

Product Information Bulletin

BULLETIN NO.	344
ISSUED:	December 20, 2016
REPLACES:	NEW

DuroFoam® Plus Insulation - CAN/ULC-S701, Type 2 Material Properties

DuroFoam® Plus Insulation is a rigid, closed-cell insulation that meets or exceeds requirements for expanded polystyrene (EPS) insulation manufactured to CAN/ULC-S701, Type 2 as per the table below. **DuroFoam Plus** insulation has laminated films on the top and bottom surfaces which results in a more durable product that is less susceptible to handling damage.

DuroFoam Plus insulation has a green facer with product identification and markings to assist with cutting insulation/spacing of fasteners for attachment to framing. The reflective facer on the opposite side contains a thin layer of foil embedded within the film. The reflective facer itself does not increase the nominal thermal resistance of **DuroFoam Plus** insulation. Additional information on wall systems using reflective insulation is provided in Plasti-Fab PIB 253.

Material Property ¹	Test Method	Units	Values
Thermal Resistance Minimum per 25 mm (inch)	ASTM C518	m ² •°C/W	0.70
		(ft²•h•°F/BTU)	(4.04)
Compressive Resistance Minimum @ 10% Deformation	ASTM D1621	kPa	110
		(psi)	(16)
Flexural Strength Minimum	ASTM	kPa	240
	C203	(psi)	(35)
Water Vapour Permeance ² Maximum for 25-mm (1-inch) thickness	ASTM E96	ng/(Pa·s·m²)	30
		(Perms)	(0.5)
Water Absorption ³ <i>Maximum</i>	ASTM D2842	% By volume	4.0
Dimensional Stability Maximum, 7 Days @ 70 ± 2 ℃ (158 ± 4 ℉)	ASTM D2126	% Linear Change	1.5
Limiting Oxygen Index Minimum	ASTM D2863	%	24
Surface Burning Characteristics Classification or Rating	CAN/ULC S102.2	Flame Spread	290
		Smoke Developed	Over 500

^{1.} *DuroFoam Plus* insulation properties are third party certified to CAN/ULC-S701, *Standard for Thermal Insulation, Polystyrene, Boards and Pipe Covering*, and listed by the Canadian Construction Materials Centre (CCMC) under evaluation listing number 12425-L (Type 2).

^{2.} Unfaced EPS insulation *maximum* vapour permeance is 200 ng/Pa•s•m² (3.5 perms). *DuroFoam Plus* insulation vapour permeance is significantly lower as a result of the laminated films. Where water vapour permeance is a design issue, contact Plasti-Fab technical services for additional information.

^{3.} The water absorption laboratory test method involves complete submersion under a head of water for 96 hours. The water absorption values above are applicable to specific end-use design requirements only to the extent that the end-use conditions are similar to test method requirements.