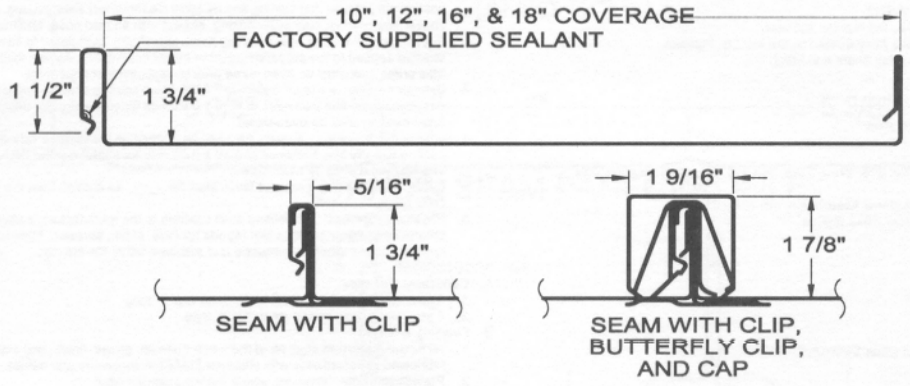
Thin Seam

ARCHITECTURAL ROOFING

FABRAL
METAL WALL AND ROOF SYSTEMS

Effective November 2000
Revised August 2002



SEAM WITH CLIP

SEAM WITH CLIP, BUTTERFLY CLIP, AND CAP

ALLOWABLE WIND UPLIFT LOAD (PSF)

substrate	width	2.5'	3.0'	3.5'	4.0'	4.5'	5.0'
24 ga. steel	12"	78	75	72	69	67	64
24 ga. steel	18"	52	50	48	46	44	41
22 ga. steel	12"	98	95	91	87	84	81
22 ga. steel	18"	65	63	61	58	56	53
.032" alum.	12"	54	52	50	48	42	34
.032" alum	18"	36	35	31	23	19	15

Notes:
1. Allowable loads are based on 1980 edition of AISI specifications.
2. Deflection is limited to L/240 of span.
3. Values are based on three or more equal spans.
4. FY = 50 ksi for steel panels.
5. Uplift values based on attachment to 16 ga. purlins with 2 #10-16 SD ST screws.

DESIGN INFORMATION

The Thin Seam panels can be custom tapered to a minimum width of 1½" and a maximum width of 18". The maximum length of tapered panels is 40'.

The maximum purlin spacing for Thin Seam panels is 4' on-center.

The minimum required roof slope is 1:12.

Minimum radius for field curving is 200 ft.

Maximum panel length is 65'.

Minimum panel length is 4'.

TEST REPORT SUMMARIES

AIR INFILTRATION: had 0.009 cfm/ft.2 leakage with 6.24 psf pressure differential per ASTM E 283.

WATER PENETRATION: There was no water penetration under 5 gal./hr. spray at 15 psf pressure differential per ASTM E 331.

UL90 UPLIFT RATING: 18" wide, 24 ga. panels with clips installed over ⅝" plywood deck with clips spaced 3' o.c. with 2, #10-12 x 1" pancake head screws per clip. All butt and side joints in deck to be sealed with one-part urethane caulk and feathered outward from joint (Construction No. 343).

UL90 UPLIFT RATING: 18" wide, 24 ga. panels with clips installed on 16 ga. steel purlins (55 ksi yield strength) spaced 4' o.c. with 2, #10-16 x 1" self-drilling screws with wafer head per clip (Construction No. 359).

UL90 UPLIFT RATING: 18" wide, 24 ga. panels with clips spaced 4' o.c. on 22 ga. steel deck (33 ksi yield strength) with 2, #14 truss head screws with #3 Phillips drive per clip. Bearing plates, 4½" x 6" x 24 ga. need to be installed under each clip. Rigid insulation (1" to 4" thickness) may be installed between the panels and deck (Construction No. 359A).

UL90 UPLIFT RATING: 18" wide, 24 ga. steel panels with clips installed 2' o.c. on ½" plywood deck with two, #10-12 x 1" pancake head screws per clip (Construction No. 417).

ASTM E1592 WIND UPLIFT TEST: 18" wide, 22 gauge steel panels installed with clips at 5' o.c. Two #10-16 x 1" screws per clip into 16 gauge purlins. Load at failure was 67 psf.

ASTM E1592 WIND UPLIFT TEST: 18" wide, 22 gauge steel panels installed with clips at 2' 6" o.c. Two #10-16 x 1" screws per clip into 16 gauge purlins. Load at failure was 80 psf.