

HYGROTHERMAL SNAPSHOT

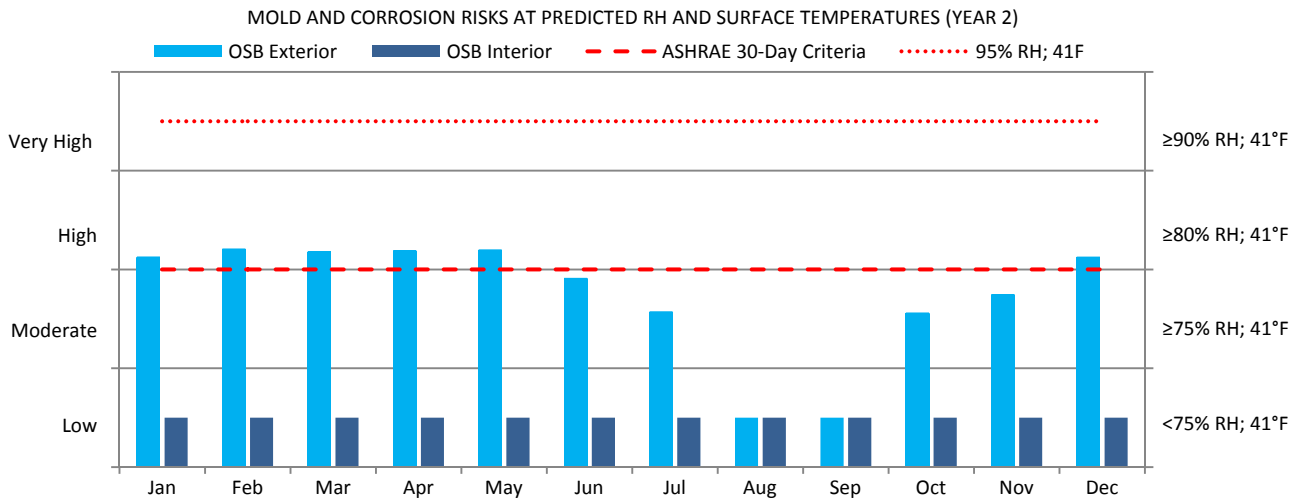
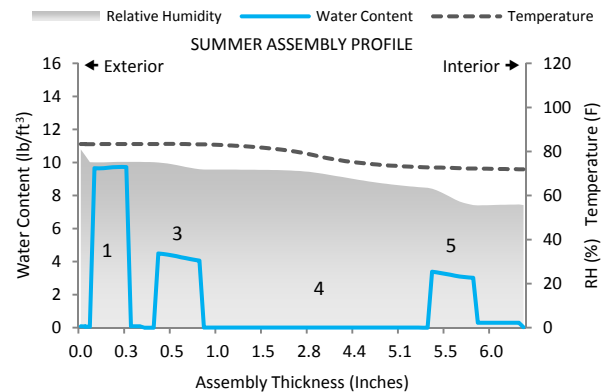
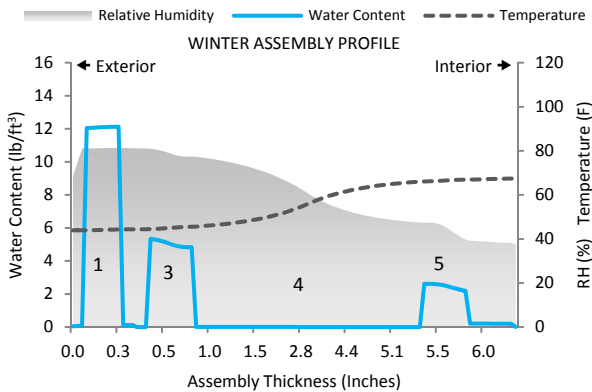
Fiber Cement Siding on Structural Insulated Panels (SIPs)

New Orleans, Louisiana | 29.59°N 90.15°W | Elev. 4 ft | -6 UTC

RATING
Critical Fail



ASSEMBLY COMPONENTS			PARAMETERS		CLIMATE NORMALS	
1	Fiber Cement, Painted	0.315 in	Test Duration	2 Yrs	Temp. Daily Max / Min	78.2°F / 61.1°F
2	Housewrap WRB	0.008 in	Interior Moisture	Low	RH Daily Max / Min	88% / 63%
3	OSB : Outer SIP Shell	0.438 in	Interior Temperature	69.8°F ± 1.8°F	Rainfall	62.45 in
4	EPS: SIP Core	4.5 in	Interior Humidity	45% ± 15%	Snowfall	0 in
5	OSB: Inner SIP Shell	0.438 in	Orientation / Inclination	N / 90°	Wind Speed	8.1 mph
6	Interior Gypsum Board	0.492 in	Exterior Coating	-	Wind Direction	170°
7	Interior Paint & Primer	0.003 in	Interior Coating	-	Station Air Pressure	30.02 in
			Rain Exposure / Deposition ¹	1 / 0.5	Heating Degree Days (65 F)	1,280
			Rain Penetration ¹ (▶)	1%	Cooling Degree Days (65 F)	3,005
			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

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

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.

2. ASTM MNL 18: Moisture Control in Buildings.