

# TECHNICAL DATA SHEET

## Profib Mat™

Industrial hemp fiber thermal insulation batt



**Nature fibres**

BETTER BY NATURE

### DESCRIPTION

Thermal and acoustic insulation batt made of industrial hemp fibers.

### USE

Preformed and flexible natural fiber batt designed to be inserted by friction between the wooden or steel frames of a construction. It is suitable for exterior walls, ceilings, attics, attics and roof trusses as well as interior walls (soundproofing).

### DIMENSIONS

|                 |  |
|-----------------|--|
| Density         | 35 kg/m <sup>3</sup>                       |
| Thickness (in.) | 2" 3,5" 5,5" 7,5"                          |
| Widths          | 16" 24" (suitable for wood or steel frame) |
| Length          | 48"  |

### THERMAL PROPERTIES

The colder it is, the higher the R-value increases!

| Thickness   | 1" (25,4 mm) | 3,5" (88,9 mm) | 5,5" (140 mm) | 7,5" (190,5 mm) |
|---|--------------|----------------|---------------|-----------------|
| R (RSI) value at T° mean 24°C for NBC compliance. |              |                |               |                 |
| 24°C  | 2,9 (0,50)   | 10,0 (1,75)    | 15,7 (2,76)   | 21,4 (3,76)     |
| R (RSI) value depending on insulation T°.         |              |                |               |                 |
| 4°C   | R 3,2 (0,56) | R 11,2 (1,97)  | R 17,6 (3,11) | R 24,0 (4,23)   |
| -4°C  | R 3,4 (0,59) | R 11,7 (2,06)  | R 18,4 (3,25) | R 25,1 (4,42)   |
| -7,5°C  | R 3,4 (0,60) | R 11,9 (2,09)  | R 18,7 (3,29) | R 25,4 (4,48)   |

Ref: ASTM C518

### OTHER FEATURES

- Global warming potential: 0.68 kg CO<sup>2</sup> eq (1 RSI)
- Hygroscopic potential (humidity regulation)
- Superior thermal phase shift (ability to slow down heat transfer)
- Exceptional R-value stability in extreme weather conditions
- High-performance acoustic insulation
- Non-abrasive, non-toxic, non-irritating
- Mechanical strength without sagging or settling
- Contributes to green building credits such as LEED for environmental impact, ingredients and emissions



### DELIVERY & STORAGE

Product delivered in its original packaging. Transport and store in a dry, enclosed place.

Respect 72 hours between the date of manufacture (on the label) and occupation of the building.

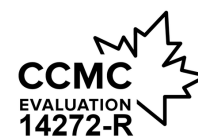
### INSTALLATION

Insulation will need to be installed in accordance with the instructions. Manufacturer's manual and installation guide.

### PERFORMANCE \*

|                     |  |
|---------------------|--|
| ASTM C167           | Standard test method for thickness and density of thermal foam insulation<br><span>✓ Pass</span>   |
| ASTM C303           | Standard test method for the dimensions and density of block and perforated panel thermal insulation<br><span>✓ Pass</span>                    |
| ASTM C518           | Standard test method for steady-state thermal transmission properties using the heat flow meter apparatus<br><span>See ASTM C518 table</span>  |
| ASTM C1338          | Standard test method for determining the resistance to fungi of insulation materials and coatings.<br><span>✓ Pass</span>                      |
| CAN/ULC S703 6.3.11 | Separation of chemical products from the insulation<br><span>0,01%</span>  |
| ASTM E96            | Standard test method for the water vapor transmission of materials<br><span>perm 9.58<br/>547.85 ng/(Pa.s.m<sup>2</sup>)</span>                |
| CAN/ULC-S102        | Standard test method for the surface burning characteristics of building materials and assemblies<br><span>FSI 255/ SDI 30</span>              |
| CAN/ULC-S774        | Standard test method for the determination of volatile organic compound (VOC) emissions.<br>Time to occupancy: 72 hours<br><span>✓ Pass</span> |
| CAN/ULC-S703 6.3.2  | Corrosivity: Aluminum, Copper, Steel.<br><span>✓ Pass</span>   |
| CAN/ULC-S703 6.3.8  | Water vapor Sorption<br><span>12%</span>   |
| CAN/ULC-S703 6.3.12 | Resistance to slow combustion of the insulation<br><span>✓ Pass</span>   |

Environmental Product Declaration (EPD) available  
Environmental technical datasheet (ETD) available  
Safety data sheet (SDS) available



\*The performance tests specified above result from the criteria of the Technical Guide (CCMC) in order to meet the requirements of the National Building Code of Canada 2020. Please note that the evaluation concerns Profib Mat insulating batts from 3.5" to 7.5" (89 mm to 190.5 mm). Acoustic performance is outside the scope of CCMC's assessment. See CCMC 14272-R for details.

### SECURITY

The insulation does not require specific protection, but it is always recommended for installation personnel to wear a dust mask, protective goggles, and gloves.

### LIABILITY

The information described in this sheet is intended to help you select the right insulation blanket for your application. It is the user's responsibility to determine if the product meets their needs. In the event of a justified complaint, the product is subject to replacement.

**Need more information?**

**Contact us!**

**ventes@naturefibres.com**

**819-716-0141**