLE 12—DEEP-DEK® 7.5 – ALLOWABLE DIAPHRAGM SHEAR[1-5]

SUPPORT CONNECTION: Hilti X-ENP-19-L15 (steel substrate thickness ≥ 0.25 inch)
SIDELAP CONNECTION: Hilti S-SLC01 M HWH, S-SLC02 M HWH or #12 self-drilling screws

S = Allowable Diaphragm Shear (plf)
G' = Stiffness Factor (kips/in.)

ATTACHMENT PATTERN: 12 / 2

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT							
			16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"	28' - 0"	30' - 0"
20 0.0358"	6"	S	694	688	682	678	675	672	669	667
		G'	5.1	5.6	6.2	6.8	7.3	7.9	8.4	8.9
	12"	S	400	394	390	386	383	380	378	376
		G'	4.9	5.5	6.0	6.5	7.0	7.5	8.0	8.4
	18"	S	284	278	274	270	267	264	262	260
		G'	4.8	5.3	5.8	6.3	6.8	7.2	7.6	8.1
	24"	S	226	220	216	212	209	206	204	202
		G'	4.7	5.2	5.7	6.1	6.6	7.0	7.4	7.7
	30"	S	191	186	181	177	174	171	169	167
		G'	4.7	5.1	5.6	6.0	6.4	6.8	7.1	7.5
	36"	S	168	162	158	154	151	148	146	144
		G'	4.6	5.1	5.5	5.9	6.2	6.6	6.9	7.3
18 0.0474"	6"	S	916	908	901	895	891	887	883	880
		G'	9.8	10.8	11.9	12.9	13.9	14.9	15.8	16.7
	12"	S	529	521	515	510	506	503	500	497
		G'	9.3	10.3	11.2	12.1	12.9	13.7	14.5	15.3
	18"	S	375	368	362	357	353	349	346	344
		G'	9.0	9.9	10.7	11.5	12.2	12.9	13.6	14.2
	24"	S	299	291	285	280	276	272	270	267
		G'	8.7	9.5	10.3	11.0	11.6	12.2	12.8	13.4
	30"	S	253	245	239	234	230	226	223	221
		G'	8.5	9.3	10.0	10.6	11.2	11.7	12.2	12.7
	36"	S	222	214	208	203	199	196	193	190
		G'	8.4	9.1	9.7	10.3	10.8	11.3	11.7	12.1
16 0.0598"	6"	S	1151	1141	1133	1126	1120	1115	1111	1107
		G'	16.6	18.3	19.9	21.5	23.1	24.5	26.0	27.3
	12"	S	666	657	649	643	638	634	630	627
		G'	15.5	16.9	18.3	19.5	20.8	21.9	23.0	24.0
	18"	S	473	463	456	450	444	440	436	433
		G'	14.7	15.9	17.1	18.1	19.1	20.0	20.9	21.7
	24"	S	376	367	359	353	348	343	340	336
		G'	14.1	15.2	16.2	17.1	17.9	18.6	19.3	20.0
	30"	S	318	308	301	295	290	285	281	278
		G'	13.6	14.6	15.4	16.2	16.9	17.6	18.1	18.7
	36"	S	279	270	262	256	251	246	243	239
		G'	13.2	14.1	14.9	15.6	16.2	16.7	17.2	17.6
14 0.0747"	6"	S	1432	1419	1409	1401	1394	1388	1382	1378
		G'	26.9	29.5	31.9	34.2	36.4	38.5	40.5	42.4
	12"	S	831	820	810	803	796	791	786	782
		G'	24.4	26.4	28.2	29.9	31.5	33.0	34.3	35.6
	18"	S	589	578	568	561	554	549	544	540
		G'	22.7	24.3	25.7	27.0	28.2	29.3	30.3	31.2
	24"	S	469	457	448	440	433	428	423	419
		G'	21.4	22.7	23.9	24.9	25.8	26.7	27.4	28.1
	30"	S	396	384	375	367	361	356	351	347
		G'	20.5	21.6	22.5	23.4	24.1	24.7	25.3	25.8
	36"	S	348	336	327	319	313	307	303	299
		G'	19.7	20.6	21.4	22.1	22.7	23.2	23.6	24.0

ATTACHMENT PATTERN: 12 / 4

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT							
			16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"	28' - 0"	30' - 0"
20 0.0358"	6"	S	778	768	761	755	750	746	742	739
		G'	5.1	5.7	6.2	6.8	7.4	7.9	8.4	9.0
	12"	S	430	421	414	408	403	398	395	392
		G'	5.0	5.5	6.1	6.6	7.1	7.6	8.1	8.5
	18"	S	314	305	298	292	287	283	279	276
		G'	4.9	5.4	5.9	6.4	6.9	7.3	7.8	8.2
	24"	S	256	247	240	234	229	225	221	218
		G'	4.8	5.3	5.8	6.3	6.7	7.2	7.6	8.0
	30"	S	221	212	205	199	194	190	186	183
		G'	4.8	5.3	5.7	6.2	6.6	7.0	7.4	7.8
	36"	S	198	189	182	176	171	167	163	160
		G'	4.8	5.2	5.7	6.1	6.5	6.9	7.2	7.6
18 0.0474"	6"	S	1028	1016	1007	999	993	987	982	978
		G'	9.8	10.9	11.9	13.0	14.0	14.9	15.9	16.8
	12"	S	568	556	547	539	532	527	522	518
		G'	9.5	10.4	11.4	12.3	13.1	14.0	14.8	15.5
	18"	S	415	403	393	385	379	373	369	365
		G'	9.2	10.1	11.0	11.8	12.5	13.3	13.9	14.6
	24"	S	338	326	316	309	302	297	292	288
		G'	9.0	9.9	10.7	11.4	12.1	12.7	13.3	13.9
	30"	S	292	280	270	263	256	251	246	242
		G'	8.9	9.7	10.4	11.1	11.7	12.3	12.9	13.4
	36"	S	261	249	240	232	225	220	215	211
		G'	8.8	9.6	10.2	10.9	11.5	12.0	12.5	13.0
16 0.0598"	6"	S	1296	1281	1269	1259	1251	1244	1238	1233
		G'	16.7	18.4	20.1	21.7	23.2	24.7	26.1	27.5
	12"	S	715	700	688	679	671	664	658	653
		G'	15.8	17.3	18.7	20.0	21.2	22.4	23.5	24.6
	18"	S	522	507	495	485	477	470	464	459
		G'	15.2	16.5	17.7	18.8	19.9	20.8	21.7	22.6
	24"	S	425	410	398	388	380	373	367	362
		G'	14.8	15.9	17.0	18.0	18.9	19.7	20.4	21.1
	30"	S	367	352	340	330	322	315	309	304
		G'	14.4	15.5	16.5	17.4	18.1	18.8	19.5	20.0
	36"	S	328	313	301	292	283	277	271	266
		G'	14.2	15.2	16.1	16.9	17.6	18.2	18.7	19.2
14 0.0747"	6"	S	1617	1598	1584	1572	1562	1553	1546	1540
		G'	27.2	29.8	32.3	34.6	36.8	38.9	40.9	42.9
	12"	S	891	873	858	846	836	828	820	814
		G'	25.1	27.2	29.1	30.8	32.5	34.0	35.4	36.7
	18"	S	650	631	616	604	594	586	579	572
		G'	23.8	25.5	27.0	28.4	29.7	30.8	31.8	32.8
	24"	S	529	510	496	484	474	465	458	451
		G'	22.9	24.3	25.6	26.7	27.7	28.6	29.4	30.1
	30"	S	456	438	423	411	401	392	385	379
		G'	22.2	23.5	24.6	25.5	26.3	27.0	27.6	28.2
	36"	S	408	389	375	363	353	344	337	331
		G'	21.7	22.8	23.8	24.6	25.2	25.8	26.3	26.7

See Table 4 notes.

TABLE 13—DEEP-DEK® 4.5 CELLULAR – ALLOWABLE DIAPHRAGM SHEAR[1-3]

SUPPORT CONNECTION: $^1/_2$" Effective Weld Diameter | **S** = Allowable Diaphragm Shear (plf) | **G'** = Stiffness Factor (kips/in.)

SIDELAP CONNECTION: #10 Screws

ATTACHMENT PATTERN: 24 / 4

GAGE	SIDE LAP	FACTOR	DECK SPAN - C to C SUPPORT							
			12' - 0"	14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"
20/20 0.0358"/	12"	S	486	454	429	410	395	382	372	363
		G'	66.3	70.3	73.5	76.2	78.5	80.5	82.2	83.7
	24"	S	358	325	301	282	266	254	243	235
		G'	53.0	54.5	55.5	56.2	56.7	57.1	57.4	57.6
	36"	S	316	283	258	239	224	211	201	192
		G'	46.7	47.0	47.1	46.9	46.8	46.5	46.3	46.0
20/18 0.0358"/	12"	S	607	569	540	518	500	485	473	463
		G'	87.0	88.7	89.9	90.8	91.5	92.0	92.5	92.8
	24"	S	437	399	370	348	330	316	304	293
		G'	63.1	62.4	61.6	61.0	60.3	59.8	59.2	58.8
	36"	S	381	342	314	292	274	259	247	237
		G'	53.2	51.6	50.2	48.9	47.9	46.9	46.1	45.4
18/20 0.0474"/	12"	S	517	480	452	430	413	399	387	377
		G'	68.7	74.1	78.7	82.7	86.2	89.2	91.9	94.3
	24"	S	389	352	324	302	285	270	259	249
		G'	57.4	60.2	62.3	64.0	65.3	66.4	67.3	68.0
	36"	S	346	309	281	259	242	228	216	206
		G'	51.7	53.2	54.1	54.7	55.1	55.4	55.5	55.6
18/18 0.0474"/	12"	S	622	581	551	528	509	494	481	470
		G'	98.5	101.9	104.6	106.7	108.4	109.9	111.0	112.0
	24"	S	452	412	382	358	339	324	311	300
		G'	74.4	74.6	74.6	74.4	74.2	73.9	73.6	73.3
	36"	S	396	355	325	302	283	267	255	244
		G'	63.8	62.8	61.7	60.7	59.7	58.9	58.1	57.4
18/16 0.0474"/	12"	S	718	677	646	621	602	586	573	562
		G'	113.8	114.6	115.1	115.3	115.5	115.6	115.6	115.7
	24"	S	504	463	432	407	388	372	359	348
		G'	80.2	78.4	76.8	75.5	74.4	73.4	72.5	71.7
	36"	S	433	391	360	336	317	301	288	277
		G'	66.7	64.1	61.9	60.0	58.5	57.1	56.0	55.0
16/18 0.0598"/	12"	S	622	581	551	528	509	494	481	470
		G'	106.2	111.6	115.8	119.3	122.2	124.6	126.7	128.5
	24"	S	452	412	382	358	339	324	311	300
		G'	83.2	84.7	85.6	86.1	86.5	86.7	86.8	86.8
	36"	S	396	355	325	302	283	267	255	244
		G'	72.5	72.4	71.9	71.3	70.7	70.1	69.5	68.9
16/16 0.0598"/	12"	S	718	677	646	621	602	586	573	562
		G'	129.8	132.1	133.7	134.9	135.8	136.6	137.1	137.6
	24"	S	504	463	432	407	388	372	359	348
		G'	94.1	92.9	91.7	90.6	89.6	88.7	87.9	87.2
	36"	S	433	391	360	336	317	301	288	277
		G'	79.3	76.8	74.6	72.7	71.1	69.7	68.5	67.4
16/14 0.0598"/	12"	S	833	791	759	734	714	698	684	673
		G'	140.4	139.8	139.2	138.6	138.1	137.7	137.2	136.9
	24"	S	566	523	492	467	447	430	417	405
		G'	96.3	93.2	90.8	88.8	87.1	85.6	84.4	83.4
	36"	S	477	434	402	378	358	341	328	316
		G'	79.3	75.5	72.4	70.0	67.9	66.2	64.7	63.5
14/16 0.0747"/	12"	S	718	677	646	621	602	586	573	562
		G'	144.3	148.6	151.8	154.3	156.4	158.0	159.4	160.5
	24"	S	504	463	432	407	388	372	359	348
		G'	107.9	107.6	107.2	106.6	106.0	105.4	104.8	104.3
	36"	S	433	391	360	336	317	301	288	277
		G'	92.0	90.1	88.3	86.6	85.0	83.7	82.5	81.4
14/14 0.0747"/	12"	S	833	791	759	734	714	698	684	673
		G'	162.8	163.5	163.8	163.9	163.9	163.9	163.8	163.7
	24"	S	566	523	492	467	447	430	417	405
		G'	114.2	111.4	109.0	107.0	105.3	103.8	102.5	101.4
	36"	S	477	434	402	378	358	341	328	316
		G'	94.9	90.9	87.7	85.0	82.7	80.8	79.1	77.7

SIDELAP CONNECTION: $1^1/_2$" Seam Welds

ATTACHMENT PATTERN: 24 / 4

GAGE	SIDE LAP	FACTOR	DECK SPAN - C to C SUPPORT							
			12' - 0"	14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"
20/20 0.0358"/	12"	S	1191	1151	1120	1097	1078	1062	1049	1039
		G'	84.6	92.4	99.3	105.4	110.8	115.7	120.1	124.1
	24"	S	738	697	667	643	624	609	596	585
		G'	71.9	76.8	80.8	84.2	87.0	89.5	91.7	93.6
	36"	S	587	546	516	492	473	458	445	434
		G'	64.5	67.7	70.2	72.1	73.7	75.1	76.2	77.1
20/18 0.0358"/	12"	S	1522	1474	1438	1410	1387	1369	1353	1340
		G'	129.2	136.0	141.6	146.2	150.1	153.5	156.4	158.9
	24"	S	930	882	846	818	795	777	761	748
		G'	98.7	101.1	102.9	104.2	105.3	106.1	106.8	107.3
	36"	S	733	684	648	620	598	579	564	551
		G'	83.5	84.0	84.2	84.2	84.1	84.0	83.9	83.7
18/20 0.0474"/	12"	S	1208	1163	1130	1104	1083	1066	1052	1039
		G'	82.7	91.6	99.7	107.0	113.6	119.7	125.3	130.5
	24"	S	761	716	683	657	636	619	604	592
		G'	73.2	79.5	84.9	89.6	93.8	97.5	100.7	103.6
	36"	S	612	567	534	507	487	470	455	443
		G'	67.2	71.9	75.8	79.0	81.8	84.1	86.2	87.9
18/18 0.0474"/	12"	S	1532	1482	1444	1415	1391	1372	1356	1342
		G'	136.7	146.1	154.1	160.9	166.8	171.9	176.5	180.5
	24"	S	942	892	854	825	801	782	766	753
		G'	109.6	114.2	117.7	120.5	122.9	124.8	126.4	127.8
	36"	S	746	695	658	628	605	586	570	556
		G'	95.1	97.3	98.8	99.8	100.6	101.2	101.6	101.9
18/16 0.0474"/	12"	S	1894	1840	1799	1767	1742	1721	1702	1684
		G'	178.7	185.4	190.8	195.1	198.7	201.7	204.2	206.4
	24"	S	1137	1083	1042	1011	985	965	947	933
		G'	131.1	132.5	133.4	134.0	134.4	134.6	134.8	134.9
	36"	S	885	831	790	758	733	712	695	680
		G'	108.8	108.1	107.2	106.4	105.6	104.9	104.3	103.7
16/18 0.0598"/	12"	S	1554	1504	1466	1436	1413	1393	1377	1364
		G'	139.6	151.2	161.3	170.0	177.7	184.6	190.7	196.1
	24"	S	954	904	866	836	813	793	777	764
		G'	116.3	123.0	128.3	132.8	136.5	139.7	142.4	144.7
	36"	S	754	704	666	636	613	593	577	564
		G'	103.1	107.1	110.1	112.4	114.2	115.7	116.9	117.9
16/16 0.0598"/	12"	S	1922	1867	1826	1795	1769	1746	1725	1708
		G'	193.2	202.9	210.8	217.3	222.8	227.5	231.5	235.1
	24"	S	1152	1098	1057	1025	999	979	961	946
		G'	147.4	150.7	153.1	154.9	156.3	157.4	158.3	159.0
	36"	S	896	841	800	768	743	722	705	690
		G'	124.6	125.2	125.3	125.2	125.0	124.7	124.4	124.1
16/14 0.0598"/	12"	S	2322	2259	2211	2173	2143	2118	2097	2079
		G'	232.6	238.1	242.3	245.6	248.2	250.4	252.2	253.8
	24"	S	1398	1339	1294	1259	1231	1209	1190	1174
		G'	164.0	163.7	163.3	162.8	162.3	161.8	161.3	160.9
	36"	S	1071	1012	967	932	905	882	863	847
		G'	133.7	131.2	129.1	127.3	125.7	124.3	123.1	122.1
14/16 0.0747"/	12"	S	1955	1900	1859	1827	1799	1774	1753	1736
		G'	203.7	216.6	227.3	236.4	244.2	250.9	256.8	262.0
	24"	S	1170	1115	1074	1042	1016	995	978	963
		G'	161.4	167.1	171.5	175.0	177.8	180.1	182.0	183.6
	36"	S	908	854	812	780	755	734	716	701
		G'	139.1	141.5	143.1	144.1	144.8	145.2	145.5	145.7
14/14 0.0747"/	12"	S	2354	2291	2243	2206	2176	2151	2130	2112
		G'	257.7	266.5	273.3	278.8	283.3	287.1	290.3	293.1
	24"	S	1421	1361	1316	1281	1253	1230	1211	1194
		G'	188.0	189.4	190.2	190.6	190.9	191.1	191.1	191.1
	36"	S	1087	1027	982	947	919	896	877	861
		G'	155.6	154.0	152.5	151.1	149.9	148.7	147.7	146.7

See Table 4 notes.

TABLE 14—DEEP-DEK® 4.5 CELLULAR – ALLOWABLE DIAPHRAGM SHEAR[1-5]

SUPPORT CONNECTION: Hilti X-ENP-19-L15 (steel substrate thickness ≥ 0.25 inch)
SIDELAP CONNECTION: Hilti S-SLC01 M HWH, S-SLC02 M HWH or #12 self-drilling screws

S = Allowable Diaphragm Shear (plf)
G' = Stiffness Factor (kips/in.)

ATTACHMENT PATTERN: 24 / 3

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT 12' - 0"	14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"
20/20 0.0358"/0.0358"	12"	S	504	481	465	452	441	433	426	420
		G'	68.2	72.2	75.5	78.3	80.5	82.5	84.1	85.6
	18"	S	388	366	349	336	326	317	310	304
		G'	60.9	63.4	65.2	66.6	67.8	68.6	69.4	69.9
	24"	S	330	308	291	278	268	259	252	246
		G'	56.2	57.7	58.7	59.4	59.8	60.1	60.3	60.4
20/18 0.0358"/0.0474"	12"	S	631	606	588	574	563	553	546	539
		G'	90.8	92.3	93.4	94.1	94.6	95.0	95.3	95.5
	18"	S	477	453	435	421	409	400	392	386
		G'	76.7	76.6	76.2	75.8	75.4	75.0	74.6	74.2
	24"	S	401	376	358	344	333	323	316	309
		G'	68.4	67.4	66.3	65.3	64.4	63.6	62.9	62.2
18/20 0.0474"/0.0358"	12"	S	509	486	469	455	444	436	428	422
		G'	70.2	75.8	80.5	84.5	88.0	91.1	93.7	96.1
	18"	S	393	370	353	339	329	320	313	306
		G'	64.2	68.2	71.4	74.0	76.1	78.0	79.5	80.8
	24"	S	335	312	295	281	271	262	255	248
		G'	60.2	63.2	65.4	67.1	68.4	69.5	70.3	71.0
18/18 0.0474"/0.0474"	12"	S	631	606	588	574	563	553	546	539
		G'	102.2	105.6	108.2	110.2	111.8	113.1	114.1	115.0
	18"	S	477	453	435	421	409	400	392	386
		G'	88.4	89.6	90.4	90.8	91.1	91.2	91.2	91.2
	24"	S	401	376	358	344	333	323	316	309
		G'	79.9	80.0	79.7	79.3	78.8	78.3	77.8	77.3
18/16 0.0474"/0.0598"	12"	S	761	735	716	701	689	679	671	664
		G'	119.5	119.9	120.0	119.9	119.8	119.6	119.4	119.2
	18"	S	568	542	523	508	496	486	478	471
		G'	99.1	97.7	96.3	95.1	94.0	93.1	92.2	91.4
	24"	S	471	445	426	411	399	389	381	374
		G'	87.5	85.1	83.0	81.2	79.7	78.3	77.1	76.1
16/18 0.0598"/0.0474"	12"	S	631	606	588	574	563	553	546	539
		G'	109.6	115.0	119.3	122.7	125.5	127.9	129.9	131.6
	18"	S	477	453	435	421	409	400	392	386
		G'	96.8	99.7	101.8	103.3	104.4	105.2	105.9	106.4
	24"	S	401	376	358	344	333	323	316	309
		G'	88.7	90.1	90.9	91.3	91.5	91.5	91.4	91.3
16/16 0.0598"/0.0598"	12"	S	761	735	716	701	689	679	671	664
		G'	135.6	137.6	138.9	139.9	140.5	141.0	141.3	141.6
	18"	S	568	542	523	508	496	486	478	471
		G'	114.4	114.0	113.4	112.7	112.0	111.3	110.7	110.1
	24"	S	471	445	426	411	399	389	381	374
		G'	102.0	100.3	98.7	97.1	95.7	94.5	93.3	92.3
16/14 0.0598"/0.0747"	12"	S	915	885	862	844	829	817	807	798
		G'	148.0	146.7	145.6	144.5	143.6	142.7	141.9	141.3
	18"	S	676	649	628	612	599	589	580	573
		G'	120.8	117.7	115.2	113.0	111.2	109.6	108.3	107.1
	24"	S	555	528	507	491	478	468	459	452
		G'	105.6	101.7	98.5	95.8	93.6	91.6	90.0	88.6
14/16 0.0747"/0.0598"	12"	S	761	735	716	701	689	679	671	664
		G'	149.9	154.1	157.2	159.5	161.3	162.8	163.9	164.9
	18"	S	568	542	523	508	496	486	478	471
		G'	128.8	130.0	130.5	130.7	130.7	130.6	130.4	130.1
	24"	S	471	445	426	411	399	389	381	374
		G'	116.1	115.6	114.8	113.8	112.8	111.8	110.9	110.1
14/14 0.0747"/0.0747"	12"	S	915	885	862	844	829	817	807	798
		G'	171.0	171.1	170.8	170.5	170.0	169.6	169.2	168.8
	18"	S	676	649	628	612	599	589	580	573
		G'	141.5	139.1	136.9	135.0	133.3	131.8	130.5	129.3
	24"	S	555	528	507	491	478	468	459	452
		G'	124.7	121.0	117.9	115.2	112.8	110.8	109.1	107.5

ATTACHMENT PATTERN: 24 / 4

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT 12' - 0"	14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"
20/20 0.0358"/0.0358	12"	S	505	483	466	453	442	434	427	421
		G'	68.6	72.6	75.9	78.7	80.9	82.9	84.5	86.0
	18"	S	389	367	350	337	327	318	311	305
		G'	61.4	63.9	65.8	67.2	68.3	69.2	69.9	70.4
	24"	S	332	309	292	279	269	260	253	247
		G'	56.8	58.3	59.3	60.0	60.4	60.7	60.9	61.0
20/18 0.0358"/0.0474	12"	S	633	608	590	575	564	554	547	540
		G'	91.6	93.1	94.1	94.8	95.3	95.6	95.9	96.1
	18"	S	479	455	436	422	410	401	393	387
		G'	77.6	77.4	77.1	76.6	76.1	75.7	75.3	74.8
	24"	S	402	378	359	345	334	324	317	310
		G'	69.5	68.4	67.3	66.2	65.3	64.4	63.6	62.9
18/20 0.0474"/0.0358	12"	S	510	487	470	456	446	437	429	423
		G'	70.5	76.1	80.8	84.9	88.4	91.4	94.1	96.5
	18"	S	395	371	354	340	330	321	313	307
		G'	64.7	68.7	71.9	74.5	76.6	78.5	80.0	81.3
	24"	S	337	313	296	283	272	263	255	249
		G'	60.8	63.7	66.0	67.7	69.0	70.1	70.9	71.6
18/18 0.0474"/0.0474	12"	S	633	608	590	575	564	554	547	540
		G'	102.9	106.3	108.9	110.9	112.4	113.7	114.7	115.6
	18"	S	479	455	436	422	410	401	393	387
		G'	89.3	90.6	91.3	91.7	91.9	92.0	92.0	91.9
	24"	S	402	378	359	345	334	324	317	310
		G'	81.0	81.1	80.7	80.3	79.7	79.2	78.7	78.1
18/16 0.0474"/0.0598	12"	S	763	737	718	702	690	680	672	665
		G'	120.6	120.9	120.9	120.8	120.6	120.4	120.2	120.0
	18"	S	569	543	524	509	497	487	479	472
		G'	100.4	98.9	97.5	96.2	95.0	94.0	93.1	92.2
	24"	S	473	447	427	412	400	390	382	375
		G'	89.0	86.5	84.3	82.4	80.7	79.3	78.1	77.0
16/18 0.0598"/0.0474	12"	S	633	608	590	575	564	554	547	540
		G'	110.3	115.7	120.0	123.4	126.2	128.5	130.5	132.2
	18"	S	479	455	436	422	410	401	393	387
		G'	97.6	100.6	102.6	104.1	105.2	106.1	106.7	107.2
	24"	S	402	378	359	345	334	324	317	310
		G'	89.7	91.2	92.0	92.3	92.5	92.4	92.3	92.2
16/16 0.0598"/0.0598	12"	S	763	737	718	702	690	680	672	665
		G'	136.7	138.7	140.0	140.9	141.5	141.9	142.2	142.4
	18"	S	569	543	524	509	497	487	479	472
		G'	115.8	115.3	114.6	113.9	113.1	112.4	111.7	111.0
	24"	S	473	447	427	412	400	390	382	375
		G'	103.6	101.8	100.0	98.4	96.9	95.6	94.4	93.3
16/14 0.0598"/0.0747	12"	S	920	892	871	855	842	832	823	815
		G'	149.5	148.1	146.9	145.7	144.6	143.7	142.9	142.2
	18"	S	678	650	629	613	600	590	581	574
		G'	122.5	119.3	116.6	114.4	112.4	110.8	109.3	108.1
	24"	S	557	529	509	492	479	469	460	453
		G'	107.5	103.4	100.0	97.2	94.9	92.8	91.1	89.6
14/16 0.0747"/0.0598	12"	S	763	737	718	702	690	680	672	665
		G'	151.1	155.2	158.2	160.5	162.3	163.7	164.8	165.7
	18"	S	569	543	524	509	497	487	479	472
		G'	130.3	131.4	131.9	132.0	131.9	131.7	131.5	131.2
	24"	S	473	447	427	412	400	390	382	375
		G'	117.8	117.2	116.2	115.2	114.1	113.1	112.1	111.2
14/14 0.0747"/0.0747	12"	S	920	892	871	855	842	832	823	815
		G'	172.6	172.6	172.2	171.8	171.3	170.8	170.3	169.8
	18"	S	678	650	629	613	600	590	581	574
		G'	143.4	140.8	138.5	136.5	134.7	133.1	131.7	130.5
	24"	S	557	529	509	492	479	469	460	453
		G'	126.8	123.0	119.7	116.8	114.4	112.2	110.4	108.8

See Table 4 notes.

TABLE 15—DEEP-DEK® 6 CELLULAR – ALLOWABLE DIAPHRAGM SHEAR[1-3]

SUPPORT CONNECTION: 1/2" Effective Weld Diameter | **S** = Allowable Diaphragm Shear (plf) | **G'** = Stiffness Factor (kips/in.)

SIDELAP CONNECTION: #10 Screws | **ATTACHMENT PATTERN:** 24 / 4

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT							
			14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"	28' - 0"
20/20 0.0358"/	12"	S	454	429	410	395	382	372	363	355
		G'	63.3	66.8	69.7	72.2	74.4	76.3	78.0	79.5
	24"	S	325	301	282	266	254	243	235	227
		G'	50.2	51.6	52.6	53.3	53.9	54.4	54.8	55.1
	36"	S	283	258	239	224	211	201	192	184
		G'	43.8	44.2	44.4	44.5	44.4	44.4	44.3	44.2
20/18 0.0358"/	12"	S	569	540	518	500	485	473	463	454
		G'	83.6	85.2	86.5	87.5	88.3	89.0	89.6	90.0
	24"	S	399	370	348	330	316	304	293	285
		G'	59.8	59.4	59.0	58.6	58.2	57.8	57.5	57.1
	36"	S	342	314	292	274	259	247	237	228
		G'	49.8	48.7	47.7	46.8	46.0	45.3	44.6	44.1
18/20 0.0474"/	12"	S	480	452	430	413	399	387	377	368
		G'	65.5	70.1	74.1	77.7	80.8	83.7	86.2	88.5
	24"	S	352	324	302	285	270	259	249	240
		G'	54.4	56.8	58.7	60.3	61.6	62.8	63.7	64.5
	36"	S	309	281	259	242	228	216	206	197
		G'	48.6	49.9	50.8	51.5	52.0	52.4	52.7	52.9
18/18 0.0474"/	12"	S	581	551	528	509	494	481	470	461
		G'	94.3	97.5	100.0	102.1	103.9	105.4	106.7	107.8
	24"	S	412	382	358	339	324	311	300	291
		G'	70.5	70.9	71.1	71.2	71.1	71.1	71.0	70.9
	36"	S	355	325	302	283	267	255	244	234
		G'	59.8	59.1	58.4	57.8	57.1	56.5	56.0	55.5
18/16 0.0474"/	12"	S	677	646	621	602	586	573	562	552
		G'	109.5	110.5	111.2	111.7	112.1	112.4	112.6	112.8
	24"	S	463	432	407	388	372	359	348	339
		G'	76.0	74.8	73.7	72.8	71.9	71.2	70.5	70.0
	36"	S	391	360	336	317	301	288	277	267
		G'	62.5	60.5	58.9	57.5	56.3	55.2	54.3	53.5
16/18 0.0598"/	12"	S	581	551	528	509	494	481	470	461
		G'	101.5	106.2	110.1	113.4	116.2	118.6	120.7	122.6
	24"	S	412	382	358	339	324	311	300	291
		G'	78.8	80.2	81.2	82.0	82.5	82.9	83.2	83.4
	36"	S	355	325	302	283	267	255	244	234
		G'	68.0	68.1	67.9	67.6	67.3	67.0	66.6	66.2
16/16 0.0598"/	12"	S	677	646	621	602	586	573	562	552
		G'	124.6	126.9	128.6	130.0	131.1	132.0	132.8	133.4
	24"	S	463	432	407	388	372	359	348	339
		G'	89.1	88.4	87.7	87.0	86.4	85.8	85.3	84.8
	36"	S	391	360	336	317	301	288	277	267
		G'	74.2	72.4	70.9	69.5	68.3	67.2	66.3	65.4
16/14 0.0598"/	12"	S	791	759	734	714	698	684	673	663
		G'	135.2	135.1	135.0	134.8	134.6	134.4	134.2	134.0
	24"	S	523	492	467	447	430	417	405	396
		G'	91.2	89.0	87.3	85.7	84.4	83.3	82.4	81.5
	36"	S	434	402	378	358	341	328	316	307
		G'	74.1	71.3	69.0	67.1	65.5	64.1	62.9	61.8
14/16 0.0747"/	12"	S	677	646	621	602	586	573	562	552
		G'	138.2	142.1	145.3	147.9	150.0	151.8	153.3	154.6
	24"	S	463	432	407	388	372	359	348	339
		G'	102.1	102.3	102.2	102.0	101.8	101.5	101.2	100.9
	36"	S	391	360	336	317	301	288	277	267
		G'	86.2	84.9	83.6	82.5	81.4	80.4	79.5	78.7
14/14 0.0747"/	12"	S	791	759	734	714	698	684	673	663
		G'	156.6	157.6	158.3	158.7	159.1	159.3	159.5	159.7
	24"	S	523	492	467	447	430	417	405	396
		G'	108.1	106.2	104.6	103.1	101.9	100.7	99.8	98.9
	36"	S	434	402	378	358	341	328	316	307
		G'	88.7	85.8	83.4	81.3	79.6	78.0	76.7	75.5

SIDELAP CONNECTION: 1 1/2" Seam Welds | **ATTACHMENT PATTERN:** 24 / 4

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT							
			14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"	28' - 0"
20/20 0.0358"/ 0.0358"	12"	S	1151	1120	1097	1078	1062	1049	1039	1029
		G'	80.8	87.4	93.3	98.7	103.5	108.0	112.0	115.7
	24"	S	697	667	643	624	609	596	585	576
		G'	68.6	72.7	76.3	79.4	82.1	84.4	86.5	88.4
	36"	S	546	516	492	473	458	445	434	425
		G'	61.2	64.0	66.3	68.2	69.7	71.1	72.2	73.3
20/18 0.0358"/ 0.0474"	12"	S	1474	1438	1410	1387	1369	1353	1340	1329
		G'	124.4	130.4	135.4	139.7	143.4	146.7	149.5	152.1
	24"	S	882	846	818	795	777	761	748	737
		G'	94.5	96.8	98.6	100.0	101.2	102.2	103.0	103.7
	36"	S	684	648	620	598	579	564	551	540
		G'	79.4	80.1	80.5	80.8	80.9	81.0	81.0	81.0
18/20 0.0474"/ 0.0358"	12"	S	1163	1130	1104	1083	1066	1052	1039	1029
		G'	78.8	86.2	93.0	99.3	105.1	110.5	115.5	120.1
	24"	S	716	683	657	636	619	604	592	582
		G'	69.6	74.9	79.6	83.8	87.5	90.9	93.9	96.7
	36"	S	567	534	507	487	470	455	443	433
		G'	63.8	67.7	71.1	74.1	76.6	78.9	80.8	82.6
18/18 0.0474"/ 0.0474"	12"	S	1482	1444	1415	1391	1372	1356	1342	1331
		G'	131.0	139.2	146.2	152.3	157.8	162.6	166.9	170.8
	24"	S	892	854	825	801	782	766	753	741
		G'	104.7	108.8	112.1	114.8	117.1	119.1	120.8	122.3
	36"	S	695	658	628	605	586	570	556	545
		G'	90.3	92.4	94.0	95.2	96.1	96.8	97.4	97.9
18/16 0.0474"/ 0.0598"	12"	S	1840	1799	1767	1742	1721	1702	1684	1669
		G'	172.5	178.5	183.5	187.6	191.1	194.2	196.8	199.1
	24"	S	1083	1042	1011	985	965	947	933	920
		G'	125.7	127.3	128.4	129.2	129.9	130.4	130.8	131.1
	36"	S	831	790	758	733	712	695	680	668
		G'	103.5	103.2	102.9	102.4	102.0	101.6	101.2	100.9
16/18 0.0598"/ 0.0474"	12"	S	1504	1466	1436	1413	1393	1377	1364	1352
		G'	133.4	143.2	151.9	159.7	166.6	172.9	178.5	183.7
	24"	S	904	866	836	813	793	777	764	752
		G'	110.9	116.7	121.5	125.6	129.1	132.2	134.9	137.3
	36"	S	704	666	636	613	593	577	564	552
		G'	97.8	101.4	104.2	106.5	108.4	110.0	111.3	112.4
16/16 0.0598"/ 0.0598"	12"	S	1867	1826	1795	1769	1746	1725	1708	1692
		G'	185.7	194.3	201.4	207.5	212.7	217.3	221.3	224.8
	24"	S	1098	1057	1025	999	979	961	946	934
		G'	141.0	144.2	146.7	148.6	150.2	151.5	152.6	153.5
	36"	S	841	800	768	743	722	705	690	677
		G'	118.4	119.3	119.7	120.0	120.1	120.2	120.2	120.1
16/14 0.0598"/ 0.0747"	12"	S	2259	2211	2173	2143	2118	2097	2079	2064
		G'	225.1	230.2	234.3	237.6	240.4	242.8	244.8	246.5
	24"	S	1339	1294	1259	1231	1209	1190	1174	1160
		G'	157.4	157.7	157.7	157.7	157.6	157.4	157.3	157.1
	36"	S	1012	967	932	905	882	863	847	833
		G'	127.2	125.6	124.2	122.9	121.8	120.8	120.0	119.2
14/16 0.0747"/ 0.0598"	12"	S	1900	1859	1827	1799	1774	1753	1736	1720
		G'	195.2	206.3	215.8	224.1	231.3	237.6	243.3	248.4
	24"	S	1115	1074	1042	1016	995	978	963	950
		G'	154.1	159.3	163.5	166.9	169.8	172.2	174.3	176.1
	36"	S	854	812	780	755	734	716	701	689
		G'	132.1	134.4	136.2	137.4	138.4	139.2	139.8	140.2
14/14 0.0747"/ 0.0747"	12"	S	2291	2243	2206	2176	2151	2130	2112	2097
		G'	248.5	256.4	262.8	268.2	272.7	276.5	279.9	282.8
	24"	S	1361	1316	1281	1253	1230	1211	1194	1181
		G'	180.1	181.8	183.0	183.9	184.5	185.0	185.4	185.7
	36"	S	1027	982	947	919	896	877	861	847
		G'	147.9	147.1	146.3	145.5	144.7	144.0	143.3	142.7

See Table 4 notes

TABLE 16—DEEP-DEK® 6 CELLULAR – ALLOWABLE DIAPHRAGM SHEAR[1-5]

SUPPORT CONNECTION: Hilti X-ENP-19-L15 (steel substrate thickness ≥ 0.25 inch)
SIDELAP CONNECTION: Hilti S-SLC01 M HWH, S-SLC02 M HWH or #12 self-drilling screws

S = Allowable Diaphragm Shear (plf)
G' = Stiffness Factor (kips/in.)

ATTACHMENT PATTERN: 24 / 3

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT							
			14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"	28' - 0"
20/20 0.0358"/0.0358"	12"	S	481	465	452	441	433	426	420	415
		G'	65.0	68.5	71.4	73.9	76.1	78.0	79.6	81.1
	18"	S	366	349	336	326	317	310	304	299
		G'	57.7	59.9	61.6	63.0	64.2	65.1	65.9	66.6
	24"	S	308	291	278	268	259	252	246	241
		G'	53.0	54.3	55.3	56.1	56.6	57.1	57.4	57.6
20/18 0.0358"/0.0474"	12"	S	606	588	574	563	553	546	539	534
		G'	86.8	88.4	89.5	90.4	91.1	91.6	92.1	92.4
	18"	S	453	435	421	409	400	392	386	380
		G'	72.7	72.8	72.8	72.7	72.5	72.3	72.1	71.9
	24"	S	376	358	344	333	323	316	309	303
		G'	64.4	63.8	63.1	62.4	61.8	61.3	60.7	60.2
18/20 0.0474"/0.0358"	12"	S	486	469	455	444	436	428	422	417
		G'	66.8	71.5	75.5	79.1	82.3	85.2	87.7	90.0
	18"	S	370	353	339	329	320	313	306	301
		G'	60.8	64.2	67.0	69.4	71.5	73.2	74.8	76.1
	24"	S	312	295	281	271	262	255	248	243
		G'	56.8	59.3	61.3	63.0	64.3	65.4	66.3	67.1
18/18 0.0474"/0.0474"	12"	S	606	588	574	563	553	546	539	534
		G'	97.5	100.6	103.1	105.1	106.8	108.2	109.3	110.4
	18"	S	453	435	421	409	400	392	386	380
		G'	83.7	85.0	85.9	86.6	87.0	87.4	87.6	87.8
	24"	S	376	358	344	333	323	316	309	303
		G'	75.2	75.5	75.6	75.4	75.2	75.0	74.7	74.5
18/16 0.0474"/0.0598"	12"	S	735	716	701	689	679	671	664	658
		G'	114.3	115.0	115.4	115.7	115.8	115.9	116.0	116.0
	18"	S	542	523	508	496	486	478	471	465
		G'	93.9	93.1	92.3	91.5	90.7	90.1	89.5	88.9
	24"	S	445	426	411	399	389	381	374	368
		G'	82.3	80.6	79.2	77.8	76.7	75.7	74.7	73.9
16/18 0.0598"/0.0474"	12"	S	606	588	574	563	553	546	539	534
		G'	104.4	109.1	113.0	116.3	119.0	121.4	123.4	125.2
	18"	S	453	435	421	409	400	392	386	380
		G'	91.6	94.3	96.3	97.9	99.1	100.2	101.0	101.7
	24"	S	376	358	344	333	323	316	309	303
		G'	83.5	84.9	85.8	86.5	86.9	87.1	87.3	87.4
16/16 0.0598"/0.0598"	12"	S	735	716	701	689	679	671	664	658
		G'	129.5	131.6	133.1	134.3	135.2	135.9	136.5	137.0
	18"	S	542	523	508	496	486	478	471	465
		G'	108.4	108.4	108.3	108.0	107.7	107.3	107.0	106.6
	24"	S	445	426	411	399	389	381	374	368
		G'	96.0	94.9	93.8	92.8	91.8	90.9	90.1	89.4
16/14 0.0598"/0.0747"	12"	S	885	862	844	829	817	807	798	791
		G'	141.7	141.1	140.5	139.9	139.4	138.9	138.4	138.0
	18"	S	649	628	612	599	589	580	573	566
		G'	114.5	112.4	110.6	109.0	107.7	106.5	105.4	104.5
	24"	S	528	507	491	478	468	459	452	445
		G'	99.3	96.4	94.0	92.0	90.3	88.7	87.4	86.3
14/16 0.0747"/0.0598"	12"	S	735	716	701	689	679	671	664	658
		G'	143.0	146.8	149.9	152.3	154.3	155.9	157.3	158.4
	18"	S	542	523	508	496	486	478	471	465
		G'	122.0	123.3	124.2	124.7	125.0	125.2	125.4	125.4
	24"	S	445	426	411	399	389	381	374	368
		G'	109.2	109.1	108.8	108.3	107.8	107.2	106.6	106.1
14/14 0.0747"/0.0747"	12"	S	885	862	844	829	817	807	798	791
		G'	163.5	164.1	164.3	164.5	164.5	164.4	164.3	164.2
	18"	S	649	628	612	599	589	580	573	566
		G'	134.0	132.5	131.1	129.8	128.6	127.6	126.7	125.8
	24"	S	528	507	491	478	468	459	452	445
		G'	117.2	114.6	112.4	110.4	108.6	107.1	105.7	104.5

ATTACHMENT PATTERN: 24 / 4

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT							
			14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"	28' - 0"
20/20 0.0358"/0.0358	12"	S	483	466	453	442	434	427	421	416
		G'	65.3	68.8	71.7	74.3	76.4	78.3	80.0	81.4
	18"	S	367	350	337	327	318	311	305	300
		G'	58.1	60.3	62.1	63.5	64.6	65.6	66.4	67.0
	24"	S	309	292	279	269	260	253	247	242
		G'	53.5	54.9	55.9	56.6	57.2	57.6	57.9	58.1
20/18 0.0358"/0.0474	12"	S	608	590	575	564	554	547	540	534
		G'	87.5	89.0	90.1	91.0	91.6	92.1	92.6	92.9
	18"	S	455	436	422	410	401	393	387	381
		G'	73.5	73.6	73.5	73.4	73.2	72.9	72.7	72.5
	24"	S	378	359	345	334	324	317	310	304
		G'	65.3	64.6	63.9	63.2	62.6	61.9	61.4	60.9
18/20 0.0474"/0.0358	12"	S	487	470	456	446	437	429	423	418
		G'	67.0	71.7	75.8	79.4	82.6	85.5	88.0	90.3
	18"	S	371	354	340	330	321	313	307	302
		G'	61.2	64.6	67.4	69.8	71.9	73.7	75.2	76.6
	24"	S	313	296	283	272	263	255	249	244
		G'	57.2	59.8	61.8	63.5	64.8	65.9	66.8	67.6
18/18 0.0474"/0.0474	12"	S	608	590	575	564	554	547	540	534
		G'	98.1	101.2	103.7	105.7	107.3	108.7	109.9	110.9
	18"	S	455	436	422	410	401	393	387	381
		G'	84.5	85.8	86.7	87.3	87.7	88.0	88.3	88.4
	24"	S	378	359	345	334	324	317	310	304
		G'	76.2	76.4	76.4	76.3	76.1	75.8	75.5	75.2
18/16 0.0474"/0.0598	12"	S	737	718	702	690	680	672	665	659
		G'	115.3	115.9	116.3	116.5	116.6	116.6	116.6	116.6
	18"	S	543	524	509	497	487	479	472	466
		G'	95.1	94.2	93.3	92.4	91.6	90.9	90.3	89.7
	24"	S	447	427	412	400	390	382	375	369
		G'	83.5	81.8	80.2	78.9	77.6	76.5	75.6	74.7
16/18 0.0598"/0.0474	12"	S	608	590	575	564	554	547	540	534
		G'	105.0	109.7	113.6	116.8	119.6	121.9	124.0	125.8
	18"	S	455	436	422	410	401	393	387	381
		G'	92.4	95.0	97.1	98.6	99.9	100.9	101.7	102.4
	24"	S	378	359	345	334	324	317	310	304
		G'	84.4	85.8	86.7	87.3	87.7	88.0	88.1	88.2
16/16 0.0598"/0.0598	12"	S	737	718	702	690	680	672	665	659
		G'	130.5	132.5	134.0	135.1	136.0	136.7	137.2	137.7
	18"	S	543	524	509	497	487	479	472	466
		G'	109.6	109.6	109.4	109.0	108.6	108.2	107.8	107.5
	24"	S	447	427	412	400	390	382	375	369
		G'	97.3	96.2	95.0	93.9	92.9	91.9	91.1	90.3
16/14 0.0598"/0.0747	12"	S	892	871	855	842	832	823	815	809
		G'	143.0	142.3	141.6	141.0	140.4	139.8	139.3	138.8
	18"	S	650	629	613	600	590	581	574	567
		G'	116.0	113.8	111.9	110.2	108.8	107.5	106.4	105.4
	24"	S	529	509	492	479	469	460	453	446
		G'	100.9	97.9	95.4	93.3	91.4	89.8	88.5	87.2
14/16 0.0747"/0.0598	12"	S	737	718	702	690	680	672	665	659
		G'	143.9	147.8	150.8	153.2	155.1	156.7	158.1	159.2
	18"	S	543	524	509	497	487	479	472	466
		G'	123.2	124.5	125.3	125.8	126.1	126.3	126.3	126.3
	24"	S	447	427	412	400	390	382	375	369
		G'	110.6	110.5	110.1	109.5	109.0	108.3	107.7	107.2
14/14 0.0747"/0.0747	12"	S	892	871	855	842	832	823	815	809
		G'	164.9	165.4	165.6	165.6	165.5	165.4	165.3	165.1
	18"	S	650	629	613	600	590	581	574	567
		G'	135.7	134.1	132.5	131.2	129.9	128.8	127.8	126.9
	24"	S	529	509	492	479	469	460	453	446
		G'	119.0	116.3	113.9	111.8	110.0	108.3	106.9	105.6

See Table 4 notes.

TABLE 17—DEEP-DEK® 7.5 CELLULAR – ALLOWABLE DIAPHRAGM SHEAR[1-3]

SUPPORT CONNECTION: 1½" Effective Weld Diameter — **S** = Allowable Diaphragm Shear (plf) — **G'** = Stiffness Factor (kips/in.)

SIDELAP CONNECTION: #10 Screws

ATTACHMENT PATTERN: 24 / 4

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT							
			16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"	28' - 0"	30' - 0"
20/20 0.0358"/	12"	S	429	410	395	382	372	363	355	349
		G'	61.3	64.4	67.0	69.3	71.3	73.2	74.8	76.3
	24"	S	301	282	266	254	243	235	227	220
		G'	48.2	49.5	50.4	51.2	51.9	52.4	52.8	53.2
	36"	S	258	239	224	211	201	192	184	178
		G'	41.7	42.2	42.4	42.6	42.6	42.7	42.7	42.6
20/18 0.0358"/	12"	S	540	518	500	485	473	463	454	447
		G'	81.1	82.7	84.0	85.0	85.9	86.6	87.2	87.8
	24"	S	370	348	330	316	304	293	285	277
		G'	57.4	57.2	57.0	56.7	56.5	56.2	56.0	55.8
	36"	S	314	292	274	259	247	237	228	220
		G'	47.3	46.5	45.7	45.1	44.4	43.9	43.4	42.9
18/20 0.0474"/	12"	S	452	430	413	399	387	377	368	361
		G'	63.3	67.3	70.8	74.0	76.9	79.6	81.9	84.1
	24"	S	324	302	285	270	259	249	240	233
		G'	52.2	54.3	56.1	57.6	58.9	60.0	61.0	61.8
	36"	S	281	259	242	228	216	206	197	190
		G'	46.3	47.5	48.4	49.1	49.7	50.1	50.5	50.8
18/18 0.0474"/	12"	S	551	528	509	494	481	470	461	453
		G'	91.4	94.3	96.7	98.7	100.4	101.9	103.2	104.4
	24"	S	382	358	339	324	311	300	291	283
		G'	67.6	68.1	68.5	68.7	68.8	68.9	68.9	68.9
	36"	S	325	302	283	267	255	244	234	226
		G'	56.9	56.4	56.0	55.5	55.1	54.6	54.2	53.9
18/16 0.0474"/	12"	S	646	621	602	586	573	562	552	544
		G'	106.4	107.4	108.2	108.9	109.4	109.8	110.1	110.4
	24"	S	432	407	388	372	359	348	339	330
		G'	72.9	72.0	71.3	70.6	70.0	69.4	68.9	68.5
	36"	S	360	336	317	301	288	277	267	259
		G'	59.3	57.8	56.5	55.4	54.5	53.6	52.9	52.2
16/18 0.0598"/	12"	S	551	528	509	494	481	470	461	453
		G'	98.3	102.4	105.9	109.0	111.7	114.0	116.1	118.0
	24"	S	382	358	339	324	311	300	291	283
		G'	75.6	77.0	78.0	78.8	79.5	80.0	80.4	80.7
	36"	S	325	302	283	267	255	244	234	226
		G'	64.7	64.9	64.9	64.8	64.7	64.5	64.3	64.1
16/16 0.0598"/	12"	S	646	621	602	586	573	562	552	544
		G'	120.9	123.1	124.8	126.2	127.4	128.4	129.3	130.0
	24"	S	432	407	388	372	359	348	339	330
		G'	85.5	85.1	84.7	84.3	83.8	83.5	83.1	82.8
	36"	S	360	336	317	301	288	277	267	259
		G'	70.4	69.1	68.0	66.9	66.0	65.2	64.4	63.7
16/14 0.0598"/	12"	S	759	734	714	698	684	673	663	654
		G'	131.4	131.6	131.7	131.8	131.8	131.7	131.7	131.6
	24"	S	492	467	447	430	417	405	396	387
		G'	87.4	85.8	84.5	83.3	82.3	81.4	80.6	80.0
	36"	S	402	378	358	341	328	316	307	298
		G'	70.3	68.1	66.3	64.8	63.5	62.3	61.3	60.5
14/16 0.0747"/	12"	S	646	621	602	586	573	562	552	544
		G'	133.9	137.5	140.5	143.0	145.1	147.0	148.5	149.9
	24"	S	432	407	388	372	359	348	339	330
		G'	97.9	98.3	98.4	98.5	98.5	98.4	98.3	98.2
	36"	S	360	336	317	301	288	277	267	259
		G'	81.9	81.0	80.1	79.3	78.5	77.8	77.1	76.5
14/14 0.0747"/	12"	S	759	734	714	698	684	673	663	654
		G'	152.0	153.2	154.0	154.7	155.3	155.7	156.0	156.3
	24"	S	492	467	447	430	417	405	396	387
		G'	103.7	102.3	101.1	100.0	99.1	98.3	97.5	96.8
	36"	S	402	378	358	341	328	316	307	298
		G'	84.2	82.0	80.1	78.5	77.1	75.8	74.7	73.7

SIDELAP CONNECTION: 1½" Seam Welds

ATTACHMENT PATTERN: 24 / 4

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT							
			16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"	28' - 0"	30' - 0"
20/20 0.0358"/ 0.0358"	12"	S	1120	1097	1078	1062	1049	1039	1029	1021
		G'	78.3	84.0	89.2	93.9	98.3	102.3	106.0	109.4
	24"	S	667	643	624	609	596	585	576	568
		G'	66.3	69.9	73.1	75.9	78.4	80.6	82.6	84.4
	36"	S	516	492	473	458	445	434	425	416
		G'	59.0	61.4	63.5	65.2	66.8	68.1	69.2	70.3
20/18 0.0358"/ 0.0474"	12"	S	1438	1410	1387	1369	1353	1340	1329	1320
		G'	121.0	126.3	130.9	134.9	138.4	141.5	144.3	146.8
	24"	S	846	818	795	777	761	748	737	728
		G'	91.6	93.7	95.4	96.9	98.1	99.1	100.0	100.7
	36"	S	648	620	598	579	564	551	540	530
		G'	76.5	77.2	77.7	78.1	78.4	78.6	78.8	78.9
18/20 0.0474"/ 0.0358"	12"	S	1130	1104	1083	1066	1052	1039	1029	1020
		G'	76.1	82.5	88.4	93.9	99.0	103.8	108.3	112.6
	24"	S	683	657	636	619	604	592	582	573
		G'	67.2	71.8	75.9	79.6	83.0	86.1	88.9	91.5
	36"	S	534	507	487	470	455	443	433	424
		G'	61.4	64.8	67.8	70.5	72.9	75.0	76.8	78.5
18/18 0.0474"/ 0.0474"	12"	S	1444	1415	1391	1372	1356	1342	1331	1321
		G'	127.1	134.2	140.5	146.1	151.1	155.6	159.6	163.3
	24"	S	854	825	801	782	766	753	741	731
		G'	101.3	104.9	108.0	110.6	112.8	114.8	116.5	118.0
	36"	S	658	628	605	586	570	556	545	534
		G'	86.9	88.9	90.4	91.6	92.6	93.5	94.2	94.8
18/16 0.0474"/ 0.0598"	12"	S	1799	1767	1742	1721	1702	1684	1669	1656
		G'	168.0	173.5	178.1	182.0	185.4	188.4	191.0	193.3
	24"	S	1042	1011	985	965	947	933	920	909
		G'	121.9	123.4	124.6	125.6	126.4	127.0	127.5	128.0
	36"	S	790	758	733	712	695	680	668	657
		G'	99.7	99.6	99.5	99.4	99.2	99.0	98.7	98.5
16/18 0.0598"/ 0.0474"	12"	S	1466	1436	1413	1393	1377	1364	1352	1342
		G'	129.2	137.7	145.3	152.2	158.5	164.2	169.5	174.3
	24"	S	866	836	813	793	777	764	752	742
		G'	107.1	112.2	116.5	120.3	123.7	126.6	129.2	131.6
	36"	S	666	636	613	593	577	564	552	542
		G'	94.1	97.3	99.9	102.1	104.0	105.6	106.9	108.1
16/16 0.0598"/ 0.0598"	12"	S	1826	1795	1769	1746	1725	1708	1692	1679
		G'	180.5	188.1	194.6	200.2	205.1	209.5	213.4	216.8
	24"	S	1057	1025	999	979	961	946	934	923
		G'	136.5	139.5	141.9	143.8	145.5	146.9	148.1	149.1
	36"	S	800	768	743	722	705	690	677	666
		G'	113.9	114.9	115.6	116.0	116.4	116.6	116.8	116.9
16/14 0.0598"/ 0.0747"	12"	S	2211	2173	2143	2118	2097	2079	2064	2051
		G'	219.6	224.4	228.3	231.6	234.3	236.7	238.8	240.6
	24"	S	1294	1259	1231	1209	1190	1174	1160	1148
		G'	152.7	153.2	153.5	153.7	153.8	153.9	153.9	154.0
	36"	S	967	932	905	882	863	847	833	821
		G'	122.4	121.3	120.4	119.5	118.7	118.0	117.4	116.8
14/16 0.0747"/ 0.0598"	12"	S	1859	1827	1799	1774	1753	1736	1720	1707
		G'	189.3	199.0	207.5	215.0	221.7	227.6	233.0	237.8
	24"	S	1074	1042	1016	995	978	963	950	939
		G'	149.0	153.6	157.5	160.8	163.6	166.1	168.2	170.1
	36"	S	812	780	755	734	716	701	689	678
		G'	127.0	129.3	131.0	132.4	133.5	134.5	135.2	135.8
14/14 0.0747"/ 0.0747"	12"	S	2243	2206	2176	2151	2130	2112	2097	2084
		G'	242.0	249.1	255.0	260.1	264.5	268.3	271.6	274.5
	24"	S	1316	1281	1253	1230	1211	1194	1181	1169
		G'	174.5	176.3	177.6	178.7	179.6	180.3	180.8	181.3
	36"	S	982	947	919	896	877	861	847	835
		G'	142.3	141.9	141.5	141.1	140.7	140.2	139.8	139.4

See Table 4 notes.

TABLE 18—DEEP-DEK® 7.5 CELLULAR – ALLOWABLE DIAPHRAGM SHEAR[1-5]

SUPPORT CONNECTION: Hilti X-ENP-19-L15 (steel substrate thickness ≥ 0.25 inch)
SIDELAP CONNECTION: Hilti S-SLC01 M HWH, S-SLC02 M HWH or #12 self-drilling screws

S = Allowable Diaphragm Shear (plf)
G' = Stiffness Factor (kips/in.)

ATTACHMENT PATTERN: 24 / 3

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT							
			16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"	28' - 0"	30' - 0"
20/20 0.0358"/0.0358"	12"	S	465	452	441	433	426	420	415	410
		G'	62.7	65.8	68.4	70.8	72.8	74.6	76.2	77.7
	18"	S	349	336	326	317	310	304	299	294
		G'	55.4	57.4	59.0	60.3	61.5	62.4	63.3	64.0
	24"	S	291	278	268	259	252	246	241	237
		G'	50.7	51.9	52.9	53.6	54.2	54.7	55.1	55.4
20/18 0.0358"/0.0474"	12"	S	588	574	563	553	546	539	534	529
		G'	84.0	85.4	86.6	87.5	88.3	89.0	89.5	90.0
	18"	S	435	421	409	400	392	386	380	375
		G'	69.8	70.1	70.2	70.3	70.2	70.2	70.1	70.0
	24"	S	358	344	333	323	316	309	303	299
		G'	61.4	61.0	60.6	60.2	59.8	59.4	59.0	58.6
18/20 0.0474"/0.0358"	12"	S	469	455	444	436	428	422	417	412
		G'	64.4	68.4	72.1	75.3	78.2	80.8	83.2	85.4
	18"	S	353	339	329	320	313	306	301	296
		G'	58.4	61.4	63.9	66.1	68.0	69.7	71.2	72.6
	24"	S	295	281	271	262	255	248	243	239
		G'	54.4	56.6	58.4	59.9	61.2	62.3	63.3	64.1
18/18 0.0474"/0.0474"	12"	S	588	574	563	553	546	539	534	529
		G'	94.2	97.0	99.3	101.3	102.9	104.4	105.6	106.7
	18"	S	435	421	409	400	392	386	380	375
		G'	80.4	81.7	82.6	83.4	83.9	84.4	84.7	85.0
	24"	S	358	344	333	323	316	309	303	299
		G'	71.8	72.2	72.4	72.5	72.5	72.4	72.3	72.2
18/16 0.0474"/0.0598"	12"	S	716	701	689	679	671	664	658	653
		G'	110.6	111.4	112.0	112.4	112.7	113.0	113.2	113.3
	18"	S	523	508	496	486	478	471	465	460
		G'	90.2	89.7	89.1	88.6	88.2	87.7	87.3	86.9
	24"	S	426	411	399	389	381	374	368	363
		G'	78.4	77.2	76.1	75.2	74.3	73.5	72.8	72.1
16/18 0.0598"/0.0474"	12"	S	588	574	563	553	546	539	534	529
		G'	100.7	104.9	108.5	111.5	114.1	116.4	118.5	120.3
	18"	S	435	421	409	400	392	386	380	375
		G'	88.0	90.4	92.3	93.9	95.2	96.3	97.2	98.0
	24"	S	358	344	333	323	316	309	303	299
		G'	79.7	81.1	82.1	82.8	83.3	83.7	84.0	84.2
16/16 0.0598"/0.0598"	12"	S	716	701	689	679	671	664	658	653
		G'	125.1	127.2	128.7	130.0	131.0	131.9	132.6	133.2
	18"	S	523	508	496	486	478	471	465	460
		G'	104.0	104.3	104.4	104.3	104.3	104.1	104.0	103.8
	24"	S	426	411	399	389	381	374	368	363
		G'	91.5	90.8	90.1	89.4	88.7	88.1	87.5	87.0
16/14 0.0598"/0.0747"	12"	S	862	844	829	817	807	798	791	785
		G'	137.1	136.9	136.7	136.4	136.1	135.8	135.6	135.3
	18"	S	628	612	599	589	580	573	566	561
		G'	109.8	108.3	107.0	105.9	104.8	103.9	103.1	102.4
	24"	S	507	491	478	468	459	452	445	440
		G'	94.5	92.4	90.6	89.0	87.6	86.4	85.3	84.4
14/16 0.0747"/0.0598"	12"	S	716	701	689	679	671	664	658	653
		G'	138.0	141.6	144.5	146.8	148.9	150.6	152.1	153.3
	18"	S	523	508	496	486	478	471	465	460
		G'	117.0	118.4	119.4	120.1	120.7	121.1	121.4	121.6
	24"	S	426	411	399	389	381	374	368	363
		G'	104.2	104.3	104.3	104.1	103.8	103.5	103.2	102.9
14/14 0.0747"/0.0747"	12"	S	862	844	829	817	807	798	791	785
		G'	158.0	158.9	159.4	159.8	160.1	160.2	160.4	160.5
	18"	S	628	612	599	589	580	573	566	561
		G'	128.6	127.6	126.7	125.8	125.0	124.2	123.5	122.9
	24"	S	507	491	478	468	459	452	445	440
		G'	111.7	109.8	108.1	106.6	105.2	104.0	102.9	102.0

ATTACHMENT PATTERN: 24 / 4

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT							
			16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"	28' - 0"	30' - 0"
20/20 0.0358"/0.0358	12"	S	466	453	442	434	427	421	416	411
		G'	63.0	66.1	68.7	71.1	73.1	74.9	76.5	77.9
	18"	S	350	337	327	318	311	305	300	295
		G'	55.8	57.8	59.4	60.7	61.9	62.8	63.7	64.4
	24"	S	292	279	269	260	253	247	242	237
		G'	51.1	52.4	53.4	54.1	54.7	55.2	55.6	55.9
20/18 0.0358"/0.0474	12"	S	590	575	564	554	547	540	534	529
		G'	84.5	86.0	87.1	88.1	88.8	89.4	89.9	90.4
	18"	S	436	422	410	401	393	387	381	376
		G'	70.5	70.8	70.9	70.9	70.8	70.8	70.7	70.6
	24"	S	359	345	334	324	317	310	304	299
		G'	62.2	61.8	61.3	60.9	60.4	60.0	59.6	59.2
18/20 0.0474"/0.0358	12"	S	470	456	446	437	429	423	418	413
		G'	64.6	68.7	72.3	75.5	78.5	81.1	83.5	85.7
	18"	S	354	340	330	321	313	307	302	297
		G'	58.8	61.7	64.3	66.5	68.4	70.1	71.6	72.9
	24"	S	296	283	272	263	255	249	244	239
		G'	54.8	57.0	58.8	60.4	61.7	62.8	63.7	64.5
18/18 0.0474"/0.0474	12"	S	590	575	564	554	547	540	534	529
		G'	94.7	97.5	99.8	101.8	103.4	104.9	106.1	107.2
	18"	S	436	422	410	401	393	387	381	376
		G'	81.1	82.4	83.3	84.0	84.6	85.0	85.3	85.6
	24"	S	359	345	334	324	317	310	304	299
		G'	72.7	73.0	73.2	73.2	73.2	73.1	73.0	72.8
18/16 0.0474"/0.0598	12"	S	718	702	690	680	672	665	659	654
		G'	111.4	112.2	112.7	113.1	113.4	113.6	113.8	113.9
	18"	S	524	509	497	487	479	472	466	460
		G'	91.2	90.6	90.0	89.5	88.9	88.5	88.0	87.6
	24"	S	427	412	400	390	382	375	369	364
		G'	79.5	78.3	77.1	76.1	75.1	74.3	73.5	72.9
16/18 0.0598"/0.0474	12"	S	590	575	564	554	547	540	534	529
		G'	101.2	105.4	108.9	112.0	114.6	116.9	119.0	120.8
	18"	S	436	422	410	401	393	387	381	376
		G'	88.6	91.0	93.0	94.5	95.8	96.9	97.8	98.6
	24"	S	359	345	334	324	317	310	304	299
		G'	80.5	81.9	82.9	83.6	84.1	84.5	84.7	85.0
16/16 0.0598"/0.0598	12"	S	718	702	690	680	672	665	659	654
		G'	126.0	128.0	129.5	130.8	131.8	132.6	133.3	133.9
	18"	S	524	509	497	487	479	472	466	460
		G'	105.1	105.3	105.3	105.3	105.1	105.0	104.8	104.6
	24"	S	427	412	400	390	382	375	369	364
		G'	92.7	92.0	91.2	90.4	89.7	89.0	88.4	87.8
16/14 0.0598"/0.0747	12"	S	871	855	842	832	823	815	809	803
		G'	138.2	138.0	137.6	137.3	137.0	136.6	136.3	136.1
	18"	S	629	613	600	590	581	574	567	562
		G'	111.1	109.5	108.2	106.9	105.8	104.9	104.0	103.2
	24"	S	509	492	479	469	460	453	446	441
		G'	96.0	93.7	91.8	90.1	88.7	87.4	86.2	85.2
14/16 0.0747"/0.0598	12"	S	718	702	690	680	672	665	659	654
		G'	138.8	142.4	145.2	147.6	149.6	151.3	152.8	154.0
	18"	S	524	509	497	487	479	472	466	460
		G'	118.1	119.5	120.4	121.1	121.6	122.0	122.2	122.4
	24"	S	427	412	400	390	382	375	369	364
		G'	105.4	105.5	105.4	105.2	104.9	104.5	104.2	103.8
14/14 0.0747"/0.0747	12"	S	871	855	842	832	823	815	809	803
		G'	159.2	160.0	160.5	160.8	161.0	161.2	161.2	161.3
	18"	S	629	613	600	590	581	574	567	562
		G'	130.0	129.0	127.9	127.0	126.1	125.3	124.6	123.9
	24"	S	509	492	479	469	460	453	446	441
		G'	113.2	111.2	109.5	107.9	106.4	105.2	104.0	103.0

See Table 4 notes.

TABLE 19—DEEP-DEK® 4.5 ACOUSTICAL – ALLOWABLE DIAPHRAGM SHEAR[1-3]

SUPPORT CONNECTION: $^1/_2$" Effective Weld Diameter **S** = Allowable Diaphragm Shear (plf) **G'** = Stiffness Factor (kips/in.)

SIDELAP CONNECTION: #10 Screws

ATTACHMENT PATTERN: 12/2

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT							
			12' - 0"	14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"
20 0.0358"	6"	S	528	517	509	502	497	493	490	487
		G'	5.9	6.8	7.7	8.5	9.4	10.2	11.0	11.7
	12"	S	302	291	283	277	272	268	264	261
		G'	5.7	6.5	7.3	8.1	8.8	9.5	10.2	10.9
	18"	S	227	216	208	202	197	192	189	186
		G'	5.6	6.3	7.1	7.8	8.4	9.0	9.7	10.2
	24"	S	189	179	170	164	159	155	151	148
		G'	5.5	6.2	6.8	7.5	8.1	8.6	9.2	9.7
	30"	S	167	156	148	141	136	132	129	126
		G'	5.4	6.0	6.7	7.3	7.8	8.3	8.8	9.2
	36"	S	152	141	133	126	121	117	114	111
		G'	5.3	5.9	6.5	7.1	7.6	8.0	8.5	8.9
18 0.0474"	6"	S	697	683	672	664	657	652	647	644
		G'	11.3	13.0	14.6	16.1	17.5	19.0	20.3	21.6
	12"	S	399	385	374	366	359	354	349	345
		G'	10.8	12.2	13.5	14.8	16.0	17.1	18.2	19.2
	18"	S	299	285	274	266	259	254	249	246
		G'	10.3	11.6	12.8	13.8	14.8	15.8	16.7	17.5
	24"	S	250	235	225	216	210	204	200	196
		G'	10.0	11.1	12.2	13.1	14.0	14.7	15.5	16.1
	30"	S	220	206	195	186	180	174	170	166
		G'	9.7	10.7	11.7	12.5	13.3	13.9	14.5	15.1
	36"	S	200	186	175	167	160	154	150	146
		G'	9.5	10.4	11.3	12.0	12.7	13.3	13.8	14.3
16 0.0598"	6"	S	878	861	847	837	829	822	816	811
		G'	19.2	21.8	24.2	26.5	28.7	30.8	32.8	34.8
	12"	S	502	484	471	460	452	445	439	435
		G'	17.7	19.8	21.7	23.5	25.2	26.7	28.1	29.5
	18"	S	376	358	345	335	326	320	314	309
		G'	16.7	18.4	20.0	21.4	22.7	23.9	24.9	25.9
	24"	S	313	296	282	272	264	257	251	246
		G'	15.9	17.4	18.7	19.9	20.9	21.8	22.6	23.4
	30"	S	276	258	245	234	226	219	213	209
		G'	15.3	16.6	17.7	18.7	19.5	20.2	20.9	21.4
	36"	S	251	233	220	209	201	194	188	184
		G'	14.8	16.0	16.9	17.7	18.4	19.0	19.5	19.9
14 0.0747"	6"	S	1095	1073	1057	1044	1034	1025	1018	1012
		G'	31.0	34.8	38.3	41.6	44.7	47.6	50.3	52.8
	12"	S	625	603	586	573	563	555	548	542
		G'	27.7	30.5	33.0	35.3	37.3	39.2	40.9	42.4
	18"	S	468	446	429	417	406	398	391	385
		G'	25.4	27.6	29.5	31.2	32.6	33.9	35.0	36.0
	24"	S	389	367	351	338	328	320	313	307
		G'	23.8	25.6	27.1	28.3	29.3	30.2	31.0	31.7
	30"	S	342	320	304	291	281	272	266	260
		G'	22.6	24.1	25.2	26.2	26.9	27.6	28.1	28.6
	36"	S	311	289	273	260	250	241	234	228
		G'	21.7	22.9	23.8	24.5	25.1	25.6	25.9	26.3

SIDELAP CONNECTION: $1^1/_2$" Seam Welds

ATTACHMENT PATTERN: 12/2

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT							
			12' - 0"	14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"
20 0.0358"	6"	S	1162	1155	1149	1145	1141	1139	1136	1134
		G'	6.0	7.0	7.9	8.8	9.7	10.6	11.5	12.4
	12"	S	923	903	888	877	867	860	853	847
		G'	5.9	6.8	7.7	8.6	9.5	10.3	11.1	11.9
	18"	S	682	664	650	640	631	624	619	614
		G'	5.9	6.7	7.6	8.4	9.2	10.0	10.8	11.5
	24"	S	543	525	512	501	493	486	480	475
		G'	5.8	6.6	7.5	8.3	9.0	9.8	10.5	11.2
	30"	S	460	442	428	418	409	403	397	392
		G'	5.7	6.6	7.4	8.1	8.9	9.6	10.3	10.9
	36"	S	405	387	373	362	354	347	341	336
		G'	5.7	6.5	7.3	8.0	8.7	9.4	10.0	10.6
18 0.0474"	6"	S	1518	1508	1501	1496	1491	1487	1484	1482
		G'	11.8	13.6	15.4	17.1	18.7	20.4	22.0	23.5
	12"	S	1206	1180	1161	1145	1133	1123	1114	1107
		G'	11.5	13.2	14.8	16.4	17.9	19.4	20.8	22.2
	18"	S	891	867	850	836	825	816	808	802
		G'	11.2	12.8	14.3	15.8	17.2	18.5	19.8	21.1
	24"	S	710	686	668	655	643	634	627	621
		G'	11.0	12.5	13.9	15.3	16.6	17.8	19.0	20.1
	30"	S	601	577	560	546	535	526	518	512
		G'	10.8	12.3	13.6	14.9	16.1	17.2	18.3	19.3
	36"	S	529	505	487	473	462	453	446	439
		G'	10.7	12.0	13.3	14.5	15.6	16.7	17.6	18.6
16 0.0598"	6"	S	1888	1876	1867	1859	1854	1849	1845	1842
		G'	20.4	23.3	26.2	29.0	31.7	34.3	36.8	39.3
	12"	S	1499	1467	1443	1424	1409	1396	1385	1376
		G'	19.5	22.2	24.8	27.3	29.6	31.8	34.0	36.0
	18"	S	1108	1078	1056	1039	1025	1014	1005	997
		G'	18.9	21.4	23.7	25.9	27.9	29.9	31.7	33.4
	24"	S	882	853	831	814	800	789	779	772
		G'	18.3	20.6	22.7	24.7	26.5	28.2	29.8	31.3
	30"	S	747	718	696	679	665	654	644	636
		G'	17.9	20.0	21.9	23.7	25.3	26.9	28.3	29.6
	36"	S	657	628	606	588	575	563	554	546
		G'	17.5	19.5	21.2	22.9	24.3	25.7	26.9	28.1
14 0.0747"	6"	S	2316	2302	2291	2282	2275	2269	2265	2261
		G'	33.9	38.5	43.0	47.3	51.4	55.3	59.0	62.6
	12"	S	1840	1801	1771	1747	1729	1713	1700	1689
		G'	31.9	35.9	39.7	43.3	46.6	49.7	52.7	55.4
	18"	S	1359	1323	1296	1275	1258	1244	1233	1223
		G'	30.3	33.9	37.1	40.2	42.9	45.5	47.9	50.1
	24"	S	1083	1047	1020	999	982	968	956	947
		G'	29.1	32.2	35.1	37.7	40.0	42.2	44.1	45.9
	30"	S	917	881	854	833	816	802	791	781
		G'	28.1	30.9	33.4	35.7	37.7	39.5	41.1	42.6
	36"	S	806	770	743	722	705	691	680	670
		G'	27.2	29.8	32.0	34.0	35.7	37.3	38.7	39.9

See Table 4 notes.

TABLE 20—DEEP-DEK® 4.5 ACOUSTICAL – ALLOWABLE DIAPHRAGM SHEAR[1-5]

SUPPORT CONNECTION: Hilti X-ENP-19-L15 (steel substrate thickness ≥ 0.25 inch)
SIDELAP CONNECTION: Hilti S-SLC01 M HWH, S-SLC02 M HWH or #12 self-drilling screws

S = Allowable Diaphragm Shear (plf)
G' = Stiffness Factor (kips/in.)

ATTACHMENT PATTERN: 12/2

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT 12' - 0"	14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"
20 0.0358"	6"	S	628	618	611	605	601	597	594	591
		G'	5.9	6.8	7.7	8.5	9.4	10.2	11.0	11.8
	12"	S	367	358	352	347	343	340	337	334
		G'	5.7	6.6	7.4	8.1	8.9	9.6	10.3	11.0
	18"	S	265	256	250	245	241	238	235	232
		G'	5.6	6.4	7.1	7.8	8.5	9.1	9.8	10.3
	24"	S	214	205	199	194	190	187	184	181
		G'	5.5	6.3	6.9	7.6	8.2	8.8	9.3	9.8
	30"	S	184	175	168	163	159	156	153	151
		G'	5.4	6.1	6.8	7.4	8.0	8.5	9.0	9.4
	36"	S	163	154	148	143	139	136	133	130
		G'	5.4	6.1	6.7	7.2	7.8	8.3	8.7	9.1
18 0.0474"	6"	S	828	815	806	799	793	788	784	780
		G'	11.4	13.0	14.6	16.1	17.6	19.0	20.4	21.7
	12"	S	485	474	465	459	453	449	445	442
		G'	10.8	12.3	13.6	14.9	16.1	17.3	18.4	19.4
	18"	S	350	339	330	324	318	314	310	307
		G'	10.5	11.8	12.9	14.1	15.1	16.0	16.9	17.8
	24"	S	283	271	263	256	251	247	243	240
		G'	10.2	11.4	12.4	13.4	14.3	15.1	15.8	16.5
	30"	S	242	231	222	216	210	206	202	199
		G'	10.0	11.0	12.0	12.9	13.7	14.4	15.0	15.6
	36"	S	215	204	195	189	183	179	175	172
		G'	9.8	10.8	11.7	12.5	13.2	13.8	14.3	14.8
16 0.0598"	6"	S	1040	1025	1013	1004	997	991	986	981
		G'	19.2	21.8	24.3	26.6	28.9	31.0	33.0	34.9
	12"	S	611	597	586	578	571	566	561	558
		G'	17.9	20.0	22.0	23.8	25.5	27.0	28.5	29.8
	18"	S	441	427	416	408	401	396	391	387
		G'	17.0	18.8	20.4	21.9	23.2	24.4	25.5	26.4
	24"	S	356	342	331	323	316	311	306	302
		G'	16.3	17.9	19.3	20.5	21.5	22.5	23.3	24.1
	30"	S	305	291	280	272	265	259	255	251
		G'	15.8	17.2	18.4	19.4	20.3	21.1	21.7	22.3
	36"	S	271	256	246	237	231	225	221	217
		G'	15.4	16.7	17.7	18.6	19.3	19.9	20.5	20.9
14 0.0747"	6"	S	1293	1274	1260	1249	1240	1233	1226	1221
		G'	31.2	35.0	38.6	41.9	44.9	47.8	50.5	53.1
	12"	S	763	745	732	721	713	706	701	696
		G'	28.1	31.0	33.6	35.9	37.9	39.8	41.5	43.1
	18"	S	550	532	519	509	500	494	488	483
		G'	26.1	28.4	30.4	32.1	33.5	34.8	36.0	37.0
	24"	S	443	426	412	402	394	387	382	377
		G'	24.8	26.6	28.1	29.4	30.5	31.4	32.2	32.9
	30"	S	380	362	349	338	330	323	318	313
		G'	23.7	25.3	26.5	27.5	28.3	29.0	29.5	30.0
	36"	S	337	319	306	296	287	281	275	270
		G'	22.9	24.3	25.3	26.0	26.6	27.1	27.5	27.8

ATTACHMENT PATTERN: 12/4

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT 12' - 0"	14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"
20 0.0358"	6"	S	708	695	684	676	670	665	660	657
		G'	5.9	6.8	7.7	8.6	9.4	10.2	11.0	11.8
	12"	S	402	389	378	370	364	359	354	351
		G'	5.8	6.6	7.5	8.2	9.0	9.7	10.4	11.1
	18"	S	300	287	276	268	262	257	252	249
		G'	5.7	6.5	7.3	8.0	8.7	9.4	10.0	10.6
	24"	S	249	236	225	217	211	206	201	198
		G'	5.7	6.4	7.2	7.8	8.5	9.1	9.7	10.2
	30"	S	219	205	195	187	180	175	171	167
		G'	5.6	6.4	7.1	7.7	8.3	8.9	9.4	9.9
	36"	S	198	185	174	166	160	155	150	147
		G'	5.6	6.3	7.0	7.6	8.2	8.7	9.2	9.7
18 0.0474"	6"	S	936	918	905	894	886	879	874	869
		G'	11.4	13.1	14.7	16.2	17.7	19.1	20.5	21.9
	12"	S	531	513	500	489	481	474	468	464
		G'	11.0	12.5	13.9	15.2	16.5	17.7	18.8	19.8
	18"	S	396	378	365	354	346	339	333	329
		G'	10.8	12.1	13.4	14.6	15.6	16.6	17.6	18.4
	24"	S	329	311	297	287	279	272	266	261
		G'	10.6	11.9	13.0	14.1	15.0	15.9	16.7	17.4
	30"	S	288	270	257	246	238	231	225	221
		G'	10.4	11.7	12.7	13.7	14.6	15.4	16.1	16.7
	36"	S	261	243	230	219	211	204	198	194
		G'	10.3	11.5	12.5	13.4	14.2	14.9	15.5	16.1
16 0.0598"	6"	S	1180	1157	1140	1127	1117	1108	1101	1095
		G'	19.4	22.1	24.6	26.9	29.2	31.3	33.3	35.3
	12"	S	669	646	629	616	606	597	590	584
		G'	18.4	20.6	22.7	24.5	26.3	27.9	29.3	30.7
	18"	S	498	476	459	446	436	427	420	414
		G'	17.7	19.7	21.4	23.0	24.4	25.7	26.8	27.8
	24"	S	413	391	374	361	350	342	335	329
		G'	17.3	19.1	20.6	21.9	23.1	24.1	25.0	25.8
	30"	S	362	340	323	310	299	291	284	277
		G'	17.0	18.6	20.0	21.2	22.2	23.0	23.7	24.4
	36"	S	328	306	289	276	265	257	249	243
		G'	16.7	18.2	19.5	20.6	21.4	22.2	22.8	23.3
14 0.0747"	6"	S	1471	1444	1423	1407	1394	1383	1374	1367
		G'	31.6	35.5	39.1	42.5	45.6	48.5	51.3	53.8
	12"	S	833	805	784	768	755	745	736	728
		G'	29.2	32.2	34.9	37.3	39.5	41.4	43.2	44.8
	18"	S	620	592	572	556	543	532	523	516
		G'	27.8	30.3	32.4	34.2	35.8	37.2	38.4	39.4
	24"	S	514	486	465	449	436	426	417	409
		G'	26.8	28.9	30.7	32.2	33.4	34.4	35.2	35.9
	30"	S	450	422	401	385	372	362	353	345
		G'	26.1	28.0	29.5	30.7	31.6	32.4	33.0	33.4
	36"	S	407	380	359	343	330	319	310	303
		G'	25.6	27.3	28.6	29.5	30.3	30.8	31.3	31.6

See Table 4 notes.

TABLE 21—DEEP-DEK® 6 ACOUSTICAL – ALLOWABLE DIAPHRAGM SHEAR[1-3]

SUPPORT CONNECTION: $^1/_2$" Effective Weld Diameter **S** = Allowable Diaphragm Shear (plf) **G'** = Stiffness Factor (kips/in.)

SIDELAP CONNECTION: #10 Screws

ATTACHMENT PATTERN: 12/2

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT							
			14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"	28' - 0"
20 0.0358"	6"	S	446	439	434	429	426	423	420	418
		G'	3.1	3.6	4.0	4.4	4.8	5.2	5.6	6.0
	12"	S	252	245	239	235	231	228	226	223
		G'	3.1	3.5	3.9	4.3	4.7	5.0	5.4	5.8
	18"	S	187	180	174	170	166	163	161	159
		G'	3.0	3.4	3.8	4.2	4.5	4.9	5.2	5.6
	24"	S	154	147	142	137	134	131	128	126
		G'	3.0	3.4	3.7	4.1	4.4	4.8	5.1	5.4
	30"	S	135	128	122	118	114	111	109	107
		G'	3.0	3.3	3.7	4.0	4.4	4.7	5.0	5.3
	36"	S	122	115	109	105	101	98	96	94
		G'	2.9	3.3	3.6	4.0	4.3	4.6	4.9	5.1
18 0.0474"	6"	S	590	581	574	568	563	559	556	553
		G'	6.1	6.9	7.7	8.5	9.3	10.0	10.8	11.5
	12"	S	332	323	316	310	305	301	298	295
		G'	6.0	6.7	7.4	8.1	8.8	9.5	10.1	10.8
	18"	S	246	237	230	224	219	216	212	209
		G'	5.8	6.5	7.2	7.8	8.5	9.1	9.6	10.2
	24"	S	203	194	187	181	176	173	169	166
		G'	5.7	6.4	7.0	7.6	8.1	8.7	9.2	9.7
	30"	S	178	168	161	155	151	147	143	141
		G'	5.6	6.2	6.8	7.4	7.9	8.4	8.9	9.3
	36"	S	160	151	144	138	133	130	126	123
		G'	5.5	6.1	6.7	7.2	7.7	8.1	8.6	9.0
16 0.0598"	6"	S	743	732	723	716	710	705	701	697
		G'	10.6	11.9	13.3	14.5	15.8	17.0	18.2	19.3
	12"	S	418	406	398	390	384	380	375	372
		G'	10.1	11.3	12.5	13.6	14.6	15.6	16.6	17.5
	18"	S	310	298	289	282	276	271	267	263
		G'	9.7	10.8	11.8	12.8	13.7	14.6	15.4	16.2
	24"	S	255	244	235	228	222	217	213	209
		G'	9.5	10.4	11.4	12.2	13.0	13.8	14.5	15.1
	30"	S	223	211	202	195	189	184	180	177
		G'	9.2	10.1	11.0	11.7	12.4	13.1	13.7	14.3
	36"	S	201	190	181	174	168	163	159	155
		G'	9.0	9.9	10.6	11.3	12.0	12.6	13.1	13.6
14 0.0747"	6"	S	927	913	902	893	885	879	874	870
		G'	17.7	19.8	21.8	23.8	25.7	27.5	29.3	31.0
	12"	S	521	506	495	486	479	473	468	464
		G'	16.5	18.3	20.0	21.5	23.0	24.5	25.8	27.1
	18"	S	385	371	360	351	344	338	333	328
		G'	15.6	17.2	18.6	19.9	21.1	22.2	23.3	24.3
	24"	S	317	303	292	283	276	270	265	261
		G'	14.9	16.3	17.5	18.6	19.6	20.6	21.4	22.2
	30"	S	277	263	251	243	235	229	224	220
		G'	14.4	15.6	16.7	17.6	18.5	19.3	20.0	20.6
	36"	S	250	235	224	216	208	202	197	193
		G'	14.0	15.1	16.0	16.8	17.6	18.2	18.8	19.3

SIDELAP CONNECTION: $1^1/_2$" Seam Welds

ATTACHMENT PATTERN: 12/2

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT							
			14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"	28' - 0"
20 0.0358"	6"	S	997	993	989	986	983	981	980	978
		G'	3.2	3.6	4.0	4.5	4.9	5.3	5.7	6.2
	12"	S	780	767	757	749	742	737	732	728
		G'	3.2	3.6	4.0	4.4	4.8	5.2	5.6	6.0
	18"	S	574	562	553	545	539	534	530	526
		G'	3.1	3.5	4.0	4.4	4.8	5.2	5.6	5.9
	24"	S	454	442	433	426	420	415	410	407
		G'	3.1	3.5	3.9	4.3	4.7	5.1	5.5	5.9
	30"	S	382	370	361	354	348	343	339	335
		G'	3.1	3.5	3.9	4.3	4.7	5.0	5.4	5.8
	36"	S	334	322	313	306	300	295	291	287
		G'	3.1	3.5	3.9	4.2	4.6	5.0	5.3	5.7
18 0.0474"	6"	S	1303	1297	1292	1288	1285	1282	1280	1278
		G'	6.3	7.1	8.0	8.8	9.6	10.4	11.2	12.0
	12"	S	1019	1002	989	978	970	962	956	951
		G'	6.2	7.0	7.8	8.6	9.4	10.1	10.9	11.6
	18"	S	749	734	722	712	705	698	693	687
		G'	6.1	6.9	7.7	8.4	9.2	9.9	10.6	11.3
	24"	S	593	577	565	556	548	542	536	531
		G'	6.0	6.8	7.6	8.3	9.0	9.7	10.4	11.0
	30"	S	499	483	471	462	454	448	442	437
		G'	6.0	6.7	7.4	8.2	8.8	9.5	10.2	10.8
	36"	S	436	421	409	399	392	385	380	375
		G'	5.9	6.6	7.4	8.0	8.7	9.3	10.0	10.6
16 0.0598"	6"	S	1620	1612	1606	1601	1597	1594	1591	1589
		G'	11.0	12.4	13.8	15.2	16.6	18.0	19.3	20.6
	12"	S	1267	1246	1230	1217	1206	1197	1189	1182
		G'	10.7	12.1	13.4	14.7	16.0	17.3	18.5	19.7
	18"	S	931	912	897	886	876	868	861	854
		G'	10.5	11.8	13.1	14.3	15.5	16.7	17.8	18.9
	24"	S	737	718	703	691	681	673	666	661
		G'	10.3	11.6	12.8	13.9	15.1	16.1	17.2	18.2
	30"	S	620	601	586	574	565	556	550	544
		G'	10.2	11.4	12.5	13.6	14.7	15.7	16.6	17.6
	36"	S	542	523	508	496	487	479	472	466
		G'	10.0	11.2	12.3	13.3	14.3	15.3	16.2	17.0
14 0.0747"	6"	S	1988	1978	1971	1965	1960	1956	1952	1949
		G'	18.6	21.0	23.3	25.6	27.8	30.0	32.1	34.2
	12"	S	1555	1529	1509	1493	1480	1468	1459	1451
		G'	17.9	20.2	22.3	24.3	26.3	28.3	30.1	31.9
	18"	S	1143	1119	1101	1087	1075	1065	1057	1048
		G'	17.4	19.5	21.4	23.3	25.1	26.8	28.5	30.1
	24"	S	904	881	862	848	836	826	818	811
		G'	17.0	18.9	20.7	22.4	24.0	25.6	27.1	28.5
	30"	S	761	737	719	705	693	683	674	667
		G'	16.6	18.4	20.1	21.7	23.2	24.6	25.9	27.1
	36"	S	665	642	624	609	597	587	579	572
		G'	16.3	18.0	19.5	21.0	22.4	23.7	24.9	26.0

See Table 4 notes

TABLE 22—DEEP-DEK® 6 ACOUSTICAL – ALLOWABLE DIAPHRAGM SHEAR[1-5]

SUPPORT CONNECTION: Hilti X-ENP-19-L15 (steel substrate thickness ≥ 0.25 inch)
SIDELAP CONNECTION: Hilti S-SLC01 M HWH, S-SLC02 M HWH or #12 self-drilling screws

S = Allowable Diaphragm Shear (plf)
G' = Stiffness Factor (kips/in.)

ATTACHMENT PATTERN: 12/2

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT							
			14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"	28' - 0"
20 0.0358"	6"	S	534	528	523	519	516	513	511	509
		G'	3.1	3.6	4.0	4.4	4.8	5.2	5.6	6.0
	12"	S	310	304	300	296	293	291	289	287
		G'	3.1	3.5	3.9	4.3	4.7	5.0	5.4	5.8
	18"	S	222	216	212	208	205	203	201	199
		G'	3.1	3.4	3.8	4.2	4.6	4.9	5.3	5.6
	24"	S	178	172	168	164	161	159	157	155
		G'	3.0	3.4	3.8	4.1	4.5	4.8	5.1	5.5
	30"	S	151	145	141	138	135	132	130	129
		G'	3.0	3.4	3.7	4.1	4.4	4.7	5.0	5.3
	36"	S	133	128	124	120	117	115	113	111
		G'	3.0	3.3	3.7	4.0	4.3	4.6	4.9	5.2
18 0.0474"	6"	S	704	696	690	685	680	677	674	671
		G'	6.1	7.0	7.7	8.5	9.3	10.0	10.8	11.5
	12"	S	409	402	396	392	388	385	382	380
		G'	6.0	6.7	7.5	8.2	8.9	9.5	10.2	10.8
	18"	S	293	285	280	275	271	268	266	263
		G'	5.9	6.6	7.2	7.9	8.5	9.1	9.7	10.3
	24"	S	234	227	221	217	213	210	207	205
		G'	5.8	6.4	7.1	7.7	8.3	8.8	9.3	9.8
	30"	S	199	192	186	182	178	175	172	170
		G'	5.7	6.3	6.9	7.5	8.0	8.5	9.0	9.5
	36"	S	176	169	163	158	155	152	149	147
		G'	5.6	6.2	6.8	7.3	7.8	8.3	8.8	9.2
16 0.0598"	6"	S	885	875	867	861	856	851	848	844
		G'	10.6	12.0	13.3	14.6	15.8	17.0	18.2	19.4
	12"	S	516	507	499	494	489	485	482	479
		G'	10.2	11.4	12.5	13.7	14.7	15.7	16.7	17.7
	18"	S	369	359	352	346	342	338	335	332
		G'	9.9	11.0	12.0	13.0	13.9	14.8	15.6	16.4
	24"	S	295	286	279	273	268	264	261	258
		G'	9.6	10.6	11.6	12.4	13.3	14.0	14.7	15.4
	30"	S	251	242	235	229	224	220	217	214
		G'	9.4	10.3	11.2	12.0	12.7	13.4	14.1	14.6
	36"	S	222	212	205	199	195	191	187	185
		G'	9.2	10.1	10.9	11.7	12.3	12.9	13.5	14.0
14 0.0747"	6"	S	1101	1088	1079	1071	1065	1059	1055	1051
		G'	17.7	19.8	21.9	23.9	25.8	27.6	29.4	31.1
	12"	S	643	632	623	616	610	605	601	598
		G'	16.6	18.4	20.1	21.7	23.3	24.7	26.0	27.3
	18"	S	460	448	439	432	426	421	417	414
		G'	15.9	17.4	18.9	20.2	21.5	22.6	23.7	24.7
	24"	S	368	356	347	340	334	330	325	322
		G'	15.3	16.7	17.9	19.1	20.1	21.1	22.0	22.8
	30"	S	313	301	292	285	279	274	270	267
		G'	14.8	16.1	17.2	18.2	19.1	19.9	20.6	21.3
	36"	S	276	264	255	248	243	238	234	230
		G'	14.5	15.6	16.6	17.5	18.3	18.9	19.5	20.1

ATTACHMENT PATTERN: 12/4

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT							
			14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"	28' - 0"
20 0.0358"	6"	S	600	591	584	579	574	570	567	564
		G'	3.2	3.6	4.0	4.4	4.8	5.2	5.6	6.0
	12"	S	336	327	320	314	310	306	303	300
		G'	3.1	3.5	3.9	4.3	4.7	5.1	5.5	5.8
	18"	S	248	239	232	226	222	218	215	212
		G'	3.1	3.5	3.9	4.2	4.6	5.0	5.3	5.7
	24"	S	204	195	188	182	178	174	171	168
		G'	3.1	3.5	3.8	4.2	4.6	4.9	5.2	5.6
	30"	S	177	168	161	156	151	148	144	142
		G'	3.0	3.4	3.8	4.2	4.5	4.8	5.2	5.5
	36"	S	160	151	144	138	134	130	127	124
		G'	3.0	3.4	3.8	4.1	4.5	4.8	5.1	5.4
18 0.0474"	6"	S	793	782	773	765	759	754	750	747
		G'	6.2	7.0	7.8	8.6	9.3	10.1	10.8	11.5
	12"	S	443	432	423	416	410	405	400	397
		G'	6.0	6.8	7.5	8.3	9.0	9.6	10.3	10.9
	18"	S	327	315	306	299	293	288	284	280
		G'	5.9	6.7	7.4	8.0	8.7	9.3	9.9	10.5
	24"	S	269	257	248	241	235	230	226	222
		G'	5.9	6.6	7.2	7.9	8.5	9.1	9.6	10.1
	30"	S	234	222	213	206	200	195	191	187
		G'	5.8	6.5	7.1	7.8	8.3	8.9	9.4	9.9
	36"	S	210	199	190	182	176	171	167	164
		G'	5.8	6.4	7.1	7.7	8.2	8.7	9.2	9.7
16 0.0598"	6"	S	1000	985	974	965	957	951	946	941
		G'	10.7	12.0	13.4	14.6	15.9	17.1	18.3	19.5
	12"	S	558	544	532	523	516	510	505	500
		G'	10.3	11.6	12.7	13.9	15.0	16.0	17.0	18.0
	18"	S	411	397	385	376	369	363	357	353
		G'	10.1	11.2	12.3	13.3	14.3	15.2	16.1	16.9
	24"	S	338	323	312	303	295	289	284	279
		G'	9.9	11.0	12.0	12.9	13.8	14.6	15.4	16.1
	30"	S	293	279	268	259	251	245	240	235
		G'	9.8	10.8	11.8	12.6	13.4	14.2	14.9	15.5
	36"	S	264	249	238	229	222	216	210	206
		G'	9.7	10.7	11.6	12.4	13.1	13.8	14.4	15.0
14 0.0747"	6"	S	1247	1229	1215	1204	1195	1187	1180	1175
		G'	17.8	20.0	22.1	24.1	26.0	27.8	29.6	31.4
	12"	S	696	678	664	652	643	636	629	624
		G'	17.0	18.8	20.6	22.2	23.8	25.3	26.7	28.0
	18"	S	512	494	480	469	459	452	445	440
		G'	16.4	18.1	19.6	21.0	22.3	23.6	24.7	25.7
	24"	S	420	402	388	377	368	360	354	348
		G'	16.0	17.5	18.9	20.2	21.3	22.3	23.3	24.1
	30"	S	365	347	333	322	312	305	298	293
		G'	15.7	17.1	18.4	19.5	20.5	21.4	22.2	22.9
	36"	S	328	310	296	285	276	268	262	256
		G'	15.5	16.8	18.0	19.0	19.9	20.7	21.4	22.0

See Table 4 notes.

TABLE 23—DEEP-DEK® 7.5 ACOUSTICAL – ALLOWABLE DIAPHRAGM SHEAR[1-3]

SUPPORT CONNECTION: 1/2" Effective Weld Diameter **S** = Allowable Diaphragm Shear (plf) **G'** = Stiffness Factor (kips/in.)

SIDELAP CONNECTION: #10 Screws

ATTACHMENT PATTERN: 12/2			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"	28' - 0"	30' - 0"
20 0.0358"	6"	S	503	497	492	487	484	481	479	476
		G'	2.1	2.4	2.6	2.9	3.1	3.3	3.6	3.8
	12"	S	280	274	269	264	261	258	256	254
		G'	2.1	2.3	2.6	2.8	3.0	3.3	3.5	3.7
	18"	S	206	199	194	190	187	184	181	179
		G'	2.1	2.3	2.5	2.8	3.0	3.2	3.4	3.6
	24"	S	168	162	157	153	150	147	144	142
		G'	2.0	2.3	2.5	2.7	2.9	3.2	3.4	3.6
	30"	S	146	140	135	131	127	124	122	120
		G'	2.0	2.3	2.5	2.7	2.9	3.1	3.3	3.5
	36"	S	131	125	120	116	112	110	107	105
		G'	2.0	2.2	2.5	2.7	2.9	3.1	3.3	3.4
18 0.0474"	6"	S	665	657	650	645	640	636	633	630
		G'	4.1	4.6	5.1	5.6	6.0	6.5	7.0	7.4
	12"	S	370	361	355	349	345	341	338	335
		G'	4.0	4.5	5.0	5.4	5.8	6.3	6.7	7.1
	18"	S	271	263	256	251	247	243	240	237
		G'	4.0	4.4	4.8	5.3	5.7	6.1	6.5	6.8
	24"	S	222	214	207	202	197	194	190	188
		G'	3.9	4.3	4.7	5.1	5.5	5.9	6.3	6.6
	30"	S	193	184	178	172	168	164	161	158
		G'	3.9	4.3	4.7	5.0	5.4	5.8	6.1	6.4
	36"	S	173	165	158	153	148	144	141	138
		G'	3.8	4.2	4.6	5.0	5.3	5.6	6.0	6.3
16 0.0598"	6"	S	838	827	819	812	807	802	798	794
		G'	7.2	8.0	8.8	9.6	10.4	11.2	12.0	12.7
	12"	S	465	455	447	440	434	430	426	422
		G'	7.0	7.7	8.5	9.2	9.9	10.6	11.3	11.9
	18"	S	341	331	323	316	310	306	302	298
		G'	6.8	7.5	8.2	8.8	9.5	10.1	10.7	11.3
	24"	S	279	269	261	254	248	244	239	236
		G'	6.6	7.3	7.9	8.5	9.1	9.7	10.2	10.7
	30"	S	242	232	223	217	211	206	202	199
		G'	6.5	7.1	7.7	8.3	8.8	9.3	9.8	10.3
	36"	S	217	207	199	192	186	181	177	174
		G'	6.4	7.0	7.5	8.1	8.6	9.0	9.5	9.9
14 0.0747"	6"	S	1045	1032	1022	1014	1007	1001	996	991
		G'	12.1	13.5	14.8	16.1	17.3	18.5	19.7	20.9
	12"	S	580	567	557	548	542	536	531	526
		G'	11.5	12.7	13.9	15.0	16.1	17.1	18.1	19.0
	18"	S	425	412	402	393	387	381	376	371
		G'	11.1	12.2	13.2	14.1	15.1	15.9	16.8	17.6
	24"	S	347	334	324	316	309	303	298	294
		G'	10.7	11.7	12.6	13.5	14.3	15.0	15.8	16.4
	30"	S	300	288	278	269	262	257	252	247
		G'	10.4	11.3	12.1	12.9	13.6	14.3	14.9	15.5
	36"	S	269	257	247	238	231	226	221	216
		G'	10.2	11.0	11.8	12.5	13.1	13.7	14.2	14.8

SIDELAP CONNECTION: 1 1/2" Seam Welds

ATTACHMENT PATTERN: 12/2			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"	28' - 0"	30' - 0"
20 0.0358"	6"	S	1136	1132	1128	1126	1123	1121	1120	1118
		G'	2.1	2.4	2.6	2.9	3.1	3.4	3.6	3.9
	12"	S	878	867	857	850	843	838	833	829
		G'	2.1	2.4	2.6	2.9	3.1	3.4	3.6	3.8
	18"	S	643	633	624	617	612	607	602	598
		G'	2.1	2.4	2.6	2.8	3.1	3.3	3.6	3.8
	24"	S	506	495	487	480	475	470	466	462
		G'	2.1	2.3	2.6	2.8	3.1	3.3	3.5	3.8
	30"	S	424	413	405	398	392	387	383	380
		G'	2.1	2.3	2.6	2.8	3.0	3.3	3.5	3.7
	36"	S	369	358	350	343	337	333	328	325
		G'	2.1	2.3	2.6	2.8	3.0	3.2	3.5	3.7
18 0.0474"	6"	S	1484	1479	1474	1470	1467	1465	1463	1461
		G'	4.2	4.7	5.2	5.7	6.2	6.7	7.1	7.6
	12"	S	1147	1132	1120	1110	1102	1094	1088	1083
		G'	4.2	4.6	5.1	5.6	6.1	6.6	7.0	7.5
	18"	S	840	826	815	806	799	793	787	781
		G'	4.1	4.6	5.1	5.5	6.0	6.5	6.9	7.3
	24"	S	661	647	636	627	620	614	608	603
		G'	4.1	4.6	5.0	5.5	5.9	6.4	6.8	7.2
	30"	S	553	540	529	520	512	506	501	496
		G'	4.1	4.5	5.0	5.4	5.8	6.3	6.7	7.1
	36"	S	482	468	457	448	441	434	429	424
		G'	4.0	4.5	4.9	5.4	5.8	6.2	6.6	7.0
16 0.0598"	6"	S	1845	1838	1833	1828	1824	1821	1818	1816
		G'	7.4	8.2	9.1	9.9	10.8	11.6	12.4	13.3
	12"	S	1427	1408	1393	1380	1370	1361	1353	1347
		G'	7.2	8.1	8.9	9.7	10.5	11.3	12.1	12.9
	18"	S	1044	1027	1014	1003	993	986	978	971
		G'	7.1	8.0	8.8	9.5	10.3	11.1	11.8	12.5
	24"	S	821	805	791	780	771	763	756	750
		G'	7.1	7.8	8.6	9.4	10.1	10.8	11.5	12.2
	30"	S	688	671	657	646	637	629	622	617
		G'	7.0	7.7	8.5	9.2	9.9	10.6	11.3	11.9
	36"	S	599	582	568	557	548	540	533	527
		G'	6.9	7.7	8.4	9.1	9.7	10.4	11.0	11.7
14 0.0747"	6"	S	2265	2256	2249	2244	2239	2235	2232	2229
		G'	12.6	14.0	15.4	16.9	18.2	19.6	21.0	22.3
	12"	S	1751	1728	1709	1694	1681	1670	1661	1652
		G'	12.3	13.6	15.0	16.3	17.6	18.9	20.1	21.3
	18"	S	1281	1261	1244	1230	1219	1209	1200	1191
		G'	12.0	13.3	14.6	15.8	17.0	18.2	19.3	20.5
	24"	S	1008	987	971	957	946	936	928	921
		G'	11.8	13.0	14.2	15.4	16.5	17.6	18.7	19.7
	30"	S	844	823	807	793	782	772	764	757
		G'	11.6	12.8	13.9	15.0	16.1	17.1	18.1	19.1
	36"	S	735	714	697	684	672	663	654	647
		G'	11.4	12.6	13.7	14.7	15.7	16.7	17.6	18.5

See Table 4 notes.

TABLE 24—DEEP-DEK® 7.5 ACOUSTICAL – ALLOWABLE DIAPHRAGM SHEAR[1-5]

SUPPORT CONNECTION: Hilti X-ENP-19-L15 (steel substrate thickness ≥ 0.25 inch)
SIDELAP CONNECTION: Hilti S-SLC01 M HWH, S-SLC02 M HWH or #12 self-drilling screws

S = Allowable Diaphragm Shear (plf)
G' = Stiffness Factor (kips/in.)

ATTACHMENT PATTERN: 12/2

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT							
			16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"	28' - 0"	30' - 0"
20 0.0358"	6"	S	604	598	594	590	587	584	582	580
		G'	2.1	2.4	2.6	2.9	3.1	3.3	3.6	3.8
	12"	S	348	343	339	336	333	331	329	327
		G'	2.1	2.3	2.6	2.8	3.0	3.3	3.5	3.7
	18"	S	247	242	238	235	232	230	228	226
		G'	2.1	2.3	2.5	2.8	3.0	3.2	3.4	3.7
	24"	S	197	192	188	184	182	179	177	176
		G'	2.1	2.3	2.5	2.7	3.0	3.2	3.4	3.6
	30"	S	166	161	157	154	151	149	147	145
		G'	2.0	2.3	2.5	2.7	2.9	3.1	3.3	3.5
	36"	S	146	141	137	134	131	129	127	125
		G'	2.0	2.3	2.5	2.7	2.9	3.1	3.3	3.5
18 0.0474"	6"	S	797	790	784	779	775	771	768	766
		G'	4.1	4.6	5.1	5.6	6.0	6.5	7.0	7.4
	12"	S	460	454	448	444	440	437	435	433
		G'	4.1	4.5	5.0	5.4	5.9	6.3	6.7	7.1
	18"	S	327	320	315	310	307	304	301	299
		G'	4.0	4.4	4.9	5.3	5.7	6.1	6.5	6.9
	24"	S	260	253	248	244	240	237	235	232
		G'	3.9	4.4	4.8	5.2	5.6	6.0	6.3	6.7
	30"	S	220	213	208	204	200	197	194	192
		G'	3.9	4.3	4.7	5.1	5.5	5.8	6.2	6.5
	36"	S	193	187	181	177	173	170	168	166
		G'	3.9	4.3	4.7	5.0	5.4	5.7	6.0	6.4
16 0.0598"	6"	S	1002	993	985	979	974	970	967	963
		G'	7.2	8.0	8.8	9.6	10.4	11.2	12.0	12.7
	12"	S	580	572	565	560	555	551	548	545
		G'	7.0	7.8	8.5	9.2	9.9	10.6	11.3	12.0
	18"	S	411	403	397	391	387	383	380	377
		G'	6.8	7.5	8.2	8.9	9.5	10.2	10.8	11.4
	24"	S	327	319	312	307	302	299	295	293
		G'	6.7	7.4	8.0	8.6	9.2	9.8	10.3	10.9
	30"	S	277	268	262	256	252	248	245	242
		G'	6.6	7.2	7.8	8.4	9.0	9.5	10.0	10.5
	36"	S	243	235	228	223	218	214	211	208
		G'	6.5	7.1	7.7	8.2	8.7	9.2	9.7	10.1
14 0.0747"	6"	S	1246	1235	1226	1219	1212	1207	1203	1199
		G'	12.1	13.5	14.8	16.1	17.4	18.6	19.8	20.9
	12"	S	723	713	705	698	693	688	684	680
		G'	11.6	12.8	14.0	15.1	16.1	17.2	18.2	19.1
	18"	S	513	503	495	488	482	478	474	470
		G'	11.2	12.3	13.3	14.3	15.2	16.1	17.0	17.8
	24"	S	408	398	389	383	377	372	368	365
		G'	10.9	11.9	12.8	13.7	14.5	15.3	16.0	16.7
	30"	S	345	334	326	320	314	309	305	302
		G'	10.6	11.6	12.4	13.2	14.0	14.6	15.3	15.9
	36"	S	303	292	284	278	272	267	263	260
		G'	10.4	11.3	12.1	12.8	13.5	14.1	14.7	15.2

ATTACHMENT PATTERN: 12/4

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT							
			16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"	28' - 0"	30' - 0"
20 0.0358"	6"	S	676	669	662	657	653	649	646	643
		G'	2.1	2.4	2.6	2.9	3.1	3.3	3.6	3.8
	12"	S	374	366	360	355	350	347	344	341
		G'	2.1	2.3	2.6	2.8	3.1	3.3	3.5	3.7
	18"	S	273	265	259	254	250	246	243	240
		G'	2.1	2.3	2.6	2.8	3.0	3.2	3.5	3.7
	24"	S	223	215	209	203	199	195	192	190
		G'	2.1	2.3	2.5	2.8	3.0	3.2	3.4	3.6
	30"	S	193	185	178	173	169	165	162	159
		G'	2.1	2.3	2.5	2.7	3.0	3.2	3.4	3.6
	36"	S	172	165	158	153	149	145	142	139
		G'	2.1	2.3	2.5	2.7	2.9	3.2	3.4	3.6
18 0.0474"	6"	S	895	884	876	869	864	859	855	851
		G'	4.1	4.6	5.1	5.6	6.1	6.5	7.0	7.4
	12"	S	494	484	476	469	463	458	454	451
		G'	4.1	4.5	5.0	5.5	5.9	6.3	6.8	7.2
	18"	S	361	350	342	335	330	325	321	317
		G'	4.0	4.5	4.9	5.4	5.8	6.2	6.6	7.0
	24"	S	294	284	275	269	263	258	254	250
		G'	4.0	4.4	4.9	5.3	5.7	6.1	6.4	6.8
	30"	S	254	244	235	229	223	218	214	210
		G'	4.0	4.4	4.8	5.2	5.6	6.0	6.3	6.7
	36"	S	227	217	209	202	196	191	187	184
		G'	4.0	4.4	4.8	5.2	5.5	5.9	6.2	6.6
16 0.0598"	6"	S	1128	1115	1104	1096	1089	1083	1078	1073
		G'	7.2	8.1	8.9	9.7	10.5	11.2	12.0	12.8
	12"	S	622	609	599	591	583	577	572	568
		G'	7.1	7.8	8.6	9.3	10.0	10.7	11.4	12.1
	18"	S	454	441	431	422	415	409	404	399
		G'	6.9	7.7	8.4	9.1	9.7	10.4	11.0	11.6
	24"	S	370	357	346	338	331	325	320	315
		G'	6.8	7.5	8.2	8.9	9.5	10.1	10.6	11.2
	30"	S	319	306	296	287	280	274	269	265
		G'	6.8	7.5	8.1	8.7	9.3	9.8	10.4	10.9
	36"	S	286	273	262	254	247	241	236	231
		G'	6.7	7.4	8.0	8.6	9.1	9.7	10.2	10.6
14 0.0747"	6"	S	1407	1391	1378	1367	1359	1351	1345	1339
		G'	12.2	13.6	14.9	16.2	17.4	18.7	19.9	21.1
	12"	S	776	760	747	736	728	720	714	708
		G'	11.8	13.0	14.2	15.3	16.4	17.4	18.5	19.4
	18"	S	565	549	536	526	517	510	503	498
		G'	11.5	12.6	13.7	14.7	15.7	16.6	17.5	18.3
	24"	S	460	444	431	421	412	405	398	393
		G'	11.2	12.3	13.3	14.2	15.1	15.9	16.7	17.4
	30"	S	397	381	368	358	349	342	335	330
		G'	11.1	12.1	13.0	13.9	14.7	15.4	16.1	16.8
	36"	S	355	339	326	316	307	299	293	288
		G'	10.9	11.9	12.8	13.6	14.3	15.0	15.6	16.2

See Table 4 notes.

TABLE 25—DEEP-DEK® 4.5 CELLULAR ACOUSTICAL – ALLOWABLE DIAPHRAGM SHEAR[1-3]

SUPPORT CONNECTION: $^1/_2$" Effective Weld Diameter — **S** = Allowable Diaphragm Shear (plf) — **G'** = Stiffness Factor (kips/in.)

SIDELAP CONNECTION: #10 Screws

ATTACHMENT PATTERN: 24 / 4

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT							
			12' - 0"	14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"
20/20 0.0358"/	12"	S	486	454	429	410	395	382	372	363
		G'	20.8	23.5	26.1	28.5	30.7	32.9	34.9	36.8
	24"	S	358	325	301	282	266	254	243	235
		G'	19.3	21.5	23.4	25.1	26.7	28.2	29.5	30.7
	36"	S	316	283	258	239	224	211	201	192
		G'	18.4	20.2	21.8	23.1	24.3	25.3	26.3	27.1
20/18 0.0358"/	12"	S	607	569	540	518	500	485	473	463
		G'	38.9	42.6	45.9	48.8	51.4	53.7	55.8	57.7
	24"	S	437	399	370	348	330	316	304	293
		G'	33.3	35.4	37.2	38.6	39.8	40.8	41.7	42.4
	36"	S	381	342	314	292	274	259	247	237
		G'	30.3	31.7	32.7	33.4	34.0	34.4	34.8	35.0
18/20 0.0474"/	12"	S	517	480	452	430	413	399	387	377
		G'	19.1	21.7	24.3	26.7	29.1	31.3	33.5	35.6
	24"	S	389	352	324	302	285	270	259	249
		G'	18.1	20.4	22.5	24.4	26.3	28.0	29.6	31.0
	36"	S	346	309	281	259	242	228	216	206
		G'	17.5	19.5	21.3	23.0	24.5	25.8	27.0	28.2
18/18 0.0474"/	12"	S	622	581	551	528	509	494	481	470
		G'	37.7	42.0	45.8	49.3	52.5	55.5	58.2	60.7
	24"	S	452	412	382	358	339	324	311	300
		G'	33.6	36.5	39.0	41.1	42.9	44.5	45.9	47.2
	36"	S	396	355	325	302	283	267	255	244
		G'	31.2	33.4	35.1	36.5	37.7	38.6	39.4	40.1
18/16 0.0474"/	12"	S	718	677	646	621	602	586	573	562
		G'	59.1	63.6	67.5	70.9	73.8	76.3	78.6	80.6
	24"	S	504	463	432	407	388	372	359	348
		G'	48.5	50.7	52.3	53.5	54.5	55.3	56.0	56.5
	36"	S	433	391	360	336	317	301	288	277
		G'	43.2	44.3	44.9	45.3	45.5	45.6	45.6	45.6
16/18 0.0598"/	12"	S	622	581	551	528	509	494	481	470
		G'	36.0	40.5	44.6	48.5	52.0	55.4	58.5	61.5
	24"	S	452	412	382	358	339	324	311	300
		G'	32.9	36.3	39.3	41.9	44.3	46.4	48.3	50.0
	36"	S	396	355	325	302	283	267	255	244
		G'	31.1	33.8	36.1	38.1	39.7	41.2	42.4	43.5
16/16 0.0598"/	12"	S	718	677	646	621	602	586	573	562
		G'	59.3	64.9	69.7	74.0	77.8	81.2	84.2	87.0
	24"	S	504	463	432	407	388	372	359	348
		G'	50.6	53.7	56.3	58.3	60.1	61.5	62.7	63.7
	36"	S	433	391	360	336	317	301	288	277
		G'	45.9	47.9	49.3	50.4	51.2	51.7	52.2	52.5
16/14 0.0598"/	12"	S	833	791	759	734	714	698	684	673
		G'	84.6	89.4	93.4	96.7	99.4	101.8	103.8	105.5
	24"	S	566	523	492	467	447	430	417	405
		G'	66.3	67.8	68.8	69.5	69.9	70.2	70.5	70.6
	36"	S	477	434	402	378	358	341	328	316
		G'	57.8	57.9	57.7	57.4	57.0	56.6	56.2	55.8
14/16 0.0747"/	12"	S	718	677	646	621	602	586	573	562
		G'	58.3	64.5	70.1	75.2	79.8	84.0	87.8	91.3
	24"	S	504	463	432	407	388	372	359	348
		G'	51.3	55.4	58.8	61.7	64.2	66.4	68.2	69.9
	36"	S	433	391	360	336	317	301	288	277
		G'	47.4	50.3	52.6	54.4	55.9	57.1	58.0	58.8
14/14 0.0747"/	12"	S	833	791	759	734	714	698	684	673
		G'	87.8	94.2	99.6	104.1	108.1	111.5	114.5	117.2
	24"	S	566	523	492	467	447	430	417	405
		G'	71.4	74.2	76.3	77.8	79.1	80.0	80.8	81.4
	36"	S	477	434	402	378	358	341	328	316
		G'	63.3	64.5	65.2	65.5	65.6	65.6	65.5	65.4

SIDELAP CONNECTION: $1^1/_2$" Seam Welds

ATTACHMENT PATTERN: 24 / 4

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT							
			12' - 0"	14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"
20/20 0.0358"/ 0.0358"	12"	S	1191	1151	1120	1097	1078	1062	1049	1039
		G'	22.3	25.6	28.7	31.8	34.7	37.5	40.3	42.9
	24"	S	738	697	667	643	624	609	596	585
		G'	21.3	24.2	26.9	29.5	32.0	34.3	36.5	38.6
	36"	S	587	546	516	492	473	458	445	434
		G'	20.6	23.2	25.7	27.9	30.0	31.9	33.8	35.5
20/18 0.0358"/ 0.0474"	12"	S	1522	1474	1438	1410	1387	1369	1353	1340
		G'	45.5	51.2	56.4	61.3	65.8	70.0	74.0	77.8
	24"	S	930	882	846	818	795	777	761	748
		G'	41.1	45.3	49.1	52.4	55.5	58.2	60.7	63.0
	36"	S	733	684	648	620	598	579	564	551
		G'	38.2	41.5	44.4	46.8	49.0	50.9	52.5	54.0
18/20 0.0474"/ 0.0358"	12"	S	1208	1163	1130	1104	1083	1066	1052	1039
		G'	20.0	23.0	26.0	28.9	31.7	34.4	37.1	39.7
	24"	S	761	716	683	657	636	619	604	592
		G'	19.4	22.2	24.9	27.4	29.9	32.3	34.6	36.8
	36"	S	612	567	534	507	487	470	455	443
		G'	18.9	21.5	24.0	26.4	28.6	30.7	32.7	34.6
18/18 0.0474"/ 0.0474"	12"	S	1532	1482	1444	1415	1391	1372	1356	1342
		G'	42.2	47.9	53.3	58.4	63.2	67.8	72.2	76.3
	24"	S	942	892	854	825	801	782	766	753
		G'	39.2	43.9	48.2	52.1	55.7	59.0	62.1	65.0
	36"	S	746	695	658	628	605	586	570	556
		G'	37.2	41.1	44.7	47.8	50.6	53.2	55.5	57.6
18/16 0.0474"/ 0.0598"	12"	S	1894	1840	1799	1767	1742	1721	1702	1684
		G'	72.7	80.8	88.0	94.7	100.7	106.3	111.4	116.2
	24"	S	1137	1083	1042	1011	985	965	947	933
		G'	63.4	68.8	73.5	77.5	81.1	84.2	87.0	89.5
	36"	S	885	831	790	758	733	712	695	680
		G'	57.7	61.6	64.8	67.4	69.7	71.6	73.2	74.6
16/18 0.0598"/ 0.0474"	12"	S	1554	1504	1466	1436	1413	1393	1377	1364
		G'	39.2	44.7	50.0	55.1	60.0	64.7	69.3	73.6
	24"	S	954	904	866	836	813	793	777	764
		G'	37.1	41.9	46.3	50.5	54.5	58.2	61.7	65.0
	36"	S	754	704	666	636	613	593	577	564
		G'	35.6	39.9	43.7	47.3	50.6	53.6	56.3	58.9
16/16 0.0598"/ 0.0598"	12"	S	1922	1867	1826	1795	1769	1746	1725	1708
		G'	69.8	78.3	86.1	93.4	100.2	106.5	112.4	117.9
	24"	S	1152	1098	1057	1025	999	979	961	946
		G'	62.7	69.0	74.6	79.6	84.1	88.1	91.8	95.1
	36"	S	896	841	800	768	743	722	705	690
		G'	58.2	63.1	67.3	71.0	74.1	76.8	79.3	81.4
16/14 0.0598"/ 0.0747"	12"	S	2322	2259	2211	2173	2143	2118	2097	2079
		G'	111.1	121.5	130.7	138.8	146.0	152.5	158.4	163.7
	24"	S	1398	1339	1294	1259	1231	1209	1190	1174
		G'	92.6	98.7	103.6	107.8	111.3	114.4	117.0	119.3
	36"	S	1071	1012	967	932	905	882	863	847
		G'	82.1	85.8	88.7	91.0	92.8	94.3	95.5	96.5
14/16 0.0747"/ 0.0598"	12"	S	1955	1900	1859	1827	1799	1774	1753	1736
		G'	66.0	74.7	82.8	90.5	97.7	104.5	110.9	117.1
	24"	S	1170	1115	1074	1042	1016	995	978	963
		G'	60.9	67.8	74.0	79.8	85.0	89.8	94.2	98.3
	36"	S	908	854	812	780	755	734	716	701
		G'	57.4	63.1	68.2	72.7	76.6	80.2	83.4	86.3
14/14 0.0747"/ 0.0747"	12"	S	2354	2291	2243	2206	2176	2151	2130	2112
		G'	109.5	121.1	131.6	141.1	149.7	157.5	164.7	171.3
	24"	S	1421	1361	1316	1281	1253	1230	1211	1194
		G'	94.6	102.2	108.7	114.3	119.2	123.5	127.3	130.6
	36"	S	1087	1027	982	947	919	896	877	861
		G'	85.6	91.0	95.3	98.8	101.8	104.3	106.4	108.2

See Table 4 notes.

TABLE 26—DEEP-DEK® 4.5 CELLULAR ACOUSTICAL – ALLOWABLE DIAPHRAGM SHEAR[1-5]

SUPPORT CONNECTION: Hilti X-ENP-19-L15 (steel substrate thickness ≥ 0.25 inch)
SIDELAP CONNECTION: Hilti S-SLC01 M HWH, S-SLC02 M HWH or #12 self-drilling screws

S = Allowable Diaphragm Shear (plf)
G' = Stiffness Factor (kips/in.)

ATTACHMENT PATTERN: 24 / 3

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT							
			12' - 0"	14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"
20/20 0.0358"/0.0358"	12"	S	504	481	465	452	441	433	426	420
		G'	21.0	23.8	26.3	28.8	31.0	33.2	35.2	37.2
	18"	S	388	366	349	336	326	317	310	304
		G'	20.3	22.7	25.0	27.0	28.9	30.7	32.4	33.9
	24"	S	330	308	291	278	268	259	252	246
		G'	19.7	21.9	24.0	25.8	27.4	28.9	30.2	31.5
20/18 0.0358"/0.0474"	12"	S	631	606	588	574	563	553	546	539
		G'	39.6	43.4	46.8	49.7	52.4	54.7	56.8	58.7
	18"	S	477	453	435	421	409	400	392	386
		G'	36.7	39.6	42.0	44.1	45.9	47.4	48.7	49.9
	24"	S	401	376	358	344	333	323	316	309
		G'	34.7	37.0	38.9	40.4	41.6	42.6	43.5	44.2
18/20 0.0474"/0.0358"	12"	S	509	486	469	455	444	436	428	422
		G'	19.2	21.9	24.5	26.9	29.3	31.6	33.7	35.8
	18"	S	393	370	353	339	329	320	313	306
		G'	18.7	21.2	23.6	25.8	27.9	29.8	31.7	33.5
	24"	S	335	312	295	281	271	262	255	248
		G'	18.3	20.7	22.9	24.9	26.8	28.5	30.1	31.6
18/18 0.0474"/0.0474"	12"	S	631	606	588	574	563	553	546	539
		G'	38.2	42.6	46.5	50.0	53.3	56.3	59.0	61.5
	18"	S	477	453	435	421	409	400	392	386
		G'	36.1	39.7	42.9	45.6	48.1	50.3	52.2	54.0
	24"	S	401	376	358	344	333	323	316	309
		G'	34.6	37.7	40.3	42.5	44.4	46.1	47.6	48.8
18/16 0.0474"/0.0598"	12"	S	761	735	716	701	689	679	671	664
		G'	60.5	65.2	69.2	72.6	75.5	78.1	80.3	82.3
	18"	S	568	542	523	508	496	486	478	471
		G'	54.8	58.1	60.6	62.7	64.4	65.8	67.0	68.0
	24"	S	471	445	426	411	399	389	381	374
		G'	51.1	53.4	55.1	56.4	57.3	58.1	58.7	59.2
16/18 0.0598"/0.0474"	12"	S	631	606	588	574	563	553	546	539
		G'	36.4	40.9	45.1	49.0	52.6	56.0	59.2	62.2
	18"	S	477	453	435	421	409	400	392	386
		G'	34.8	38.8	42.4	45.6	48.5	51.2	53.7	55.9
	24"	S	401	376	358	344	333	323	316	309
		G'	33.7	37.3	40.4	43.1	45.5	47.7	49.7	51.4
16/16 0.0598"/0.0598"	12"	S	761	735	716	701	689	679	671	664
		G'	60.5	66.2	71.1	75.4	79.3	82.7	85.8	88.6
	18"	S	568	542	523	508	496	486	478	471
		G'	55.9	60.2	63.8	66.8	69.3	71.5	73.5	75.1
	24"	S	471	445	426	411	399	389	381	374
		G'	52.8	56.1	58.8	61.0	62.7	64.2	65.4	66.4
16/14 0.0598"/0.0747"	12"	S	915	885	862	844	829	817	807	798
		G'	87.3	92.2	96.2	99.5	102.2	104.5	106.4	108.1
	18"	S	676	649	628	612	599	589	580	573
		G'	77.0	79.9	81.9	83.5	84.7	85.6	86.3	86.9
	24"	S	555	528	507	491	478	468	459	452
		G'	70.6	72.2	73.1	73.7	74.0	74.2	74.3	74.3
14/16 0.0747"/0.0598"	12"	S	761	735	716	701	689	679	671	664
		G'	59.2	65.5	71.2	76.4	81.0	85.3	89.1	92.7
	18"	S	568	542	523	508	496	486	478	471
		G'	55.6	60.7	65.2	69.1	72.5	75.5	78.2	80.6
	24"	S	471	445	426	411	399	389	381	374
		G'	53.1	57.4	61.0	64.1	66.6	68.9	70.8	72.4
14/14 0.0747"/0.0747"	12"	S	915	885	862	844	829	817	807	798
		G'	90.1	96.6	102.1	106.7	110.7	114.1	117.1	119.8
	18"	S	676	649	628	612	599	589	580	573
		G'	81.2	85.5	88.9	91.7	93.9	95.7	97.2	98.4
	24"	S	555	528	507	491	478	468	459	452
		G'	75.4	78.4	80.5	82.1	83.2	84.1	84.8	85.3

ATTACHMENT PATTERN: 24 / 4

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT							
			12' - 0"	14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"
20/20 0.0358"/0.0358	12"	S	505	483	466	453	442	434	427	421
		G'	21.0	23.8	26.4	28.8	31.1	33.3	35.3	37.2
	18"	S	389	367	350	337	327	318	311	305
		G'	20.3	22.8	25.0	27.1	29.0	30.8	32.5	34.0
	24"	S	332	309	292	279	269	260	253	247
		G'	19.8	22.0	24.1	25.9	27.5	29.0	30.4	31.6
20/18 0.0358"/0.0474	12"	S	633	608	590	575	564	554	547	540
		G'	39.8	43.6	47.0	49.9	52.5	54.9	57.0	58.9
	18"	S	479	455	436	422	410	401	393	387
		G'	36.9	39.8	42.3	44.4	46.2	47.7	49.0	50.2
	24"	S	402	378	359	345	334	324	317	310
		G'	35.0	37.3	39.2	40.7	41.9	42.9	43.8	44.5
18/20 0.0474"/0.0358	12"	S	510	487	470	456	446	437	429	423
		G'	19.2	21.9	24.5	27.0	29.3	31.6	33.8	35.9
	18"	S	395	371	354	340	330	321	313	307
		G'	18.7	21.2	23.6	25.8	27.9	29.9	31.8	33.5
	24"	S	337	313	296	283	272	263	255	249
		G'	18.4	20.8	22.9	25.0	26.8	28.6	30.2	31.8
18/18 0.0474"/0.0474	12"	S	633	608	590	575	564	554	547	540
		G'	38.3	42.7	46.6	50.2	53.4	56.4	59.2	61.7
	18"	S	479	455	436	422	410	401	393	387
		G'	36.3	39.9	43.1	45.8	48.3	50.5	52.5	54.3
	24"	S	402	378	359	345	334	324	317	310
		G'	34.8	37.9	40.6	42.8	44.7	46.4	47.9	49.1
18/16 0.0474"/0.0598	12"	S	763	737	718	702	690	680	672	665
		G'	60.8	65.5	69.5	72.9	75.9	78.4	80.7	82.6
	18"	S	569	543	524	509	497	487	479	472
		G'	55.2	58.5	61.1	63.2	64.9	66.3	67.5	68.5
	24"	S	473	447	427	412	400	390	382	375
		G'	51.6	53.9	55.6	56.9	57.9	58.6	59.2	59.7
16/18 0.0598"/0.0474	12"	S	633	608	590	575	564	554	547	540
		G'	36.4	41.0	45.2	49.1	52.8	56.2	59.3	62.3
	18"	S	479	455	436	422	410	401	393	387
		G'	35.0	38.9	42.5	45.8	48.7	51.4	53.9	56.1
	24"	S	402	378	359	345	334	324	317	310
		G'	33.9	37.4	40.6	43.3	45.8	48.0	50.0	51.7
16/16 0.0598"/0.0598	12"	S	763	737	718	702	690	680	672	665
		G'	60.7	66.4	71.4	75.7	79.6	83.0	86.1	88.9
	18"	S	569	543	524	509	497	487	479	472
		G'	56.2	60.5	64.1	67.2	69.8	72.0	73.9	75.6
	24"	S	473	447	427	412	400	390	382	375
		G'	53.2	56.6	59.3	61.5	63.3	64.7	65.9	66.9
16/14 0.0598"/0.0747	12"	S	920	892	871	855	842	832	823	815
		G'	87.8	92.8	96.8	100.0	102.7	105.0	107.0	108.7
	18"	S	678	650	629	613	600	590	581	574
		G'	77.8	80.6	82.7	84.2	85.4	86.3	87.0	87.6
	24"	S	557	529	509	492	479	469	460	453
		G'	71.4	73.0	74.0	74.5	74.8	75.0	75.0	75.0
14/16 0.0747"/0.0598	12"	S	763	737	718	702	690	680	672	665
		G'	59.3	65.7	71.5	76.6	81.3	85.5	89.4	93.0
	18"	S	569	543	524	509	497	487	479	472
		G'	55.8	61.0	65.5	69.5	72.9	75.9	78.6	81.0
	24"	S	473	447	427	412	400	390	382	375
		G'	53.4	57.8	61.4	64.5	67.1	69.3	71.3	72.9
14/14 0.0747"/0.0747	12"	S	920	892	871	855	842	832	823	815
		G'	90.5	97.1	102.6	107.3	111.2	114.7	117.7	120.3
	18"	S	678	650	629	613	600	590	581	574
		G'	81.8	86.2	89.6	92.4	94.6	96.4	97.9	99.1
	24"	S	557	529	509	492	479	469	460	453
		G'	76.1	79.2	81.3	82.9	84.1	84.9	85.6	86.1

See Table 4 notes.

TABLE 27—DEEP-DEK® 6 CELLULAR ACOUSTICAL – ALLOWABLE DIAPHRAGM SHEAR[1-3]

SUPPORT CONNECTION: 1½" Effective Weld Diameter **S** = Allowable Diaphragm Shear (plf) **G'** = Stiffness Factor (kips/in.)

SIDELAP CONNECTION: #10 Screws

ATTACHMENT PATTERN: 24 / 4

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT							
			14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"	28' - 0"
20/20 0.0358"/	12"	S	445	420	402	387	374	364	355	348
		G'	28.3	31.2	33.9	36.4	38.7	40.8	42.9	44.8
	24"	S	319	295	276	261	249	239	230	223
		G'	25.4	27.4	29.2	30.9	32.3	33.6	34.8	35.9
	36"	S	277	253	234	219	207	197	188	181
		G'	23.6	25.2	26.5	27.7	28.6	29.5	30.2	30.9
20/18 0.0358"/	12"	S	557	529	507	490	476	464	454	445
		G'	49.1	52.4	55.2	57.7	60.0	61.9	63.7	65.3
	24"	S	391	363	341	324	309	298	287	279
		G'	39.8	41.3	42.6	43.6	44.4	45.0	45.6	46.1
	36"	S	336	308	286	268	254	242	232	223
		G'	35.1	35.8	36.3	36.7	36.9	37.0	37.1	37.2
18/20 0.0474"/	12"	S	470	443	422	405	391	379	369	361
		G'	26.5	29.5	32.3	35.0	37.5	39.9	42.2	44.4
	24"	S	345	317	296	279	265	253	244	235
		G'	24.5	26.8	29.0	31.0	32.8	34.4	36.0	37.4
	36"	S	303	275	254	237	223	212	202	193
		G'	23.2	25.2	26.9	28.5	29.8	31.1	32.2	33.2
18/18 0.0474"/	12"	S	570	540	517	499	484	471	460	451
		G'	49.3	53.4	57.1	60.3	63.3	66.1	68.5	70.8
	24"	S	404	374	351	333	317	305	294	285
		G'	41.9	44.3	46.3	48.0	49.5	50.7	51.8	52.8
	36"	S	348	319	296	277	262	249	239	230
		G'	37.9	39.4	40.6	41.5	42.3	42.8	43.3	43.7
18/16 0.0474"/	12"	S	663	633	609	590	575	562	551	541
		G'	71.7	75.3	78.4	81.1	83.4	85.4	87.1	88.7
	24"	S	453	423	399	380	365	352	341	332
		G'	55.6	56.8	57.7	58.4	58.9	59.3	59.6	59.9
	36"	S	383	353	329	310	295	282	271	262
		G'	48.0	48.2	48.2	48.1	48.0	47.8	47.6	47.4
16/18 0.0598"/	12"	S	570	540	517	499	484	471	460	451
		G'	48.3	52.8	57.0	60.8	64.4	67.7	70.7	73.5
	24"	S	404	374	351	333	317	305	294	285
		G'	42.4	45.5	48.2	50.5	52.5	54.3	55.9	57.4
	36"	S	348	319	296	277	262	249	239	230
		G'	39.1	41.3	43.1	44.7	45.9	47.0	47.9	48.7
16/16 0.0598"/	12"	S	663	633	609	590	575	562	551	541
		G'	74.4	79.2	83.4	87.1	90.3	93.1	95.7	98.0
	24"	S	453	423	399	380	365	352	341	332
		G'	60.1	62.3	64.0	65.4	66.6	67.5	68.3	68.9
	36"	S	383	353	329	310	295	282	271	262
		G'	52.9	53.9	54.6	55.0	55.3	55.4	55.5	55.6
16/14 0.0598"/	12"	S	775	744	719	700	684	671	659	650
		G'	98.3	101.7	104.5	106.8	108.7	110.3	111.7	113.0
	24"	S	513	482	457	438	422	409	397	388
		G'	72.7	73.2	73.4	73.5	73.5	73.4	73.3	73.2
	36"	S	426	394	370	351	335	321	310	300
		G'	61.5	60.8	60.1	59.3	58.7	58.1	57.5	56.9
14/16 0.0747"/	12"	S	663	633	609	590	575	562	551	541
		G'	75.2	81.1	86.3	90.9	95.0	98.8	102.2	105.3
	24"	S	453	423	399	380	365	352	341	332
		G'	63.1	66.3	69.0	71.2	73.1	74.7	76.1	77.3
	36"	S	383	353	329	310	295	282	271	262
		G'	56.6	58.6	60.0	61.1	62.0	62.6	63.1	63.6
14/14 0.0747"/	12"	S	775	744	719	700	684	671	659	650
		G'	105.3	110.3	114.5	118.0	121.0	123.6	125.9	127.9
	24"	S	513	482	457	438	422	409	397	388
		G'	80.9	82.4	83.5	84.2	84.8	85.2	85.5	85.7
	36"	S	426	394	370	351	335	321	310	300
		G'	69.6	69.6	69.4	69.1	68.8	68.4	68.0	67.6

SIDELAP CONNECTION: 1½" Seam Welds

ATTACHMENT PATTERN: 24 / 4

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT							
			14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"	28' - 0"
20/20 0.0358"/ 0.0358"	12"	S	1128	1098	1075	1056	1041	1028	1018	1009
		G'	31.4	35.1	38.6	42.0	45.3	48.4	51.4	54.3
	24"	S	683	654	630	612	597	584	573	564
		G'	29.3	32.4	35.3	38.1	40.6	43.0	45.3	47.4
	36"	S	535	505	482	464	449	436	425	416
		G'	27.9	30.6	33.0	35.3	37.4	39.3	41.1	42.7
20/18 0.0358"/ 0.0474"	12"	S	1444	1409	1381	1359	1341	1326	1314	1303
		G'	60.8	66.5	71.8	76.6	81.1	85.3	89.1	92.7
	24"	S	864	829	801	779	761	746	733	722
		G'	52.6	56.5	59.9	62.9	65.6	68.0	70.2	72.2
	36"	S	671	635	608	586	568	553	540	529
		G'	47.6	50.4	52.7	54.7	56.5	58.0	59.3	60.4
18/20 0.0474"/ 0.0358"	12"	S	1140	1107	1082	1061	1044	1031	1019	1009
		G'	28.4	32.0	35.4	38.8	42.0	45.1	48.2	51.1
	24"	S	702	669	643	623	606	592	580	570
		G'	27.2	30.3	33.3	36.2	38.9	41.5	44.0	46.3
	36"	S	556	523	497	477	460	446	434	424
		G'	26.2	29.1	31.7	34.2	36.6	38.8	40.9	42.8
18/18 0.0474"/ 0.0474"	12"	S	1452	1415	1386	1363	1345	1329	1316	1304
		G'	57.7	63.8	69.6	74.9	80.0	84.7	89.2	93.4
	24"	S	874	837	808	785	767	751	738	726
		G'	52.0	56.6	60.8	64.6	68.0	71.2	74.1	76.8
	36"	S	682	645	616	593	574	558	545	534
		G'	48.2	51.8	55.0	57.8	60.3	62.6	64.6	66.4
18/16 0.0474"/ 0.0598"	12"	S	1803	1763	1732	1707	1687	1668	1651	1636
		G'	94.1	101.8	108.6	114.8	120.4	125.5	130.2	134.5
	24"	S	1061	1021	990	966	945	928	914	902
		G'	78.3	82.8	86.6	90.0	92.8	95.4	97.6	99.6
	36"	S	814	774	743	718	698	681	667	655
		G'	69.0	71.9	74.2	76.1	77.7	79.0	80.2	81.1
16/18 0.0598"/ 0.0474"	12"	S	1473	1436	1407	1384	1365	1350	1336	1325
		G'	54.4	60.6	66.5	72.0	77.4	82.4	87.3	91.9
	24"	S	886	848	820	796	777	762	748	737
		G'	50.3	55.3	59.9	64.2	68.2	71.9	75.4	78.6
	36"	S	690	652	624	600	582	566	552	541
		G'	47.4	51.6	55.4	58.8	61.9	64.8	67.4	69.8
16/16 0.0598"/ 0.0598"	12"	S	1830	1790	1759	1734	1711	1691	1673	1658
		G'	92.6	101.1	108.9	116.1	122.7	128.8	134.4	139.7
	24"	S	1076	1036	1004	979	959	942	928	915
		G'	79.9	85.6	90.6	95.0	98.9	102.4	105.6	108.4
	36"	S	824	784	753	728	708	691	676	664
		G'	72.1	76.2	79.6	82.5	84.9	87.1	89.0	90.6
16/14 0.0598"/ 0.0747"	12"	S	2214	2167	2130	2100	2076	2055	2038	2023
		G'	138.4	147.5	155.5	162.5	168.6	174.2	179.1	183.6
	24"	S	1312	1268	1234	1207	1185	1166	1150	1137
		G'	109.5	114.0	117.6	120.6	123.2	125.4	127.3	128.9
	36"	S	992	948	914	887	864	846	830	816
		G'	93.9	96.2	97.9	99.2	100.2	101.0	101.7	102.2
14/16 0.0747"/ 0.0598"	12"	S	1862	1822	1791	1764	1739	1718	1701	1686
		G'	89.4	98.5	107.0	114.9	122.3	129.2	135.6	141.7
	24"	S	1093	1053	1021	996	975	958	944	931
		G'	79.7	86.4	92.3	97.7	102.6	107.0	111.1	114.8
	36"	S	836	796	765	740	719	702	687	675
		G'	73.4	78.5	83.0	86.8	90.3	93.3	96.0	98.4
14/14 0.0747"/ 0.0747"	12"	S	2245	2199	2162	2132	2108	2087	2070	2055
		G'	140.2	151.1	160.7	169.3	177.1	184.2	190.6	196.4
	24"	S	1334	1289	1255	1228	1205	1186	1171	1157
		G'	115.5	121.7	126.9	131.3	135.2	138.5	141.5	144.1
	36"	S	1007	963	928	901	879	860	844	830
		G'	101.3	105.1	108.1	110.5	112.5	114.2	115.6	116.8

See Table 4 notes

TABLE 28—DEEP-DEK® 6 CELLULAR ACOUSTICAL – ALLOWABLE DIAPHRAGM SHEAR[1-5]

SUPPORT CONNECTION: Hilti X-ENP-19-L15 (steel substrate thickness ≥ 0.25 inch)
SIDELAP CONNECTION: Hilti S-SLC01 M HWH, S-SLC02 M HWH or #12 self-drilling screws

S = Allowable Diaphragm Shear (plf)
G' = Stiffness Factor (kips/in.)

ATTACHMENT PATTERN: 24 / 3

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT							
			14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"	28' - 0"
20/20 0.0358"/0.0358"	12"	S	472	455	443	433	424	417	412	406
		G'	28.6	31.6	34.3	36.8	39.1	41.3	43.3	45.3
	18"	S	358	342	329	319	311	304	298	293
		G'	27.1	29.6	31.8	33.9	35.7	37.4	38.9	40.4
	24"	S	301	285	272	262	254	247	241	236
		G'	26.0	28.2	30.1	31.8	33.3	34.6	35.8	36.9
20/18 0.0358"/0.0474"	12"	S	594	576	563	551	542	535	528	523
		G'	50.2	53.5	56.4	59.0	61.2	63.2	65.0	66.5
	18"	S	444	426	412	401	392	384	378	373
		G'	45.1	47.4	49.3	50.9	52.2	53.4	54.3	55.2
	24"	S	369	351	337	326	317	309	303	297
		G'	41.8	43.4	44.7	45.7	46.4	47.1	47.6	48.1
18/20 0.0474"/0.0358"	12"	S	476	459	446	436	427	420	414	409
		G'	26.7	29.7	32.6	35.3	37.8	40.2	42.6	44.8
	18"	S	362	346	332	322	313	306	300	295
		G'	25.7	28.4	30.9	33.2	35.4	37.4	39.3	41.0
	24"	S	306	289	276	265	257	249	243	238
		G'	25.0	27.4	29.6	31.6	33.5	35.2	36.8	38.3
18/18 0.0474"/0.0474"	12"	S	594	576	563	551	542	535	528	523
		G'	50.1	54.3	58.0	61.4	64.4	67.1	69.6	71.9
	18"	S	444	426	412	401	392	384	378	373
		G'	46.2	49.4	52.2	54.6	56.6	58.5	60.1	61.6
	24"	S	369	351	337	326	317	309	303	297
		G'	43.5	46.1	48.2	49.9	51.4	52.7	53.8	54.7
18/16 0.0474"/0.0598"	12"	S	721	702	687	675	666	658	651	645
		G'	73.7	77.4	80.5	83.2	85.4	87.4	89.1	90.6
	18"	S	531	512	497	486	476	468	461	455
		G'	64.7	66.8	68.5	69.9	71.0	71.9	72.6	73.2
	24"	S	436	417	403	391	381	373	366	361
		G'	58.9	60.2	61.0	61.6	62.1	62.4	62.6	62.7
16/18 0.0598"/0.0474"	12"	S	594	576	563	551	542	535	528	523
		G'	48.9	53.5	57.8	61.7	65.2	68.6	71.6	74.5
	18"	S	444	426	412	401	392	384	378	373
		G'	45.9	49.7	53.1	56.1	58.8	61.2	63.5	65.5
	24"	S	369	351	337	326	317	309	303	297
		G'	43.8	47.0	49.7	52.1	54.2	56.1	57.8	59.2
16/16 0.0598"/0.0598"	12"	S	721	702	687	675	666	658	651	645
		G'	76.1	81.0	85.3	89.0	92.2	95.1	97.6	99.9
	18"	S	531	512	497	486	476	468	461	455
		G'	68.3	71.6	74.3	76.6	78.5	80.1	81.5	82.7
	24"	S	436	417	403	391	381	373	366	361
		G'	63.1	65.4	67.2	68.6	69.7	70.6	71.4	71.9
16/14 0.0598"/0.0747"	12"	S	867	845	827	813	801	791	783	775
		G'	101.6	105.1	107.8	110.0	111.8	113.4	114.7	115.8
	18"	S	636	616	600	587	577	568	561	555
		G'	86.8	88.3	89.2	89.9	90.4	90.8	91.1	91.3
	24"	S	517	497	481	469	459	450	443	437
		G'	77.8	78.1	78.2	78.0	77.8	77.6	77.3	77.0
14/16 0.0747"/0.0598"	12"	S	721	702	687	675	666	658	651	645
		G'	76.6	82.6	87.8	92.5	96.7	100.5	103.9	107.1
	18"	S	531	512	497	486	476	468	461	455
		G'	70.2	74.6	78.3	81.6	84.4	86.8	89.0	90.9
	24"	S	436	417	403	391	381	373	366	361
		G'	65.7	69.2	71.9	74.2	76.1	77.8	79.1	80.3
14/14 0.0747"/0.0747"	12"	S	867	845	827	813	801	791	783	775
		G'	108.4	113.4	117.6	121.1	124.1	126.7	128.9	130.8
	18"	S	636	616	600	587	577	568	561	555
		G'	94.6	97.4	99.6	101.2	102.6	103.6	104.5	105.2
	24"	S	517	497	481	469	459	450	443	437
		G'	85.9	87.4	88.4	89.0	89.4	89.7	89.8	89.9

ATTACHMENT PATTERN: 24 / 4

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT							
			14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"	28' - 0"
20/20 0.0358"/0.0358	12"	S	473	457	444	434	425	418	412	407
		G'	28.7	31.6	34.3	36.9	39.2	41.4	43.4	45.4
	18"	S	360	343	330	320	312	305	299	294
		G'	27.2	29.7	32.0	34.0	35.8	37.5	39.1	40.5
	24"	S	303	286	274	263	255	248	242	237
		G'	26.2	28.3	30.2	31.9	33.4	34.8	36.0	37.1
20/18 0.0358"/0.0474	12"	S	596	578	564	553	543	536	529	524
		G'	50.4	53.8	56.7	59.2	61.5	63.4	65.2	66.8
	18"	S	445	427	413	402	393	385	379	373
		G'	45.4	47.7	49.6	51.2	52.6	53.7	54.7	55.5
	24"	S	370	352	338	327	318	310	304	298
		G'	42.1	43.8	45.1	46.1	46.9	47.5	48.0	48.5
18/20 0.0474"/0.0358	12"	S	478	461	447	437	428	421	415	409
		G'	26.8	29.8	32.6	35.3	37.9	40.3	42.6	44.8
	18"	S	364	347	334	323	314	307	301	296
		G'	25.8	28.5	31.0	33.3	35.5	37.5	39.4	41.2
	24"	S	307	290	277	266	258	250	244	239
		G'	25.1	27.5	29.7	31.8	33.6	35.4	37.0	38.4
18/18 0.0474"/0.0474	12"	S	596	578	564	553	543	536	529	524
		G'	50.3	54.5	58.2	61.6	64.6	67.3	69.8	72.1
	18"	S	445	427	413	402	393	385	379	373
		G'	46.5	49.7	52.5	54.9	57.0	58.8	60.4	61.9
	24"	S	370	352	338	327	318	310	304	298
		G'	43.8	46.4	48.5	50.3	51.8	53.1	54.2	55.1
18/16 0.0474"/0.0598	12"	S	722	703	688	676	667	659	652	646
		G'	74.1	77.8	80.9	83.6	85.9	87.8	89.5	91.0
	18"	S	533	513	499	487	477	469	462	456
		G'	65.2	67.4	69.1	70.4	71.5	72.4	73.1	73.7
	24"	S	438	419	404	392	382	374	367	361
		G'	59.5	60.8	61.7	62.3	62.7	63.0	63.2	63.3
16/18 0.0598"/0.0474	12"	S	596	578	564	553	543	536	529	524
		G'	49.0	53.7	57.9	61.8	65.4	68.7	71.8	74.7
	18"	S	445	427	413	402	393	385	379	373
		G'	46.1	49.9	53.3	56.3	59.1	61.5	63.7	65.8
	24"	S	370	352	338	327	318	310	304	298
		G'	44.0	47.2	50.0	52.5	54.6	56.5	58.1	59.6
16/16 0.0598"/0.0598	12"	S	722	703	688	676	667	659	652	646
		G'	76.4	81.4	85.6	89.3	92.6	95.4	98.0	100.3
	18"	S	533	513	499	487	477	469	462	456
		G'	68.8	72.1	74.9	77.1	79.0	80.6	82.0	83.2
	24"	S	438	419	404	392	382	374	367	361
		G'	63.7	66.1	67.9	69.3	70.4	71.2	72.0	72.5
16/14 0.0598"/0.0747	12"	S	874	854	838	825	815	806	799	793
		G'	102.3	105.7	108.4	110.6	112.4	114.0	115.2	116.4
	18"	S	637	617	601	588	578	569	562	556
		G'	87.7	89.1	90.1	90.7	91.2	91.5	91.8	91.9
	24"	S	519	498	483	470	460	451	444	437
		G'	78.8	79.1	79.1	78.9	78.7	78.4	78.1	77.8
14/16 0.0747"/0.0598	12"	S	722	703	688	676	667	659	652	646
		G'	76.9	82.9	88.2	92.9	97.1	100.9	104.3	107.4
	18"	S	533	513	499	487	477	469	462	456
		G'	70.6	75.0	78.8	82.1	84.9	87.3	89.5	91.4
	24"	S	438	419	404	392	382	374	367	361
		G'	66.2	69.7	72.5	74.8	76.7	78.4	79.7	80.9
14/14 0.0747"/0.0747	12"	S	874	854	838	825	815	806	799	793
		G'	109.0	114.1	118.2	121.7	124.7	127.3	129.5	131.4
	18"	S	637	617	601	588	578	569	562	556
		G'	95.4	98.2	100.4	102.0	103.4	104.4	105.3	106.0
	24"	S	519	498	483	470	460	451	444	437
		G'	86.9	88.4	89.3	89.9	90.3	90.6	90.7	90.7

See Table 4 notes.

TABLE 29—DEEP-DEK® 7.5 CELLULAR ACOUSTICAL – ALLOWABLE DIAPHRAGM SHEAR[1-3]

SUPPORT CONNECTION: 1/2" Effective Weld Diameter — **S** = Allowable Diaphragm Shear (plf) — **G'** = Stiffness Factor (kips/in.)

SIDELAP CONNECTION: #10 Screws

ATTACHMENT PATTERN: 24 / 4

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT							
			16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"	28' - 0"	30' - 0"
20/20 0.0358"/	12"	S	420	402	387	374	364	355	348	342
		G'	34.3	37.1	39.7	42.0	44.3	46.3	48.3	50.1
	24"	S	295	276	261	249	239	230	223	216
		G'	29.8	31.6	33.2	34.6	35.9	37.0	38.1	39.0
	36"	S	253	234	219	207	197	188	181	174
		G'	27.2	28.5	29.5	30.5	31.2	31.9	32.5	33.0
20/18 0.0358"/	12"	S	529	507	490	476	464	454	445	438
		G'	56.0	58.7	61.2	63.3	65.2	66.9	68.3	69.7
	24"	S	363	341	324	309	298	287	279	271
		G'	43.6	44.6	45.5	46.2	46.7	47.2	47.6	47.9
	36"	S	308	286	268	254	242	232	223	216
		G'	37.5	37.8	38.0	38.1	38.2	38.2	38.2	38.1
18/20 0.0474"/	12"	S	443	422	405	391	379	369	361	354
		G'	32.7	35.7	38.5	41.2	43.7	46.1	48.4	50.5
	24"	S	317	296	279	265	253	244	235	228
		G'	29.5	31.7	33.7	35.6	37.3	38.8	40.2	41.6
	36"	S	275	254	237	223	212	202	193	186
		G'	27.5	29.2	30.8	32.1	33.3	34.4	35.4	36.2
18/18 0.0474"/	12"	S	540	517	499	484	471	460	451	443
		G'	57.8	61.4	64.7	67.7	70.4	72.8	75.0	77.0
	24"	S	374	351	333	317	305	294	285	277
		G'	47.3	49.2	50.7	52.1	53.2	54.2	55.1	55.8
	36"	S	319	296	277	262	249	239	230	222
		G'	41.7	42.8	43.5	44.2	44.6	45.0	45.3	45.5
18/16 0.0474"/	12"	S	633	609	590	575	562	551	541	533
		G'	79.5	82.4	84.9	87.0	88.8	90.4	91.8	93.0
	24"	S	423	399	380	365	352	341	332	324
		G'	59.2	59.9	60.3	60.7	61.0	61.1	61.3	61.4
	36"	S	353	329	310	295	282	271	262	254
		G'	49.9	49.7	49.4	49.1	48.8	48.5	48.3	48.0
16/18 0.0598"/	12"	S	540	517	499	484	471	460	451	443
		G'	57.7	62.0	65.9	69.5	72.8	75.9	78.7	81.3
	24"	S	374	351	333	317	305	294	285	277
		G'	49.0	51.7	53.9	55.9	57.6	59.1	60.5	61.7
	36"	S	319	296	277	262	249	239	230	222
		G'	44.2	45.9	47.3	48.5	49.4	50.2	50.9	51.5
16/16 0.0598"/	12"	S	633	609	590	575	562	551	541	533
		G'	84.4	88.5	92.0	95.1	97.8	100.2	102.3	104.2
	24"	S	423	399	380	365	352	341	332	324
		G'	65.5	67.0	68.2	69.1	69.9	70.5	71.1	71.5
	36"	S	353	329	310	295	282	271	262	254
		G'	56.3	56.7	56.9	57.0	57.0	57.0	56.9	56.8
16/14 0.0598"/	12"	S	744	719	700	684	671	659	650	641
		G'	105.9	108.4	110.4	112.1	113.5	114.7	115.7	116.6
	24"	S	482	457	438	422	409	397	388	379
		G'	75.4	75.3	75.2	75.0	74.8	74.6	74.4	74.2
	36"	S	394	370	351	335	321	310	300	292
		G'	62.3	61.3	60.5	59.6	58.9	58.2	57.6	57.1
14/16 0.0747"/	12"	S	633	609	590	575	562	551	541	533
		G'	87.3	92.4	97.0	101.1	104.7	108.0	111.0	113.7
	24"	S	423	399	380	365	352	341	332	324
		G'	70.4	72.9	74.9	76.6	78.0	79.2	80.3	81.2
	36"	S	353	329	310	295	282	271	262	254
		G'	61.7	62.9	63.8	64.5	64.9	65.3	65.6	65.8
14/14 0.0747"/	12"	S	744	719	700	684	671	659	650	641
		G'	115.9	119.8	123.0	125.7	128.1	130.2	131.9	133.5
	24"	S	482	457	438	422	409	397	388	379
		G'	85.5	86.3	86.8	87.1	87.3	87.4	87.5	87.6
	36"	S	394	370	351	335	321	310	300	292
		G'	71.8	71.3	70.8	70.3	69.7	69.2	68.7	68.3

SIDELAP CONNECTION: 1 1/2" Seam Welds

ATTACHMENT PATTERN: 24 / 4

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT							
			16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"	28' - 0"	30' - 0"
20/20 0.0358"/ 0.0358"	12"	S	1098	1075	1056	1041	1028	1018	1009	1001
		G'	39.0	42.8	46.5	50.0	53.3	56.5	59.6	62.5
	24"	S	654	630	612	597	584	573	564	556
		G'	35.8	38.9	41.7	44.4	46.9	49.2	51.4	53.5
	36"	S	505	482	464	449	436	425	416	408
		G'	33.5	36.1	38.4	40.5	42.5	44.2	45.9	47.4
20/18 0.0358"/ 0.0474"	12"	S	1409	1381	1359	1341	1326	1314	1303	1293
		G'	72.4	77.8	82.8	87.4	91.5	95.4	99.0	102.3
	24"	S	829	801	779	761	746	733	722	713
		G'	60.7	64.1	67.0	69.7	72.0	74.1	75.9	77.6
	36"	S	635	608	586	568	553	540	529	520
		G'	53.7	55.9	57.8	59.4	60.8	62.0	63.0	64.0
18/20 0.0474"/ 0.0358"	12"	S	1107	1082	1061	1044	1031	1019	1009	1000
		G'	35.8	39.6	43.2	46.7	50.1	53.4	56.5	59.6
	24"	S	669	643	623	606	592	580	570	562
		G'	33.7	36.9	40.0	42.9	45.6	48.2	50.7	53.1
	36"	S	523	497	477	460	446	434	424	415
		G'	32.2	35.0	37.6	40.1	42.4	44.5	46.6	48.5
18/18 0.0474"/ 0.0474"	12"	S	1415	1386	1363	1345	1329	1316	1304	1294
		G'	70.2	76.2	81.8	87.1	92.0	96.6	100.9	105.0
	24"	S	837	808	785	767	751	738	726	716
		G'	61.5	65.8	69.6	73.1	76.2	79.1	81.8	84.2
	36"	S	645	616	593	574	558	545	534	524
		G'	55.9	59.1	61.9	64.3	66.5	68.4	70.1	71.7
18/16 0.0474"/ 0.0598"	12"	S	1763	1732	1707	1687	1668	1651	1636	1623
		G'	109.5	116.4	122.6	128.1	133.1	137.6	141.8	145.6
	24"	S	1021	990	966	945	928	914	902	891
		G'	87.8	91.5	94.6	97.3	99.7	101.7	103.5	105.2
	36"	S	774	743	718	698	681	667	655	644
		G'	75.7	77.8	79.4	80.8	81.9	82.9	83.7	84.4
16/18 0.0598"/ 0.0474"	12"	S	1436	1407	1384	1365	1350	1336	1325	1315
		G'	67.1	73.3	79.3	84.9	90.2	95.2	100.0	104.6
	24"	S	848	820	796	777	762	748	737	727
		G'	60.6	65.4	69.9	73.9	77.7	81.2	84.5	87.5
	36"	S	652	624	600	582	566	552	541	531
		G'	56.2	60.1	63.5	66.6	69.5	72.0	74.4	76.5
16/16 0.0598"/ 0.0598"	12"	S	1790	1759	1734	1711	1691	1673	1658	1645
		G'	109.8	117.8	125.1	131.7	137.8	143.4	148.6	153.5
	24"	S	1036	1004	979	959	942	928	915	905
		G'	91.8	96.7	101.0	104.7	108.1	111.1	113.7	116.2
	36"	S	784	753	728	708	691	676	664	653
		G'	81.0	84.2	86.9	89.2	91.1	92.8	94.3	95.6
16/14 0.0598"/ 0.0747"	12"	S	2167	2130	2100	2076	2055	2038	2023	2010
		G'	156.6	164.3	171.0	177.0	182.2	186.9	191.0	194.8
	24"	S	1268	1234	1207	1185	1166	1150	1137	1125
		G'	119.3	122.6	125.3	127.6	129.5	131.1	132.6	133.8
	36"	S	948	914	887	864	846	830	816	805
		G'	100.0	101.3	102.3	103.1	103.7	104.1	104.5	104.8
14/16 0.0747"/ 0.0598"	12"	S	1822	1791	1764	1739	1718	1701	1686	1673
		G'	107.8	116.7	124.8	132.4	139.4	146.0	152.1	157.9
	24"	S	1053	1021	996	975	958	944	931	921
		G'	93.4	99.4	104.8	109.6	114.0	118.0	121.6	124.9
	36"	S	796	765	740	719	702	687	675	664
		G'	84.3	88.6	92.4	95.7	98.5	101.1	103.3	105.4
14/14 0.0747"/ 0.0747"	12"	S	2199	2162	2132	2108	2087	2070	2055	2042
		G'	161.8	171.4	179.9	187.5	194.3	200.5	206.1	211.2
	24"	S	1289	1255	1228	1205	1186	1171	1157	1145
		G'	128.5	133.4	137.6	141.1	144.2	146.9	149.2	151.3
	36"	S	963	928	901	879	860	844	830	819
		G'	110.2	112.8	114.9	116.6	118.0	119.2	120.2	121.0

See Table 4 notes.

TABLE 30—DEEP-DEK® 7.5 CELLULAR ACOUSTICAL – ALLOWABLE DIAPHRAGM SHEAR[1-5]

SUPPORT CONNECTION: Hilti X-ENP-19-L15 (steel substrate thickness ≥ 0.25 inch)
SIDELAP CONNECTION: Hilti S-SLC01 M HWH, S-SLC02 M HWH or #12 self-drilling screws

S = Allowable Diaphragm Shear (plf)
G' = Stiffness Factor (kips/in.)

ATTACHMENT PATTERN: 24 / 3

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT							
			16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"	28' - 0"	30' - 0"
20/20 0.0358"/0.0358"	12"	S	455	443	433	424	417	412	406	402
		G'	34.7	37.5	40.2	42.6	44.8	46.9	48.8	50.7
	18"	S	342	329	319	311	304	298	293	289
		G'	32.4	34.7	36.7	38.6	40.3	41.8	43.2	44.5
	24"	S	285	272	262	254	247	241	236	232
		G'	30.7	32.6	34.3	35.7	37.0	38.2	39.2	40.2
20/18 0.0358"/0.0474"	12"	S	576	563	551	542	535	528	523	518
		G'	57.3	60.1	62.6	64.7	66.6	68.2	69.7	71.0
	18"	S	426	412	401	392	384	378	373	368
		G'	50.3	52.1	53.5	54.7	55.8	56.6	57.4	58.0
	24"	S	351	337	326	317	309	303	297	293
		G'	45.8	46.9	47.8	48.4	49.0	49.4	49.7	50.0
18/20 0.0474"/0.0358"	12"	S	459	446	436	427	420	414	409	404
		G'	33.0	36.0	38.9	41.6	44.1	46.6	48.8	51.0
	18"	S	346	332	322	313	306	300	295	291
		G'	31.3	34.0	36.4	38.6	40.7	42.6	44.4	46.1
	24"	S	289	276	265	257	249	243	238	234
		G'	30.1	32.4	34.5	36.4	38.2	39.8	41.2	42.6
18/18 0.0474"/0.0474"	12"	S	576	563	551	542	535	528	523	518
		G'	58.8	62.6	65.9	68.9	71.6	74.0	76.2	78.3
	18"	S	426	412	401	392	384	378	373	368
		G'	53.1	55.8	58.1	60.1	61.8	63.4	64.7	65.9
	24"	S	351	337	326	317	309	303	297	293
		G'	49.3	51.2	52.9	54.2	55.4	56.4	57.2	57.9
18/16 0.0474"/0.0598"	12"	S	702	687	675	666	658	651	645	640
		G'	81.8	84.7	87.2	89.2	91.0	92.5	93.9	95.1
	18"	S	512	497	486	476	468	461	455	450
		G'	70.1	71.5	72.7	73.6	74.3	74.9	75.3	75.7
	24"	S	417	403	391	381	373	366	361	356
		G'	62.8	63.4	63.8	64.0	64.2	64.3	64.3	64.3
16/18 0.0598"/0.0474"	12"	S	576	563	551	542	535	528	523	518
		G'	58.5	62.9	66.9	70.5	73.9	76.9	79.8	82.4
	18"	S	426	412	401	392	384	378	373	368
		G'	54.0	57.4	60.4	63.0	65.4	67.6	69.5	71.3
	24"	S	351	337	326	317	309	303	297	293
		G'	50.7	53.5	55.8	57.8	59.6	61.1	62.5	63.7
16/16 0.0598"/0.0598"	12"	S	702	687	675	666	658	651	645	640
		G'	86.5	90.6	94.1	97.2	99.9	102.3	104.4	106.3
	18"	S	512	497	486	476	468	461	455	450
		G'	75.9	78.4	80.4	82.1	83.5	84.7	85.8	86.7
	24"	S	417	403	391	381	373	366	361	356
		G'	69.0	70.5	71.7	72.6	73.3	73.8	74.2	74.6
16/14 0.0598"/0.0747"	12"	S	845	827	813	801	791	783	775	769
		G'	109.6	111.9	113.9	115.4	116.7	117.8	118.7	119.5
	18"	S	616	600	587	577	568	561	555	550
		G'	91.4	92.1	92.5	92.8	92.9	93.0	93.1	93.1
	24"	S	497	481	469	459	450	443	437	431
		G'	80.6	80.3	80.0	79.6	79.1	78.7	78.3	77.9
14/16 0.0747"/0.0598"	12"	S	702	687	675	666	658	651	645	640
		G'	89.0	94.2	98.9	103.0	106.6	109.9	112.9	115.6
	18"	S	512	497	486	476	468	461	455	450
		G'	79.8	83.4	86.5	89.1	91.3	93.3	95.1	96.6
	24"	S	417	403	391	381	373	366	361	356
		G'	73.6	76.2	78.2	79.9	81.4	82.5	83.5	84.4
14/14 0.0747"/0.0747"	12"	S	845	827	813	801	791	783	775	769
		G'	119.4	123.2	126.4	129.1	131.4	133.3	135.0	136.5
	18"	S	616	600	587	577	568	561	555	550
		G'	101.8	103.6	104.9	105.9	106.8	107.4	107.9	108.4
	24"	S	497	481	469	459	450	443	437	431
		G'	90.9	91.5	91.8	92.0	92.0	92.0	91.9	91.8

ATTACHMENT PATTERN: 24 / 4

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT							
			16' - 0"	18' - 0"	20' - 0"	22' - 0"	24' - 0"	26' - 0"	28' - 0"	30' - 0"
20/20 0.0358"/0.0358	12"	S	457	444	434	425	418	412	407	403
		G'	34.8	37.6	40.3	42.7	44.9	47.0	49.0	50.8
	18"	S	343	330	320	312	305	299	294	289
		G'	32.5	34.8	36.9	38.7	40.4	42.0	43.4	44.7
	24"	S	286	274	263	255	248	242	237	232
		G'	30.9	32.8	34.5	35.9	37.2	38.4	39.5	40.4
20/18 0.0358"/0.0474	12"	S	578	564	553	543	536	529	524	519
		G'	57.6	60.4	62.8	65.0	66.9	68.5	70.0	71.3
	18"	S	427	413	402	393	385	379	373	369
		G'	50.7	52.5	53.9	55.1	56.1	57.0	57.7	58.4
	24"	S	352	338	327	318	310	304	298	293
		G'	46.3	47.4	48.2	48.9	49.4	49.8	50.1	50.4
18/20 0.0474"/0.0358	12"	S	461	447	437	428	421	415	409	405
		G'	33.0	36.1	39.0	41.7	44.2	46.6	48.9	51.1
	18"	S	347	334	323	314	307	301	296	291
		G'	31.4	34.1	36.5	38.7	40.8	42.8	44.6	46.3
	24"	S	290	277	266	258	250	244	239	234
		G'	30.3	32.6	34.7	36.6	38.3	39.9	41.4	42.8
18/18 0.0474"/0.0474	12"	S	578	564	553	543	536	529	524	519
		G'	59.0	62.8	66.1	69.1	71.8	74.3	76.5	78.5
	18"	S	427	413	402	393	385	379	373	369
		G'	53.4	56.1	58.4	60.4	62.2	63.7	65.1	66.3
	24"	S	352	338	327	318	310	304	298	293
		G'	49.7	51.7	53.3	54.7	55.8	56.8	57.6	58.4
18/16 0.0474"/0.0598	12"	S	703	688	676	667	659	652	646	641
		G'	82.3	85.2	87.6	89.7	91.4	93.0	94.3	95.5
	18"	S	513	499	487	477	469	462	456	451
		G'	70.7	72.1	73.3	74.1	74.8	75.4	75.9	76.3
	24"	S	419	404	392	382	374	367	361	356
		G'	63.5	64.1	64.5	64.7	64.8	64.9	64.9	64.9
16/18 0.0598"/0.0474	12"	S	578	564	553	543	536	529	524	519
		G'	58.7	63.1	67.1	70.7	74.1	77.1	80.0	82.6
	18"	S	427	413	402	393	385	379	373	369
		G'	54.2	57.6	60.6	63.3	65.7	67.9	69.8	71.6
	24"	S	352	338	327	318	310	304	298	293
		G'	51.1	53.8	56.2	58.2	60.0	61.5	62.9	64.1
16/16 0.0598"/0.0598	12"	S	703	688	676	667	659	652	646	641
		G'	86.9	91.0	94.5	97.6	100.3	102.7	104.8	106.7
	18"	S	513	499	487	477	469	462	456	451
		G'	76.4	78.9	81.0	82.7	84.1	85.3	86.3	87.2
	24"	S	419	404	392	382	374	367	361	356
		G'	69.6	71.2	72.3	73.2	73.9	74.5	74.9	75.2
16/14 0.0598"/0.0747	12"	S	854	838	825	815	806	799	793	787
		G'	110.3	112.7	114.5	116.1	117.3	118.4	119.3	120.1
	18"	S	617	601	588	578	569	562	556	550
		G'	92.3	93.0	93.4	93.6	93.7	93.8	93.8	93.8
	24"	S	498	483	470	460	451	444	437	432
		G'	81.6	81.3	80.9	80.5	80.0	79.5	79.1	78.7
14/16 0.0747"/0.0598	12"	S	703	688	676	667	659	652	646	641
		G'	89.3	94.6	99.2	103.3	107.0	110.3	113.3	116.0
	18"	S	513	499	487	477	469	462	456	451
		G'	80.3	83.9	87.0	89.6	91.9	93.9	95.6	97.1
	24"	S	419	404	392	382	374	367	361	356
		G'	74.2	76.8	78.9	80.6	82.0	83.2	84.2	85.0
14/14 0.0747"/0.0747	12"	S	854	838	825	815	806	799	793	787
		G'	120.1	123.9	127.1	129.8	132.0	134.0	135.7	137.1
	18"	S	617	601	588	578	569	562	556	550
		G'	102.7	104.4	105.8	106.8	107.6	108.2	108.7	109.1
	24"	S	498	483	470	460	451	444	437	432
		G'	91.9	92.5	92.8	92.9	92.9	92.9	92.7	92.6

See Table 4 notes.

TABLE 31—VERSA-DEK® S & LS – ALLOWABLE DIAPHRAGM SHEAR[1-3]

SUPPORT CONNECTION: $^1/_2$" Effective Weld Diameter
SIDELAP CONNECTION: #10 Screws

S = Allowable Diaphragm Shear (plf)
G' = Stiffness Factor (kips/in.)

ATTACHMENT PATTERN: 24.5/4			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	7' - 0"	8' - 0"	9' - 0"	10' - 0"	11' - 0"	12' - 0"	13' - 0"	14' - 0"
22 0.0295"	6"	S	636	609	589	572	559	547	538	529
		G'	34.6	37.7	40.6	43.2	45.6	47.8	49.9	51.8
	12"	S	425	398	378	361	347	336	327	318
		G'	32.3	34.8	37.1	39.0	40.8	42.4	43.9	45.2
	18"	S	355	328	307	291	277	266	256	248
		G'	30.9	33.0	34.9	36.5	37.8	39.0	40.1	41.0
	24"	S	319	293	272	255	242	231	221	213
		G'	30.0	31.8	33.4	34.7	35.8	36.7	37.5	38.2
	30"	S	298	272	251	234	221	209	200	192
		G'	29.3	31.0	32.3	33.4	34.3	35.0	35.6	36.1
	36"	S	284	258	237	220	207	195	186	178
		G'	28.8	30.3	31.5	32.4	33.1	33.7	34.2	34.5
20 0.0358"	6"	S	770	738	713	693	677	663	651	642
		G'	50.1	54.1	57.6	60.8	63.7	66.3	68.6	70.8
	12"	S	514	482	457	437	420	407	395	385
		G'	45.9	48.8	51.4	53.5	55.4	57.1	58.6	59.9
	18"	S	429	396	371	351	335	321	310	300
		G'	43.4	45.7	47.6	49.2	50.5	51.6	52.5	53.4
	24"	S	386	354	329	309	292	279	267	257
		G'	41.7	43.6	45.1	46.3	47.2	48.0	48.6	49.0
	30"	S	360	328	303	283	267	253	242	232
		G'	40.6	42.2	43.3	44.2	44.9	45.4	45.7	46.0
	36"	S	343	311	286	266	250	236	224	215
		G'	39.7	41.1	42.0	42.7	43.1	43.4	43.6	43.7
18 0.0474"	6"	S	1031	974	941	915	893	875	860	847
		G'	82.1	87.0	91.3	95.0	98.2	101.1	103.6	105.9
	12"	S	692	634	602	575	554	536	521	508
		G'	72.6	75.6	78.1	80.2	81.9	83.3	84.6	85.6
	18"	S	579	521	489	462	441	423	408	395
		G'	67.2	69.2	70.8	71.9	72.8	73.4	73.9	74.3
	24"	S	522	465	432	406	384	367	351	339
		G'	63.8	65.2	66.0	66.6	66.9	67.1	67.2	67.2
	30"	S	488	431	398	372	351	333	318	305
		G'	61.5	62.3	62.8	62.9	62.9	62.7	62.5	62.2
	36"	S	465	408	376	349	328	310	295	282
		G'	59.7	60.3	60.4	60.2	59.9	59.5	59.1	58.6
16 0.0598"	6"	S	1312	1238	1183	1150	1124	1101	1082	1066
		G'	118.1	123.3	127.7	131.4	134.6	137.3	139.7	141.8
	12"	S	884	810	755	722	696	673	654	638
		G'	101.0	103.6	105.5	107.0	108.2	109.2	109.9	110.5
	18"	S	741	667	612	580	553	531	512	496
		G'	92.0	93.1	93.8	94.1	94.3	94.3	94.3	94.1
	24"	S	670	596	541	508	482	459	440	424
		G'	86.4	86.6	86.5	86.1	85.7	85.1	84.6	84.0
	30"	S	627	553	498	465	439	417	398	382
		G'	82.6	82.2	81.5	80.7	79.8	78.9	78.0	77.2
	36"	S	599	524	470	437	410	388	369	353
		G'	79.8	79.0	77.9	76.8	75.6	74.4	73.3	72.2

ATTACHMENT PATTERN: 24.5/8			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	7' - 0"	8' - 0"	9' - 0"	10' - 0"	11' - 0"	12' - 0"	13' - 0"	14' - 0"
22 0.0295"	6"	S	756	715	682	656	635	617	602	590
		G'	34.9	38.1	41.0	43.7	46.1	48.4	50.5	52.4
	12"	S	545	504	471	445	424	406	391	378
		G'	33.1	35.8	38.1	40.2	42.0	43.7	45.1	46.5
	18"	S	475	433	401	375	354	336	321	308
		G'	32.1	34.4	36.4	38.1	39.6	40.8	42.0	42.9
	24"	S	440	398	366	340	318	301	286	273
		G'	31.4	33.5	35.3	36.7	37.9	39.0	39.8	40.6
	30"	S	419	377	344	319	297	280	265	252
		G'	31.0	32.9	34.5	35.7	36.8	37.6	38.3	38.9
	36"	S	405	363	330	304	283	266	251	238
		G'	30.6	32.4	33.9	35.0	35.9	36.6	37.2	37.6
20 0.0358"	6"	S	915	865	826	795	769	748	730	714
		G'	50.9	54.9	58.5	61.7	64.6	67.2	69.6	71.8
	12"	S	659	609	570	538	513	491	473	458
		G'	47.4	50.5	53.2	55.5	57.4	59.2	60.7	62.0
	18"	S	574	523	484	453	427	406	388	372
		G'	45.5	48.1	50.2	51.9	53.3	54.5	55.5	56.4
	24"	S	531	481	441	410	385	363	345	330
		G'	44.3	46.5	48.3	49.6	50.7	51.5	52.2	52.7
	30"	S	505	455	416	385	359	338	320	304
		G'	43.5	45.4	46.9	48.0	48.8	49.4	49.8	50.1
	36"	S	488	438	399	368	342	321	303	287
		G'	42.9	44.6	45.9	46.8	47.4	47.8	48.1	48.2
18 0.0474"	6"	S	1220	1139	1088	1047	1014	986	962	942
		G'	83.8	88.8	93.2	96.9	100.1	103.0	105.6	107.8
	12"	S	881	800	749	708	675	647	623	603
		G'	75.9	79.2	81.9	84.0	85.7	87.2	88.4	89.4
	18"	S	768	687	636	595	562	534	510	490
		G'	71.8	74.1	75.8	77.0	77.9	78.6	79.1	79.5
	24"	S	711	631	579	538	505	477	453	433
		G'	69.2	70.9	72.0	72.7	73.1	73.3	73.3	73.2
	30"	S	677	597	545	505	471	443	420	399
		G'	67.4	68.7	69.4	69.7	69.7	69.6	69.3	69.0
	36"	S	655	574	523	482	448	421	397	377
		G'	66.2	67.1	67.5	67.5	67.3	66.9	66.4	65.8
16 0.0598"	6"	S	1548	1444	1366	1315	1273	1239	1209	1184
		G'	121.2	126.6	131.0	134.7	137.8	140.5	142.8	144.9
	12"	S	1120	1016	938	887	845	811	781	756
		G'	107.0	109.7	111.7	113.1	114.3	115.1	115.7	116.2
	18"	S	977	873	795	744	703	668	639	613
		G'	99.7	101.0	101.8	102.1	102.1	102.0	101.8	101.5
	24"	S	906	802	724	673	631	597	567	542
		G'	95.3	95.8	95.7	95.3	94.8	94.1	93.3	92.5
	30"	S	863	759	681	630	589	554	524	499
		G'	92.3	92.3	91.7	90.8	89.8	88.7	87.6	86.5
	36"	S	834	730	653	602	560	525	496	471
		G'	90.2	89.7	88.8	87.6	86.2	84.9	83.5	82.2

See Table 4 notes.

TABLE 32—VERSA-DEK® S & LS – ALLOWABLE DIAPHRAGM SHEAR[1-3]

SUPPORT CONNECTION: 1 1/2" Effective Weld Diameter
SIDELAP CONNECTION: 1 1/2" Long Fillet Welds or 1 1/2" Seam Welds

S = Allowable Diaphragm Shear (plf)
G' = Stiffness Factor (kips/in.)

ATTACHMENT PATTERN: 24.5/4

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT							
			7' - 0"	8' - 0"	9' - 0"	10' - 0"	11' - 0"	12' - 0"	13' - 0"	14' - 0"
22 0.0295"	6"	S	1273	1245	1223	1205	1191	1179	1169	1017*
		G'	36.8	40.5	43.9	47.1	50.1	52.9	55.5	58.0
	12"	S	1017	985	959	938	921	906	894	883
		G'	35.3	38.6	41.6	44.4	47.0	49.4	51.6	53.6
	18"	S	819	782	753	731	712	696	683	671
		G'	34.2	37.2	40.0	42.4	44.7	46.7	48.6	50.4
	24"	S	688	651	623	600	581	565	552	541
		G'	33.4	36.2	38.7	40.9	42.9	44.7	46.3	47.8
	30"	S	610	573	544	521	502	487	473	462
		G'	32.8	35.4	37.6	39.7	41.4	43.0	44.5	45.8
	36"	S	557	521	492	469	450	434	421	410
		G'	32.3	34.7	36.8	38.7	40.3	41.7	43.0	44.1
20 0.0358"	6"	S	1534	1500	1473	1452	1435	1420	1408	1232*
		G'	54.5	59.4	63.9	68.1	71.9	75.4	78.6	81.6
	12"	S	1225	1186	1155	1130	1109	1092	1077	1064
		G'	51.6	55.8	59.6	63.0	66.2	69.0	71.6	73.9
	18"	S	987	942	908	880	857	839	823	809
		G'	49.5	53.2	56.5	59.4	62.0	64.4	66.5	68.4
	24"	S	829	785	750	722	700	681	665	651
		G'	48.0	51.3	54.2	56.7	58.9	60.9	62.6	64.1
	30"	S	735	690	656	628	605	586	570	557
		G'	46.8	49.8	52.4	54.6	56.5	58.1	59.5	60.8
	36"	S	672	627	592	565	542	523	507	494
		G'	45.9	48.6	50.9	52.9	54.5	55.9	57.1	58.2
18 0.0474"	6"	S	2003	1959	1924	1897	1874	1855	1839	1626*
		G'	92.6	99.5	105.6	111.0	115.9	120.4	124.4	128.0
	12"	S	1600	1550	1509	1477	1449	1426	1406	1389
		G'	85.5	90.9	95.7	99.8	103.4	106.6	109.5	112.1
	18"	S	1304	1231	1186	1150	1120	1095	1074	1057
		G'	80.7	85.1	88.9	92.1	94.8	97.3	99.4	101.2
	24"	S	1098	1025	980	944	914	889	869	851
		G'	77.2	80.9	84.0	86.5	88.6	90.4	92.0	93.3
	30"	S	975	901	856	820	791	766	745	727
		G'	74.6	77.7	80.2	82.2	83.9	85.2	86.3	87.3
	36"	S	892	819	774	738	708	684	663	645
		G'	72.6	75.2	77.3	78.9	80.1	81.1	81.9	82.6
16 0.0598"	6"	S	2491	2436	2393	2358	2330	2307	2287	2043*
		G'	138.1	146.4	153.6	159.9	165.4	170.3	174.7	178.6
	12"	S	1989	1927	1877	1836	1802	1773	1749	1727
		G'	124.4	130.4	135.4	139.7	143.4	146.6	149.4	151.8
	18"	S	1626	1544	1474	1429	1393	1362	1336	1314
		G'	115.5	119.9	123.5	126.5	129.0	131.1	132.9	134.4
	24"	S	1383	1288	1218	1173	1136	1106	1080	1058
		G'	109.2	112.6	115.2	117.2	118.8	120.2	121.2	122.2
	30"	S	1229	1135	1065	1020	983	952	926	904
		G'	104.6	107.1	108.9	110.3	111.3	112.1	112.6	113.1
	36"	S	1127	1032	962	917	880	850	824	802
		G'	101.0	102.9	104.2	105.0	105.5	105.8	106.0	106.1

ATTACHMENT PATTERN: 24.5/8

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT							
			7' - 0"	8' - 0"	9' - 0"	10' - 0"	11' - 0"	12' - 0"	13' - 0"	14' - 0"
22 0.0295"	6"	S	1496	1440	1396	1361	1332	1309	1180*	1017*
		G'	36.9	40.6	44.0	47.2	50.2	53.1	55.7	58.1
	12"	S	1201	1149	1109	1076	1050	1028	1009	993
		G'	35.6	38.9	42.0	44.8	47.4	49.8	52.0	54.1
	18"	S	939	887	847	815	788	766	748	732
		G'	34.7	37.7	40.5	43.0	45.3	47.4	49.3	51.1
	24"	S	809	757	716	684	657	635	617	601
		G'	34.0	36.9	39.4	41.7	43.7	45.6	47.3	48.8
	30"	S	730	678	638	605	579	557	538	522
		G'	33.5	36.2	38.6	40.7	42.5	44.2	45.7	47.0
	36"	S	678	626	585	553	527	505	486	470
		G'	33.1	35.7	37.9	39.8	41.6	43.0	44.4	45.6
20 0.0358"	6"	S	1802	1734	1682	1640	1605	1577	1429*	1232*
		G'	54.7	59.6	64.2	68.3	72.1	75.6	78.9	81.9
	12"	S	1447	1384	1336	1297	1265	1238	1216	1197
		G'	52.1	56.4	60.2	63.7	66.8	69.7	72.3	74.6
	18"	S	1132	1069	1020	982	950	923	901	881
		G'	50.4	54.2	57.5	60.5	63.1	65.5	67.6	69.5
	24"	S	974	912	863	824	792	765	743	724
		G'	49.1	52.6	55.5	58.1	60.4	62.4	64.2	65.8
	30"	S	880	817	768	729	697	671	648	629
		G'	48.2	51.3	54.0	56.3	58.3	60.0	61.5	62.8
	36"	S	817	754	705	666	634	608	585	566
		G'	47.4	50.4	52.8	54.9	56.6	58.1	59.4	60.5
18 0.0474"	6"	S	2354	2266	2197	2142	2097	2060	1885*	1626*
		G'	93.1	100.0	106.1	111.6	116.5	120.9	124.9	128.6
	12"	S	1905	1809	1745	1694	1652	1618	1588	1563
		G'	86.7	92.3	97.0	101.2	104.9	108.1	111.0	113.6
	18"	S	1494	1397	1333	1282	1241	1206	1176	1151
		G'	82.6	87.2	91.0	94.3	97.1	99.5	101.6	103.5
	24"	S	1288	1191	1127	1076	1035	1000	971	945
		G'	79.7	83.6	86.8	89.4	91.6	93.4	95.0	96.3
	30"	S	1164	1067	1004	953	911	876	847	822
		G'	77.6	81.0	83.6	85.7	87.4	88.8	90.0	90.9
	36"	S	1082	985	921	870	829	794	765	739
		G'	75.9	78.9	81.1	82.9	84.2	85.3	86.1	86.7
16 0.0598"	6"	S	2927	2817	2732	2663	2608	2561	2370*	2043*
		G'	139.1	147.4	154.6	160.9	166.4	171.3	175.6	179.5
	12"	S	2386	2263	2170	2106	2055	2011	1975	1944
		G'	126.7	132.8	137.9	142.1	145.8	149.0	151.8	154.2
	18"	S	1874	1751	1657	1594	1542	1499	1463	1431
		G'	119.0	123.6	127.3	130.2	132.7	134.8	136.5	138.0
	24"	S	1618	1495	1401	1338	1286	1243	1207	1175
		G'	113.7	117.2	119.9	122.0	123.6	124.9	125.9	126.8
	30"	S	1465	1341	1248	1184	1133	1090	1053	1022
		G'	109.9	112.6	114.6	116.0	117.0	117.7	118.2	118.5
	36"	S	1362	1238	1145	1082	1030	987	951	919
		G'	107.0	109.1	110.5	111.4	111.9	112.1	112.2	112.2

See Table 4 notes.

TABLE 33—VERSA-DEK® S & LS – ALLOWABLE DIAPHRAGM SHEAR[1-5]

SUPPORT CONNECTION: Hilti X-ENP-19-L15 (steel substrate thickness ≥ 0.25 inch)
SIDELAP CONNECTION: Hilti S-SLC01 M HWH, S-SLC02 M HWH or #12 self-drilling screws

S = Allowable Diaphragm Shear (plf)
G' = Stiffness Factor (kips/in.)

ATTACHMENT PATTERN: 24.5/4			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	7' - 0"	8' - 0"	9' - 0"	10' - 0"	11' - 0"	12' - 0"	13' - 0"	14' - 0"
22 0.0295"	6"	S	650	635	623	614	606	599	594	589
		G'	34.8	38.0	40.9	43.5	46.0	48.2	50.3	52.2
	12"	S	418	401	389	378	370	363	357	352
		G'	32.9	35.5	37.8	39.8	41.7	43.3	44.8	46.1
	18"	S	322	306	293	283	275	268	262	257
		G'	31.8	34.0	36.0	37.6	39.1	40.3	41.4	42.4
	24"	S	274	258	245	235	227	220	214	209
		G'	31.0	33.1	34.7	36.1	37.3	38.3	39.2	39.9
	30"	S	246	229	217	207	198	191	185	180
		G'	30.5	32.4	33.9	35.1	36.1	36.9	37.5	38.1
	36"	S	227	210	198	187	179	172	166	161
		G'	30.1	31.8	33.2	34.3	35.1	35.8	36.3	36.7
20 0.0358"	6"	S	786	769	755	743	734	726	719	713
		G'	50.7	54.7	58.2	61.4	64.3	66.9	69.3	71.5
	12"	S	506	486	471	459	449	440	433	427
		G'	47.0	50.1	52.7	54.9	56.8	58.5	60.0	61.4
	18"	S	390	370	355	343	333	324	317	311
		G'	44.9	47.4	49.4	51.1	52.5	53.7	54.6	55.5
	24"	S	332	312	297	285	275	266	259	253
		G'	43.6	45.7	47.4	48.7	49.7	50.5	51.1	51.6
	30"	S	297	278	262	250	240	232	225	218
		G'	42.7	44.5	45.9	46.9	47.7	48.2	48.6	48.9
	36"	S	274	255	239	227	217	208	201	195
		G'	42.0	43.6	44.8	45.6	46.2	46.6	46.8	46.9
18 0.0474"	6"	S	1036	1013	995	980	967	957	948	940
		G'	83.3	88.3	92.6	96.3	99.6	102.4	105.0	107.2
	12"	S	677	642	622	606	593	582	572	564
		G'	75.0	78.2	80.8	82.9	84.6	86.0	87.2	88.3
	18"	S	524	489	469	452	439	428	419	411
		G'	70.5	72.7	74.3	75.5	76.4	77.1	77.6	77.9
	24"	S	447	412	392	376	363	352	342	334
		G'	67.7	69.3	70.3	70.9	71.3	71.4	71.5	71.4
	30"	S	401	366	346	330	317	306	296	288
		G'	65.8	66.9	67.5	67.7	67.7	67.6	67.3	67.0
	36"	S	370	335	315	299	286	275	266	258
		G'	64.4	65.2	65.5	65.4	65.2	64.7	64.2	63.7
16 0.0598"	6"	S	1300	1271	1249	1230	1215	1202	1191	1181
		G'	120.3	125.6	130.0	133.7	136.8	139.5	141.9	143.9
	12"	S	863	817	783	763	746	732	721	711
		G'	105.2	107.9	109.9	111.3	112.5	113.3	114.0	114.5
	18"	S	669	623	589	569	553	539	527	517
		G'	97.5	98.7	99.4	99.7	99.8	99.7	99.6	99.3
	24"	S	572	526	492	472	456	442	430	420
		G'	92.7	93.1	93.0	92.7	92.1	91.4	90.7	90.0
	30"	S	514	468	434	414	398	384	372	362
		G'	89.6	89.4	88.7	87.9	86.9	85.8	84.8	83.7
	36"	S	475	429	396	376	359	345	334	324
		G'	87.3	86.7	85.6	84.4	83.1	81.8	80.5	79.2

ATTACHMENT PATTERN: 24.5/8			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	7' - 0"	8' - 0"	9' - 0"	10' - 0"	11' - 0"	12' - 0"	13' - 0"	14' - 0"
22 0.0295"	6"	S	793	765	744	727	713	701	691	683
		G'	35.4	38.6	41.6	44.3	46.8	49.1	51.2	53.1
	12"	S	506	479	458	440	427	415	405	397
		G'	34.0	36.8	39.3	41.5	43.4	45.1	46.7	48.1
	18"	S	411	383	362	345	331	319	310	301
		G'	33.3	35.8	38.0	39.9	41.5	42.9	44.1	45.2
	24"	S	363	336	314	297	283	272	262	253
		G'	32.8	35.2	37.2	38.9	40.3	41.5	42.5	43.3
	30"	S	334	307	286	269	255	243	233	225
		G'	32.5	34.8	36.6	38.2	39.4	40.5	41.3	42.0
	36"	S	315	288	267	249	236	224	214	206
		G'	32.3	34.5	36.2	37.7	38.8	39.7	40.5	41.1
20 0.0358"	6"	S	960	927	902	881	864	850	838	828
		G'	51.7	55.9	59.5	62.8	65.8	68.4	70.8	73.0
	12"	S	613	580	554	533	517	503	491	480
		G'	49.1	52.4	55.3	57.7	59.8	61.6	63.2	64.6
	18"	S	497	464	438	418	401	387	375	365
		G'	47.7	50.6	53.0	55.0	56.6	57.9	59.0	59.9
	24"	S	439	406	380	360	343	329	317	307
		G'	46.9	49.5	51.6	53.2	54.5	55.6	56.4	57.0
	30"	S	404	371	345	325	308	294	282	272
		G'	46.4	48.8	50.6	52.1	53.1	53.9	54.5	55.0
	36"	S	381	348	322	302	285	271	259	249
		G'	46.0	48.2	49.9	51.2	52.1	52.8	53.2	53.5
18 0.0474"	6"	S	1277	1225	1191	1164	1142	1124	1108	1094
		G'	85.8	91.0	95.5	99.3	102.6	105.5	108.0	110.3
	12"	S	817	764	731	704	682	663	648	634
		G'	79.7	83.3	86.2	88.5	90.4	91.9	93.1	94.2
	18"	S	664	611	577	550	528	510	494	481
		G'	76.6	79.4	81.5	83.0	84.1	84.8	85.4	85.7
	24"	S	587	534	501	474	451	433	418	404
		G'	74.8	77.1	78.6	79.6	80.2	80.5	80.6	80.5
	30"	S	541	488	455	428	405	387	371	358
		G'	73.5	75.5	76.7	77.3	77.6	77.6	77.4	77.0
	36"	S	510	458	424	397	375	356	341	327
		G'	72.7	74.3	75.3	75.7	75.7	75.5	75.0	74.5
16 0.0598"	6"	S	1610	1550	1499	1465	1438	1415	1394	1376
		G'	125.0	130.5	135.0	138.8	141.9	144.6	146.9	148.9
	12"	S	1037	969	918	884	857	834	814	798
		G'	113.7	116.8	119.0	120.5	121.7	122.5	123.1	123.4
	18"	S	843	775	725	691	663	640	621	604
		G'	108.2	110.0	111.0	111.5	111.6	111.5	111.1	110.7
	24"	S	746	679	628	594	567	544	524	507
		G'	104.9	106.0	106.3	106.1	105.6	104.9	104.0	103.1
	30"	S	688	620	570	536	508	485	466	449
		G'	102.8	103.3	103.2	102.5	101.6	100.5	99.3	98.0
	36"	S	649	582	531	497	470	447	427	411
		G'	101.2	101.5	100.9	100.0	98.7	97.3	95.9	94.4

See Table 4 notes.

TABLE 34—VERSA-DEK® S & LS – ALLOWABLE DIAPHRAGM SHEAR[1-5]

SUPPORT CONNECTION: Hilti X-HSN24 (0.125 inch ≤ steel substrate thickness ≤ 0.375 inch)
SIDELAP CONNECTION: Hilti S-SLC01 M HWH, S-SLC02 M HWH or #12 self-drilling screws

S = Allowable Diaphragm Shear (plf)
G' = Stiffness Factor (kips/in.)

ATTACHMENT PATTERN: 24.5/4

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT							
			7' - 0"	8' - 0"	9' - 0"	10' - 0"	11' - 0"	12' - 0"	13' - 0"	14' - 0"
22 0.0295"	6"	S	630	617	607	598	591	585	580	575
		G'	34.4	37.6	40.4	43.1	45.5	47.7	49.7	51.6
	12"	S	411	396	384	374	366	359	354	349
		G'	32.0	34.5	36.7	38.7	40.5	42.1	43.5	44.8
	18"	S	316	300	288	278	271	264	258	254
		G'	30.5	32.6	34.4	36.0	37.3	38.5	39.5	40.4
	24"	S	268	252	240	231	223	216	211	206
		G'	29.5	31.3	32.8	34.1	35.1	36.0	36.8	37.5
	30"	S	239	224	212	202	194	188	182	177
		G'	28.8	30.3	31.6	32.7	33.5	34.2	34.8	35.3
	36"	S	220	205	193	183	175	168	163	158
		G'	28.2	29.6	30.7	31.6	32.3	32.8	33.3	33.6
20 0.0358"	6"	S	763	747	734	724	715	708	702	697
		G'	49.9	53.9	57.4	60.6	63.4	66.0	68.4	70.5
	12"	S	498	480	465	453	444	436	429	423
		G'	45.4	48.3	50.8	53.0	54.8	56.5	58.0	59.3
	18"	S	382	364	349	337	328	320	313	307
		G'	42.7	45.0	46.8	48.4	49.7	50.7	51.7	52.5
	24"	S	324	306	291	279	270	262	255	249
		G'	40.9	42.7	44.1	45.3	46.2	46.9	47.5	48.0
	30"	S	290	271	256	245	235	227	220	215
		G'	39.6	41.1	42.2	43.1	43.7	44.1	44.5	44.7
	36"	S	267	248	233	221	212	204	197	191
		G'	38.7	39.9	40.8	41.4	41.8	42.1	42.2	42.3
18 0.0474"	6"	S	1005	984	967	954	943	934	926	919
		G'	81.6	86.5	90.8	94.5	97.7	100.6	103.1	105.4
	12"	S	667	633	614	599	586	576	567	559
		G'	71.5	74.6	77.0	79.1	80.8	82.2	83.5	84.5
	18"	S	513	480	461	445	433	422	414	406
		G'	65.8	67.8	69.3	70.4	71.2	71.9	72.5	72.9
	24"	S	436	403	384	369	356	346	337	329
		G'	62.1	63.4	64.2	64.8	65.1	65.3	65.4	65.4
	30"	S	390	357	338	323	310	300	291	283
		G'	59.6	60.4	60.7	60.9	60.8	60.7	60.5	60.3
	36"	S	360	326	307	292	279	269	260	253
		G'	57.7	58.1	58.2	58.0	57.7	57.3	56.9	56.5
16 0.0598"	6"	S	1260	1235	1214	1198	1184	1172	1162	1154
		G'	117.2	122.4	126.8	130.5	133.7	136.5	138.9	141.0
	12"	S	848	805	773	754	738	725	714	705
		G'	99.3	101.8	103.8	105.3	106.5	107.5	108.3	109.0
	18"	S	655	611	579	560	545	531	520	511
		G'	89.7	90.8	91.4	91.8	92.0	92.1	92.1	92.1
	24"	S	558	515	483	463	448	435	424	414
		G'	83.7	83.9	83.8	83.5	83.0	82.6	82.1	81.6
	30"	S	500	457	425	405	390	377	366	356
		G'	79.6	79.2	78.5	77.7	76.9	76.1	75.3	74.5
	36"	S	461	418	386	367	351	338	327	317
		G'	76.6	75.7	74.7	73.6	72.5	71.4	70.4	69.4

ATTACHMENT PATTERN: 24.5/8

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT							
			7' - 0"	8' - 0"	9' - 0"	10' - 0"	11' - 0"	12' - 0"	13' - 0"	14' - 0"
22 0.0295"	6"	S	780	754	734	717	703	691	681	672
		G'	34.9	38.0	40.9	43.6	46.0	48.3	50.3	52.3
	12"	S	494	468	448	432	418	407	398	390
		G'	33.0	35.6	37.9	39.9	41.8	43.4	44.9	46.2
	18"	S	398	372	352	336	323	312	303	295
		G'	31.9	34.1	36.1	37.8	39.2	40.5	41.6	42.6
	24"	S	350	324	304	288	275	264	255	247
		G'	31.2	33.2	34.9	36.3	37.5	38.5	39.4	40.1
	30"	S	322	296	276	260	247	236	226	218
		G'	30.7	32.5	34.1	35.3	36.3	37.1	37.8	38.3
	36"	S	303	277	257	241	227	216	207	199
		G'	30.3	32.0	33.4	34.5	35.4	36.1	36.6	37.0
20 0.0358"	6"	S	945	914	890	869	852	837	825	815
		G'	50.7	54.7	58.3	61.5	64.4	67.0	69.4	71.6
	12"	S	597	566	542	523	507	494	482	473
		G'	47.1	50.2	52.8	55.1	57.0	58.7	60.2	61.6
	18"	S	482	450	426	407	391	378	367	357
		G'	45.1	47.6	49.7	51.4	52.8	53.9	54.9	55.8
	24"	S	424	392	368	349	333	320	309	299
		G'	43.8	46.0	47.6	49.0	50.0	50.8	51.5	52.0
	30"	S	389	358	333	314	298	285	274	264
		G'	42.9	44.8	46.2	47.3	48.0	48.6	49.0	49.3
	36"	S	366	335	310	291	275	262	251	241
		G'	42.3	44.0	45.2	46.0	46.6	47.0	47.2	47.3
18 0.0474"	6"	S	1250	1207	1173	1146	1124	1105	1089	1076
		G'	83.5	88.5	92.8	96.5	99.8	102.6	105.2	107.4
	12"	S	796	747	715	690	669	652	637	624
		G'	75.3	78.5	81.1	83.2	85.0	86.4	87.6	88.6
	18"	S	643	593	562	536	515	498	483	471
		G'	70.9	73.1	74.8	76.0	76.9	77.6	78.1	78.4
	24"	S	566	517	485	460	439	421	407	394
		G'	68.2	69.8	70.8	71.5	71.8	72.0	72.1	72.0
	30"	S	520	471	439	413	393	375	361	348
		G'	66.3	67.5	68.1	68.4	68.4	68.2	67.9	67.6
	36"	S	489	440	408	383	362	345	330	317
		G'	64.9	65.8	66.1	66.1	65.8	65.4	64.9	64.4
16 0.0598"	6"	S	1569	1516	1475	1441	1413	1390	1370	1353
		G'	120.6	125.9	130.3	134.0	137.1	139.8	142.2	144.2
	12"	S	1010	946	899	867	841	819	801	785
		G'	105.8	108.5	110.4	111.9	113.0	113.9	114.5	115.1
	18"	S	816	753	705	673	647	626	607	592
		G'	98.2	99.5	100.2	100.5	100.6	100.5	100.3	100.0
	24"	S	720	656	608	577	551	529	511	495
		G'	93.6	94.0	93.9	93.5	92.9	92.3	91.5	90.8
	30"	S	662	598	550	519	493	471	453	437
		G'	90.4	90.3	89.7	88.8	87.8	86.7	85.7	84.6
	36"	S	623	559	512	480	454	432	414	398
		G'	88.2	87.6	86.6	85.4	84.1	82.7	81.4	80.2

See Table 4 notes.

TABLE 35—VERSA-DEK® S ES & LS ES – ALLOWABLE DIAPHRAGM SHEAR[1-3]

SUPPORT CONNECTION: 1/2" Effective Weld Diameter
SIDELAP CONNECTION: #10 Screws

S = Allowable Diaphragm Shear (plf)
G' = Stiffness Factor (kips/in.)

ATTACHMENT PATTERN: 24/4			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	7' - 0"	8' - 0"	9' - 0"	10' - 0"	11' - 0"	12' - 0"	13' - 0"	14' - 0"
22 0.0295"	6"	S	634	608	587	571	557	546	537	528
		G'	32.8	35.8	38.6	41.2	43.6	45.8	47.8	49.7
	12"	S	423	397	376	360	346	335	325	317
		G'	30.7	33.2	35.4	37.3	39.1	40.7	42.1	43.4
	18"	S	353	326	306	289	276	265	255	247
		G'	29.4	31.5	33.3	34.9	36.3	37.5	38.5	39.5
	24"	S	317	291	271	254	241	229	220	212
		G'	28.6	30.4	31.9	33.2	34.3	35.3	36.1	36.8
	30"	S	296	270	249	233	219	208	199	191
		G'	27.9	29.6	30.9	32.0	32.9	33.7	34.3	34.8
	36"	S	282	256	235	219	205	194	185	177
		G'	27.5	29.0	30.2	31.1	31.9	32.5	32.9	33.3
20 0.0358"	6"	S	768	736	711	691	675	662	650	640
		G'	47.8	51.7	55.1	58.3	61.1	63.7	66.0	68.2
	12"	S	512	480	455	435	419	405	394	384
		G'	43.8	46.7	49.3	51.4	53.3	55.0	56.5	57.8
	18"	S	426	394	370	350	334	320	309	299
		G'	41.5	43.8	45.7	47.3	48.6	49.8	50.8	51.6
	24"	S	384	352	327	307	291	277	266	256
		G'	40.0	41.9	43.4	44.6	45.5	46.3	46.9	47.5
	30"	S	358	326	301	281	265	252	240	230
		G'	38.9	40.5	41.7	42.6	43.3	43.8	44.2	44.5
	36"	S	341	309	284	264	248	235	223	213
		G'	38.0	39.4	40.4	41.1	41.6	42.0	42.2	42.3
18 0.0474"	6"	S	1028	971	939	913	891	874	859	846
		G'	78.8	83.7	87.9	91.6	94.9	97.8	100.4	102.7
	12"	S	689	632	599	573	552	534	519	507
		G'	69.8	72.9	75.4	77.5	79.3	80.8	82.0	83.1
	18"	S	576	519	486	460	439	421	406	394
		G'	64.7	66.8	68.4	69.6	70.5	71.2	71.8	72.2
	24"	S	519	462	430	404	383	365	350	337
		G'	61.5	62.9	63.9	64.5	64.9	65.1	65.3	65.3
	30"	S	485	428	396	370	349	331	316	303
		G'	59.2	60.2	60.7	61.0	61.0	60.9	60.7	60.5
	36"	S	462	406	373	347	326	308	293	280
		G'	57.6	58.2	58.4	58.4	58.1	57.8	57.4	57.0
16 0.0598"	6"	S	1308	1234	1180	1148	1121	1099	1080	1064
		G'	113.9	119.2	123.6	127.4	130.7	133.5	135.9	138.1
	12"	S	880	806	752	720	693	671	652	636
		G'	97.6	100.3	102.4	104.0	105.2	106.2	107.1	107.7
	18"	S	738	664	609	577	551	528	510	494
		G'	89.0	90.3	91.0	91.5	91.7	91.8	91.8	91.8
	24"	S	666	592	538	506	479	457	438	422
		G'	83.6	84.0	84.0	83.8	83.4	82.9	82.5	82.0
	30"	S	624	550	495	463	436	414	396	380
		G'	80.0	79.7	79.2	78.5	77.7	76.9	76.1	75.3
	36"	S	595	521	467	434	408	386	367	351
		G'	77.3	76.7	75.7	74.7	73.6	72.5	71.5	70.5

ATTACHMENT PATTERN: 24/8			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	7' - 0"	8' - 0"	9' - 0"	10' - 0"	11' - 0"	12' - 0"	13' - 0"	14' - 0"
22 0.0295"	6"	S	756	714	682	656	635	617	602	589
		G'	33.1	36.2	39.1	41.7	44.1	46.3	48.3	50.2
	12"	S	545	503	471	445	424	406	391	378
		G'	31.5	34.1	36.4	38.4	40.2	41.9	43.3	44.7
	18"	S	474	433	400	374	353	335	321	308
		G'	30.5	32.8	34.8	36.4	37.9	39.2	40.3	41.3
	24"	S	439	397	365	339	318	300	285	273
		G'	29.9	32.0	33.7	35.2	36.4	37.4	38.3	39.1
	30"	S	418	376	344	318	297	279	264	251
		G'	29.5	31.4	33.0	34.2	35.3	36.2	36.9	37.5
	36"	S	404	362	330	304	283	265	250	237
		G'	29.2	31.0	32.4	33.6	34.5	35.2	35.8	36.3
20 0.0358"	6"	S	914	864	825	794	768	747	729	714
		G'	48.5	52.4	55.9	59.1	62.0	64.6	66.9	69.1
	12"	S	658	608	569	538	512	491	473	457
		G'	45.3	48.4	51.0	53.3	55.2	57.0	58.5	59.8
	18"	S	573	523	484	452	427	405	387	372
		G'	43.5	46.1	48.2	49.9	51.4	52.6	53.6	54.5
	24"	S	530	480	441	410	384	363	345	329
		G'	42.4	44.6	46.3	47.7	48.8	49.7	50.4	51.0
	30"	S	504	454	415	384	358	337	319	304
		G'	41.6	43.6	45.1	46.2	47.1	47.7	48.2	48.5
	36"	S	487	437	398	367	341	320	302	287
		G'	41.0	42.8	44.1	45.1	45.8	46.2	46.5	46.7
18 0.0474"	6"	S	1219	1138	1087	1047	1013	985	962	942
		G'	80.4	85.4	89.7	93.5	96.7	99.6	102.2	104.5
	12"	S	880	799	748	707	674	646	622	602
		G'	73.0	76.3	79.0	81.2	83.0	84.5	85.7	86.8
	18"	S	767	686	635	594	561	533	509	489
		G'	69.0	71.4	73.2	74.5	75.5	76.3	76.8	77.2
	24"	S	710	630	579	538	504	476	453	433
		G'	66.6	68.4	69.6	70.4	70.8	71.1	71.2	71.2
	30"	S	676	596	545	504	470	442	419	399
		G'	64.9	66.3	67.1	67.5	67.6	67.6	67.4	67.1
	36"	S	654	573	522	481	448	420	396	376
		G'	63.7	64.8	65.3	65.4	65.3	65.0	64.6	64.1
16 0.0598"	6"	S	1546	1443	1365	1314	1272	1238	1208	1183
		G'	116.9	122.3	126.8	130.6	133.8	136.5	138.9	141.0
	12"	S	1118	1015	937	886	845	810	781	755
		G'	103.3	106.2	108.3	109.9	111.1	112.0	112.7	113.3
	18"	S	976	872	794	743	702	667	638	613
		G'	96.4	97.9	98.8	99.2	99.4	99.4	99.2	99.0
	24"	S	904	801	723	672	631	596	567	541
		G'	92.2	92.9	93.0	92.7	92.3	91.7	91.0	90.3
	30"	S	861	758	680	629	588	553	524	499
		G'	89.4	89.5	89.1	88.3	87.4	86.5	85.5	84.4
	36"	S	833	729	652	601	559	525	495	470
		G'	87.3	87.1	86.3	85.2	84.0	82.7	81.5	80.2

See Table 4 notes.

TABLE 36—VERSA-DEK® S ES & LS ES – ALLOWABLE DIAPHRAGM SHEAR[1-3]

SUPPORT CONNECTION: 1 1/2" Effective Weld Diameter
SIDELAP CONNECTION: 1 1/2" Long Fillet Welds or 1 1/2" Seam Welds

S = Allowable Diaphragm Shear (plf)
G' = Stiffness Factor (kips/in.)

ATTACHMENT PATTERN: 24/4			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	7' - 0"	8' - 0"	9' - 0"	10' - 0"	11' - 0"	12' - 0"	13' - 0"	14' - 0"
22 0.0295"	6"	S	1271	1243	1221	1204	1190	1178	1168	1065*
		G'	34.8	38.4	41.7	44.8	47.8	50.5	53.1	55.5
	12"	S	1020	988	962	941	924	909	896	885
		G'	33.5	36.7	39.6	42.4	44.9	47.2	49.4	51.4
	18"	S	817	781	752	729	710	695	682	670
		G'	32.5	35.4	38.1	40.5	42.7	44.7	46.6	48.3
	24"	S	686	650	621	598	580	564	551	540
		G'	31.8	34.5	36.9	39.1	41.0	42.8	44.4	45.9
	30"	S	608	571	543	520	501	486	472	461
		G'	31.2	33.7	35.9	37.9	39.7	41.3	42.7	44.0
	36"	S	556	519	490	468	449	433	420	409
		G'	30.7	33.1	35.1	37.0	38.6	40.0	41.3	42.4
20 0.0358"	6"	S	1532	1498	1472	1451	1433	1419	1407	1290*
		G'	51.8	56.6	61.0	65.1	68.8	72.2	75.4	78.4
	12"	S	1229	1190	1159	1134	1113	1095	1080	1067
		G'	49.1	53.3	57.0	60.4	63.4	66.2	68.8	71.2
	18"	S	984	940	906	878	856	837	821	808
		G'	47.2	50.9	54.1	57.0	59.6	61.9	64.0	65.9
	24"	S	827	783	748	721	698	680	664	650
		G'	45.8	49.1	51.9	54.4	56.6	58.6	60.3	61.9
	30"	S	732	688	654	626	604	585	569	556
		G'	44.7	47.7	50.2	52.4	54.3	56.0	57.4	58.7
	36"	S	669	625	591	563	541	522	506	492
		G'	43.8	46.6	48.8	50.8	52.4	53.9	55.1	56.2
18 0.0474"	6"	S	2001	1957	1922	1895	1873	1854	1838	1702*
		G'	88.6	95.4	101.4	106.9	111.7	116.1	120.2	123.8
	12"	S	1606	1555	1514	1481	1454	1431	1411	1393
		G'	81.9	87.4	92.1	96.2	99.8	103.1	106.0	108.6
	18"	S	1301	1228	1183	1147	1118	1094	1073	1055
		G'	77.4	81.9	85.6	88.9	91.7	94.1	96.3	98.2
	24"	S	1095	1022	977	942	912	888	867	849
		G'	74.2	77.9	81.0	83.5	85.7	87.6	89.2	90.5
	30"	S	972	899	854	818	789	764	743	726
		G'	71.7	74.9	77.4	79.5	81.2	82.6	83.8	84.8
	36"	S	889	816	772	736	706	682	661	643
		G'	69.8	72.5	74.6	76.3	77.6	78.6	79.5	80.2
16 0.0598"	6"	S	2488	2433	2390	2356	2328	2305	2285	2139*
		G'	132.9	141.2	148.4	154.7	160.3	165.2	169.6	173.6
	12"	S	1997	1934	1883	1842	1808	1779	1754	1733
		G'	119.9	125.9	131.0	135.3	139.1	142.4	145.2	147.8
	18"	S	1628	1541	1471	1427	1390	1360	1334	1312
		G'	111.4	115.9	119.6	122.7	125.2	127.4	129.3	130.9
	24"	S	1379	1285	1215	1171	1134	1104	1078	1056
		G'	105.5	108.9	111.6	113.7	115.5	116.9	118.0	119.0
	30"	S	1225	1132	1062	1017	980	950	924	902
		G'	101.0	103.7	105.6	107.1	108.2	109.0	109.7	110.2
	36"	S	1123	1029	959	915	878	848	822	800
		G'	97.6	99.7	101.0	102.0	102.6	103.0	103.2	103.4

ATTACHMENT PATTERN: 24/8			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	7' - 0"	8' - 0"	9' - 0"	10' - 0"	11' - 0"	12' - 0"	13' - 0"	14' - 0"
22 0.0295"	6"	S	1496	1440	1396	1361	1332	1309	1235*	1065*
		G'	34.9	38.5	41.8	45.0	47.9	50.6	53.2	55.6
	12"	S	1200	1148	1108	1076	1049	1027	1009	993
		G'	33.7	37.0	39.9	42.7	45.2	47.6	49.7	51.8
	18"	S	939	887	846	814	788	766	747	731
		G'	32.9	35.9	38.6	41.0	43.3	45.3	47.2	49.0
	24"	S	808	756	716	683	657	635	616	600
		G'	32.3	35.1	37.6	39.8	41.8	43.7	45.3	46.8
	30"	S	729	678	637	605	579	557	538	522
		G'	31.8	34.5	36.8	38.9	40.7	42.3	43.8	45.2
	36"	S	677	625	585	553	526	504	486	470
		G'	31.5	34.0	36.2	38.1	39.8	41.3	42.6	43.8
20 0.0358"	6"	S	1802	1734	1682	1640	1605	1577	1496*	1290*
		G'	52.0	56.8	61.2	65.3	69.0	72.5	75.7	78.7
	12"	S	1446	1384	1335	1296	1264	1238	1215	1196
		G'	49.6	53.8	57.6	61.0	64.1	66.9	69.5	71.8
	18"	S	1131	1068	1020	981	949	923	900	881
		G'	48.0	51.7	55.0	58.0	60.6	63.0	65.1	67.0
	24"	S	973	911	862	823	791	765	743	723
		G'	46.8	50.2	53.2	55.8	58.0	60.0	61.8	63.4
	30"	S	879	816	768	729	697	670	648	629
		G'	46.0	49.1	51.8	54.1	56.1	57.8	59.3	60.6
	36"	S	816	753	705	666	634	607	585	566
		G'	45.3	48.2	50.7	52.7	54.5	56.0	57.3	58.4
18 0.0474"	6"	S	2354	2266	2197	2142	2097	2060	1973*	1702*
		G'	89.1	95.9	102.0	107.4	112.3	116.7	120.7	124.4
	12"	S	1904	1808	1744	1693	1652	1617	1588	1563
		G'	83.1	88.6	93.4	97.5	101.2	104.5	107.4	110.0
	18"	S	1492	1396	1332	1281	1240	1205	1176	1151
		G'	79.2	83.8	87.7	91.0	93.8	96.3	98.5	100.4
	24"	S	1286	1190	1126	1075	1034	999	970	945
		G'	76.5	80.4	83.7	86.3	88.6	90.5	92.1	93.5
	30"	S	1163	1066	1003	952	910	876	846	821
		G'	74.5	77.9	80.6	82.8	84.6	86.1	87.3	88.3
	36"	S	1081	984	920	870	828	793	764	739
		G'	73.0	76.0	78.3	80.1	81.5	82.6	83.5	84.2
16 0.0598"	6"	S	2927	2817	2732	2663	2608	2561	2481*	2139*
		G'	133.8	142.2	149.4	155.7	161.2	166.2	170.6	174.6
	12"	S	2385	2261	2168	2105	2054	2011	1974	1943
		G'	122.1	128.2	133.4	137.7	141.5	144.7	147.6	150.1
	18"	S	1873	1749	1656	1593	1542	1498	1462	1431
		G'	114.8	119.5	123.2	126.3	128.9	131.0	132.8	134.4
	24"	S	1617	1493	1400	1337	1285	1242	1206	1175
		G'	109.8	113.4	116.2	118.4	120.1	121.5	122.6	123.5
	30"	S	1463	1340	1247	1184	1132	1089	1052	1021
		G'	106.1	109.0	111.1	112.6	113.7	114.5	115.1	115.5
	36"	S	1361	1237	1144	1081	1029	986	950	919
		G'	103.3	105.6	107.2	108.2	108.8	109.1	109.3	109.4

See Table 4 notes.

TABLE 37—VERSA-DEK® S ES & LS ES – ALLOWABLE DIAPHRAGM SHEAR[1-5]

SUPPORT CONNECTION: Hilti X-ENP-19-L15 (steel substrate thickness ≥ 0.25 inch)
SIDELAP CONNECTION: Hilti S-SLC01 M HWH, S-SLC02 M HWH or #12 self-drilling screws

S = Allowable Diaphragm Shear (plf)
G' = Stiffness Factor (kips/in.)

ATTACHMENT PATTERN: 24/4			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	7' - 0"	8' - 0"	9' - 0"	10' - 0"	11' - 0"	12' - 0"	13' - 0"	14' - 0"
22 0.0295"	6"	S	652	638	626	616	608	602	596	591
		G'	33.0	36.1	38.9	41.5	43.9	46.1	48.1	50.0
	12"	S	416	400	387	377	369	362	356	352
		G'	31.3	33.8	36.1	38.1	39.9	41.5	43.0	44.3
	18"	S	321	304	292	282	274	267	261	256
		G'	30.2	32.4	34.3	36.0	37.4	38.7	39.8	40.8
	24"	S	273	257	244	234	226	219	213	208
		G'	29.5	31.5	33.2	34.6	35.8	36.8	37.7	38.4
	30"	S	244	228	216	205	197	190	185	180
		G'	29.0	30.9	32.4	33.6	34.6	35.4	36.1	36.7
	36"	S	225	209	196	186	178	171	166	161
		G'	28.7	30.4	31.8	32.8	33.7	34.4	35.0	35.4
20 0.0358"	6"	S	790	772	758	746	736	728	721	716
		G'	48.3	52.2	55.7	58.9	61.7	64.3	66.7	68.8
	12"	S	504	485	469	457	447	439	432	426
		G'	44.9	47.9	50.5	52.7	54.6	56.4	57.9	59.2
	18"	S	388	369	354	341	332	323	316	310
		G'	42.9	45.4	47.4	49.1	50.5	51.7	52.7	53.6
	24"	S	330	311	296	284	274	265	258	252
		G'	41.7	43.8	45.5	46.8	47.8	48.7	49.4	49.9
	30"	S	296	276	261	249	239	231	224	218
		G'	40.8	42.7	44.1	45.1	45.9	46.5	47.0	47.3
	36"	S	272	253	238	226	216	207	200	194
		G'	40.2	41.8	43.0	43.9	44.5	44.9	45.2	45.4
18 0.0474"	6"	S	1040	1017	998	983	971	961	952	944
		G'	79.9	84.9	89.2	92.9	96.2	99.0	101.6	103.9
	12"	S	675	640	620	604	591	580	571	563
		G'	72.0	75.3	77.9	80.1	81.8	83.3	84.6	85.7
	18"	S	521	487	467	451	438	427	418	410
		G'	67.8	70.1	71.8	73.0	74.0	74.7	75.3	75.7
	24"	S	445	410	390	374	361	350	341	333
		G'	65.1	66.8	67.9	68.6	69.0	69.3	69.4	69.4
	30"	S	399	364	344	328	315	304	295	287
		G'	63.3	64.5	65.2	65.5	65.6	65.5	65.3	65.1
	36"	S	368	333	313	297	284	273	264	256
		G'	61.9	62.9	63.3	63.3	63.1	62.8	62.4	61.9
16 0.0598"	6"	S	1305	1277	1254	1235	1220	1207	1195	1186
		G'	116.0	121.3	125.8	129.6	132.8	135.6	138.0	140.1
	12"	S	859	814	780	761	744	731	719	709
		G'	101.6	104.4	106.5	108.0	109.3	110.2	111.0	111.6
	18"	S	666	620	587	567	551	537	526	516
		G'	94.2	95.6	96.4	96.9	97.0	97.0	96.9	96.8
	24"	S	569	524	490	470	454	440	429	419
		G'	89.7	90.2	90.3	90.0	89.5	89.0	88.4	87.7
	30"	S	511	466	432	412	396	382	371	361
		G'	86.6	86.6	86.1	85.3	84.5	83.5	82.6	81.6
	36"	S	472	427	393	373	357	344	332	322
		G'	84.4	84.0	83.1	82.0	80.8	79.6	78.4	77.2

ATTACHMENT PATTERN: 24/8			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	7' - 0"	8' - 0"	9' - 0"	10' - 0"	11' - 0"	12' - 0"	13' - 0"	14' - 0"
22 0.0295"	6"	S	792	765	744	727	713	701	691	683
		G'	33.6	36.7	39.6	42.2	44.7	46.9	49.0	50.9
	12"	S	506	478	457	440	426	415	405	396
		G'	32.3	35.0	37.4	39.6	41.5	43.2	44.8	46.2
	18"	S	410	383	362	345	331	319	309	301
		G'	31.6	34.1	36.3	38.1	39.7	41.1	42.4	43.5
	24"	S	363	335	314	297	283	271	262	253
		G'	31.2	33.5	35.5	37.2	38.6	39.8	40.8	41.7
	30"	S	334	307	285	268	254	243	233	225
		G'	30.9	33.1	35.0	36.5	37.8	38.9	39.7	40.5
	36"	S	315	288	266	249	235	224	214	205
		G'	30.7	32.9	34.6	36.1	37.2	38.2	38.9	39.6
20 0.0358"	6"	S	960	927	901	881	864	850	838	828
		G'	49.3	53.3	56.9	60.1	63.1	65.7	68.1	70.3
	12"	S	612	579	554	533	516	502	490	480
		G'	46.8	50.1	52.9	55.4	57.5	59.3	60.9	62.3
	18"	S	496	463	438	417	400	386	375	364
		G'	45.6	48.4	50.8	52.8	54.4	55.8	56.9	57.9
	24"	S	439	406	380	359	342	328	317	306
		G'	44.8	47.4	49.5	51.2	52.5	53.5	54.4	55.1
	30"	S	404	371	345	325	308	294	282	272
		G'	44.3	46.7	48.6	50.0	51.2	52.0	52.7	53.1
	36"	S	381	348	322	301	285	271	259	248
		G'	43.9	46.2	47.9	49.2	50.2	50.9	51.4	51.7
18 0.0474"	6"	S	1277	1224	1190	1164	1142	1123	1108	1094
		G'	82.3	87.5	91.9	95.7	99.0	102.0	104.6	106.9
	12"	S	816	764	730	703	681	663	647	634
		G'	76.5	80.2	83.1	85.5	87.4	89.0	90.3	91.4
	18"	S	663	610	577	550	528	509	494	481
		G'	73.6	76.5	78.6	80.2	81.4	82.2	82.8	83.3
	24"	S	586	534	500	473	451	433	417	404
		G'	71.9	74.3	75.9	77.0	77.7	78.1	78.2	78.3
	30"	S	540	488	454	427	405	387	371	358
		G'	70.7	72.8	74.0	74.8	75.2	75.3	75.1	74.9
	36"	S	510	457	423	396	374	356	340	327
		G'	69.9	71.7	72.7	73.2	73.4	73.2	72.9	72.4
16 0.0598"	6"	S	1613	1549	1498	1465	1437	1414	1395	1378
		G'	120.5	126.1	130.7	134.5	137.7	140.5	142.8	144.9
	12"	S	1036	968	918	884	856	833	814	797
		G'	109.7	113.0	115.3	117.0	118.2	119.1	119.8	120.3
	18"	S	842	775	724	690	663	640	620	604
		G'	104.5	106.5	107.7	108.3	108.5	108.5	108.3	108.0
	24"	S	745	678	627	594	566	543	524	507
		G'	101.4	102.7	103.1	103.1	102.7	102.1	101.4	100.6
	30"	S	687	620	569	535	508	485	466	449
		G'	99.3	100.1	100.1	99.6	98.8	97.8	96.8	95.6
	36"	S	649	581	530	497	469	446	427	410
		G'	97.9	98.3	98.0	97.2	96.1	94.8	93.5	92.1

See Table 4 notes.

TABLE 38—VERSA-DEK® S ES & LS ES – ALLOWABLE DIAPHRAGM SHEAR[1-5]

SUPPORT CONNECTION: Hilti X-HSN24 (0.125 inch ≤ steel substrate thickness ≤ 0.375 inch)
SIDELAP CONNECTION: Hilti S-SLC01 M HWH, S-SLC02 M HWH or #12 self-drilling screws

S = Allowable Diaphragm Shear (plf)
G' = Stiffness Factor (kips/in.)

ATTACHMENT PATTERN: 24/4			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	7' - 0"	8' - 0"	9' - 0"	10' - 0"	11' - 0"	12' - 0"	13' - 0"	14' - 0"
22 0.0295"	6"	S	633	620	609	601	593	587	582	578
		G'	32.7	35.7	38.5	41.1	43.4	45.6	47.6	49.5
	12"	S	410	394	382	373	365	359	353	348
		G'	30.5	32.9	35.1	37.0	38.8	40.3	41.8	43.1
	18"	S	314	299	287	277	270	263	258	253
		G'	29.1	31.1	32.9	34.4	35.8	37.0	38.0	38.9
	24"	S	267	251	239	230	222	215	210	205
		G'	28.1	29.9	31.4	32.6	33.7	34.6	35.4	36.1
	30"	S	238	223	211	201	193	187	181	177
		G'	27.4	29.0	30.3	31.3	32.2	32.9	33.5	34.0
	36"	S	219	203	192	182	174	168	162	157
		G'	26.9	28.3	29.4	30.3	31.0	31.6	32.1	32.4
20 0.0358"	6"	S	766	750	737	727	718	711	705	700
		G'	47.6	51.5	54.9	58.0	60.9	63.4	65.8	67.9
	12"	S	497	478	464	452	443	435	428	422
		G'	43.4	46.3	48.7	50.9	52.8	54.4	55.9	57.2
	18"	S	381	362	348	336	327	319	312	306
		G'	40.9	43.1	45.0	46.5	47.8	49.0	49.9	50.8
	24"	S	323	304	290	278	269	261	254	249
		G'	39.2	41.0	42.4	43.6	44.5	45.3	45.9	46.4
	30"	S	288	269	255	243	234	226	219	214
		G'	38.0	39.5	40.6	41.5	42.1	42.6	43.0	43.3
	36"	S	265	246	232	220	211	203	196	191
		G'	37.0	38.3	39.2	39.9	40.3	40.7	40.9	41.0
18 0.0474"	6"	S	1009	988	972	958	947	938	929	923
		G'	78.3	83.2	87.4	91.1	94.4	97.3	99.8	102.2
	12"	S	664	631	612	597	585	574	566	558
		G'	68.8	71.9	74.4	76.4	78.2	79.7	81.0	82.1
	18"	S	511	478	459	444	431	421	412	405
		G'	63.4	65.4	66.9	68.1	69.0	69.8	70.4	70.8
	24"	S	434	401	382	367	355	344	336	328
		G'	59.9	61.2	62.1	62.7	63.1	63.4	63.5	63.6
	30"	S	388	355	336	321	309	298	290	282
		G'	57.4	58.3	58.8	59.0	59.0	59.0	58.8	58.6
	36"	S	357	324	306	290	278	268	259	251
		G'	55.6	56.1	56.3	56.2	56.0	55.7	55.3	54.9
16 0.0598"	6"	S	1266	1240	1220	1203	1189	1178	1168	1159
		G'	113.0	118.3	122.8	126.5	129.8	132.6	135.1	137.3
	12"	S	846	803	771	752	736	723	712	703
		G'	95.9	98.6	100.6	102.3	103.5	104.6	105.5	106.2
	18"	S	652	609	577	558	543	530	519	510
		G'	86.7	88.0	88.8	89.2	89.5	89.7	89.8	89.8
	24"	S	555	512	480	462	446	433	422	413
		G'	81.0	81.3	81.3	81.1	80.8	80.4	80.0	79.6
	30"	S	497	454	422	403	388	375	364	355
		G'	77.0	76.8	76.3	75.6	74.9	74.1	73.4	72.7
	36"	S	458	415	384	365	349	336	325	316
		G'	74.2	73.5	72.6	71.6	70.5	69.5	68.6	67.7

ATTACHMENT PATTERN: 24/8			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	7' - 0"	8' - 0"	9' - 0"	10' - 0"	11' - 0"	12' - 0"	13' - 0"	14' - 0"
22 0.0295"	6"	S	780	754	734	718	704	692	682	673
		G'	33.1	36.2	39.0	41.6	44.0	46.2	48.2	50.1
	12"	S	493	467	447	431	418	407	398	390
		G'	31.3	33.9	36.2	38.2	40.0	41.6	43.1	44.4
	18"	S	398	372	352	336	323	312	302	295
		G'	30.3	32.6	34.5	36.1	37.6	38.9	40.0	41.0
	24"	S	350	324	304	288	275	264	255	247
		G'	29.7	31.7	33.4	34.8	36.0	37.0	37.9	38.6
	30"	S	321	295	275	259	246	235	226	218
		G'	29.2	31.1	32.6	33.8	34.8	35.7	36.4	37.0
	36"	S	302	276	256	240	227	216	207	199
		G'	28.9	30.6	32.0	33.1	34.0	34.7	35.3	35.7
20 0.0358"	6"	S	945	914	889	870	853	839	826	816
		G'	48.3	52.3	55.8	58.9	61.8	64.4	66.8	68.9
	12"	S	597	566	542	522	507	493	482	473
		G'	45.0	48.0	50.6	52.9	54.9	56.6	58.1	59.4
	18"	S	481	450	426	406	391	377	366	357
		G'	43.1	45.6	47.7	49.4	50.8	52.0	53.0	53.9
	24"	S	423	392	368	349	333	320	308	299
		G'	41.9	44.1	45.8	47.1	48.2	49.0	49.7	50.3
	30"	S	388	357	333	314	298	285	274	264
		G'	41.1	43.0	44.4	45.5	46.3	46.9	47.4	47.7
	36"	S	365	334	310	291	275	262	250	241
		G'	40.5	42.2	43.4	44.3	45.0	45.4	45.7	45.8
18 0.0474"	6"	S	1252	1207	1175	1148	1126	1107	1091	1077
		G'	80.1	85.0	89.3	93.1	96.4	99.2	101.8	104.1
	12"	S	796	746	715	689	668	651	637	624
		G'	72.3	75.6	78.3	80.4	82.2	83.7	85.0	86.1
	18"	S	642	593	561	536	515	498	483	471
		G'	68.2	70.5	72.3	73.6	74.5	75.3	75.8	76.2
	24"	S	566	516	484	459	438	421	406	394
		G'	65.6	67.3	68.5	69.2	69.7	69.9	70.0	70.0
	30"	S	520	470	438	413	392	375	360	348
		G'	63.9	65.2	65.9	66.2	66.3	66.2	66.0	65.8
	36"	S	489	439	408	382	362	344	330	317
		G'	62.6	63.6	64.0	64.1	63.9	63.6	63.1	62.7
16 0.0598"	6"	S	1573	1519	1477	1443	1415	1392	1372	1355
		G'	116.3	121.7	126.1	129.9	133.1	135.9	138.3	140.4
	12"	S	1009	946	898	866	840	819	801	785
		G'	102.2	105.0	107.1	108.7	109.9	110.8	111.6	112.2
	18"	S	816	752	705	673	647	625	607	591
		G'	95.0	96.4	97.2	97.7	97.8	97.8	97.7	97.5
	24"	S	719	655	608	576	550	529	510	495
		G'	90.5	91.1	91.2	90.9	90.5	89.9	89.3	88.6
	30"	S	661	597	550	518	492	470	452	437
		G'	87.6	87.6	87.1	86.4	85.5	84.5	83.6	82.6
	36"	S	622	559	511	479	453	432	413	398
		G'	85.4	85.0	84.2	83.1	81.9	80.7	79.5	78.3

See Table 4 notes.

TABLE 39—VERSA-DEK® 3.5 LS – ALLOWABLE DIAPHRAGM SHEAR[1-3]

SUPPORT CONNECTION: 1/2" Effective Weld Diameter
SIDELAP CONNECTION: #10 Screws
S = Allowable Diaphragm Shear (plf)
G' = Stiffness Factor (kips/in.)

ATTACHMENT PATTERN: 24/3			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	8' - 0"	10' - 0"	12' - 0"	14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"
20 0.0358"	6"	S	699	661	637	619	606	595	587	580
		G'	12.9	15.7	18.2	20.7	23.0	25.2	27.2	29.2
	12"	S	442	405	380	363	350	339	331	324
		G'	12.6	15.1	17.4	19.6	21.6	23.4	25.1	26.8
	18"	S	357	320	295	277	264	254	246	239
		G'	12.3	14.7	16.8	18.7	20.5	22.1	23.6	24.9
	24"	S	314	277	252	235	221	211	203	196
		G'	12.1	14.3	16.3	18.1	19.7	21.1	22.4	23.5
	30"	S	289	252	227	209	196	186	177	171
		G'	12.0	14.1	15.9	17.6	19.0	20.3	21.4	22.4
	36"	S	272	234	210	192	179	168	160	153
		G'	11.9	13.9	15.7	17.2	18.5	19.6	20.6	21.5
19 0.0418"	6"	S	814	771	743	722	707	695	685	677
		G'	18.4	22.1	25.6	28.8	31.8	34.7	37.3	39.8
	12"	S	515	472	443	423	407	395	386	378
		G'	17.7	21.1	24.1	26.8	29.3	31.6	33.7	35.6
	18"	S	415	372	344	323	308	296	286	278
		G'	17.2	20.3	23.0	25.4	27.5	29.4	31.1	32.7
	24"	S	366	323	294	273	258	246	236	228
		G'	16.9	19.7	22.2	24.3	26.2	27.8	29.2	30.5
	30"	S	336	293	264	243	228	216	206	199
		G'	16.7	19.3	21.6	23.5	25.1	26.5	27.7	28.8
	36"	S	316	273	244	223	208	196	186	179
		G'	16.4	19.0	21.1	22.8	24.2	25.4	26.5	27.4
18 0.0474"	6"	S	922	873	841	818	801	787	776	767
		G'	24.3	29.1	33.4	37.4	41.1	44.5	47.6	50.5
	12"	S	583	534	502	479	461	448	437	428
		G'	23.2	27.4	31.0	34.3	37.2	39.8	42.2	44.4
	18"	S	470	421	389	366	348	335	324	315
		G'	22.5	26.2	29.3	32.1	34.5	36.6	38.5	40.1
	24"	S	413	365	332	309	292	278	267	259
		G'	21.9	25.3	28.1	30.5	32.5	34.2	35.7	37.0
	30"	S	379	331	298	275	258	244	233	225
		G'	21.5	24.6	27.2	29.2	31.0	32.4	33.6	34.7
	36"	S	357	308	276	253	235	222	211	202
		G'	21.2	24.1	26.4	28.3	29.7	30.9	32.0	32.8
16 0.0598"	6"	S	1160	1099	1059	1030	1008	991	978	967
		G'	40.1	47.2	53.4	59.0	64.0	68.5	72.6	76.3
	12"	S	732	671	631	602	580	563	550	539
		G'	37.5	43.3	48.1	52.3	55.9	59.1	61.9	64.3
	18"	S	589	528	488	459	437	421	407	396
		G'	35.8	40.7	44.6	47.9	50.6	52.9	54.9	56.6
	24"	S	518	457	417	388	366	349	336	325
		G'	34.6	38.8	42.1	44.7	46.8	48.6	50.0	51.2
	30"	S	475	414	374	345	323	306	293	282
		G'	33.7	37.5	40.2	42.4	44.0	45.3	46.4	47.2
	36"	S	446	386	345	316	295	278	264	253
		G'	33.0	36.4	38.8	40.5	41.8	42.8	43.6	44.2

ATTACHMENT PATTERN: 24/6			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	8' - 0"	10' - 0"	12' - 0"	14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"
20 0.0358"	6"	S	772	720	685	661	642	628	616	607
		G'	13.0	15.7	18.3	20.8	23.1	25.3	27.3	29.3
	12"	S	515	464	429	405	386	372	360	351
		G'	12.7	15.2	17.6	19.7	21.8	23.6	25.4	27.0
	18"	S	430	378	344	319	301	286	275	265
		G'	12.5	14.9	17.1	19.0	20.8	22.5	24.0	25.4
	24"	S	387	336	301	276	258	244	232	223
		G'	12.3	14.6	16.7	18.5	20.1	21.6	22.9	24.1
	30"	S	362	310	275	251	232	218	206	197
		G'	12.2	14.4	16.4	18.1	19.6	20.9	22.1	23.2
	36"	S	345	293	258	234	215	201	189	180
		G'	12.1	14.3	16.2	17.8	19.2	20.4	21.5	22.4
19 0.0418"	6"	S	899	839	799	770	749	732	719	708
		G'	18.5	22.2	25.7	28.9	32.0	34.8	37.5	39.9
	12"	S	600	540	500	471	450	433	420	409
		G'	17.9	21.3	24.4	27.2	29.7	32.0	34.1	36.1
	18"	S	500	440	400	371	350	333	320	309
		G'	17.5	20.7	23.5	25.9	28.1	30.1	31.8	33.4
	24"	S	450	390	350	322	300	284	270	259
		G'	17.3	20.2	22.8	25.0	27.0	28.6	30.1	31.4
	30"	S	420	360	320	292	270	254	240	229
		G'	17.1	19.9	22.3	24.3	26.1	27.6	28.8	29.9
	36"	S	400	340	300	272	250	234	220	209
		G'	16.9	19.7	21.9	23.8	25.4	26.7	27.8	28.8
18 0.0474"	6"	S	1017	950	905	872	848	829	814	802
		G'	24.4	29.2	33.6	37.6	41.3	44.7	47.8	50.8
	12"	S	678	611	565	533	509	490	475	463
		G'	23.5	27.7	31.5	34.8	37.7	40.4	42.8	45.0
	18"	S	565	497	452	420	396	377	362	350
		G'	22.9	26.8	30.1	32.9	35.4	37.5	39.5	41.2
	24"	S	509	441	396	364	339	321	306	293
		G'	22.5	26.1	29.1	31.5	33.7	35.5	37.0	38.4
	30"	S	475	407	362	330	305	287	272	259
		G'	22.2	25.6	28.3	30.5	32.4	33.9	35.2	36.3
	36"	S	452	384	339	307	283	264	249	237
		G'	22.0	25.2	27.7	29.7	31.4	32.7	33.8	34.7
16 0.0598"	6"	S	1278	1194	1138	1097	1067	1044	1025	1010
		G'	40.4	47.5	53.8	59.4	64.4	69.0	73.1	76.8
	12"	S	850	766	710	669	639	616	597	582
		G'	38.2	44.1	49.1	53.3	57.0	60.2	63.0	65.5
	18"	S	708	623	567	527	497	473	455	439
		G'	36.8	42.0	46.1	49.5	52.3	54.7	56.7	58.4
	24"	S	636	552	496	455	425	402	383	368
		G'	35.9	40.5	44.0	46.8	49.0	50.8	52.3	53.5
	30"	S	593	509	453	413	383	359	340	325
		G'	35.3	39.4	42.5	44.8	46.6	48.0	49.1	49.9
	36"	S	565	481	424	384	354	331	312	297
		G'	34.7	38.6	41.3	43.3	44.8	45.8	46.6	47.2

See Table 4 notes.

TABLE 40—VERSA-DEK® 3.5 LS – ALLOWABLE DIAPHRAGM SHEAR[1-3]

SUPPORT CONNECTION: 1 1/2" Effective Weld Diameter
SIDELAP CONNECTION: 1 1/2" Long Fillet Welds or 1 1/2" Seam Welds

S = Allowable Diaphragm Shear (plf)
G' = Stiffness Factor (kips/in.)

ATTACHMENT PATTERN: 24/3			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	8' - 0"	10' - 0"	12' - 0"	14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"
20 0.0358"	6"	S	1413	1382	1362	1348	1337	1329	1322	1316
		G'	13.2	16.1	18.9	21.6	24.1	26.5	28.9	31.1
	12"	S	1079	1037	1008	986	970	957	946	938
		G'	13.0	15.8	18.5	21.0	23.3	25.6	27.7	29.8
	18"	S	882	830	794	768	748	732	719	709
		G'	12.9	15.6	18.1	20.5	22.7	24.8	26.8	28.7
	24"	S	745	691	655	629	609	594	582	572
		G'	12.7	15.3	17.8	20.0	22.1	24.1	26.0	27.7
	30"	S	651	596	560	534	515	500	488	478
		G'	12.6	15.2	17.5	19.7	21.7	23.5	25.2	26.9
	36"	S	588	533	497	471	452	437	424	415
		G'	12.5	15.0	17.3	19.3	21.3	23.0	24.6	26.1
19 0.0418"	6"	S	1638	1603	1579	1563	1550	1541	1533	1526
		G'	19.0	23.0	26.8	30.4	33.8	37.1	40.2	43.1
	12"	S	1251	1202	1168	1144	1125	1110	1097	1087
		G'	18.6	22.4	26.0	29.3	32.5	35.4	38.2	40.8
	18"	S	1023	963	921	891	867	849	834	822
		G'	18.3	21.9	25.3	28.4	31.3	34.0	36.5	38.8
	24"	S	864	801	759	729	706	689	675	663
		G'	18.0	21.5	24.7	27.7	30.3	32.8	35.1	37.2
	30"	S	754	691	649	619	597	579	565	554
		G'	17.8	21.2	24.3	27.0	29.5	31.8	33.9	35.8
	36"	S	681	618	576	546	524	506	492	481
		G'	17.7	20.9	23.9	26.5	28.8	30.9	32.9	34.6
18 0.0474"	6"	S	1845	1806	1779	1761	1747	1736	1727	1720
		G'	25.3	30.5	35.4	40.0	44.2	48.3	52.1	55.6
	12"	S	1409	1354	1316	1288	1267	1250	1236	1225
		G'	24.7	29.5	34.0	38.2	42.0	45.6	48.9	52.0
	18"	S	1153	1085	1038	1003	977	956	940	926
		G'	24.2	28.8	32.9	36.7	40.2	43.4	46.4	49.1
	24"	S	973	902	855	821	796	776	760	747
		G'	23.8	28.1	32.1	35.6	38.7	41.6	44.3	46.7
	30"	S	850	779	731	698	672	653	637	624
		G'	23.5	27.6	31.3	34.6	37.5	40.1	42.5	44.6
	36"	S	768	696	649	615	590	570	554	541
		G'	23.2	27.2	30.7	33.7	36.4	38.8	41.0	42.9
16 0.0598"	6"	S	2294	2245	2213	2189	2172	2158	2147	2138
		G'	42.5	50.6	58.0	64.8	71.1	76.8	82.1	87.0
	12"	S	1752	1684	1637	1602	1575	1554	1537	1523
		G'	40.9	48.3	54.8	60.7	66.1	70.9	75.3	79.3
	18"	S	1433	1349	1290	1247	1215	1189	1168	1151
		G'	39.7	46.5	52.4	57.6	62.2	66.3	70.0	73.4
	24"	S	1210	1122	1063	1021	989	965	945	929
		G'	38.8	45.0	50.4	55.0	59.1	62.6	65.8	68.6
	30"	S	1057	968	909	867	836	811	792	776
		G'	38.0	43.8	48.7	52.9	56.5	59.6	62.4	64.8
	36"	S	954	866	807	765	733	709	689	673
		G'	37.4	42.9	47.4	51.2	54.4	57.1	59.5	61.6

ATTACHMENT PATTERN: 24/6			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	8' - 0"	10' - 0"	12' - 0"	14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"
20 0.0358"	6"	S	1590	1524	1480	1449	1426	1407	1393	1381
		G'	13.2	16.1	18.9	21.6	24.1	26.6	28.9	31.1
	12"	S	1291	1222	1176	1142	1114	1093	1076	1062
		G'	13.0	15.8	18.5	21.0	23.4	25.6	27.8	29.8
	18"	S	976	907	861	828	803	784	769	756
		G'	12.9	15.6	18.2	20.5	22.8	24.9	26.9	28.8
	24"	S	818	749	703	670	646	627	611	599
		G'	12.8	15.4	17.9	20.2	22.3	24.3	26.1	27.9
	30"	S	724	655	609	576	551	532	517	504
		G'	12.7	15.3	17.7	19.8	21.9	23.7	25.5	27.1
	36"	S	661	592	546	513	488	469	454	441
		G'	12.6	15.2	17.5	19.6	21.5	23.3	24.9	26.4
19 0.0418"	6"	S	1843	1767	1717	1680	1653	1632	1615	1601
		G'	19.0	23.0	26.8	30.5	33.9	37.1	40.2	43.1
	12"	S	1497	1417	1364	1324	1292	1267	1247	1231
		G'	18.6	22.5	26.1	29.4	32.5	35.5	38.3	40.9
	18"	S	1132	1052	998	960	932	909	892	877
		G'	18.4	22.0	25.4	28.6	31.5	34.2	36.7	39.0
	24"	S	949	869	815	777	749	727	709	694
		G'	18.2	21.7	24.9	27.9	30.6	33.1	35.4	37.5
	30"	S	839	759	706	668	639	617	599	585
		G'	18.0	21.4	24.5	27.3	29.9	32.2	34.3	36.2
	36"	S	766	686	633	595	566	544	526	511
		G'	17.9	21.2	24.2	26.8	29.2	31.4	33.4	35.1
18 0.0474"	6"	S	2077	1991	1934	1893	1862	1839	1819	1804
		G'	25.3	30.5	35.4	40.0	44.3	48.3	52.1	55.7
	12"	S	1687	1596	1536	1491	1456	1428	1405	1387
		G'	24.7	29.6	34.2	38.3	42.2	45.7	49.1	52.2
	18"	S	1275	1185	1125	1082	1049	1024	1004	988
		G'	24.3	28.9	33.2	37.0	40.5	43.7	46.7	49.4
	24"	S	1069	979	919	876	844	819	798	782
		G'	24.0	28.4	32.4	35.9	39.1	42.1	44.7	47.1
	30"	S	945	855	795	752	720	695	675	659
		G'	23.7	28.0	31.7	35.0	38.0	40.7	43.1	45.2
	36"	S	863	773	713	670	638	613	593	576
		G'	23.5	27.6	31.2	34.3	37.1	39.5	41.7	43.7
16 0.0598"	6"	S	2582	2476	2405	2354	2316	2286	2262	2243
		G'	42.5	50.7	58.1	64.9	71.2	76.9	82.2	87.1
	12"	S	2097	1985	1910	1854	1810	1775	1747	1724
		G'	41.1	48.5	55.1	61.0	66.4	71.2	75.7	79.7
	18"	S	1585	1473	1398	1345	1305	1274	1249	1228
		G'	40.1	46.9	52.8	58.1	62.8	66.9	70.6	74.0
	24"	S	1329	1217	1142	1089	1049	1018	993	972
		G'	39.3	45.6	51.1	55.8	59.9	63.5	66.7	69.6
	30"	S	1175	1063	989	935	895	864	839	819
		G'	38.6	44.6	49.6	53.9	57.6	60.7	63.5	65.9
	36"	S	1073	961	886	833	793	762	737	716
		G'	38.1	43.8	48.4	52.3	55.6	58.4	60.9	63.0

See Table 4 notes.

TABLE 41—VERSA-DEK® 3.5 LS – ALLOWABLE DIAPHRAGM SHEAR[1-5]

SUPPORT CONNECTION: Hilti X-ENP-19-L15 (steel substrate thickness ≥ 0.25 inch)
SIDELAP CONNECTION: Hilti S-SLC01 M HWH, S-SLC02 M HWH or #12 self-drilling screws

S = Allowable Diaphragm Shear (plf)
G' = Stiffness Factor (kips/in.)

ATTACHMENT PATTERN: 24/3			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	8' - 0"	10' - 0"	12' - 0"	14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"
20 0.0358"	6"	S	683	667	656	648	642	637	633	630
		G'	12.9	15.7	18.3	20.7	23.0	25.2	27.3	29.2
	12"	S	440	422	409	401	394	389	385	380
		G'	12.6	15.1	17.5	19.6	21.6	23.5	25.2	26.9
	18"	S	324	306	293	285	278	273	269	266
		G'	12.4	14.7	16.9	18.8	20.6	22.2	23.7	25.1
	24"	S	266	248	235	227	220	215	211	208
		G'	12.2	14.5	16.5	18.3	19.9	21.3	22.6	23.8
	30"	S	231	213	201	192	185	180	176	173
		G'	12.1	14.2	16.1	17.8	19.2	20.5	21.7	22.7
	36"	S	208	190	178	169	162	157	153	150
		G'	12.0	14.1	15.9	17.4	18.8	19.9	20.9	21.9
19 0.0418"	6"	S	796	777	764	755	748	742	738	734
		G'	18.4	22.2	25.6	28.9	31.9	34.7	37.4	39.8
	12"	S	513	492	478	467	460	454	449	444
		G'	17.8	21.1	24.2	27.0	29.5	31.8	33.9	35.8
	18"	S	378	356	342	332	324	319	314	310
		G'	17.4	20.5	23.2	25.6	27.7	29.7	31.4	33.0
	24"	S	310	289	275	264	257	251	246	242
		G'	17.1	20.0	22.4	24.6	26.5	28.1	29.6	30.9
	30"	S	270	248	234	224	216	210	206	202
		G'	16.8	19.6	21.9	23.8	25.5	26.9	28.1	29.2
	36"	S	243	221	207	197	189	183	178	175
		G'	16.7	19.3	21.4	23.2	24.7	25.9	27.0	27.9
18 0.0474"	6"	S	900	879	865	854	846	840	835	831
		G'	24.4	29.1	33.5	37.5	41.1	44.5	47.7	50.6
	12"	S	581	557	541	530	521	514	508	502
		G'	23.3	27.5	31.2	34.5	37.4	40.1	42.5	44.6
	18"	S	428	404	388	376	368	361	356	351
		G'	22.7	26.4	29.6	32.4	34.8	37.0	38.9	40.5
	24"	S	351	327	311	300	291	284	279	275
		G'	22.2	25.6	28.5	30.9	33.0	34.7	36.2	37.6
	30"	S	305	281	265	254	245	238	233	228
		G'	21.8	25.0	27.6	29.8	31.5	33.0	34.2	35.3
	36"	S	275	250	234	223	214	208	202	198
		G'	21.6	24.6	26.9	28.9	30.4	31.6	32.7	33.5
16 0.0598"	6"	S	1129	1103	1085	1072	1063	1055	1049	1043
		G'	40.2	47.3	53.6	59.1	64.1	68.7	72.8	76.5
	12"	S	732	702	682	668	657	648	639	632
		G'	37.8	43.6	48.5	52.7	56.3	59.5	62.3	64.8
	18"	S	539	509	488	474	463	455	448	443
		G'	36.2	41.2	45.2	48.5	51.3	53.6	55.6	57.3
	24"	S	442	412	392	377	366	358	351	346
		G'	35.1	39.5	42.9	45.5	47.7	49.4	50.9	52.1
	30"	S	384	354	334	319	308	300	293	288
		G'	34.3	38.2	41.1	43.3	45.0	46.4	47.4	48.3
	36"	S	345	315	295	280	270	261	255	249
		G'	33.7	37.3	39.8	41.6	43.0	44.0	44.8	45.3

ATTACHMENT PATTERN: 24/6			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	8' - 0"	10' - 0"	12' - 0"	14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"
20 0.0358"	6"	S	851	815	791	774	761	750	742	735
		G'	13.0	15.8	18.4	20.8	23.1	25.3	27.4	29.4
	12"	S	509	476	455	440	428	419	412	406
		G'	12.7	15.3	17.7	19.9	22.0	23.9	25.6	27.3
	18"	S	393	361	339	324	312	304	296	291
		G'	12.6	15.1	17.3	19.3	21.2	22.9	24.4	25.8
	24"	S	335	303	281	266	255	246	238	233
		G'	12.5	14.9	17.0	18.9	20.6	22.1	23.5	24.7
	30"	S	300	268	246	231	220	211	204	198
		G'	12.4	14.7	16.8	18.6	20.1	21.5	22.8	23.9
	36"	S	277	245	223	208	197	188	181	175
		G'	12.3	14.6	16.6	18.3	19.8	21.1	22.2	23.2
19 0.0418"	6"	S	991	950	922	902	887	875	865	858
		G'	18.5	22.3	25.8	29.1	32.1	35.0	37.6	40.1
	12"	S	593	556	531	513	500	489	481	474
		G'	18.0	21.5	24.6	27.5	30.0	32.4	34.5	36.5
	18"	S	457	420	395	378	364	354	346	339
		G'	17.8	21.0	23.9	26.4	28.7	30.7	32.5	34.1
	24"	S	390	353	328	310	297	286	278	271
		G'	17.6	20.7	23.3	25.7	27.7	29.5	31.0	32.4
	30"	S	349	312	287	269	256	246	237	231
		G'	17.4	20.4	23.0	25.1	27.0	28.5	29.9	31.1
	36"	S	322	285	260	242	229	219	210	204
		G'	17.3	20.2	22.7	24.7	26.4	27.8	29.0	30.0
18 0.0474"	6"	S	1122	1076	1044	1021	1004	991	980	971
		G'	24.6	29.4	33.7	37.8	41.5	44.9	48.1	51.0
	12"	S	671	629	601	581	566	554	545	537
		G'	23.8	28.1	31.9	35.3	38.3	41.0	43.5	45.7
	18"	S	518	476	448	428	413	401	392	384
		G'	23.3	27.3	30.7	33.6	36.2	38.4	40.4	42.2
	24"	S	441	399	371	351	336	324	315	307
		G'	23.0	26.7	29.9	32.5	34.7	36.7	38.3	39.7
	30"	S	395	353	325	305	290	278	269	261
		G'	22.8	26.4	29.3	31.7	33.7	35.3	36.7	37.9
	36"	S	364	322	294	274	259	247	238	230
		G'	22.6	26.1	28.8	31.0	32.8	34.3	35.5	36.4
16 0.0598"	6"	S	1410	1352	1313	1285	1264	1247	1233	1222
		G'	40.7	47.8	54.2	59.8	64.9	69.4	73.6	77.3
	12"	S	844	792	757	731	713	698	686	677
		G'	38.8	44.9	50.0	54.4	58.1	61.4	64.2	66.8
	18"	S	651	598	563	538	519	505	493	483
		G'	37.7	43.1	47.4	51.0	53.9	56.4	58.5	60.2
	24"	S	554	501	466	441	422	408	396	386
		G'	37.0	41.9	45.7	48.7	51.1	53.0	54.5	55.8
	30"	S	496	443	408	383	364	350	338	328
		G'	36.5	41.0	44.5	47.1	49.0	50.5	51.7	52.6
	36"	S	457	404	369	344	326	311	299	290
		G'	36.1	40.4	43.5	45.8	47.5	48.7	49.6	50.2

See Table 4 notes.

TABLE 42—VERSA-DEK® 3.5 LS – ALLOWABLE DIAPHRAGM SHEAR[1-5]

SUPPORT CONNECTION: Hilti X-HSN24 (0.125 inch ≤ steel substrate thickness ≤ 0.375 inch)
SIDELAP CONNECTION: Hilti S-SLC01 M HWH, S-SLC02 M HWH or #12 self-drilling screws

S = Allowable Diaphragm Shear (plf)
G' = Stiffness Factor (kips/in.)

ATTACHMENT PATTERN: 24/3			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	8' - 0"	10' - 0"	12' - 0"	14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"
20 0.0358"	6"	S	662	647	638	630	625	621	617	614
		G'	12.9	15.6	18.2	20.7	23.0	25.1	27.2	29.2
	12"	S	436	419	407	399	391	384	379	375
		G'	12.5	15.0	17.3	19.5	21.4	23.3	25.0	26.6
	18"	S	321	303	291	283	276	271	268	264
		G'	12.2	14.5	16.6	18.6	20.3	21.9	23.4	24.7
	24"	S	263	245	233	225	218	214	210	206
		G'	12.0	14.2	16.1	17.8	19.4	20.8	22.0	23.2
	30"	S	228	210	198	190	184	179	175	172
		G'	11.8	13.9	15.7	17.3	18.7	19.9	21.0	22.0
	36"	S	205	187	175	167	161	156	152	148
		G'	11.7	13.7	15.3	16.8	18.1	19.2	20.1	21.0
19 0.0418"	6"	S	770	754	742	734	728	723	719	716
		G'	18.3	22.1	25.5	28.8	31.8	34.6	37.2	39.7
	12"	S	509	489	475	465	455	448	442	437
		G'	17.6	20.9	23.9	26.7	29.1	31.4	33.5	35.4
	18"	S	374	353	340	330	322	317	312	308
		G'	17.1	20.1	22.7	25.1	27.2	29.1	30.8	32.3
	24"	S	306	286	272	262	255	249	245	241
		G'	16.7	19.5	21.8	23.9	25.7	27.3	28.7	30.0
	30"	S	266	245	231	222	214	209	204	200
		G'	16.4	19.0	21.1	23.0	24.5	25.9	27.1	28.1
	36"	S	239	218	204	194	187	181	177	173
		G'	16.1	18.6	20.5	22.2	23.6	24.8	25.8	26.6
18 0.0474"	6"	S	871	853	840	830	823	818	813	810
		G'	24.3	29.0	33.3	37.3	41.0	44.3	47.5	50.4
	12"	S	577	554	538	526	516	507	501	495
		G'	23.1	27.2	30.8	34.0	36.9	39.5	41.9	44.1
	18"	S	423	400	385	374	365	359	354	350
		G'	22.2	25.8	29.0	31.7	34.0	36.1	38.0	39.6
	24"	S	347	324	308	297	289	282	277	273
		G'	21.6	24.9	27.6	29.9	31.9	33.6	35.0	36.3
	30"	S	301	278	262	251	243	236	231	227
		G'	21.1	24.1	26.5	28.5	30.2	31.6	32.8	33.8
	36"	S	270	247	231	220	212	206	200	196
		G'	20.7	23.5	25.7	27.4	28.8	30.0	31.0	31.8
16 0.0598"	6"	S	1092	1069	1054	1042	1033	1027	1021	1016
		G'	40.0	47.0	53.2	58.8	63.8	68.3	72.3	76.1
	12"	S	727	698	678	662	649	638	630	623
		G'	37.1	42.8	47.6	51.8	55.3	58.5	61.3	63.7
	18"	S	533	504	485	471	460	452	446	441
		G'	35.2	40.0	43.8	47.0	49.7	52.0	54.0	55.7
	24"	S	436	407	388	374	364	356	349	344
		G'	33.8	37.9	41.1	43.6	45.7	47.4	48.8	50.0
	30"	S	378	349	330	316	306	297	291	286
		G'	32.8	36.3	39.0	41.0	42.6	43.9	45.0	45.8
	36"	S	340	311	291	277	267	259	252	247
		G'	32.0	35.1	37.4	39.0	40.3	41.2	42.0	42.6

ATTACHMENT PATTERN: 24/6			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	8' - 0"	10' - 0"	12' - 0"	14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"
20 0.0358"	6"	S	832	799	777	761	749	740	732	726
		G'	12.9	15.7	18.3	20.7	23.0	25.2	27.3	29.3
	12"	S	500	470	449	435	424	416	409	403
		G'	12.6	15.2	17.5	19.7	21.7	23.5	25.3	26.9
	18"	S	384	354	334	319	308	300	293	288
		G'	12.4	14.8	16.9	18.9	20.7	22.3	23.8	25.2
	24"	S	326	296	276	261	250	242	235	230
		G'	12.2	14.5	16.5	18.3	19.9	21.4	22.7	23.9
	30"	S	292	261	241	226	216	207	200	195
		G'	12.1	14.3	16.2	17.9	19.4	20.7	21.8	22.9
	36"	S	268	238	218	203	192	184	177	172
		G'	12.0	14.1	16.0	17.5	18.9	20.1	21.1	22.0
19 0.0418"	6"	S	969	931	906	887	873	862	853	846
		G'	18.4	22.2	25.7	28.9	31.9	34.7	37.4	39.9
	12"	S	583	548	524	507	495	485	477	471
		G'	17.8	21.2	24.2	27.0	29.5	31.8	34.0	35.9
	18"	S	448	412	389	372	359	350	342	335
		G'	17.4	20.5	23.3	25.7	27.9	29.8	31.5	33.1
	24"	S	380	345	321	304	292	282	274	268
		G'	17.1	20.0	22.6	24.7	26.6	28.3	29.7	31.0
	30"	S	340	304	281	264	251	241	234	227
		G'	16.9	19.7	22.0	24.0	25.7	27.1	28.4	29.4
	36"	S	313	277	254	237	224	214	206	200
		G'	16.7	19.4	21.6	23.4	24.9	26.2	27.3	28.2
18 0.0474"	6"	S	1097	1055	1026	1005	989	977	967	959
		G'	24.4	29.2	33.5	37.5	41.2	44.6	47.7	50.7
	12"	S	660	620	594	575	561	549	541	533
		G'	23.4	27.6	31.3	34.6	37.5	40.2	42.6	44.8
	18"	S	507	467	440	421	407	396	387	380
		G'	22.8	26.5	29.8	32.6	35.0	37.1	39.0	40.7
	24"	S	430	390	364	345	330	319	310	303
		G'	22.3	25.8	28.7	31.1	33.2	34.9	36.5	37.8
	30"	S	384	344	318	299	284	273	264	257
		G'	22.0	25.2	27.8	30.0	31.8	33.3	34.5	35.6
	36"	S	353	314	287	268	254	243	234	226
		G'	21.7	24.8	27.2	29.1	30.7	32.0	33.0	33.9
16 0.0598"	6"	S	1379	1326	1290	1264	1244	1229	1216	1206
		G'	40.3	47.4	53.6	59.2	64.2	68.7	72.8	76.6
	12"	S	831	781	747	724	706	692	681	672
		G'	37.9	43.7	48.7	52.9	56.5	59.7	62.5	65.0
	18"	S	637	587	554	530	512	498	487	478
		G'	36.4	41.4	45.5	48.8	51.6	53.9	55.9	57.6
	24"	S	540	490	457	433	416	402	391	382
		G'	35.4	39.8	43.2	45.9	48.1	49.9	51.3	52.5
	30"	S	482	432	399	375	357	344	333	323
		G'	34.6	38.6	41.6	43.8	45.5	46.9	47.9	48.8
	36"	S	443	394	360	337	319	305	294	285
		G'	34.1	37.7	40.3	42.2	43.5	44.6	45.3	45.9

See Table 4 notes.

TABLE 43—VERSA-DEK® S ACOUSTICAL & LS ACOUSTICAL – ALLOWABLE DIAPHRAGM SHEAR[1-3]

SUPPORT CONNECTION: 1/2" Effective Weld Diameter
SIDELAP CONNECTION: #10 Screws

S = Allowable Diaphragm Shear (plf)
G' = Stiffness Factor (kips/in.)

ATTACHMENT PATTERN: 24.5/4			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	7' - 0"	8' - 0"	9' - 0"	10' - 0"	11' - 0"	12' - 0"	13' - 0"	14' - 0"
22 0.0295"	6"	S	480	473	468	463	459	456	454	452
		G'	19.3	20.3	21.1	21.8	22.4	22.9	23.4	23.8
	12"	S	269	262	256	252	248	245	243	240
		G'	18.4	19.3	19.9	20.5	21.0	21.4	21.8	22.1
	18"	S	199	192	186	182	178	175	172	170
		G'	17.8	18.5	19.1	19.6	20.0	20.3	20.6	20.9
	24"	S	164	157	151	146	143	140	137	135
		G'	17.4	18.0	18.5	18.9	19.2	19.5	19.7	19.9
	30"	S	143	135	130	125	122	119	116	114
		G'	17.0	17.6	18.0	18.3	18.6	18.8	19.0	19.1
	36"	S	129	121	116	111	108	105	102	100
		G'	16.7	17.2	17.6	17.9	18.1	18.3	18.4	18.5
20 0.0358"	6"	S	579	571	564	559	555	552	549	546
		G'	27.5	28.7	29.6	30.4	31.1	31.8	32.3	32.8
	12"	S	323	315	308	303	299	295	292	290
		G'	26.2	27.1	27.9	28.5	29.0	29.5	29.9	30.2
	18"	S	238	229	223	218	213	210	207	204
		G'	25.4	26.1	26.7	27.2	27.6	28.0	28.2	28.5
	24"	S	195	187	180	175	171	167	164	162
		G'	24.8	25.4	25.9	26.3	26.6	26.8	27.0	27.2
	30"	S	169	161	154	149	145	142	139	136
		G'	24.4	24.9	25.3	25.6	25.9	26.0	26.1	26.2
	36"	S	152	144	137	132	128	125	122	119
		G'	24.1	24.5	24.9	25.1	25.3	25.4	25.4	25.5
18 0.0474"	6"	S	769	755	747	740	734	730	726	723
		G'	46.3	47.8	49.1	50.1	51.0	51.8	52.5	53.0
	12"	S	430	416	407	401	395	391	387	383
		G'	43.1	44.2	45.0	45.7	46.2	46.7	47.1	47.4
	18"	S	317	303	294	288	282	277	274	270
		G'	41.2	41.9	42.5	42.9	43.2	43.4	43.6	43.7
	24"	S	260	246	238	231	226	221	217	214
		G'	39.9	40.4	40.7	40.9	41.1	41.1	41.2	41.2
	30"	S	226	212	204	197	192	187	183	180
		G'	38.9	39.3	39.5	39.5	39.5	39.4	39.3	39.2
	36"	S	204	190	181	175	169	164	160	157
		G'	38.2	38.5	38.5	38.4	38.3	38.1	38.0	37.8
16 0.0598"	6"	S	973	955	941	933	926	920	915	911
		G'	74.6	76.6	78.3	79.7	80.8	81.8	82.7	83.4
	12"	S	545	527	513	505	498	492	487	483
		G'	67.4	68.5	69.4	70.0	70.5	70.9	71.2	71.5
	18"	S	402	384	371	362	355	350	345	340
		G'	63.3	63.8	64.1	64.3	64.3	64.3	64.3	64.3
	24"	S	331	313	299	291	284	278	273	269
		G'	60.6	60.7	60.6	60.4	60.2	59.9	59.7	59.4
	30"	S	288	270	257	248	241	235	230	226
		G'	58.7	58.5	58.1	57.7	57.3	56.8	56.3	55.9
	36"	S	260	242	228	220	213	207	202	198
		G'	57.3	56.8	56.3	55.7	55.0	54.4	53.8	53.2

ATTACHMENT PATTERN: 24.5/8			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	7' - 0"	8' - 0"	9' - 0"	10' - 0"	11' - 0"	12' - 0"	13' - 0"	14' - 0"
22 0.0295"	6"	S	571	552	538	526	517	509	502	497
		G'	19.4	20.4	21.2	21.9	22.5	23.0	23.5	23.9
	12"	S	360	341	327	315	306	298	291	286
		G'	18.7	19.5	20.2	20.7	21.2	21.6	22.0	22.3
	18"	S	289	271	256	245	235	228	221	215
		G'	18.1	18.9	19.4	19.9	20.3	20.7	21.0	21.2
	24"	S	254	235	221	210	200	192	186	180
		G'	17.8	18.4	18.9	19.3	19.7	20.0	20.2	20.4
	30"	S	233	214	200	188	179	171	165	159
		G'	17.5	18.1	18.6	18.9	19.2	19.4	19.6	19.7
	36"	S	219	200	186	174	165	157	151	145
		G'	17.3	17.9	18.3	18.6	18.8	19.0	19.1	19.2
20 0.0358"	6"	S	676	656	640	627	617	608	601	595
		G'	27.7	28.9	29.9	30.7	31.4	32.0	32.5	33.0
	12"	S	420	400	384	371	361	352	345	338
		G'	26.7	27.6	28.4	29.0	29.6	30.0	30.4	30.7
	18"	S	335	314	298	286	275	267	259	253
		G'	26.1	26.9	27.5	28.0	28.5	28.8	29.1	29.3
	24"	S	292	272	256	243	233	224	217	210
		G'	25.7	26.4	26.9	27.4	27.7	27.9	28.1	28.3
	30"	S	266	246	230	217	207	198	191	185
		G'	25.4	26.0	26.5	26.9	27.1	27.3	27.4	27.5
	36"	S	249	229	213	200	190	181	174	168
		G'	25.2	25.8	26.2	26.5	26.7	26.8	26.9	26.9
18 0.0474"	6"	S	896	866	845	829	815	804	794	786
		G'	46.8	48.4	49.6	50.7	51.5	52.3	52.9	53.5
	12"	S	557	527	506	490	476	465	455	447
		G'	44.3	45.4	46.2	46.9	47.4	47.9	48.2	48.5
	18"	S	444	414	393	376	363	352	342	334
		G'	42.8	43.7	44.2	44.7	45.0	45.2	45.3	45.5
	24"	S	387	357	337	320	306	295	285	277
		G'	41.9	42.5	42.9	43.2	43.3	43.4	43.4	43.3
	30"	S	353	323	303	286	272	261	251	243
		G'	41.3	41.7	42.0	42.1	42.1	42.0	41.9	41.8
	36"	S	331	301	280	263	250	238	229	221
		G'	40.8	41.1	41.3	41.3	41.2	41.1	40.9	40.7
16 0.0598"	6"	S	1131	1093	1064	1043	1026	1012	1000	990
		G'	75.8	77.9	79.5	80.9	82.0	82.9	83.7	84.4
	12"	S	703	665	636	615	598	584	572	562
		G'	70.0	71.1	72.0	72.6	73.0	73.4	73.6	73.8
	18"	S	560	522	493	473	456	442	430	419
		G'	66.8	67.4	67.7	67.9	67.9	67.8	67.7	67.6
	24"	S	489	451	422	401	384	370	358	348
		G'	64.8	65.0	65.0	64.8	64.6	64.2	63.9	63.5
	30"	S	446	408	379	359	342	327	315	305
		G'	63.4	63.4	63.1	62.7	62.2	61.7	61.2	60.6
	36"	S	417	380	351	330	313	299	287	277
		G'	62.4	62.2	61.7	61.1	60.5	59.8	59.1	58.5

See Table 4 notes.

TABLE 44—VERSA-DEK® S ACOUSTICAL & LS ACOUSTICAL – ALLOWABLE DIAPHRAGM SHEAR[1-3]

SUPPORT CONNECTION: 1 1/2" Effective Weld Diameter
SIDELAP CONNECTION: 1 1/2" Long Fillet Welds or 1 1/2" Seam Welds

S = Allowable Diaphragm Shear (plf)
G' = Stiffness Factor (kips/in.)

ATTACHMENT PATTERN: 24.5/4			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	7' - 0"	8' - 0"	9' - 0"	10' - 0"	11' - 0"	12' - 0"	13' - 0"	14' - 0"
22 0.0295"	6"	S	955	934	917	904	893	884	877	870
		G'	20.1	21.2	22.1	22.9	23.5	24.1	24.7	25.1
	12"	S	896	874	857	843	831	821	812	805
		G'	19.6	20.6	21.4	22.2	22.8	23.3	23.8	24.2
	18"	S	663	646	632	622	613	605	599	594
		G'	19.2	20.1	20.9	21.6	22.2	22.7	23.1	23.5
	24"	S	533	515	502	491	482	474	468	463
		G'	18.9	19.8	20.5	21.1	21.6	22.1	22.5	22.8
	30"	S	454	437	423	412	403	396	390	384
		G'	18.7	19.5	20.1	20.7	21.2	21.6	22.0	22.3
	36"	S	402	384	371	360	351	344	337	332
		G'	18.4	19.2	19.8	20.4	20.8	21.2	21.5	21.8
20 0.0358"	6"	S	1028	1005	987	973	961	952	943	936
		G'	28.8	30.1	31.2	32.2	33.0	33.7	34.3	34.9
	12"	S	1023	1001	984	969	957	947	938	930
		G'	27.9	29.1	30.1	31.0	31.7	32.4	32.9	33.4
	18"	S	796	775	759	746	736	727	720	713
		G'	27.3	28.4	29.3	30.1	30.7	31.3	31.8	32.2
	24"	S	638	617	601	589	578	569	562	556
		G'	26.9	27.9	28.7	29.4	30.0	30.5	30.9	31.3
	30"	S	543	523	507	494	484	475	467	461
		G'	26.5	27.4	28.2	28.8	29.3	29.8	30.1	30.4
	36"	S	480	460	444	431	421	412	404	398
		G'	26.2	27.1	27.8	28.3	28.8	29.2	29.5	29.8
18 0.0474"	6"	S	1342	1313	1289	1271	1256	1243	1232	1223
		G'	49.5	51.4	52.9	54.3	55.4	56.4	57.3	58.0
	12"	S	1337	1308	1285	1266	1250	1237	1225	1215
		G'	47.4	49.0	50.3	51.4	52.4	53.2	53.9	54.5
	18"	S	1042	1012	992	975	961	950	940	932
		G'	45.9	47.3	48.4	49.3	50.1	50.8	51.3	51.8
	24"	S	836	807	786	769	755	744	734	726
		G'	44.7	45.9	46.9	47.7	48.3	48.8	49.3	49.7
	30"	S	713	683	662	645	632	620	611	602
		G'	43.8	44.9	45.7	46.3	46.9	47.3	47.6	47.9
	36"	S	631	601	580	563	549	538	528	520
		G'	43.1	44.0	44.7	45.3	45.7	46.0	46.3	46.5
16 0.0598"	6"	S	1669	1632	1603	1580	1561	1546	1532	1521
		G'	82.1	85.0	87.3	89.3	91.0	92.5	93.8	94.9
	12"	S	1662	1626	1598	1574	1554	1537	1523	1511
		G'	77.0	79.3	81.1	82.7	83.9	85.0	85.9	86.8
	18"	S	1299	1262	1233	1212	1195	1181	1169	1158
		G'	73.5	75.3	76.7	77.9	78.8	79.6	80.2	80.8
	24"	S	1043	1006	977	956	939	925	913	902
		G'	71.0	72.3	73.4	74.2	74.9	75.4	75.8	76.2
	30"	S	890	852	823	802	785	771	759	749
		G'	69.0	70.1	70.8	71.4	71.8	72.1	72.4	72.6
	36"	S	787	750	721	700	683	669	657	646
		G'	67.4	68.2	68.8	69.1	69.4	69.5	69.6	69.6

ATTACHMENT PATTERN: 24.5/8			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	7' - 0"	8' - 0"	9' - 0"	10' - 0"	11' - 0"	12' - 0"	13' - 0"	14' - 0"
22 0.0295"	6"	S	1122	1080	1047	1021	999	982	967	954
		G'	20.1	21.2	22.1	22.9	23.6	24.2	24.7	25.2
	12"	S	1015	987	964	946	932	920	909	900
		G'	19.7	20.7	21.5	22.2	22.8	23.4	23.9	24.3
	18"	S	754	725	703	685	670	658	648	639
		G'	19.3	20.2	21.0	21.7	22.3	22.8	23.2	23.6
	24"	S	623	594	572	554	539	527	517	508
		G'	19.0	19.9	20.6	21.3	21.8	22.2	22.6	23.0
	30"	S	544	516	493	475	461	449	438	429
		G'	18.8	19.7	20.3	20.9	21.4	21.8	22.2	22.5
	36"	S	492	463	441	423	408	396	386	377
		G'	18.7	19.4	20.1	20.6	21.1	21.4	21.8	22.1
20 0.0358"	6"	S	1207	1162	1127	1099	1076	1057	1040	1026
		G'	28.8	30.1	31.3	32.2	33.0	33.7	34.4	34.9
	12"	S	1207	1162	1127	1099	1076	1057	1040	1026
		G'	28.1	29.3	30.3	31.2	31.9	32.5	33.1	33.6
	18"	S	893	860	835	814	798	784	772	762
		G'	27.6	28.7	29.6	30.4	31.0	31.6	32.1	32.5
	24"	S	735	702	677	657	640	626	614	604
		G'	27.2	28.2	29.1	29.8	30.3	30.8	31.3	31.6
	30"	S	641	608	582	562	545	532	520	510
		G'	26.9	27.9	28.7	29.3	29.8	30.2	30.6	30.9
	36"	S	578	545	519	499	482	468	457	447
		G'	26.7	27.6	28.3	28.9	29.4	29.8	30.1	30.4
18 0.0474"	6"	S	1577	1518	1472	1435	1405	1380	1359	1341
		G'	49.6	51.5	53.1	54.4	55.6	56.5	57.4	58.2
	12"	S	1577	1518	1472	1435	1405	1380	1359	1341
		G'	47.7	49.4	50.7	51.8	52.8	53.6	54.3	54.9
	18"	S	1169	1123	1090	1064	1042	1024	1008	995
		G'	46.5	47.9	49.0	50.0	50.7	51.4	51.9	52.4
	24"	S	963	918	884	858	836	818	802	789
		G'	45.5	46.8	47.8	48.5	49.2	49.7	50.1	50.5
	30"	S	840	794	761	734	712	694	679	666
		G'	44.8	45.9	46.8	47.4	48.0	48.4	48.7	49.0
	36"	S	757	712	678	652	630	612	597	583
		G'	44.3	45.3	46.0	46.6	47.0	47.3	47.5	47.7
16 0.0598"	6"	S	1961	1888	1830	1785	1747	1716	1690	1667
		G'	82.4	85.3	87.7	89.6	91.3	92.8	94.0	95.2
	12"	S	1961	1888	1830	1785	1747	1716	1690	1667
		G'	77.9	80.2	82.0	83.5	84.8	85.8	86.7	87.5
	18"	S	1457	1400	1356	1322	1295	1273	1254	1237
		G'	75.0	76.7	78.1	79.3	80.2	80.9	81.5	82.1
	24"	S	1201	1144	1099	1066	1039	1017	998	981
		G'	72.8	74.3	75.3	76.1	76.8	77.3	77.6	78.0
	30"	S	1048	990	946	913	886	863	844	828
		G'	71.2	72.4	73.2	73.7	74.1	74.4	74.6	74.8
	36"	S	945	888	843	810	783	761	742	725
		G'	70.0	70.9	71.5	71.8	72.1	72.2	72.2	72.2

See Table 4 notes.

TABLE 45—VERSA-DEK® S ACOUSTICAL & LS ACOUSTICAL – ALLOWABLE DIAPHRAGM SHEAR[1-5]

SUPPORT CONNECTION: Hilti X-ENP-19-L15 (steel substrate thickness ≥ 0.25 inch)
SIDELAP CONNECTION: Hilti S-SLC01 M HWH, S-SLC02 M HWH or #12 self-drilling screws

S = Allowable Diaphragm Shear (plf)
G' = Stiffness Factor (kips/in.)

ATTACHMENT PATTERN: 24.5/4			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	7' - 0"	8' - 0"	9' - 0"	10' - 0"	11' - 0"	12' - 0"	13' - 0"	14' - 0"
22 0.0295"	6"	S	571	560	551	544	539	534	530	526
		G'	19.4	20.3	21.1	21.8	22.4	23.0	23.4	23.8
	12"	S	328	323	319	316	313	311	309	307
		G'	18.5	19.3	20.0	20.5	21.0	21.4	21.8	22.2
	18"	S	232	227	223	220	217	215	213	212
		G'	17.9	18.6	19.1	19.6	20.0	20.4	20.7	20.9
	24"	S	185	180	176	172	170	168	166	164
		G'	17.4	18.0	18.5	18.9	19.2	19.5	19.8	20.0
	30"	S	156	151	147	144	141	139	137	136
		G'	17.1	17.6	18.0	18.4	18.6	18.9	19.0	19.2
	36"	S	137	132	128	125	122	120	118	116
		G'	16.8	17.3	17.7	17.9	18.2	18.3	18.5	18.6
20 0.0358"	6"	S	615	603	594	586	580	575	571	567
		G'	27.3	28.5	29.5	30.3	31.0	31.6	32.1	32.6
	12"	S	398	392	387	383	380	377	375	373
		G'	25.8	26.7	27.4	28.1	28.6	29.0	29.4	29.8
	18"	S	282	276	271	267	264	261	259	257
		G'	24.7	25.4	26.0	26.5	26.9	27.2	27.5	27.8
	24"	S	224	218	213	209	206	203	201	199
		G'	23.9	24.5	25.0	25.4	25.7	25.9	26.1	26.3
	30"	S	189	183	178	174	171	169	166	164
		G'	23.3	23.8	24.2	24.5	24.7	24.9	25.0	25.1
	36"	S	166	160	155	151	148	145	143	141
		G'	22.9	23.3	23.6	23.8	23.9	24.0	24.1	24.1
18 0.0474"	6"	S	805	789	777	767	759	752	746	741
		G'	45.9	47.4	48.7	49.7	50.6	51.4	52.1	52.7
	12"	S	528	518	512	507	503	499	496	494
		G'	42.1	43.1	44.0	44.7	45.3	45.7	46.1	46.5
	18"	S	375	365	358	353	349	346	343	340
		G'	39.6	40.4	40.9	41.3	41.7	41.9	42.1	42.3
	24"	S	298	288	282	277	272	269	266	263
		G'	37.9	38.4	38.7	39.0	39.1	39.2	39.3	39.3
	30"	S	252	242	236	231	226	223	220	217
		G'	36.7	37.0	37.1	37.2	37.2	37.2	37.1	37.0
	36"	S	222	211	205	200	196	192	189	187
		G'	35.7	35.9	35.9	35.8	35.7	35.6	35.4	35.3
16 0.0598"	6"	S	1002	982	967	955	945	936	929	923
		G'	73.6	75.7	77.4	78.8	80.0	81.0	81.9	82.6
	12"	S	669	655	646	639	634	630	626	623
		G'	65.2	66.3	67.2	67.9	68.5	69.0	69.4	69.7
	18"	S	475	462	452	446	440	436	432	429
		G'	60.1	60.6	61.0	61.2	61.4	61.5	61.5	61.6
	24"	S	378	365	355	349	344	339	335	332
		G'	56.7	56.8	56.8	56.7	56.5	56.4	56.2	56.0
	30"	S	320	307	297	291	286	281	277	274
		G'	54.2	54.0	53.7	53.4	53.0	52.6	52.3	52.0
	36"	S	281	268	259	252	247	242	239	236
		G'	52.4	51.9	51.4	50.8	50.3	49.8	49.3	48.9

ATTACHMENT PATTERN: 24.5/8			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	7' - 0"	8' - 0"	9' - 0"	10' - 0"	11' - 0"	12' - 0"	13' - 0"	14' - 0"
22 0.0295"	6"	S	681	662	642	626	613	602	592	585
		G'	19.5	20.4	21.2	21.9	22.5	23.1	23.5	23.9
	12"	S	394	381	370	362	355	350	345	341
		G'	18.7	19.5	20.2	20.8	21.3	21.7	22.1	22.4
	18"	S	299	285	275	267	260	254	249	245
		G'	18.3	19.0	19.6	20.1	20.5	20.8	21.1	21.4
	24"	S	251	238	227	219	212	206	202	197
		G'	17.9	18.6	19.1	19.5	19.9	20.1	20.4	20.6
	30"	S	222	209	199	190	183	178	173	169
		G'	17.7	18.3	18.7	19.1	19.4	19.6	19.8	20.0
	36"	S	203	190	179	171	164	159	154	150
		G'	17.5	18.1	18.5	18.8	19.0	19.2	19.4	19.5
20 0.0358"	6"	S	741	713	691	674	660	648	638	630
		G'	27.5	28.7	29.6	30.5	31.2	31.8	32.3	32.8
	12"	S	469	454	442	433	425	419	413	409
		G'	26.2	27.1	27.9	28.5	29.1	29.5	29.9	30.2
	18"	S	353	338	327	317	309	303	298	293
		G'	25.4	26.2	26.8	27.3	27.7	28.0	28.3	28.5
	24"	S	296	280	269	259	251	245	240	235
		G'	24.8	25.5	26.0	26.4	26.7	26.9	27.1	27.2
	30"	S	261	246	234	224	217	210	205	200
		G'	24.4	25.0	25.4	25.7	25.9	26.1	26.2	26.3
	36"	S	238	222	211	201	194	187	182	177
		G'	24.1	24.6	24.9	25.2	25.3	25.4	25.5	25.5
18 0.0474"	6"	S	969	932	904	881	863	848	835	823
		G'	46.3	47.9	49.1	50.2	51.0	51.8	52.5	53.0
	12"	S	622	600	585	572	562	554	547	540
		G'	43.2	44.2	45.1	45.7	46.3	46.7	47.1	47.4
	18"	S	469	447	431	419	409	400	393	387
		G'	41.2	42.0	42.5	42.9	43.2	43.5	43.7	43.8
	24"	S	392	370	355	342	332	324	316	310
		G'	39.9	40.5	40.8	41.0	41.1	41.2	41.2	41.2
	30"	S	346	324	309	296	286	278	270	264
		G'	39.0	39.4	39.5	39.6	39.6	39.5	39.4	39.3
	36"	S	315	293	278	265	255	247	240	234
		G'	38.3	38.5	38.6	38.5	38.4	38.2	38.1	37.9
16 0.0598"	6"	S	1206	1161	1126	1097	1074	1055	1039	1025
		G'	74.6	76.7	78.4	79.7	80.9	81.9	82.7	83.4
	12"	S	785	757	736	721	708	698	689	681
		G'	67.5	68.6	69.5	70.1	70.6	71.0	71.3	71.6
	18"	S	592	564	543	527	515	504	495	487
		G'	63.4	63.9	64.2	64.4	64.5	64.5	64.4	64.4
	24"	S	495	467	446	430	418	407	398	391
		G'	60.7	60.8	60.8	60.6	60.4	60.1	59.8	59.5
	30"	S	437	409	388	372	360	349	340	333
		G'	58.8	58.6	58.3	57.9	57.4	57.0	56.5	56.0
	36"	S	398	370	349	334	321	310	301	294
		G'	57.4	57.0	56.5	55.9	55.2	54.6	54.0	53.4

See Table 4 notes.

TABLE 46—VERSA-DEK® S ACOUSTICAL & LS ACOUSTICAL– ALLOWABLE DIAPHRAGM SHEAR[1-5]

SUPPORT CONNECTION: Hilti X-HSN24 (0.125 inch ≤ steel substrate thickness ≤ 0.375 inch)
SIDELAP CONNECTION: Hilti S-SLC01 M HWH, S-SLC02 M HWH or #12 self-drilling screws

S = Allowable Diaphragm Shear (plf)
G' = Stiffness Factor (kips/in.)

ATTACHMENT PATTERN: 24.5/4			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	7' - 0"	8' - 0"	9' - 0"	10' - 0"	11' - 0"	12' - 0"	13' - 0"	14' - 0"
22 0.0295"	6"	S	530	520	512	505	500	496	492	489
		G'	19.3	20.2	21.1	21.8	22.4	22.9	23.4	23.8
	12"	S	328	323	319	316	313	311	309	307
		G'	18.3	19.1	19.8	20.4	20.9	21.3	21.7	22.0
	18"	S	232	227	223	220	218	215	213	212
		G'	17.6	18.3	18.8	19.3	19.7	20.1	20.4	20.6
	24"	S	185	180	176	172	170	168	166	164
		G'	17.0	17.6	18.1	18.5	18.8	19.1	19.4	19.6
	30"	S	156	151	147	144	141	139	137	136
		G'	16.6	17.1	17.5	17.9	18.1	18.4	18.5	18.7
	36"	S	137	132	128	125	122	120	118	116
		G'	16.3	16.7	17.1	17.4	17.6	17.7	17.9	18.0
20 0.0358"	6"	S	571	560	551	544	539	534	530	526
		G'	27.2	28.4	29.3	30.2	30.9	31.5	32.0	32.5
	12"	S	398	392	387	383	380	377	375	373
		G'	25.5	26.4	27.1	27.8	28.3	28.8	29.2	29.5
	18"	S	282	276	271	267	264	261	259	257
		G'	24.2	24.9	25.5	26.0	26.4	26.8	27.1	27.3
	24"	S	224	218	213	209	206	203	201	199
		G'	23.3	23.9	24.3	24.7	25.0	25.3	25.5	25.6
	30"	S	189	183	178	174	171	169	166	164
		G'	22.6	23.0	23.4	23.7	23.9	24.1	24.2	24.3
	36"	S	166	160	155	151	148	145	143	141
		G'	22.0	22.4	22.7	22.9	23.0	23.1	23.2	23.2
18 0.0474"	6"	S	747	732	721	712	704	698	693	688
		G'	45.6	47.1	48.4	49.5	50.4	51.2	51.9	52.5
	12"	S	528	518	512	507	503	499	496	494
		G'	41.4	42.5	43.3	44.0	44.6	45.1	45.6	45.9
	18"	S	375	365	358	353	349	346	343	340
		G'	38.6	39.3	39.9	40.3	40.7	41.0	41.2	41.4
	24"	S	298	288	282	277	272	269	266	264
		G'	36.6	37.0	37.4	37.6	37.8	37.9	38.0	38.1
	30"	S	252	242	236	231	226	223	220	217
		G'	35.1	35.3	35.5	35.6	35.6	35.6	35.6	35.6
	36"	S	221	211	205	200	196	192	189	187
		G'	33.9	34.0	34.0	34.0	33.9	33.8	33.7	33.6
16 0.0598"	6"	S	930	912	898	886	877	869	863	857
		G'	72.9	75.1	76.8	78.2	79.4	80.5	81.4	82.2
	12"	S	668	655	646	639	634	630	626	623
		G'	63.7	64.9	65.8	66.6	67.2	67.7	68.2	68.6
	18"	S	475	462	452	446	440	436	432	429
		G'	57.9	58.5	58.9	59.2	59.5	59.6	59.8	59.9
	24"	S	378	365	355	349	344	339	335	332
		G'	53.9	54.1	54.2	54.2	54.1	54.0	54.0	53.9
	30"	S	320	307	297	291	286	281	277	274
		G'	51.1	50.9	50.7	50.4	50.2	49.9	49.7	49.5
	36"	S	281	268	259	252	247	242	239	236
		G'	48.9	48.5	48.0	47.6	47.2	46.8	46.4	46.1

ATTACHMENT PATTERN: 24.5/8			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	7' - 0"	8' - 0"	9' - 0"	10' - 0"	11' - 0"	12' - 0"	13' - 0"	14' - 0"
22 0.0295"	6"	S	639	615	596	581	569	559	550	543
		G'	19.4	20.3	21.1	21.8	22.4	23.0	23.4	23.8
	12"	S	390	377	367	359	352	347	342	338
		G'	18.5	19.3	20.0	20.5	21.0	21.5	21.8	22.2
	18"	S	294	281	271	263	257	251	247	243
		G'	17.9	18.6	19.2	19.6	20.0	20.4	20.7	20.9
	24"	S	246	234	224	216	209	204	199	195
		G'	17.4	18.1	18.6	19.0	19.3	19.6	19.8	20.0
	30"	S	218	205	195	187	180	175	170	166
		G'	17.1	17.7	18.1	18.4	18.7	18.9	19.1	19.2
	36"	S	199	186	176	168	161	156	151	147
		G'	16.9	17.3	17.7	18.0	18.2	18.4	18.5	18.6
20 0.0358"	6"	S	688	662	642	626	613	602	593	585
		G'	27.4	28.5	29.5	30.3	31.0	31.6	32.1	32.6
	12"	S	464	450	438	429	422	416	411	406
		G'	25.8	26.7	27.5	28.1	28.6	29.1	29.5	29.8
	18"	S	348	334	323	314	306	300	295	290
		G'	24.7	25.5	26.1	26.6	27.0	27.3	27.6	27.8
	24"	S	290	276	265	256	248	242	237	232
		G'	24.0	24.6	25.1	25.4	25.7	26.0	26.2	26.3
	30"	S	256	241	230	221	213	207	202	198
		G'	23.4	23.9	24.3	24.6	24.8	24.9	25.1	25.1
	36"	S	232	218	207	198	190	184	179	174
		G'	23.0	23.4	23.7	23.9	24.0	24.1	24.2	24.2
18 0.0474"	6"	S	899	866	840	819	801	787	775	765
		G'	45.9	47.4	48.7	49.8	50.7	51.4	52.1	52.7
	12"	S	615	594	580	568	558	550	543	537
		G'	42.1	43.2	44.1	44.7	45.3	45.8	46.2	46.5
	18"	S	462	441	426	414	405	396	390	384
		G'	39.7	40.5	41.0	41.4	41.8	42.0	42.2	42.4
	24"	S	385	364	349	338	328	320	313	307
		G'	38.1	38.5	38.9	39.1	39.2	39.3	39.4	39.4
	30"	S	339	318	303	291	282	274	267	261
		G'	36.8	37.1	37.3	37.3	37.3	37.3	37.2	37.2
	36"	S	308	288	273	261	251	243	236	230
		G'	35.9	36.0	36.0	36.0	35.9	35.7	35.6	35.4
16 0.0598"	6"	S	1120	1078	1045	1019	998	980	965	952
		G'	73.6	75.7	77.4	78.8	80.0	81.0	81.9	82.7
	12"	S	776	750	730	715	703	693	684	677
		G'	65.3	66.5	67.4	68.1	68.6	69.1	69.5	69.8
	18"	S	583	557	536	521	509	499	491	483
		G'	60.3	60.8	61.2	61.4	61.6	61.7	61.7	61.7
	24"	S	486	460	440	425	413	402	394	386
		G'	56.9	57.0	57.0	56.9	56.7	56.6	56.4	56.2
	30"	S	428	402	381	367	354	344	336	328
		G'	54.5	54.3	54.0	53.6	53.3	52.9	52.5	52.2
	36"	S	389	363	343	328	316	306	297	290
		G'	52.7	52.2	51.7	51.2	50.6	50.1	49.6	49.2

See Table 4 notes.

TABLE 47—VERSA-DEK® S ES ACOUSTICAL & LS ES ACOUSTICAL – ALLOWABLE DIAPHRAGM SHEAR[1-3]

SUPPORT CONNECTION: 1/2" Effective Weld Diameter
SIDELAP CONNECTION: #10 Screws

S = Allowable Diaphragm Shear (plf)
G' = Stiffness Factor (kips/in.)

ATTACHMENT PATTERN: 24/4			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	7' - 0"	8' - 0"	9' - 0"	10' - 0"	11' - 0"	12' - 0"	13' - 0"	14' - 0"
22 0.0295"	6"	S	479	472	466	462	459	456	453	451
		G'	18.7	19.6	20.4	21.1	21.7	22.3	22.7	23.2
	12"	S	268	261	255	251	247	244	242	240
		G'	17.8	18.6	19.3	19.9	20.4	20.8	21.2	21.5
	18"	S	197	190	185	181	177	174	172	169
		G'	17.2	17.9	18.5	19.0	19.4	19.7	20.0	20.3
	24"	S	162	155	150	145	142	139	136	134
		G'	16.8	17.4	17.9	18.3	18.6	18.9	19.2	19.4
	30"	S	141	134	129	124	121	118	115	113
		G'	16.4	17.0	17.4	17.8	18.1	18.3	18.5	18.6
	36"	S	127	120	115	110	107	104	101	99
		G'	16.2	16.7	17.1	17.3	17.6	17.8	17.9	18.0
20 0.0358"	6"	S	578	569	563	558	554	551	548	545
		G'	26.6	27.8	28.7	29.5	30.3	30.9	31.4	31.9
	12"	S	321	313	307	302	298	294	292	289
		G'	25.3	26.3	27.0	27.7	28.2	28.7	29.1	29.4
	18"	S	236	228	222	217	212	209	206	204
		G'	24.5	25.3	25.9	26.4	26.9	27.2	27.5	27.7
	24"	S	193	185	179	174	170	166	163	161
		G'	24.0	24.7	25.2	25.6	25.9	26.1	26.3	26.5
	30"	S	168	160	153	148	144	141	138	135
		G'	23.6	24.2	24.6	24.9	25.1	25.3	25.4	25.5
	36"	S	151	142	136	131	127	124	121	118
		G'	23.3	23.8	24.1	24.4	24.6	24.7	24.8	24.8
18 0.0474"	6"	S	767	753	745	739	733	729	725	722
		G'	44.8	46.4	47.6	48.7	49.6	50.4	51.1	51.7
	12"	S	428	414	406	399	394	389	386	382
		G'	41.7	42.8	43.7	44.4	45.0	45.5	45.9	46.2
	18"	S	315	301	293	286	281	276	272	269
		G'	39.9	40.7	41.3	41.7	42.0	42.3	42.5	42.6
	24"	S	258	245	236	230	224	220	216	213
		G'	38.6	39.2	39.6	39.8	40.0	40.1	40.1	40.1
	30"	S	224	211	202	196	190	186	182	179
		G'	37.7	38.1	38.3	38.4	38.4	38.4	38.3	38.3
	36"	S	202	188	180	173	168	163	159	156
		G'	37.1	37.3	37.4	37.4	37.3	37.2	37.0	36.8
16 0.0598"	6"	S	970	953	939	931	924	919	914	910
		G'	72.1	74.2	75.9	77.3	78.5	79.5	80.3	81.1
	12"	S	542	525	511	503	496	491	486	482
		G'	65.2	66.4	67.3	68.0	68.5	69.0	69.3	69.6
	18"	S	400	382	369	361	354	348	343	339
		G'	61.3	61.9	62.2	62.4	62.5	62.6	62.6	62.6
	24"	S	328	311	297	289	282	277	272	268
		G'	58.7	58.9	58.8	58.7	58.5	58.3	58.1	57.8
	30"	S	286	268	255	246	240	234	229	225
		G'	56.8	56.7	56.5	56.1	55.7	55.3	54.8	54.4
	36"	S	257	239	226	218	211	205	201	197
		G'	55.5	55.1	54.7	54.1	53.5	53.0	52.4	51.9

ATTACHMENT PATTERN: 24/8			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	7' - 0"	8' - 0"	9' - 0"	10' - 0"	11' - 0"	12' - 0"	13' - 0"	14' - 0"
22 0.0295"	6"	S	570	552	537	526	517	509	502	496
		G'	18.7	19.7	20.5	21.2	21.8	22.4	22.8	23.2
	12"	S	359	341	326	315	305	298	291	285
		G'	18.0	18.8	19.5	20.1	20.6	21.0	21.4	21.7
	18"	S	289	270	256	244	235	227	221	215
		G'	17.5	18.2	18.8	19.3	19.7	20.1	20.4	20.7
	24"	S	253	235	221	209	200	192	185	180
		G'	17.2	17.8	18.3	18.8	19.1	19.4	19.6	19.9
	30"	S	232	214	200	188	179	171	164	159
		G'	16.9	17.5	18.0	18.3	18.6	18.9	19.1	19.2
	36"	S	218	200	185	174	165	157	150	145
		G'	16.7	17.3	17.7	18.0	18.3	18.4	18.6	18.7
20 0.0358"	6"	S	676	655	640	627	616	608	601	594
		G'	26.8	28.0	28.9	29.8	30.5	31.1	31.6	32.1
	12"	S	419	399	383	371	360	352	344	338
		G'	25.8	26.8	27.6	28.2	28.7	29.2	29.6	29.9
	18"	S	334	314	298	285	275	266	259	253
		G'	25.2	26.1	26.7	27.2	27.7	28.0	28.3	28.5
	24"	S	291	271	255	243	232	224	216	210
		G'	24.8	25.6	26.1	26.6	26.9	27.2	27.4	27.6
	30"	S	266	245	230	217	207	198	191	184
		G'	24.6	25.2	25.7	26.1	26.4	26.6	26.7	26.8
	36"	S	249	228	212	200	189	181	174	167
		G'	24.4	25.0	25.4	25.7	26.0	26.1	26.2	26.3
18 0.0474"	6"	S	895	866	845	828	815	803	794	786
		G'	45.3	46.9	48.2	49.2	50.1	50.9	51.5	52.1
	12"	S	556	526	506	489	475	464	455	446
		G'	42.9	44.0	44.9	45.6	46.1	46.6	47.0	47.3
	18"	S	443	413	393	376	362	351	341	333
		G'	41.5	42.3	43.0	43.4	43.7	44.0	44.2	44.3
	24"	S	386	357	336	319	306	295	285	277
		G'	40.6	41.3	41.7	42.0	42.1	42.2	42.3	42.3
	30"	S	352	323	302	285	272	261	251	243
		G'	40.0	40.5	40.8	40.9	41.0	41.0	40.9	40.8
	36"	S	330	300	279	263	249	238	228	220
		G'	39.5	39.9	40.1	40.2	40.1	40.0	39.8	39.7
16 0.0598"	6"	S	1130	1092	1063	1043	1026	1012	1000	989
		G'	73.3	75.4	77.1	78.4	79.6	80.5	81.4	82.1
	12"	S	702	664	635	615	598	584	572	562
		G'	67.7	68.9	69.8	70.5	71.0	71.3	71.6	71.9
	18"	S	559	521	493	472	455	441	429	419
		G'	64.7	65.3	65.7	65.9	66.0	66.0	65.9	65.8
	24"	S	488	450	421	401	384	370	358	348
		G'	62.8	63.1	63.1	63.0	62.8	62.5	62.2	61.9
	30"	S	445	407	379	358	341	327	315	305
		G'	61.4	61.5	61.3	60.9	60.5	60.0	59.6	59.1
	36"	S	416	379	350	329	312	298	286	276
		G'	60.5	60.3	59.9	59.4	58.8	58.2	57.6	57.0

See Table 4 notes.

TABLE 48—VERSA-DEK® S ES ACOUSTICAL & LS ES ACOUSTICAL – ALLOWABLE DIAPHRAGM SHEAR[1-3]

SUPPORT CONNECTION: 1 1/2" Effective Weld Diameter
SIDELAP CONNECTION: 1 1/2" Long Fillet Welds or 1 1/2" Seam Welds

S = Allowable Diaphragm Shear (plf)
G' = Stiffness Factor (kips/in.)

ATTACHMENT PATTERN: 24/4			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	7' - 0"	8' - 0"	9' - 0"	10' - 0"	11' - 0"	12' - 0"	13' - 0"	14' - 0"
22 0.0295"	6"	S	954	933	916	903	892	884	876	870
		G'	19.4	20.4	21.3	22.1	22.8	23.4	24.0	24.4
	12"	S	902	879	862	847	835	825	816	809
		G'	18.9	19.9	20.7	21.5	22.1	22.6	23.1	23.6
	18"	S	662	645	631	621	612	604	598	593
		G'	18.5	19.5	20.2	20.9	21.5	22.0	22.4	22.8
	24"	S	531	514	500	490	481	474	467	462
		G'	18.2	19.1	19.8	20.5	21.0	21.5	21.9	22.2
	30"	S	453	435	422	411	402	395	389	384
		G'	18.0	18.8	19.5	20.1	20.6	21.0	21.4	21.7
	36"	S	400	383	370	359	350	343	337	331
		G'	17.8	18.6	19.2	19.7	20.2	20.6	20.9	21.2
20 0.0358"	6"	S	1026	1004	986	972	961	951	943	936
		G'	27.8	29.1	30.2	31.2	32.0	32.8	33.4	34.0
	12"	S	1026	1004	986	972	961	951	943	936
		G'	27.0	28.2	29.2	30.1	30.8	31.5	32.0	32.5
	18"	S	794	774	758	745	735	726	719	713
		G'	26.4	27.5	28.4	29.2	29.9	30.4	30.9	31.4
	24"	S	637	616	600	588	577	569	561	555
		G'	26.0	27.0	27.8	28.5	29.1	29.6	30.1	30.4
	30"	S	542	522	506	493	483	474	467	460
		G'	25.6	26.6	27.3	28.0	28.5	28.9	29.3	29.7
	36"	S	479	459	443	430	420	411	404	397
		G'	25.3	26.2	26.9	27.5	28.0	28.4	28.7	29.0
18 0.0474"	6"	S	1341	1311	1288	1270	1255	1242	1232	1223
		G'	47.8	49.7	51.3	52.7	53.8	54.8	55.7	56.5
	12"	S	1341	1311	1288	1270	1255	1242	1232	1222
		G'	45.8	47.5	48.8	50.0	50.9	51.8	52.5	53.1
	18"	S	1040	1011	990	973	960	949	939	931
		G'	44.4	45.8	47.0	47.9	48.7	49.4	50.0	50.5
	24"	S	834	805	784	767	754	743	733	725
		G'	43.3	44.5	45.5	46.3	47.0	47.5	48.0	48.4
	30"	S	711	681	660	644	630	619	609	601
		G'	42.4	43.5	44.4	45.0	45.6	46.0	46.4	46.7
	36"	S	629	599	578	562	548	537	527	519
		G'	41.7	42.7	43.4	44.0	44.4	44.8	45.1	45.3
16 0.0598"	6"	S	1667	1630	1602	1579	1560	1545	1531	1520
		G'	79.3	82.2	84.5	86.5	88.3	89.7	91.0	92.2
	12"	S	1667	1630	1602	1579	1560	1545	1531	1520
		G'	74.5	76.7	78.6	80.1	81.4	82.5	83.5	84.3
	18"	S	1297	1259	1231	1210	1193	1179	1167	1157
		G'	71.1	72.9	74.4	75.5	76.5	77.3	78.0	78.5
	24"	S	1041	1003	975	954	937	923	911	901
		G'	68.6	70.1	71.2	72.0	72.7	73.3	73.7	74.1
	30"	S	887	850	821	801	784	770	758	748
		G'	66.7	67.9	68.7	69.3	69.8	70.1	70.4	70.6
	36"	S	785	747	719	698	681	667	655	645
		G'	65.2	66.1	66.7	67.1	67.4	67.6	67.7	67.7

ATTACHMENT PATTERN: 24/8			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	7' - 0"	8' - 0"	9' - 0"	10' - 0"	11' - 0"	12' - 0"	13' - 0"	14' - 0"
22 0.0295"	6"	S	1122	1080	1047	1021	999	982	967	954
		G'	19.4	20.5	21.4	22.1	22.8	23.4	24.0	24.5
	12"	S	1015	986	964	946	931	919	909	900
		G'	19.0	19.9	20.8	21.5	22.1	22.7	23.2	23.6
	18"	S	753	724	702	684	670	658	647	638
		G'	18.6	19.6	20.3	21.0	21.6	22.1	22.5	22.9
	24"	S	622	594	571	553	539	527	516	508
		G'	18.4	19.2	20.0	20.6	21.1	21.6	22.0	22.4
	30"	S	544	515	493	475	460	448	438	429
		G'	18.2	19.0	19.7	20.3	20.8	21.2	21.6	21.9
	36"	S	491	463	441	423	408	396	386	377
		G'	18.0	18.8	19.4	20.0	20.4	20.8	21.2	21.5
20 0.0358"	6"	S	1207	1162	1127	1099	1076	1057	1040	1026
		G'	27.8	29.2	30.3	31.2	32.1	32.8	33.4	34.0
	12"	S	1207	1162	1127	1099	1076	1057	1040	1026
		G'	27.1	28.4	29.4	30.2	31.0	31.6	32.2	32.7
	18"	S	892	860	834	814	797	783	772	762
		G'	26.7	27.8	28.7	29.5	30.1	30.7	31.2	31.6
	24"	S	735	702	677	656	640	626	614	604
		G'	26.3	27.3	28.2	28.9	29.5	30.0	30.4	30.8
	30"	S	640	607	582	562	545	531	519	509
		G'	26.0	27.0	27.8	28.4	29.0	29.4	29.8	30.1
	36"	S	577	544	519	499	482	468	456	446
		G'	25.8	26.7	27.5	28.1	28.5	29.0	29.3	29.6
18 0.0474"	6"	S	1577	1518	1472	1435	1405	1380	1359	1341
		G'	48.0	49.9	51.5	52.8	54.0	55.0	55.8	56.6
	12"	S	1577	1518	1472	1435	1405	1380	1359	1341
		G'	46.2	47.8	49.2	50.3	51.3	52.1	52.8	53.4
	18"	S	1169	1123	1090	1063	1041	1023	1008	995
		G'	45.0	46.4	47.6	48.5	49.3	50.0	50.6	51.1
	24"	S	963	917	884	857	835	817	802	789
		G'	44.1	45.4	46.4	47.2	47.8	48.4	48.8	49.2
	30"	S	839	793	760	734	712	694	678	665
		G'	43.4	44.5	45.4	46.1	46.6	47.1	47.4	47.7
	36"	S	757	711	678	651	630	611	596	583
		G'	42.9	43.9	44.7	45.2	45.7	46.0	46.3	46.5
16 0.0598"	6"	S	1961	1888	1830	1785	1747	1716	1690	1667
		G'	79.6	82.5	84.8	86.8	88.5	90.0	91.3	92.4
	12"	S	1961	1888	1830	1785	1747	1716	1690	1667
		G'	75.3	77.6	79.4	81.0	82.2	83.3	84.3	85.1
	18"	S	1456	1399	1355	1322	1295	1272	1253	1237
		G'	72.5	74.3	75.7	76.9	77.8	78.6	79.2	79.8
	24"	S	1200	1143	1099	1066	1039	1016	997	981
		G'	70.4	71.9	73.0	73.9	74.5	75.1	75.5	75.8
	30"	S	1047	989	945	912	885	863	844	827
		G'	68.9	70.1	71.0	71.6	72.0	72.3	72.6	72.7
	36"	S	944	887	843	810	783	760	741	725
		G'	67.7	68.7	69.3	69.8	70.0	70.2	70.2	70.3

See Table 4 notes.

TABLE 49—VERSA-DEK® S ES ACOUSTICAL & LS ES ACOUSTICAL – ALLOWABLE DIAPHRAGM SHEAR[1-5]

SUPPORT CONNECTION: Hilti X-ENP-19-L15 (steel substrate thickness ≥ 0.25 inch)
SIDELAP CONNECTION: Hilti S-SLC01 M HWH, S-SLC02 M HWH or #12 self-drilling screws

S = Allowable Diaphragm Shear (plf)
G' = Stiffness Factor (kips/in.)

ATTACHMENT PATTERN: 24/4			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	7' - 0"	8' - 0"	9' - 0"	10' - 0"	11' - 0"	12' - 0"	13' - 0"	14' - 0"
22 0.0295"	6"	S	570	559	551	544	538	533	529	526
		G'	18.7	19.6	20.4	21.1	21.7	22.3	22.8	23.2
	12"	S	327	322	318	315	312	310	308	307
		G'	17.8	18.6	19.3	19.9	20.4	20.8	21.2	21.5
	18"	S	231	226	222	219	217	215	213	211
		G'	17.2	17.9	18.5	19.0	19.4	19.8	20.1	20.3
	24"	S	183	179	175	172	169	167	165	164
		G'	16.8	17.4	17.9	18.3	18.7	19.0	19.2	19.4
	30"	S	155	150	146	143	140	138	136	135
		G'	16.5	17.0	17.5	17.8	18.1	18.3	18.5	18.7
	36"	S	136	131	127	124	121	119	117	116
		G'	16.2	16.7	17.1	17.4	17.6	17.8	18.0	18.1
20 0.0358"	6"	S	614	602	593	585	579	574	570	566
		G'	26.4	27.6	28.6	29.4	30.1	30.7	31.3	31.7
	12"	S	397	390	386	382	379	376	374	372
		G'	24.9	25.8	26.6	27.2	27.8	28.3	28.7	29.0
	18"	S	281	275	270	266	263	260	258	256
		G'	23.9	24.6	25.3	25.7	26.2	26.5	26.8	27.1
	24"	S	223	217	212	208	205	203	200	199
		G'	23.1	23.8	24.3	24.6	25.0	25.2	25.4	25.6
	30"	S	188	182	177	173	170	168	166	164
		G'	22.6	23.1	23.5	23.8	24.0	24.2	24.3	24.4
	36"	S	165	159	154	150	147	145	142	141
		G'	22.2	22.6	22.9	23.1	23.3	23.4	23.5	23.5
18 0.0474"	6"	S	803	788	775	766	758	751	745	741
		G'	44.4	46.0	47.2	48.3	49.2	50.0	50.7	51.3
	12"	S	527	517	511	506	502	498	495	493
		G'	40.8	41.9	42.7	43.4	44.0	44.5	44.9	45.3
	18"	S	373	363	357	352	348	345	342	339
		G'	38.4	39.2	39.8	40.2	40.6	40.8	41.1	41.3
	24"	S	297	287	280	276	271	268	265	263
		G'	36.8	37.3	37.6	37.9	38.1	38.2	38.3	38.3
	30"	S	251	241	234	229	225	222	219	217
		G'	35.6	35.9	36.1	36.2	36.2	36.2	36.2	36.1
	36"	S	220	210	204	199	195	191	188	186
		G'	34.7	34.8	34.9	34.8	34.8	34.6	34.5	34.4
16 0.0598"	6"	S	1000	981	965	953	943	935	928	922
		G'	71.1	73.2	75.0	76.4	77.6	78.7	79.5	80.3
	12"	S	667	654	644	638	633	628	625	622
		G'	63.1	64.3	65.2	66.0	66.6	67.1	67.5	67.8
	18"	S	473	460	451	444	439	435	431	428
		G'	58.2	58.8	59.2	59.5	59.7	59.8	59.9	60.0
	24"	S	376	363	354	347	342	338	334	331
		G'	54.9	55.1	55.1	55.1	55.0	54.8	54.7	54.6
	30"	S	318	305	296	289	284	280	276	273
		G'	52.5	52.4	52.2	51.9	51.6	51.2	50.9	50.6
	36"	S	279	267	257	251	246	241	238	235
		G'	50.8	50.4	49.9	49.4	49.0	48.5	48.1	47.6

ATTACHMENT PATTERN: 24/8			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	7' - 0"	8' - 0"	9' - 0"	10' - 0"	11' - 0"	12' - 0"	13' - 0"	14' - 0"
22 0.0295"	6"	S	680	662	642	626	613	602	592	585
		G'	18.8	19.7	20.5	21.2	21.8	22.4	22.9	23.3
	12"	S	394	381	370	362	355	349	345	340
		G'	18.1	18.9	19.6	20.2	20.7	21.1	21.5	21.8
	18"	S	299	285	275	266	260	254	249	245
		G'	17.6	18.4	19.0	19.4	19.9	20.2	20.5	20.8
	24"	S	251	237	227	219	212	206	201	197
		G'	17.3	18.0	18.5	18.9	19.3	19.6	19.8	20.0
	30"	S	222	209	198	190	183	178	173	169
		G'	17.1	17.7	18.2	18.5	18.8	19.1	19.3	19.4
	36"	S	203	190	179	171	164	158	154	150
		G'	16.9	17.5	17.9	18.2	18.5	18.7	18.8	19.0
20 0.0358"	6"	S	741	713	691	674	660	648	638	630
		G'	26.6	27.8	28.7	29.6	30.3	30.9	31.4	31.9
	12"	S	469	454	442	433	425	419	413	409
		G'	25.3	26.3	27.1	27.7	28.2	28.7	29.1	29.4
	18"	S	353	338	326	317	309	303	297	293
		G'	24.6	25.3	26.0	26.5	26.9	27.2	27.5	27.8
	24"	S	295	280	268	259	251	245	239	235
		G'	24.0	24.7	25.2	25.6	25.9	26.2	26.4	26.5
	30"	S	260	245	234	224	216	210	205	200
		G'	23.6	24.2	24.6	25.0	25.2	25.4	25.5	25.6
	36"	S	237	222	210	201	193	187	181	177
		G'	23.3	23.8	24.2	24.5	24.6	24.7	24.8	24.9
18 0.0474"	6"	S	969	932	904	881	863	848	835	823
		G'	44.8	46.4	47.7	48.7	49.6	50.4	51.1	51.7
	12"	S	622	600	584	572	562	553	546	540
		G'	41.8	42.9	43.8	44.5	45.0	45.5	45.9	46.2
	18"	S	468	446	431	419	408	400	393	387
		G'	40.0	40.7	41.3	41.8	42.1	42.3	42.5	42.7
	24"	S	391	370	354	342	332	323	316	310
		G'	38.7	39.3	39.7	39.9	40.1	40.1	40.2	40.2
	30"	S	345	324	308	296	286	277	270	264
		G'	37.8	38.2	38.4	38.5	38.6	38.5	38.5	38.4
	36"	S	315	293	278	265	255	247	240	233
		G'	37.2	37.4	37.5	37.5	37.4	37.3	37.1	36.9
16 0.0598"	6"	S	1206	1161	1126	1097	1074	1055	1039	1025
		G'	72.1	74.2	75.9	77.3	78.5	79.5	80.4	81.1
	12"	S	785	757	736	720	708	697	688	681
		G'	65.3	66.5	67.4	68.1	68.6	69.0	69.4	69.7
	18"	S	591	563	542	527	514	504	495	487
		G'	61.4	62.0	62.4	62.6	62.7	62.7	62.7	62.7
	24"	S	494	467	446	430	417	407	398	390
		G'	58.8	59.0	59.0	58.9	58.7	58.5	58.3	58.0
	30"	S	436	409	388	372	359	349	340	332
		G'	57.0	56.9	56.7	56.3	55.9	55.5	55.0	54.6
	36"	S	397	370	349	333	321	310	301	294
		G'	55.7	55.4	54.9	54.3	53.8	53.2	52.6	52.1

See Table 4 notes.

TABLE 50—VERSA-DEK® S ES ACOUSTICAL & LS ES ACOUSTICAL – ALLOWABLE DIAPHRAGM SHEAR[1-5]

SUPPORT CONNECTION: Hilti X-HSN24 (0.125 inch ≤ steel substrate thickness ≤ 0.375 inch)
SIDELAP CONNECTION: Hilti S-SLC01 M HWH, S-SLC02 M HWH or #12 self-drilling screws

S = Allowable Diaphragm Shear (plf)
G' = Stiffness Factor (kips/in.)

ATTACHMENT PATTERN: 24/3

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT							
			7' - 0"	8' - 0"	9' - 0"	10' - 0"	11' - 0"	12' - 0"	13' - 0"	14' - 0"
22 0.0295"	6"	S	530	519	511	505	500	495	491	488
		G'	18.6	19.6	20.4	21.1	21.7	22.2	22.7	23.1
	12"	S	327	322	318	315	312	310	308	307
		G'	17.7	18.5	19.2	19.7	20.2	20.7	21.1	21.4
	18"	S	231	226	222	219	217	215	213	211
		G'	17.0	17.7	18.2	18.7	19.1	19.5	19.8	20.1
	24"	S	184	179	175	172	169	167	165	164
		G'	16.5	17.1	17.6	18.0	18.3	18.6	18.8	19.0
	30"	S	155	150	146	143	140	138	137	135
		G'	16.1	16.6	17.0	17.3	17.6	17.9	18.0	18.2
	36"	S	136	131	127	124	121	119	117	116
		G'	15.7	16.2	16.6	16.8	17.1	17.3	17.4	17.5
20 0.0358"	6"	S	570	559	551	544	538	533	529	526
		G'	26.3	27.5	28.4	29.3	30.0	30.6	31.2	31.6
	12"	S	397	391	386	382	379	376	374	372
		G'	24.6	25.5	26.3	27.0	27.5	28.0	28.4	28.8
	18"	S	281	275	270	266	263	261	258	257
		G'	23.4	24.2	24.8	25.3	25.7	26.1	26.4	26.6
	24"	S	223	217	212	208	205	203	200	199
		G'	22.5	23.2	23.6	24.0	24.3	24.6	24.8	25.0
	30"	S	188	182	177	173	170	168	166	164
		G'	21.9	22.4	22.7	23.0	23.2	23.4	23.6	23.7
	36"	S	165	159	154	150	147	145	142	141
		G'	21.3	21.7	22.0	22.2	22.4	22.5	22.6	22.6
18 0.0474"	6"	S	746	731	720	711	704	697	692	688
		G'	44.1	45.7	47.0	48.1	49.0	49.8	50.5	51.1
	12"	S	527	517	511	506	502	498	495	493
		G'	40.1	41.2	42.1	42.8	43.4	43.9	44.4	44.8
	18"	S	373	364	357	352	348	345	342	339
		G'	37.4	38.2	38.7	39.2	39.6	39.9	40.2	40.4
	24"	S	297	287	281	276	272	268	265	263
		G'	35.5	36.0	36.3	36.6	36.8	37.0	37.1	37.2
	30"	S	251	241	235	230	225	222	219	217
		G'	34.0	34.3	34.5	34.6	34.7	34.7	34.7	34.7
	36"	S	220	210	204	199	195	191	189	186
		G'	32.9	33.0	33.1	33.1	33.0	33.0	32.9	32.8
16 0.0598"	6"	S	929	911	896	885	876	868	862	856
		G'	70.5	72.7	74.4	75.9	77.1	78.2	79.1	79.9
	12"	S	666	654	644	638	633	628	625	622
		G'	61.7	62.9	63.9	64.7	65.3	65.9	66.3	66.7
	18"	S	473	460	451	444	439	435	431	428
		G'	56.1	56.8	57.2	57.6	57.8	58.0	58.2	58.3
	24"	S	376	363	354	348	342	338	334	331
		G'	52.3	52.5	52.6	52.7	52.7	52.6	52.6	52.5
	30"	S	318	305	296	289	284	280	276	273
		G'	49.5	49.4	49.3	49.1	48.9	48.6	48.4	48.2
	36"	S	279	267	257	251	246	241	238	235
		G'	47.4	47.1	46.7	46.3	45.9	45.6	45.2	44.9

ATTACHMENT PATTERN: 24/6

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT							
			7' - 0"	8' - 0"	9' - 0"	10' - 0"	11' - 0"	12' - 0"	13' - 0"	14' - 0"
22 0.0295"	6"	S	639	615	596	581	569	559	550	543
		G'	18.7	19.6	20.4	21.1	21.8	22.3	22.8	23.2
	12"	S	389	376	367	359	352	347	342	338
		G'	17.8	18.7	19.3	19.9	20.4	20.9	21.2	21.6
	18"	S	294	281	271	263	257	251	247	243
		G'	17.3	18.0	18.6	19.0	19.5	19.8	20.1	20.4
	24"	S	246	233	223	215	209	203	199	195
		G'	16.9	17.5	18.0	18.4	18.7	19.0	19.3	19.5
	30"	S	217	205	195	187	180	175	170	166
		G'	16.5	17.1	17.5	17.9	18.2	18.4	18.6	18.7
	36"	S	198	186	176	168	161	156	151	147
		G'	16.3	16.8	17.2	17.5	17.7	17.9	18.0	18.2
20 0.0358"	6"	S	688	662	642	626	613	602	593	585
		G'	26.4	27.6	28.6	29.4	30.1	30.7	31.3	31.8
	12"	S	464	449	438	429	422	416	410	406
		G'	24.9	25.9	26.6	27.3	27.8	28.3	28.7	29.0
	18"	S	348	334	322	313	306	300	295	290
		G'	23.9	24.7	25.3	25.8	26.2	26.6	26.9	27.1
	24"	S	290	276	264	255	248	242	237	232
		G'	23.2	23.8	24.3	24.7	25.0	25.3	25.5	25.6
	30"	S	255	241	230	221	213	207	202	197
		G'	22.7	23.2	23.6	23.9	24.1	24.3	24.4	24.5
	36"	S	232	218	206	197	190	184	179	174
		G'	22.3	22.7	23.0	23.2	23.4	23.5	23.6	23.6
18 0.0474"	6"	S	899	866	840	819	801	787	775	765
		G'	44.4	46.0	47.3	48.3	49.3	50.0	50.7	51.3
	12"	S	615	594	579	567	558	550	543	537
		G'	40.8	41.9	42.8	43.5	44.1	44.6	45.0	45.4
	18"	S	461	441	426	414	404	396	389	383
		G'	38.5	39.3	39.9	40.3	40.7	40.9	41.2	41.4
	24"	S	385	364	349	337	328	319	313	307
		G'	36.9	37.4	37.8	38.0	38.2	38.3	38.4	38.5
	30"	S	339	318	303	291	282	273	267	261
		G'	35.7	36.1	36.3	36.3	36.4	36.4	36.3	36.3
	36"	S	308	287	272	261	251	243	236	230
		G'	34.8	35.0	35.1	35.0	34.9	34.8	34.7	34.6
16 0.0598"	6"	S	1120	1078	1045	1019	998	980	965	952
		G'	71.2	73.3	75.0	76.5	77.7	78.7	79.6	80.4
	12"	S	776	750	730	715	703	692	684	677
		G'	63.2	64.5	65.4	66.1	66.7	67.2	67.6	67.9
	18"	S	582	556	536	521	509	499	490	483
		G'	58.4	59.0	59.4	59.7	59.9	60.0	60.1	60.1
	24"	S	486	459	439	424	412	402	394	386
		G'	55.2	55.4	55.4	55.3	55.2	55.1	55.0	54.8
	30"	S	428	401	381	366	354	344	335	328
		G'	52.9	52.7	52.5	52.2	51.9	51.5	51.2	50.9
	36"	S	389	363	342	328	315	305	297	289
		G'	51.1	50.7	50.3	49.8	49.3	48.8	48.4	47.9

See Table 4 notes.

TABLE 51—VERSA-DEK® 3.5 LS ACOUSTICAL – ALLOWABLE DIAPHRAGM SHEAR[1-3]

SUPPORT CONNECTION: $^1/_2$" Effective Weld Diameter
SIDELAP CONNECTION: #10 Screws
S = Allowable Diaphragm Shear (plf)
G' = Stiffness Factor (kips/in.)

ATTACHMENT PATTERN: 24/4			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	8' - 0"	10' - 0"	12' - 0"	14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"
20 0.0358"	6"	S	613	587	569	556	546	539	532	527
		G'	8.9	10.1	11.2	12.0	12.8	13.4	14.0	14.5
	12"	S	389	362	345	332	323	315	309	305
		G'	8.7	9.9	10.8	11.6	12.3	12.9	13.4	13.8
	18"	S	303	277	259	247	237	230	224	219
		G'	8.6	9.7	10.5	11.3	11.9	12.4	12.9	13.3
	24"	S	261	234	217	204	195	187	181	177
		G'	8.5	9.5	10.3	11.0	11.6	12.1	12.5	12.8
	30"	S	235	209	191	178	169	162	156	151
		G'	8.4	9.4	10.1	10.8	11.3	11.7	12.1	12.4
	36"	S	218	191	174	161	152	145	139	134
		G'	8.3	9.2	10.0	10.6	11.1	11.5	11.8	12.1
19 0.0418"	6"	S	713	683	663	648	636	627	620	614
		G'	12.2	13.7	15.0	16.0	16.9	17.7	18.3	18.9
	12"	S	453	422	402	387	376	368	361	355
		G'	11.8	13.3	14.4	15.3	16.1	16.8	17.4	17.9
	18"	S	353	323	302	287	277	268	261	256
		G'	11.6	12.9	14.0	14.8	15.5	16.1	16.6	17.0
	24"	S	303	273	252	238	227	218	211	206
		G'	11.4	12.6	13.6	14.4	15.0	15.5	16.0	16.4
	30"	S	273	243	222	208	197	188	181	176
		G'	11.3	12.4	13.3	14.0	14.6	15.1	15.4	15.8
	36"	S	253	223	202	188	177	168	162	156
		G'	11.1	12.2	13.1	13.7	14.2	14.7	15.0	15.3
18 0.0474"	6"	S	806	773	750	733	720	710	702	695
		G'	15.7	17.5	19.0	20.2	21.2	22.1	22.9	23.5
	12"	S	513	478	455	439	426	417	409	403
		G'	15.1	16.8	18.1	19.2	20.1	20.8	21.5	22.0
	18"	S	400	365	342	325	313	303	296	290
		G'	14.8	16.3	17.5	18.4	19.2	19.8	20.4	20.9
	24"	S	343	308	285	269	257	247	239	233
		G'	14.5	15.9	16.9	17.8	18.5	19.0	19.5	19.9
	30"	S	309	274	251	235	223	213	205	199
		G'	14.3	15.5	16.5	17.3	17.9	18.4	18.8	19.1
	36"	S	286	252	229	212	200	190	183	176
		G'	14.1	15.3	16.2	16.8	17.4	17.8	18.1	18.4
16 0.0598"	6"	S	1011	970	941	920	904	892	882	874
		G'	25.1	27.7	29.8	31.4	32.8	33.9	34.9	35.7
	12"	S	644	601	572	552	536	524	515	507
		G'	24.1	26.3	28.0	29.4	30.5	31.4	32.2	32.9
	18"	S	502	458	430	409	394	382	372	364
		G'	23.4	25.3	26.8	28.0	28.9	29.6	30.2	30.7
	24"	S	430	387	358	338	322	310	301	293
		G'	22.9	24.6	25.9	26.9	27.6	28.2	28.7	29.1
	30"	S	387	344	316	295	280	268	258	250
		G'	22.5	24.1	25.2	26.0	26.6	27.1	27.4	27.7
	36"	S	359	316	287	266	251	239	229	222
		G'	22.2	23.6	24.6	25.3	25.8	26.2	26.4	26.7

ATTACHMENT PATTERN: 24/8			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	8' - 0"	10' - 0"	12' - 0"	14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"
20 0.0358"	6"	S	692	656	632	615	603	593	585	578
		G'	8.9	10.2	11.2	12.0	12.8	13.4	14.0	14.5
	12"	S	436	400	376	359	346	336	328	322
		G'	8.8	9.9	10.9	11.7	12.3	12.9	13.4	13.9
	18"	S	351	315	291	274	261	251	243	237
		G'	8.6	9.7	10.6	11.4	12.0	12.5	13.0	13.4
	24"	S	308	272	248	231	218	208	200	194
		G'	8.5	9.6	10.4	11.1	11.7	12.2	12.6	13.0
	30"	S	282	246	223	205	193	183	175	168
		G'	8.5	9.5	10.3	10.9	11.5	11.9	12.3	12.6
	36"	S	265	229	205	188	176	166	158	151
		G'	8.4	9.4	10.2	10.8	11.3	11.7	12.0	12.3
19 0.0418"	6"	S	807	765	738	718	703	691	682	675
		G'	12.2	13.7	15.0	16.1	16.9	17.7	18.4	18.9
	12"	S	508	466	438	419	404	392	383	375
		G'	11.9	13.3	14.5	15.4	16.2	16.9	17.5	18.0
	18"	S	408	367	339	319	304	292	283	276
		G'	11.7	13.0	14.1	14.9	15.7	16.2	16.8	17.2
	24"	S	358	317	289	269	254	243	233	226
		G'	11.6	12.8	13.8	14.6	15.2	15.7	16.2	16.6
	30"	S	328	287	259	239	224	213	203	196
		G'	11.4	12.6	13.5	14.3	14.9	15.3	15.7	16.1
	36"	S	308	267	239	219	204	193	184	176
		G'	11.3	12.5	13.4	14.0	14.6	15.0	15.3	15.6
18 0.0474"	6"	S	914	867	836	813	796	783	773	764
		G'	15.7	17.5	19.0	20.3	21.3	22.2	22.9	23.6
	12"	S	575	528	496	474	457	444	434	425
		G'	15.2	16.9	18.2	19.3	20.2	21.0	21.6	22.2
	18"	S	462	415	383	361	344	331	321	312
		G'	14.9	16.5	17.7	18.6	19.4	20.0	20.6	21.1
	24"	S	405	358	327	304	288	275	264	256
		G'	14.7	16.1	17.2	18.1	18.8	19.3	19.8	20.2
	30"	S	371	324	293	270	254	241	230	222
		G'	14.5	15.9	16.9	17.6	18.3	18.7	19.1	19.5
	36"	S	348	301	270	248	231	218	208	199
		G'	14.4	15.7	16.6	17.3	17.8	18.3	18.6	18.9
16 0.0598"	6"	S	1149	1091	1052	1024	1003	987	974	963
		G'	25.2	27.8	29.9	31.5	32.9	34.0	35.0	35.8
	12"	S	721	663	624	596	575	559	546	535
		G'	24.4	26.6	28.4	29.7	30.9	31.8	32.5	33.2
	18"	S	579	520	481	453	432	416	403	392
		G'	23.8	25.8	27.3	28.5	29.4	30.2	30.8	31.3
	24"	S	507	449	410	382	361	345	332	321
		G'	23.4	25.3	26.6	27.6	28.4	28.9	29.4	29.8
	30"	S	465	406	367	339	318	302	289	278
		G'	23.1	24.8	26.0	26.9	27.5	28.0	28.4	28.7
	36"	S	436	377	338	310	290	273	260	250
		G'	22.9	24.5	25.6	26.3	26.9	27.3	27.5	27.7

See Table 4 notes.

TABLE 52—VERSA-DEK® 3.5 LS ACOUSTICAL – ALLOWABLE DIAPHRAGM SHEAR[1-3]

SUPPORT CONNECTION: 1 1/2" Effective Weld Diameter
SIDELAP CONNECTION: 1 1/2" Long Fillet Welds or 1 1/2" Seam Welds

S = Allowable Diaphragm Shear (plf)
G' = Stiffness Factor (kips/in.)

ATTACHMENT PATTERN: 24/3

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT							
			8' - 0"	10' - 0"	12' - 0"	14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"
20 0.0358"	6"	S	918	899	886	876	869	864	859	856
		G'	9.1	10.3	11.4	12.3	13.1	13.8	14.4	14.9
	12"	S	868	848	833	823	814	808	802	798
		G'	9.0	10.2	11.2	12.1	12.9	13.5	14.1	14.6
	18"	S	732	702	681	665	653	644	636	630
		G'	8.9	10.1	11.1	11.9	12.7	13.3	13.9	14.3
	24"	S	642	607	581	563	549	538	529	521
		G'	8.8	10.0	11.0	11.8	12.5	13.1	13.6	14.1
	30"	S	581	541	514	493	478	466	456	448
		G'	8.8	9.9	10.9	11.7	12.3	12.9	13.4	13.9
	36"	S	534	490	461	440	425	413	403	395
		G'	8.7	9.8	10.8	11.5	12.2	12.7	13.2	13.6
19 0.0418"	6"	S	1065	1042	1027	1016	1008	1002	996	992
		G'	12.4	14.1	15.4	16.5	17.5	18.3	19.0	19.7
	12"	S	1007	983	966	954	944	936	930	925
		G'	12.3	13.8	15.1	16.2	17.1	17.9	18.6	19.1
	18"	S	849	814	789	771	757	746	737	730
		G'	12.1	13.6	14.9	15.9	16.8	17.5	18.1	18.7
	24"	S	745	703	674	653	636	623	613	604
		G'	12.0	13.5	14.7	15.6	16.5	17.2	17.8	18.3
	30"	S	673	627	596	572	554	540	528	519
		G'	11.9	13.3	14.5	15.4	16.2	16.9	17.4	17.9
	36"	S	619	568	535	511	492	478	467	458
		G'	11.8	13.2	14.3	15.2	16.0	16.6	17.1	17.6
18 0.0474"	6"	S	1200	1174	1157	1145	1135	1128	1123	1118
		G'	16.1	18.0	19.6	21.0	22.1	23.1	23.9	24.6
	12"	S	1134	1107	1089	1074	1064	1055	1048	1042
		G'	15.8	17.7	19.2	20.5	21.5	22.4	23.2	23.9
	18"	S	956	917	889	869	853	841	831	822
		G'	15.6	17.4	18.8	20.0	21.0	21.9	22.6	23.2
	24"	S	839	792	760	735	717	702	690	680
		G'	15.4	17.1	18.5	19.6	20.6	21.4	22.0	22.6
	30"	S	758	707	671	644	624	608	595	585
		G'	15.3	16.9	18.2	19.3	20.2	20.9	21.6	22.1
	36"	S	697	640	602	575	555	539	526	516
		G'	15.1	16.7	18.0	19.0	19.8	20.5	21.1	21.6
16 0.0598"	6"	S	1491	1460	1438	1423	1412	1403	1396	1390
		G'	26.0	28.9	31.1	33.0	34.5	35.8	37.0	37.9
	12"	S	1410	1377	1353	1336	1322	1312	1303	1296
		G'	25.4	28.1	30.2	31.9	33.3	34.5	35.5	36.4
	18"	S	1189	1140	1106	1080	1061	1045	1033	1022
		G'	25.0	27.5	29.4	31.0	32.3	33.4	34.3	35.1
	24"	S	1043	985	944	914	891	873	858	846
		G'	24.6	27.0	28.8	30.3	31.4	32.4	33.2	34.0
	30"	S	943	879	834	801	776	756	740	727
		G'	24.3	26.5	28.3	29.6	30.7	31.6	32.3	33.0
	36"	S	867	796	749	715	690	670	654	641
		G'	24.0	26.2	27.8	29.1	30.1	30.9	31.6	32.1

ATTACHMENT PATTERN: 24/6

GAGE	SIDE LAP SPACING	FACTOR	DECK SPAN - C to C SUPPORT							
			8' - 0"	10' - 0"	12' - 0"	14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"
20 0.0358"	6"	S	1034	991	962	942	927	915	906	898
		G'	9.1	10.3	11.4	12.3	13.1	13.8	14.4	15.0
	12"	S	1034	991	962	942	927	915	906	898
		G'	9.0	10.2	11.3	12.1	12.9	13.6	14.1	14.6
	18"	S	893	839	803	776	756	740	728	717
		G'	8.9	10.1	11.1	12.0	12.7	13.3	13.9	14.4
	24"	S	739	686	650	625	606	591	580	570
		G'	8.8	10.0	11.0	11.8	12.5	13.1	13.7	14.1
	30"	S	644	591	556	531	512	497	485	475
		G'	8.8	9.9	10.9	11.7	12.4	13.0	13.5	13.9
	36"	S	581	528	493	467	449	434	422	412
		G'	8.8	9.9	10.8	11.6	12.2	12.8	13.3	13.7
19 0.0418"	6"	S	1198	1149	1116	1092	1075	1061	1050	1041
		G'	12.4	14.1	15.4	16.5	17.5	18.3	19.0	19.7
	12"	S	1198	1149	1116	1092	1075	1061	1050	1041
		G'	12.3	13.8	15.1	16.2	17.1	17.9	18.6	19.2
	18"	S	1035	973	931	900	877	858	844	832
		G'	12.2	13.7	14.9	15.9	16.8	17.5	18.2	18.7
	24"	S	857	795	754	725	703	686	672	661
		G'	12.1	13.5	14.7	15.7	16.5	17.2	17.8	18.3
	30"	S	747	685	644	615	593	576	562	551
		G'	12.0	13.4	14.5	15.5	16.3	16.9	17.5	18.0
	36"	S	674	612	571	542	520	503	489	478
		G'	11.9	13.3	14.4	15.3	16.1	16.7	17.2	17.7
18 0.0474"	6"	S	1350	1294	1257	1231	1211	1195	1183	1173
		G'	16.1	18.1	19.7	21.0	22.1	23.1	23.9	24.6
	12"	S	1350	1294	1257	1231	1211	1195	1183	1173
		G'	15.8	17.7	19.2	20.5	21.5	22.4	23.2	23.9
	18"	S	1166	1096	1048	1014	988	967	951	937
		G'	15.6	17.4	18.9	20.1	21.1	21.9	22.6	23.3
	24"	S	965	896	850	817	792	772	757	744
		G'	15.5	17.2	18.6	19.7	20.7	21.4	22.1	22.7
	30"	S	842	772	726	693	668	649	633	621
		G'	15.3	17.0	18.3	19.4	20.3	21.0	21.7	22.2
	36"	S	759	690	644	611	586	567	551	538
		G'	15.2	16.9	18.1	19.1	20.0	20.7	21.3	21.8
16 0.0598"	6"	S	1679	1609	1563	1530	1505	1486	1471	1458
		G'	26.1	28.9	31.2	33.0	34.6	35.9	37.0	37.9
	12"	S	1679	1609	1563	1530	1505	1486	1471	1458
		G'	25.5	28.2	30.3	32.0	33.4	34.6	35.6	36.5
	18"	S	1450	1363	1303	1260	1228	1202	1182	1165
		G'	25.1	27.6	29.6	31.2	32.5	33.5	34.4	35.2
	24"	S	1200	1114	1056	1015	984	960	941	926
		G'	24.8	27.2	29.0	30.5	31.7	32.7	33.5	34.2
	30"	S	1046	960	903	862	831	807	788	772
		G'	24.5	26.8	28.6	29.9	31.0	31.9	32.7	33.3
	36"	S	944	858	800	759	728	704	685	669
		G'	24.3	26.5	28.2	29.4	30.4	31.3	31.9	32.5

See Table 4 notes.

TABLE 53—VERSA-DEK® 3.5 LS ACOUSTICAL – ALLOWABLE DIAPHRAGM SHEAR[1-5]

SUPPORT CONNECTION: Hilti X-ENP-19-L15 (steel substrate thickness ≥ 0.25 inch)
SIDELAP CONNECTION: Hilti S-SLC01 M HWH, S-SLC02 M HWH or #12 self-drilling screws

S = Allowable Diaphragm Shear (plf)
G' = Stiffness Factor (kips/in.)

ATTACHMENT PATTERN: 24/3			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	8' - 0"	10' - 0"	12' - 0"	14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"
20 0.0358"	6"	S	538	531	526	523	520	518	517	516
		G'	8.9	10.1	11.2	12.0	12.8	13.4	14.0	14.5
	12"	S	393	379	369	362	357	352	349	346
		G'	8.7	9.8	10.8	11.6	12.3	12.8	13.4	13.8
	18"	S	307	292	282	275	270	264	260	257
		G'	8.5	9.6	10.5	11.2	11.9	12.4	12.8	13.2
	24"	S	249	234	224	217	212	208	204	202
		G'	8.4	9.4	10.3	10.9	11.5	12.0	12.4	12.8
	30"	S	214	199	189	182	177	173	169	167
		G'	8.3	9.3	10.1	10.7	11.2	11.7	12.0	12.4
	36"	S	191	176	166	159	154	150	146	144
		G'	8.2	9.2	9.9	10.5	11.0	11.4	11.7	12.0
19 0.0418"	6"	S	624	616	610	607	604	602	600	598
		G'	12.2	13.7	15.0	16.0	16.9	17.7	18.3	18.9
	12"	S	458	441	430	422	415	410	406	403
		G'	11.8	13.2	14.4	15.3	16.1	16.8	17.3	17.9
	18"	S	358	341	329	321	314	308	303	300
		G'	11.5	12.8	13.9	14.7	15.4	16.0	16.5	17.0
	24"	S	291	273	262	253	247	242	238	235
		G'	11.3	12.5	13.5	14.3	14.9	15.4	15.9	16.3
	30"	S	250	233	221	213	206	202	198	195
		G'	11.2	12.3	13.2	13.9	14.5	14.9	15.3	15.7
	36"	S	223	206	194	186	179	175	171	167
		G'	11.0	12.1	12.9	13.6	14.1	14.5	14.8	15.1
18 0.0474"	6"	S	703	694	688	684	681	678	676	674
		G'	15.7	17.5	19.0	20.2	21.2	22.1	22.9	23.5
	12"	S	518	500	487	477	470	465	460	456
		G'	15.1	16.8	18.1	19.1	20.0	20.8	21.4	22.0
	18"	S	406	386	373	364	356	349	344	339
		G'	14.7	16.2	17.4	18.3	19.1	19.7	20.3	20.8
	24"	S	329	309	296	287	280	274	270	266
		G'	14.4	15.7	16.8	17.6	18.3	18.9	19.4	19.8
	30"	S	283	263	250	241	234	228	224	220
		G'	14.1	15.4	16.3	17.1	17.7	18.2	18.6	18.9
	36"	S	252	233	220	210	203	198	193	190
		G'	13.9	15.1	16.0	16.6	17.2	17.6	17.9	18.2
16 0.0598"	6"	S	876	864	857	851	847	844	842	840
		G'	25.0	27.6	29.7	31.3	32.7	33.8	34.8	35.6
	12"	S	650	627	611	600	591	584	578	574
		G'	23.8	26.0	27.7	29.1	30.2	31.1	31.9	32.6
	18"	S	511	487	470	458	447	439	432	427
		G'	22.9	24.8	26.3	27.4	28.3	29.1	29.7	30.2
	24"	S	415	390	373	362	353	346	340	336
		G'	22.2	23.9	25.1	26.1	26.8	27.4	27.9	28.3
	30"	S	356	332	315	303	295	288	282	278
		G'	21.7	23.2	24.2	25.0	25.6	26.1	26.5	26.8
	36"	S	318	293	277	265	256	249	244	239
		G'	21.2	22.6	23.5	24.1	24.6	25.0	25.3	25.6

ATTACHMENT PATTERN: 24/6			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	8' - 0"	10' - 0"	12' - 0"	14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"
20 0.0358"	6"	S	617	594	579	568	560	554	549	544
		G'	8.9	10.2	11.2	12.0	12.8	13.4	14.0	14.5
	12"	S	468	444	428	416	408	401	396	391
		G'	8.7	9.9	10.8	11.6	12.3	12.9	13.4	13.9
	18"	S	352	328	312	301	292	285	280	276
		G'	8.6	9.7	10.6	11.3	12.0	12.5	12.9	13.3
	24"	S	294	270	254	243	234	227	222	218
		G'	8.5	9.6	10.4	11.1	11.7	12.1	12.6	12.9
	30"	S	259	235	219	208	199	193	187	183
		G'	8.4	9.4	10.2	10.9	11.4	11.9	12.2	12.6
	36"	S	236	212	196	185	176	169	164	160
		G'	8.4	9.4	10.1	10.7	11.2	11.6	12.0	12.3
19 0.0418"	6"	S	716	689	672	659	650	642	637	632
		G'	12.2	13.7	15.0	16.0	16.9	17.7	18.4	18.9
	12"	S	545	518	499	486	476	468	462	456
		G'	11.9	13.3	14.4	15.4	16.2	16.9	17.4	17.9
	18"	S	410	382	364	350	341	333	327	322
		G'	11.7	13.0	14.0	14.9	15.6	16.2	16.7	17.1
	24"	S	342	315	296	283	273	265	259	254
		G'	11.5	12.7	13.7	14.5	15.1	15.7	16.1	16.5
	30"	S	302	274	255	242	232	225	218	213
		G'	11.4	12.6	13.5	14.2	14.8	15.2	15.6	16.0
	36"	S	275	247	228	215	205	198	191	186
		G'	11.3	12.4	13.3	13.9	14.5	14.9	15.2	15.5
18 0.0474"	6"	S	807	777	757	743	732	724	718	712
		G'	15.7	17.5	19.0	20.2	21.3	22.1	22.9	23.6
	12"	S	618	586	565	550	539	531	524	517
		G'	15.2	16.9	18.2	19.3	20.2	20.9	21.6	22.1
	18"	S	464	433	412	397	386	377	370	364
		G'	14.9	16.4	17.6	18.6	19.3	20.0	20.5	21.0
	24"	S	388	356	335	320	309	300	293	288
		G'	14.6	16.0	17.1	18.0	18.7	19.2	19.7	20.1
	30"	S	342	310	289	274	263	254	247	242
		G'	14.4	15.8	16.8	17.5	18.1	18.6	19.0	19.3
	36"	S	311	279	259	244	232	224	217	211
		G'	14.3	15.5	16.5	17.1	17.7	18.1	18.5	18.7
16 0.0598"	6"	S	1005	968	943	925	912	902	893	887
		G'	25.1	27.7	29.7	31.4	32.8	33.9	34.9	35.7
	12"	S	778	738	712	693	679	668	659	651
		G'	24.0	26.3	28.0	29.4	30.5	31.4	32.2	32.8
	18"	S	584	545	519	500	486	475	466	459
		G'	23.3	25.3	26.7	27.9	28.8	29.5	30.1	30.6
	24"	S	487	448	422	403	389	378	369	362
		G'	22.8	24.5	25.8	26.7	27.5	28.1	28.6	29.0
	30"	S	429	390	364	345	331	320	311	304
		G'	22.3	23.9	25.0	25.8	26.5	26.9	27.3	27.6
	36"	S	390	351	325	306	292	281	273	265
		G'	22.0	23.5	24.4	25.1	25.6	26.0	26.3	26.5

See Table 4 notes.

TABLE 54—VERSA-DEK® 3.5 LS ACOUSTICAL – ALLOWABLE DIAPHRAGM SHEAR[1-5]

SUPPORT CONNECTION: Hilti X-HSN24 (0.125 inch ≤ steel substrate thickness ≤ 0.375 inch)
SIDELAP CONNECTION: Hilti S-SLC01 M HWH, S-SLC02 M HWH or #12 self-drilling screws

S = Allowable Diaphragm Shear (plf)
G' = Stiffness Factor (kips/in.)

ATTACHMENT PATTERN: 24/3			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	8' - 0"	10' - 0"	12' - 0"	14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"
20 0.0358"	6"	S	499	493	489	486	483	481	480	479
		G'	8.9	10.1	11.1	12.0	12.8	13.4	14.0	14.5
	12"	S	382	369	360	354	349	345	342	339
		G'	8.7	9.8	10.8	11.6	12.2	12.8	13.3	13.8
	18"	S	305	290	279	271	265	260	256	253
		G'	8.5	9.6	10.5	11.2	11.8	12.3	12.8	13.2
	24"	S	247	232	223	216	211	207	203	201
		G'	8.4	9.4	10.2	10.9	11.4	11.9	12.3	12.7
	30"	S	212	198	188	181	176	172	169	166
		G'	8.2	9.2	10.0	10.6	11.1	11.5	11.9	12.2
	36"	S	189	174	165	158	153	149	145	143
		G'	8.1	9.0	9.8	10.4	10.8	11.2	11.6	11.9
19 0.0418"	6"	S	579	572	567	563	561	559	557	556
		G'	12.2	13.7	14.9	16.0	16.9	17.7	18.3	18.9
	12"	S	445	430	420	412	406	402	398	395
		G'	11.8	13.2	14.3	15.3	16.0	16.7	17.3	17.8
	18"	S	356	338	325	316	309	303	299	295
		G'	11.5	12.8	13.8	14.6	15.4	15.9	16.5	16.9
	24"	S	288	271	260	252	246	241	237	234
		G'	11.2	12.4	13.4	14.1	14.8	15.3	15.7	16.1
	30"	S	247	230	219	211	205	200	197	194
		G'	11.0	12.1	13.0	13.7	14.3	14.8	15.1	15.5
	36"	S	220	203	192	184	178	173	170	167
		G'	10.9	11.9	12.7	13.3	13.9	14.3	14.6	14.9
18 0.0474"	6"	S	653	645	639	635	632	630	628	626
		G'	15.6	17.5	19.0	20.2	21.2	22.1	22.8	23.5
	12"	S	503	486	475	466	460	455	451	447
		G'	15.0	16.7	18.0	19.1	20.0	20.7	21.4	21.9
	18"	S	403	382	368	357	350	343	338	334
		G'	14.6	16.1	17.2	18.2	19.0	19.6	20.2	20.6
	24"	S	326	307	294	285	278	273	269	265
		G'	14.2	15.6	16.6	17.5	18.1	18.7	19.2	19.6
	30"	S	280	261	248	239	232	227	223	219
		G'	13.9	15.2	16.1	16.9	17.4	17.9	18.3	18.7
	36"	S	250	230	218	209	202	196	192	189
		G'	13.7	14.8	15.7	16.3	16.9	17.3	17.6	17.9
16 0.0598"	6"	S	813	803	796	791	787	784	782	780
		G'	25.0	27.6	29.6	31.3	32.6	33.8	34.7	35.6
	12"	S	632	611	596	586	578	571	566	562
		G'	23.6	25.9	27.6	28.9	30.1	31.0	31.8	32.4
	18"	S	506	480	462	449	439	432	425	420
		G'	22.6	24.6	26.0	27.2	28.1	28.8	29.5	30.0
	24"	S	411	387	371	359	351	344	339	334
		G'	21.9	23.5	24.8	25.7	26.5	27.1	27.6	28.0
	30"	S	353	329	313	301	293	286	281	276
		G'	21.2	22.7	23.8	24.6	25.2	25.7	26.1	26.4
	36"	S	314	290	274	263	254	247	242	238
		G'	20.7	22.0	22.9	23.6	24.1	24.5	24.8	25.0

ATTACHMENT PATTERN: 24/6			DECK SPAN - C to C SUPPORT							
GAGE	SIDE LAP SPACING	FACTOR	8' - 0"	10' - 0"	12' - 0"	14' - 0"	16' - 0"	18' - 0"	20' - 0"	22' - 0"
20 0.0358"	6"	S	573	552	538	528	520	514	509	506
		G'	8.9	10.1	11.2	12.0	12.8	13.4	14.0	14.5
	12"	S	462	439	424	413	405	397	392	387
		G'	8.7	9.9	10.8	11.6	12.3	12.9	13.4	13.8
	18"	S	346	323	308	297	289	283	278	274
		G'	8.6	9.6	10.5	11.2	11.9	12.4	12.9	13.3
	24"	S	288	266	250	239	231	225	220	216
		G'	8.4	9.5	10.3	11.0	11.5	12.0	12.4	12.8
	30"	S	254	231	216	205	197	190	185	181
		G'	8.3	9.3	10.1	10.7	11.2	11.7	12.1	12.4
	36"	S	230	208	192	182	173	167	162	158
		G'	8.3	9.2	9.9	10.5	11.0	11.4	11.7	12.0
19 0.0418"	6"	S	665	640	624	612	603	597	591	587
		G'	12.2	13.7	15.0	16.0	16.9	17.7	18.3	18.9
	12"	S	539	512	495	482	472	463	457	451
		G'	11.8	13.2	14.4	15.3	16.1	16.8	17.4	17.9
	18"	S	404	377	360	347	337	330	324	319
		G'	11.6	12.9	13.9	14.8	15.5	16.1	16.6	17.0
	24"	S	336	310	292	279	270	262	256	252
		G'	11.4	12.6	13.5	14.3	14.9	15.5	15.9	16.3
	30"	S	295	269	251	239	229	222	216	211
		G'	11.2	12.3	13.2	13.9	14.5	15.0	15.4	15.7
	36"	S	268	242	224	212	202	195	189	184
		G'	11.1	12.1	13.0	13.6	14.1	14.5	14.9	15.2
18 0.0474"	6"	S	749	722	703	690	680	672	666	661
		G'	15.7	17.5	19.0	20.2	21.2	22.1	22.9	23.5
	12"	S	611	581	561	546	534	525	517	511
		G'	15.1	16.8	18.1	19.2	20.1	20.8	21.4	22.0
	18"	S	457	427	407	393	382	374	367	362
		G'	14.7	16.2	17.4	18.3	19.1	19.8	20.3	20.8
	24"	S	380	351	331	316	306	297	291	285
		G'	14.4	15.8	16.8	17.7	18.4	18.9	19.4	19.8
	30"	S	334	304	285	270	260	251	245	239
		G'	14.2	15.4	16.4	17.1	17.7	18.2	18.6	19.0
	36"	S	304	274	254	240	229	221	214	208
		G'	13.9	15.1	16.0	16.7	17.2	17.6	18.0	18.3
16 0.0598"	6"	S	933	898	875	859	847	837	830	823
		G'	25.0	27.6	29.7	31.3	32.7	33.8	34.8	35.6
	12"	S	769	731	706	687	672	660	651	643
		G'	23.8	26.0	27.8	29.1	30.2	31.2	31.9	32.6
	18"	S	575	538	513	495	481	471	463	456
		G'	22.9	24.9	26.3	27.5	28.4	29.1	29.7	30.3
	24"	S	478	441	416	398	385	374	366	359
		G'	22.3	24.0	25.2	26.2	26.9	27.5	28.0	28.4
	30"	S	420	383	358	340	327	316	308	301
		G'	21.7	23.2	24.3	25.1	25.7	26.2	26.6	26.9
	36"	S	382	344	319	301	288	277	269	262
		G'	21.3	22.7	23.6	24.3	24.8	25.1	25.4	25.7

See Table 4 notes.

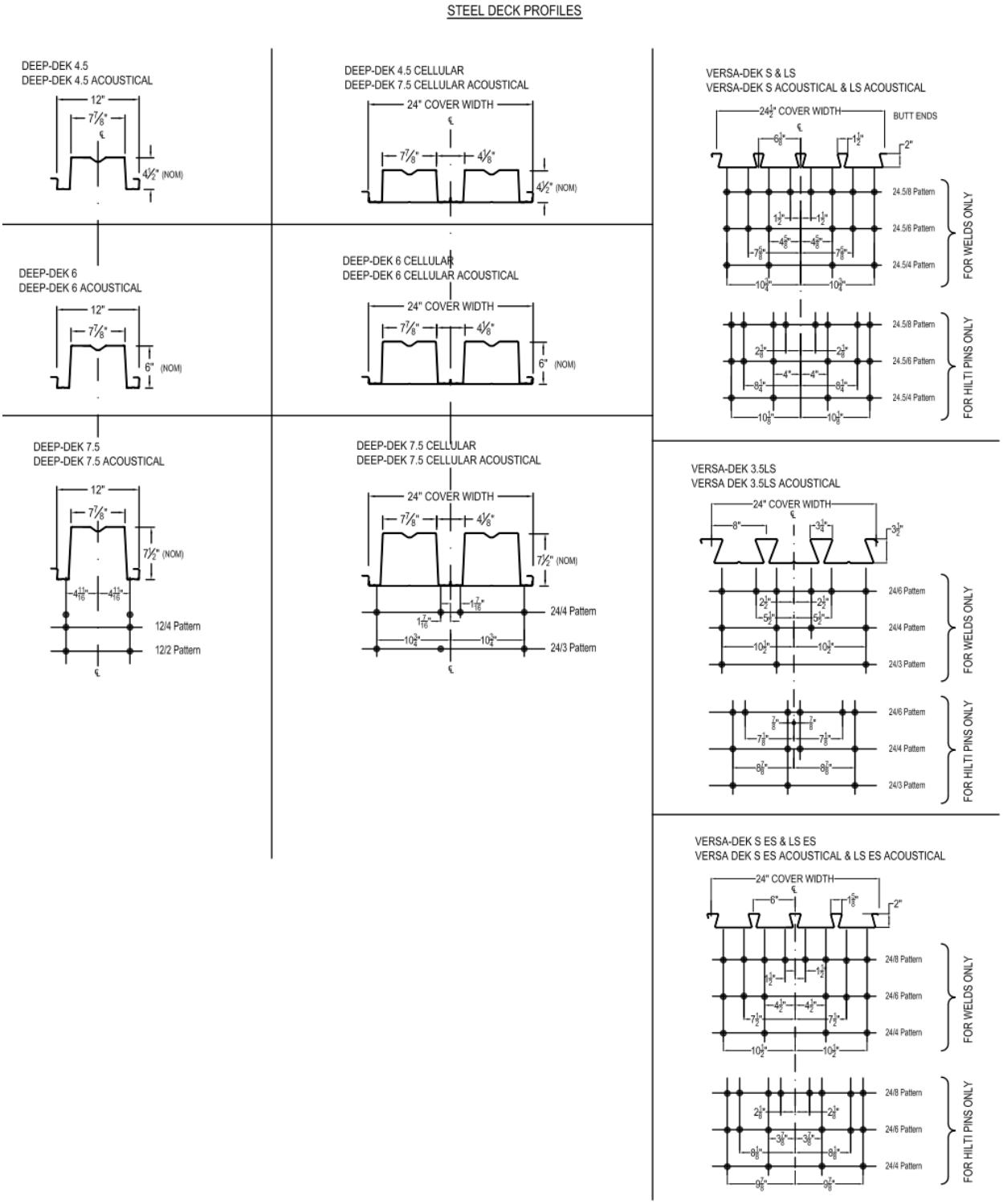


FIGURE 1—STEEL DECK PANEL PROFILES AND ATTACHMENT PATTERNS AT SUPPORTS

DECK TYPE	PERFORATION DIAMETER (in.)	PERFORATION SPACING, a
Versa-Dek® S Acoustical, Versa-Dek® LS Acoustical	0.156	31 spaces @ 0.1875" = 5.813"
Versa-Dek® S ES Acoustical, Versa-Dek® LS ES Acoustical	0.157	30 spaces @ 0.1895" = 5.685"
Versa-Dek® 3.5 LS Acoustical	0.156	46 spaces @ 0.162" = 7.452"

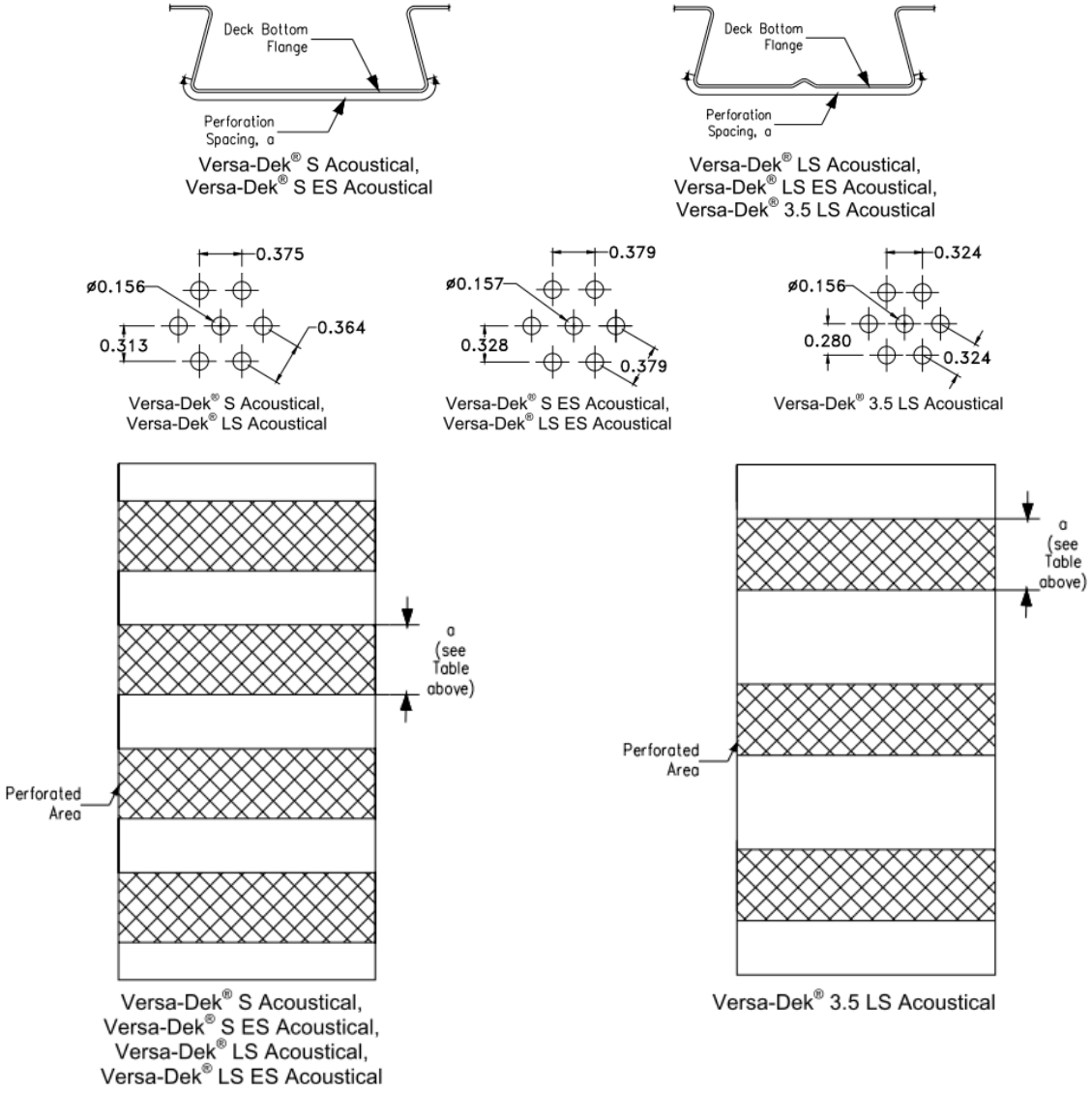
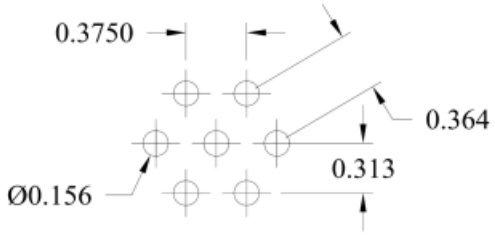
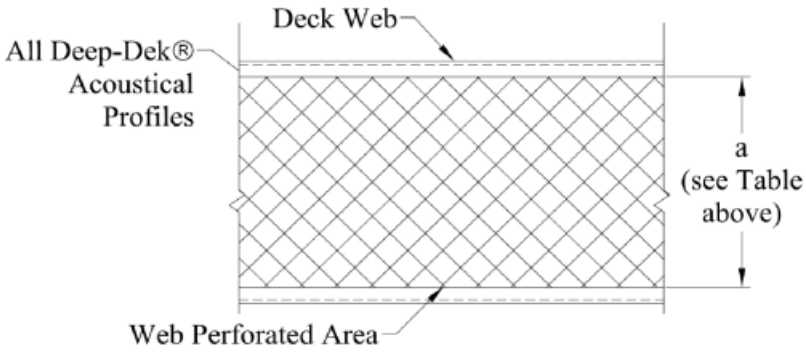


FIGURE 2—PERFORATION PATTERNS OF VERSA-DEK ACOUSTICAL PROFILES

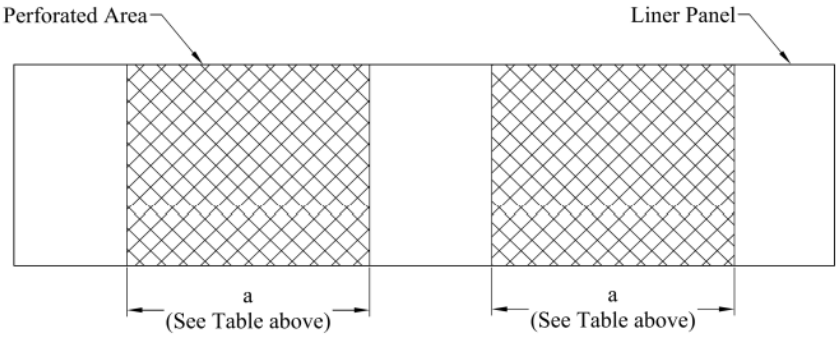
DECK TYPE	PERFORATION DIAMETER (in)	PERFORATION SPACING, a
Deep-Dek® 4.5 Acoustical	0.156	10 spaces @ 0.375" = 3.750"
Deep-Dek® 6 Acoustical	0.156	14 spaces @ 0.375" = 5.250"
Deep-Dek® 7.5 Acoustical	0.156	18 spaces @ 0.375" = 6.750"
Deep-Dek® Cellular Acoustical	0.156	21 spaces @ 0.375" = 7.875"



All Deep-Dek® Acoustical &
Deep-Dek® Cellular Acoustical Profiles



All Deep-Dek® Acoustical Profiles



All Deep-Dek® Cellular Acoustical Profiles

FIGURE 3—PERFORATION PATTERNS OF DEEP-DEK® ACOUSTICAL & DEEP-DEK® CELLULAR ACOUSTICAL

ICC-ES Evaluation Report

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

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EVALUATION SUBJECT:

NEW MILLENNIUM STEEL ROOF DECK PANELS: D4.5, D6 AND D7.5 DEEP-DEK®; D4.5A, D6A AND D7.5A DEEP-DEK® ACOUSTICAL; D4.5C, D6C AND D7.5C DEEP-DEK® CELLULAR; D4.5CA, D6CA AND D7.5CA DEEP-DEK® CELLULAR ACOUSTICAL; VERSA-DEK® ROOF DECK PANELS; AND VERSA-DEK® ACOUSTICAL ROOF DECK PANELS

1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that New Millennium Steel Roof Deck Panels: D4.5, D6 and D7.5 Deep-Dek®; D4.5A, D6A AND D7.5A Deep-Dek® Acoustical; D4.5C, D6C and D7.5C Deep-Dek® Cellular; D4.5CA, D6CA and D7.5CA Deep-Dek® Cellular Acoustical; Versa-Dek® roof deck panels; and Versa-Dek® Acoustical roof deck panels, recognized in ICC-ES master evaluation report ESR-2657, have also been evaluated for compliance with Chapters 22 and 22A of the code noted below.

Applicable code edition:

2013 *California Building Code* (CBC)

2.0 CONCLUSIONS

The New Millennium Steel Roof Deck Panels: D4.5, D6 and D7.5 Deep-Dek®; D4.5A, D6A and D7.5A Deep-Dek® Acoustical; D4.5C, D6C AND D7.5C Deep-Dek® Cellular; D4.5CA, D6CA AND D7.5CA Deep-Dek® Cellular Acoustical; Versa-Dek® roof deck panels; and Versa-Dek® Acoustical roof deck panels, described in Sections 2.0 through 7.0 of the master evaluation report ESR-2657, comply with CBC Chapters 22 and 22A, provided the design and installation are in accordance with the 2012 *International Building Code®* (IBC) provisions noted in the master report and the additional requirements of the CBC Chapters 16, 16A, 17, 17A, 22 and 22A, as applicable.

This supplement expires concurrently with the master report, reissued May 2018.

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