



## CLASSIC™

### TECHNICAL DATA SHEET

CCMC 12070-R

#### PRODUCT DESCRIPTION

Huntsman Building Solutions Classic™ is a spray-in-place low density, open-cell, flexible, nominal 0.5 lbs/ft<sup>3</sup> density, 100% water-blown polyurethane foam insulation manufactured by Huntsman Building Solutions. Huntsman Building Solutions Classic has a yield of 17,500 board feet (annual average). Classic is applied exclusively by CALIBER QAP licensed installers and contractors in accordance with the standard CAN/ULC S712.1.

The product is for use as a thermal insulation in:

- wall cavities
- floor assemblies
- ceiling assemblies
- roof assemblies (interior)
- attics

#### PROPERTIES OF CURED FOAM - CAN/ULC S712.1:2017

Characteristic	Test Method	Value
Core Density	ASTM D 1622	0.54 lb/ft <sup>3</sup>   8.7 kg/m <sup>3</sup>
Color		Cream
Thermal Resistance at 50mm	ASTM C 518	1.24 m <sup>2</sup> · °K/W
Water Vapor Transmission (50mm thick specimens)	ASTM E 96	1319 ng/Pa•s•m <sup>2</sup>
Water Absorption	ASTM D 2842	41%
Dimensional Stability (Volume Change) 28 days at -20°C & ambient RH 28 days at 80°C & ambient RH 28 days at 70°C & 97% ± 3% RH	ASTM D 2126	Result: -1 -5 -6
Time of Occupancy (VOC)	CAN/ULC S774-09 (R-2014)	Pass 25 Hours
Open Cell Content	ASTM D 6226	97.4%
Fungi Resistance	ASTM C 1338-14	No Growth
Spontaneous-Ignition Temperature	ASTM D 1929	501°C (950°F)

#### BURN CHARACTERISTICS - CAN/ULC S712.1:2017

Flame Spread Index	CAN/ULC S102	385
Smoke Development		760

\*consult Huntsman Building Solutions Engineering Department for details.

- Huntsman Building Solutions Classic must be covered with ½" of gypsum board, or approved thermal barrier.

#### ADDITIONAL TESTING

Air Permeance at 100mm	ASTM E 2178	0.2693 L/(m <sup>2</sup> · s) @ 75 Pa
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#### ACOUSTICAL PROPERTIES

Performance in a 38 x 89 mm (2 x 4") wood stud wall:

##### STC Sound Transmission Class - 37

Hertz Frequency	125	250	500	1000	2000	4000
ASTM E 90	19	30	31	42	38	46

##### NRC Noise Reduction Coeff. - .70

Hertz Frequency	125	250	500	1000	2000	4000
ASTM C 423	.11	.43	.89	.72	.71	.67

## AIR BARRIER/ MECHANICAL VENTILATION

- Huntsman Building Solutions Classic fills any shaped cavity, and adheres to most construction materials, creating assemblies with very low air permeance.
- Additional interior or exterior air infiltration protection is subject to applicable codes.
- All buildings insulated and air sealed with Huntsman Building Solutions Classic must be designed to include adequate mechanical ventilation/outdoor air supply for optimum IAQ (Indoor Air Quality).
- For mechanical ventilation see ASHRAE Standard 62 –Ventilation for Acceptable Indoor Air Quality or any other acceptable good engineering practice.

## WATER ABSORPTION PROPERTIES

- Water can be forced into the foam under pressure because it is open-cell.
- Water will drain by gravity, given favorable drying potential, and upon drying all chemical and physical properties are fully restored.

## ELECTRICAL WIRING

- Huntsman Building Solutions Classic has been evaluated with energized 14/3 and 12/2 residential wiring (max. 122°F/50°C).
- It is chemically compatible with typical electrical wiring coverings.
- For any insulation of older knob and tube wiring, please reference local electrical code.

## CORROSION

- Huntsman Building Solutions Classic did not cause corrosion when evaluated in contact with steel and copper at 120°F (48°C) and 95% relative humidity conditions.

## PLASTIC PIPING

- Huntsman Building Solutions Classic is compatible in direct contact with the following piping systems, as per Paschal Engineering Study:
  - CPVC
  - ABS
  - PVC
  - PP-R

## ENVIRONMENTAL AND HEALTH

- Huntsman Building Solutions Classic is 100% water-blown and therefore has zero ozone-depletion potential.
- The reaction used to create Huntsman Building Solutions Classic generates carbon dioxide to expand the foam. Huntsman Building Solutions Classic has the lowest Global Warming Potential (GWP of 1) value for foam insulation products.
- Huntsman Building Solutions Classic is PBDE-free.

## INSTALLATION

- Huntsman Building Solutions Classic is installed by a network of Licensed Dealers, trained in its installation.
- Not intended for exterior use. Not to be installed within 3" (76 mm) of heat emitting devices or where the temperature is in excess of 180°F (maximum service temperature), as per ASTM C411 or in accordance with applicable codes.
- Installation is generally independent of environmental conditions.
- Huntsman Building Solutions Classic has excellent adhesion to a wide variety of substrates including common construction materials.
- It can be installed in hot, humid or freezing conditions. Minimum substrate temperature for application is 14°F (-10°C).
- Surface preparation is generally not necessary.
- Within seconds, the foaming process is complete.

**Disclaimer:** The information herein is to assist customers in determining whether our products are suitable for their applications. We request that customers inspect and test our products before use and satisfy themselves as to contents and suitability. Nothing herein shall constitute a warranty, expressed or implied, including any warranty of merchantability or fitness, nor is protection from any law or patent inferred. All patent rights are reserved. The foam product is combustible and must be protected in accordance with applicable codes. Protect from direct flame and spark contact, around hot work for example. The exclusive remedy for all proven claims is replacement of our materials.

## AVAILABILITY

Contact Huntsman Building Solutions at 1.888.783.0751 or visit our website at [www.huntsmanbuildingsolutions.com](http://www.huntsmanbuildingsolutions.com).

## WARRANTY

WHEN INSTALLED PROPERLY IN ACCORDANCE WITH INSTRUCTIONS, THE COMPANY WARRANTS THAT THE PROPERTIES OF THE PRODUCT MEET PRODUCT SPECIFICATIONS AS OUTLINED IN THIS TECHNICAL DATA SHEET. SAVE AND EXCEPT ANY EXCLUSIONS REFERENCED IN THE WARRANTY.

## TECHNICAL

Huntsman Building Solutions dealers and Huntsman Building Solutions provide support on both technical and regulatory issues. Architectural specifications in CSI 3-Part format and design details are available at our website at [www.huntsmanbuildingsolutions.com](http://www.huntsmanbuildingsolutions.com).

## RELATED REFERENCES

All physical properties were determined through testing by accredited third party agencies. Huntsman Building Solutions reserves the right to change specifications in its effort of continuous improvement. Please confirm that technical data literature is current.

## PACKAGING AND STORAGE

- Packaging - 55 US gallon, steel drums
- Component 'A' – 235.9 kg (520lb) per drum. Base Seal® MDI
- Component 'B' – 235.9 kg (520lb) per drum. Huntsman Building Solutions Classic™ – Resin
- Huntsman Building Solutions Classic™ (Component A and Component B) ideally should be stored between 60°F (15°C) and 85°F (30°C).
- Component A should be protected from freezing.
- Shelf life is 6 months.