Metal Roof and Wall Systems

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FACTORY MUTUAL GLOBAL

Approval of SuperLok Standing Seam Roof Systems as Class 1 Panel Roof

MBCI, 14031 West Hardy, Houston, TX 77060

Trade Name:	SuperLok Standing Seam Roof System with Low or High Float G-90 Galvanized Clips.
Size:	Min. 24-ga. (0.0239 in., 0.61 mm) steel panels, max. 16 in. (406 mm) wide coated with Signature 200 or 300 paint or Galvalume.
Supports:	Min. 16-ga. (0.0598 in., 1.5 mm) steel supporting members.
Application:	Secured as described below to min. 16-ga. (0.0598 in., 1.5 mm) thick steel supporting members. A min. length on ½ in. (13 mm) of threaded portion of screw must penetrate underside of purlin.
Special Application:	Optional liner panels are corrugated decks of Galvalume coated steel or painted Galvalume steel having a min. yield strength of 50 ksi (345 N/mm^2). The panels are min. 0.017 in. (0.4 mm) thick, 36 in.(914 mm) wide and $^{13}/_{16}$ in.(21 mm) or 1 ¼ in. (32 mm) deep, PBU Liner Panels and PBR Liner Panels, respectively.
Optional Insulation:	Max. 6 in. (152 mm) vinyl faced glass fiber blanket insulation, or Celotex Thermax Insulation Board, max. 4.25 in. (108 mm) thickness (max supporting members spacing 5 ft. (1.5 m) o.c., placed between the roof panels and the supporting members and used in conjunction with either the PBU or PBR liner panel. Steel Bearing Plates of 16-ga. (0.0598 in., 1.5 mm) red oxide coated steel plate having a min. yield strength of 50 ksi (345 N/mm^2). The plate measures 4 in. x 5 in. (102 mm x 127 mm), has one recessed ¼ in. (6.4 mm) dia. center hole, two ¼ in. (6.4 mm) wide by 1 in. long slots and is applied over ridged insulation and positioned. The clips, as described below, are secured through the bearing plate, insulation and liner panel to the steel supporting members.
Hail Rating:	Class 1-SH.
ASTM E 108:	Class A noncombustible deck at max. 5 in 12 slope.

Construction #1: SuperLok Roof Panels, max. 16 in. (406 mm) wide panels are secured to steel supports using screws and Low or High Float G-90 Galvanized Clips. Clips are secured to 0.0598 to 0.10 in. (1.5 to 2.5 mm) thick steel supports using two Construction Fasteners ¼-14x1 ¼ HWH SD Screws or two Atlas ¼-14x1 ¼ HWH Long Pilot TCP2 Screws per clip.

Construction #1a: SuperLok Roof Panels, min. 24-ga. (0.0239 in., 0.61 mm) thick are secured to steel supports spaced at max. 4 ft. (1.2 m) o.c. **Meets Class 1-90**. RoofNav Assembly numbers: 29793-0-0, 29814-0-0, and *29828*-0-0.

Construction #1b: SuperLok Roof Panels, min. 22-ga. (0.0299 in., 0.76 mm) thick are secured to steel supports spaced at max. 4 ft. (1.2 m) o.c. **Meets Class 1-135**. RoofNav Assembly numbers: 29800-0-0, 29896-0-0, and *29903*-0-0.

Construction #1c: SuperLok Roof Panels, min. 22-ga. (0.0299 in., 0.76 mm) thick are secured to steel supports spaced at max. 5 ft. (1.5 m) o.c. **Meets Class 1-105**. RoofNav Assembly numbers: 29807-0-0, *29821-0-0, and 29899-0-0.*

Approval Report No. 3005245 Dated: July 24, 2000

FM Global (Factory Mutual) Approvals

RATING	PROFILE	WIDTH (IN)	GAUGE	PURLIN SPACING (FT)	PURLIN GA.	FASTENER TYPE	NUMBER OF FASTENERS	CLIP
1-90	SuperLok[1]	16	24	4'-0"	16	$^1/_4$-14 X 1 $^1/_4$[2]	2	floating[3]
1-105	SuperLok[1]	16	22	5'-0"	16	$^1/_4$-14 X 1 $^1/_4$[2]	2	floating[3]
1-135	SuperLok[1]	16	22	4'-0"	16	$^1/_4$-14 X 1 $^1/_4$[2]	2	floating[3]

Notes:

[1] All roofs are Class 4471

[2] Fastener #1B

[3] HW-230, HW 232 (low and high floating)