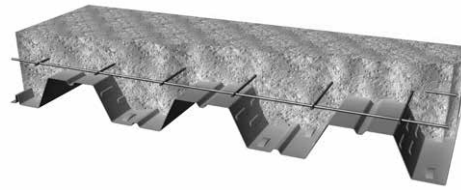


2.4 3WxH-36 Composite Deck

5" Total Slab Depth

Normal Weight Concrete (145 pcf)

Concrete Volume 1.080yd³/100ft²



3WxH-36 5" Slab Depth, 145 pcf NWC

Maximum Unshored Span		Gage	Single	Double	Triple	Gage	Single	Double	Triple
		22	10' - 1"	10' - 11"	11' - 4"	19	12' - 2"	13' - 10"	14' - 3"
		21	11' - 0"	11' - 9"	12' - 1"	18	12' - 7"	15' - 1"	14' - 9"
		20	11' - 9"	12' - 5"	12' - 10"	16	13' - 3"	16' - 6"	15' - 6"

22 ga.	Vertical Load Span (ft-in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"		
	ASD & LRFD - Available Superimposed Load Capacity, W (psf)																	
	ASD, W/Ω	295	256	224	196	173	153	135	120	106	95	84	75	66	59	52		
	LRFD, φW	451	394	345	305	270	240	214	191	171	153	138	124	111	100	90		
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft) 36/4 Attachment Pattern																	
	Arc Spot Weld 1/2" Effective Dia	2324	2304	2287	2277	2262	2250	2238	2227	2217	2212	2204	2196	2189	2182	2175		
	PAF Base Steel ≥ .25"	2221	2208	2196	2190	2180	2171	2163	2155	2149	2146	2140	2135	2130	2125	2120		
	PAF Base Steel ≥ 0.125"	2206	2193	2182	2177	2168	2160	2152	2145	2139	2137	2131	2126	2121	2117	2112		
	#12 Screw Base Steel ≥ .0385"	2105	2098	2092	2092	2087	2082	2078	2075	2071	2072	2069	2066	2063	2061	2058		
Concrete + Deck =		44.4	psf		I _{cr} = 39.2		in ⁴ /ft		ASD		M _{no} /Ω = 32.6		kip-in/ft		V _n /Ω = 3.33		kip/ft	
(I _{cr} +I _u)/2 =		73.28	in ⁴ /ft		I _u = 107.3		in ⁴ /ft		LRFD		φM _{no} = 48.4		kip-in/ft		φ V _n = 4.97		kip/ft	

21 ga.	Vertical Load Span (ft-in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"		
	ASD & LRFD - Available Superimposed Load Capacity, W (psf)																	
	ASD, W/Ω	326	284	248	218	192	170	151	135	120	107	96	85	76	68	61		
	LRFD, φW	497	435	382	337	299	266	238	213	191	172	155	140	126	114	103		
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft) 36/4 Attachment Pattern																	
	Arc Spot Weld 1/2" Effective Dia	2388	2365	2345	2331	2314	2299	2285	2273	2261	2254	2244	2235	2227	2218	2211		
	PAF Base Steel ≥ .25"	2245	2231	2217	2211	2200	2190	2181	2173	2166	2163	2156	2150	2145	2140	2135		
	PAF Base Steel ≥ 0.125"	2229	2215	2203	2197	2187	2178	2169	2162	2155	2152	2146	2141	2135	2130	2126		
	#12 Screw Base Steel ≥ .0385"	2104	2098	2092	2092	2087	2083	2079	2075	2072	2073	2070	2067	2064	2062	2059		
Concrete + Deck =		44.6	psf		I _{cr} = 42.3		in ⁴ /ft		ASD		M _{no} /Ω = 35.6		kip-in/ft		V _n /Ω = 3.81		kip/ft	
(I _{cr} +I _u)/2 =		75.54	in ⁴ /ft		I _u = 108.8		in ⁴ /ft		LRFD		φM _{no} = 52.9		kip-in/ft		φ V _n = 5.69		kip/ft	

20 ga.	Vertical Load Span (ft-in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"		
	ASD & LRFD - Available Superimposed Load Capacity, W (psf)																	
	ASD, W/Ω	355	309	271	238	211	187	166	149	133	119	106	95	86	77	69		
	LRFD, φW	540	473	416	368	327	291	261	234	210	190	171	155	140	127	115		
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft) 36/4 Attachment Pattern																	
	Arc Spot Weld 1/2" Effective Dia	2453	2426	2403	2386	2367	2349	2333	2319	2305	2297	2285	2275	2265	2256	2247		
	PAF Base Steel ≥ .25"	2268	2252	2238	2230	2219	2208	2198	2190	2182	2178	2171	2165	2159	2153	2148		
	PAF Base Steel ≥ 0.125"	2250	2235	2222	2215	2204	2194	2185	2177	2170	2167	2160	2154	2149	2143	2138		
	#12 Screw Base Steel ≥ .0385"	2104	2098	2092	2093	2088	2083	2079	2076	2073	2074	2071	2068	2065	2063	2061		
Concrete + Deck =		44.8	psf		I _{cr} = 45.0		in ⁴ /ft		ASD		M _{no} /Ω = 38.4		kip-in/ft		V _n /Ω = 3.84		kip/ft	
(I _{cr} +I _u)/2 =		77.62	in ⁴ /ft		I _u = 110.2		in ⁴ /ft		LRFD		φM _{no} = 57.0		kip-in/ft		φ V _n = 5.75		kip/ft	

All Gages	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft) for all vertical load spans, WWF Size or Area of Steel per foot width																				
	3/4" Welded Shear Studs	6x6 W1.4xW1.4				6x6 W2.9xW2.9				6x6 W4.0xW4.0				4x4 W4xW4				4x4 W6xW6			
		A _s = 0.028 in ² /ft				A _s = 0.058 in ² /ft				A _s = 0.080 in ² /ft				A _s = 0.120 in ² /ft				A _s = 0.180 in ² /ft			
	12 in o.c.	3270				4620				5610				7410				10110			
	24 in o.c.	3270				4620				5610				7410				7750			
	36 in o.c.	3270				4620				5170				5170				5170			

3WxH-36 5" Slab Depth, 145 pcf NWC



3WxH-36 Composite Deck 2.4

5" Total Slab Depth

Normal Weight Concrete (145 pcf)

Concrete Volume 1.080yd³/100ft²



3WxH-36 5" Slab Depth, 145 pcf NWC

Maximum Unshored Span	Gage	Single	Double	Triple	Gage	Single	Double	Triple
	22	10' - 1"	10' - 11"	11' - 4"		19	12' - 2"	13' - 10"
	21	11' - 0"	11' - 9"	12' - 1"		18	12' - 7"	15' - 1"
	20	11' - 9"	12' - 5"	12' - 10"		16	13' - 3"	16' - 6"

19 ga.	Vertical Load Span (ft-in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
	ASD & LRFD - Available Superimposed Load Capacity, W (psf)															
	ASD, W/Ω	414	361	317	280	248	221	197	177	159	143	129	116	105	94	85
	LRFD, φW	628	550	485	430	383	342	307	276	249	225	204	185	169	153	140
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	2605	2570	2538	2515	2490	2467	2446	2426	2409	2396	2381	2367	2354	2342	2331
	PAF Base Steel ≥ .25"	2315	2296	2280	2271	2257	2245	2234	2224	2215	2211	2203	2195	2188	2182	2176
	PAF Base Steel ≥ 0.125"	2294	2277	2262	2253	2241	2229	2219	2210	2201	2197	2190	2183	2176	2170	2165
	#12 Screw Base Steel ≥ .0385"	2108	2102	2096	2097	2092	2088	2084	2080	2077	2078	2075	2073	2070	2068	2066
	Concrete + Deck =	45.2 psf				I _{cr} = 50.5 in ⁴ /ft ASD				M _{no} /Ω = 44.0 kip-in/ft				V _n /Ω = 3.84 kip/ft		
	(I _{cr} +I _u)/2 =	81.79 in ⁴ /ft				I _u = 113.0 in ⁴ /ft LRFD				φM _{no} = 65.5 kip-in/ft				φ V _n = 5.76 kip/ft		

18 ga.	Vertical Load Span (ft-in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
	ASD & LRFD - Available Superimposed Load Capacity, W (psf)															
	ASD, W/Ω	468	410	360	319	283	253	226	203	183	165	149	135	122	111	101
	LRFD, φW	710	622	549	487	434	389	350	315	285	258	235	214	195	178	163
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	2678	2678	2678	2654	2622	2593	2566	2542	2520	2503	2484	2467	2450	2435	2421
	PAF Base Steel ≥ .25"	2359	2338	2320	2309	2294	2280	2268	2257	2246	2241	2232	2224	2216	2209	2202
	PAF Base Steel ≥ 0.125"	2335	2316	2299	2289	2275	2262	2251	2240	2231	2226	2217	2210	2202	2196	2189
	#12 Screw Base Steel ≥ .0385"	2114	2107	2102	2102	2098	2093	2090	2086	2083	2084	2081	2078	2076	2073	2071
	Concrete + Deck =	45.6 psf				I _{cr} = 55.4 in ⁴ /ft ASD				M _{no} /Ω = 49.3 kip-in/ft				V _n /Ω = 3.84 kip/ft		
	(I _{cr} +I _u)/2 =	85.58 in ⁴ /ft				I _u = 115.7 in ⁴ /ft LRFD				φM _{no} = 73.4 kip-in/ft				φ V _n = 5.76 kip/ft		

16 ga.	Vertical Load Span (ft-in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
	ASD & LRFD - Available Superimposed Load Capacity, W (psf)															
	ASD, W/Ω	577	506	446	396	353	315	283	255	231	209	190	172	157	143	131
	LRFD, φW	872	766	677	602	538	483	435	393	356	324	295	270	247	227	208
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	142	129
	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	2694	2694	2694	2694	2694	2694	2694	2694	2667	2645	2621	2599	2578	2559	2541
	PAF Base Steel ≥ .25"	2449	2423	2401	2386	2368	2351	2336	2323	2310	2303	2292	2282	2272	2264	2255
	PAF Base Steel ≥ 0.125"	2403	2381	2361	2348	2332	2317	2303	2291	2280	2273	2264	2255	2246	2239	2231
	#12 Screw Base Steel ≥ .0385"	2125	2119	2114	2114	2109	2105	2101	2098	2095	2096	2093	2090	2088	2085	2083
	Concrete + Deck =	46.5 psf				I _{cr} = 64.8 in ⁴ /ft ASD				M _{no} /Ω = 59.8 kip-in/ft				V _n /Ω = 3.85 kip/ft		
	(I _{cr} +I _u)/2 =	92.91 in ⁴ /ft				I _u = 121.0 in ⁴ /ft LRFD				φM _{no} = 89.0 kip-in/ft				φ V _n = 5.77 kip/ft		

All Gages	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft) for all vertical load spans, WWF Size or Area of Steel per foot width					
	3/4" Welded Shear Studs		6x6 W1.4xW1.4	6x6 W2.9xW2.9	6x6 W4.0xW4.0	4x4 W4xW4
			A _s = 0.028 in ² /ft	A _s = 0.058 in ² /ft	A _s = 0.080 in ² /ft	A _s = 0.120 in ² /ft
	12 in o.c.		3270	4620	5610	7410
	24 in o.c.		3270	4620	5610	7750
	36 in o.c.		3270	4620	5170	5170

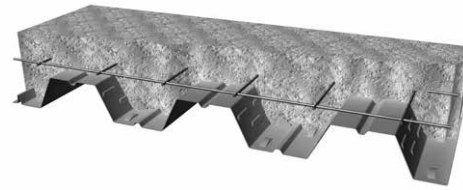
3WxH-36 5" Slab Depth, 145 pcf NWC

2.4 3WxH-36 Composite Deck

5½" Total Slab Depth

Normal Weight Concrete (145 pcf)

Concrete Volume 1.23yd³/100ft²



3WxH-36 5 1/2 " Slab Depth, 145 pcf NWC

	Maximum Unshored Span	Gage	Single	Double	Triple		Gage	Single	Double	Triple
		22	9' - 7"	10' - 6"	10' - 10"		19	11' - 10"	13' - 3"	13' - 8"
		21	10' - 6"	11' - 3"	11' - 7"		18	12' - 3"	14' - 6"	14' - 4"
		20	11' - 3"	11' - 11"	12' - 4"		16	12' - 10"	16' - 0"	15' - 1"

22 ga.	Vertical Load Span (ft-in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
	ASD & LRFD - Available Superimposed Load Capacity, W (psf)															
	ASD, W/Ω	345	300	262	230	203	179	159	141	125	111	99	88	79	70	62
	LRFD, φW	527	460	404	356	316	281	250	224	201	180	162	146	131	118	107
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	2815	2795	2778	2767	2753	2740	2728	2718	2708	2703	2694	2686	2679	2672	2666
	PAF Base Steel ≥ .25"	2712	2698	2686	2680	2671	2662	2653	2646	2639	2637	2631	2625	2620	2615	2611
	PAF Base Steel ≥ 0.125"	2696	2684	2673	2668	2658	2650	2642	2635	2629	2627	2621	2616	2611	2607	2603
	#12 Screw Base Steel ≥ .0385"	2595	2589	2583	2583	2577	2573	2569	2565	2561	2562	2559	2556	2554	2551	2549
	Concrete + Deck =	50.4 psf				I _{cr} = 50.6 in⁴/ft	ASD	M _{no} /Ω =	37.9 kip-in/ft				V _n /Ω =	3.59 kip/ft		
	(I _{cr} +I _u)/2 =	96.08 in⁴/ft				I _u = 141.6 in⁴/ft	LRFD	φM _{no} =	56.4 kip-in/ft				φ V _n =	5.37 kip/ft		

21 ga.	Vertical Load Span (ft-in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
	ASD & LRFD - Available Superimposed Load Capacity, W (psf)															
	ASD, W/Ω	381	332	290	255	226	200	178	158	141	126	113	101	90	81	72
	LRFD, φW	581	508	447	395	350	312	279	250	225	202	182	165	149	135	122
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	2879	2856	2835	2822	2805	2790	2776	2763	2752	2745	2735	2726	2717	2709	2701
	PAF Base Steel ≥ .25"	2736	2721	2708	2701	2690	2681	2672	2664	2656	2653	2647	2641	2635	2630	2625
	PAF Base Steel ≥ 0.125"	2719	2705	2693	2687	2677	2668	2660	2652	2645	2643	2637	2631	2626	2621	2616
	#12 Screw Base Steel ≥ .0385"	2595	2588	2582	2582	2578	2573	2569	2565	2562	2563	2560	2557	2555	2552	2550
	Concrete + Deck =	50.7 psf				I _{cr} = 54.5 in⁴/ft	ASD	M _{no} /Ω =	41.4 kip-in/ft				V _n /Ω =	4.08 kip/ft		
	(I _{cr} +I _u)/2 =	98.97 in⁴/ft				I _u = 143.5 in⁴/ft	LRFD	φM _{no} =	61.7 kip-in/ft				φ V _n =	6.09 kip/ft		

20 ga.	Vertical Load Span (ft-in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
	ASD & LRFD - Available Superimposed Load Capacity, W (psf)															
	ASD, W/Ω	415	362	317	279	247	219	195	174	156	140	125	113	101	91	82
	LRFD, φW	632	553	486	430	382	341	305	274	247	223	201	182	165	150	136
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	2944	2917	2893	2877	2857	2840	2824	2809	2796	2787	2776	2765	2755	2746	2737
	PAF Base Steel ≥ .25"	2758	2742	2728	2721	2709	2699	2689	2680	2672	2669	2662	2655	2649	2644	2639
	PAF Base Steel ≥ 0.125"	2740	2725	2712	2706	2695	2685	2676	2668	2660	2657	2651	2645	2639	2634	2629
	#12 Screw Base Steel ≥ .0385"	2595	2588	2583	2583	2578	2574	2570	2566	2563	2564	2561	2558	2556	2553	2551
	Concrete + Deck =	50.9 psf				I _{cr} = 58.0 in⁴/ft	ASD	M _{no} /Ω =	44.7 kip-in/ft				V _n /Ω =	4.37 kip/ft		
	(I _{cr} +I _u)/2 =	101.6 in⁴/ft				I _u = 145.2 in⁴/ft	LRFD	φM _{no} =	66.5 kip-in/ft				φ V _n =	6.55 kip/ft		

All Gages	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft) for all vertical load spans, WWF Size or Area of Steel per foot width															
	3/4" Welded Shear Studs	6x6 W1.4xW1.4	6x6 W2.9xW2.9	6x6 W4.0xW4.0	4x4 W4xW4	4x4 W6xW6										
		A _s = 0.028 in²/ft	A _s = 0.058 in²/ft	A _s = 0.080 in²/ft	A _s = 0.120 in²/ft	A _s = 0.180 in²/ft										
	12 in o.c.	3760	5110	6100	7900	10600										
	24 in o.c.	3760	5110	6100	7750	7750										
	36 in o.c.	3760	5110	5170	5170	5170										

3WxH-36 5 1/2 " Slab Depth, 145 pcf NWC



3WxH-36 Composite Deck 2.4

5 1/2" Total Slab Depth

Normal Weight Concrete (145 pcf)

Concrete Volume 1.23yd³/100ft²



3WxH-36 5 1/2" Slab Depth, 145 pcf NWC

Maximum Unshored Span	Gage	Single	Double	Triple	Gage	Single	Double	Triple
	22	9' - 7"	10' - 6"	10' - 10"		19	11' - 10"	13' - 3"
	21	10' - 6"	11' - 3"	11' - 7"		18	12' - 3"	14' - 6"
	20	11' - 3"	11' - 11"	12' - 4"		16	12' - 10"	16' - 0"

19 ga.	Vertical Load Span (ft-in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
	ASD & LRFD - Available Superimposed Load Capacity, W (psf)															
	ASD, W/Ω	484	423	372	328	291	259	232	208	187	168	151	137	123	112	101
	LRFD, φW	734	644	567	503	448	401	359	324	292	264	240	218	198	181	165
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	3096	3060	3029	3006	2980	2957	2936	2917	2899	2887	2872	2858	2845	2833	2821
	PAF Base Steel ≥ .25"	2805	2787	2771	2761	2748	2736	2725	2715	2705	2701	2693	2686	2679	2672	2666
	PAF Base Steel ≥ 0.125"	2784	2767	2752	2744	2731	2720	2709	2700	2691	2688	2680	2673	2667	2661	2655
	#12 Screw Base Steel ≥ .0385"	2598	2592	2587	2587	2582	2578	2574	2571	2568	2569	2566	2563	2561	2558	2556
	Concrete + Deck =	51.3	psf			I _{cr} = 65.1	in ⁴ /ft	ASD	M _{no} /Ω = 51.4	kip-in/ft			V _n /Ω = 4.37	kip/ft		
	(I _{cr} +I _u)/2 =	106.9	in ⁴ /ft			I _u = 148.7	in ⁴ /ft	LRFD	φM _{no} = 76.4	kip-in/ft			φ V _n = 6.56	kip/ft		

18 ga.	Vertical Load Span (ft-in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
	ASD & LRFD - Available Superimposed Load Capacity, W (psf)															
	ASD, W/Ω	548	479	422	373	332	296	265	238	215	194	175	159	144	131	119
	LRFD, φW	830	728	643	570	509	456	410	370	334	303	276	251	229	209	192
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	3259	3215	3175	3145	3112	3083	3057	3032	3010	2994	2975	2957	2941	2925	2911
	PAF Base Steel ≥ .25"	2849	2829	2810	2799	2784	2771	2758	2747	2737	2731	2722	2714	2706	2699	2693
	PAF Base Steel ≥ 0.125"	2826	2806	2789	2779	2765	2753	2741	2731	2721	2716	2708	2700	2693	2686	2680
	#12 Screw Base Steel ≥ .0385"	2604	2598	2592	2593	2588	2584	2580	2576	2573	2574	2571	2569	2566	2564	2562
	Concrete + Deck =	51.7	psf			I _{cr} = 71.5	in ⁴ /ft	ASD	M _{no} /Ω = 57.5	kip-in/ft			V _n /Ω = 4.37	kip/ft		
	(I _{cr} +I _u)/2 =	111.8	in ⁴ /ft			I _u = 152.0	in ⁴ /ft	LRFD	φM _{no} = 85.6	kip-in/ft			φ V _n = 6.56	kip/ft		

16 ga.	Vertical Load Span (ft-in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
	ASD & LRFD - Available Superimposed Load Capacity, W (psf)															
	ASD, W/Ω	675	592	522	464	413	370	332	300	271	246	223	203	185	169	154
	LRFD, φW	1019	896	792	705	630	565	510	461	418	380	347	317	290	267	245
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	3348	3348	3348	3327	3287	3250	3216	3185	3157	3135	3111	3089	3069	3049	3031
	PAF Base Steel ≥ .25"	2939	2914	2892	2877	2858	2842	2827	2813	2801	2793	2782	2772	2763	2754	2746
	PAF Base Steel ≥ 0.125"	2894	2871	2851	2838	2822	2807	2794	2781	2770	2764	2754	2745	2737	2729	2722
	#12 Screw Base Steel ≥ .0385"	2616	2610	2604	2605	2600	2596	2592	2588	2585	2586	2583	2580	2578	2576	2574
	Concrete + Deck =	52.5	psf			I _{cr} = 83.6	in ⁴ /ft	ASD	M _{no} /Ω = 69.9	kip-in/ft			V _n /Ω = 4.38	kip/ft		
	(I _{cr} +I _u)/2 =	121.1	in ⁴ /ft			I _u = 158.6	in ⁴ /ft	LRFD	φM _{no} = 103.9	kip-in/ft			φ V _n = 6.57	kip/ft		

All Gages	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft) for all vertical load spans, WWF Size or Area of Steel per foot width					
	3/4" Welded Shear Studs	6x6 W1.4xW1.4	6x6 W2.9xW2.9	6x6 W4.0xW4.0	4x4 W4xW4	4x4 W6xW6
		A _s = 0.028 in ² /ft	A _s = 0.058 in ² /ft	A _s = 0.080 in ² /ft	A _s = 0.120 in ² /ft	A _s = 0.180 in ² /ft
	12 in o.c.	3760	5110	6100	7900	10600
	24 in o.c.	3760	5110	6100	7750	7750
	36 in o.c.	3760	5110	5170	5170	5170

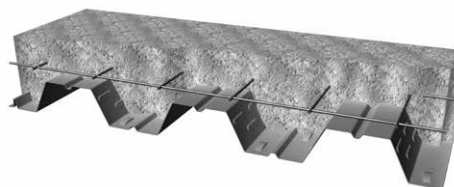
3WxH-36 5 1/2" Slab Depth, 145 pcf NWC

2.4 3WxH-36 Composite Deck

6" Total Slab Depth

Normal Weight Concrete (145 pcf)

Concrete Volume 1.389yd³/100ft²



3WxH-36 6" Slab Depth, 145 pcf NWC

Maximum Unshored Span		Gage	Single	Double	Triple	Gage		Single	Double	Triple	
		22	9' - 3"	10' - 1"	10' - 5"			19	11' - 6"	12' - 9"	13' - 2"
		21	10' - 0"	10' - 9"	11' - 2"			18	11' - 11"	13' - 11"	13' - 11"
20	10' - 9"	11' - 5"	11' - 10"	16	12' - 7"	15' - 6"	14' - 8"				

22 ga.	Vertical Load Span (ft-in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
	ASD & LRFD - Available Superimposed Load Capacity, W (psf)															
	ASD, W/Ω	398	346	302	265	234	207	184	163	145	129	115	103	92	82	73
	LRFD, φW	608	530	466	411	364	324	289	259	232	209	188	169	153	138	124
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	3305	3285	3268	3258	3243	3230	3219	3208	3198	3193	3185	3177	3169	3163	3156
	PAF Base Steel ≥ .25"	3202	3188	3176	3171	3161	3152	3144	3136	3129	3127	3121	3116	3111	3106	3101
	PAF Base Steel ≥ 0.125"	3187	3174	3163	3158	3149	3140	3133	3126	3119	3117	3112	3107	3102	3097	3093
	#12 Screw Base Steel ≥ .0385"	3086	3079	3073	3073	3068	3063	3059	3055	3052	3053	3050	3047	3044	3042	3039
Concrete + Deck =	56.5	psf			I _{cr} =	63.7	in ⁴ /ft	ASD	M _{no} /Ω=	43.6	kip-in/ft			V _n /Ω =	3.87	kip/ft
(I _{cr} +I _u)/2 =	123.2	in ⁴ /ft			I _u =	182.7	in ⁴ /ft	LRFD	φM _{no} =	64.8	kip-in/ft			φ V _n =	5.79	kip/ft

21 ga.	Vertical Load Span (ft-in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
	ASD & LRFD - Available Superimposed Load Capacity, W (psf)															
	ASD, W/Ω	439	383	335	295	261	231	206	183	164	147	131	118	105	94	84
	LRFD, φW	670	586	515	455	404	360	322	289	260	234	211	191	173	157	142
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	3369	3346	3325	3312	3295	3280	3266	3254	3242	3235	3225	3216	3207	3199	3192
	PAF Base Steel ≥ .25"	3226	3211	3198	3192	3181	3171	3162	3154	3147	3144	3137	3131	3126	3120	3116
	PAF Base Steel ≥ 0.125"	3210	3196	3183	3178	3168	3158	3150	3143	3136	3133	3127	3121	3116	3111	3107
	#12 Screw Base Steel ≥ .0385"	3085	3079	3073	3073	3068	3064	3060	3056	3053	3053	3050	3048	3045	3043	3040
Concrete + Deck =	56.7	psf			I _{cr} =	68.7	in ⁴ /ft	ASD	M _{no} /Ω=	47.6	kip-in/ft			V _n /Ω =	4.36	kip/ft
(I _{cr} +I _u)/2 =	126.9	in ⁴ /ft			I _u =	185.0	in ⁴ /ft	LRFD	φM _{no} =	70.9	kip-in/ft			φ V _n =	6.51	kip/ft

20 ga.	Vertical Load Span (ft-in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
	ASD & LRFD - Available Superimposed Load Capacity, W (psf)															
	ASD, W/Ω	478	417	366	323	286	254	226	202	181	162	146	131	118	106	95
	LRFD, φW	728	637	561	496	441	394	353	317	286	258	233	211	192	174	158
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	3434	3407	3383	3367	3348	3330	3314	3300	3286	3278	3266	3256	3246	3236	3228
	PAF Base Steel ≥ .25"	3249	3233	3219	3211	3199	3189	3179	3171	3163	3159	3152	3146	3140	3134	3129
	PAF Base Steel ≥ 0.125"	3231	3216	3203	3196	3185	3175	3166	3158	3151	3148	3141	3135	3129	3124	3119
	#12 Screw Base Steel ≥ .0385"	3085	3079	3073	3073	3069	3064	3060	3057	3053	3054	3051	3049	3046	3044	3042
Concrete + Deck =	56.9	psf			I _{cr} =	73.2	in ⁴ /ft	ASD	M _{no} /Ω=	51.4	kip-in/ft			V _n /Ω =	4.90	kip/ft
(I _{cr} +I _u)/2 =	130.2	in ⁴ /ft			I _u =	187.2	in ⁴ /ft	LRFD	φM _{no} =	76.4	kip-in/ft			φ V _n =	7.32	kip/ft

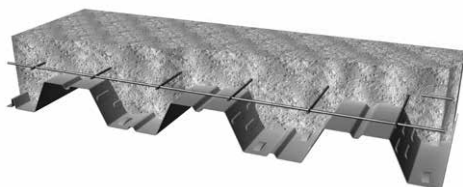
All Gages	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft) for all vertical load spans, WWF Size or Area of Steel per foot width																
	3/4" Welded Shear Studs	6x6 W1.4xW1.4	6x6 W2.9xW2.9			6x6 W4.0xW4.0			4x4 W4xW4			4x4 W6xW6					
		A _s = 0.028	in ² /ft			A _s = 0.058 in ² /ft			A _s = 0.080 in ² /ft			A _s = 0.120 in ² /ft			A _s = 0.180 in ² /ft		
	12 in o.c.	4250	5600			6590			8390			11090					
	24 in o.c.	4250	5600			6590			7750			7750					
	36 in o.c.	4250	5170			5170			5170			5170					

3WxH-36 6" Slab Depth, 145 pcf NWC

3WxH-36 Composite Deck 2.4

6" Total Slab Depth

Normal Weight Concrete (145 pcf)

Concrete Volume $1.389 \text{ yd}^3/100 \text{ ft}^2$ 

3WxH-36 6" Slab Depth, 145 pcf NWC

Maximum Unshored Span	Gage	Single	Double	Triple	Gage	Single	Double	Triple
	22	9' - 3"	10' - 1"	10' - 5"	19	11' - 6"	12' - 9"	13' - 2"
	21	10' - 0"	10' - 9"	11' - 2"	18	11' - 11"	13' - 11"	13' - 11"
	20	10' - 9"	11' - 5"	11' - 10"	16	12' - 7"	15' - 6"	14' - 8"

19 ga.	Vertical Load Span (ft-in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
	ASD & LRFD - Available Superimposed Load Capacity, W (psf)															
	ASD, W/Ω	558	488	429	379	337	300	268	241	216	195	176	159	144	130	118
	LRFD, φW	847	742	655	581	517	463	416	374	338	306	278	253	230	210	192
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	3586	3551	3519	3496	3471	3447	3426	3407	3389	3377	3362	3348	3335	3323	3312
	PAF Base Steel ≥ .25"	3296	3277	3261	3252	3238	3226	3215	3205	3196	3191	3183	3176	3169	3163	3157
	PAF Base Steel ≥ 0.125"	3275	3258	3242	3234	3222	3210	3200	3191	3182	3178	3170	3164	3157	3151	3146
	#12 Screw Base Steel ≥ .0385"	3089	3083	3077	3078	3073	3069	3065	3061	3058	3059	3056	3053	3051	3049	3046
Concrete + Deck =	57.3	psf		I _{cr} =	82.2	in ⁴ /ft	ASD	M _{no} /Ω=	59.1	kip-in/ft		V _n /Ω =	4.93	kip/ft		
(I _{cr} +I _u)/2 =	136.9	in ⁴ /ft		I _u =	191.6	in ⁴ /ft	LRFD	φM _{no} =	87.9	kip-in/ft		φ V _n =	7.40	kip/ft		

18 ga.	Vertical Load Span (ft-in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
	ASD & LRFD - Available Superimposed Load Capacity, W (psf)															
	ASD, W/Ω	632	553	487	432	384	343	307	276	249	225	204	185	168	152	139
	LRFD, φW	957	840	742	659	588	527	474	427	387	351	319	291	266	243	223
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft)															
	36/4	Attachment Pattern														
	Arc Spot Weld 1/2" Effective Dia	3750	3705	3665	3635	3603	3574	3547	3523	3501	3484	3465	3447	3431	3416	3402
	PAF Base Steel ≥ .25"	3340	3319	3301	3290	3275	3261	3249	3238	3227	3222	3213	3204	3197	3190	3183
	PAF Base Steel ≥ 0.125"	3316	3297	3280	3270	3256	3243	3232	3221	3211	3207	3198	3190	3183	3177	3170
#12 Screw Base Steel ≥ .0385"	3095	3088	3083	3083	3079	3074	3070	3067	3064	3065	3062	3059	3057	3054	3052	
Concrete + Deck =	57.7	psf		I _{cr} =	90.3	in ⁴ /ft	ASD	M _{no} /Ω=	66.2	kip-in/ft		V _n /Ω =	4.93	kip/ft		
(I _{cr} +I _u)/2 =	143	in ⁴ /ft		I _u =	195.6	in ⁴ /ft	LRFD	φM _{no} =	98.5	kip-in/ft		φ V _n =	7.40	kip/ft		

16 ga.	Vertical Load Span (ft-in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
	ASD & LRFD - Available Superimposed Load Capacity, W (psf)															
	ASD, W/Ω	780	684	604	536	478	428	385	347	314	285	259	236	215	197	180
	LRFD, φW	1177	1035	915	814	728	654	589	533	484	441	402	368	337	309	285
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft)															
	36/4	Attachment Pattern														
	Arc Spot Weld 1/2" Effective Dia	3965	3908	3858	3818	3777	3740	3706	3676	3648	3626	3602	3580	3559	3540	3522
	PAF Base Steel ≥ .25"	3430	3404	3382	3367	3349	3332	3317	3304	3291	3283	3273	3262	3253	3244	3236
	PAF Base Steel ≥ 0.125"	3384	3362	3342	3329	3313	3298	3284	3272	3261	3254	3245	3236	3227	3219	3212
#12 Screw Base Steel ≥ .0385"	3106	3100	3095	3095	3090	3086	3082	3079	3075	3076	3074	3071	3068	3066	3064	
Concrete + Deck =	58.5	psf		I _{cr} =	105.6	in ⁴ /ft	ASD	M _{no} /Ω=	80.5	kip-in/ft		V _n /Ω =	4.94	kip/ft		
(I _{cr} +I _u)/2 =	154.7	in ⁴ /ft		I _u =	203.7	in ⁴ /ft	LRFD	φM _{nc} =	119.7	kip-in/ft		φ V _n =	7.41	kip/ft		

All Gages	LRFD - Available Diaphragm Shear Capacity, ϕS_n (plf / ft) for all vertical load spans, WWF Size or Area of Steel per foot width						
	3/4" Welded Shear Studs	6x6 W1.4xW1.4	6x6 W2.9xW2.9	6x6 W4.0xW4.0	4x4 W4xW4	4x4 W6xW6	
		$A_s = 0.028 \text{ in}^2/\text{ft}$	$A_s = 0.058 \text{ in}^2/\text{ft}$	$A_s = 0.080 \text{ in}^2/\text{ft}$	$A_s = 0.120 \text{ in}^2/\text{ft}$	$A_s = 0.180 \text{ in}^2/\text{ft}$	
		12 in o.c.	4250	5600	6590	8390	11090
		24 in o.c.	4250	5600	6590	7750	7750
	36 in o.c.	4250	5170	5170	5170	5170	

3WxH-36 6" Slab Depth, 145 pcf NWC

2.4 3WxH-36 Composite Deck

6 1/2" Total Slab Depth

Normal Weight Concrete (145 pcf)

Concrete Volume 1.543yd³/100ft²

1 Hour Fire Rating



3WxH-36 6 1/2" Slab Depth, 145 pcf NWC

Maximum Unshored Span		Gage	Single	Double	Triple			Gage	Single	Double	Triple
		22	8' - 11"	9' - 8"	10' - 0"			19	11' - 3"	12' - 4"	12' - 9"
		21	9' - 8"	10' - 5"	10' - 9"			18	11' - 7"	13' - 5"	13' - 7"
		20	10' - 4"	11' - 0"	11' - 5"			16	12' - 3"	15' - 0"	14' - 4"

22 ga.	Vertical Load Span (ft-in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"	
	ASD & LRFD - Available Superimposed Load Capacity, W (psf)																
	ASD, W/Ω	452	394	344	303	267	236	210	187	166	148	132	118	106	94	84	
	LRFD, ϕW	691	604	530	468	415	370	330	296	265	239	215	194	175	158	143	
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	LRFD - Available Diaphragm Shear Capacity, ϕS _n (plf / ft) 36/4 Attachment Pattern																
	Arc Spot Weld 1/2" Effective Dia	3795	3776	3758	3748	3734	3721	3709	3698	3689	3683	3675	3667	3660	3653	3647	
	PAF Base Steel ≥ .25"	3692	3679	3667	3661	3651	3642	3634	3627	3620	3618	3612	3606	3601	3596	3592	
	PAF Base Steel ≥ 0.125"	3677	3665	3653	3649	3639	3631	3623	3616	3610	3608	3602	3597	3592	3588	3584	
	#12 Screw Base Steel ≥ .0385"	3576	3569	3563	3563	3558	3554	3550	3546	3542	3543	3540	3537	3534	3532	3530	
	Concrete + Deck =	62.5 psf				I _{cr} = 78.7 in ⁴ /ft		ASD		M _{no} /Ω=		49.4 kip-in/ft		V _n /Ω = 4.16 kip/ft			
	(I _{cr} +I _u)/2 =	155.1 in ⁴ /ft				I _u = 231.5 in ⁴ /ft		LRFD		ϕM _{no} =		73.5 kip-in/ft		ϕ V _n = 6.23 kip/ft			

21 ga.	Vertical Load Span (ft-in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"	
	ASD & LRFD - Available Superimposed Load Capacity, W (psf)																
	ASD, W/Ω	500	436	382	337	298	264	235	210	187	168	150	135	121	109	97	
	LRFD, ϕW	762	667	586	519	461	411	368	330	297	268	242	219	198	180	163	
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	LRFD - Available Diaphragm Shear Capacity, ϕS _n (plf / ft) 36/4 Attachment Pattern																
	Arc Spot Weld 1/2" Effective Dia	3860	3836	3816	3803	3786	3771	3757	3744	3732	3726	3716	3706	3698	3690	3682	
	PAF Base Steel ≥ .25"	3717	3702	3689	3682	3671	3662	3653	3644	3637	3634	3628	3622	3616	3611	3606	
	PAF Base Steel ≥ 0.125"	3700	3686	3674	3668	3658	3649	3641	3633	3626	3624	3617	3612	3607	3602	3597	
	#12 Screw Base Steel ≥ .0385"	3575	3569	3563	3563	3558	3554	3550	3546	3543	3544	3541	3538	3535	3533	3531	
	Concrete + Deck =	62.7 psf				I _{cr} = 84.9 in ⁴ /ft		ASD		M _{no} /Ω=		54.0 kip-in/ft		V _n /Ω = 4.65 kip/ft			
	(I _{cr} +I _u)/2 =	159.6 in ⁴ /ft				I _u = 234.3 in ⁴ /ft		LRFD		ϕM _{no} =		80.4 kip-in/ft		ϕ V _n = 6.95 kip/ft			

20 ga.	Vertical Load Span (ft-in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"	
	ASD & LRFD - Available Superimposed Load Capacity, W (psf)																
	ASD, W/Ω	545	475	417	368	326	290	258	231	207	186	167	150	135	122	110	
	LRFD, ϕW	828	725	639	565	503	449	403	362	326	295	267	242	220	200	182	
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	LRFD - Available Diaphragm Shear Capacity, ϕS _n (plf / ft) 36/4 Attachment Pattern																
	Arc Spot Weld 1/2" Effective Dia	3925	3898	3874	3858	3838	3821	3805	3790	3777	3768	3757	3746	3736	3727	3718	
	PAF Base Steel ≥ .25"	3739	3723	3709	3702	3690	3679	3670	3661	3653	3650	3643	3636	3630	3625	3619	
	PAF Base Steel ≥ 0.125"	3721	3706	3693	3686	3676	3666	3657	3648	3641	3638	3632	3625	3620	3615	3610	
	#12 Screw Base Steel ≥ .0385"	3575	3569	3564	3564	3559	3555	3551	3547	3544	3545	3542	3539	3537	3534	3532	
	Concrete + Deck =	62.9 psf				I _{cr} = 90.6 in ⁴ /ft		ASD		M _{no} /Ω=		58.3 kip-in/ft		V _n /Ω = 5.20 kip/ft			
	(I _{cr} +I _u)/2 =	163.7 in ⁴ /ft				I _u = 236.9 in ⁴ /ft		LRFD		ϕM _{no} =		86.8 kip-in/ft		ϕ V _n = 7.76 kip/ft			

All Gages	LRFD - Available Diaphragm Shear Capacity, ϕS _n (plf / ft) for all vertical load spans, WWF Size or Area of Steel per foot width																				
	3/4" Welded Shear Studs	6x6 W1.4xW1.4 A _s = 0.028 in ² /ft				6x6 W2.9xW2.9 A _s = 0.058 in ² /ft				6x6 W4.0xW4.0 A _s = 0.080 in ² /ft				4x4 W4xW4 A _s = 0.120 in ² /ft				4x4 W6xW6 A _s = 0.180 in ² /ft			
	12 in o.c.	n/a				6100				7090				8890				11590			
	24 in o.c.	n/a				6100				7090				7750				7750			
	36 in o.c.	n/a				5170				5170				5170				5170			

3WxH-36 6 1/2" Slab Depth, 145 pcf NWC



3WxH-36 Composite Deck 2.4

6 1/2" Total Slab Depth

Normal Weight Concrete (145 pcf)

Concrete Volume 1.543yd³/100ft²

1 Hour Fire Rating



3WxH-36 6 1/2" Slab Depth, 145 pcf NWC

Maximum Unshored Span	Gage	Single	Double	Triple	Gage	Single	Double	Triple
	22	8' - 11"	9' - 8"	10' - 0"		19	11' - 3"	12' - 4"
	21	9' - 8"	10' - 5"	10' - 9"		18	11' - 7"	13' - 5"
	20	10' - 4"	11' - 0"	11' - 5"		16	12' - 3"	15' - 0"

19 ga.	Vertical Load Span (ft-in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
	ASD & LRFD - Available Superimposed Load Capacity, W (psf)															
	ASD, W/Ω	636	556	489	432	384	343	306	275	247	223	201	182	165	149	136
	LRFD, φW	964	845	746	662	590	528	474	427	386	350	318	289	264	241	220
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	4077	4041	4010	3987	3961	3938	3917	3898	3880	3868	3853	3839	3826	3813	3802
	PAF Base Steel ≥ .25"	3786	3768	3751	3742	3729	3717	3706	3696	3686	3682	3674	3666	3660	3653	3647
	PAF Base Steel ≥ 0.125"	3765	3748	3733	3724	3712	3701	3690	3681	3672	3668	3661	3654	3648	3642	3636
	#12 Screw Base Steel ≥ .0385"	3579	3573	3568	3568	3563	3559	3555	3552	3548	3549	3547	3544	3541	3539	3537
	Concrete + Deck =	63.4	psf		I _{cr} = 101.8	in ⁴ /ft	ASD	M _{no} /Ω = 67.1	kip-in/ft	V _n /Ω = 5.52	kip/ft					
	(I _{cr} +I _u)/2 =	172	in ⁴ /ft		I _u = 242.2	in ⁴ /ft	LRFD	φM _{no} = 99.9	kip-in/ft	φV _n = 8.28	kip/ft					

18 ga.	Vertical Load Span (ft-in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
	ASD & LRFD - Available Superimposed Load Capacity, W (psf)															
	ASD, W/Ω	721	631	556	492	438	392	351	316	285	257	233	212	192	175	159
	LRFD, φW	1090	957	845	751	670	601	541	488	442	401	365	333	304	279	255
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	4240	4196	4156	4125	4093	4064	4037	4013	3991	3975	3956	3938	3922	3906	3892
	PAF Base Steel ≥ .25"	3830	3810	3791	3780	3765	3752	3739	3728	3718	3712	3703	3695	3687	3680	3673
	PAF Base Steel ≥ 0.125"	3807	3787	3770	3760	3746	3734	3722	3711	3702	3697	3689	3681	3674	3667	3661
	#12 Screw Base Steel ≥ .0385"	3585	3579	3573	3574	3569	3565	3561	3557	3554	3555	3552	3550	3547	3545	3543
	Concrete + Deck =	63.8	psf		I _{cr} = 111.9	in ⁴ /ft	ASD	M _{no} /Ω = 75.3	kip-in/ft	V _n /Ω = 5.52	kip/ft					
	(I _{cr} +I _u)/2 =	179.5	in ⁴ /ft		I _u = 247.2	in ⁴ /ft	LRFD	φM _{no} = 112.0	kip-in/ft	φV _n = 8.28	kip/ft					

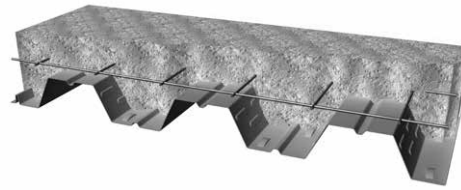
16 ga.	Vertical Load Span (ft-in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
	ASD & LRFD - Available Superimposed Load Capacity, W (psf)															
	ASD, W/Ω	890	781	689	612	546	489	440	397	360	326	297	271	247	226	207
	LRFD, φW	1342	1180	1044	929	831	746	673	609	553	504	460	421	386	355	326
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	4455	4398	4348	4308	4267	4231	4197	4166	4138	4116	4092	4070	4049	4030	4012
	PAF Base Steel ≥ .25"	3920	3895	3872	3858	3839	3823	3808	3794	3781	3774	3763	3753	3744	3735	3727
	PAF Base Steel ≥ 0.125"	3875	3852	3832	3819	3803	3788	3775	3762	3751	3745	3735	3726	3718	3710	3703
	#12 Screw Base Steel ≥ .0385"	3597	3591	3585	3585	3581	3576	3573	3569	3566	3567	3564	3561	3559	3557	3554
	Concrete + Deck =	64.6	psf		I _{cr} = 131.1	in ⁴ /ft	ASD	M _{no} /Ω = 91.6	kip-in/ft	V _n /Ω = 5.53	kip/ft					
	(I _{cr} +I _u)/2 =	194.1	in ⁴ /ft		I _u = 257.1	in ⁴ /ft	LRFD	φM _{no} = 136.3	kip-in/ft	φV _n = 8.30	kip/ft					

All Gages	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft) for all vertical load spans, WWF Size or Area of Steel per foot width															
	3/4" Welded Shear Studs				6x6 W1.4xW1.4				6x6 W2.9xW2.9				6x6 W4.0xW4.0			
	A _s = 0.028 in ² /ft				A _s = 0.058 in ² /ft				A _s = 0.080 in ² /ft				A _s = 0.120 in ² /ft			
	12 in o.c.	n/a				6100				7090				8890		
	24 in o.c.	n/a				6100				7090				7750		
	36 in o.c.	n/a				5170				5170				5170		

3WxH-36 6 1/2" Slab Depth, 145 pcf NWC

Normal Weight Concrete (145 pcf)

2 Hour Fire Rating



Maximum Unshored Span	Gage	Single	Double	Triple
	22	8' - 4"	9' - 1"	9' - 5"
	21	9' - 0"	9' - 9"	10' - 1"
	20	9' - 8"	10' - 4"	10' - 8"

Gage	Single	Double	Triple
19	10' - 8"	11' - 6"	11' - 11"
18	11' - 1"	12' - 7"	13' - 0"
16	11' - 9"	14' - 1"	13' - 9"

22 ga.	Vertical Load Span (ft-in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
	ASD & LRFD - Available Superimposed Load Capacity, W (psf)															
	ASD, W/Ω	567	494	432	380	336	298	265	236	211	188	168	151	135	121	108
	LRFD, ϕW	865	756	665	587	521	464	415	372	335	301	272	246	222	201	182
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, ϕS _n (plf / ft)															
	36/4	Attachment Pattern														
	Arc Spot Weld 1/2" Effective Dia	4776	4757	4739	4729	4715	4702	4690	4679	4669	4664	4656	4648	4641	4634	4627
	PAF Base Steel ≥ .25"	4673	4660	4648	4642	4632	4623	4615	4608	4601	4598	4592	4587	4582	4577	4573
	PAF Base Steel ≥ 0.125"	4658	4646	4634	4629	4620	4612	4604	4597	4591	4589	4583	4578	4573	4569	4565
#12 Screw Base Steel ≥ .0385"	4557	4550	4544	4544	4539	4535	4530	4527	4523	4524	4521	4518	4515	4513	4511	
Concrete + Deck =	74.6	psf		I _{cr} =	114.5	in ⁴ /ft	ASD	M _{no} /Ω=	61.6	kip-in/ft	V _n /Ω =	4.79	kip/ft			
(I _{cr} +I _u)/2 =	234.7	in ⁴ /ft		I _u =	354.9	in ⁴ /ft	LRFD	ϕM _{no} =	91.6	kip-in/ft	ϕ V _n =	7.17	kip/ft			

21 ga.	Vertical Load Span (ft-in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
	ASD & LRFD - Available Superimposed Load Capacity, W (psf)															
	ASD, W/Ω	627	547	480	423	375	333	297	265	237	213	191	172	154	139	125
	LRFD, ϕW	955	835	735	651	579	516	463	416	374	338	306	277	251	228	207
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, ϕS_n (plf / ft)								36/4 Attachment Pattern							
	Arc Spot Weld 1/2" Effective Dia	4840	4817	4797	4783	4767	4751	4738	4725	4713	4707	4697	4687	4679	4671	4663
	PAF Base Steel $\geq .25"$	4697	4683	4670	4663	4652	4642	4633	4625	4618	4615	4609	4603	4597	4592	4587
	PAF Base Steel $\geq 0.125"$	4681	4667	4655	4649	4639	4630	4621	4614	4607	4604	4598	4593	4587	4583	4578
	#12 Screw Base Steel $\geq .0385"$	4556	4550	4544	4544	4539	4535	4531	4527	4524	4525	4522	4519	4516	4514	4512
Concrete + Deck =	74.8	psf		I_{cr} =		123.7	in^4/ft	ASD	M_{no}/Ω =		67.4	$\text{kip-in}/\text{ft}$		V_n/Ω =	5.28	kip/ft
$(I_{cr}+I_u)/2$ =	241.3	in^4/ft		I_u =		358.9	in^4/ft	LRFD	ϕM_{no} =		100.3	$\text{kip-in}/\text{ft}$		ϕV_n =	7.89	kip/ft

20 ga.	Vertical Load Span (ft-in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"	
	ASD & LRFD - Available Superimposed Load Capacity, W (psf)																
	ASD, W/Ω	683	597	524	463	410	365	326	292	262	236	212	191	173	156	141	
	LRFD, ϕW	1038	909	801	710	632	565	507	456	411	372	337	306	278	253	231	
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	LRFD - Available Diaphragm Shear Capacity, ϕS _n (plf / ft)	36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	4905	4879	4855	4839	4819	4802	4786	4771	4757	4749	4738	4727	4717	4708	4699	
	PAF Base Steel ≥ .25"	4720	4704	4690	4682	4671	4660	4651	4642	4634	4630	4623	4617	4611	4605	4600	
	PAF Base Steel ≥ 0.125"	4702	4687	4674	4667	4656	4647	4638	4629	4622	4619	4612	4606	4601	4596	4591	
	#12 Screw Base Steel ≥ .0385"	4556	4550	4544	4545	4540	4536	4532	4528	4525	4526	4523	4520	4518	4515	4513	
Concrete + Deck =	75.0	psf		I _{cr} =		132.0	in ⁴ /ft		ASD	M _{no} /Ω=		72.8	kip-in/ft		V _n /Ω =	5.82	kip/ft
(I _{cr} +I _u)/2 =	247.3	in ⁴ /ft		I _u =		362.6	in ⁴ /ft		LRFD	ϕM _{no} =		108.3	kip-in/ft		ϕ V _n =	8.70	kip/ft

All Gages	LRFD - Available Diaphragm Shear Capacity, ϕS_n (plf / ft) for all vertical load spans, WWF Size or Area of Steel per foot width					
	3/4" Welded Shear Studs	6x6 W1.4xW1.4 $A_s = 0.028 \text{ in}^2/\text{ft}$	6x6 W2.9xW2.9 $A_s = 0.058 \text{ in}^2/\text{ft}$	6x6 W4.0xW4.0 $A_s = 0.080 \text{ in}^2/\text{ft}$	4x4 W4xW4 $A_s = 0.120 \text{ in}^2/\text{ft}$	4x4 W6xW6 $A_s = 0.180 \text{ in}^2/\text{ft}$
	12 in o.c.	n/a	7080	8070	9870	12570
	24 in o.c.	n/a	7080	7750	7750	7750
	36 in o.c.	n/a	5170	5170	5170	5170

3WxH-36 7 1/2 " Slab Depth, 145 pcf NWC



3WxH-36 Composite Deck 2.4

7 1/2" Total Slab Depth

Normal Weight Concrete (145 pcf)

Concrete Volume 1.852yd³/100ft²

2 Hour Fire Rating



3WxH-36 7 1/2 " Slab Depth, 145 pcf NWC

	Maximum Unshored Span	Gage	Single	Double	Triple		Gage	Single	Double	Triple
		22	8' - 4"	9' - 1"	9' - 5"		19	10' - 8"	11' - 6"	11' - 11"
		21	9' - 0"	9' - 9"	10' - 1"		18	11' - 1"	12' - 7"	13' - 0"
		20	9' - 8"	10' - 4"	10' - 8"		16	11' - 9"	14' - 1"	13' - 9"

19 ga.	Vertical Load Span (ft-in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
	ASD & LRFD - Available Superimposed Load Capacity, W (psf)															
	ASD, W/Ω	798	699	615	544	484	432	387	347	313	282	255	231	210	191	173
	LRFD, φW	1209	1061	937	831	741	664	597	539	487	442	402	366	334	305	279
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	5057	5022	4990	4968	4942	4919	4898	4878	4861	4849	4833	4819	4806	4794	4783
	PAF Base Steel ≥ .25"	4767	4749	4732	4723	4710	4697	4686	4676	4667	4663	4655	4647	4640	4634	4628
	PAF Base Steel ≥ 0.125"	4746	4729	4714	4705	4693	4681	4671	4662	4653	4649	4642	4635	4628	4622	4617
	#12 Screw Base Steel ≥ .0385"	4560	4554	4548	4549	4544	4540	4536	4533	4529	4530	4527	4525	4522	4520	4518
	Concrete + Deck = 75.4 psf I _{cr} = 148.7 in ⁴ /ft ASD M _{no} /Ω = 83.9 kip-in/ft V _n /Ω = 6.77 kip/ft (I _{cr} +I _u)/2 = 259.5 in ⁴ /ft I _u = 370.3 in ⁴ /ft LRFD φM _{no} = 124.8 kip-in/ft φV _n = 10.13 kip/ft															

18 ga.	Vertical Load Span (ft-in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
	ASD & LRFD - Available Superimposed Load Capacity, W (psf)															
	ASD, W/Ω	906	794	700	620	552	494	443	399	360	326	296	269	245	223	203
	LRFD, φW	1369	1202	1062	944	843	756	681	615	558	507	462	422	386	353	324
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	5221	5176	5137	5106	5074	5045	5018	4994	4972	4955	4936	4919	4902	4887	4873
	PAF Base Steel ≥ .25"	4811	4790	4772	4761	4746	4732	4720	4709	4698	4693	4684	4676	4668	4661	4654
	PAF Base Steel ≥ 0.125"	4787	4768	4751	4741	4727	4714	4703	4692	4683	4678	4669	4662	4655	4648	4642
	#12 Screw Base Steel ≥ .0385"	4566	4560	4554	4555	4550	4546	4542	4538	4535	4536	4533	4530	4528	4526	4523
	Concrete + Deck = 75.8 psf I _{cr} = 163.7 in ⁴ /ft ASD M _{no} /Ω = 94.2 kip-in/ft V _n /Ω = 6.78 kip/ft (I _{cr} +I _u)/2 = 270.5 in ⁴ /ft I _u = 377.4 in ⁴ /ft LRFD φM _{no} = 140.1 kip-in/ft φV _n = 10.17 kip/ft															

16 ga.	Vertical Load Span (ft-in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
	ASD & LRFD - Available Superimposed Load Capacity, W (psf)															
	ASD, W/Ω	1120	984	869	772	689	618	557	503	455	414	377	344	314	288	264
	LRFD, φW	1689	1485	1315	1171	1048	942	850	770	699	637	582	533	489	450	415
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	5436	5379	5329	5289	5248	5211	5178	5147	5119	5097	5073	5051	5030	5011	4993
	PAF Base Steel ≥ .25"	4901	4876	4853	4838	4820	4804	4789	4775	4762	4755	4744	4734	4724	4716	4708
	PAF Base Steel ≥ 0.125"	4855	4833	4813	4800	4784	4769	4756	4743	4732	4726	4716	4707	4698	4691	4683
	#12 Screw Base Steel ≥ .0385"	4578	4571	4566	4566	4562	4557	4553	4550	4547	4548	4545	4542	4540	4537	4535
	Concrete + Deck = 76.7 psf I _{cr} = 192.3 in ⁴ /ft ASD M _{no} /Ω = 114.9 kip-in/ft V _n /Ω = 6.79 kip/ft (I _{cr} +I _u)/2 = 291.9 in ⁴ /ft I _u = 391.6 in ⁴ /ft LRFD φM _{no} = 170.9 kip-in/ft φV _n = 10.18 kip/ft															

All Gages	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft) for all vertical load spans, WWF Size or Area of Steel per foot width					
	3/4" Welded Shear Studs	6x6 W1.4xW1.4 A _s = 0.028 in ² /ft	6x6 W2.9xW2.9 A _s = 0.058 in ² /ft	6x6 W4.0xW4.0 A _s = 0.080 in ² /ft	4x4 W4xW4 A _s = 0.120 in ² /ft	4x4 W6xW6 A _s = 0.180 in ² /ft
	12 in o.c.	n/a	7080	8070	9870	12570
	24 in o.c.	n/a	7080	7750	7750	7750
	36 in o.c.	n/a	5170	5170	5170	5170

3WxH-36 7 1/2 " Slab Depth, 145 pcf NWC

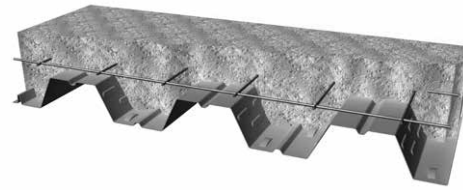
2.4 3WxH-36 Composite Deck

8 1/4" Total Slab Depth

Normal Weight Concrete (145 pcf)

Concrete Volume 2.083yd³/100ft²

3 Hour Fire Rating



3WxH-36 8 1/4 " Slab Depth, 145 pcf NWC

Maximum Unshored Span	Gage	Single	Double	Triple	Gage	Single	Double	Triple
	22	7' - 11"	8' - 8"	9' - 0"		19	10' - 3"	11' - 0"
	21	8' - 7"	9' - 4"	9' - 8"		18	10' - 9"	12' - 0"
	20	9' - 3"	9' - 11"	10' - 3"		16	11' - 5"	13' - 5"

22 ga.	Vertical Load Span (ft-in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
	ASD & LRFD - Available Superimposed Load Capacity, W (psf)															
	ASD, W/Ω	656	572	501	441	390	346	308	274	245	219	196	176	158	141	127
	LRFD, φW	1000	874	769	680	604	538	482	432	389	350	316	286	259	234	213
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	5512	5492	5475	5465	5450	5437	5426	5415	5405	5400	5391	5384	5376	5369	5363
	PAF Base Steel ≥ .25"	5409	5395	5383	5378	5368	5359	5351	5343	5336	5334	5328	5323	5317	5313	5308
	PAF Base Steel ≥ 0.125"	5394	5381	5370	5365	5356	5347	5340	5333	5326	5324	5319	5314	5309	5304	5300
	#12 Screw Base Steel ≥ .0385"	5293	5286	5280	5280	5275	5270	5266	5262	5259	5260	5257	5254	5251	5248	5246
	Concrete + Deck =	83.7 psf														
	(I _{cr} +I _u)/2 =	309.7 in ⁴ /ft														
					I _{cr} = 146.4 in ⁴ /ft	ASD			M _{no} /Ω = 71.0 kip-in/ft					V _n /Ω = 5.42 kip/ft		
					I _u = 473.0 in ⁴ /ft	LRFD			φM _{no} = 105.6 kip-in/ft					φ V _n = 8.11 kip/ft		

21 ga.	Vertical Load Span (ft-in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
	ASD & LRFD - Available Superimposed Load Capacity, W (psf)															
	ASD, W/Ω	726	633	556	490	434	386	344	308	276	248	223	200	181	163	146
	LRFD, φW	1104	966	851	754	670	599	536	482	435	393	356	322	293	266	242
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	5576	5553	5532	5519	5502	5487	5473	5460	5449	5442	5432	5423	5414	5406	5399
	PAF Base Steel ≥ .25"	5433	5418	5405	5399	5388	5378	5369	5361	5354	5351	5344	5338	5333	5327	5323
	PAF Base Steel ≥ 0.125"	5416	5403	5390	5385	5375	5365	5357	5349	5342	5340	5334	5328	5323	5318	5314
	#12 Screw Base Steel ≥ .0385"	5292	5285	5280	5280	5275	5271	5266	5263	5259	5260	5257	5255	5252	5250	5247
	Concrete + Deck =	83.9 psf														
	(I _{cr} +I _u)/2 =	318.2 in ⁴ /ft														
					I _{cr} = 158.3 in ⁴ /ft	ASD			M _{no} /Ω = 77.7 kip-in/ft					V _n /Ω = 5.91 kip/ft		
					I _u = 478.1 in ⁴ /ft	LRFD			φM _{no} = 115.6 kip-in/ft					φ V _n = 8.83 kip/ft		

20 ga.	Vertical Load Span (ft-in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
	ASD & LRFD - Available Superimposed Load Capacity, W (psf)															
	ASD, W/Ω	791	691	607	536	476	424	379	339	305	274	247	223	202	182	165
	LRFD, φW	1201	1052	927	822	732	655	588	529	478	432	392	356	324	295	269
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	5641	5614	5590	5574	5555	5537	5521	5507	5493	5485	5473	5463	5453	5443	5435
	PAF Base Steel ≥ .25"	5456	5440	5426	5418	5406	5396	5386	5378	5369	5366	5359	5353	5347	5341	5336
	PAF Base Steel ≥ 0.125"	5438	5423	5410	5403	5392	5382	5373	5365	5357	5355	5348	5342	5336	5331	5326
	#12 Screw Base Steel ≥ .0385"	5292	5286	5280	5280	5276	5271	5267	5264	5260	5261	5258	5256	5253	5251	5249
	Concrete + Deck =	84.1 psf														
	(I _{cr} +I _u)/2 =	325.9 in ⁴ /ft														
					I _{cr} = 169.0 in ⁴ /ft	ASD			M _{no} /Ω = 84.0 kip-in/ft					V _n /Ω = 6.45 kip/ft		
					I _u = 482.8 in ⁴ /ft	LRFD			φM _{no} = 124.9 kip-in/ft					φ V _n = 9.65 kip/ft		

All Gages	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft) for all vertical load spans, WWF Size or Area of Steel per foot width					
	3/4" Welded Shear Studs	6x6 W1.4xW1.4	6x6 W2.9xW2.9	6x6 W4.0xW4.0	4x4 W4xW4	4x4 W6xW6
		A _s = 0.028 in ² /ft	A _s = 0.058 in ² /ft	A _s = 0.080 in ² /ft	A _s = 0.120 in ² /ft	A _s = 0.180 in ² /ft
	12 in o.c.	n/a	7820	8810	10610	13310
	24 in o.c.	n/a	7750	7750	7750	7750
	36 in o.c.	n/a	5170	5170	5170	5170

3WxH-36 8 1/4 " Slab Depth, 145 pcf NWC



3WxH-36 Composite Deck 2.4

8 1/4" Total Slab Depth

Normal Weight Concrete (145 pcf)

Concrete Volume 2.083yd³/100ft²

3 Hour Fire Rating



3WxH-36 8 1/4 " Slab Depth, 145 pcf NWC

		Gage	Single	Double	Triple			Gage	Single	Double	Triple
Maximum Unshored Span		22	7' - 11"	8' - 8"	9' - 0"			19	10' - 3"	11' - 0"	11' - 5"
		21	8' - 7"	9' - 4"	9' - 8"			18	10' - 9"	12' - 0"	12' - 5"
		20	9' - 3"	9' - 11"	10' - 3"			16	11' - 5"	13' - 5"	13' - 5"

19 ga.	Vertical Load Span (ft-in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
	ASD & LRFD - Available Superimposed Load Capacity, W (psf)															
	ASD, W/Ω	925	810	713	631	562	501	449	404	364	329	298	270	245	223	203
	LRFD, ϕW	1400	1229	1085	963	860	770	693	625	566	514	467	426	389	356	326
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, ϕS _n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	5793	5758	5726	5703	5678	5654	5633	5614	5596	5584	5569	5555	5542	5530	5519
	PAF Base Steel ≥ .25"	5503	5484	5468	5459	5445	5433	5422	5412	5403	5398	5390	5383	5376	5370	5364
	PAF Base Steel ≥ 0.125"	5482	5465	5449	5441	5428	5417	5407	5397	5389	5385	5377	5371	5364	5358	5353
	#12 Screw Base Steel ≥ .0385"	5296	5290	5284	5284	5280	5276	5272	5268	5265	5266	5263	5260	5258	5256	5253
Concrete + Deck =		84.5	psf	I _{cr} = 190.7		in ⁴ /ft	ASD	M _{no} /Ω= 96.9		kip-in/ft	V _r /Ω = 7.41		kip/ft			
(I _{cr} +I _u)/2 =		341.6	in ⁴ /ft	I _u = 492.5		in ⁴ /ft	LRFD	ϕM _{no} = 144.2		kip-in/ft	ϕ V _n = 11.08		kip/ft			

18 ga.	Vertical Load Span (ft-in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
	ASD & LRFD - Available Superimposed Load Capacity, W (psf)															
	ASD, W/Ω	1050	920	812	720	641	574	515	464	419	380	345	314	286	261	238
	LRFD, ϕW	1586	1393	1232	1095	978	878	791	715	648	589	537	491	449	412	378
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, ϕS _n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	5957	5912	5872	5842	5810	5781	5754	5730	5708	5691	5672	5654	5638	5623	5609
	PAF Base Steel ≥ .25"	5547	5526	5508	5497	5482	5468	5456	5444	5434	5429	5420	5411	5404	5397	5390
	PAF Base Steel ≥ 0.125"	5523	5504	5487	5477	5463	5450	5439	5428	5418	5413	5405	5397	5390	5384	5377
	#12 Screw Base Steel ≥ .0385"	5301	5295	5290	5290	5285	5281	5277	5274	5271	5272	5269	5266	5264	5261	5259
Concrete + Deck =		84.9	psf	I _{cr} = 210.2		in ⁴ /ft	ASD	M _{no} /Ω= 108.9		kip-in/ft	V _r /Ω = 8.05		kip/ft			
(I _{cr} +I _u)/2 =		355.9	in ⁴ /ft	I _u = 501.6		in ⁴ /ft	LRFD	ϕM _{no} = 162.0		kip-in/ft	ϕ V _n = 12.08		kip/ft			

16 ga.	Vertical Load Span (ft-in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
	ASD & LRFD - Available Superimposed Load Capacity, W (psf)															
	ASD, W/Ω	1301	1142	1010	897	802	719	648	585	530	482	439	401	367	336	309
	LRFD, ϕW	1960	1724	1527	1360	1217	1094	988	895	814	742	678	621	571	525	484
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, ϕS _n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	6172	6115	6065	6025	5984	5947	5913	5883	5855	5833	5809	5787	5766	5747	5729
	PAF Base Steel ≥ .25"	5636	5611	5589	5574	5556	5539	5524	5510	5498	5490	5479	5469	5460	5451	5443
	PAF Base Steel ≥ 0.125"	5591	5569	5549	5536	5519	5505	5491	5479	5468	5461	5451	5442	5434	5426	5419
	#12 Screw Base Steel ≥ .0385"	5313	5307	5302	5302	5297	5293	5289	5286	5282	5283	5281	5278	5275	5273	5271
Concrete + Deck =		85.7	psf	I _{cr} = 247.5		in ⁴ /ft	ASD	M _{no} /Ω= 133.1		kip-in/ft	V _r /Ω = 8.08		kip/ft			
(I _{cr} +I _u)/2 =		383.6	in ⁴ /ft	I _u = 519.7		in ⁴ /ft	LRFD	ϕM _{no} = 198.0		kip-in/ft	ϕ V _n = 12.12		kip/ft			

All Gages	LRFD - Available Diaphragm Shear Capacity, ϕS _n (plf / ft) for all vertical load spans, WWF Size or Area of Steel per foot width																
	3/4" Welded Shear Studs	6x6 W1.4xW1.4		6x6 W2.9xW2.9		6x6 W4.0xW4.0		4x4 W4xW4		4x4 W6xW6							
		A _s = 0.028		in ² /ft		A _s = 0.058		in ² /ft		A _s = 0.120		in ² /ft		A _s = 0.180		in ² /ft	
	12 in o.c.	n/a		7820		8810		10610		13310							
	24 in o.c.	n/a		7750		7750		7750		7750							
	36 in o.c.		n/a		5170		5170		5170		5170						

3WxH-36 8 1/4 " Slab Depth, 145 pcf NWC