

PRODUCT SPEC DATA

TOPHAT™ US200DL SYSTEM



TOPHAT
enhanced engineering

PRODUCT DESCRIPTION

Combining the Ultra Seam US200DL Standing Seam Panel with the TopHat Subframe results in an unsurpassed retrofit roof system.

The superior structural benefits and combined energy efficiency will satisfy any architect, engineer, or building owner. This system is recommended for projects with stringent engineering design requirements. The 2" tall, double-seamed US200DL standing seam panel is mechanically seamed with an electric seamer.

APPLICATION

The TopHat Subframe is an economical and efficient way to replace an existing metal roof. By putting a new and improved roof right over your existing roof structure, you achieve lower labor costs and minimal business interruption. The TopHat Subframe member is attached directly to the existing purlin (or to the deflection limiter between existing purlins). The 2" tall US200DL standing seam panel is then attached directly to the TopHat Subframe.

SUBSTRATE

- The TopHat Subframe is roll formed from premium-quality 16 ga. G60 Galvanized steel manufactured per ASTM A653/A653M or 1011/A1011M and having a minimum yield strength of 33 ksi.
- 14 ga. Galvanized, G90 Galvanized, and high-strength steel are available upon request.

SIZES AND LENGTHS

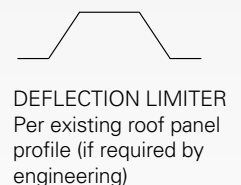
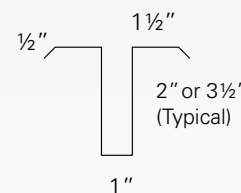
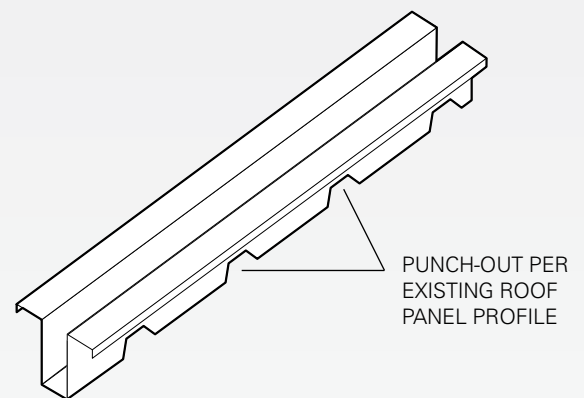
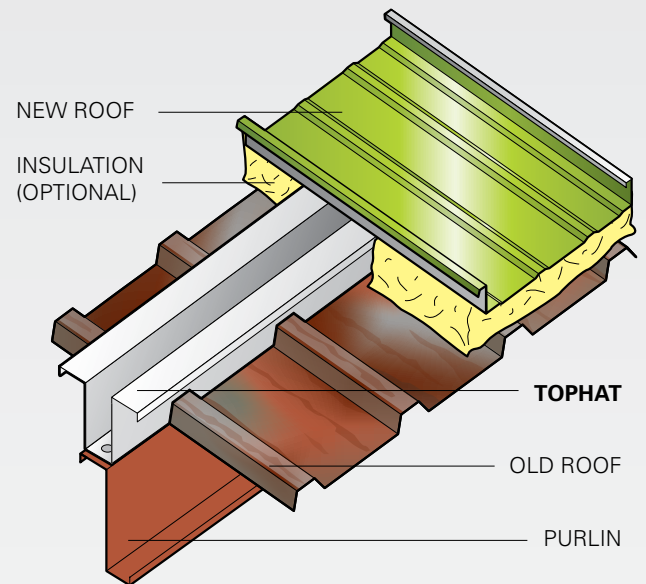
- The TopHat Subframe is available as 2" and 3½" tall. Other heights may be available upon request.
- TopHat can be roll formed to any length required, although 20' and 10' lengths are standard.

TOPHAT PROFILES

TopHat can be installed over virtually any existing metal roof. Standard punch-outs accommodate the following existing roofs: R-Panel, UltraDek, 7.2 Rib, 7.0 Rib, a variety of standing seam panels, and many more.

WARRANTY

A 20-year substrate warranty covering the galvanized material is available at no additional cost. *The warranty is issued on a per project basis upon request.*



ULTRA SEAM US200DL INFORMATION

SUBSTRATE

Choose between prime-quality Structural Grade 50 Galvalume steel manufactured per ASTM A-792 or aluminum conforming with Aluminum Association specification sheet 3003-H14 or 3105 H-14 and manufactured per ASTM B-209. Both are coated with 70% Kynar 500/Hylar 5000 (polyvinylidene fluoride resin) fluorocarbon, applied over an appropriate primer. An exterior off-white or gray backer coat is applied to the reverse side for additional protection. *Other substrates may be available upon request.*

GAUGES

The US200DL is available in 22 ga. or 24 ga. *Other gauges or thicknesses may be available upon request.*

FINISH

- 70% Kynar 500/Hylar 5000 fluorocarbon coating of 1.0 +/- 0.1 mil total dry film thickness including primer. The reverse side is coated with a primer and off-white or gray backer with a total of 0.5 mil dry film for additional protection. *Other finishes may be available upon request.*
- A smooth, dull matte, and low-to-medium gloss finish is standard.

CLIP

22 ga. 6" long top and 16 ga. 4" long base, two (2) piece sliding UL-Rated clip allowing for thermal movement

SIZES AND LENGTHS

- Available widths: 12", 16", or 18"
- Available length: 5' - 40' is standard. The US200DL panel can be roll formed on your jobsite (at an additional cost) for continuous length panels from eave to ridge.

COOL METAL ROOF COLORS

There are a variety of standard colors available. *Please contact TopHat Framing for a color chart.*

WARRANTY

A 35-year finish warranty covering color, fade, chalking, and film integrity and 25-year substrate warranty covering the Galvalume substrate are available at no additional cost. *The warranties are issued on a per project basis upon request.*



ENGINEERING

The TopHat Subframe system requires specific engineering in order to meet the design criteria for your building. *TopHat Framing Systems can offer an engineering and shop drawing package for your project upon request.*

Always consult with a professional engineer registered in the state of your project before you start any project.

WIND UPLIFT ALLOWABLE UNIFORM LOADS FOR TOPHAT US200DL SYSTEM

Panel width	Panel gauge	Roof panel span (loads are in psf)						
		TopHat between purlins	TopHat directly over existing purlins					
		2'-6"	2'-6"	3'-0"*	3'-6"*	4'-0"*	4'-6"*	5'-0"
18"	24	62.5	115.94*	101.25	86.56	71.88	57.19	42.5
	22	85	118	104.2	90.4	76.6	62.8	49
16"	24	70	71	68.3	65.6	62.9	60.2	57.5
	22	120	100	91.5	83	74.5	66	57.5
12"	22	—	110	105.5	101	96.5	92	87.5

NOTES

1. Loads are based on ASTM E 1592 testing and based on three or more equal spans.
2. Allowable loads include a 2.0 Factor of Safety in accordance with AISI '01.
3. No load increase for wind is included.
4. All loads are in psf and based on 33 ksi (min) TopHat and 50 ksi US200 Panel.
5. Spans marked with an asterisk (*) are interpolated.
6. TopHat directly over existing purlins does not affect the uplift capacity of the top roof panel.
7. Loads between purlins require a 16 ga. Deflection Limiter and are tested with a 16 ga. 3 1/2" TopHat.
8. Values in italics require Ultra Seam Slider Clip with 6" top and 4" base (other values were tested with 3" top)
9. Visit www.tophatframing.com to download complete test reports.
10. These Load Tables are intended as a guide only. Always refer to the complete test reports when designing a roof.
11. Always consult with a professional engineer registered in the state of your project.



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