

HYGROTHERMAL SNAPSHOT

One-Inch Exterior Insulation on Framed Wall

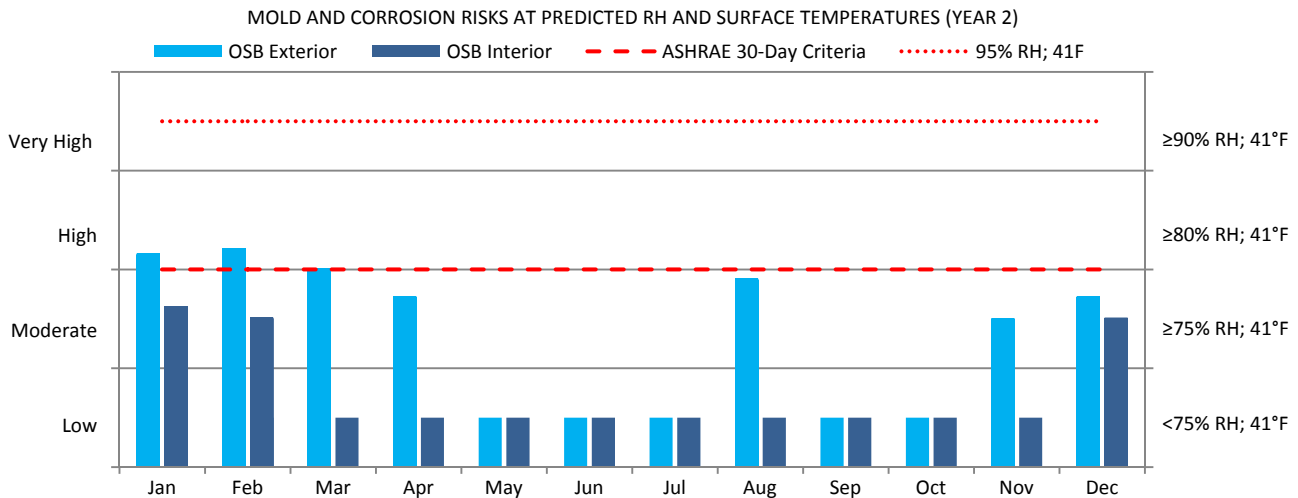
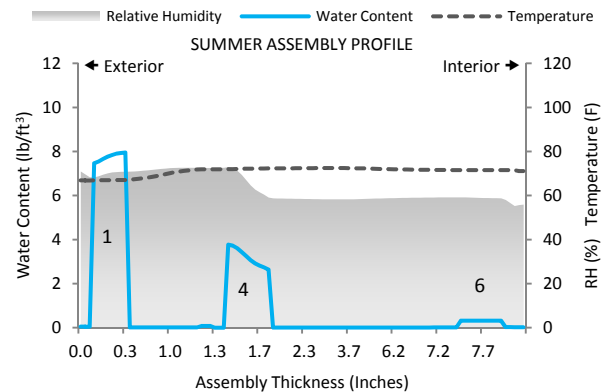
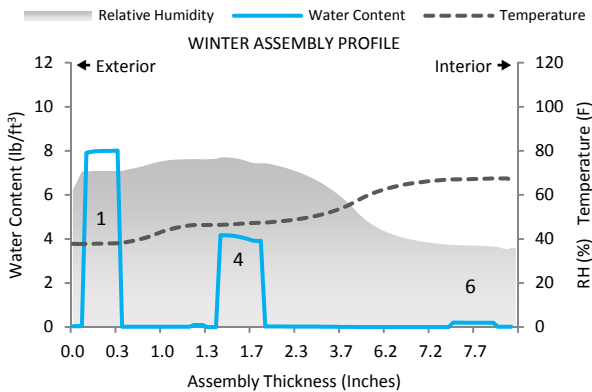
Atlanta, Georgia | 33.37°N 84.26°W | Elev. 1010 ft | -5 UTC

RATING

F



ASSEMBLY COMPONENTS			PARAMETERS		CLIMATE NORMALS	
1	Fiber Cement, Painted	0.31 in	Test Duration	2 Yrs	Temp. Daily Max / Min	71.5°F / 52.1°F
2	Extruded Polystyrene	1 in	Interior Moisture	Low	RH Daily Max / Min	82% / 56%
3	Housewrap WRB	0.008 in	Interior Temperature	69.8°F ± 1.8°F	Rainfall	49.7 in
4	OSB Sheathing	0.492 in	Interior Humidity	45% ± 15%	Snowfall	2.9 in
5	Fiberglass Batt Insulation	5.5 in	Orientation / Inclination	N / 90°	Wind Speed	8.4 mph
6	Interior Gypsum Board	0.492 in	Exterior Coating	-	Wind Direction	320°
7	Interior Paint & Primer	0.003 in	Interior Coating	-	Station Air Pressure	28.9 in
			Rain Exposure / Deposition ¹	1 / 0.5	Heating Degree Days (65 F)	2,768
			Rain Penetration ¹ (▶)	1%	Cooling Degree Days (65 F)	1,883
			Rainscreen / ACH	No / 0	Modeled Climate Data	WUFI



PERFORMANCE RATINGS

Ratings are based on ASHRAE Standard 160¹. Resistant materials are evaluated based on hourly 30-day running averages at ≥95% RH, 41°F.

P = Pass; Criteria met

C = Conditional; Criteria compliance is uncertain

F = Fail; Criteria not met for a 30-day running average

CF = Critical Fail; Criteria not met at multiple 30-day running averages

ABOUT THIS REPORT

These findings are offered for informational purposes only and are not intended as a comprehensive hygrothermal analysis. Design considerations should not rely on this report as the sole means for predicting assembly performance. Uncertainties and limitations inherent to hygrothermal modeling apply to these findings². For more information, visit our website at www.built-environments.com.

1. ASHRAE Standard 160: Criteria for Moisture-Control Design Analysis in Buildings.

2. ASTM MNL 18: Moisture Control in Buildings.