HYGROTHERMAL SNAPSHOT

Exterior Cellular Foam Glass Insulation on Framed Wall

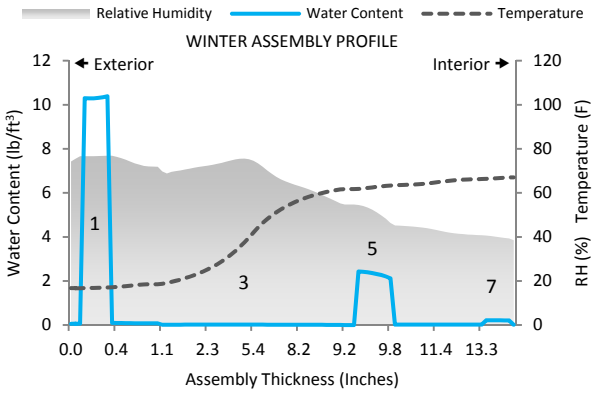
International Falls, Minnesota | 93.23°N 48.33°W | Elev. 1183 ft | -6 UTC

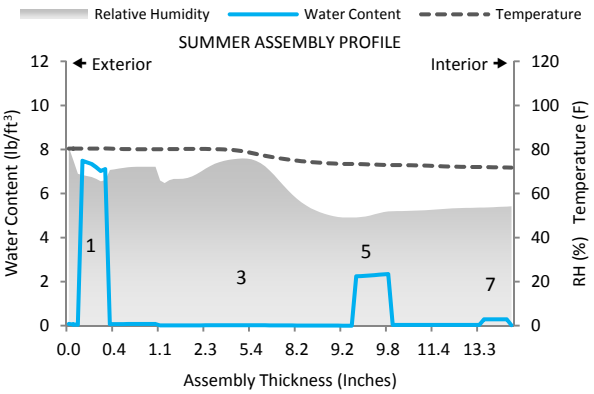
RATING
Pass
P

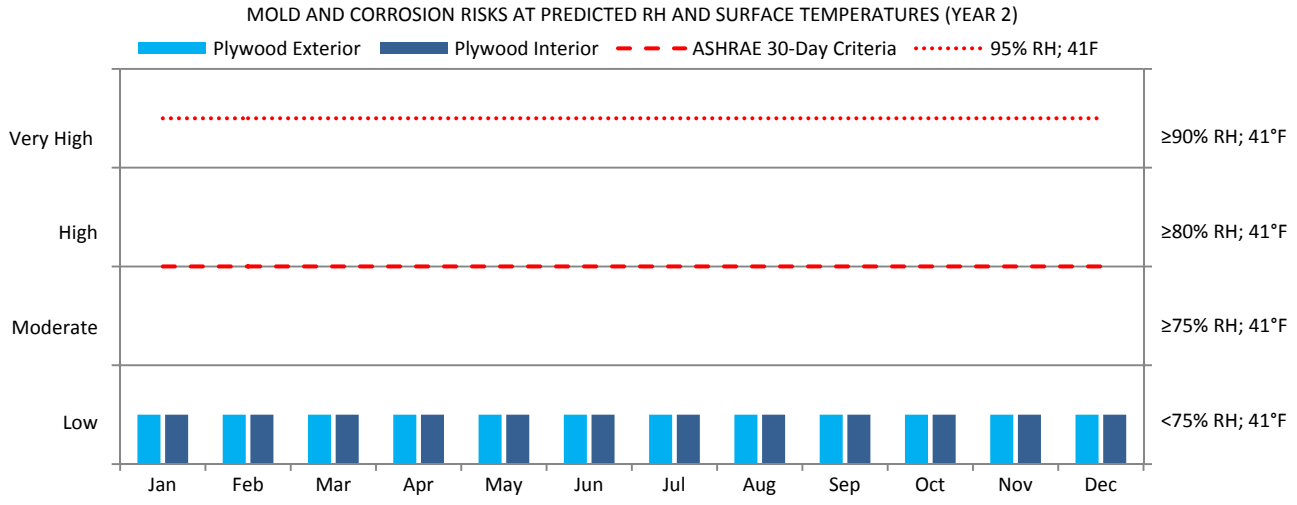
ASSEMBLY COMPONENTS		
1	Fiber Cement, Painted	0.315 in
2	Rainscreen Air Space	0.75 in
▶ 3	Cellular Foam Glass Panel	8 in
4	Housewrap WRB	0.008 in
5	Plywood	0.625 in
6	Wall Cavity (Air)	3.5 in
7	Interior Gypsum Board	0.492 in
8	Interior Paint & Primer	0.003 in

PARAMETERS	
Test Duration	2 Yrs
Interior Moisture	Low
Interior Temperature	69.8°F ± 1.8°F
Interior Humidity	45% ± 15%
Orientation / Inclination	N/ 90°
Exterior Coating	-
Interior Coating	-
Rain Exposure / Deposition[1]	1 / 0.5
Rain Penetration[1] (▶)	1%
Rainscreen / ACH	Yes / 120

CLIMATE NORMALS	
Temp. Daily Max / Min	48.7°F / 26.1°F
RH Daily Max / Min	82% / 62%
Rainfall	24.22 in
Snowfall	71 in
Wind Speed	7.9 mph
Wind Direction	300°
Station Air Pressure	28.7 in
Heating Degree Days (65 F)	10,221
Cooling Degree Days (65 F)	192
Modeled Climate Data	WUFI







PERFORMANCE RATINGS

Ratings are based on ASHRAE Standard 160[1]. 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 findings[2]. 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.