

Versa-Dek® S Acoustical
Allowable Diaphragm Shear Values, S (plf) and Stiffness Factors, G' (kpi)



SUPPORT CONNECTION: 1/2" Eff. Weld Diameter
 SIDELAP CONNECTION: 1-1/2" Seam Welds
 ATTACHMENT PATTERN: 24.5 / 4

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

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	804	787	774	763	755	731*	623*	537*
		G'	20.1	21.2	22.1	22.9	23.5	24.1	24.7	25.1
	12"	S	757	739	725	713	703	695	623*	537*
		G'	19.6	20.6	21.4	22.2	22.8	23.3	23.8	24.2
	18"	S	555	541	530	522	515	509	504	500
		G'	19.2	20.1	20.9	21.6	22.2	22.7	23.1	23.5
	24"	S	443	430	419	411	404	398	393	389
		G'	18.9	19.8	20.5	21.1	21.6	22.1	22.5	22.8
	30"	S	377	363	352	344	337	331	326	322
		G'	18.6	19.5	20.1	20.7	21.2	21.6	22.0	22.3
	36"	S	332	318	308	299	292	287	282	278
		G'	18.4	19.2	19.8	20.4	20.8	21.2	21.5	21.8
20 0.0358"	6"	S	880	862	847	835	826	818	811	717*
		G'	28.8	30.1	31.2	32.2	33.0	33.7	34.3	34.9
	12"	S	880	861	846	834	824	815	808	717*
		G'	27.9	29.1	30.1	31.0	31.7	32.4	32.9	33.4
	18"	S	678	661	648	638	630	623	617	612
		G'	27.3	28.4	29.3	30.1	30.7	31.3	31.8	32.2
	24"	S	541	525	512	502	493	486	480	475
		G'	26.8	27.9	28.7	29.4	29.9	30.4	30.9	31.2
	30"	S	460	443	430	420	412	405	399	394
		G'	26.5	27.4	28.2	28.8	29.3	29.7	30.1	30.4
	36"	S	405	389	376	365	357	350	344	339
		G'	26.2	27.0	27.8	28.3	28.7	29.1	29.5	29.7
18 0.0474"	6"	S	1186	1161	1141	1125	1113	1102	1093	1085
		G'	49.5	51.4	52.9	54.3	55.4	56.4	57.3	58.0
	12"	S	1185	1160	1140	1124	1110	1098	1088	1079
		G'	47.3	49.0	50.3	51.4	52.4	53.2	53.9	54.5
	18"	S	915	891	873	859	848	839	831	824
		G'	45.8	47.2	48.4	49.3	50.1	50.7	51.3	51.8
	24"	S	732	707	690	676	665	655	647	640
		G'	44.7	45.9	46.8	47.6	48.3	48.8	49.2	49.6
	30"	S	622	597	579	566	554	545	537	530
		G'	43.8	44.8	45.6	46.3	46.8	47.2	47.6	47.9
	36"	S	548	523	506	492	481	471	463	457
		G'	43.0	44.0	44.7	45.2	45.6	45.9	46.2	46.4
16 0.0598"	6"	S	1523	1491	1466	1446	1429	1416	1404	1394
		G'	82.1	85.0	87.3	89.3	91.0	92.5	93.7	94.9
	12"	S	1523	1491	1465	1444	1426	1411	1398	1387
		G'	77.0	79.3	81.1	82.6	83.9	85.0	85.9	86.7
	18"	S	1179	1147	1122	1104	1090	1078	1067	1058
		G'	73.4	75.2	76.6	77.8	78.7	79.5	80.1	80.7
	24"	S	943	911	886	868	854	842	831	823
		G'	70.8	72.2	73.3	74.1	74.8	75.3	75.7	76.1
	30"	S	802	769	744	727	712	700	690	681
		G'	68.8	69.9	70.7	71.3	71.7	72.0	72.2	72.4
	36"	S	707	675	650	632	618	606	595	587
		G'	67.2	68.1	68.6	69.0	69.2	69.3	69.4	69.5

SUPPORT CONNECTION: 1/2" Eff. Weld Diameter
 SIDELAP CONNECTION: 1-1/2" Seam Welds
 ATTACHMENT PATTERN: 24.5 / 8

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

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	954	918	890	868	850	731*	623*	537*
		G'	20.1	21.2	22.1	22.9	23.6	24.2	24.7	25.2
	12"	S	860	836	817	802	790	731*	623*	537*
		G'	19.7	20.7	21.5	22.2	22.8	23.4	23.9	24.3
	18"	S	637	613	595	580	568	557	549	537*
		G'	19.3	20.2	21.0	21.7	22.3	22.8	23.2	23.6
	24"	S	526	502	483	469	456	446	438	430
		G'	19.0	19.9	20.6	21.3	21.8	22.2	22.6	23.0
	30"	S	459	435	417	402	390	379	371	363
		G'	18.8	19.7	20.3	20.9	21.4	21.8	22.2	22.5
	36"	S	415	391	372	357	345	335	326	319
		G'	18.7	19.4	20.1	20.6	21.1	21.4	21.8	22.1
20 0.0358"	6"	S	1044	1005	975	950	930	914	831*	717*
		G'	28.8	30.1	31.3	32.2	33.0	33.7	34.4	34.9
	12"	S	1041	1005	975	950	930	914	831*	717*
		G'	28.1	29.3	30.3	31.2	31.9	32.5	33.1	33.6
	18"	S	768	740	719	701	687	675	665	657
		G'	27.6	28.7	29.6	30.4	31.0	31.6	32.1	32.5
	24"	S	632	604	582	565	551	539	529	521
		G'	27.2	28.2	29.1	29.8	30.3	30.8	31.3	31.6
	30"	S	550	522	501	483	469	457	447	439
		G'	26.9	27.9	28.7	29.3	29.8	30.2	30.6	30.9
	36"	S	496	468	446	429	415	403	393	384
		G'	26.7	27.6	28.3	28.9	29.4	29.8	30.1	30.4
18 0.0474"	6"	S	1407	1354	1313	1280	1253	1231	1212	1090*
		G'	49.6	51.5	53.1	54.4	55.6	56.5	57.4	58.2
	12"	S	1405	1354	1313	1280	1253	1231	1212	1090*
		G'	47.7	49.4	50.7	51.8	52.8	53.6	54.3	54.9
	18"	S	1037	997	968	945	926	910	896	885
		G'	46.5	47.9	49.0	50.0	50.7	51.4	51.9	52.4
	24"	S	854	814	785	761	742	726	713	701
		G'	45.5	46.8	47.8	48.5	49.2	49.7	50.1	50.5
	30"	S	744	703	674	651	632	616	603	591
		G'	44.8	45.9	46.9	47.4	48.0	48.4	48.7	49.0
	36"	S	670	630	601	578	559	543	529	518
		G'	44.3	45.3	46.0	46.6	47.0	47.3	47.5	47.7
16 0.0598"	6"	S	1807	1739	1687	1645	1610	1581	1557	1536
		G'	82.4	85.3	87.7	89.6	91.3	92.8	94.0	95.2
	12"	S	1807	1739	1687	1645	1610	1581	1557	1536
		G'	77.9	80.2	82.0	83.5	84.8	85.8	86.7	87.5
	18"	S	1336	1284	1244	1214	1189	1169	1152	1137
		G'	75.0	76.7	78.1	79.3	80.2	80.9	81.5	82.1
	24"	S	1100	1048	1008	978	953	933	916	901
		G'	72.8	74.3	75.3	76.1	76.8	77.3	77.6	78.0
	30"	S	959	906	866	836	812	791	774	759
		G'	71.2	72.4	73.2	73.7	74.1	74.4	74.6	74.8
	36"	S	864	812	772	742	717	697	680	665
		G'	70.0	70.9	71.5	71.8	72.1	72.2	72.2	72.2

NOTES: The nominal shear values, S_n, have been divided by a Safety Factor of 3.00 to obtain (ASD) Diaphragm Shear values, S, for seismic loading (worst case). The following Safety Factors shown are from Table D5 of 2004 Supplement AISI Specification:
 Seismic: φ = .55 for LRFD and Ω = 3.00 for ASD for welds.
 Wind: φ = .70 for LRFD and Ω = 2.35 for ASD for welds.
 Other: φ = .60 for LRFD and Ω = 2.65 for ASD for welds.
 Calculations are based on a "Single Span Condition". For "Other Span Conditions" contact the Metal Dek Group for additional information.
 F_y = 40 ksi and F_u = 55 ksi
 * Indicates Shear Buckling controls. A Safety Factor of 2.00 was used as referenced in SDI DDM0.

Versa-Dek® S Acoustical
Allowable Diaphragm Shear Values, S (plf) and Stiffness Factors, G' (kpi)



SUPPORT CONNECTION: 1/2" Effective Weld Diameter		S = Allowable Diaphragm Shear (lbs/ft)		DECK SPAN - C to C SUPPORT							
SIDELAP CONNECTION: S/L Screws #10		G' = Stiffness Factor (kips/in.)		7' - 0"	8' - 0"	9' - 0"	10' - 0"	11' - 0"	12' - 0"	13' - 0"	14' - 0"
GAGE	SIDE LAP SPACING	FACTOR									
22 0.0295"	6"	S	467	461	457	454	451	448	446	445	
		G'	19.3	20.3	21.1	21.8	22.4	22.4	23.4	23.8	
	12"	S	256	250	246	242	240	237	235	234	
		G'	18.4	19.2	19.9	20.5	21.0	21.4	21.8	22.1	
	18"	S	185	180	175	172	169	167	165	163	
		G'	17.8	18.5	19.1	19.6	20.0	20.3	20.6	20.9	
	24"	S	150	145	140	137	134	132	130	128	
		G'	17.3	18.0	18.4	18.8	19.2	19.4	19.7	19.9	
	30"	S	129	123	119	116	113	111	109	107	
		G'	17.0	17.5	17.9	18.3	18.5	18.8	18.9	19.1	
	36"	S	115	109	105	102	99	97	95	93	
		G'	16.7	17.2	17.5	17.8	18.0	18.2	18.4	18.5	
20 0.0358"	6"	S	565	558	553	549	546	543	541	539	
		G'	27.5	28.7	29.6	30.4	31.1	31.7	32.3	32.7	
	12"	S	308	302	297	293	290	287	285	283	
		G'	26.2	27.1	27.8	28.5	29.0	29.5	29.8	30.2	
	18"	S	223	217	212	207	204	201	199	197	
		G'	25.3	26.1	26.7	27.2	27.6	27.9	28.2	28.4	
	24"	S	180	174	169	165	161	159	156	154	
		G'	24.7	25.4	25.9	26.3	26.5	26.8	27.0	27.1	
	30"	S	155	148	143	139	136	133	131	129	
		G'	24.3	24.9	25.3	25.6	25.8	25.9	26.0	26.1	
	36"	S	138	131	126	122	119	116	114	112	
		G'	24.0	24.5	24.8	25.0	25.2	25.3	25.3	25.4	
18 0.0474"	6"	S	750	739	732	727	723	719	716	713	
		G'	46.3	47.8	48.1	48.1	51.0	51.8	52.4	53.0	
	12"	S	411	400	393	388	383	380	377	374	
		G'	43.0	44.1	44.9	45.6	46.2	46.6	47.0	47.3	
	18"	S	298	287	280	275	270	267	264	261	
		G'	41.1	41.8	42.4	42.8	43.1	43.3	43.5	43.6	
	24"	S	242	230	224	218	214	210	207	205	
		G'	39.7	40.3	40.6	40.8	40.9	41.0	41.0	41.0	
	30"	S	208	196	190	184	180	176	173	171	
		G'	38.8	39.1	39.3	39.4	39.3	39.3	39.2	39.1	
	36"	S	185	174	167	162	157	154	151	148	
		G'	38.1	38.3	38.3	38.2	38.1	38.0	37.8	37.6	
16 0.0598"	6"	S	950	935	924	918	912	907	903	900	
		G'	74.5	76.6	78.2	79.6	80.8	81.8	82.6	83.3	
	12"	S	522	507	496	490	484	479	475	472	
		G'	67.2	68.4	69.2	69.9	70.4	70.8	71.1	71.4	
	18"	S	380	365	354	347	341	337	333	329	
		G'	63.0	63.6	63.9	64.0	64.1	64.1	64.1	64.1	
	24"	S	308	293	282	276	270	265	261	258	
		G'	60.3	60.4	60.3	60.2	59.9	59.7	59.4	59.1	
	30"	S	266	251	240	233	227	223	219	215	
		G'	58.4	58.2	57.8	57.4	56.9	56.5	56.0	55.6	
	36"	S	237	222	211	204	199	194	190	187	
		G'	56.9	56.5	55.9	55.3	54.7	54.1	53.5	52.9	

SUPPORT CONNECTION: 1/2" Effective Weld Diameter
SIDELAP CONNECTION: S/L Screws #10
ATTACHMENT PATTERN: 24.5 / 8

SUPPORT CONNECTION: 1/2" Effective Weld Diameter		S = Allowable Diaphragm Shear (lbs/ft)		DECK SPAN - C to C SUPPORT							
SIDELAP CONNECTION: S/L Screws #10		G' = Stiffness Factor (kips/in.)		7' - 0"	8' - 0"	9' - 0"	10' - 0"	11' - 0"	12' - 0"	13' - 0"	14' - 0"
GAGE	SIDE LAP SPACING	FACTOR									
22 0.0295"	6"	S	549	534	521	511	503	497	491	486	
		G'	19.4	20.4	21.2	21.9	22.5	23.0	23.5	23.9	
	12"	S	338	322	310	300	292	286	280	275	
		G'	18.7	19.5	20.2	20.7	21.2	21.6	22.0	22.3	
	18"	S	268	252	240	230	222	215	209	205	
		G'	18.1	18.9	19.4	19.9	20.3	20.7	21.0	21.2	
	24"	S	233	217	205	195	187	180	174	169	
		G'	17.8	18.4	18.9	19.3	19.7	20.0	20.2	20.4	
	30"	S	212	196	183	174	166	159	153	148	
		G'	17.5	18.1	18.6	18.9	19.2	19.4	19.6	19.7	
	36"	S	198	182	169	160	151	145	139	134	
		G'	17.3	17.9	18.3	18.6	18.8	19.0	19.1	19.2	
20 0.0358"	6"	S	655	637	624	612	603	596	590	584	
		G'	27.7	28.9	29.9	30.7	31.4	32.0	32.5	33.0	
	12"	S	399	381	367	356	347	340	333	328	
		G'	26.7	27.6	28.4	29.0	29.6	30.0	30.4	30.7	
	18"	S	314	296	282	271	262	254	248	242	
		G'	26.1	26.9	27.5	28.0	28.5	28.8	29.1	29.3	
	24"	S	271	253	239	228	219	212	205	200	
		G'	25.7	26.4	26.9	27.4	27.7	27.9	28.1	28.3	
	30"	S	245	227	214	203	193	186	180	174	
		G'	25.4	26.0	26.5	26.9	27.1	27.3	27.4	27.5	
	36"	S	228	210	197	185	176	169	162	157	
		G'	25.2	25.8	26.2	26.5	26.7	26.8	26.9	26.9	
18 0.0474"	6"	S	872	846	827	813	800	790	782	774	
		G'	46.8	48.4	49.6	50.7	51.5	52.3	52.9	53.5	
	12"	S	533	507	488	473	461	451	442	435	
		G'	44.3	45.4	46.2	46.9	47.4	47.9	48.2	48.5	
	18"	S	420	394	375	360	348	338	329	322	
		G'	42.8	43.7	44.2	44.7	45.0	45.2	45.3	45.5	
	24"	S	364	337	318	304	292	281	273	266	
		G'	41.9	42.5	42.9	43.2	43.3	43.4	43.4	43.3	
	30"	S	330	303	285	270	258	247	239	232	
		G'	41.3	41.7	42.0	42.0	42.1	42.0	41.9	41.8	
	36"	S	307	280	262	247	235	225	216	209	
		G'	40.8	41.1	41.3	41.3	41.2	41.1	40.9	40.7	
16 0.0598"	6"	S	1107	1073	1046	1027	1012	999	988	978	
		G'	75.8	77.9	79.5	80.9	82.0	82.9	83.7	84.4	
	12"	S	679	645	618	599	584	571	560	550	
		G'	70.0	71.1	72.0	72.6	73.0	73.4	73.6	73.8	
	18"	S	536	502	476	457	441	428	417	408	
		G'	66.8	67.4	67.7	67.9	67.9	67.8	67.7	67.6	
	24"	S	465	431	404	385	370	357	346	336	
		G'	64.8	65.0	65.0	64.8	64.6	64.2	63.9	63.5	
	30"	S	422	388	361	342	327	314	303	294	
		G'	63.4	63.4	63.1	62.7	62.2	61.7	61.2	60.6	
	36"	S	394	359	333	314	298	285	275	265	
		G'	62.4	62.2	61.7	61.1	60.5	59.8	59.1	58.5	

NOTES: The nominal shear values, S_n, have been divided by a Safety Factor of 3.00 to obtain (ASD) Diaphragm Shear values, S, for seismic loading (worst case). The following Safety Factors shown are from Table D5 of 2004 Supplement AISI Specification:
Seismic: φ = .55 for LRFD and Ω = 3.00 for ASD for welds.
Wind: φ = .70 for LRFD and Ω = 2.35 for ASD for welds.
Other: φ = .60 for LRFD and Ω = 2.65 for ASD for welds.
 Calculations are based on a "Single Span Condition". For "Other Span Conditions" contact the Metal Dek Group for additional information.
 F_y = 40 ksi and F_u = 55 ksi
 * Indicates Shear Buckling controls. A Safety Factor of 2.00 was used as referenced in SDI DDM01.

Versa-Dek® S Acoustical
Allowable Diaphragm Shear Values, S (plf) and Stiffness Factors, G' (kpi)



SUPPORT CONNECTION: Hilti X-ENP-19-L15
 SIDELAP CONNECTION: S/L Screws #10
 ATTACHMENT PATTERN: 24.5 / 4

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

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	542	531	523	516	510	505	501	497
		G'	19.4	20.3	21.1	21.8	22.4	23.0	23.4	23.8
	12"	S	300	294	290	286	283	281	279	277
		G'	18.5	19.3	20.0	20.6	21.0	21.5	21.8	22.2
	18"	S	216	210	205	202	199	196	194	192
		G'	17.9	18.6	19.2	19.6	20.0	20.4	20.7	20.9
	24"	S	173	168	163	159	157	154	152	150
		G'	17.5	18.1	18.6	19.0	19.3	19.6	19.8	20.0
	30"	S	148	142	138	134	131	129	127	125
		G'	17.1	17.7	18.1	18.4	18.7	18.9	19.1	19.3
	36"	S	131	125	121	117	114	112	110	108
		G'	16.9	17.4	17.7	18.0	18.2	18.4	18.5	18.7
20 0.0358"	6"	S	622	611	601	593	586	580	575	571
		G'	27.4	28.5	29.5	30.3	31.0	31.6	32.1	32.6
	12"	S	363	356	350	346	343	340	337	335
		G'	25.8	26.7	27.5	28.1	28.6	29.1	29.5	29.8
	18"	S	260	253	248	244	240	237	235	233
		G'	24.7	25.5	26.1	26.6	27.0	27.3	27.6	27.8
	24"	S	209	202	197	192	189	186	184	182
		G'	24.0	24.6	25.1	25.4	25.7	26.0	26.2	26.3
	30"	S	178	171	166	162	158	155	153	151
		G'	23.4	23.9	24.3	24.6	24.8	25.0	25.1	25.2
	36"	S	158	151	145	141	138	135	132	130
		G'	23.0	23.4	23.7	24.0	24.0	24.2	24.2	24.2
18 0.0474"	6"	S	816	799	786	775	766	759	753	747
		G'	45.9	47.4	48.7	49.8	50.7	51.4	52.1	52.7
	12"	S	482	471	464	458	453	450	446	444
		G'	42.2	43.2	44.1	44.8	45.3	45.8	46.2	46.6
	18"	S	346	335	328	322	318	314	311	308
		G'	39.8	40.5	41.0	41.5	41.8	42.1	42.3	42.4
	24"	S	278	267	260	255	250	246	243	240
		G'	38.1	38.6	38.9	39.1	39.3	39.4	39.4	39.5
	30"	S	237	226	219	214	209	205	202	199
		G'	36.9	37.2	37.3	37.4	37.4	37.3	37.3	37.2
	36"	S	210	199	192	187	182	178	175	172
		G'	36.0	36.1	36.1	36.0	35.9	35.8	35.6	35.5
16 0.0598"	6"	S	1017	995	978	965	954	945	937	930
		G'	73.7	75.7	77.4	78.9	80.0	81.0	81.9	82.7
	12"	S	609	595	585	578	572	567	563	559
		G'	65.4	66.5	67.4	68.1	68.7	69.1	69.5	69.8
	18"	S	438	424	413	406	401	396	392	388
		G'	60.3	60.9	61.2	61.5	61.6	61.7	61.8	61.8
	24"	S	353	338	328	321	315	310	306	303
		G'	57.0	57.1	57.1	57.0	56.8	56.6	56.5	56.3
	30"	S	301	287	277	269	264	259	255	251
		G'	54.6	54.4	54.1	53.7	53.3	53.0	52.6	52.3
	36"	S	267	253	242	235	229	225	221	217
		G'	52.8	52.3	51.8	51.2	50.7	50.2	49.7	49.2

SUPPORT CONNECTION: Hilti X-ENP-19-L15
 SIDELAP CONNECTION: S/L Screws #10
 ATTACHMENT PATTERN: 24.5 / 8

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

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	613	600	589	581	574	569	564	537*
		G'	19.5	20.4	21.2	21.9	22.5	23.1	23.5	23.9
	12"	S	360	346	336	328	321	316	311	307
		G'	18.7	19.5	20.2	20.8	21.3	21.7	22.1	22.4
	18"	S	275	262	252	243	237	231	226	222
		G'	18.3	19.0	19.6	20.1	20.5	20.8	21.1	21.4
	24"	S	233	220	209	201	194	189	184	180
		G'	17.9	18.6	19.1	19.5	19.9	20.1	20.4	20.6
	30"	S	208	194	184	176	169	164	159	155
		G'	17.7	18.3	18.7	19.1	19.4	19.6	19.8	20.0
	36"	S	191	177	167	159	152	147	142	138
		G'	17.5	18.1	18.5	18.8	19.0	19.2	19.4	19.5
20 0.0358"	6"	S	734	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	427	412	400	391	384	377	372	367
		G'	26.2	27.1	27.9	28.5	29.1	29.5	29.9	30.2
	18"	S	324	309	298	289	281	275	269	265
		G'	25.4	26.2	26.8	27.3	27.7	28.0	28.3	28.5
	24"	S	273	258	247	237	230	224	218	214
		G'	24.8	25.5	26.0	26.4	26.7	26.9	27.1	27.2
	30"	S	242	227	216	207	199	193	187	183
		G'	24.4	25.0	25.4	25.7	25.9	26.1	26.2	26.3
	36"	S	222	207	195	186	179	172	167	162
		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	566	544	529	517	507	499	492	486
		G'	43.2	44.2	45.1	45.7	46.3	46.7	47.1	47.4
	18"	S	430	408	393	381	371	363	356	350
		G'	41.2	42.0	42.5	42.9	43.2	43.5	43.7	43.8
	24"	S	362	341	325	313	303	295	288	282
		G'	39.9	40.5	40.8	41.0	41.1	41.2	41.2	41.2
	30"	S	321	300	285	273	263	254	247	241
		G'	39.0	39.4	39.5	39.6	39.5	39.5	39.4	39.3
	36"	S	294	273	258	245	236	227	220	214
		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	714	687	666	651	638	628	619	612
		G'	67.5	68.6	69.5	70.1	70.6	71.0	71.3	71.6
	18"	S	543	516	495	480	467	457	448	441
		G'	63.4	63.9	64.2	64.4	64.5	64.5	64.4	64.4
	24"	S	457	430	409	394	382	371	362	355
		G'	60.7	60.8	60.8	60.6	60.4	60.1	59.8	59.5
	30"	S	406	379	358	343	330	320	311	304
		G'	58.8	58.6	58.3	57.9	57.4	57.0	56.5	56.0
	36"	S	371	344	324	308	296	286	277	269
		G'	57.4	57.0	56.5	55.9	55.2	54.6	54.0	53.4

NOTES: The nominal shear values, S_n, have been divided by a Safety Factor of 2.50 to obtain (ASD) Diaphragm Shear values, S, for seismic loading (worst case). The following Safety Factors shown are from Table D5 of 2004 Supplement AISI Specification:
 Seismic: φ = .65 for LRFD and Ω = 2.50 for ASD for mechanical fasteners
 Wind: φ = .70 for LRFD and Ω = 2.35 for ASD for mechanical fasteners
 Other: φ = .65 for LRFD and Ω = 2.50 for ASD for mechanical fasteners
 Calculations are based on a "Single Span Condition". For "Other Span Conditions" contact the Metal Dek Group for additional information.
 F_y = 40 ksi and F_u = 55 ksi
 * Indicates Shear Buckling controls. A Safety Factor of 2.00 was used as referenced in SDI DDM0.