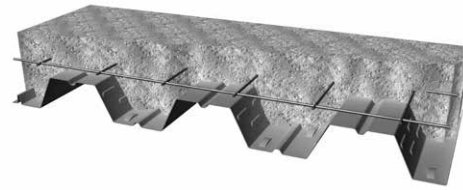


2.4 3WxH-36 Composite Deck

5" Total Slab Depth

Light Weight Concrete (110 pcf)

Concrete Volume 1.080yd³/100ft²



3WxH-36 5" Slab Depth, 110 pcf LWC

Maximum Unshored Span	Gage	Single	Double	Triple	Gage	Single	Double	Triple
	22	11' - 2"	12' - 0"	12' - 5"		19	13' - 1"	15' - 2"
	21	12' - 2"	12' - 10"	13' - 3"		18	13' - 5"	16' - 6"
	20	12' - 6"	13' - 7"	14' - 1"		16	14' - 2"	17' - 7"

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	291	254	223	196	174	155	138	123	110	99	89	80	72	65	58
	LRFD, φW	443	387	341	302	269	240	215	193	174	157	142	129	117	106	97
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	1649	1629	1612	1601	1587	1574	1562	1552	1542	1537	1528	1520	1513	1506	1500
	PAF Base Steel ≥ .25"	1546	1532	1520	1515	1505	1496	1487	1480	1473	1471	1465	1459	1454	1449	1445
	PAF Base Steel ≥ 0.125"	1531	1518	1507	1502	1493	1484	1476	1469	1463	1461	1456	1450	1446	1441	1437
	#12 Screw Base Steel ≥ .0385"	1429	1423	1417	1417	1412	1407	1403	1399	1396	1396	1393	1390	1388	1385	1383
	Concrete + Deck =	34.1 psf		I _{cr} = 53.5 in ⁴ /ft		ASD		M _{no} /Ω = 31.2 kip-in/ft		V _n /Ω = 2.85 kip/ft						
	(I _{cr} +I _u)/2 =	84.04 in ⁴ /ft		I _u = 114.6 in ⁴ /ft		LRFD		φM _{no} = 46.4 kip-in/ft		φ V _n = 4.25 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	320	280	246	217	192	171	153	137	123	111	100	90	81	74	66
	LRFD, φW	486	426	375	333	296	265	238	214	193	175	158	144	131	119	109
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	1712	1689	1668	1655	1638	1623	1609	1596	1585	1578	1568	1559	1550	1542	1535
	PAF Base Steel ≥ .25"	1569	1554	1541	1534	1524	1514	1505	1497	1489	1486	1480	1474	1468	1463	1458
	PAF Base Steel ≥ 0.125"	1552	1538	1526	1520	1510	1501	1493	1485	1478	1476	1470	1464	1459	1454	1449
	#12 Screw Base Steel ≥ .0385"	1428	1421	1415	1416	1411	1406	1402	1399	1395	1396	1393	1390	1388	1385	1383
	Concrete + Deck =	34.3 psf		I _{cr} = 57.4 in ⁴ /ft		ASD		M _{no} /Ω = 34.0 kip-in/ft		V _n /Ω = 2.88 kip/ft						
	(I _{cr} +I _u)/2 =	87.07 in ⁴ /ft		I _u = 116.7 in ⁴ /ft		LRFD		φM _{no} = 50.6 kip-in/ft		φ V _n = 4.98 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	347	304	267	236	210	187	167	150	135	122	110	100	90	82	74
	LRFD, φW	526	461	407	361	322	288	259	233	211	191	174	158	144	131	120
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	1759	1749	1725	1709	1690	1672	1656	1641	1628	1620	1608	1597	1587	1578	1570
	PAF Base Steel ≥ .25"	1590	1574	1560	1553	1541	1531	1521	1512	1504	1501	1494	1487	1481	1476	1471
	PAF Base Steel ≥ 0.125"	1572	1557	1544	1538	1527	1517	1508	1500	1492	1489	1483	1477	1471	1466	1461
	#12 Screw Base Steel ≥ .0385"	1427	1420	1415	1415	1410	1406	1402	1398	1395	1396	1393	1390	1388	1386	1383
	Concrete + Deck =	34.5 psf		I _{cr} = 61.0 in ⁴ /ft		ASD		M _{no} /Ω = 36.6 kip-in/ft		V _n /Ω = 2.88 kip/ft						
	(I _{cr} +I _u)/2 =	89.85 in ⁴ /ft		I _u = 118.7 in ⁴ /ft		LRFD		φM _{no} = 54.5 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.	2770		4120		5110		6910		9610						
	24 in o.c.	2770		4120		5110		6910		7750						
	36 in o.c.	2770		4120		5110		5170								

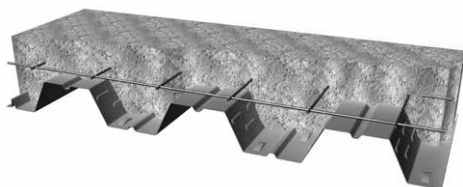
3WxH-36 5" Slab Depth, 110 pcf LWC

3WxH-36 Composite Deck 2.4

5" Total Slab Depth

Light Weight Concrete (110 pcf)

Concrete Volume 1.080yd³/100ft²



3WxH-36 5" Slab Depth, 110 pcf LWC

Maximum Unshored Span		Gage	Single	Double	Triple	Gage		Single	Double	Triple	
		22	11' - 2"	12' - 0"	12' - 5"			19	13' - 1"	15' - 2"	15' - 3"
		21	12' - 2"	12' - 10"	13' - 3"			18	13' - 5"	16' - 6"	15' - 9"
20	12' - 6"	13' - 7"	14' - 1"	16	14' - 2"	17' - 7"	16' - 7"				

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	402	352	311	275	245	219	196	177	159	144	131	119	108	98	89		
	LRFD, ϕW	608	534	472	419	374	336	302	273	247	224	204	186	170	156	143		
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	107	97	87		
	LRFD - Available Diaphragm Shear Capacity, ϕS _n (plf / ft) 36/4 Attachment Pattern																	
	Arc Spot Weld 1/2" Effective Dia	1765	1765	1765	1765	1765	1765	1765	1747	1729	1717	1702	1688	1675	1663	1651		
	PAF Base Steel ≥ .25"	1635	1617	1601	1591	1578	1566	1555	1545	1535	1531	1523	1516	1509	1502	1496		
	PAF Base Steel ≥ 0.125"	1614	1597	1582	1574	1561	1550	1540	1530	1522	1518	1510	1503	1497	1491	1485		
	#12 Screw Base Steel ≥ .0385"	1428	1422	1417	1417	1412	1408	1404	1401	1398	1399	1396	1393	1391	1388	1386		
	Concrete + Deck =	34.9	psf		I _{cr} = 68.0		in ⁴ /ft		ASD		M _{no} /Ω = 42.0		kip-in/ft		V _n /Ω = 2.88		kip/ft	
	(I _{cr} +I _u)/2 =	95.38	in ⁴ /ft		I _u = 122.8		in ⁴ /ft		LRFD		ϕM _{no} = 62.4		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	453	397	351	311	277	248	223	201	182	165	150	136	124	113	104		
	LRFD, ϕW	684	601	532	473	423	379	342	309	281	255	233	213	195	179	164		
	L/360	-	-	-	-	-	-	-	-	179	159	141	126	113	102	92		
	LRFD - Available Diaphragm Shear Capacity, ϕS _n (plf / ft) 36/4 Attachment Pattern																	
	Arc Spot Weld 1/2" Effective Dia	1770	1770	1770	1770	1770	1770	1770	1770	1770	1770	1770	1770	1769	1754	1739		
	PAF Base Steel ≥ .25"	1677	1657	1639	1627	1612	1599	1587	1575	1565	1559	1550	1542	1535	1527	1521		
	PAF Base Steel ≥ 0.125"	1654	1635	1618	1608	1593	1581	1569	1559	1549	1544	1536	1528	1521	1514	1508		
	#12 Screw Base Steel ≥ .0385"	1432	1426	1421	1421	1416	1412	1408	1405	1401	1402	1400	1397	1394	1392	1390		
	Concrete + Deck =	35.3	psf		I _{cr} = 74.2		in ⁴ /ft		ASD		M _{no} /Ω = 46.9		kip-in/ft		V _n /Ω = 2.88		kip/ft	
	(I _{cr} +I _u)/2 =	100.4	in ⁴ /ft		I _u = 126.5		in ⁴ /ft		LRFD		ϕM _{no} = 69.8		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	554	487	430	382	342	307	276	250	226	206	187	171	157	144	132		
	LRFD, ϕW	835	734	650	579	519	466	421	382	347	316	289	265	243	224	206		
	L/360	-	-	-	-	340	294	255	223	197	174	155	138	124	111	101		
	LRFD - Available Diaphragm Shear Capacity, ϕS _n (plf / ft) 36/4 Attachment Pattern																	
	Arc Spot Weld 1/2" Effective Dia	1780	1780	1780	1780	1780	1780	1780	1780	1780	1780	1780	1780	1780	1780	1780		
	PAF Base Steel ≥ .25"	1763	1738	1716	1701	1683	1666	1651	1637	1625	1617	1606	1596	1587	1578	1570		
	PAF Base Steel ≥ 0.125"	1718	1695	1675	1663	1646	1631	1618	1606	1594	1588	1578	1569	1561	1553	1546		
	#12 Screw Base Steel ≥ .0385"	1440	1434	1428	1429	1424	1420	1416	1412	1409	1410	1407	1405	1402	1400	1398		
	Concrete + Deck =	36.1	psf		I _{cr} = 86.0		in ⁴ /ft		ASD		M _{no} /Ω = 56.7		kip-in/ft		V _n /Ω = 2.88		kip/ft	
	(I _{cr} +I _u)/2 =	110	in ⁴ /ft		I _u = 134.0		in ⁴ /ft		LRFD		ϕM _{no} = 84.3		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				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.		2770				4120				5110				6910				9610			
	24 in o.c.		2770				4120				5110				6910				7750			
	36 in o.c.		2770				4120				5110				5170				5170			

3WxH-36 5" Slab Depth, 110 pcf LWC

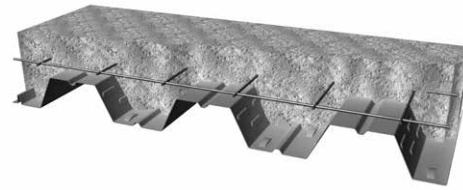
2.4 3WxH-36 Composite Deck

5 1/2" Total Slab Depth

Light Weight Concrete (110 pcf)

Concrete Volume 1.235yd³/100ft²

1 Hour Fire Rating



3WxH-36 5 1/2" Slab Depth, 110 pcf LWC

Maximum Unshored Span		Gage	Single	Double	Triple	Gage		Single	Double	Triple	
		22	10' - 8"	11' - 6"	11' - 11"			19	12' - 8"	14' - 7"	14' - 10"
		21	11' - 8"	12' - 4"	12' - 9"			18	13' - 1"	15' - 11"	15' - 4"
		20	12' - 2"	13' - 1"	13' - 6"			16	13' - 9"	17' - 2"	16' - 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	340	297	261	230	204	181	162	145	130	117	105	94	85	77	69
	LRFD, ϕW	517	453	399	353	314	281	252	226	204	185	167	152	138	125	114
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, ϕS _n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	1973	1953	1936	1925	1911	1898	1886	1876	1866	1861	1852	1844	1837	1830	1824
	PAF Base Steel ≥ .25"	1870	1856	1844	1839	1829	1820	1811	1804	1797	1795	1789	1783	1778	1773	1769
	PAF Base Steel ≥ 0.125"	1855	1842	1831	1826	1817	1808	1801	1794	1787	1785	1780	1774	1770	1765	1761
	#12 Screw Base Steel ≥ .0385"	1753	1747	1741	1741	1736	1731	1727	1723	1720	1720	1717	1714	1712	1709	1707
Concrete + Deck =		38.7 psf			I _{cr} = 69.0 in ⁴ /ft			ASD	M _{no} /Ω= 36.4 kip-in/ft			V _n /Ω = 3.05 kip/ft				
(I _{cr} +I _u)/2 =		109.8 in ⁴ /ft			I _u = 150.6 in ⁴ /ft			LRFD	ϕM _{no} = 54.1 kip-in/ft			ϕ V _n = 4.55 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	374	327	288	254	226	201	180	161	145	130	118	106	96	87	79
	LRFD, ϕW	568	498	439	389	347	310	278	251	227	205	186	169	154	140	128
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, ϕS _n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	2036	2013	1992	1979	1962	1947	1933	1920	1909	1902	1892	1883	1874	1866	1859
	PAF Base Steel ≥ .25"	1893	1878	1865	1858	1848	1838	1829	1821	1813	1810	1804	1798	1792	1787	1782
	PAF Base Steel ≥ 0.125"	1876	1862	1850	1844	1834	1825	1817	1809	1802	1800	1794	1788	1783	1778	1773
	#12 Screw Base Steel ≥ .0385"	1752	1745	1739	1740	1735	1730	1726	1723	1719	1720	1717	1714	1712	1709	1707
Concrete + Deck =		38.9 psf			I _{cr} = 74.0 in ⁴ /ft			ASD	M _{no} /Ω= 39.7 kip-in/ft			V _n /Ω = 3.27 kip/ft				
(I _{cr} +I _u)/2 =		113.7 in ⁴ /ft			I _u = 153.3 in ⁴ /ft			LRFD	ϕM _{no} = 59.0 kip-in/ft			ϕ V _n = 5.27 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	406	355	313	277	246	219	196	176	159	143	129	117	106	96	88
	LRFD, ϕW	615	540	476	423	377	337	303	274	247	224	204	186	169	155	141
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, ϕS _n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	2100	2073	2049	2033	2014	1996	1980	1965	1952	1944	1932	1921	1911	1902	1894
	PAF Base Steel ≥ .25"	1914	1898	1884	1877	1865	1855	1845	1836	1828	1825	1818	1811	1805	1800	1795
	PAF Base Steel ≥ 0.125"	1896	1882	1868	1862	1851	1841	1832	1824	1816	1813	1807	1801	1795	1790	1785
	#12 Screw Base Steel ≥ .0385"	1751	1744	1739	1739	1734	1730	1726	1722	1719	1720	1717	1714	1712	1710	1707
Concrete + Deck =		39.1 psf			I _{cr} = 78.6 in ⁴ /ft			ASD	M _{no} /Ω= 42.7 kip-in/ft			V _n /Ω = 3.28 kip/ft				
(I _{cr} +I _u)/2 =		117.2 in ⁴ /ft			I _u = 155.8 in ⁴ /ft			LRFD	ϕM _{no} = 63.6 kip-in/ft			ϕ V _n = 6.09 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.	3140				4490				5480				7280		9980	
	24 in o.c.	3140				4490				5480				7280		7750	
	36 in o.c.	3140				4490				5170				5170		5170	

3WxH-36 5 1/2" Slab Depth, 110 pcf LWC



3WxH-36 Composite Deck 2.4

5 1/2" Total Slab Depth

Light Weight Concrete (110 pcf)

Concrete Volume 1.235yd³/100ft²

1 Hour Fire Rating



3WxH-36 5 1/2 " Slab Depth, 110 pcf LWC

	Gage	Single	Double	Triple	Gage	Single	Double	Triple
Maximum Unshored Span	22	10' - 8"	11' - 6"	11' - 11"	19	12' - 8"	14' - 7"	14' - 10"
	21	11' - 8"	12' - 4"	12' - 9"	18	13' - 1"	15' - 11"	15' - 4"
	20	12' - 2"	13' - 1"	13' - 6"	16	13' - 9"	17' - 2"	16' - 1"

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	471	412	363	322	287	257	230	207	187	169	154	140	127	116	106
	LRFD, φW	711	625	552	491	438	393	354	320	290	263	240	219	200	184	168
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	2197	2197	2183	2160	2134	2111	2090	2071	2053	2041	2026	2012	1999	1987	1975
	PAF Base Steel ≥ .25"	1959	1941	1925	1915	1902	1890	1879	1869	1860	1855	1847	1840	1833	1826	1820
	PAF Base Steel ≥ 0.125"	1938	1921	1906	1898	1885	1874	1864	1854	1846	1842	1834	1827	1821	1815	1809
	#12 Screw Base Steel ≥ .0385"	1753	1746	1741	1741	1737	1732	1728	1725	1722	1723	1720	1717	1715	1712	1710

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	530	465	410	364	325	291	262	236	213	194	176	160	146	134	122
	LRFD, φW	800	703	622	553	495	444	401	362	329	299	273	250	229	210	193
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	132	119
	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	2202	2202	2202	2202	2202	2202	2202	2185	2162	2146	2127	2109	2093	2078	2063
	PAF Base Steel ≥ .25"	2002	1981	1963	1951	1936	1923	1911	1899	1889	1883	1875	1866	1859	1851	1845
	PAF Base Steel ≥ 0.125"	1978	1959	1942	1932	1918	1905	1893	1883	1873	1868	1860	1852	1845	1838	1832
	#12 Screw Base Steel ≥ .0385"	1756	1750	1745	1745	1740	1736	1732	1729	1725	1726	1724	1721	1718	1716	1714

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	648	569	504	448	400	359	324	293	265	241	220	201	184	169	155
	LRFD, φW	976	859	761	678	607	546	493	447	407	371	339	311	286	263	243
	L/360	-	-	-	-	-	-	-	290	255	226	201	179	161	145	131
	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	2212	2212	2212	2212	2212	2212	2212	2212	2212	2212	2212	2212	2212	2197	2180
	PAF Base Steel ≥ .25"	2087	2062	2040	2025	2007	1990	1975	1961	1949	1941	1930	1920	1911	1902	1894
	PAF Base Steel ≥ 0.125"	2042	2019	1999	1987	1970	1955	1942	1930	1918	1912	1902	1893	1885	1877	1870
	#12 Screw Base Steel ≥ .0385"	1764	1758	1752	1753	1748	1744	1740	1736	1733	1734	1731	1729	1726	1724	1722

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.	3140				4490				5480				7280		9980
	24 in o.c.	3140				4490				5480				7280		7750
	36 in o.c.	3140				4490				5170				5170		5170

3WxH-36 5 1/2 " Slab Depth, 110 pcf LWC

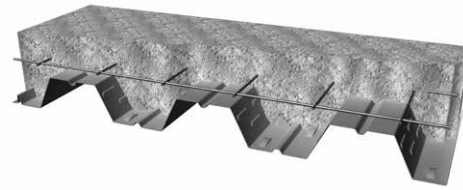
2.4 3WxH-36 Composite Deck

6 1/4" Total Slab Depth

Light Weight Concrete (110 pcf)

Concrete Volume 1.466yd³/100ft²

2 Hour Fire Rating



3WxH-36 6 1/4 " Slab Depth, 110 pcf LWC

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

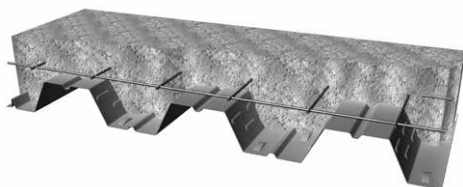
22 ga.	Vertical Load Span (ft-in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
	ASD & LRFD - Available Superimposed Load Capacity, W (psf)															
	ASD, W/Ω	420	367	322	284	252	225	201	180	161	145	131	118	106	96	87
	LRFD, φW	638	559	492	436	388	347	311	280	253	229	207	188	171	156	142
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	2459	2439	2422	2411	2397	2384	2372	2362	2352	2347	2338	2330	2323	2316	2310
	PAF Base Steel ≥ .25"	2356	2342	2330	2325	2315	2306	2298	2290	2283	2281	2275	2269	2264	2260	2255
	PAF Base Steel ≥ 0.125"	2341	2328	2317	2312	2303	2294	2287	2280	2273	2271	2266	2261	2256	2251	2247
	#12 Screw Base Steel ≥ .0385"	2239	2233	2227	2227	2222	2217	2213	2209	2206	2206	2203	2201	2198	2195	2193
Concrete + Deck =		45.6 psf			I _{cr} = 97.1 in ⁴ /ft		ASD		M _{no} /Ω= 44.7 kip-in/ft		V _n /Ω = 3.36 kip/ft					
(I _{cr} +I _u)/2 =		157.8 in ⁴ /ft			I _u = 218.4 in ⁴ /ft		LRFD		φM _{no} = 66.5 kip-in/ft		φ V _n = 5.03 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	462	404	355	314	279	249	223	200	180	162	147	133	120	109	99	
	LRFD, φW	700	614	542	481	429	384	345	311	281	254	231	210	192	175	160	
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft) 36/4 Attachment Pattern																
	Arc Spot Weld 1/2" Effective Dia	2522	2499	2478	2465	2448	2433	2419	2406	2395	2388	2378	2369	2360	2352	2345	
	PAF Base Steel ≥ .25"	2379	2364	2351	2345	2334	2324	2315	2307	2299	2296	2290	2284	2278	2273	2268	
	PAF Base Steel ≥ 0.125"	2362	2349	2336	2331	2320	2311	2303	2295	2288	2286	2280	2274	2269	2264	2260	
	#12 Screw Base Steel ≥ .0385"	2238	2231	2226	2226	2221	2216	2212	2209	2205	2206	2203	2200	2198	2195	2193	
Concrete + Deck =		45.8 psf		I _{cr} =		104.3 in ⁴ /ft		ASD		M _{no} /Ω=		48.8 kip-in/ft		V _n /Ω =		3.85 kip/ft	
(I _{cr} +I _u)/2 =		163.2 in ⁴ /ft		I _u =		222.1 in ⁴ /ft		LRFD		φM _{no} =		72.5 kip-in/ft		φ V _n =		5.75 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	501	439	386	342	304	272	243	219	197	178	161	146	133	121	110
	LRFD, φW	759	666	588	522	466	417	375	339	307	278	253	231	211	193	176
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	2586	2559	2535	2519	2500	2482	2466	2451	2438	2430	2418	2407	2398	2388	2380
	PAF Base Steel ≥ .25"	2400	2385	2370	2363	2351	2341	2331	2322	2314	2311	2304	2298	2292	2286	2281
	PAF Base Steel ≥ 0.125"	2382	2368	2354	2348	2337	2327	2318	2310	2302	2299	2293	2287	2281	2276	2271
	#12 Screw Base Steel ≥ .0385"	2237	2231	2225	2225	2220	2216	2212	2209	2205	2206	2203	2201	2198	2196	2193
Concrete + Deck =		46.0 psf			I _{cr} = 110.8 in ⁴ /ft		ASD		M _{no} /Ω= 52.5 kip-in/ft		V _n /Ω = 3.91 kip/ft					
(I _{cr} +I _u)/2 =		168.1 in ⁴ /ft			I _u = 225.4 in ⁴ /ft		LRFD		φM _{no} = 78.1 kip-in/ft		φ V _n = 6.56 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	5040	6030	7830	10530
	24 in o.c.	n/a	5040	6030	7750	7750
	36 in o.c.	n/a	5040	5170	5170	5170

3WxH-36 6 1/4 " Slab Depth, 110 pcf LWC



3WxH-36 Composite Deck 2.4

6 1/4" Total Slab Depth

Light Weight Concrete (110 pcf)

Concrete Volume $1.466\text{yd}^3/100\text{ft}^2$

2 Hour Fire Rating

3WxH-36 6 1/4 " Slab Depth, 110 pcf LWC

	Gage	Single	Double	Triple
Maximum Unshored Span	22	10' - 1"	10' - 11"	11' - 3"
	21	10' - 11"	11' - 8"	12' - 1"
	20	11' - 9"	12' - 5"	12' - 10"

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	581	509	449	399	355	318	286	257	233	211	191	174	159	145	132
	LRFD, ϕW	878	771	682	606	542	486	438	396	359	327	298	272	249	228	210
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, ϕS _n (plf / ft)															
	36/4	Attachment Pattern														
	Arc Spot Weld 1/2" Effective Dia	2736	2700	2669	2646	2620	2597	2576	2557	2539	2527	2512	2498	2485	2473	2461
	PAF Base Steel ≥ .25"	2445	2427	2411	2401	2388	2376	2365	2355	2346	2341	2333	2326	2319	2313	2307
	PAF Base Steel ≥ 0.125"	2424	2407	2392	2384	2371	2360	2350	2340	2332	2328	2320	2313	2307	2301	2295
#12 Screw Base Steel ≥ .0385"	2239	2232	2227	2227	2223	2218	2215	2211	2208	2209	2206	2203	2201	2198	2196	
Concrete + Deck =	46.4	psf			I _{cr} =	123.6	in ⁴ /ft	ASD	M _{no} /Ω=	60.2	kip-in/ft		V _n /Ω =	3.92	kip/ft	
(I _{cr} +I _u)/2 =	177.9	in ⁴ /ft			I _u =	232.3	in ⁴ /ft	LRFD	ϕM _{no} =	89.6	kip-in/ft		ϕ V _n =	7.83	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	655	575	508	451	402	361	324	293	265	241	219	200	182	167	153
	LRFD, φW	988	869	769	684	612	550	496	449	408	371	339	310	285	262	241
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft)															
	Arc Spot Weld 1/2" Effective Dia	2850	2850	2813	2783	2751	2721	2695	2671	2648	2632	2613	2595	2579	2564	2550
	PAF Base Steel ≥ .25"	2488	2467	2449	2438	2423	2409	2397	2385	2375	2370	2361	2352	2345	2337	2331
	PAF Base Steel ≥ 0.125"	2464	2445	2428	2418	2404	2391	2379	2369	2359	2354	2346	2338	2331	2324	2318
	#12 Screw Base Steel ≥ .0385"	2242	2236	2231	2231	2226	2222	2218	2215	2212	2213	2210	2207	2204	2202	2200
Concrete + Deck =	46.7	psf		I _{cr} =	134.9	in ⁴ /ft	ASD	M _{no} /Ω =	67.4	kip-in/ft		V _n /Ω =	3.92	kip/ft		
(I _{cr} +I _u)/2 =	186.8	in ⁴ /ft		I _u =	238.6	in ⁴ /ft	LRFD	φM _{no} =	100.2	kip-in/ft		φ V _n =	7.84	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	802	705	624	555	496	445	402	363	330	300	274	251	230	211	194	
	LRFD, ϕW	1206	1062	941	839	751	676	611	554	504	460	421	387	355	328	302	
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	229	206	186	
	LRFD - Available Diaphragm Shear Capacity, ϕS _n (plf / ft)								36/4	Attachment Pattern							
	Arc Spot Weld 1/2" Effective Dia	2860	2860	2860	2860	2860	2860	2850	2820	2792	2770	2746	2723	2703	2684	2666	
	PAF Base Steel ≥ .25"	2573	2548	2526	2511	2493	2476	2461	2447	2435	2427	2416	2406	2397	2388	2380	
	PAF Base Steel ≥ 0.125"	2528	2505	2485	2473	2456	2442	2428	2416	2405	2398	2388	2379	2371	2363	2356	
	#12 Screw Base Steel ≥ .0385"	2250	2244	2238	2239	2234	2230	2226	2223	2219	2220	2217	2215	2212	2210	2208	
Concrete + Deck =	47.5	psf			I _{cr} =	156.3	in ⁴ /ft	ASD	M _{no} /Ω=	81.5	kip-in/ft		V _n /Ω =	3.92	kip/ft		
(I _{cr} +I _u)/2 =	203.6	in ⁴ /ft			I _u =	251.0	in ⁴ /ft	LRFD	ϕM _{no} =	121.3	kip-in/ft		ϕ V _n =	7.85	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.	n/a	5040	6030	7830	10530
	24 in o.c.	n/a	5040	6030	7750	7750
36 in o.c.	n/a	5040	5170	5170	5170	

3WxH-36 6 1/4 " Slab Depth, 110 pcf LWC

3 Hour Fire Rating



Maximum Unshored Span	Gage	Single	Double	Triple	Gage	Single	Double	Triple
	22	9' - 5"	10' - 3"	10' - 7"	19	11' - 8"	13' - 0"	13' - 5"
	21	10' - 3"	11' - 0"	11' - 4"	18	12' - 0"	14' - 2"	14' - 1"
	20	11' - 0"	11' - 8"	12' - 0"	16	12' - 8"	15' - 10"	14' - 10"

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	533	466	410	362	321	286	256	230	206	186	168	152	137	124	112
	LRFD, ϕW	808	709	625	554	494	442	397	357	323	292	265	241	220	200	183
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, ϕS _n (plf / ft)															
	36/4	Attachment Pattern														
	Arc Spot Weld 1/2" Effective Dia	3107	3087	3070	3060	3045	3032	3021	3010	3000	2995	2986	2979	2971	2964	2958
	PAF Base Steel ≥ .25"	3004	2990	2978	2973	2963	2954	2946	2938	2931	2929	2923	2918	2912	2908	2903
	PAF Base Steel ≥ 0.125"	2989	2976	2965	2960	2951	2942	2935	2928	2921	2919	2914	2909	2904	2899	2895
#12 Screw Base Steel ≥ .0385"	2888	2881	2875	2875	2870	2865	2861	2857	2854	2855	2851	2849	2846	2843	2841	
Concrete + Deck =	54.7	psf		I _{cr} =	144.1	in ⁴ /ft	ASD	M _{no} /Ω=	56.4	kip-in/ft		V _n /Ω =	3.82	kip/ft		
(I _{cr} +I _u)/2 =	241.2	in ⁴ /ft		I _u =	338.3	in ⁴ /ft	LRFD	ϕM _{no} =	83.9	kip-in/ft		ϕ V _n =	5.72	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	587	514	452	400	356	318	285	256	230	208	188	170	155	140	128
	LRFD, ϕW	889	780	688	611	545	488	439	396	358	325	296	269	246	225	206
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, ϕS_n (plf / ft)															
	36/4	Attachment Pattern														
	Arc Spot Weld 1/2" Effective Dia	3170	3147	3126	3113	3096	3081	3067	3054	3043	3036	3026	3017	3008	3000	2993
	PAF Base Steel $\geq .25"$	3027	3012	2999	2993	2982	2972	2963	2955	2947	2945	2938	2932	2927	2921	2916
	PAF Base Steel $\geq 0.125"$	3010	2997	2984	2979	2969	2959	2951	2943	2936	2934	2928	2922	2917	2912	2908
#12 Screw Base Steel $\geq .0385"$	2886	2879	2874	2874	2869	2864	2860	2857	2853	2854	2851	2848	2846	2843	2841	
Concrete + Deck =	54.9	psf			I_{cr} =	154.9	in^4/ft		ASD	M_{no}/Ω =	61.6	kip-in/ft		V_n/Ω =	4.31	kip/ft
$(I_{cr}+I_u)/2$ =	249.3	in^4/ft			I_u =	343.6	in^4/ft		LRFD	ϕM_{no} =	91.7	kip-in/ft		ϕV_n =	6.44	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	637	558	492	436	388	347	311	280	252	228	207	188	171	156	142
	LRFD, ϕW	963	846	747	664	593	531	478	432	391	356	324	295	270	247	227
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, ϕS _n (plf / ft)															
	36/4	Attachment Pattern														
	Arc Spot Weld 1/2" Effective Dia	3234	3207	3183	3167	3148	3130	3114	3100	3086	3078	3066	3056	3046	3036	3028
	PAF Base Steel ≥ .25"	3049	3033	3018	3011	2999	2989	2979	2970	2962	2959	2952	2946	2940	2934	2929
	PAF Base Steel ≥ 0.125"	3031	3016	3002	2996	2985	2975	2966	2958	2950	2948	2941	2935	2929	2924	2919
#12 Screw Base Steel ≥ .0385"	2885	2879	2873	2873	2869	2864	2860	2857	2853	2854	2851	2849	2846	2844	2842	
Concrete + Deck =	55.1	psf			I _{cr} =	164.7	in ⁴ /ft	ASD	M _{no} /Ω=	66.4	kip-in/ft		V _n /Ω =	4.83	kip/ft	
(I _{cr} +I _u)/2 =	256.6	in ⁴ /ft			I _u =	348.5	in ⁴ /ft	LRFD	ϕM _{no} =	98.8	kip-in/ft		ϕ V _n =	7.25	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	5780	6770	8570	11270
	24 in o.c.	n/a	5780	6770	7750	7750
	36 in o.c.	n/a	5170	5170	5170	5170

3WxH-36 7 1/4 " Slab Depth, 110 pcf LWC



3WxH-36 Composite Deck 2.4

7 1/4" Total Slab Depth

Light Weight Concrete (110 pcf)

Concrete Volume 1.77yd³/100ft²

3 Hour Fire Rating



3WxH-36 7 1/4 " Slab Depth, 110 pcf LWC

	Gage	Single	Double	Triple	Gage	Single	Double	Triple
Maximum Unshored Span	22	9' - 5"	10' - 3"	10' - 7"	19	11' - 8"	13' - 0"	13' - 5"
	21	10' - 3"	11' - 0"	11' - 4"	18	12' - 0"	14' - 2"	14' - 1"
	20	11' - 0"	11' - 8"	12' - 0"	16	12' - 8"	15' - 10"	14' - 10"

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	740	649	573	508	453	406	365	329	298	270	246	224	204	186	171
	LRFD, φW	1116	981	868	772	690	620	559	506	459	418	381	349	320	293	270
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	3384	3349	3317	3294	3269	3245	3224	3205	3187	3175	3160	3146	3133	3121	3110
	PAF Base Steel ≥ .25"	3094	3075	3059	3050	3036	3024	3013	3003	2994	2989	2981	2974	2967	2961	2955
	PAF Base Steel ≥ 0.125"	3073	3055	3040	3032	3019	3008	2998	2988	2980	2976	2968	2961	2955	2949	2943
	#12 Screw Base Steel ≥ .0385"	2887	2881	2875	2875	2871	2866	2863	2859	2856	2857	2854	2851	2849	2847	2844
	Concrete + Deck =	55.5 psf				I _{cr} = 184.1 in ⁴ /ft ASD				M _{no} /Ω = 76.3 kip-in/ft				V _n /Ω = 4.84 kip/ft		
	(I _{cr} +I _u)/2 =	271.2 in ⁴ /ft				I _u = 358.4 in ⁴ /ft LRFD				φM _{no} = 113.5 kip-in/ft				φ V _n = 8.68 kip/ft		

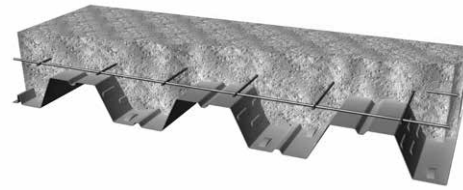
18 ga.	Vertical Load Span (ft-in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
	ASD & LRFD - Available Superimposed Load Capacity, W (psf)															
	ASD, W/Ω	835	733	648	576	514	461	415	375	340	309	281	257	235	215	197
	LRFD, φW	1257	1106	979	872	781	702	633	574	522	475	434	398	365	336	310
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	3546	3501	3461	3431	3399	3370	3343	3319	3297	3280	3261	3243	3227	3212	3198
	PAF Base Steel ≥ .25"	3136	3115	3097	3086	3071	3057	3045	3033	3023	3018	3009	3000	2993	2986	2979
	PAF Base Steel ≥ 0.125"	3112	3093	3076	3066	3052	3039	3028	3017	3007	3002	2994	2986	2979	2973	2966
	#12 Screw Base Steel ≥ .0385"	2890	2884	2879	2879	2874	2870	2866	2863	2860	2861	2858	2855	2853	2850	2848
	Concrete + Deck =	55.9 psf				I _{cr} = 201.3 in ⁴ /ft ASD				M _{no} /Ω = 85.5 kip-in/ft				V _n /Ω = 4.84 kip/ft		
	(I _{cr} +I _u)/2 =	284.4 in ⁴ /ft				I _u = 367.5 in ⁴ /ft LRFD				φM _{no} = 127.2 kip-in/ft				φ V _n = 9.68 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	1024	900	797	709	635	570	515	466	423	386	352	323	296	272	251
	LRFD, φW	1539	1356	1202	1072	961	865	782	710	646	590	541	496	457	421	389
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	3724	3700	3650	3610	3569	3532	3498	3468	3440	3418	3394	3372	3351	3332	3314
	PAF Base Steel ≥ .25"	3222	3196	3174	3159	3141	3124	3109	3096	3083	3075	3064	3054	3045	3036	3028
	PAF Base Steel ≥ 0.125"	3176	3154	3134	3121	3104	3090	3076	3064	3053	3046	3036	3027	3019	3011	3004
	#12 Screw Base Steel ≥ .0385"	2898	2892	2887	2887	2882	2878	2874	2871	2867	2868	2866	2863	2860	2858	2856
	Concrete + Deck =	56.7 psf				I _{cr} = 233.8 in ⁴ /ft ASD				M _{no} /Ω = 103.7 kip-in/ft				V _n /Ω = 4.85 kip/ft		
	(I _{cr} +I _u)/2 =	309.7 in ⁴ /ft				I _u = 385.6 in ⁴ /ft LRFD				φM _{no} = 154.3 kip-in/ft				φ V _n = 9.70 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				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				5780				6770			
	24 in o.c.				n/a				5780				6770			
	36 in o.c.				n/a				5170				5170			

3WxH-36 7 1/4 " Slab Depth, 110 pcf LWC

3 Hour Fire Rating



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

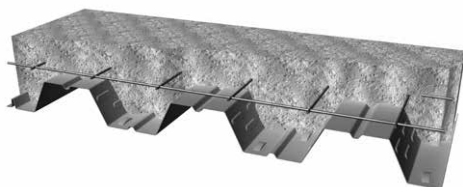
22 ga.	Vertical Load Span (ft-in)	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"
	ASD & LRFD - Available Superimposed Load Capacity, W (psf)															
	ASD, W/Ω	526	459	404	357	317	282	253	226	204	183	165	149	135	122	111
	LRFD, φW	798	699	617	547	487	436	391	352	318	288	262	238	217	198	180
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft)															
	36/4	Attachment Pattern														
	Arc Spot Weld 1/2" Effective Dia	3066	3047	3029	3019	3005	2992	2980	2969	2960	2954	2946	2938	2931	2924	2918
	PAF Base Steel ≥ .25"	2963	2950	2938	2932	2922	2913	2905	2898	2891	2889	2883	2877	2872	2867	2863
	PAF Base Steel ≥ 0.125"	2948	2936	2924	2920	2910	2902	2894	2887	2881	2879	2873	2868	2863	2859	2855
#12 Screw Base Steel ≥ .0385"	2847	2840	2834	2834	2829	2825	2821	2817	2813	2814	2811	2808	2805	2803	2801	
Concrete + Deck =	54.2	psf			I _{cr} =	140.8	in ⁴ /ft	ASD	M _{no} /Ω=	55.7	kip-in/ft		V _n /Ω =	3.79	kip/ft	
(I _{cr} +I _u)/2 =	235.3	in ⁴ /ft			I _u =	329.7	in ⁴ /ft	LRFD	φM _{no} =	82.8	kip-in/ft		φ V _n =	5.67	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	579	507	446	395	351	313	281	252	227	205	185	168	152	138	126
	LRFD, φW	877	769	679	603	538	482	433	391	353	321	291	266	242	222	203
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft)															
	36/4	Attachment Pattern														
	Arc Spot Weld 1/2" Effective Dia	3130	3106	3086	3073	3056	3040	3027	3014	3002	2996	2986	2976	2968	2960	2952
	PAF Base Steel ≥ .25"	2987	2972	2959	2952	2941	2931	2923	2914	2907	2904	2898	2892	2886	2881	2876
	PAF Base Steel ≥ 0.125"	2970	2956	2944	2938	2928	2919	2910	2903	2896	2893	2887	2882	2877	2872	2867
#12 Screw Base Steel ≥ .0385"	2845	2839	2833	2833	2828	2824	2820	2816	2813	2814	2811	2808	2805	2803	2801	
Concrete + Deck =	54.4	psf	I _{cr} =		151.4	in ⁴ /ft	ASD	M _{no} /Ω=	60.8	kip-in/ft	V _n /Ω =		4.28	kip/ft		
(I _{cr} +I _u)/2 =	243.1	in ⁴ /ft	I _u =		334.9	in ⁴ /ft	LRFD	φM _{no} =	90.4	kip-in/ft	φ V _n =		6.40	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	628	550	485	430	382	342	307	276	249	225	204	185	168	153	140
	LRFD, φW	950	834	737	655	585	524	472	426	386	351	319	291	266	244	223
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, φS _n (plf / ft)															
	Arc Spot Weld 1/2" Effective Dia	3194	3167	3143	3127	3107	3090	3074	3059	3046	3037	3026	3015	3005	2996	2987
	PAF Base Steel ≥ .25"	3008	2992	2978	2971	2959	2948	2939	2930	2922	2919	2912	2905	2899	2894	2888
	PAF Base Steel ≥ 0.125"	2990	2975	2962	2955	2944	2935	2926	2917	2910	2907	2901	2894	2889	2884	2879
	#12 Screw Base Steel ≥ .0385"	2844	2838	2833	2833	2828	2824	2820	2816	2813	2814	2811	2808	2806	2803	2801
Concrete + Deck =	54.6	psf		I _{cr} =	161.0	in ⁴ /ft	ASD	M _{no} /Ω=	65.5	kip-in/ft		V _n /Ω =	4.77	kip/ft		
(I _{cr} +I _u)/2 =	250.3	in ⁴ /ft		I _u =	339.7	in ⁴ /ft	LRFD	φM _{no} =	97.5	kip-in/ft		φ V _n =	7.21	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	5730	6720	8520	11220
	24 in o.c.	n/a	5730	6720	7750	7750
	36 in o.c.	n/a	5170	5170	5170	5170

3WxH-36 7 3/16" Slab Depth, 110 pcf LWC



3WxH-36 Composite Deck 2.4

7 ³/₁₆" Total Slab Depth

Light Weight Concrete (110 pcf)

Concrete Volume $1.755vd^3/100ft^2$

3 Hour Fire Rating

3WxH-36 7 3/16" Slab Depth, 110 pcf LWC

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

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	729	640	565	501	447	400	360	325	294	266	242	220	201	184	168
	LRFD, ϕW	1101	968	856	761	681	611	551	499	453	412	376	344	315	289	266
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, ϕS _n (plf / ft)															
	36/4	Attachment Pattern														
	Arc Spot Weld 1/2" Effective Dia	3343	3308	3277	3254	3228	3205	3184	3164	3147	3135	3119	3105	3092	3080	3069
	PAF Base Steel ≥ .25"	3053	3035	3018	3009	2996	2984	2973	2962	2953	2949	2941	2933	2927	2920	2914
	PAF Base Steel ≥ 0.125"	3032	3015	3000	2991	2979	2968	2957	2948	2939	2935	2928	2921	2915	2909	2903
#12 Screw Base Steel ≥ .0385"	2846	2840	2835	2835	2830	2826	2822	2819	2815	2816	2814	2811	2808	2806	2804	
Concrete + Deck =	55.0	psf		I _{cr} =	179.9	in ⁴ /ft	ASD	M _{no} /Ω=	75.3	kip-in/ft		V _n /Ω =	4.78	kip/ft		
(I _{cr} +I _u)/2 =	264.6	in ⁴ /ft		I _u =	349.4	in ⁴ /ft	LRFD	ϕM _{no} =	112.0	kip-in/ft		ϕ V _n =	8.63	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	823	723	639	567	507	455	409	370	335	304	277	253	231	212	194
	LRFD, ϕW	1240	1091	966	860	770	692	625	566	514	469	428	392	360	331	305
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LRFD - Available Diaphragm Shear Capacity, ϕS _n (plf / ft) 36/4 Attachment Pattern															
	Arc Spot Weld 1/2" Effective Dia	3505	3461	3421	3391	3358	3329	3302	3278	3256	3240	3221	3203	3187	3171	3157
	PAF Base Steel ≥ .25"	3095	3075	3056	3045	3030	3017	3004	2993	2983	2977	2968	2960	2952	2945	2938
	PAF Base Steel ≥ 0.125"	3072	3052	3035	3025	3011	2999	2987	2976	2967	2962	2954	2946	2939	2932	2926
	#12 Screw Base Steel ≥ .0385"	2850	2844	2838	2839	2834	2830	2826	2822	2819	2820	2817	2815	2812	2810	2808
Concrete + Deck =	55.3	psf		I _{cr} =	196.7	in ⁴ /ft	ASD		M _{no} /Ω =	84.3	kip-in/ft		V _n /Ω =	4.78	kip/ft	
(I _{cr} +I _u)/2 =	277.5	in ⁴ /ft		I _u =	358.3	in ⁴ /ft	LRFD		ϕM _{no} =	125.4	kip-in/ft		ϕ V _n =	9.56	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	1009	888	786	699	626	562	507	460	417	380	347	318	292	268	247	
	LRFD, ϕW	1518	1337	1185	1057	947	853	771	700	637	582	533	489	450	415	383	
	L/360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	LRFD - Available Diaphragm Shear Capacity, ϕS _n (plf / ft)								36/4 Attachment Pattern								
	Arc Spot Weld 1/2" Effective Dia	3670	3659	3609	3569	3528	3492	3458	3427	3399	3377	3353	3331	3310	3291	3273	
	PAF Base Steel ≥ .25"	3181	3156	3133	3119	3100	3084	3069	3055	3042	3035	3024	3014	3005	2996	2988	
	PAF Base Steel ≥ 0.125"	3136	3113	3093	3080	3064	3049	3036	3023	3012	3006	2996	2987	2979	2971	2964	
	#12 Screw Base Steel ≥ .0385"	2858	2852	2846	2846	2842	2838	2834	2830	2827	2828	2825	2822	2820	2818	2815	
Concrete + Deck =	56.1	psf		I _{cr} = 228.4		in ⁴ /ft		ASD		M _{no} /Ω= 102.3		kip-in/ft		V _n /Ω = 4.79		kip/ft	
(I _c +I _u)/2 =	302.2	in ⁴ /ft		I _u = 376.0		in ⁴ /ft		LRFD		ϕM _{no} = 152.2		kip-in/ft		ϕ V _n = 9.58		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.	n/a	5730	6720	8520	11220
		24 in o.c.	n/a	5730	6720	7750	7750
36 in o.c.	n/a	5170	5170	5170	5170		

3WxH-36 7 3/16" Slab Depth, 110 pcf LWC