



Technical DataSheet



Product name: IGLOO Cellulose®

Technical name: Loosely packed cellulosic wood fiber

State: Free flowing - wood base

Color: Gray

Odor: None

Dimensional weight: 1.46 lbs/ft³ - 23.4 kg/m³

Chemical composition:

- Newsprint fiber C₆H₁₀O₃
- Boric acid H₃BO₃
- Natural additives for mold, dust, and fire control
- Magnesium sulfate

Product registration:

Canadian Construction Materials Centre (CCMC)

- Technical product sheet / CCMC #08532-L
- Technical product sheet / CCMC #12835-R (Walls)
- CAN / ULC - S703-09
- Product is guided by standard ASTM C-739, HHI-515-E and amended CPSC
- VOC Emission certificate # 120120 - 03 (Berkeley Analytical)

pH: @25 °C, 2% solution 7.8

Packaging: 25 lbs - 11.3kg / bag

Installation:

- IGLOO Cellulose® insulation’s high efficiency relies on air between the fibers, obtained when the cellulose expands during installation (whether hand-applied or blown).
- Clear up 1 ft² for every 300 ft² of ceiling of air intake.
- Apply in places where temperature does not exceed 194 °F (90 °C).
- Install 3” or more away from chimneys.
- Wear a respirator at all times.
- For soundproofing, contact an acoustical engineer.
- For wall insulation, apply enough product to achieve at least 3 lbs/ft³ (48 kg/m³) density. (Recommended 360HD Igloo wall cavity system).
- Do not apply on built-in-surface-mounted light fixtures without proper IC protection.

Technical DataSheet

Installation Chart (blown-applied over a horizontal surface)

| R | Applied Thickness (in) | Thickness After Settling (in) | Surface Mass (lb/ft ²) | Coverage per Bag (ft ²) |
|----|------------------------|-------------------------------|------------------------------------|-------------------------------------|
| 12 | 3 1/2 | 3 1/4 | 0.40 | 62 |
| 20 | 6 | 5 3/8 | 0.65 | 38 |
| 32 | 9 1/2 | 8 5/8 | 1.05 | 24 |
| 40 | 12 | 10 3/4 | 1.30 | 19 |

| RSI | Applied Thickness (mm) | Thickness After Settling (mm) | Surface Mass (kg/m ²) | Coverage per Bag (m ²) |
|-----|------------------------|-------------------------------|-----------------------------------|------------------------------------|
| 2.1 | 90 | 82 | 1.92 | 5.9 |
| 3.5 | 151 | 136 | 3.18 | 3.55 |
| 5.6 | 242 | 218 | 5.10 | 2.22 |
| 7.0 | 302 | 272 | 6.37 | 1.77 |

All testing were made according to CAN/ULC S703-09 Standards in March 2015.

Thermal Resistance:

- ASTM C 177 and ASTM C 518 tests
- R = 3.71 per inch
- Example : RSI-7 = R-40

Apsorption Rate :

- Less than 20% absorption in a environment where humidity is higher than 90%, at 50°C temperature, during 168 hours.

Surface Combustion Specifications:

- CAN/ULC-S102.2 tests
- Flame speed rating is lower than 150 (for loosely packed insulation)
- Equivalent : CAN/ULC-S-102 or ASTM E-84
- Equivalent flame spread rater is lower than 25.

Corrosiveness:

- ASTM G1-90 test
- Exposed @ 50°C for 28 days - No perforation
- Aluminum #3003 BARE – No perforation
- Copper #110 CABRA – No perforation
- Cold rolled low carbon steel - No perforation
- Galvanized steel, 40% zinc – No perforation

Permanent Flammability Index:

- ASTM E 970 test
- Surface flammability specifications show flame spread classification of a least 0.12 w/cm²
- Results are determined by electric radiant panel trial (ASTM E 970).

Cryptogamic Resistance :

- ASTM C 1338-96 test
- No mold (fungus) had appeared in a culture medium containing fungous spores (95% rH and 28°C temp.) after 28 days.

Resistance to Combustion Without Flame :

- CAN/ULC-S130 test
- Less than 15% mass loss after being exposed to a high temperature.
- Fire will die out once the heat source is removed.

Chemical Product Separation :

- Less than 1.5% chemical product separation after agitating at 275 cycles/min for 30 minutes



1485, TransCanada, Dorval Quebec
CANADA H9P 2V3

T 514 694-1485 / 1 800 363-7876 F 514 694-3999
www.cellulose.com