

HYGROTHERMAL SNAPSHOT

Stucco on Structural Insulated Panels (SIPs)

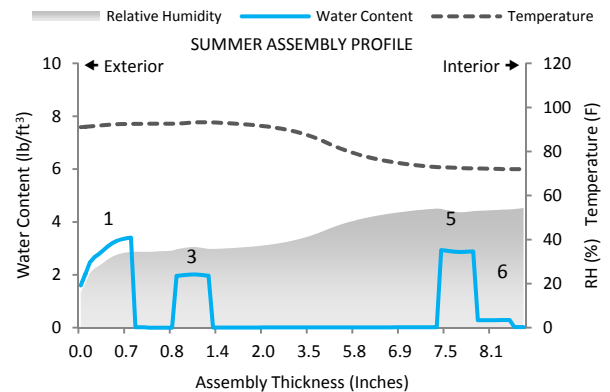
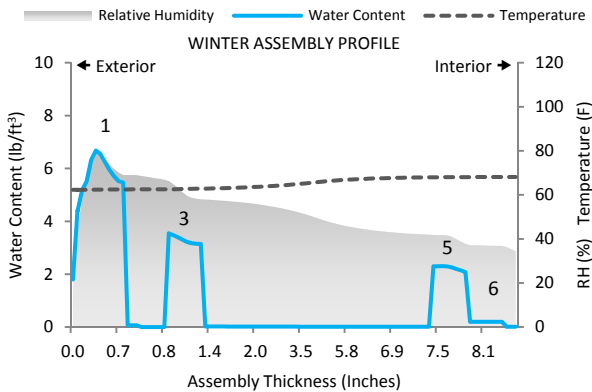
Phoenix, Arizona | 33.25°N 112.0°W | Elev. 1107 ft | -7 UTC

RATING

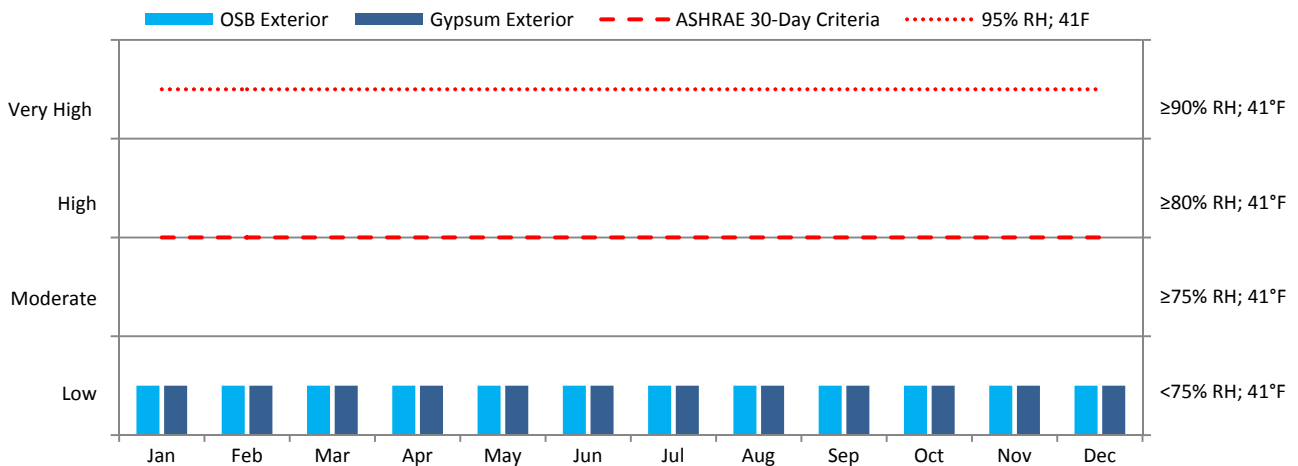
Pass



ASSEMBLY COMPONENTS			PARAMETERS		CLIMATE NORMALS	
1	Portland Stucco	0.787 in	Test Duration	2 Yrs	Temp. Daily Max / Min	86.6°F / 63.4°F
2	Two-Ply 60-Minute Paper	0.016 in	Interior Moisture	Low	RH Daily Max / Min	49% / 23%
3	OSB Exterior of SIP Panel	0.492 in	Interior Temperature	69.8°F ± 1.8°F	Rainfall	8.03 in
4	Polyisocyanurate SIP Core	6 in	Interior Humidity	45% ± 15%	Snowfall	0 in
5	OSB Interior of SIP Panel	0.492 in	Orientation / Inclination	E / 90°	Wind Speed	6.1 mph
6	Interior Gypsum Board	0.492 in	Exterior Coating	-	Wind Direction	110°
7	Interior Paint & Primer	0.003 in	Interior Coating	-	Station Air Pressure	28.7 in
			Rain Exposure / Deposition ¹	1 / 1	Heating Degree Days (65 F)	935
			Rain Penetration ¹ (▶)	1%	Cooling Degree Days (65 F)	4,607
			Rainscreen / ACH	No / 0	Modeled Climate Data	WUFI



MOLD AND CORROSION RISKS AT PREDICTED RH AND SURFACE TEMPERATURES (YEAR 2)



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.