

450 Series

Technical sheet

Structural Insulating Panels



Product Description

Product Name	Polyisocyanurate Insulation Boards
Brand	450 Series
Panel Type	Wall
Composition	2 OSB CSA 0325, 7/16 + foam polyiso injected in the center
Standard dimensions	4×8', 4×9', 4×10', 4×12'
Thickness	4.625"
Thickness tolerance and Squareness	1/8"
Density	46-50 kg/m ³

Thermal Performance

Panel only:
Element C518 laboratory test

• Thermal Resistance	32.325 °F·ft²·h/BTU
• Thermal Conductivity	0.143 BTU·in/h·ft²·°F
• Thermal Resistivity	7.004 °F·ft²·h/BTU·in

Full composition

1. Exterior air film	0.17
2. Flexible exterior sheathing	0.62
3. Air space (3/4")	0.51
4. Air space (1×3 à 16"c/c)	0.00
5. Air barrier (tyvek)	0.06
6. PIS (Prestige) 4.5"	32.325
7. Blowing (2×4 / 1-1/2")	1.02
8. Air space 3/4	0.51
9. Furring 1×3 @ 16"c/c	0.00
5. Gypsum 1/2"	0.44
6. Interior air film	0.62

Total "R" factor **36.275**

Mechanical performance

Reference to the technical specifications for L2C structural insulated panels.

Flame retardant properties

CAN/ULC S102 and CAN/ULC S127

1. Flame spread rating **80**

2. Smoke developed classification **362**

ASTM E84

1. Flame spread rating **5**

2. Smoke developed classification **300**

Compliance with current standards

- ASTM C1289-17
- CAN/ULC C-S704.1-2017
- CAN/ULC S102 ref. CAN/ULC S127
- ASTM E84-21
- ASTM C518-21

Application and installation

Application areas Wall

Installation method Refer to our installation manual

Advantages

- Excellent thermal performance
- High compressive strength
- Lightweight and easy to handle
- Low Global Warming Potential blowing agents (less than 1)
- Low flame spread
- Timeless material
- Reduced management of materials on site

Precautions for use

Handling Handle our panels with care and use appropriate personal protective equipment to ensure maximum safety on the construction site.

Storage Store our panels outdoors or indoors in a dry, cool, covered place, protected from direct sunlight.

Insulation Type	450	550	650	Mineral Wool	Wool Rock	Wool Cellulose	Extruded Insulation
Panel Thickness	4 1/2"	5 1/2"	6 1/2"	5 1/2"	5 1/2"	5 1/2"	6 1/2"
Total Wall Thickness	8 3/4"	9 3/4"	10 3/4"	9 1/4"	9 1/4"	9 1/4"	10 3/4"
Insulation Rating	R-32.325	R-41.50	R- 49.23	R-20	R-21.60	R-19	R-24
Total Wall Rating	R-36.275	R-43.81	R-51.54	R-26.93	R-28.53	R-25.93	R-27.95