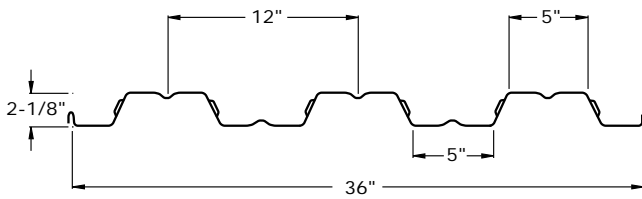
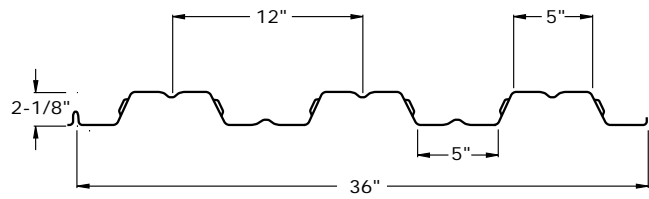


3.1 2WH-36



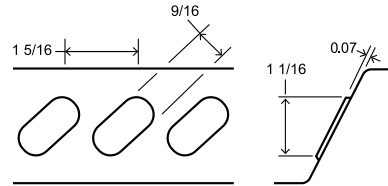
2WH-36 Profile



2WHS-36 Profile



36/4 Attachment Pattern



2W Series Embossment

Panel Properties

Gage	Weight psf	Base Metal Thickness in	Yield Strength ksi	Tensile Strength ksi	Gross Section Properties				
					Area in ² /ft	Moment of Inertia in ⁴ /ft	Distance to N.A. from Bottom in	Section Modulus in ³ /ft	Radius of Gyration in
22	1.57	0.029	50	65	0.448	0.353	1.04	0.340	0.890
21	1.78	0.033	50	65	0.509	0.403	1.04	0.385	0.889
20	1.89	0.035	50	65	0.540	0.427	1.05	0.408	0.880
19	2.25	0.042	50	65	0.647	0.510	1.05	0.486	0.887
18	2.51	0.047	50	65	0.722	0.567	1.05	0.541	0.886
16	3.14	0.059	50	65	0.903	0.703	1.05	0.670	0.883

Gage	Effective Section Modulus at F _y					Effective Moment of Inertia for Deflection			
	Compression	Bending				Moment of Inertia	Moment of Inertia	Uniform Load Only	
	Area	Section Modulus	Distance to N.A. from Bottom	Section Modulus	Distance to N.A. from Bottom			I _d = (2I _e +I _g)/3	
						A _e in ² /ft	S _{e+} in ³ /ft	Y _b in	S _{e-} in ³ /ft
22	0.315	0.247	0.92	0.252	1.18	0.330	0.327	0.338	0.336
21	0.383	0.298	0.95	0.304	1.15	0.387	0.383	0.392	0.390
20	0.419	0.325	0.96	0.331	1.14	0.417	0.410	0.420	0.416
19	0.551	0.408	0.98	0.419	1.11	0.523	0.517	0.519	0.514
18	0.650	0.468	1.00	0.483	1.10	0.567	0.563	0.567	0.564
16	0.882	0.614	1.03	0.640	1.07	0.703	0.703	0.703	0.703

Reactions at Supports (plf) Based on Web Crippling

Gage	Condition	Bearing Length of Webs							
		Allowable (R _n /Ω)				Factored (ΦR _n)			
		1"	2"	4"	6"	1"	2"	4"	6"
22	End	316	393	503	588	483	602	770	899
	Interior	528	638	792	911	786	948	1178	1355
21	End	403	499	636	741	616	764	973	1133
	Interior	675	810	1001	1148	1004	1205	1489	1708
20	End	450	556	707	822	688	851	1081	1258
	Interior	755	903	1114	1275	1123	1344	1657	1897
19	End	633	777	980	1137	968	1188	1500	1739
	Interior	1066	1266	1549	1766	1585	1883	2304	2627
18	End	781	954	1199	1387	1195	1460	1835	2122
	Interior	1319	1559	1898	2158	1961	2318	2823	3211
16	End	1194	1445	1800	2072	1827	2211	2754	3170
	Interior	2027	2373	2862	3237	3015	3530	4257	4815

Web Crippling Constraints

h=2.16"

r=0.125"

θ=64°

1.15 Edge Form

Edge Form

Edge form is an integral part of a composite or non-composite deck installation. The edge form provides containment of the concrete at the perimeter of the composite deck-slab system and around openings. Edge form also provides a screed at the edge to help maintain slab thickness. Edge forms may be manufactured from bent plate, cold-formed sheet steel, and hot roll steel angles or channels. ASC Steel Deck manufactures cold-formed sheet steel flashings used for edge forms and other flashing conditions. Section 1.17 shows typical installation conditions for common flashing types.

Edge Form Flashings

Galvanized steel edge form flashings are custom manufactured by ASC Steel Deck to meet project requirements. The flashings are formed from ASTM A653 SS Grade 33 minimum galvanized steel sheets. Flashings are available in most common structural shapes in 7 gages. (See figures 1.15.1 and 1.15.2) The standard length flashing is 10'-0", shorter lengths available upon request. The minimum width of any stiffener or flat cross section is $\frac{3}{4}$ ". For Hat and Channel shapes, the web width must be at least $\frac{3}{4}$ " wider than the flange width.

Design of Edge Form

Edge forms may be rationally designed to support concrete and construction loads using the methods in the SDI Floor Deck Design Manual based on engineering mechanics and confirmatory testing. The SDI edge form table provided in figure 1.15.3 provides an easy to use design aid without the need to detailed calculations for common edge form conditions.

FLASHING THICKNESS BY GAGE	
Gage	Base Steel Thickness
22	0.0290
20	0.0350
18	0.0470
16	0.0590
14	0.0700
12	0.1050
10	0.1350

Figure 1.15.1

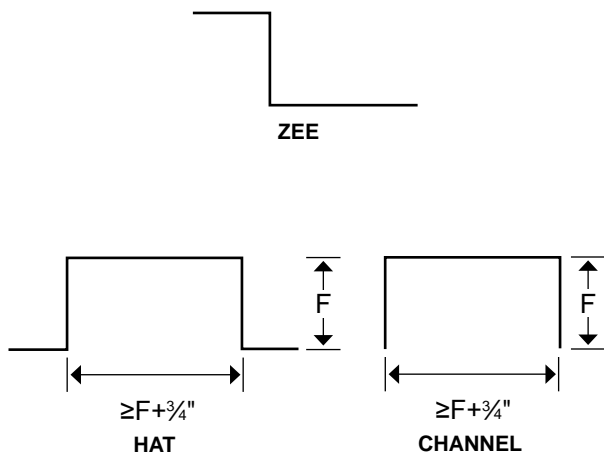
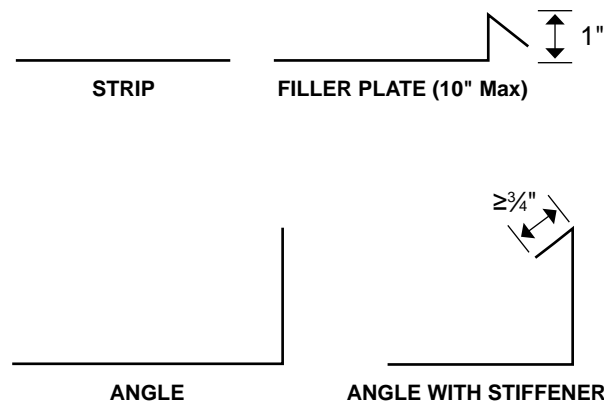
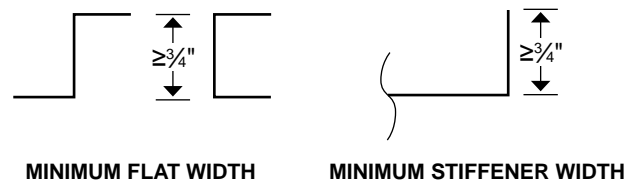


Figure 1.15.2