

Spray Wrap

Test	Method	Criteria	Results
Air Leakage of Air Barrier Assemblies	ASTM E 2357	Less than 0.04 cfm/ft ² @ 1.57 psf	Pass
Aging Water Penetration Resistance	AATCC127 (Water Column)	Resist 21.6 in (55 cm) water for 5 hours before and after aging.	No water penetration before and after aging. No water penetration at 332 inches (843cm) head of water before aging.
Structural Loading Water Penetration Testing	ASTM E 1233 ASTM E 331	No water at exterior plane of sheathing (exterior gypsum, Dens-Glass Gold, plywood, OSB) after 10 cycles at 80% design load and 75 minutes water spray at 6.24 psf (299 Pa) pressure differential with water spray rate of 5 gal/ft ² -hr (3.4 L/m ² -min).	No water penetration before and after aging. No water penetration at 332 inches (843cm) head of water before aging.
Cyclic Pressure Water Penetration Testing	ASTM E 283 ASTM E 331	No water penetration or evidence of elevated moisture levels in plywood sheathing after 10 cycles of conditioning at 299 Pa (6.24 psf) positive and negative pressure followed by 75 minutes water spray at 6.24 psf (299 Pa) pressure differential with water spray rate of 5 gal/ft ² -hr (3.4 L/m ² -min).	No water penetration before and after aging. No water penetration at 332 inches (843cm) head of water before aging.
Water Penetration R-GUARD Spray Wrap (8-in medium wt CMU w/2 coats)	ASTM E 331	No leakage at 137 Pa (2.86 psf) for 15 minutes	No leakage at 137 Pa (2.86 psf) for 15 minutes. No leakage at 300 Pa (6.24 psf) for 120 minutes.
Water Resistance Testing	ASTM D 2247	Absence of deleterious effects after 14-day exposure.	No visible deleterious effects after 14-day exposure.
Resistance to Mold Growth	ASTM D 3273	No mold growth after 28 days.	No mold growth after 28-day exposure.
Freeze/Thaw Resistance	ICBO Method (AC 24)	No visible effects (cracking, checking, delamination, erosion) when viewed at 5x.	No visible deleterious effects when viewed at 5x.
Water Vapor Transmission (WMT)	ASTM E 96 Method B (Water Method)	Measure.	4.7 grains/square feet/hour
Water Vapor Penetration (WMP)	ASTM E 96 Method B	Measure.	10.5 perms
Air Leakage: Wall Assembly with R-GUARD Fill and R-GUARD Spray Wrap	ASTM E 283 (SBCCI PST & ESI Method)	<0.06 cfm/ft ² at 1.57 psf (0.00030 m ³ /s m ² at 75 Pa)	0.0044 cfm/ft ² (0.000022 m ³ /s m ²)
Air Leakage: R-GUARD Spray Wrap (8-in medium wt CMU w/2 coats)	ASTM E 2178	<0.004 cfm/ft ² air leakage at 1.57 psf <0.02 L/s m ² air leakage at 75 Pa	<0.004 cfm/ft ² air leakage at 1.57 psf <0.004 cfm/ft ² air leakage at 6.24 psf <0.02 L/s m ² air leakage at 75 Pa <0.02 L/s m ² air leakage at 300 Pa
Structural Integrity	ASTM E 330	2-in (51mm) water pressure (positive and negative) for one hour.	No loss of structural integrity.
Flexibility	ASTM D 522	No cracking or delamination using 1/8-in (3mm) mandrel at 14°F (-10°C) before and after aging.	No cracking or delamination before or after aging.
Tensile Adhesion	ASTM C 297	>15 psi (103 kPa)	Gypsum (ASTM C 79): >30 psi (206 kPa) Gypsum (ASTM C 1177): >30 psi (206 kPa) Exposure 1 OSB: >50 psi (344 kPa) Exterior Plywood: >90 psi (620 kPa)
Nail Sealability R-GUARD Spray Wrap	ASTM D 1970	No water found on nail shanks, on underside of sheathing and/or between sheathing and product coating.	Dens-Glass®: Pass Plywood: Pass Applied in single 10 mil wet film and allowed to dry 14-days under laboratory conditions.
Surface Burning	ASTM E 84	Flame Spread <25 Smoke developed: <450	Flame Spread: 5 Smoke Developed: 10 NFPA Class A, UBC Class 1 building material
Fire Testing	UBC 26-9	No increase in fire hazard.	Pass.