

# Test Results Summary

Test EMC-3639			
<b>UV Resistance</b> ICC AC48, ICC EG356	<a href="#">9 weeks/630 light hours - No peeling, chipping, cracking, flaking, pitting, crazing, erosion, or other deleterious effects were observed under a 5x magnification</a>		
<b>Fungal Resistance</b> ASTM C 1338	<a href="#">Aspergillus niger ATCC # 9642 - No growth</a>		
	<a href="#">Aspergillus versicolor ATCC # 11730 - No growth</a> <a href="#">Aspergillus flavus ATCC # 9643 - No growth</a> <a href="#">Chaetomium globosum ATCC # 6205 - No growth</a> <a href="#">Penicillium pinophilum ATCC # 11797 - No growth</a>		
<b>Water Vapor Transmission</b> ASTM E 96-05 (ASTM E 96-00E01)	<a href="#">Avg. WVT: 9.6</a>		
	<a href="#">Avg. Permeance: 23.45</a> <a href="#">Avg. Permeability: 8.79</a>		
<b>Funnel Testing of Wall Systems</b> ASTM E 2273, ICC EG356	<a href="#">Panel 1:</a> <a href="#">with WOW-3639</a> <a href="#">Water Collected: 97.5%</a>		<a href="#">Panel 2:</a> <a href="#">with LR-3639</a> <a href="#">Water Collected: 97.4%</a>
Funnel Testing of Wall Systems	Panel	Time to Stop Draining (hrs)	Observations
	No Drainage Plane	>3:30:00	Wall did not drain but absorbed the water. After 3 ½ hours still wet as water bleeds through scratch coat
	EMC-3639	0:01:40	Dripping stopped and wall starting to dry
	EMC-3639 with WOW-3639	0:02:45	Dripping stopped and wall starting to dry

**Restricted  
Funnel Wall  
Test**

6.65Kg Water introduced to Wall Panels

Panel	Time to Stop Draining (hrs)	Observations
No Drainage Plane	0:25:00	Dripping stopped top of Wall starting to dry, some water bled through scratch coat. Collected 1.580 Kg of water
EMC-3639	0:08:30	Dripping stopped and collected 4.896 Kg of water. Some water missed the collection pan
EMC-3639 with WOW-3639	0:02:45	Dripping stopped and collected 5.668 Kg of water. Some water missed the collection pan

**Compression**

Avg. Compressive Strength: 18.5 kPa  
Avg. Load at 10% Deform.: 248 lbf

**Mean  
Compressive  
Strength**127 kPa**Thickness &  
Weight**

Weight: 860 g/m<sup>2</sup>  
Thickness: .77mm

**Dynamic  
Impact Load**Passed 14 of 15 trials (93%)**Static  
Puncturing**Passed 6 of 6 trials**Low-temp  
flexibility**No Cracking**Tensile  
Strength &  
Elongation**

**Tensile Strength:**  
Machine Direction, 14% of original  
Cross-Machine Direction, 13% of original.  
**Elongation:**  
Machine Direction, 59% of original  
Cross-Machine Direction, 49% of original.

<b>Water Immersion:</b>	<a href="#">Dimensional Change: 0%</a> <a href="#">Weight Change 0.08%</a> <a href="#">More...</a>			
<b>Heat Aging</b>	<a href="#">Dimensional Change: 0%</a> <a href="#">Weight Change: 0.002%</a> <a href="#">More...</a>			
<b>Chemical Exposure: Ammonium Chloride</b>	<a href="#">No visible Deterioration</a>			
<b>Chemical Exposure: Sodium Sulfate</b>	<a href="#">No visible deterioration</a>			
<b>Dimensional Stability - Mean Results</b>	<a href="#">With Cloth:</a>			
	-30°C	-15°C	50°C	70°C
	0	-.1	.1	.3
	<a href="#">Without Cloth:</a>			
	-30°C	-15°C	50°C	70°C
	0	-.1	0	.1
<b>Moisture Testing of Sure Cavity™ Drainage System</b>	Maximum recorded Wood Moisture Equivalent			
	<b>Layer</b>	<b>Panel with EMC-3639</b>	<b>Control Panel (No Drainage Plane)</b>	
	Wood Layer	8.72	13.17	
	Building Paper Layer 1	9.29	16.55	
	Building Paper Layer 2	10.06	27.34	

## Testing on Other Products

<b>Test</b>	<b>White Plastic Products</b>
<b>UV Resistance</b> ASTM G 154-00A	<a href="#">10 hrs/day for 21 days (210 hours) - All panels had yellowing but no cracking, checking, crazing, or erosion that might affect performance.</a>
<b>Fungal Resistance</b> ASTM C 1338	<a href="#">Aspergillus niger ATCC # 9642 - No growth</a> <a href="#">Aspergillus versicolor ATCC # 11730 - No growth</a> <a href="#">Aspergillus flavus ATCC # 9643 - No growth</a> <a href="#">Chaetomium globosum ATCC # 6205 - No growth</a> <a href="#">Penicillium pinophilum ATCC # 11797 - No growth</a>