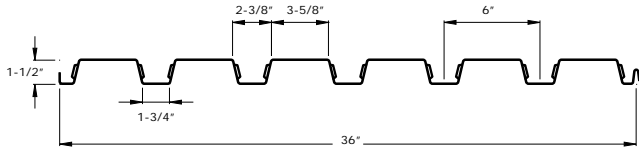
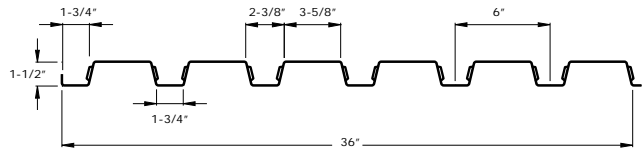


4.1 BH-36



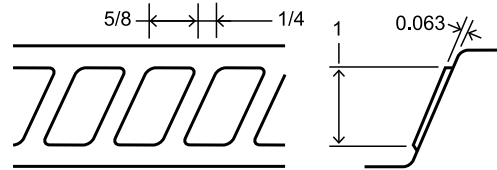
BH-36 Profile



BHN-36 Profile



36/4 Attachment Pattern



B Series Embossment

Panel Properties

Gage	Weight psf	Base Metal Thickness in	Yield Strength F _y ksi	Tensile Strength F _u ksi	Gross Section Properties				
					Area A _g in ² /ft	Moment of Inertia I _g in ⁴ /ft	Distance to N.A. from Bottom y _b in	Section Modulus S _g in ³ /ft	Radius of Gyration r in
22	1.75	0.0299	50	65	0.514	0.200	0.94	0.213	0.625
20	2.09	0.0359	50	65	0.615	0.240	0.94	0.253	0.623
18	2.76	0.0478	50	65	0.814	0.313	0.95	0.330	0.619
16	3.43	0.0598	50	65	1.012	0.383	0.95	0.404	0.615

Gage	Effective Section Modulus at F _y					Effective Moment of Inertia for Deflection			
	Compression Area A _c in ² /ft	Bending				Moment of Inertia I _{e+} in ⁴ /ft	Moment of Inertia I _{e-} in ⁴ /ft	Uniform Load Only	
		Section Modulus S _{e+} in ³ /ft	Distance to N.A. from Bottom y _b in	Section Modulus S _{e-} in ³ /ft	Distance to N.A. from Bottom y _b in			I _d = (2I _{e+} +I _{e-})/3 I _{d+} in ⁴ /ft	I _{d-} in ⁴ /ft
	22	0.179	0.175	0.74	0.187	0.98	0.157	0.197	0.171
20	0.235	0.228	0.77	0.236	0.96	0.197	0.237	0.211	0.238
18	0.351	0.311	0.84	0.329	0.94	0.287	0.313	0.296	0.313
16	0.330	0.392	0.89	0.404	0.95	0.377	0.383	0.379	0.383

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	772	960	1223	1223	1180	1469	1871	1871
	Interior	1229	1482	1832	1832	1828	2204	2726	2726
20	End	1081	1336	1690	1690	1655	2045	2586	2586
	Interior	1737	2078	2551	2551	2584	3091	3794	3794
18	End	1834	2239	2802	2802	2805	3425	4287	4287
	Interior	2984	3525	4276	4276	4439	5243	6361	6361
16	End	2771	3351	4158	4158	4240	5127	6361	6361
	Interior	4555	5329	6405	6405	6776	7927	9527	9527

Web Crippling Constraints

h=1.32"

r=0.125"

θ=78.3°

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

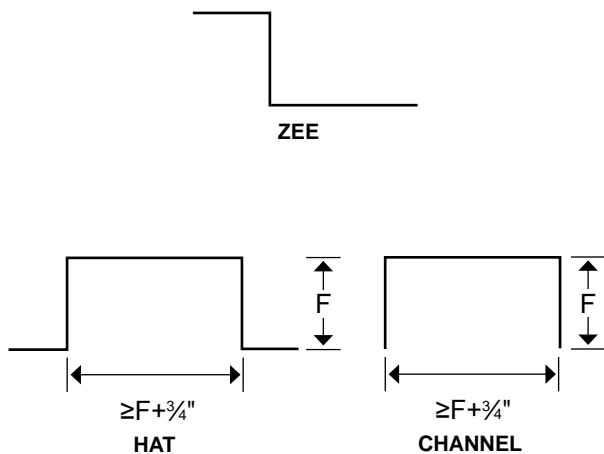
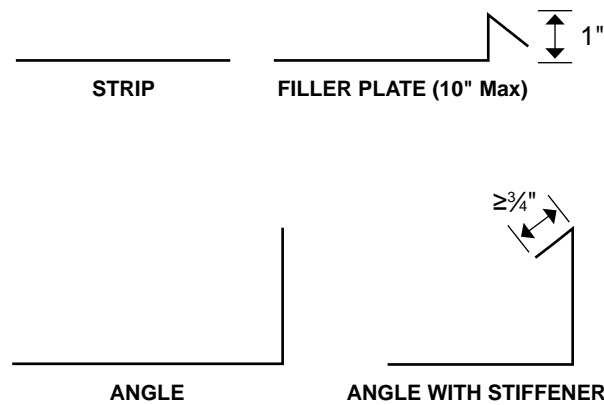
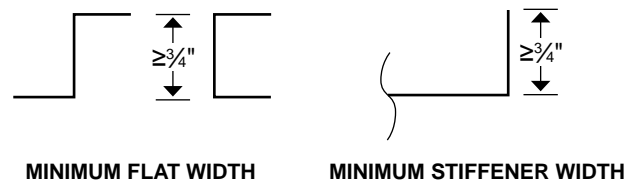


Figure 1.15.2