**ICF Wall Construction**

**Pittsburgh, Pennsylvania | 40.29°N 80.12°W | Elev. 1,203 ft | -5 UTC**

**ASSEMBLY COMPONENTS**

<table>
<thead>
<tr>
<th>No.</th>
<th>Component</th>
<th>Thickness</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Fiberglass Siding</td>
<td>0.315 in</td>
</tr>
<tr>
<td>2</td>
<td>Housewrap WRB</td>
<td>0.008 in</td>
</tr>
<tr>
<td>3</td>
<td>EPS: ICF Outer Shell</td>
<td>2.625 in</td>
</tr>
<tr>
<td>4</td>
<td>Concrete: ICF Core</td>
<td>6 in</td>
</tr>
<tr>
<td>5</td>
<td>EPS: ICF Inner Shell</td>
<td>2.625 in</td>
</tr>
<tr>
<td>6</td>
<td>Interior Gypsum Board</td>
<td>0.492 in</td>
</tr>
</tbody>
</table>

**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 / 0.5
- Rain Penetration: 1%
- Rainscreen / ACH: No / 0

**CLIMATE NORMALS**

- Temp. Daily Max / Min: 60.6°F / 41.9°F
- RH Daily Max / Min: 79% / 58%
- Rainfall: 38.19 in
- Snowfall: 41.4 in
- Wind Speed: 7.9 mph
- Wind Direction: 270°
- Station Air Pressure: 28.74 in
- Heating Degree Days (65 F): 5,710
- Cooling Degree Days (65 F): 736
- Modeled Climate Data: WUFI

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

- Gypsum Exterior
- Gypsum Interior
- ASHRAE 30-Day Criteria
- 95% RH; 41°F

**PERFORMANCE RATINGS**

Ratings are based on ASHRAE Standard 160. 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. For more information, visit our website at www.built-environments.com.

2. ASTM MNL 18: Moisture Control in Buildings.