

# 3.3 2WH-36 Composite Deck

4" Total Slab Depth

Normal Weight Concrete (145 pcf)

Concrete Volume 0.907yd<sup>3</sup>/100ft<sup>2</sup>



Maximum Unshored Span (in)

Gage	Single	Double	Triple
22	7' - 11"	8' - 9"	9' - 5"
21	9' - 0"	9' - 11"	10' - 4"
20	9' - 6"	10' - 6"	10' - 10"

Gage	Single	Double	Triple
19	10' - 4"	11' - 9"	12' - 2"
18	10' - 8"	12' - 7"	12' - 8"
16	11' - 4"	14' - 2"	13' - 4"

GA	Vertical Load Span (in)	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"
22	<b>ASD &amp; LRFD - Superimposed Load, W (psf)</b>															
	ASD, W/Ω	395	332	283	243	210	183	160	141	124	110	98	87	78	70	62
	LRFD, φW	632	532	452	388	336	292	256	225	199	176	157	140	125	111	100
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	<b>LRFD - Diaphragm Shear, φS<sub>n</sub> (plf / ft) 36/4 Attachment Pattern</b>															
	Arc Spot Weld 1/2" Effective Dia	2362	2335	2298	2265	2237	2212	2190	2180	2162	2145	2130	2116	2103	2100	2089
	PAF Base Steel ≥ .25"	2115	2107	2086	2067	2051	2037	2024	2024	2013	2004	1995	1987	1979	1981	1974
	PAF Base Steel ≥ 0.125"	2095	2089	2069	2052	2037	2023	2012	2012	2002	1992	1984	1977	1970	1971	1965
	#12 Screw Base Steel ≥ .0385"	2077	2072	2054	2037	2023	2011	2000	2000	1991	1982	1974	1967	1961	1963	1957
	Concrete + Deck =	37.1 psf		$I_{cr} = 23.1 \text{ in}^4/\text{ft}$				$M_{no}/\Omega = 23.9 \text{ kip-in/ft}$				$V_n/\Omega = 3.02 \text{ kip/ft}$				
	$(I_{cr}+I_u)/2 = 40.7 \text{ in}^4/\text{ft}$		$I_u = 58.3 \text{ in}^4/\text{ft}$				$\phi M_{no} = 36.5 \text{ kip-in/ft}$				$\phi V_n = 4.52 \text{ kip/ft}$					

GA	Vertical Load Span (in)	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"
21	<b>ASD &amp; LRFD - Superimposed Load, W (psf)</b>															
	ASD, W/Ω	445	375	320	275	238	208	182	161	142	127	113	101	90	81	73
	LRFD, φW	713	601	512	440	381	333	292	257	228	203	181	161	145	130	117
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	<b>LRFD - Diaphragm Shear, φS<sub>n</sub> (plf / ft) 36/4 Attachment Pattern</b>															
	Arc Spot Weld 1/2" Effective Dia	2441	2413	2369	2332	2299	2270	2244	2235	2214	2194	2177	2161	2146	2143	2130
	PAF Base Steel ≥ .25"	2157	2150	2125	2104	2085	2069	2054	2055	2043	2032	2021	2012	2003	2006	1998
	PAF Base Steel ≥ 0.125"	2135	2130	2106	2087	2069	2054	2040	2041	2030	2019	2009	2001	1992	1996	1988
	#12 Screw Base Steel ≥ .0385"	2115	2112	2090	2071	2055	2040	2027	2029	2018	2008	1999	1991	1983	1986	1979
	Concrete + Deck =	37.3 psf		$I_{cr} = 25.4 \text{ in}^4/\text{ft}$				$M_{no}/\Omega = 26.7 \text{ kip-in/ft}$				$V_n/\Omega = 3.02 \text{ kip/ft}$				
	$(I_{cr}+I_u)/2 = 42.4 \text{ in}^4/\text{ft}$		$I_u = 59.4 \text{ in}^4/\text{ft}$				$\phi M_{no} = 40.9 \text{ kip-in/ft}$				$\phi V_n = 4.52 \text{ kip/ft}$					

GA	Vertical Load Span (in)	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"
20	<b>ASD &amp; LRFD - Superimposed Load, W (psf)</b>															
	ASD, W/Ω	470	396	338	291	252	220	193	171	151	134	120	107	96	87	78
	LRFD, φW	752	634	540	465	403	352	309	273	242	215	192	172	154	139	125
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	<b>LRFD - Diaphragm Shear, φS<sub>n</sub> (plf / ft) 36/4 Attachment Pattern</b>															
	Arc Spot Weld 1/2" Effective Dia	2481	2452	2406	2366	2331	2300	2272	2263	2240	2219	2201	2183	2168	2165	2151
	PAF Base Steel ≥ .25"	2178	2172	2146	2123	2103	2085	2070	2071	2058	2046	2035	2025	2016	2019	2011
	PAF Base Steel ≥ 0.125"	2155	2150	2126	2104	2086	2069	2054	2057	2044	2033	2022	2013	2004	2008	2000
	#12 Screw Base Steel ≥ .0385"	2135	2132	2109	2088	2071	2055	2041	2044	2032	2021	2012	2003	1994	1999	1991
	Concrete + Deck =	37.4 psf		$I_{cr} = 26.4 \text{ in}^4/\text{ft}$				$M_{no}/\Omega = 28.1 \text{ kip-in/ft}$				$V_n/\Omega = 3.02 \text{ kip/ft}$				
	$(I_{cr}+I_u)/2 = 43.2 \text{ in}^4/\text{ft}$		$I_u = 59.9 \text{ in}^4/\text{ft}$				$\phi M_{no} = 43.0 \text{ kip-in/ft}$				$\phi V_n = 4.52 \text{ kip/ft}$					

# 2WH-36 Composite Deck 3.3

4" Total Slab Depth

Normal Weight Concrete (145 pcf)

Concrete Volume 0.907yd<sup>3</sup>/100ft<sup>2</sup>



2W PANELS

GA	Vertical Load Span (in)	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	
19	<b>ASD &amp; LRFD - Superimposed Load, W (psf)</b>																
	ASD, W/Ω	555	469	400	345	300	262	231	204	182	162	145	130	118	106	96	
	LRFD, φW	888	750	640	552	480	420	370	327	291	259	232	209	188	170	154	
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	<b>LRFD - Diaphragm Shear, φS<sub>n</sub> (plf / ft) 36/4 Attachment Pattern</b>																
	Arc Spot Weld 1/2" Effective Dia	2625	2594	2537	2488	2445	2407	2373	2365	2337	2311	2288	2266	2247	2246	2229	
	PAF Base Steel ≥ .25"	2255	2252	2220	2191	2167	2145	2126	2131	2114	2099	2086	2073	2062	2068	2058	
	PAF Base Steel ≥ 0.125"	2227	2227	2196	2169	2146	2126	2108	2113	2098	2083	2070	2059	2048	2055	2045	
	#12 Screw Base Steel ≥ .0385"	2206	2207	2178	2152	2130	2111	2093	2100	2085	2071	2059	2048	2037	2045	2035	
	Concrete + Deck = 37.7 psf						I <sub>cr</sub> = 30.1 in <sup>4</sup> /ft						M <sub>no</sub> /Ω = 32.9 kip-in/ft	V <sub>n</sub> /Ω = 3.02 kip/ft			
(I <sub>cr</sub> +I <sub>u</sub> )/2 = 45.9 in <sup>4</sup> /ft						I <sub>u</sub> = 61.8 in <sup>4</sup> /ft						φM <sub>no</sub> = 50.4 kip-in/ft	φ V <sub>n</sub> = 4.52 kip/ft				

Vertical Load Span (in)	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"		
<b>ASD &amp; LRFD - Superimposed Load, W (psf)</b>																	
ASD, W/Ω	613	518	443	382	332	291	256	227	202	181	162	146	129	114	102		
LRFD, φW	980	828	708	611	531	466	410	364	324	289	260	234	211	191	173		
L/360	-	-	-	-	-	-	-	-	-	-	-	-	129	114	102		
<b>LRFD - Diaphragm Shear, φS<sub>n</sub> (plf / ft) 36/4 Attachment Pattern</b>																	
Arc Spot Weld 1/2" Effective Dia	2731	2700	2635	2579	2530	2486	2448	2441	2409	2380	2353	2329	2306	2307	2287		
PAF Base Steel ≥ .25"	2311	2312	2275	2243	2215	2190	2168	2176	2157	2140	2124	2109	2096	2105	2093		
PAF Base Steel ≥ 0.125"	2280	2284	2249	2218	2192	2168	2147	2157	2139	2122	2107	2093	2081	2091	2079		
#12 Screw Base Steel ≥ .0385"	2259	2264	2230	2201	2176	2153	2133	2143	2126	2110	2095	2082	2070	2080	2069		
Concrete + Deck = 38.0 psf						I <sub>cr</sub> = 32.5 in <sup>4</sup> /ft						M <sub>no</sub> /Ω = 36.2 kip-in/ft	V <sub>n</sub> /Ω = 3.02 kip/ft				
(I <sub>cr</sub> +I <sub>u</sub> )/2 = 47.7 in <sup>4</sup> /ft						I <sub>u</sub> = 63.0 in <sup>4</sup> /ft						φM <sub>no</sub> = 55.4 kip-in/ft	φ V <sub>n</sub> = 4.52 kip/ft				

Vertical Load Span (in)	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"		
<b>ASD &amp; LRFD - Superimposed Load, W (psf)</b>																	
ASD, W/Ω	746	631	540	467	407	357	315	280	242	209	182	159	140	124	110		
LRFD, φW	1193	1010	864	747	651	571	505	448	400	358	322	291	264	239	218		
L/360	-	-	-	-	-	-	-	-	242	209	182	159	140	124	110		
<b>LRFD - Diaphragm Shear, φS<sub>n</sub> (plf / ft) 36/4 Attachment Pattern</b>																	
Arc Spot Weld 1/2" Effective Dia	2996	2967	2882	2809	2744	2688	2637	2636	2594	2555	2520	2488	2458	2464	2438		
PAF Base Steel ≥ .25"	2453	2466	2417	2375	2337	2305	2276	2294	2268	2245	2224	2205	2187	2204	2188		
PAF Base Steel ≥ 0.125"	2396	2413	2368	2329	2294	2264	2237	2257	2234	2212	2192	2175	2158	2177	2161		
#12 Screw Base Steel ≥ .0385"	2394	2412	2366	2327	2293	2263	2236	2256	2233	2211	2192	2174	2157	2176	2161		
Concrete + Deck = 38.6 psf						I <sub>cr</sub> = 37.8 in <sup>4</sup> /ft						M <sub>no</sub> /Ω = 43.8 kip-in/ft	V <sub>n</sub> /Ω = 3.02 kip/ft				
(I <sub>cr</sub> +I <sub>u</sub> )/2 = 51.8 in <sup>4</sup> /ft						I <sub>u</sub> = 65.9 in <sup>4</sup> /ft						φM <sub>no</sub> = 66.9 kip-in/ft	φ V <sub>n</sub> = 4.52 kip/ft				

All Gages	<b>LRFD - Diaphragm Shear, φS<sub>n</sub> (plf / ft) for all vertical load spans, WWF Designation or Area of Steel per foot width</b>															
	3/4" Welded Shear Studs	6x6 W1.4xW1.4			6x6 W2.9xW2.9			6x6 W4.0xW4.0			4x4 W4xW4			4x4 W6xW6		
		A <sub>s</sub> = 0.028 in <sup>2</sup> /ft			A <sub>s</sub> = 0.058 in <sup>2</sup> /ft			A <sub>s</sub> = 0.080 in <sup>2</sup> /ft			A <sub>s</sub> = 0.120 in <sup>2</sup> /ft			A <sub>s</sub> = 0.180 in <sup>2</sup> /ft		
	12 in o.c.	3080			4430			5420			7220			9920		
	24 in o.c.	3080			4430			5420			7220			7750		
36 in o.c.	3080			4430			5170			5170			5170			

### 3.3 2WH-36 Composite Deck

4½" Total Slab Depth

Normal Weight Concrete (145 pcf)

Concrete Volume 1.061yd³/100ft²



Maximum Unshored Span (in)

Gage	Single	Double	Triple
22	7' - 7"	8' - 4"	8' - 11"
21	8' - 7"	9' - 6"	9' - 11"
20	9' - 0"	10' - 0"	10' - 4"

Gage	Single	Double	Triple
19	9' - 11"	11' - 2"	11' - 7"
18	10' - 2"	12' - 0"	12' - 3"
16	10' - 11"	13' - 8"	12' - 10"

GA	Vertical Load Span (in)	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"				
22	<b>ASD &amp; LRFD - Superimposed Load, W (psf)</b>																			
	ASD, W/Ω	477	401	342	293	254	221	194	171	151	134	119	106	95	85	76				
	LRFD, φW	763	642	547	470	406	354	310	273	242	214	191	170	152	136	122				
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
	<b>LRFD - Diaphragm Shear, φS<sub>n</sub> (plf / ft) 36/4 Attachment Pattern</b>																			
	Arc Spot Weld 1/2" Effective Dia	2853	2826	2788	2756	2727	2702	2680	2671	2652	2635	2620	2606	2594	2590	2579				
	PAF Base Steel ≥ .25"	2605	2597	2576	2558	2542	2527	2515	2514	2504	2494	2485	2477	2470	2471	2465				
	PAF Base Steel ≥ 0.125"	2586	2579	2559	2542	2527	2514	2502	2502	2492	2483	2475	2467	2460	2462	2456				
	#12 Screw Base Steel ≥ .0385"	2568	2563	2544	2528	2514	2501	2490	2491	2481	2473	2465	2458	2451	2453	2447				
	Concrete + Deck =	43.1	psf					I <sub>cr</sub> = 31.5	in <sup>4</sup> /ft					M <sub>no</sub> /Ω = 28.7	kip-in/ft				V <sub>n</sub> /Ω = 3.51	kip/ft
(I <sub>cr</sub> +I <sub>y</sub> )/2 =	56.9	in <sup>4</sup> /ft					I <sub>y</sub> = 82.3	in <sup>4</sup> /ft					φM <sub>no</sub> = 44.0	kip-in/ft				φV <sub>n</sub> = 5.04	kip/ft	
21	<b>ASD &amp; LRFD - Superimposed Load, W (psf)</b>																			
	ASD, W/Ω	538	454	387	333	288	252	221	195	173	154	137	123	110	99	89				
	LRFD, φW	861	726	619	532	462	403	354	312	277	246	220	197	176	158	142				
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
	<b>LRFD - Diaphragm Shear, φS<sub>n</sub> (plf / ft) 36/4 Attachment Pattern</b>																			
	Arc Spot Weld 1/2" Effective Dia	2932	2903	2860	2822	2789	2760	2735	2725	2704	2685	2667	2651	2636	2633	2620				
	PAF Base Steel ≥ .25"	2647	2640	2616	2594	2576	2559	2545	2546	2533	2522	2512	2502	2494	2496	2489				
	PAF Base Steel ≥ 0.125"	2625	2620	2597	2577	2559	2544	2530	2532	2520	2509	2500	2491	2483	2486	2479				
	#12 Screw Base Steel ≥ .0385"	2606	2602	2580	2562	2545	2530	2517	2520	2508	2498	2489	2481	2473	2477	2470				
	Concrete + Deck =	43.3	psf					I <sub>cr</sub> = 34.7	in <sup>4</sup> /ft					M <sub>no</sub> /Ω = 32.2	kip-in/ft				V <sub>n</sub> /Ω = 3.51	kip/ft
(I <sub>cr</sub> +I <sub>y</sub> )/2 =	59.2	in <sup>4</sup> /ft					I <sub>y</sub> = 83.7	in <sup>4</sup> /ft					φM <sub>no</sub> = 49.3	kip-in/ft				φV <sub>n</sub> = 5.26	kip/ft	
20	<b>ASD &amp; LRFD - Superimposed Load, W (psf)</b>																			
	ASD, W/Ω	568	479	408	352	305	267	234	207	184	163	146	131	118	106	95				
	LRFD, φW	908	766	654	563	488	426	375	331	294	262	234	209	188	169	152				
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
	<b>LRFD - Diaphragm Shear, φS<sub>n</sub> (plf / ft) 36/4 Attachment Pattern</b>																			
	Arc Spot Weld 1/2" Effective Dia	2972	2942	2896	2856	2821	2790	2763	2754	2731	2710	2691	2674	2658	2655	2641				
	PAF Base Steel ≥ .25"	2668	2662	2636	2613	2593	2576	2560	2562	2548	2536	2525	2515	2506	2510	2501				
	PAF Base Steel ≥ 0.125"	2645	2641	2616	2595	2576	2560	2545	2547	2535	2523	2513	2503	2495	2498	2491				
	#12 Screw Base Steel ≥ .0385"	2625	2623	2599	2579	2561	2546	2532	2535	2523	2512	2502	2493	2485	2489	2482				
	Concrete + Deck =	43.4	psf					I <sub>cr</sub> = 36.2	in <sup>4</sup> /ft					M <sub>no</sub> /Ω = 33.9	kip-in/ft				V <sub>n</sub> /Ω = 3.51	kip/ft
(I <sub>cr</sub> +I <sub>y</sub> )/2 =	60.3	in <sup>4</sup> /ft					I <sub>y</sub> = 84.4	in <sup>4</sup> /ft					φM <sub>no</sub> = 51.9	kip-in/ft				φV <sub>n</sub> = 5.26	kip/ft	

# 2WH-36 Composite Deck 3.3

4½" Total Slab Depth

Normal Weight Concrete (145 pcf)

Concrete Volume 1.061yd³/100ft²



2W PANELS

GA	Vertical Load Span (in)	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"		
19	<b>ASD &amp; LRFD - Superimposed Load, W (psf)</b>																	
	ASD, W/Ω	671	567	485	418	363	318	280	248	221	197	177	159	143	129	117		
	LRFD, φW	1074	908	775	669	581	509	448	397	353	315	283	254	229	207	187		
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	<b>LRFD - Diaphragm Shear, φS<sub>n</sub> (plf / ft) 36/4 Attachment Pattern</b>																	
	Arc Spot Weld 1/2" Effective Dia	3116	3085	3028	2978	2935	2897	2863	2855	2827	2801	2778	2757	2737	2736	2719		
	PAF Base Steel ≥ .25"	2745	2742	2710	2682	2657	2636	2616	2621	2605	2590	2576	2563	2552	2558	2548		
	PAF Base Steel ≥ 0.125"	2717	2717	2686	2660	2637	2616	2598	2604	2588	2574	2561	2549	2538	2545	2535		
	#12 Screw Base Steel ≥ .0385"	2696	2697	2668	2643	2621	2601	2584	2591	2575	2562	2549	2538	2528	2535	2525		
	Concrete + Deck = 43.8 psf						I <sub>cr</sub> = 41.2 in <sup>4</sup> /ft						M <sub>no</sub> /Ω = 39.8 kip-in/ft					
(I <sub>cr</sub> +I <sub>u</sub> )/2 = 64.1 in <sup>4</sup> /ft						I <sub>u</sub> = 86.9 in <sup>4</sup> /ft						φM <sub>no</sub> = 60.8 kip-in/ft						φ V <sub>n</sub> = 5.26 kip/ft

	Vertical Load Span (in)	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"		
18	<b>ASD &amp; LRFD - Superimposed Load, W (psf)</b>																	
	ASD, W/Ω	742	627	536	463	403	353	311	276	246	220	197	178	161	145	132		
	LRFD, φW	1187	1003	858	740	644	565	498	442	393	352	316	285	257	233	211		
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	<b>LRFD - Diaphragm Shear, φS<sub>n</sub> (plf / ft) 36/4 Attachment Pattern</b>																	
	Arc Spot Weld 1/2" Effective Dia	3222	3190	3125	3069	3020	2977	2938	2932	2899	2870	2843	2819	2797	2797	2778		
	PAF Base Steel ≥ .25"	2802	2803	2765	2733	2705	2680	2658	2667	2647	2630	2614	2600	2587	2596	2584		
	PAF Base Steel ≥ 0.125"	2771	2774	2739	2709	2682	2659	2638	2647	2629	2612	2598	2584	2571	2581	2570		
	#12 Screw Base Steel ≥ .0385"	2749	2754	2721	2692	2666	2643	2623	2633	2616	2600	2586	2573	2561	2571	2560		
	Concrete + Deck = 44.0 psf						I <sub>cr</sub> = 44.5 in <sup>4</sup> /ft						M <sub>no</sub> /Ω = 43.7 kip-in/ft					
(I <sub>cr</sub> +I <sub>u</sub> )/2 = 66.5 in <sup>4</sup> /ft						I <sub>u</sub> = 88.5 in <sup>4</sup> /ft						φM <sub>no</sub> = 66.9 kip-in/ft						φ V <sub>n</sub> = 5.26 kip/ft

	Vertical Load Span (in)	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"		
16	<b>ASD &amp; LRFD - Superimposed Load, W (psf)</b>																	
	ASD, W/Ω	904	765	655	567	494	434	383	341	304	273	245	222	195	173	153		
	LRFD, φW	1447	1225	1049	907	790	694	613	545	487	436	393	355	321	292	266		
	L/360	-	-	-	-	-	-	-	-	-	-	-	222	195	173	153		
	<b>LRFD - Diaphragm Shear, φS<sub>n</sub> (plf / ft) 36/4 Attachment Pattern</b>																	
	Arc Spot Weld 1/2" Effective Dia	3486	3457	3372	3299	3235	3178	3128	3127	3084	3045	3010	2978	2949	2955	2929		
	PAF Base Steel ≥ .25"	2944	2956	2907	2865	2828	2795	2766	2784	2758	2735	2714	2695	2677	2694	2678		
	PAF Base Steel ≥ 0.125"	2886	2903	2858	2819	2785	2755	2728	2748	2724	2702	2683	2665	2649	2667	2652		
	#12 Screw Base Steel ≥ .0385"	2885	2902	2857	2818	2784	2754	2727	2747	2723	2702	2682	2664	2648	2666	2651		
	Concrete + Deck = 44.7 psf						I <sub>cr</sub> = 51.8 in <sup>4</sup> /ft						M <sub>no</sub> /Ω = 53.0 kip-in/ft					
(I <sub>cr</sub> +I <sub>u</sub> )/2 = 72.1 in <sup>4</sup> /ft						I <sub>u</sub> = 92.4 in <sup>4</sup> /ft						φM <sub>no</sub> = 81.0 kip-in/ft						φ V <sub>n</sub> = 5.26 kip/ft

All Gages	<b>LRFD - Diaphragm Shear, φS<sub>n</sub> (plf / ft) for all vertical load spans, WWF Designation or Area of Steel per foot width</b>															
		6x6 W1.4xW1.4			6x6 W2.9xW2.9			6x6 W4.0xW4.0			4x4 W4xW4			4x4 W6xW6		
	3/4" Welded Shear Studs	A <sub>s</sub> = 0.028 in <sup>2</sup> /ft			A <sub>s</sub> = 0.058 in <sup>2</sup> /ft			A <sub>s</sub> = 0.080 in <sup>2</sup> /ft			A <sub>s</sub> = 0.120 in <sup>2</sup> /ft			A <sub>s</sub> = 0.180 in <sup>2</sup> /ft		
	12 in o.c.	3570			4920			5910			7710			10410		
	24 in o.c.	3570			4920			5910			7710			7750		
36 in o.c.	3570			4920			5170			5170			5170			

# 3.3 2WH-36 Composite Deck

5" Total Slab Depth

Normal Weight Concrete (145 pcf)

Concrete Volume 1.215yd<sup>3</sup>/100ft<sup>2</sup>



Maximum Unshored Span (in)

Gage	Single	Double	Triple
22	7' - 3"	8' - 1"	8' - 7"
21	8' - 2"	9' - 2"	9' - 6"
20	8' - 8"	9' - 7"	9' - 10"

Gage	Single	Double	Triple
19	9' - 6"	10' - 9"	11' - 1"
18	9' - 9"	11' - 6"	11' - 10"
16	10' - 6"	13' - 2"	12' - 6"

GA	Vertical Load Span (in)	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"
22	<b>ASD &amp; LRFD - Superimposed Load, W (psf)</b>															
	ASD, W/Ω	563	474	404	347	300	262	230	202	179	159	142	126	113	101	91
	LRFD, φW	900	759	646	555	481	419	367	324	286	254	226	202	181	162	145
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	<b>LRFD - Diaphragm Shear, φS<sub>n</sub> (plf / ft) 36/4 Attachment Pattern</b>															
	Arc Spot Weld 1/2" Effective Dia	3343	3316	3279	3246	3218	3193	3170	3161	3143	3126	3111	3097	3084	3080	3069
	PAF Base Steel ≥ .25"	3095	3088	3066	3048	3032	3018	3005	3005	2994	2984	2976	2968	2960	2962	2955
	PAF Base Steel ≥ 0.125"	3076	3070	3050	3033	3018	3004	2992	2993	2982	2973	2965	2958	2951	2952	2946
	#12 Screw Base Steel ≥ .0385"	3058	3053	3034	3018	3004	2992	2980	2981	2972	2963	2955	2948	2942	2944	2938
	Concrete + Deck = 49.2 psf						I <sub>cr</sub> = 41.6 in <sup>4</sup> /ft	M <sub>no</sub> /Ω = 33.9 kip-in/ft					V <sub>n</sub> /Ω = 3.78 kip/ft			
(I <sub>cr</sub> +I <sub>y</sub> )/2 = 76.942 in <sup>4</sup> /ft						I <sub>y</sub> = 112.3 in <sup>4</sup> /ft	φM <sub>no</sub> = 51.8 kip-in/ft					φV <sub>n</sub> = 5.43 kip/ft				

GA	Vertical Load Span (in)	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"
21	<b>ASD &amp; LRFD - Superimposed Load, W (psf)</b>															
	ASD, W/Ω	635	536	457	393	341	298	262	231	205	183	163	146	131	118	106
	LRFD, φW	1017	858	731	629	546	477	419	370	328	292	261	234	210	189	170
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	<b>LRFD - Diaphragm Shear, φS<sub>n</sub> (plf / ft) 36/4 Attachment Pattern</b>															
	Arc Spot Weld 1/2" Effective Dia	3422	3393	3350	3313	3280	3251	3225	3216	3194	3175	3157	3141	3127	3124	3111
	PAF Base Steel ≥ .25"	3137	3131	3106	3085	3066	3050	3035	3036	3024	3012	3002	2993	2984	2987	2979
	PAF Base Steel ≥ 0.125"	3116	3110	3087	3067	3050	3034	3021	3022	3010	3000	2990	2981	2973	2976	2969
	#12 Screw Base Steel ≥ .0385"	3096	3093	3071	3052	3035	3021	3008	3010	2999	2989	2980	2971	2964	2967	2960
	Concrete + Deck = 49.4 psf						I <sub>cr</sub> = 45.8 in <sup>4</sup> /ft	M <sub>no</sub> /Ω = 38.0 kip-in/ft					V <sub>n</sub> /Ω = 4.03 kip/ft			
(I <sub>cr</sub> +I <sub>y</sub> )/2 = 79.985 in <sup>4</sup> /ft						I <sub>y</sub> = 114.1 in <sup>4</sup> /ft	φM <sub>no</sub> = 58.1 kip-in/ft					φV <sub>n</sub> = 6.04 kip/ft				

GA	Vertical Load Span (in)	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"
20	<b>ASD &amp; LRFD - Superimposed Load, W (psf)</b>															
	ASD, W/Ω	671	566	483	416	361	316	278	245	218	194	174	156	140	126	114
	LRFD, φW	1073	906	773	666	578	505	444	392	348	310	278	249	224	202	182
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	<b>LRFD - Diaphragm Shear, φS<sub>n</sub> (plf / ft) 36/4 Attachment Pattern</b>															
	Arc Spot Weld 1/2" Effective Dia	3462	3433	3387	3347	3311	3281	3253	3244	3221	3200	3181	3164	3148	3146	3132
	PAF Base Steel ≥ .25"	3159	3153	3126	3104	3084	3066	3051	3052	3039	3027	3016	3006	2997	3000	2992
	PAF Base Steel ≥ 0.125"	3136	3131	3107	3085	3066	3050	3035	3038	3025	3014	3003	2994	2985	2989	2981
	#12 Screw Base Steel ≥ .0385"	3116	3113	3090	3069	3052	3036	3022	3025	3013	3002	2992	2983	2975	2979	2972
	Concrete + Deck = 49.5 psf						I <sub>cr</sub> = 47.8 in <sup>4</sup> /ft	M <sub>no</sub> /Ω = 40.0 kip-in/ft					V <sub>n</sub> /Ω = 4.03 kip/ft			
(I <sub>cr</sub> +I <sub>y</sub> )/2 = 81.439 in <sup>4</sup> /ft						I <sub>y</sub> = 115.0 in <sup>4</sup> /ft	φM <sub>no</sub> = 61.2 kip-in/ft					φV <sub>n</sub> = 6.04 kip/ft				

# 2WH-36 Composite Deck 3.3

5" Total Slab Depth

Normal Weight Concrete (145 pcf)

Concrete Volume 1.215yd<sup>3</sup>/100ft<sup>2</sup>



2W PANELS

GA	Vertical Load Span (in)	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"
19	<b>ASD &amp; LRFD - Superimposed Load, W (psf)</b>															
	ASD, W/Ω	794	671	574	495	430	377	332	294	262	234	210	189	171	154	140
	LRFD, φW	1271	1074	918	792	689	603	531	471	419	375	336	302	273	247	224
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	<b>LRFD - Diaphragm Shear, φS<sub>n</sub> (plf / ft) 36/4 Attachment Pattern</b>															
	Arc Spot Weld 1/2" Effective Dia	3606	3575	3518	3469	3426	3388	3354	3346	3318	3292	3269	3247	3228	3227	3209
	PAF Base Steel ≥ .25"	3235	3233	3200	3172	3148	3126	3107	3112	3095	3080	3066	3054	3042	3049	3038
	PAF Base Steel ≥ 0.125"	3208	3207	3177	3150	3127	3107	3088	3094	3079	3064	3051	3039	3029	3036	3026
	#12 Screw Base Steel ≥ .0385"	3187	3188	3159	3133	3111	3092	3074	3081	3066	3052	3040	3028	3018	3025	3016
	Concrete + Deck = 49.8 psf (I <sub>cr</sub> +I <sub>u</sub> )/2 = 86.414 in <sup>4</sup> /ft					I <sub>cr</sub> = 54.6 in <sup>4</sup> /ft I <sub>u</sub> = 118.2 in <sup>4</sup> /ft					M <sub>no</sub> /Ω = 47.0 kip-in/ft φM <sub>no</sub> = 71.8 kip-in/ft			V <sub>n</sub> /Ω = 4.03 kip/ft φ V <sub>n</sub> = 6.04 kip/ft		

	Vertical Load Span (in)	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"
18	<b>ASD &amp; LRFD - Superimposed Load, W (psf)</b>															
	ASD, W/Ω	878	742	635	548	477	419	369	328	292	261	235	212	191	173	157
	LRFD, φW	1404	1188	1016	877	764	670	591	524	467	418	376	339	306	277	252
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	<b>LRFD - Diaphragm Shear, φS<sub>n</sub> (plf / ft) 36/4 Attachment Pattern</b>															
	Arc Spot Weld 1/2" Effective Dia	3712	3681	3616	3560	3511	3467	3429	3422	3390	3360	3334	3309	3287	3288	3268
	PAF Base Steel ≥ .25"	3292	3293	3256	3224	3196	3171	3149	3157	3138	3120	3105	3090	3077	3086	3074
	PAF Base Steel ≥ 0.125"	3261	3265	3230	3199	3173	3149	3128	3138	3119	3103	3088	3074	3062	3071	3060
	#12 Screw Base Steel ≥ .0385"	3240	3245	3211	3182	3156	3134	3114	3124	3106	3091	3076	3063	3051	3061	3050
	Concrete + Deck = 50.1 psf (I <sub>cr</sub> +I <sub>u</sub> )/2 = 89.703 in <sup>4</sup> /ft					I <sub>cr</sub> = 59.0 in <sup>4</sup> /ft I <sub>u</sub> = 120.4 in <sup>4</sup> /ft					M <sub>no</sub> /Ω = 51.7 kip-in/ft φM <sub>no</sub> = 79.1 kip-in/ft			V <sub>n</sub> /Ω = 4.03 kip/ft φ V <sub>n</sub> = 6.04 kip/ft		

	Vertical Load Span (in)	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"
16	<b>ASD &amp; LRFD - Superimposed Load, W (psf)</b>															
	ASD, W/Ω	1072	908	778	672	586	515	455	405	362	324	292	264	239	218	198
	LRFD, φW	1715	1453	1244	1076	938	824	729	648	579	519	468	423	383	348	317
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	<b>LRFD - Diaphragm Shear, φS<sub>n</sub> (plf / ft) 36/4 Attachment Pattern</b>															
	Arc Spot Weld 1/2" Effective Dia	3977	3948	3863	3789	3725	3669	3618	3617	3574	3536	3501	3468	3439	3445	3419
	PAF Base Steel ≥ .25"	3434	3447	3398	3355	3318	3286	3257	3274	3249	3226	3205	3185	3168	3185	3169
	PAF Base Steel ≥ 0.125"	3377	3394	3349	3309	3275	3245	3218	3238	3214	3193	3173	3155	3139	3157	3142
	#12 Screw Base Steel ≥ .0385"	3375	3392	3347	3308	3274	3244	3217	3237	3214	3192	3173	3155	3138	3157	3142
	Concrete + Deck = 50.7 psf (I <sub>cr</sub> +I <sub>u</sub> )/2 = 97.114 in <sup>4</sup> /ft					I <sub>cr</sub> = 68.9 in <sup>4</sup> /ft I <sub>u</sub> = 125.4 in <sup>4</sup> /ft					M <sub>no</sub> /Ω = 62.7 kip-in/ft φM <sub>no</sub> = 95.9 kip-in/ft			V <sub>n</sub> /Ω = 4.03 kip/ft φ V <sub>n</sub> = 6.04 kip/ft		

All Gages	<b>LRFD - Diaphragm Shear, φS<sub>n</sub> (plf / ft) for all vertical load spans, WWF Designation or Area of Steel per foot width</b>					
		6x6 W1.4xW1.4	6x6 W2.9xW2.9	6x6 W4.0xW4.0	4x4 W4xW4	4x4 W6xW6
	3/4" Welded Shear Studs	A <sub>s</sub> = 0.028 in <sup>2</sup> /ft	A <sub>s</sub> = 0.058 in <sup>2</sup> /ft	A <sub>s</sub> = 0.080 in <sup>2</sup> /ft	A <sub>s</sub> = 0.120 in <sup>2</sup> /ft	A <sub>s</sub> = 0.180 in <sup>2</sup> /ft
	12 in o.c.	4070	5420	6410	8210	10910
	24 in o.c.	4070	5420	6410	7750	7750
36 in o.c.	4070	5170	5170	5170	5170	

### 3.3 2WH-36 Composite Deck

5 1/2" Total Slab Depth

Normal Weight Concrete (145 pcf)

Concrete Volume 1.370yd<sup>3</sup>/100ft<sup>2</sup>

1 Hour Fire Rating



Maximum Unshored Span (in)

Gage	Single	Double	Triple
22	7' - 0"	7' - 9"	8' - 3"
21	7' - 10"	8' - 10"	9' - 1"
20	8' - 3"	9' - 2"	9' - 6"

Gage	Single	Double	Triple
19	9' - 2"	10' - 4"	10' - 8"
18	9' - 5"	11' - 0"	11' - 5"
16	10' - 1"	12' - 8"	12' - 2"

GA	Vertical Load Span (in)	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"
22	<b>ASD &amp; LRFD - Superimposed Load, W (psf)</b>															
	ASD, W/Ω	652	549	468	402	349	304	267	235	208	185	165	147	132	118	106
	LRFD, φW	1043	879	749	644	558	486	427	376	333	296	264	236	211	189	170
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	<b>LRFD - Diaphragm Shear, φS<sub>n</sub> (plf / ft) 36/4 Attachment Pattern</b>															
	Arc Spot Weld 1/2" Effective Dia	3834	3807	3769	3737	3708	3683	3661	3652	3633	3616	3601	3587	3575	3571	3560
	PAF Base Steel ≥ .25"	3586	3578	3557	3539	3522	3508	3496	3495	3484	3475	3466	3458	3451	3452	3445
	PAF Base Steel ≥ 0.125"	3567	3560	3540	3523	3508	3495	3483	3483	3473	3464	3456	3448	3441	3443	3437
	#12 Screw Base Steel ≥ .0385"	3549	3544	3525	3509	3495	3482	3471	3472	3462	3454	3446	3439	3432	3434	3428
	Concrete + Deck = 55.2 psf (I <sub>cr</sub> +I <sub>y</sub> )/2 = 101.21 in <sup>4</sup> /ft					I <sub>cr</sub> = 53.4 in <sup>4</sup> /ft I <sub>y</sub> = 149.0 in <sup>4</sup> /ft			M <sub>no</sub> /Ω = 39.1 kip-in/ft φM <sub>no</sub> = 59.9 kip-in/ft				V <sub>n</sub> /Ω = 4.06 kip/ft φV <sub>n</sub> = 5.84 kip/ft			

GA	Vertical Load Span (in)	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"
21	<b>ASD &amp; LRFD - Superimposed Load, W (psf)</b>															
	ASD, W/Ω	736	621	530	456	396	346	304	269	238	212	190	170	153	138	124
	LRFD, φW	1178	994	848	730	634	554	487	430	382	340	304	272	245	220	199
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	<b>LRFD - Diaphragm Shear, φS<sub>n</sub> (plf / ft) 36/4 Attachment Pattern</b>															
	Arc Spot Weld 1/2" Effective Dia	3913	3884	3841	3803	3770	3741	3716	3706	3685	3666	3648	3632	3617	3614	3601
	PAF Base Steel ≥ .25"	3628	3621	3597	3575	3557	3540	3526	3526	3514	3503	3493	3483	3475	3477	3470
	PAF Base Steel ≥ 0.125"	3606	3601	3578	3558	3540	3525	3511	3513	3501	3490	3481	3472	3464	3467	3460
	#12 Screw Base Steel ≥ .0385"	3587	3583	3561	3542	3526	3511	3498	3500	3489	3479	3470	3462	3454	3458	3451
	Concrete + Deck = 55.4 psf (I <sub>cr</sub> +I <sub>y</sub> )/2 = 105.12 in <sup>4</sup> /ft					I <sub>cr</sub> = 58.8 in <sup>4</sup> /ft I <sub>y</sub> = 151.4 in <sup>4</sup> /ft			M <sub>no</sub> /Ω = 43.9 kip-in/ft φM <sub>no</sub> = 67.2 kip-in/ft				V <sub>n</sub> /Ω = 4.57 kip/ft φV <sub>n</sub> = 6.55 kip/ft			

GA	Vertical Load Span (in)	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"
20	<b>ASD &amp; LRFD - Superimposed Load, W (psf)</b>															
	ASD, W/Ω	777	656	560	483	419	367	322	285	253	226	202	181	163	147	133
	LRFD, φW	1244	1050	896	772	671	586	516	456	405	361	323	290	261	235	213
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	<b>LRFD - Diaphragm Shear, φS<sub>n</sub> (plf / ft) 36/4 Attachment Pattern</b>															
	Arc Spot Weld 1/2" Effective Dia	3953	3923	3877	3837	3802	3771	3743	3734	3711	3691	3672	3655	3639	3636	3622
	PAF Base Steel ≥ .25"	3649	3643	3617	3594	3574	2557	3541	3543	3529	3517	3506	3496	3487	3490	3482
	PAF Base Steel ≥ 0.125"	3626	3622	3597	3576	3557	3540	3526	3528	3515	3504	3494	3484	3476	3479	3472
	#12 Screw Base Steel ≥ .0385"	3606	3603	3580	3560	3542	3526	3513	3516	3504	3493	3483	3474	3466	3470	3462
	Concrete + Deck = 55.5 psf (I <sub>cr</sub> +I <sub>y</sub> )/2 = 107 in <sup>4</sup> /ft					I <sub>cr</sub> = 61.4 in <sup>4</sup> /ft I <sub>y</sub> = 152.6 in <sup>4</sup> /ft			M <sub>no</sub> /Ω = 46.3 kip-in/ft φM <sub>no</sub> = 70.8 kip-in/ft				V <sub>n</sub> /Ω = 4.57 kip/ft φV <sub>n</sub> = 6.86 kip/ft			

# 2WH-36 Composite Deck 3.3

5 1/2" Total Slab Depth

Normal Weight Concrete (145 pcf)

Concrete Volume 1.370yd<sup>3</sup>/100ft<sup>2</sup>

1 Hour Fire Rating



2W PANELS

GA	Vertical Load Span (in)	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"		
19	<b>ASD &amp; LRFD - Superimposed Load, W (psf)</b>																	
	ASD, W/Ω	921	779	666	575	500	438	386	342	305	273	245	220	199	180	163		
	LRFD, φW	1474	1246	1065	919	800	701	618	548	488	436	392	353	318	288	261		
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	<b>LRFD - Diaphragm Shear, φS<sub>n</sub> (plf / ft) 36/4 Attachment Pattern</b>																	
	Arc Spot Weld 1/2" Effective Dia	4097	4065	4009	3959	3916	3878	3844	3836	3808	3782	3759	3738	3718	3717	3700		
	PAF Base Steel ≥ .25"	3726	3723	3691	3663	3638	3616	3597	3602	3586	3570	3557	3544	3533	3539	3529		
	PAF Base Steel ≥ 0.125"	3698	3698	3667	3641	3617	3597	3579	3585	3569	3555	3542	3530	3519	3526	3516		
	#12 Screw Base Steel ≥ .0385"	3677	3678	3649	3624	3602	3582	3565	3571	3556	3543	3530	3519	3508	3516	3506		
	Concrete + Deck = 55.9 psf						I <sub>cr</sub> = 70.3 in <sup>4</sup> /ft						M <sub>no</sub> /Ω = 54.4 kip-in/ft					
						(I <sub>cr</sub> +I <sub>u</sub> )/2 = 113.42 in <sup>4</sup> /ft						φM <sub>no</sub> = 83.2 kip-in/ft						φ V <sub>n</sub> = 6.86 kip/ft

	Vertical Load Span (in)	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"		
18	<b>ASD &amp; LRFD - Superimposed Load, W (psf)</b>																	
	ASD, W/Ω	1019	862	738	637	555	487	430	381	340	304	274	247	223	202	184		
	LRFD, φW	1631	1380	1180	1019	888	779	687	610	544	487	438	395	357	324	294		
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	<b>LRFD - Diaphragm Shear, φS<sub>n</sub> (plf / ft) 36/4 Attachment Pattern</b>																	
	Arc Spot Weld 1/2" Effective Dia	4202	4171	4106	4050	4001	3958	3919	3913	3880	3851	3824	3800	3778	3778	3758		
	PAF Base Steel ≥ .25"	3782	3783	3746	3714	3686	3661	3639	3647	3628	3611	3595	3581	3568	3577	3565		
	PAF Base Steel ≥ 0.125"	3752	3755	3720	3690	3663	3640	3619	3628	3610	3593	3578	3565	3552	3562	3550		
	#12 Screw Base Steel ≥ .0385"	3730	3735	3702	3672	3647	3624	3604	3614	3597	3581	3567	3553	3541	3552	3541		
	Concrete + Deck = 56.1 psf						I <sub>cr</sub> = 76.0 in <sup>4</sup> /ft						M <sub>no</sub> /Ω = 59.9 kip-in/ft					
						(I <sub>cr</sub> +I <sub>u</sub> )/2 = 117.68 in <sup>4</sup> /ft						φM <sub>no</sub> = 91.7 kip-in/ft						φ V <sub>n</sub> = 6.86 kip/ft

	Vertical Load Span (in)	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"		
16	<b>ASD &amp; LRFD - Superimposed Load, W (psf)</b>																	
	ASD, W/Ω	1247	1056	905	783	683	600	531	472	422	378	341	308	280	255	232		
	LRFD, φW	1995	1690	1448	1252	1092	960	849	755	675	606	546	494	448	407	371		
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	<b>LRFD - Diaphragm Shear, φS<sub>n</sub> (plf / ft) 36/4 Attachment Pattern</b>																	
	Arc Spot Weld 1/2" Effective Dia	4467	4438	4353	4280	4216	4159	4109	4108	4065	4026	3991	3959	3929	3936	3910		
	PAF Base Steel ≥ .25"	3925	3937	3888	3846	3809	3776	3747	3765	3739	3716	3695	3676	3658	3675	3659		
	PAF Base Steel ≥ 0.125"	3867	3884	3839	3800	3766	3736	3709	3729	3705	3683	3664	3646	3629	3648	3633		
	#12 Screw Base Steel ≥ .0385"	3866	3883	3838	3799	3765	3735	3708	3728	3704	3682	3663	3645	3629	3647	3632		
	Concrete + Deck = 56.8 psf						I <sub>cr</sub> = 88.9 in <sup>4</sup> /ft						M <sub>no</sub> /Ω = 72.8 kip-in/ft					
						(I <sub>cr</sub> +I <sub>u</sub> )/2 = 127.28 in <sup>4</sup> /ft						φM <sub>no</sub> = 111.4 kip-in/ft						φ V <sub>n</sub> = 6.86 kip/ft

All Gages	<b>LRFD - Diaphragm Shear, φS<sub>n</sub> (plf / ft) for all vertical load spans, WWF Designation or Area of Steel per foot width</b>																
		6x6 W1.4xW1.4				6x6 W2.9xW2.9				6x6 W4.0xW4.0				4x4 W4xW4		4x4 W6xW6	
	3/4" Welded Shear Studs	A <sub>s</sub> = 0.028 in <sup>2</sup> /ft				A <sub>s</sub> = 0.058 in <sup>2</sup> /ft				A <sub>s</sub> = 0.080 in <sup>2</sup> /ft				A <sub>s</sub> = 0.120 in <sup>2</sup> /ft		A <sub>s</sub> = 0.180 in <sup>2</sup> /ft	
	12 in o.c.	n/a				5910				6900				8700		11400	
	24 in o.c.	n/a				5910				6900				7750		7750	
36 in o.c.	n/a				5170				5170				5170		5170		



### 3.3 2WH-36 Composite Deck

6 1/2" Total Slab Depth

Normal Weight Concrete (145 pcf)

Concrete Volume 1.687yd<sup>3</sup>/100ft<sup>2</sup>

2 Hour Fire Rating



Maximum Unshored Span (in)

Gage	Single	Double	Triple
22	6' - 6"	7' - 4"	7' - 8"
21	7' - 4"	8' - 2"	8' - 6"
20	7' - 8"	8' - 6"	8' - 10"

Gage	Single	Double	Triple
19	8' - 7"	9' - 7"	9' - 11"
18	8' - 10"	10' - 3"	10' - 8"
16	9' - 6"	11' - 10"	11' - 7"

GA	Vertical Load Span (in)	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"
22	<b>ASD &amp; LRFD - Superimposed Load, W (psf)</b>															
	ASD, W/Ω	836	705	601	517	448	391	343	303	269	239	213	191	171	154	138
	LRFD, φW	1337	1127	961	827	717	626	549	485	430	382	341	305	274	246	221
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	<b>LRFD - Diaphragm Shear, φS<sub>n</sub> (plf / ft) 36/4 Attachment Pattern</b>															
	Arc Spot Weld 1/2" Effective Dia	4814	4787	4750	4718	4689	4664	4642	4632	4614	4597	4582	4568	4555	4552	4541
	PAF Base Steel ≥ .25"	4567	4559	4538	4519	4503	4489	4477	4476	4465	4456	4447	4439	4432	4433	4426
	PAF Base Steel ≥ 0.125"	4547	4541	4521	4504	4489	4476	4464	4464	4454	4445	4436	4429	4422	4424	4417
	#12 Screw Base Steel ≥ .0385"	4529	4524	4506	4490	4475	4463	4452	4452	4443	4434	4427	4419	4413	4415	4409
	Concrete + Deck = 67.3 psf (I <sub>cr</sub> +I <sub>y</sub> )/2 = 164 in <sup>4</sup> /ft			I <sub>cr</sub> = 82.0 in <sup>4</sup> /ft I <sub>y</sub> = 245.9 in <sup>4</sup> /ft		M <sub>no</sub> /Ω = 50.0 kip-in/ft φM <sub>no</sub> = 76.6 kip-in/ft		V <sub>n</sub> /Ω = 4.64 kip/ft φV <sub>n</sub> = 6.71 kip/ft								

GA	Vertical Load Span (in)	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"
21	<b>ASD &amp; LRFD - Superimposed Load, W (psf)</b>															
	ASD, W/Ω	945	798	681	587	509	446	392	347	308	275	246	220	198	179	161
	LRFD, φW	1512	1277	1090	939	815	713	627	555	493	439	393	353	317	286	258
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	<b>LRFD - Diaphragm Shear, φS<sub>n</sub> (plf / ft) 36/4 Attachment Pattern</b>															
	Arc Spot Weld 1/2" Effective Dia	4893	4865	4821	4784	4751	4722	4696	4687	4666	4646	4629	4613	4598	4595	4582
	PAF Base Steel ≥ .25"	4609	4602	4577	4556	4538	4521	4507	4507	4495	4484	4473	4464	4456	4458	4450
	PAF Base Steel ≥ 0.125"	4587	4582	4559	4539	4521	4506	4492	4494	4482	4471	4462	4453	4445	4448	4440
	#12 Screw Base Steel ≥ .0385"	4568	4564	4542	4523	4507	4492	4479	4481	4470	4460	4451	4443	4435	4438	4432
	Concrete + Deck = 67.5 psf (I <sub>cr</sub> +I <sub>y</sub> )/2 = 170 in <sup>4</sup> /ft			I <sub>cr</sub> = 90.6 in <sup>4</sup> /ft I <sub>y</sub> = 249.5 in <sup>4</sup> /ft		M <sub>no</sub> /Ω = 56.2 kip-in/ft φM <sub>no</sub> = 86.0 kip-in/ft		V <sub>n</sub> /Ω = 5.16 kip/ft φV <sub>n</sub> = 7.42 kip/ft								

GA	Vertical Load Span (in)	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"
20	<b>ASD &amp; LRFD - Superimposed Load, W (psf)</b>															
	ASD, W/Ω	999	843	720	621	540	472	416	368	327	292	262	235	212	191	173
	LRFD, φW	1598	1349	1152	993	863	755	665	589	523	467	418	376	339	306	277
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	<b>LRFD - Diaphragm Shear, φS<sub>n</sub> (plf / ft) 36/4 Attachment Pattern</b>															
	Arc Spot Weld 1/2" Effective Dia	4934	4904	4858	4818	4783	4752	4724	4715	4692	4672	4653	4636	4620	4617	4603
	PAF Base Steel ≥ .25"	4630	4624	4598	4575	4555	4538	4522	4524	4510	4498	4487	4477	4468	4471	4463
	PAF Base Steel ≥ 0.125"	4607	4603	4578	4557	4538	4521	4507	4509	4496	4485	4475	4465	4456	4460	4452
	#12 Screw Base Steel ≥ .0385"	4587	4584	4561	4541	4523	4507	4493	4496	4484	4474	4464	4455	4447	4451	4443
	Concrete + Deck = 67.6 psf (I <sub>cr</sub> +I <sub>y</sub> )/2 = 173 in <sup>4</sup> /ft			I <sub>cr</sub> = 94.7 in <sup>4</sup> /ft I <sub>y</sub> = 251.2 in <sup>4</sup> /ft		M <sub>no</sub> /Ω = 59.3 kip-in/ft φM <sub>no</sub> = 90.7 kip-in/ft		V <sub>n</sub> /Ω = 5.45 kip/ft φV <sub>n</sub> = 7.81 kip/ft								

# 2WH-36 Composite Deck 3.3

6 1/2" Total Slab Depth

Normal Weight Concrete (145 pcf)

Concrete Volume 1.987yd<sup>3</sup>/100ft<sup>2</sup>

2 Hour Fire Rating



GA	Vertical Load Span (in)	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"
19	<b>ASD &amp; LRFD - Superimposed Load, W (psf)</b>															
	ASD, W/Ω	1186	1003	858	740	645	565	499	442	394	353	317	286	258	234	212
	LRFD, φW	1897	1604	1372	1185	1031	904	798	708	631	565	507	457	413	374	340
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	<b>LRFD - Diaphragm Shear, φS<sub>n</sub> (plf / ft) 36/4 Attachment Pattern</b>															
	Arc Spot Weld 1/2" Effective Dia	5077	5046	4989	4940	4897	4859	4825	4817	4789	4763	4740	4719	4699	4698	4681
	PAF Base Steel ≥ .25"	4707	4704	4672	4644	4619	4597	4578	4583	4566	4551	4538	4525	4514	4520	4510
	PAF Base Steel ≥ 0.125"	4679	4679	4648	4622	4598	4578	4560	4566	4550	4536	4523	4511	4500	4507	4497
	#12 Screw Base Steel ≥ .0385"	4658	4659	4630	4605	4582	4563	4546	4552	4537	4523	4511	4500	4489	4497	4487
	Concrete + Deck = 68.0 psf (I <sub>cr</sub> +I <sub>u</sub> )/2 = 183 in <sup>4</sup> /ft					I <sub>cr</sub> = 108.6 in <sup>4</sup> /ft I <sub>u</sub> = 257.3 in <sup>4</sup> /ft				M <sub>no</sub> /Ω = 69.8 kip-in/ft φM <sub>no</sub> = 106.8 kip-in/ft				V <sub>n</sub> /Ω = 5.74 kip/ft φV <sub>n</sub> = 8.61 kip/ft		
18	<b>ASD &amp; LRFD - Superimposed Load, W (psf)</b>															
	ASD, W/Ω	1313	1111	951	822	716	629	555	493	440	394	355	320	290	263	239
	LRFD, φW	2101	1778	1522	1315	1146	1006	888	789	704	631	568	512	464	421	383
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	<b>LRFD - Diaphragm Shear, φS<sub>n</sub> (plf / ft) 36/4 Attachment Pattern</b>															
	Arc Spot Weld 1/2" Effective Dia	5183	5152	5087	5031	4982	4939	4900	4893	4861	4832	4805	4781	4758	4759	4739
	PAF Base Steel ≥ .25"	4763	4764	4727	4695	4667	4642	4620	4628	4609	4592	4576	4562	4548	4558	4546
	PAF Base Steel ≥ 0.125"	4733	4736	4701	4671	4644	4620	4600	4609	4591	4574	4559	4546	4533	4543	4531
	#12 Screw Base Steel ≥ .0385"	4711	4716	4682	4653	4628	4605	4585	4595	4578	4562	4547	4534	4522	4532	4521
	Concrete + Deck = 68.2 psf (I <sub>cr</sub> +I <sub>u</sub> )/2 = 190 in <sup>4</sup> /ft					I <sub>cr</sub> = 117.7 in <sup>4</sup> /ft I <sub>u</sub> = 261.5 in <sup>4</sup> /ft				M <sub>no</sub> /Ω = 77.1 kip-in/ft φM <sub>no</sub> = 117.9 kip-in/ft				V <sub>n</sub> /Ω = 5.74 kip/ft φV <sub>n</sub> = 8.61 kip/ft		
16	<b>ASD &amp; LRFD - Superimposed Load, W (psf)</b>															
	ASD, W/Ω	1611	1365	1170	1013	884	777	687	612	547	491	443	401	364	332	303
	LRFD, φW	2578	2185	1872	1620	1414	1243	1100	979	875	786	709	642	583	530	484
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	<b>LRFD - Diaphragm Shear, φS<sub>n</sub> (plf / ft) 36/4 Attachment Pattern</b>															
	Arc Spot Weld 1/2" Effective Dia	5448	5419	5334	5261	5197	5140	5090	5088	5046	5007	4972	4940	4910	4917	4890
	PAF Base Steel ≥ .25"	4905	4918	4869	4827	4790	4757	4728	4746	4720	4697	4676	4657	4639	4656	4640
	PAF Base Steel ≥ 0.125"	4848	4865	4820	4781	4747	4716	4690	4710	4686	4664	4645	4627	4610	4629	4613
	#12 Screw Base Steel ≥ .0385"	4847	4864	4819	4780	4745	4715	4689	4709	4685	4663	4644	4626	4610	4628	4613
	Concrete + Deck = 68.8 psf (I <sub>cr</sub> +I <sub>u</sub> )/2 = 205 in <sup>4</sup> /ft					I <sub>cr</sub> = 138.2 in <sup>4</sup> /ft I <sub>u</sub> = 271.2 in <sup>4</sup> /ft				M <sub>no</sub> /Ω = 93.9 kip-in/ft φM <sub>no</sub> = 143.7 kip-in/ft				V <sub>n</sub> /Ω = 5.74 kip/ft φV <sub>n</sub> = 8.61 kip/ft		
All Gages	<b>LRFD - Diaphragm Shear, φS<sub>n</sub> (plf / ft) for all vertical load spans, WWF Designation or Area of Steel per foot width</b>															
	3/4" Welded Shear Studs	6x6 W1.4xW1.4			6x6 W2.9xW2.9			6x6 W4.0xW4.0			4x4 W4xW4			4x4 W6xW6		
		A <sub>s</sub> = 0.028 in <sup>2</sup> /ft			A <sub>s</sub> = 0.058 in <sup>2</sup> /ft			A <sub>s</sub> = 0.080 in <sup>2</sup> /ft			A <sub>s</sub> = 0.120 in <sup>2</sup> /ft			A <sub>s</sub> = 0.180 in <sup>2</sup> /ft		
	12 in o.c.	n/a			6890			7880			9680			12380		
	24 in o.c.	n/a			6890			7750			7750			7750		
36 in o.c.	n/a			5170			5170			5170			5170			

2W PANELS

# 3.3 2WH-36 Composite Deck

7 1/4" Total Slab Depth

Normal Weight Concrete (145 pcf)

Concrete Volume 1.910yd<sup>3</sup>/100ft<sup>2</sup>

3 Hour Fire Rating



Maximum Unshored Span (in)

Gage	Single	Double	Triple
22	6' - 3"	7' - 0"	7' - 3"
21	7' - 0"	7' - 10"	8' - 1"
20	7' - 4"	8' - 2"	8' - 5"

Gage	Single	Double	Triple
19	8' - 3"	9' - 2"	9' - 5"
18	8' - 6"	9' - 10"	10' - 2"
16	9' - 2"	11' - 3"	11' - 3"

GA	Vertical Load Span (in)	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"
22	<b>ASD &amp; LRFD - Superimposed Load, W (psf)</b>															
	ASD, W/Ω	978	824	703	605	525	458	403	356	315	281	251	224	201	181	163
	LRFD, φW	1564	1319	1125	968	840	733	644	569	504	449	401	359	322	290	261
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	<b>LRFD - Diaphragm Shear, φS<sub>n</sub> (plf / ft) 36/4 Attachment Pattern</b>															
	Arc Spot Weld 1/2" Effective Dia	5550	5523	5486	5453	5425	5400	5377	5368	5350	5333	5318	5304	5291	5287	5276
	PAF Base Steel ≥ .25"	5302	5294	5273	5255	5239	5225	5212	5212	5201	5191	5183	5175	5167	5169	5162
	PAF Base Steel ≥ 0.125"	5283	5277	5257	5240	5225	5211	5199	5199	5189	5180	5172	5164	5158	5159	5153
	#12 Screw Base Steel ≥ .0385"	5265	5260	5241	5225	5211	5199	5187	5188	5179	5170	5162	5155	5149	5151	5145
	Concrete + Deck = 76.3 psf						I <sub>cr</sub> = 108.0 in <sup>4</sup> /ft	M <sub>no</sub> /Ω = 58.4 kip-in/ft					V <sub>n</sub> /Ω = 5.11 kip/ft			
(I <sub>cr</sub> +I <sub>y</sub> )/2 = 225 in <sup>4</sup> /ft						I <sub>y</sub> = 342.0 in <sup>4</sup> /ft	φM <sub>no</sub> = 89.4 kip-in/ft					φV <sub>n</sub> = 7.42 kip/ft				

GA	Vertical Load Span (in)	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"
21	<b>ASD &amp; LRFD - Superimposed Load, W (psf)</b>															
	ASD, W/Ω	1106	934	797	687	597	522	460	407	361	323	289	259	233	211	190
	LRFD, φW	1770	1494	1276	1100	955	836	736	651	578	516	462	415	374	337	305
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	<b>LRFD - Diaphragm Shear, φS<sub>n</sub> (plf / ft) 36/4 Attachment Pattern</b>															
	Arc Spot Weld 1/2" Effective Dia	5629	5600	5557	5520	5487	5458	5432	5423	5401	5382	5364	5348	5334	5330	5318
	PAF Base Steel ≥ .25"	5344	5338	5313	5292	5273	5257	5242	5243	5231	5219	5209	5200	5191	5194	5186
	PAF Base Steel ≥ 0.125"	5322	5317	5294	5274	5257	5241	5228	5229	5217	5207	5197	5188	5180	5183	5176
	#12 Screw Base Steel ≥ .0385"	5303	5300	5278	5259	5242	5228	5215	5217	5206	5196	5187	5178	5171	5174	5167
	Concrete + Deck = 76.6 psf						I <sub>cr</sub> = 119.4 in <sup>4</sup> /ft	M <sub>no</sub> /Ω = 65.7 kip-in/ft					V <sub>n</sub> /Ω = 5.63 kip/ft			
(I <sub>cr</sub> +I <sub>y</sub> )/2 = 233 in <sup>4</sup> /ft						I <sub>y</sub> = 346.6 in <sup>4</sup> /ft	φM <sub>no</sub> = 100.5 kip-in/ft					φV <sub>n</sub> = 8.13 kip/ft				

GA	Vertical Load Span (in)	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"
20	<b>ASD &amp; LRFD - Superimposed Load, W (psf)</b>															
	ASD, W/Ω	1169	988	844	728	632	554	488	432	384	343	307	276	249	225	204
	LRFD, φW	1871	1580	1350	1164	1012	886	780	691	615	549	492	442	399	360	326
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	<b>LRFD - Diaphragm Shear, φS<sub>n</sub> (plf / ft) 36/4 Attachment Pattern</b>															
	Arc Spot Weld 1/2" Effective Dia	5669	5640	5594	5553	5518	5487	5460	5451	5428	5407	5388	5371	5355	5353	5339
	PAF Base Steel ≥ .25"	5366	5360	5333	5311	5291	5273	5258	5259	5246	5234	5223	5213	5204	5207	5199
	PAF Base Steel ≥ 0.125"	5343	5338	5314	5292	5273	5257	5242	5245	5232	5221	5210	5201	5192	5196	5188
	#12 Screw Base Steel ≥ .0385"	5323	5320	5297	5276	5259	5243	5229	5232	5220	5209	5199	5190	5182	5186	5179
	Concrete + Deck = 76.7 psf						I <sub>cr</sub> = 124.9 in <sup>4</sup> /ft	M <sub>no</sub> /Ω = 69.3 kip-in/ft					V <sub>n</sub> /Ω = 5.92 kip/ft			
(I <sub>cr</sub> +I <sub>y</sub> )/2 = 237 in <sup>4</sup> /ft						I <sub>y</sub> = 348.9 in <sup>4</sup> /ft	φM <sub>no</sub> = 106.0 kip-in/ft					φV <sub>n</sub> = 8.52 kip/ft				

# 2WH-36 Composite Deck 3.3

7 1/4" Total Slab Depth

Normal Weight Concrete (145 pcf)

Concrete Volume 1.910yd<sup>3</sup>/100ft<sup>2</sup>

3 Hour Fire Rating



2W PANELS

GA	Vertical Load Span (in)	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"
19	<b>ASD &amp; LRFD - Superimposed Load, W (psf)</b>															
	ASD, W/Ω	1390	1176	1006	869	756	663	586	520	463	415	373	336	304	276	251
	LRFD, φW	2223	1881	1609	1390	1210	1062	937	831	741	664	597	538	487	441	401
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	<b>LRFD - Diaphragm Shear, φS<sub>n</sub> (plf / ft) 36/4 Attachment Pattern</b>															
	Arc Spot Weld 1/2" Effective Dia	5813	5782	5725	5676	5633	5595	5561	5553	5524	5499	5475	5454	5435	5434	5416
	PAF Base Steel ≥ .25"	5442	5440	5407	5379	5355	5333	5314	5319	5302	5287	5273	5261	5249	5256	5245
	PAF Base Steel ≥ 0.125"	5415	5414	5384	5357	5334	5314	5295	5301	5286	5271	5258	5246	5236	5242	5233
	#12 Screw Base Steel ≥ .0385"	5394	5395	5366	5340	5318	5299	5281	5288	5273	5259	5247	5235	5225	5232	5223
	Concrete + Deck = 77.0 psf (I <sub>cr</sub> +I <sub>u</sub> )/2 = 250 in <sup>4</sup> /ft					I <sub>cr</sub> = 143.6 in <sup>4</sup> /ft I <sub>u</sub> = 356.9 in <sup>4</sup> /ft				M <sub>no</sub> /Ω = 81.7 kip-in/ft φM <sub>no</sub> = 125.1 kip-in/ft				V <sub>n</sub> /Ω = 6.68 kip/ft φ V <sub>n</sub> = 9.59 kip/ft		

	Vertical Load Span (in)	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"
18	<b>ASD &amp; LRFD - Superimposed Load, W (psf)</b>															
	ASD, W/Ω	1540	1304	1116	965	841	739	652	580	517	464	418	377	342	310	283
	LRFD, φW	2465	2086	1786	1544	1346	1182	1044	927	828	742	668	603	547	497	452
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	<b>LRFD - Diaphragm Shear, φS<sub>n</sub> (plf / ft) 36/4 Attachment Pattern</b>															
	Arc Spot Weld 1/2" Effective Dia	5919	5888	5823	5767	5718	5674	5636	5629	5597	5567	5541	5516	5494	5495	5475
	PAF Base Steel ≥ .25"	5499	5500	5463	5431	5403	5378	5356	5364	5345	5327	5312	5297	5284	5293	5281
	PAF Base Steel ≥ 0.125"	5468	5472	5437	5406	5380	5356	5335	5345	5326	5310	5295	5281	5269	5278	5267
	#12 Screw Base Steel ≥ .0385"	5447	5452	5418	5389	5363	5341	5321	5331	5313	5298	5283	5270	5258	5268	5257
	Concrete + Deck = 77.3 psf (I <sub>cr</sub> +I <sub>u</sub> )/2 = 259 in <sup>4</sup> /ft					I <sub>cr</sub> = 155.9 in <sup>4</sup> /ft I <sub>u</sub> = 362.3 in <sup>4</sup> /ft				M <sub>no</sub> /Ω = 90.3 kip-in/ft φM <sub>no</sub> = 138.1 kip-in/ft				V <sub>n</sub> /Ω = 6.68 kip/ft φ V <sub>n</sub> = 10.02 kip/ft		

	Vertical Load Span (in)	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"
16	<b>ASD &amp; LRFD - Superimposed Load, W (psf)</b>															
	ASD, W/Ω	1894	1605	1376	1191	1040	914	809	720	644	579	522	473	430	391	357
	LRFD, φW	3030	2568	2201	1905	1663	1463	1295	1152	1031	926	836	757	687	626	572
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	<b>LRFD - Diaphragm Shear, φS<sub>n</sub> (plf / ft) 36/4 Attachment Pattern</b>															
	Arc Spot Weld 1/2" Effective Dia	6184	6154	6070	5996	5932	5876	5825	5824	5781	5743	5707	5675	5646	5652	5626
	PAF Base Steel ≥ .25"	5641	5654	5605	5562	5525	5493	5463	5481	5456	5433	5412	5392	5375	5392	5376
	PAF Base Steel ≥ 0.125"	5584	5601	5556	5516	5482	5452	5425	5445	5421	5400	5380	5362	5346	5364	5349
	#12 Screw Base Steel ≥ .0385"	5582	5599	5554	5515	5481	5451	5424	5444	5420	5399	5379	5362	5345	5364	5348
	Concrete + Deck = 77.9 psf (I <sub>cr</sub> +I <sub>u</sub> )/2 = 279 in <sup>4</sup> /ft					I <sub>cr</sub> = 183.6 in <sup>4</sup> /ft I <sub>u</sub> = 375.1 in <sup>4</sup> /ft				M <sub>no</sub> /Ω = 110.2 kip-in/ft φM <sub>no</sub> = 168.6 kip-in/ft				V <sub>n</sub> /Ω = 6.68 kip/ft φ V <sub>n</sub> = 10.02 kip/ft		

All Gages	<b>LRFD - Diaphragm Shear, φS<sub>n</sub> (plf / ft) for all vertical load spans, WWF Designation or Area of Steel per foot width</b>															
	3/4" Welded Shear Studs	6x6 W1.4xW1.4			6x6 W2.9xW2.9			6x6 W4.0xW4.0			4x4 W4xW4			4x4 W6xW6		
		A <sub>s</sub> = 0.028	in <sup>2</sup> /ft	A <sub>s</sub> = 0.058	in <sup>2</sup> /ft	A <sub>s</sub> = 0.080	in <sup>2</sup> /ft	A <sub>s</sub> = 0.120	in <sup>2</sup> /ft	A <sub>s</sub> = 0.180	in <sup>2</sup> /ft					
	12 in o.c.		n/a		7630		8620		10420		13120					
	24 in o.c.		n/a		7630		7750		7750		7750					
36 in o.c.		n/a		5170		5170		5170		5170						