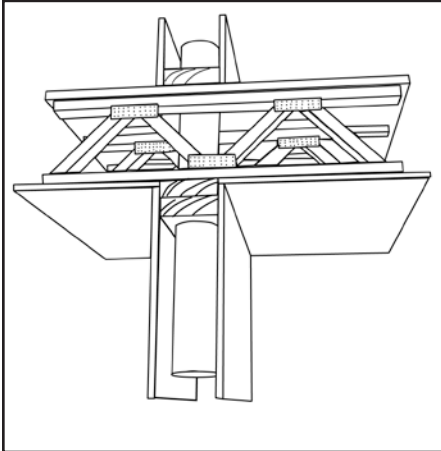## BlazeStop FIRESTOP PRODUCTS
SERIES WF300 INTUMESCENT FIRESTOP CAULK

APPLICATIONS

Type WF300 Caulk is used to seal through penetrations and gaps in fire resistance rated wood frame construction such as floor/ceilings and walls or partitions. Most common penetrating items were successfully tested with WF300.

PRODUCT DESCRIPTION

Type WF300 Caulk is a latex based, high solids firestop caulk. This material, when properly installed, effectively seals penetration openings in wood frame construction against the spread of fire, smoke and combustion byproducts.
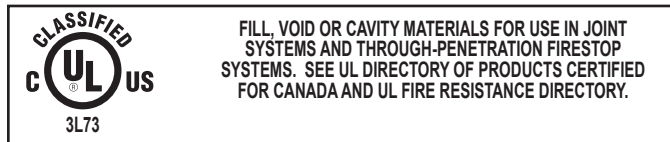
Type WF300 Caulk is a single stage intumescent. When exposed to elevated temperatures, WF300 expands rapidly to seal off voids left by the burning or melting of combustible materials.

Type WF300 Caulk is storage stable (when stored according to manufacturer's recommendations) and will not separate or shrink when dried. WF300 adheres tenaciously to common construction materials such as lumber and gypsum board as well as typical penetrant materials.

FEATURE	BENEFIT
• **Water Based**	Easy installation, cleanup and disposal
• **Intumescent**	Expands with heat
• **Water-Resistant**	Will not re-emulsify
• **Paintable**	

PERFORMANCE

Type WF300 Caulk is the basis for systems that meet the exacting criteria of ASTM E 814 (ANSI/UL1479) as well as the time/temperature requirements of ASTM E 119 (ANSI/UL263). UL Systems have been tested for wood frame construction and common penetrating items with ratings up to 2 hours. See UL Directory for system information.
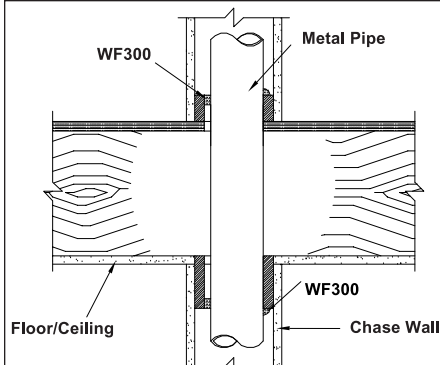
FGG /=BM=/ **CZ** ™
SYSTEM COMPATIBLE

CLASSIFIED
C (UL) US
3L73

FILL, VOID OR CAVITY MATERIALS FOR USE IN JOINT SYSTEMS AND THROUGH-PENETRATION FIRESTOP SYSTEMS. SEE UL DIRECTORY OF PRODUCTS CERTIFIED FOR CANADA AND UL FIRE RESISTANCE DIRECTORY.

PHYSICAL PROPERTIES

Properties	Series WF300
Color	Red
Odor	Mild Latex
Density	11.4 lbs/gal (1.36 kg/L)
Solids Content	81%
pH	7.4 to 8.4
In Service Temperature	185°F (85°C)
Storage Temperature	40°F (4°C) - 95°F (35°C)

Properties	Series WF300
Flame Spread	0*
Smoke Developed	20*
STC Rating (ASTM E90/ASTM C919)	61
VOC Content (EPA Method 24/ASTM D3960)	33.3 lb/gal. (40.0 g/L)
Expansion Begins	350°F (176°C)
Volume Expansion	>5X Free Expansion
Shelf Life	2 Years

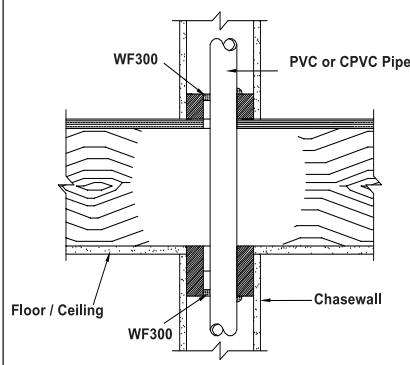*ASTM E 84 (UL723) @ 14% surface coverage (modified test for caulks and sealants)

Fig 1: Metal Pipe, Conduit, Tube

UL System No. F-C-1053
F Rating: 1 hour • T Rating: 1 hour
Steel, Iron, Copper, Conduit/EMT: 4"
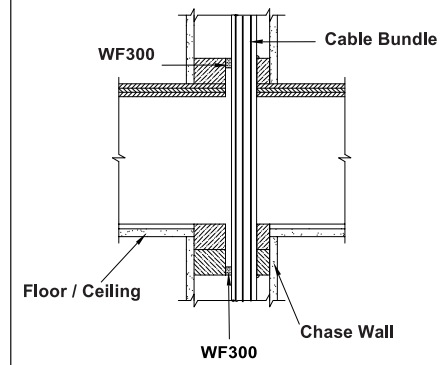Annulus: 0" to 1/2"
Sealant Depth: 3/4" top, 5/8" bottom

Fig 2: Plastic Pipe

UL System No. F-C-2014
F Rating: 1 hour • T Rating: 1 hour
PVS, CPVC (DWV or Closed): 2"
Annulus: 0" to 1/2"
Sealant Depth: 1/2" top, 1/2" bottom

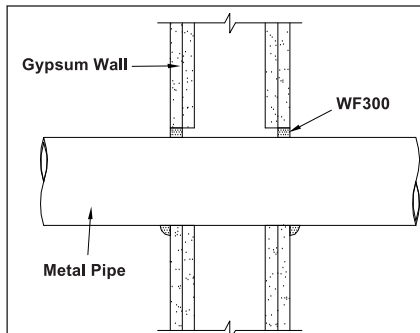## Fig 3: Electrical/Telecom/Data Cables

UL System No. F-C-3010
F Rating: 1 hour • T Rating: 1 hour
Electrical, Telephone, or Data Cables
Annulus: 0" to 1/2"
Sealant Depth: 1/2" top, 1/2" bottom

SPECIFICATIONS

The firestopping sealant shall be a water-resistant, intumescent, latex sealant Type WF Firestop Caulk. The sealant when exposed to high heat or flame shall exhibit a free expansion of up to 4 times its original volume. The firestopping sealant shall contain no water soluble nor hygroscopic ingredients. The sealant shall be UL Classified and tested to the requirements of ASTM E814 (UL1479) and shall meet Class A finish requirements when tested in accordance with ASTM E84 (UL723).
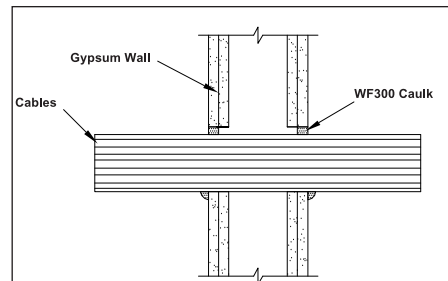
Fig 4: Metal Pipe, Conduit, Tube

UL System No. W-L-1042
F Rating: 1 or 2 hour • T Rating: 1/4 hour
Steel, Iron, Copper, Conduit/EMT: 4"
Annulus: 0" to 1/2"
Sealant Depth: 5/8" both sides

Fig 5: Electrical/Telecom/Data Cables

UL System No. W-L-3036
F Rating: 1 or 2 hour • T Rating: 1/2 hour
Electrical, Telephone, or Data Cables
Annulus: 0" to 3/4"
Sealant Depth: 0" both sides

SPECIFIED DIVISIONS

DIV. 7 07840 Through-Penetration Firestopping

DIV. 13 13900 Special Construction Fire Suppression & Supervisory Systems

DIV. 15 15250 Mechanical Insulation – Fire Protection

DIV. 16 16050 Basic Electrical Materials & Methods

SEALANT REQUIREMENTS IN CUBIC INCHES PER 1/4 INCH OF INSTALLED DEPTH*

| Pipe Size | | Diameter of Opening (in.) | | | | | | | | | | | |
Trade Size	Pipe O.D.	1.5	2.0	3.0	4.0	5.0	6.0	7.0	8.0	10	12	14	26
0.5"	0.840	0.3	0.6	1.6	3.0	4.8	6.9	9.5	12.4	19.5	28.1	38.3	132.6
1"	1.315	0.1	0.4	1.4	2.8	4.6	6.7	9.3	12.2	19.3	27.9	38.1	132.4
1.5"	1.900			1.1	2.4	4.2	6.4	8.9	11.9	18.9	27.6	37.8	132.0
2"	2.375			0.7	2.0	3.8	6.0	8.5	11.5	18.5	27.2	37.4	131.6
2.5"	2.875			0.1	1.5	3.3	5.4	8.0	10.9	18.0	26.7	36.9	131.1
3"	3.500				0.7	2.5	4.7	7.2	10.2	17.2	25.9	36.1	130.3
3.5"	4.000					1.8	3.9	6.5	9.4	16.5	25.1	35.3	129.6
4"	4.500					0.8	3.0	5.6	8.5	15.6	24.2	34.4	128.7
6"	6.625							1.1	4.0	11.1	19.7	29.9	124.2
8"	8.625									4.9	13.6	23.8	118.0
10"	10.750										5.6	15.8	110.0
12"	12.750											6.6	100.8
24"	24.000												19.6

*Different Sealant Depth?
1/2" Multiply by 2
5/8" Multiply by 2.5
1" Multiply by 4
1-1/4" Multiply by 5

IMPORTANT NOTE: This table is for estimation purposes only. Consult UL Fire Resistance Directory or STI Product & Application Guide for specific installation requirements and limitations
Metric Estimation Table available upon request.

INSTALLATION INSTRUCTIONS

GENERAL: Areas to be protected must be clean and free of oil, loose dirt, rust or scale. Installation temperatures must be between 35° F to 100° F (2° C to 38° C). Allow product to dry a minimum of 24 hours before prior to exposure to moisture.

SYSTEM SELECTION: Select appropriate UL Classified System. Refer to UL Fire Resistance Directory for more information.

FORMING: Although not generally required, backing materials may be utilized to facilitate the installation of WF300 Caulk. In most wood frame construction applications, open or close cell polyethylene or polyurethane backer rod may be used.

FILL MATERIAL: Type WF300 Caulk may be installed by caulking using a standard caulk gun or from bulk containers using a bulk loading caulk gun, or by manually troweling using a mason's trowel or putty knife. If the sealant pulls back from surface, clean the surface with a damp rag or sponge and reapply. Work caulk into all areas and exercise care to eliminate voids or seams. Surface of caulk can be smoothed using a putty knife dipped in water. Adding water to caulk itself is not recommended. Type WF300 (when dry) may be sanded and painted using most non-solvent based paints. In gypsum board construction, overlapping onto gypsum board paper by a minimum 1/4" (6 mm) is recommended to assure adequate adhesion is maintained.

LIMITATIONS: Type WF300 Caulk is water based and cures through the evaporation of water. Low temperatures, high humidity, the use of non-porous or impermeable backing materials, cover plates or coatings may retard the drying process. Do not paint or seal in any way that prevents contact with air until caulk has dried through completely. Type WF300 Caulk has been designed to be safe for contact with plastics and has been used extensively and successfully with a variety of different types of plastic pipes, tubes, and plastic cable insulations or jackets. Variations in these materials, however, make it impossible to guarantee compatibility. STI strongly recommends that the user consult with the manufacturer of the pipe, tubing, or cable in question regarding any known sensitivities or potential restrictions before applying this product.

MAINTENANCE

Inspection: Installations should be inspected periodically for subsequent damage. Any damage should be repaired using Type WF300 Caulk per the original approved design.

Retrofit: When adding or removing penetrants, care should be taken to minimize damage to the seal. Reseal using Type WF300 Caulk per the original approved design. NOTE: New penetrants of a different nature than the original design may require a totally new firestop design or extensive modifications to the existing design. Reseal all openings as per the requirements of the modified design.

TECHNICAL SERVICE

Specified Technologies Inc. provides toll free technical support to assist in product selection and appropriate installation design. UL Systems, Material Safety Data Sheets and other technical information is available through the Technical Library at www.stifirestop.com.

PRECAUTIONARY INFORMATION

Consult Material Safety Data Sheet for additional information on the safe handling and disposal of this material. Wash areas of skin contact with soap and water. Avoid contact with eyes. SEALANT IS CONDUCTIVE UNTIL DRY.

AVAILABILITY

Type WF300 Caulk is available from authorized STI distributors. Visit the company website at www.stifirestop.com for complete list of names and locations of nearest sales representatives or distributors. Available packages and additional STI products for wood frame construction are listed below.

ORDERING INFORMATION

WF300 Intumescent Firestop Caulk is available in caulk tubes, sausages and pails.

Cat. No. Description

WF310   10.1 oz. Tube (300 ml) 18.2 cu.in.
WF329   29 oz. Tube (858 ml) 52 cu.in.
WF320   20 oz. Sausage (592 ml) 36 cu. in.
WF305   5 Gal. Pail (19.0 liters) 1,155 cu. in.

Additional STI Products for Wood Frame Construction...

SmokeBlock™ Sealer

A noncombustible caulk meeting ASTM E 136 for use in sealing penetrants and gaps in non-rated construction.

CITY OF NEW YORK MEA 440-04-M

Specified Technologies Inc.

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