

PRODUCT SPEC DATA

TOPHAT™ SUBFRAME



TOPHAT
enhanced engineering

PRODUCT DESCRIPTION

The TopHat Subframe is the industry's most advanced retrofit framing system.

Featuring superior energy efficiency, a stronger structural profile and superior compliance with newly strengthened building codes, TopHat is the unchallenged leader in retrofit metal roofing solutions. The TopHat Subframe is compatible with a variety of standing seam and exposed fastener panels to complete your new roof.

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). Your new roof 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

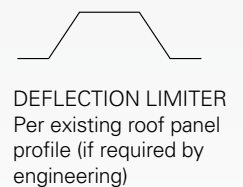
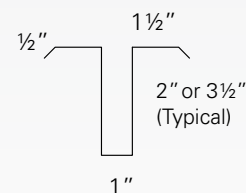
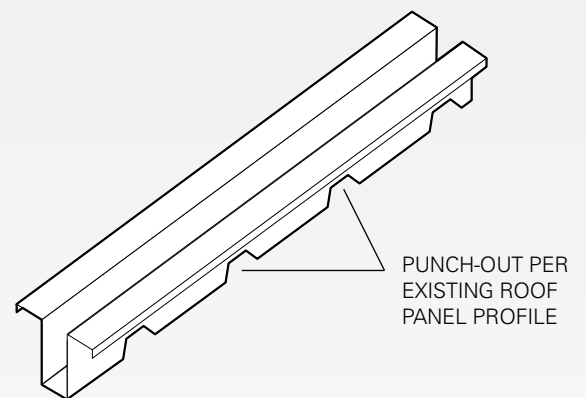
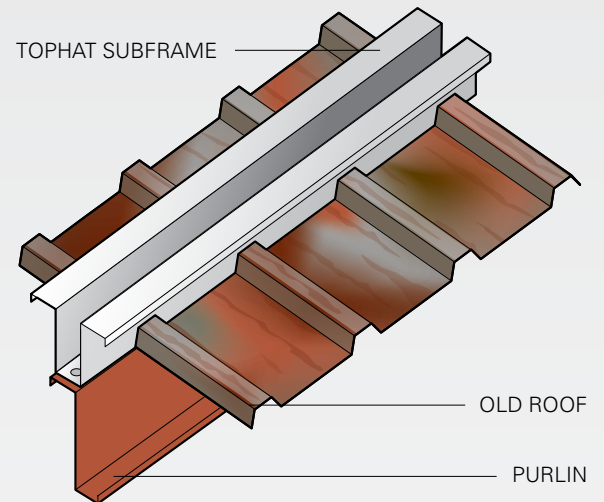
- The TopHat Subframe is available as 2" and 3½" tall. Other heights may be available upon request.
- TopHat can be roll formed to any length required, although 20' and 10' lengths are standard.

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.*



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.

TOPHAT SUBFRAME BASE TEST SUMMARY

Test #	Date	Test description	Moment reduction (amplification) factor		
			12 ga. purlin	14 ga. purlin	16 ga. purlin
1	4/3/2008	16 ga. TopHat Gravity Base Test	1.215	1.522	1.646
2	4/3/2008	16 ga. TopHat Uplift Base Test	0.834	0.795	0.779
3	3/3/2009	16 ga. Continuous TopHat Uplift Base Test	—	—	0.768
4	3/3/2009	16 ga. High Strength TopHat Uplift Base Test	—	—	0.902
5	3/3/2009	14 ga. TopHat Uplift Base Test	—	—	0.900

NOTES

1. The Moment Reduction Factor (R-Value) determines the normal flexural strength of a purlin in negative bending (uplift).
2. The Moment Amplification Factor (A-Value) determines the normal flexural strength of a purlin in positive bending (gravity).
3. These tests reflect the increased ability of the TopHat system to provide lateral and torsional bracing to purlins to which it is attached.
4. All tests used a 3 1/2" TopHat over 26 ga. R-Panel.
5. Visit www.tophatframing.com to download complete test reports.
6. Always consult with a professional engineer registered in the state of your project.

TopHat is a trademark of TopHat Framing Systems, LLC. All registered trademarks are the property of their respective owners. TopHat is a patented roof subframe system with patent no. US 7,861,480 B2.

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