Evaluation Listing CCMC 12426-L
PlastiSpan 25, PlastiSpan 25 Type 3, PlastiSpan M28, DuroFoam 25, PlastiSpan M-30, PlastiSpan M-40, PlastiSpan 40

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1. Evaluation

The products conform to CAN/ULC-S701-11, Type 3. The evaluation of these products is based solely on their certification by Intertek Testing Services (ITS) North America Limited.

2. Description

The products are thermal insulation materials composed of expanded polystyrene beads that are moulded and cut to rigid board type sections and are available in various sizes. “DuroFoam 25” is faced with a polypropylene film on both sides.

3. Standard and Regulatory Information

See the Annex appended to this Listing, which summarizes the product standard.

This/These product(s) was/were evaluated to the product standard referenced in the Annex current as of 2012-03-05. Note that the Annex may have been updated since this Listing was issued to include more recent editions of the applicable product standard. Therefore, this Listing may not reflect the requirements contained in any updated version of this product standard.

Listing Holder

Plasti-Fab Ltd.
100 – 2886 Sunridge Way NE
Calgary, AB T1Y 7H9

Telephone: 403-569-4312

Email: jwhalen@plastifab.com

Web site: www.plastifab.com

Plants

Ajax, ON
Crossfield, AB
Delta, BC
Kitchener, ON
Saskatoon, SK
Winnipeg, MB
Lebanon, OH, USA

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Expanded Polystyrene Insulation Board and Pipe Covering (Annex)

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Scope

These Evaluation Listings apply to factory-made, rigid expanded polystyrene insulation in the form of pipe covering and boards with or without facings or coatings and made by moulding (EPS) or extrusion (XPS) of expandable polystyrene beads. It is intended for use as a thermal insulation in building construction and other applications within a temperature range of −54°C to +75°C.

Products covered by one of the standards listed below are also used for sound insulation and in prefabricated thermal insulation systems and composite panels. The performance of systems incorporating these products is not covered by the Evaluation Listing.

The proponent has demonstrated that the product meets at least one of the following standards:

- CAN/ULC-S701-05, “Standard for Thermal Insulation, Polystyrene, Boards and Pipe Covering”
- CAN/ULC-S701-11, “Standard for Thermal Insulation, Polystyrene, Boards and Pipe Covering”

Products meeting the above standards are classified as Type 1, 2, 3 or 4.

Notes

The moulded/expanded polystyrene (EPS) insulation industry subscribes to an accredited certification program as part of their quality assurance. The Listings for EPS insulation products that are published in the Canadian Construction Materials Centre (CCMC) Registry are based on the participation of one of the certification organizations accredited by the Standards Council of Canada (SCC).

Annex A of CAN/ULC-S701-11 includes requirements for flat, uncoated EPS thermal insulation boards that are to be used in exterior insulation and finish systems (EIFS). Annex A forms a mandatory part of the standard.

Standard

Table 1 Material Property Standards as per CAN/ULC-S701-05 and CAN/ULC-S701-11[1]

Property	Unit	Requirement			
		Type 1	Type 2	Type 3	Type 4
Thermal resistance for 25 mm thickness	$m^2 \cdot °C/W$	≥ 0.65	≥ 0.70	≥ 0.74	≥ 0.86
Long-term thermal resistance (LTTR)	$m^2 \cdot °C/W$	See Table Note 2			
		See Table Note 3			
Water vapour permeance for 25 mm thickness	$ng/(Pa \cdot s \cdot m^2)$	≤ 300	≤ 200	≤ 130	≤ 60 (CAN/ULC-S701-05)
					≤ 90 (CAN/ULC-S701-11)
Dimensional stability	% linear change	≤ 1.5	≤ 1.5	≤ 1.5	≤ 1.5
Flexural strength	kPa	≥ 170	≥ 240	≥ 300	≥ 350
Water absorption	% by volume	≤ 6.0	≤ 4.0	≤ 2.0	≤ 0.7
Compressive strength	kPa	≥ 70	≥ 110	≥ 140	≥ 210
Limiting oxygen index	%	≥ 24	≥ 24	≥ 24	≥ 24

Notes to Table 1:

1. As per CAN/ULC-S701-11, where EPS insulation is to be used in EIFS applications, users must refer to Annex A for mandatory additional requirements.
2. The requirement of LTTR is applicable to XPS only. CAN/ULC-S701-05 requires a minimum value of 1.73 $m^2 \cdot °C/W$ for a 50-mm-thick product. The LTTR value must also be reported for the 25-mm- and 75-mm-thick products.
3. The requirement of LTTR is applicable to XPS only. CAN/ULC-S701-11 requires a minimum value of 1.68 $m^2 \cdot °C/W$ for a 50-mm-thick product. The LTTR value must also be reported for the 25-mm- and 75-mm-thick products.

Labelling

A product that meets the requirements in CAN/ULC-S701-05 must be marked with the following information:

- ULC standard number;
- type; and
- name or trademark of the manufacturer.

A product that meets the requirements in CAN/ULC-S701-11 must be marked with the following information:

- ULC standard number;
- type;
- product thickness;
- thermal resistance per unit of thickness (LTTR for XPS insulation);
- production identification number; and
- name or trademark of the manufacturer.

For both standards the product must also be marked with the warning:

> **"Caution: This product is combustible. A protective barrier or thermal barrier is required as specified in the appropriate building code."**

National Building Code (NBC) of Canada

NBC References

CAN/ULC-S701-11 is referenced in Sentences 9.15.4.1.(1) and 9.25.2.2.(1) and Tables 5.9.1.1., 9.23.17.2.A. and A-9.36.2.4.(1)-D of Division B of the NBC 2015.

CAN/ULC-S701-11 is also referenced in Sentences 9.15.4.1.(1) and 9.25.2.2.(1) and Tables 5.10.1.1., 9.23.17.2.A. and A-9.36.2.4.(1)-D of Division B of the NBC 2010.

CAN/ULC-S701-05 is not referenced in NBC 2010.