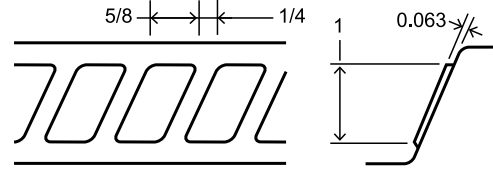
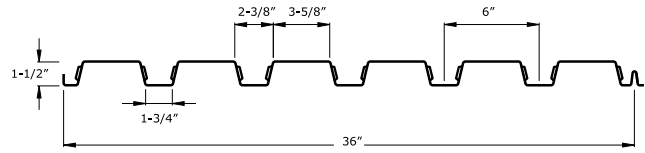
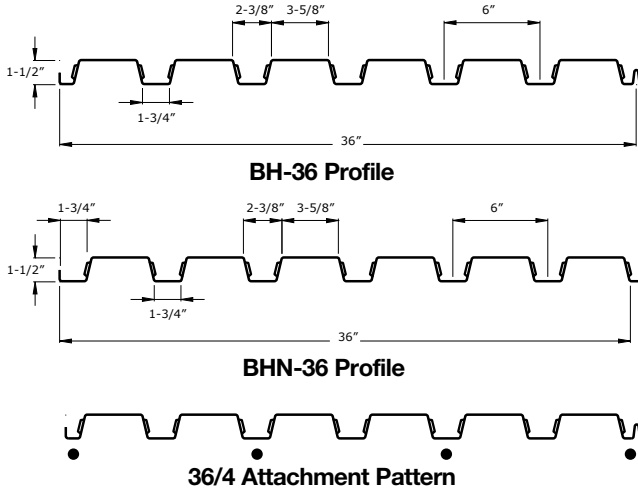


4.1 BH-36



Panel Properties

Gage	Weight	Base Metal Thickness	Yield Strength	Tensile Strength	Gross Section Properties				
					Area	Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	Radius of Gyration
	w	t	F _y	F _u	A _g	I _g	y _b	S _g	r
	psf	in	ksi	ksi	in ² /ft	in ⁴ /ft	in	in ³ /ft	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	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 _u = (2I _e +I _g)/3
	A _e	S _e +	y _b	S _e -	y _b	I _e +	I _e -	I _u +	I _u -
	in ² /ft	in ³ /ft	in	in ³ /ft	in	in ⁴ /ft	in ⁴ /ft	in ⁴ /ft	in ⁴ /ft
22	0.179	0.175	0.74	0.187	0.98	0.157	0.197	0.171	0.198
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"	1.5"	2"	3"	1"	1.5"	2"	3"
22	End	772	874	960	1105	1180	1337	1469	1691
	Interior	1229	1366	1482	1675	1828	2032	2204	2492
20	End	1081	1220	1336	1532	1655	1866	2045	2344
	Interior	1737	1922	2078	2339	2584	2859	3091	3479
18	End	1834	2053	2239	2550	2805	3142	3425	3901
	Interior	2984	3277	3525	3940	4439	4875	5243	5860
16	End	2771	3086	3351	3796	4240	4721	5127	5809
	Interior	4555	4975	5329	5923	6776	7401	7927	8810

Web Crippling Constraints

h=1.32"

r=0.125"

θ=78.3°