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OptiLiner® Banded Liner System (Ls)

Meets Energy Code Requirements



- Meets the definition of Liner System (Ls) as described in ASHRAE 90.1 and IECC requirements
- Meets the requirements of OSHA Standard 29 CFR 1926.754(e)(3)(i) covers for roof and floor openings
- Exceptional vapor retarder
- Improves acoustical environment, both inside and outside of a metal building
- Bright interior finish allows for reduced lighting loads
- Meets fire code ratings
- GREENGUARD Certified

For more information about **OptiLiner®**,
contact your local Therm-All representative,
visit therm-all.com or call **888-2-INSUL-8**.

ASHRAE 90.1 (2013) Table A2.3.3

Insulation System	Rated R-Value of Insulation	Overall U-Factor for Entire Base Roof Assembly
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Standing Seam Roof with Thermal Spacer Blocks a,b (see below)

Liner System	R-19 + R-11	0.037
	R-25 + R-8	0.037
	R-25 + R-11	0.031
	R-30 + R-11	0.029
	R-25 + R-11 + R-11	0.026

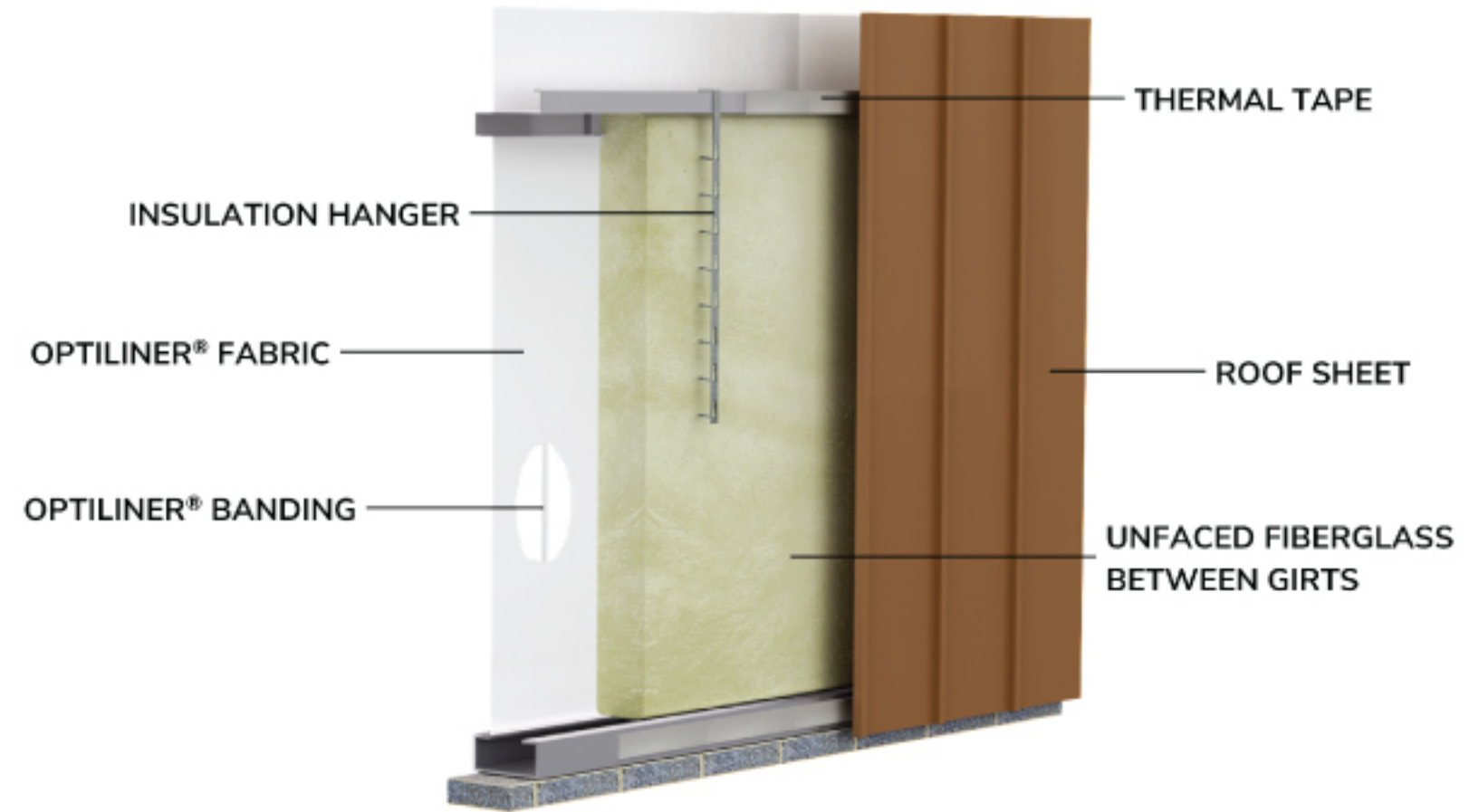
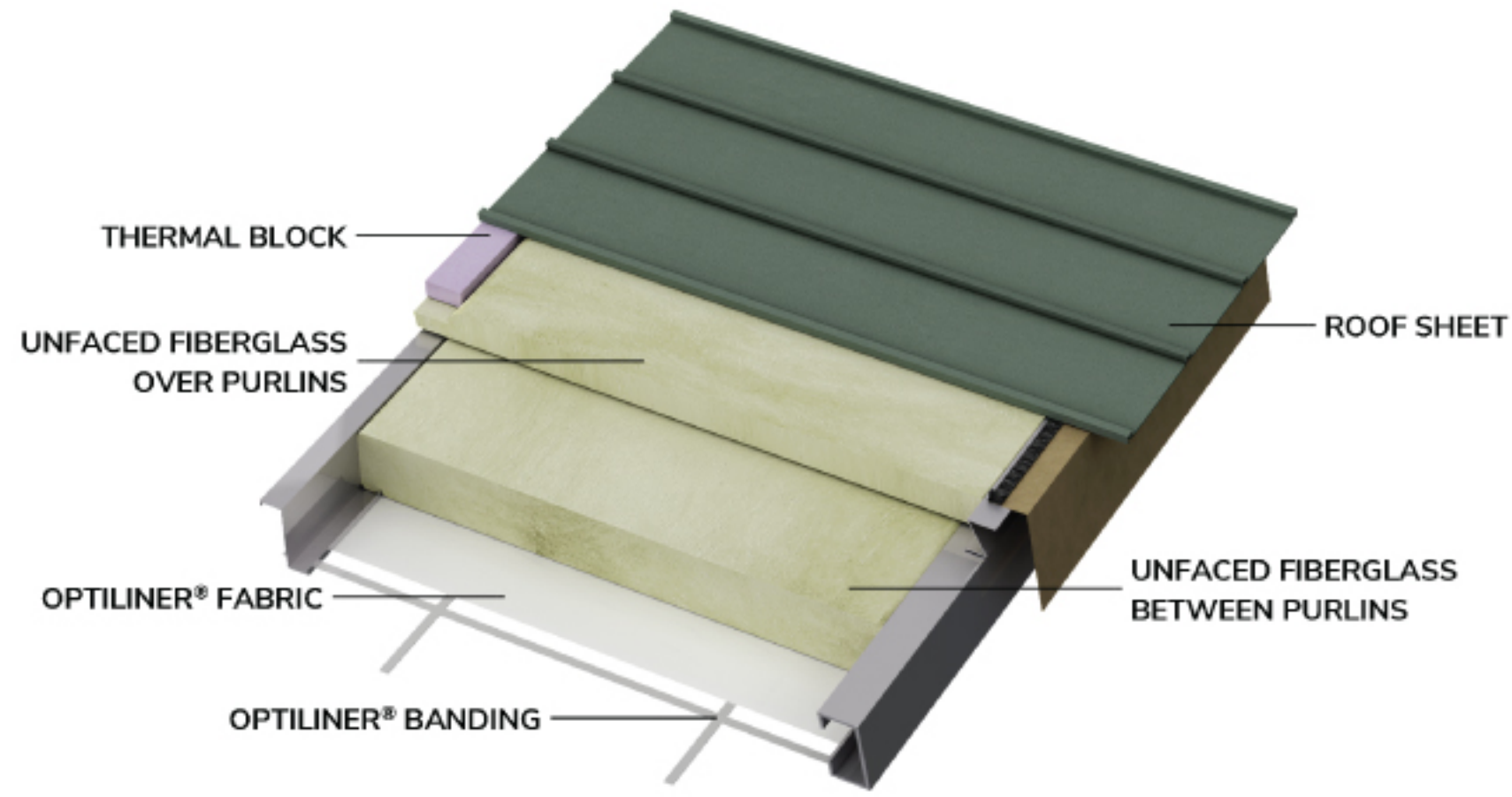
Standing Seam Roofs without Thermal Spacer Blocks

Liner System	R-19 + R-11	0.040
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Through-Fastened Roofs without Thermal Spacer Blocks

Liner System	R-19 + R-11	0.044
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- a. A standing seam roof clip that provides a minimum clip height of 1.5" from underside of roof and top of purlin.
 b. A minimum R-3 thermal spacer is required.



Wall Assembly U-Values

Thermal Break	Cavity Insulation	Wall U-Factor
None	R-15 MBI+	0.074
None	R-19 MBI+	0.066
1/8" Foam	R-25 MBI+	0.057
1/8" Foam	R-30 MBI+	0.049
Certified R-13	R-30 MBI+	0.042

Calculations based on Owens Corning™ OptiLiner® system; 8" girts spaced 5' on center.

**Learn more
at therm-all.com.**

Find more information about **OptiLiner®**, including specification guidelines, install instructions and more on our brand new website.

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