



## 3M™ Fire Barrier IC 15WB+ Sealant

### Product Description

The 3M Fire Barrier IC 15WB+ Sealant is a latex sealant designed for use as a one-part fire, smoke, noxious gas and water resistant sealant. In addition, the unique intumescent property of this material (expands when heated) means that as the combustible cable insulation is consumed by fire, the sealant expands to maintain the penetration seal.

IC 15WB+ Sealant can be installed with a standard or bulk caulking gun, pneumatic pumping equipment or it can be easily applied with a putty knife or trowel. Sealant bonds to gypsum wallboard, concrete, metals, wood, plastic and cable jacketing. No mixing is required. Tool within 5 minutes of application, if required. IC 15WB+ Sealant provides Fire Resistance Ratings of up to 2 hours.

### Product Features



- Water Based: Easy clean up, no special handling, routine disposal
- Intumescent: Expands when heated to maintain seal around items consumed by fire
- Endothermic: Absorbs heat energy, releases chemically bound water
- Thixotropic: Will not sag or run in overhead or vertical applications
- Halogen-free
- Fast dry: Tack-free in approximately 8 to 12 minutes @ 23°C (73°F)
- Paintable. Best results obtained after 72 hour cure
- Minimal shrinkage
- Yellow colour
- High flow rate: 2000 g/min. with 6 mm (1/4") nozzle
- Point contact allowed
- Testing in accordance with AS1530.4, EN1366, and ASTM E814 (UL Listed).
- Assessed in accordance with A.S.4072.1 – 2005
- EWFA Report No. RIR 23262

## Physical Properties

Typical Physical Properties	
Tack Free Time (ASTM C679-87)	8 to 12 minutes @ 23°C (73°F)
Continuous operating temperature	Up to 48°C (120°F)
Expansion at 350° C (662°F)	2.0
Colour	Yellow
Density	1.43 kg/L (12.0 lb./gal.)
Adhesion	Very good on all construction substrates
Application	Caulk guns, trowel, spatula, pressurized pumps
Durometer Hardness (Shore A)	70
Solids	80% by weight
VOC	0% by weight
Odour	Pleasant non-irritating
Flow Rate	2000 grams/min. from 6.35 mm (1/4") nozzle at 50 psi
ASTM E 84: Flame Spread	0
Smoke Development	0
Boeing Flow (Sag Characteristics)	<5.08 cm (2") in 5 minutes

## Availability

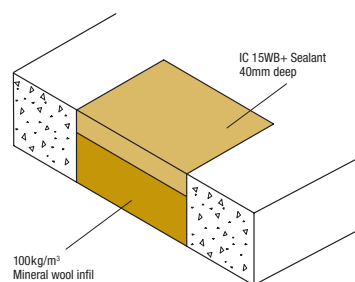
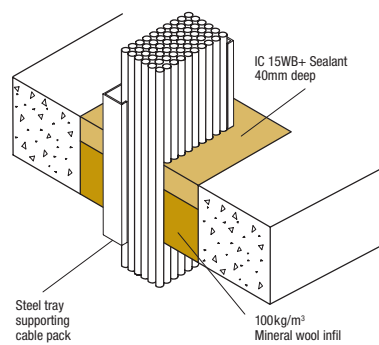
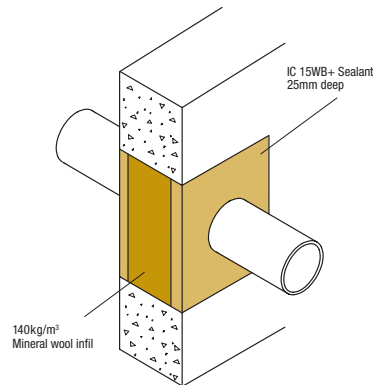
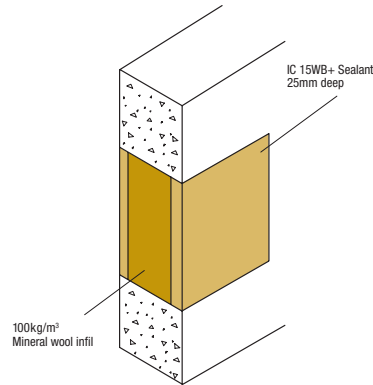
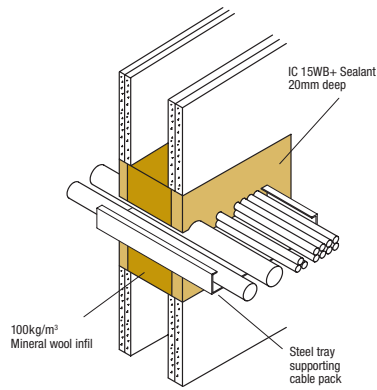
3M™ Fire Barrier IC 15WB+ Sealant is available from Authorized 3M Fire Protection Products Distributors.

3M Order Code	Packing	Unit/Case
98040055091	300 ml (10.1 fl.oz.) cartridge	12
98040055125	594 ml (20 fl. oz.) sausage	10
98040055117	802 ml (27 fl. oz.) cartridge	6
98040055109	17 litre (4.5 gallon) pail	1

## Maintenance

IC 15WB+ Sealant is stable under normal storage conditions and has a one year shelf life. Normal stock and stock rotation are recommended.

**Recommended: Store between 4°C (40°F) & 32°C (90°F) for maximum shelf life. Keep from freezing.**



## Installation Techniques:

### Installation Techniques: Walls

#### Electrical Cables, Blank (unpenetrated) Seals

- Install 100kg/m<sup>3</sup> mineral wool infill friction fitted and centred in the penetration. Ensure that enough space is left on either side of the mineral wool for the IC 15WB+ Sealant.
- Install IC 15WB+ Sealant to a depth of 20mm for electrical cables and 25mm for blank unpenetrated seals on both sides of the wall. Ensure that the Sealant is installed flush with the wall on both sides of the penetration.

#### Metal Pipes

- Install 140kg/m<sup>3</sup> Mineral Wool infill friction fitted and centred in the penetration. Ensure that enough space is left for the IC 15WB+ Sealant.
- Install IC 15WB+ Sealant to a depth of 25mm on both sides of the wall, ensure that the Sealant is installed flush with the wall on both sides of the penetration.

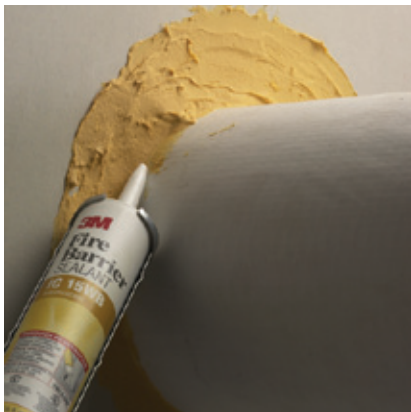
### Installation Techniques: Floors

#### Electrical Cables, Blank (unpenetrated) Seals

- Install 100kg/m<sup>3</sup> mineral wool infill friction fitted into the floor slab, the bottom of the mineral wool should be flush with the bottom surface of the floor slab. Ensure that enough space is left above the mineral wool for the IC 15WB+ Sealant.
- Install IC 15WB+ Sealant to a depth of 40mm on the top side of the floor slab only; ensure that the Sealant is installed flush with the top surface of the floor slab.

# Performance Specifications for Installers

Australian Standard FRLs		Fire Resistance Level (FRL)				
3M Fire Barrier System	Building Element	Blank (Unpenetrated) Seal	PVC Insulated Cables, Cable trays and Cable bundles	Copper or Steel Pipes Small 15mm diameter or smaller 0.9mm Wall thickness or thicker	Steel Pipes Small 34mm diameter or smaller 3.5mm wall thickness or thicker	Steel Pipes Large 114mm diameter or smaller 4.5mm wall thickness or thicker
3M IC 15WB+ Sealant	<b>Floor:</b> Concrete slab. <i>Minimum 120mm thickness</i>	-/120/120	-/120/30	—	—	—
	<b>Wall:</b> Plasterboard Dry Wall, solid masonry, hollow masonry or concrete construction. <i>Minimum 116mm thickness</i>	-/120/120	-/120/30	—	—	—
	<b>Wall:</b> Plasterboard Dry Wall, solid masonry, hollow masonry or concrete construction. <i>Minimum 150mm thickness</i>	-/120/120	-/120/30	-/120/30	-/120/30	-/120/-



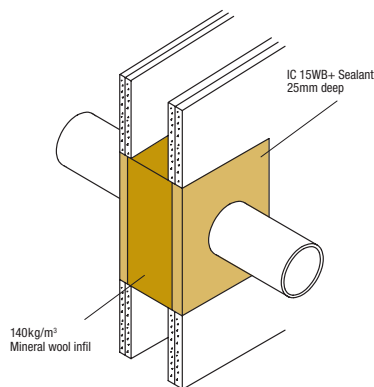
In order to achieve the above FRLs you must ensure that the IC 15WB+ Sealant is installed as per the Installation Techniques and the building element you are installing into has an FRL performance equal to or better than that of the IC 15WB+ system. The Installation Techniques can be found on the final page of this document.

## What does FRL mean?

FRL stands for 'Fire Resistance Level'. For example, an FRL of '-/120/30' indicates:

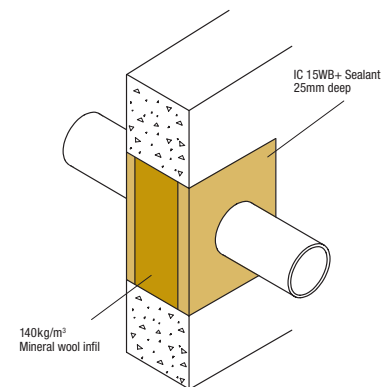
- **Structural Adequacy.** The first dash '-' indicates that IC 15WB+ is non load bearing
- **Integrity.** The middle number '120' indicates for how many minutes the IC 15WB+ system can resist the passage of flames and hot gasses
- **Insulation.** The last number '30' indicates how many minutes it takes the unexposed face to heat up by more than 140°C.

## Metal Pipes



### Dry Wall 150mm

Copper: 15mm dia, 0.91mm wall: FRL: -/120/30  
 Steel: 34mm dia, 3.5mm wall: FRL: -/120/30  
 Steel: 114mm dia, 4.5mm wall: FRL: -/120/-



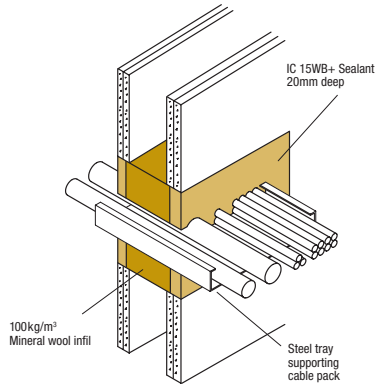
### Solid Masonry, Hollow Masonry or Concrete Wall 150mm

Copper: 15mm dia, 0.91mm wall: FRL: -/120/30  
 Steel: 34mm dia, 3.5mm wall: FRL: -/120/30  
 Steel: 114mm dia, 4.5mm wall: FRL: -/120/30

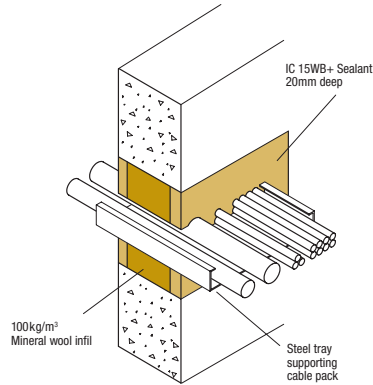
# Performance Specifications for Engineers and Specifiers

3M Fire Barrier IC 15WB+ Sealant has been tested in accordance with AS1530.4-2005 and assessed in accordance with AS4072.1-2005 under BWA Report No: 23262. The following illustrations provide a summary of the test results for D1 and D2 cable configurations, metal pipe penetrations and blank unpenetrated seals with IC 15WB+ installed as per the Installation Techniques. Specifications for standard D1 and D2 cable configurations can be found in AS1530.4-2005 Appendix D.

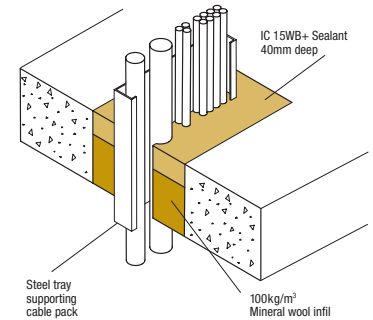
## D1 Cable Pack – Power Transmission Cables.



Dry Wall 116mm – FRL: -/120/30

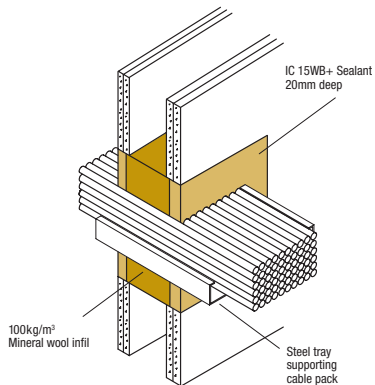


Solid Masonry, Hollow Masonry or  
Concrete Wall 116mm – FRL: -/120/30

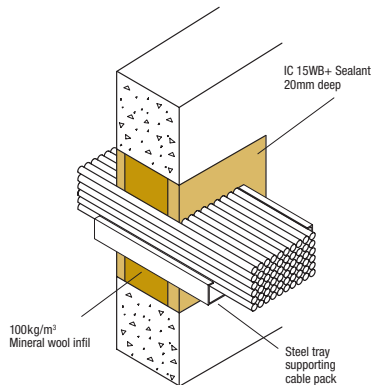


Concrete Floor 120mm – FRL: -/120/30

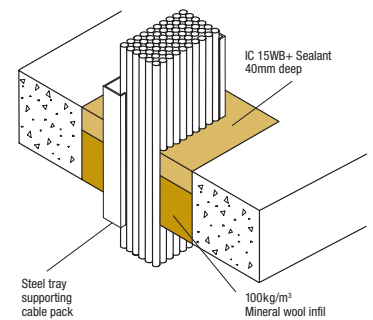
## D2 Cable Pack – Telecom Cables.



Dry Wall 116mm – FRL: - /120/30

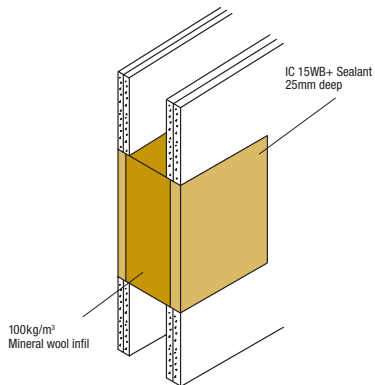


Solid Masonry, Hollow Masonry or  
Concrete Wall 116mm – FRL: -/120/30

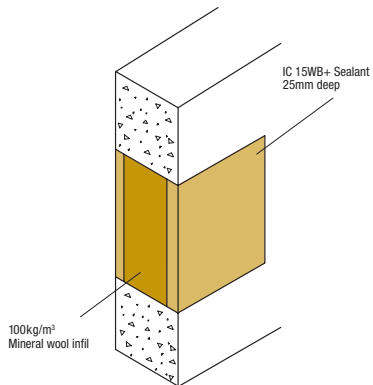


Concrete Floor 120mm – FRL: -/120/30

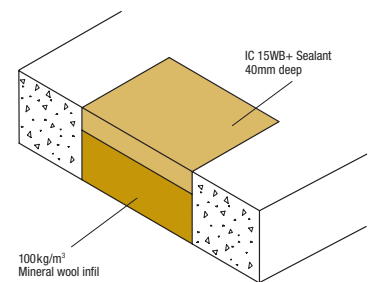
## Blank Openings (unpenetrated)



Dry Wall 116mm – FRL: -/120/120



Solid Masonry, Hollow Masonry or  
Concrete Wall 116mm – FRL: -/120/120



Concrete Floor 120mm – FRL: -/120/30



# 3M™ Fire Barrier Sealant IC 15WB+

## Product Data Sheet

### 1. Product Description

3M™ Fire Barrier Sealant IC 15WB+ is an economical, one-part, gun-grade, latex-based, intumescent firestop sealant that dries to form a monolithic firestop seal that also acts as a barrier to airborne sound transmission. 3M™ Fire Barrier Sealant IC 15WB+ firestops through penetrations passing through fire-rated floor, floor/ceiling or wall assemblies, as well as other fire-rated interior building partitions and assemblies (e.g. static construction joints or blank openings). In addition, the unique intumescent property of this material allows 3M™ Fire Barrier Sealant IC 15WB+ to expand and help maintain a firestop penetration seal for up to 3 hours as penetrants are exposed to fire. 3M™ Fire Barrier Sealant IC 15WB+ bonds to most construction substrates, including: gypsum wallboard, concrete, metals, wood, plastic (including CPVC) and cable jacketing. No mixing is required.



Economical firestop sealant available in tube, pail or sausage.

Product Color: ■ Yellow.

**FGG =BM= CZ**  
SYSTEM COMPATIBLE

#### Product Features

- AS1530.4-2005 and AS4072.1.2005
- Firestop tested up to 3 hours in accordance with ASTM E 814 (UL 1479), ASTM E 1966 (UL 2079) & CAN/ULC-S115
- CPVC compatible
- Expanded fire protection systems
- Helps minimize sound transfer\*
- Sag-resistant
- Halogen-free
- Excellent adhesion
- Re-enterable/repairable
- Excellent caulk rate
- Paintable
- Water clean up

*Meets the intent of LEED® VOC regulations—helps reduce the quantity of indoor air contaminants that may be odorous, irritating and harmful to the comfort and well-being of the installers and occupants. <250 g/L VOC contents (less H<sub>2</sub>O and exempt solvents).*

*\*Minimizes noise transfer—STC-Rating of 54 when tested in STC 54-rated wall assembly.*

### 2. Applications

3M™ Fire Barrier Sealant IC 15WB+ is a general-purpose intumescent firestop ideal for sealing single or multiple through penetrations in fire-rated construction. 3M™ Fire Barrier Sealant IC 15WB+ is typically used in mechanical, electrical and plumbing applications to firestop openings created by the following penetrations in fire-rated floors, floor/ceilings or walls: metallic pipe, plastic pipe, conduit, power and communication cable, cable trays, busways, combos, insulated pipe and HVAC duct penetrations. 3M™ Fire Barrier Sealant IC 15WB+ is also used to firestop blank openings and static construction joints.

### 3. Specifications

3M™ Fire Barrier Sealant IC 15WB+ shall be a one component, ready-to-use, gun-grade, latex-based, intumescent firestop sealant capable of expanding a minimum of 3 times at 1000°F. The material shall be thixotropic and be applicable to overhead, vertical and horizontal firestops. The sealant shall be listed by independent test agencies such as UL, ULC, Intertek or FM. 3M™ Fire Barrier Sealant IC 15WB+ shall be tested to and pass the criteria of ASTM E 814 (UL 1479) Standard Test Method for Fire Tests of Penetration Firestop Systems, ASTM E 1966 (UL 2079) Standard Test Method for Fire Resistive Joint Systems and CAN/ULC-S115 Standard Method of Fire Tests of Firestop Systems. 3M™ Fire Barrier Sealant IC 15WB+ meets the requirements of the IBC, IRC, NBCC, IFC, IPC, IMC, NFPA 5000, NEC (NFPA 70) and NFPA 101.

#### Typically Specified MasterFormat (2004)

Section 07 84 00 – Firestopping

#### Related Sections

- Section 07 27 00 – Air Barriers
- Section 07 84 16 – Annular Space Protection
- Section 07 84 43 – Fire-Resistant Joint Sealants
- Section 07 86 00 – Smoke Seals
- Section 07 87 00 – Smoke Containment Barriers
- Section 07 92 13 – Elastomeric Joint Sealants
- Section 07 92 19 – Acoustical Joint Sealants
- Section 21 00 00 – Fire Suppression
- Section 22 00 00 – Plumbing
- Section 23 00 00 – Heating, Ventilating, and Air Conditioning (HVAC)
- Section 26 00 00 – Electrical

FIRE BARRIER SMOKE SEAL



SOUND BARRIER



FILL, VOID, OR CAVITY FOR USE IN JOINT SYSTEMS, THROUGH-PENETRATION FIRESTOP SYSTEMS AND PERIMETER CONTAINMENT SYSTEMS SEE UL FIRE RESISTANCE DIRECTORY 90G9



LISTED

FILL, VOID OR CAVITY MATERIALS 90G9

LISTED



Intertek

FIRESTOP SYSTEMS SEE INTERTEK DIRECTORY



## 4. Performance & Typical Physical Properties

<b>Color:</b>	Yellow	<b>Hardness (ASTM D 2240 Shore A):</b>	70
<b>Application Temperature Range:</b> (ASTM C 1299)	40° to 122°F (4° to 50°C)	<b>Tensile Strength:</b>	85 psi (0.59 MPa)
<b>Service Temperature Range:</b>	-20° to 180°F (-28° to 82°C)	<b>Volume Shrinkage (ASTM C 1241):</b>	28%
<b>STC Acoustic Barrier:</b> (ASTM E 90 and ASTM E 413)	54 when tested in STC 54 rated wall assembly	<b>VOC Less H<sub>2</sub>O and Exempt Solvents:</b>	<250 g/L

**Surface Burning (ASTM E 84):** Flame Spread 5, Smoke Development 50

**Dry:** Under typical conditions of 75°F (23°C) and 50% R.H., sealant becomes tack-free in about ten minutes and dry-to-touch in 30 to 60 minutes. Full dry depends upon ambient conditions and volume of sealant. Typical dry rate is approximately 1/8 inch (3 mm) per day.

Unit Volume: 10.1 fl. oz tube (298.7 ml, 18.2 in.<sup>3</sup>), 20 fl. oz. sausage (591.5 ml, 36.1 in.<sup>3</sup>), 27 fl. oz tube (798.5 ml, 48.7 in.<sup>3</sup>), 4.5 gal. pail (17.03 L, 1039.5 in.<sup>3</sup>)

## 5. Packaging, Storage, Shelf Life

<b>Packaging</b>	Product packaged in cartridge or pail is enclosed in HDPE plastic containers, sausage is packaged in aluminum foil wrap.
<b>Storage</b>	3M™ Fire Barrier Sealant IC 15WB+ should be stored indoors in dry conditions between 40°F and 90°F (4°C and 32°C) in the original unopened package. Avoid repeated freeze / thaw exposures of the 3M™ Fire Barrier Sealant IC 15WB+ prior to installation.
<b>Shelf Life</b>	3M™ Fire Barrier Sealant IC 15WB+ shelf life is 12 months in original unopened containers from date of packaging when stored above 68°F (2°C).

Lot numbering (e.g. 8183AS): First digit = Last digit of year manufactured, Second to fourth digit = Julian Date, Letters = Random to distinguish between lot numbers

## 6. Installation Techniques

*Consult a 3M Authorized Fire Protection Products Distributor / Dealer or Sales Representative for Applicable UL, cUL, ULC, Intertek or other third-party drawings and system details.*

*Representative for Applicable UL, cUL, ULC, Intertek or other third-party drawings and system details.*

<b>Preparatory Work</b>	The surface of the opening and any penetrating items should be cleaned to allow for the proper adhesion of the 3M™ Fire Barrier Sealant IC 15WB+. Ensure that the surface of the substrates are not wet and are frost free. Sealant can be installed with a standard caulking gun, pneumatic pumping equipment or it can be easily applied with a putty knife or trowel.
<b>Installation Details</b>	Install the applicable depth of backing material, if required, as detailed within the applicable UL, cUL, ULC, Intertek, FM or other third-party listed system. Cut the end of the 3M™ Fire Barrier Sealant IC 15WB+ tube spout to achieve the desired bead width when applying. Install the applicable depth of 3M™ Fire Barrier Sealant IC 15WB+ into the opening flush with the surface of the substrate, or as detailed within the applicable listed system, at the depth for the assembly and rating that is required. Tool within 5 minutes. Clean all tools immediately after use with water.
<b>Limitations</b>	Do not apply 3M™ Fire Barrier Sealant IC 15WB+ when surrounding temperature is than less 40°F (4°C) and in conditions where seals may be exposed to rain or water spray within 18 hours of application. Do not apply 3M™ Fire Barrier Sealant IC 15WB+ to building materials that bleed oil, plasticizers or solvent (e.g. impregnated wood, oil-based sealants, or green or partially vulcanized rubber). Do not apply 3M™ Fire Barrier Sealant IC 15WB+ to wet or frost-coated surfaces or to areas that are continuously damp or immersed in water.

## 7. Maintenance

No maintenance is expected to be required when installed in accordance with the applicable UL, cUL, ULC, Intertek, FM or other third-party listed system. Once installed, if any section of the 3M™ Fire Barrier Sealant IC 15WB+ is damaged, the following procedure will apply: remove and reinstall the damaged section in accordance with the applicable listed system, with a minimum 1/2 in. (12.7 mm) overlap onto the adjacent material.

## 8. Availability

3M™ Fire Barrier Sealant IC 15WB+ is available from 3M Authorized Fire Protection Products Distributors and Dealers. 3M™ Fire Barrier Sealant IC 15WB+ is available in 10.1 fl. oz. cartridges (12/case), 20.0 fl. oz. sausages (10/case), 27.0 fl. oz. cartridges (6/case), and 4.5 gallon pails (1/case). For additional technical and purchasing information regarding this and other 3M Fire Protection Products, please call: 1-800-328-1687 or visit [www.3m.com/firestop](http://www.3m.com/firestop).

## 9. Safe Handling Information

*Consult country-of-use Material Safety Data Sheet (MSDS) prior to handling and disposal.*

### Important Notice to User:

**Technical Information:** The technical information, recommendations and other statements contained in this document are based upon tests or experience that 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed.

**Product Use:** Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. Given the variety of factors that can affect the use and performance of a 3M product, user is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application.

**Warranty and Limited Remedy:** 3M warrants that each 3M Fire Protection Product will be free from defects in material and manufacture for 90 days from the date of purchase from 3M's authorized distributor. 3M MAKES NO OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. If a 3M product does not conform to this warranty, the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price.

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