

BUILDING PRODUCTS PROGRAM

Class: Thermal Insulation

Customer: LOGIX Insulated Concrete Forms, Ltd.
Location: 9242 Pinetree Place, Whistler, BC, Canada V0N 1B9
Website: <http://www.LOGIXicf.com>

Listing No. B1031-2
Project No. B1031-2
Effective Date: May 30, 2014
Last Revised: **November 26, 2014**
Expires: N/A

Product: LOGIX Halo™ Expanded Polystyrene (EPS) Thermal Insulation
LOGIX Heat Sheet™ Expanded Polystyrene Subfloor Insulation Products

Label: **Product is marked with labels supplied by LOGIX Insulated Concrete Forms, Ltd. The label includes the manufacturer's name, trademark, or other recognized symbol of identification, the product model designation, month and year of manufacture or equivalent, QAI logo with the 'US' and 'C' identifier, and CAN/ULC S701 Type, ASTM C578 Type, CAN/ULC S102.2, and ASTM E84 FSI and SDI Rating. Labels are applied to palletized finished products to ensure visibility on the jobsite.**

Standard: CAN/ULC S701 "Thermal Insulation, Polystyrene, Boards and Pipe Covering".

CAN/ULC S102.2 "Standard Method of Test for Surface Burning Characteristics of Flooring, Floor Coverings, and Miscellaneous Materials and Assemblies".

ASTM C578 "Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation".

ASTM E84 - "Standard Test Method for Surface Burning Characteristics of Building Materials".

Ratings: **The following outlines LOGIX Halo™ and LOGIX Heat Sheet Expanded Polystyrene (EPS) Thermal Insulation Performance determined in accordance with the noted standards.**

LOGIX Halo™ Expanded Polystyrene Thermal Insulation Properties per CAN/ULC S701

PROPERTY	TYPE 1	TYPE 2	TYPE 3
Thermal Resistance Minimum at 25 mm Thickness (m ² *°C/W)	0.76	0.80	0.81
Water Vapour Permeance Maximum at 25 mm Thickness (Ng/Pa*s*m ²)	300	200	130
Dimensional Stability Maximum Linear Change (%)	1.5	1.5	1.5
Flexural Strength Minimum (kPa)	170	240	300
Water Absorption By Volume Maximum (%)	6.0	4.0	2.0
Compressive Strength Minimum at 10% Deformation (kPa)	70	110	140
Limiting Oxygen Index Minimum (%)	24	24	24

LOGIX Heat Sheet Expanded Polystyrene Thermal Insulation Properties per CAN/ULC S701

PROPERTY	TYPE 2	TYPE 3
Thermal Resistance Minimum at 25 mm Thickness (m ² *°C/W)	0.80	0.81
Water Vapour Permeance Maximum at 25 mm Thickness (Ng/Pa*s*m ²)	200	130
Dimensional Stability Maximum Linear Change (%)	1.5	1.5
Flexural Strength Minimum (kPa)	240	300
Water Absorption By Volume Maximum (%)	4.0	2.0
Compressive Strength Minimum at 10% Deformation (kPa)	110	140
Limiting Oxygen Index Minimum (%)	24	24

LOGIX Halo™ and Heat Sheet Expanded Polystyrene Thermal Insulation Surface Burning Characteristics per CAN/ULC S102.2

LOGIX HALO and HEAT SHEET INSULATION	DENSITY	MAXIMUM THICKNESS	FLAME SPREAD INDEX (FSI)	SMOKE DEVELOPED INDEX (SDI)
Type 1, Type 2, Type 3	Maximum 32 kg/m ³	100 mm Maximum	≤ 250	≥ 500

LOGIX Halo™ Expanded Polystyrene Thermal Insulation Properties per ASTM C578

PROPERTY	TYPE VIII	TYPE II	TYPE IX
Compressive Strength Minimum @ 10% Deformation (psi)	13.0	15.0	25.0
Thermal Resistance Minimum @ 1 inch Thick (F*ft ² *h/Btu)	4.48	4.53	4.59
Flexural Strength Minimum (psi)	30.0	35.0	50.0
Water Vapor Permeance @ 1 inch Thickness Maximum (Perms)	3.5	3.5	2.5
Water Absorption By Volume Maximum (%)	3.0	4.0	2.0
Dimensional Stability Linear Change Maximum (%)	2.0	2.0	2.0
Oxygen Index Minimum (%)	24.0	24.0	24.0
Density Minimum (lbs/ft ³)	1.15	1.35	1.80

LOGIX Heat Sheet Expanded Polystyrene Thermal Insulation Properties per ASTM C578

PROPERTY	TYPE II	TYPE IX
Compressive Strength Minimum @ 10% Deformation (psi)	15.0	25.0
Thermal Resistance Minimum @ 1 inch Thick (F*ft ² *h/Btu)	4.53	4.59
Flexural Strength Minimum (psi)	35.0	50.0
Water Vapor Permeance @ 1 inch Thickness Maximum (Perms)	3.5	2.5
Water Absorption By Volume Maximum (%)	4.0	2.0
Dimensional Stability Linear Change Maximum (%)	2.0	2.0
Oxygen Index Minimum (%)	24.0	24.0
Density Minimum (lbs/ft ³)	1.35	1.80

LOGIX Halo™ and Heat Sheet Expanded Polystyrene Thermal Insulation Surface Burning Characteristics per ASTM E84

LOGIX HALO and HEAT SHEET INSULATION	DENSITY	MAXIMUM THICKNESS	FLAME SPREAD INDEX (FSI)	SMOKE DEVELOPED INDEX (SDI)
Type VIII, Type II, Type IX	Maximum 2.20 lbs/ft ³	4.0 Inches Maximum	≤ 25	≤ 450

Note: **Final acceptance of the product in the intended application is to be determined by the authority having jurisdiction.**

Product is to be installed in accordance with the manufacturer's published installation instructions by qualified installing personnel.

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FORM History

History Date	Version	Change Description	Reviewed By	Approved By
04/17/2014	3.0	Added disclaimer to form.	J. Johnson	K. Adamson