

## TECHNICAL GUIDE

### **BAZZ Core HFO**

CLOSED-CELL POLYURETHANE FOAM

#### Product Description:

**Bazz Core HFO** is a two-component, HFO-based closed-cell spray polyurethane (ccSPF) insulation with medium density. It delivers strong thermal performance, moisture resistance, and high yield for improved energy efficiency.

Its advanced formula provides reliable adhesion and environmental benefits, making it ideal for residential, commercial, and industrial use. Available in summer and winter blends for consistent performance in all conditions.

#### Appearance:

The final cured product is cream in color (natural).



#### Recommended Applications:

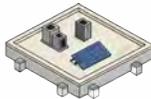
##### **Residential Interior Construction:**

Wall enclosures, ceilings, interior foundation, attic, crawl space, cathedral ceiling, duct work, rim joists, etc.



##### **Industrial Construction:**

Wall enclosures including steel, above or below grade, foundation walls, underside of deck, etc.



##### **Commercial Interior Construction:**

Walls, foundation walls and underside of roof decks.



#### Thermal Resistance:

| Thickness (inch) | R-Value (°F·ft <sup>2</sup> ·h/Btu) |
|------------------|-------------------------------------|
| 1.0              | 7.5                                 |
| 2.0              | 15                                  |
| 3.0              | 22                                  |
| 3.5              | 26                                  |
| 4.0              | 29                                  |

#### Application Information:

**Applied at a maximum of 3.5" per pass.**

Record initial pass temperatures to ensure core temperature stays below 100°F, and repeat for each pass to allow proper heat dissipation. When spraying on heat-sensitive materials (like PEX or low-voltage wiring), apply a maximum of 1 inch per pass and allow it to fully cool before adding more.

Protect foam from UV exposure within 90 days. Apply (ccSPF) only when surface and ambient temperatures meet manufacturer limits, humidity is below 80%, and substrate temperature is at least 5°F above the dew point to prevent condensation.

**Substrate temperature for Standard Grade: 50-122°F.**

**Substrate temperature for Winter Grade: 14-77°F.**

## Technical Properties

| Attribute   | Standard   | Test Results               |
|---|------------|----------------------------|
| Density   | ASTM D1622 | 2.2 lb/ft <sup>3</sup>     |
| Water Vapor Transmission  | ASTM E96   | 0.83 perm @1"              |
| Dimensional Stability <sup>ii</sup><br>(Volume Change after 7 days) | ASTM D2126 | -4.46% @ 158°F<br>& 97% RH |
| Tensile Strength  | ASTM D1623 | 33 psi                     |
| Compressive Strength  | ASTM D1621 | 26.4 psi                   |
| Air Permeance @ 75 Pa   | ASTM E2178 | 0.002 L/s.m <sup>2</sup>   |
| Water Absorption<br>(% Volume)                                      | ASTM D2842 | 0.5%                       |
| Open Cell Content   | ASTM D2856 | 2.5%                       |
| Hot Surface Performance   | ASTM C411  | 194°F                      |
| Fungi Resistance  | ASTM C1338 | Pass, no growth            |
| Re-entry – worker   | 10 AHC's   | 2 hours                    |
| VOC Emissions   | -          | -                          |
| Colour  | Material   | Cream                      |

## Burn Characteristics

| Attribute                               | Standard               | Test Results                               |
|---|------------------------|--|
| Flame Spread                            | ASTM E84               | 10   |
| Smoke Development                       | ASTM E84               | 300  |
| Surface Burning Characteristics<br>@ 4" | ASTM E84               | Class 1 (A)                                |
| Ignition Barrier Uncoated               | NFPA 286<br>Appendix X | Pass                                       |
| DC 315 Thermal Barrier                  | NFPA 286               | Pass                                       |
| Commercial Fire Resistance              | NFPA 286               | Certified Compliant Systems <sup>iii</sup> |

All testing performed by an accredited independent third-party test facility. **i** --- Thermal resistance above 3.5" calculated using R = 7.3/inch. R-values between 1 and 3.5 are interpolated. **ii** - Dimensional Stability tested without substrate. **iii** - See design details.

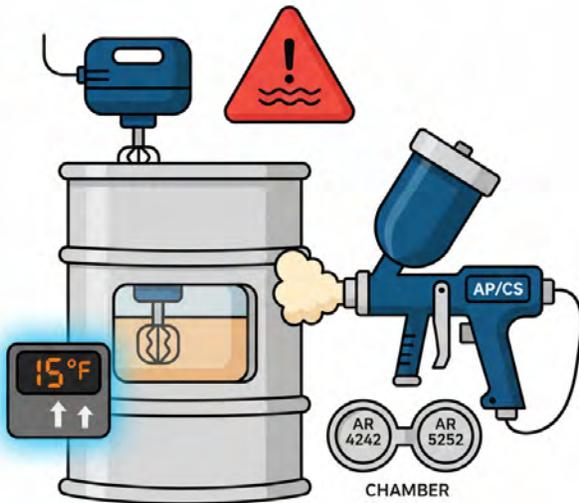
### Air Barrier Testing Results

The air barrier assembly has been evaluated and meets the ABAA Evaluation process.

**ASTM E2357** 0.001 L/s·m<sup>2</sup> @ 75 Pa  
 0.0002 cfm/ft<sup>2</sup> @ 1.57 psf

### Processing Parameters:

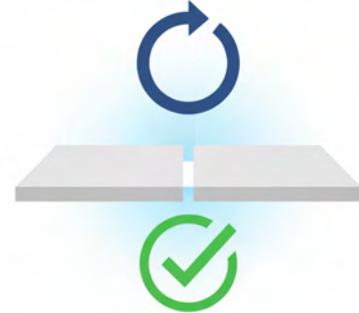
Pressures (dynamic): **1000-1500psi**  
 Preheat Temperature: **A and B, 130-140°F**  
 Hose Temperature: **110-130°F**  
 Drum Temperature in Use: **68-77°F**  
 Surface Temperature: **Standard Grade: 50-122°F**  
**Winter Grade: 14-77°F**



For optimal processing of ccSPF, Bazz Foam recommends the above parameters in use with a Graco Fusion AP/CS gun equipped with an AR 4242/AR 4747 chamber. The use of larger gun chambers may result in diminished yield and physical properties.

### Adhesion:

**Bazz Core HFO** will adhere to most construction materials. Substrates must be free of grease, oil, dirt, and surface moisture. Moisture content of porous materials must be below **19%** before application of foam.



Manufacturer can be contacted for material compatibility, surface preparation techniques and adhesion on commonly encountered construction materials.

It is up to the builder or designer to determine the suitability of the material for any project. The installer must verify the compatibility of the product at the time of application due to the variability of weather conditions, material suppliers and site conditions which may impact the performance of the product.

### Liquid Component Characteristics:

|                             |  |
|-----------------------------|--|
| <b>Component A :</b>        | <b>150-250 cps</b><br>@ 77°F (Viscosity)         |
|                             | <b>1.24kg/L sg</b><br>@ 77°F (Specific Gravity)  |
| <b>Component B :</b>        | <b>600 cps</b><br>@ 77°F (Viscosity)             |
|                             | <b>1.18 kg/L sg</b><br>@ 77°F (Specific Gravity) |
| <b>Mix Ratio by Volume:</b> | <b>1:1 of A:B</b>                                |

**Storage Recommendation:**

All material provided by Bazz Foam are to be sealed until ready for use. Keep drums closed during storage and out of a humid environment.

A nitrogen blanket should be used in ISO barrels for long term storage. ISO and resin barrels should be sealed when not in use. A desiccant air dryer should be used on Iso barrel to allow pressure to equalize in drum when in use. Keep drums out of direct sunlight. To ensure proper longevity of the products, unopened materials should be indoors within the temperature ranges referenced below. Please see chart below for shelf life of materials:

| Shelf Life                          | Bazz Air HY Part B Resin – 6 months | Bazz ISO Part A 12 months |
|-------------------------------------|-------------------------------------|---------------------------|
| Storage Temperature Recommendations | 64-86°F                             | 64-86°F                   |

**Precautions:**

Like many construction materials, spray polyurethane foam is a combustible product. Therefore, installers and occupants are to take precautions and safety measures to ensure the foam does not come into contact (within 3") of any devices that have a surface temperature exceeding 180°F. Once application is completed, foam shall be protected with a thermal barrier in accordance with the local building code requirements for a suitable thermal barrier (e.g. drywall).

**Health and Safety Handling:**

When spraying or handling Bazz Air NM ISO and resin the following protective steps and equipment are recommended:



**Protective Equipment**

- Fabric coverall (nonporous)
- Nitrile gloves
- Protective eyewear
- Supplied full face fresh air respirator (while spraying)
- Use personal protective equipment (see SDS)

**Exposure**

- Avoid all contact with skin
- Avoid all contact with eyes
- Do not ingest
- Do not inhale vapors

In case of exposure, please refer to the SDS for first-aid measures.

**Spills**

In case of spills, contain and collect spillage with a noncombustible absorbent material, such as: sand, earth, clay-based oil absorbent (kitty-litter),

**Disclaimer: Technical information as shown in this document is intended to be used as general guidelines only. Please refer to the Safety Data Sheet and product label prior to using this product.**