

Test/Properties

Test / Description	Results	Pass / Fail Criteria	Referenced Standard Test Method
R-Value, (RSI), [U value-EU] / per inch (25.4mm)	R 4.2, (RSI 0.74), [1.35], EPS Type 2 - 1.5lbs/ft ³ (24.19kg/m ³)	Min. R 4.00 (RSI 0.70)	ASTM C518
Water Absorption	0.17%	Max. 4%	ASTM 2842
Water Vapor Permeance	0.69 perm-in (39.8 ng/Pa-s-m ²)	PASS - Max. 3.5perm-in. (201 ng/Pa-s-m ²)	ASTM E96
Compressive Strength	26.1 psi (180 kPa)	15 psi(103.44 kPa)	ASTM D1621 & ASTM C165
Flexural Strength	56 psi (386.1 kPa)	35 psi (241.38 kPa)	ASTM C203
Density	1.50 lbs/ft ³ (24.19 Kg/m ³)	1.35 lbs/ft ³ (21.63 Kg/m ³)	ASTM C1622 & ASTM C303
Dimensional Stability – Thermal & Humid Aging	0.4% Max.	Max. 2.0%	ASTM D2126
Capillarity	None	N/A	NRC-CNRC - ISSN 1206 - 1220
Dimensions	Max. length variation ≤ 1/8”(3.1mm) Max. Height variation ≤ 1/16”(1.5mm) Max. width variation ≤ 1/16”(1.5mm)	Meets and exceeds Industry Standards	ASTM C303 AC 353 (2014)
Flame Spread Rating	EPS Type 2 X 2.5” = 30	N/A	ASTM E84 - UL 723
Smoke Developed Rating	EPS Type 2 X 2.5” = 600	N/A	ASTM E84 - UL 723
Wall Assembly Fire Endurance Test	2hrs - 4” (102mm) Concrete 3hrs - 6” (152mm) Concrete 4hrs - 8” (203mm) Concrete	N/A	ASTM E119 CAN/ULC S101
Standard Room Fire Test	Test stopped at 15 min.	Pass - 15 minutes requirements	UBC 26-3
Concrete Pour-in-place Form Deflection	Observation of deflection < 1/8”(2mm)	PASS	ASTM 2634 - CCMC Forming Capacity Test
Sound Transmission	STC 57 - 6”(152mm) Concrete Wall STC 58 - 8” (203mm) Concrete Wall	N/A	ASTM E90 - HUD
UPITT Toxicity	LC50 < 19.7g	PASS	University of Pittsburgh Toxicity test
Screw withdrawal Test - No. 8 Screws (Newton)	Avrg. Withdrawal = 222 lbs. (988 N) Avrg. Lateral = 185 lbs. (823 N)		ASTM D1761
AC353 Screw withdrawal Test - No. 8 Screws (Newton)	Withdrawal = 44.4 lbs. (196 N) Lateral = 33 lbs. (147 N)	N/A	ASTM 1761 and in accordance with ICC - AC 353
EPS Type 2 Material 100% Recyclable	95% New material 5% Recycled (when available)	N/A	LEED COMPLIANT
Reprocessed HIPS Plastic Material - 100% recyclable	95% Post industrial Feedstock 5% Consumer Feedstock	N/A	LEED COMPLIANT
Forming Capacity of IntegraSpec ICF assembly	avg. Pressure = 38 to 50 Kpa	PASS (≥ 25 Kpa)	CCMC Technical Guide Master Format 03 11 19.01
	Avg. deformation ≤ 2 mm	PASS (≤ 10 mm)	
ICF Form Wastes	< 3% overall	N/A	LEED COMPLIANT