

CP 653 Speed Sleeve

1) Cables Through Floor- or Wall-Assemblies							
Barrier	Hole Created in Barrier	F-Rating, hours	T-Rating, hours	L-Rating, cfm ² / ft ² (Ambient)	L-Rating, cfm ² / ft ² (400 F)	System Number	Product (Other)
Concrete (2.5" min.)	2.5" for CP 653 2" 4.5" for CP 653 4"	2	3/4	1 or 7	2 or 7	C-AJ-3281	CP 653 (FS One or CP 606)
Concrete (2.5" min.)	3.0" for CP 653 2" 5.0" for CP 653 4"	2	1/2	7	7	C-AJ-3283	CP 653 (FS One or CP 618 Putty)
Concrete (2.5" min.)	3.0" for CP 653 2" 5.0" for CP 653 4"	3	1, 1.5 or 3	1 or 7	2 or 7	C-AJ-3285	CP 653 (FS One or CP 606)
Gypsum (1 or 2 hour)	3.0" for CP 653 2" 5.0" for CP 653 4"	2 or 2	1 to 2	< 1, 5 or 9	< 1, 1 or 10	W-L-3335	CP 653 (FS One; CP 606; or CP 618 Putty)

2) Cables Through Floor Assemblies							
Barrier	Penetration Type	F-Rating	F-Rating	F-Rating	F-Rating	System Number	Product (Other)
Concrete (2.5" min.)	2.5" for CP 653 2" 4.5" for CP 653 4"	2	3/4	1 or 7	2 or 7	C-AJ-3281	CP 653 (FS One or CP 606)
Concrete (2.5" min.)	3.0" for CP 653 2" 5.0" for CP 653 4"	2	1/2	7	7	C-AJ-3283	CP 653 (FS One or CP 618 Putty)
Concrete (2.5" min.)	3.0" for CP 653 2" 5.0" for CP 653 4"	3	1, 1.5 or 3	1 or 7	2 or 7	C-AJ-3285	CP 653 (FS One or CP 606)

Products Recommended	
CP 606	Flexible Firestop Sealant (acrylic-base)
CP 618	Firestop Putty Stick
CP 653	Speed Sleeve
FS One	Intumescent Firestop Sealant (water-base)
-	Mineral Wool
Always refer to the Tested System for comprehensive system details and installation requirements.	

CABLE BUNDLE THROUGH CONCRETE FLOOR/WALL OR BLOCK WALL ASSEMBLY

F-RATING = 2-HR.

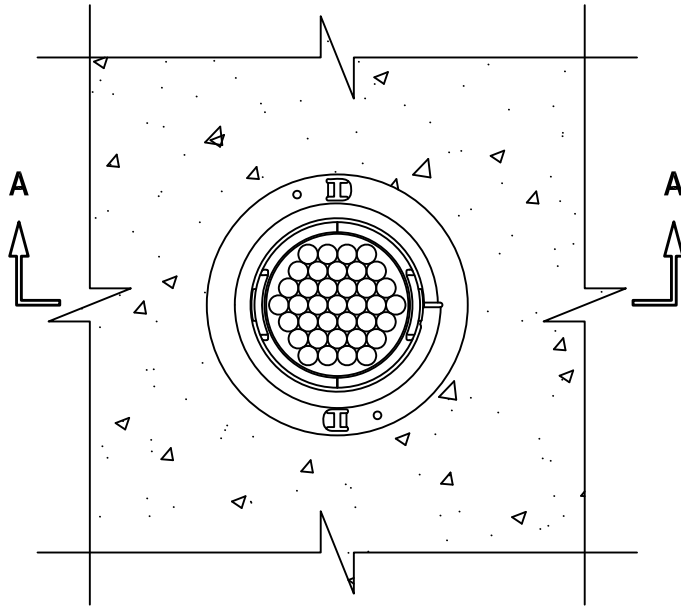
T-RATING = 3/4-HR.

L-RATING AT AMBIENT = 1 CFM/SQ. FT. (BLANK) AND 7 CFM/SQ. FT. (CABLES)

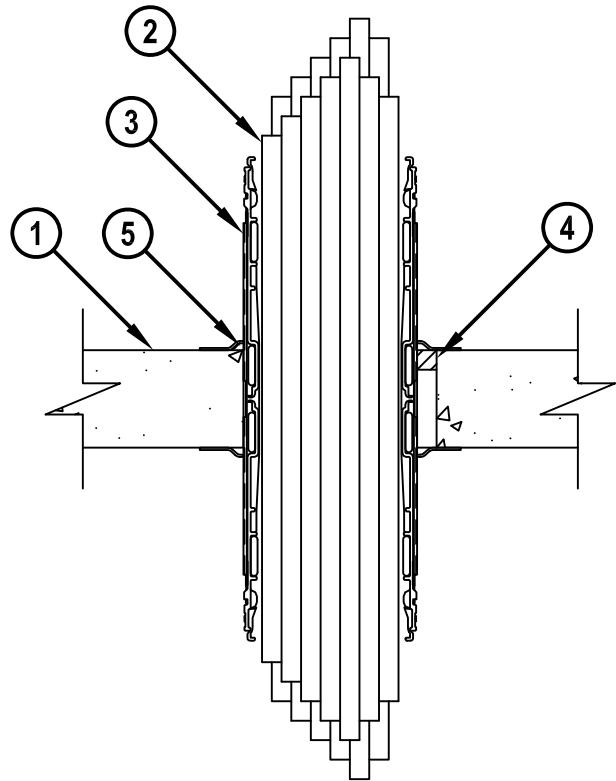
L-RATING AT 400°F = 2 CFM/SQ. FT. (BLANK) AND 7 CFM/SQ. FT. (CABLES)

CAJ3281a.110307

TOP VIEW



SECTION A-A



Hilti Firestop Systems

HILTI, Inc.
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Scale	13/64" = 1"
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Drawing No.

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CABLE BUNDLE THROUGH CONCRETE FLOOR/WALL OR BLOCK WALL ASSEMBLY

F-RATING = 2-HR.

T-RATING = 3/4-HR.

L-RATING AT AMBIENT = 1 CFM/SQ. FT. (BLANK) AND 7 CFM/SQ. FT. (CABLES)

L-RATING AT 400°F = 2 CFM/SQ. FT. (BLANK) AND 7 CFM/SQ. FT. (CABLES)

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1. CONCRETE FLOOR OR WALL ASSEMBLY (2-HR. FIRE-RATING) :
 - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR OR WALL (MINIMUM 2-1/2" THICK).
 - B. ANY UL/cUL CLASSIFIED PRECAST (HOLLOW-CORE) CONCRETE FLOOR (MINIMUM 6" THICK).
 - C. ANY UL/cUL CLASSIFIED CONCRETE BLOCK WALL.
2. CABLE BUNDLE TO BE A COMBINATION OF ANY OF THE FOLLOWING :
 - A. MAXIMUM 100 PAIR NO. 24 AWG TELEPHONE CABLE WITH PVC JACKET.
 - B. MAXIMUM 7/C NO. 12 AWG COPPER CONDUCTOR CONTROL CABLE WITH PVC OR XLPE JACKET AND INSULATION.
 - C. MAXIMUM 4/0 AWG SHIELDED PRINTER CABLE WITH PVC JACKET.
 - D. MAXIMUM 4 PAIR NO. 22 AWG CAT 6 COMPUTER CABLE.
 - E. MAXIMUM RG 6/U COAXIAL CABLE.
 - F. MAXIMUM 1/2" DIAMETER FIBER-OPTIC CABLE (24 FIBER) WITH PVC OR PE JACKET AND INSULATION.
 - G. MAXIMUM 20/C NO. 22 AWG SHIELDED PRINTER CABLE WITH PVC JACKET.
 - H. MAXIMUM 2/C NO. 18 AWG POWER OR NON-POWER LIMITED FIRE ALARM CABLE WITH OR WITHOUT METAL JACKET (MANUFACTURED BY AFC CABLE SYSTEMS, INC).
 - I. MAXIMUM 1/4" DIAMETER S-VIDEO CABLE CONSISTING OF MAXIMUM 24 AWG 75 OHM COAX OR TWISTED PAIR CABLE WITH PE INSULATION AND PVC JACKET.
3. HILTI CP 653 SPEED SLEEVE (2" OR 4") SLID INTO AND CENTERED WITHIN FLOOR OR WALL. DEVICE FLANGES SPUN CLOCKWISE ONTO DEVICE THREADS, BUTTING TIGHTLY TO BOTH SIDES OF FLOOR OR WALL.
4. MINIMUM 1/2" DEPTH HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT OR HILTI CP 606 FLEXIBLE FIRESTOP SEALANT FLUSH WITH TOP SURFACE OF FLOOR.
5. MINIMUM 1/4" BEAD HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT OR HILTI CP 606 FLEXIBLE FIRESTOP SEALANT APPLIED AT POINT OF CONTACT.

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 2-1/2" (FOR 2" DEVICE) OR 4-1/2" (FOR 4" DEVICE).
 2. CABLES MAY REPRESENT 0 TO 100% VISUAL FILL OF DEVICE.
 3. MINIMUM ANNULAR SPACE BETWEEN DEVICE AND PERIPHERY OF OPENING = 0".
 4. MINIMUM 1/2" DEPTH HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT OR HILTI CP 606 FLEXIBLE FIRESTOP SEALANT IS REQUIRED ON BOTH SIDES OF A WALL.

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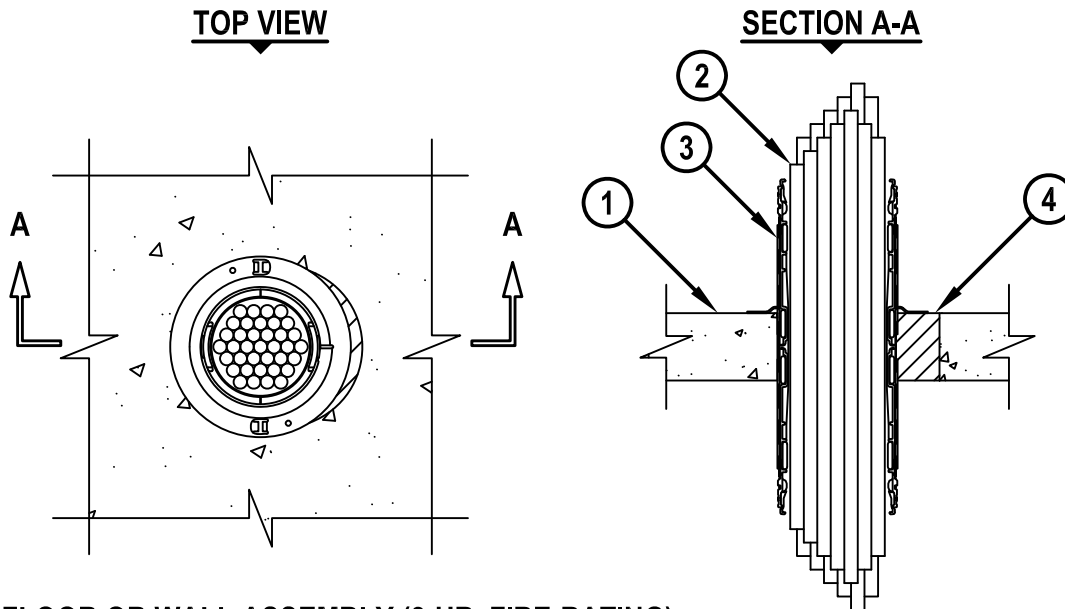
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CABLE BUNDLE THROUGH CONCRETE FLOOR/WALL OR BLOCK WALL ASSEMBLY

F-RATING = 2-HR.

T-RATING = 3/4-HR. AND 1-HR.

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1. CONCRETE FLOOR OR WALL ASSEMBLY (2-HR. FIRE-RATING) :
 - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR OR WALL (MINIMUM 2-1/2" THICK).
 - B. ANY UL/cUL CLASSIFIED CONCRETE BLOCK WALL.
2. CABLE BUNDLE TO BE A COMBINATION OF ANY OF THE FOLLOWING :
 - A. MAXIMUM 100 PAIR NO. 24 AWG TELEPHONE CABLE WITH PVC JACKET.
 - B. MAXIMUM 7/C NO. 12 AWG COPPER CONDUCTOR CONTROL CABLE WITH PVC OR XLPE JACKET AND INSULATION.
 - C. MAXIMUM 4/0 AWG SHIELDED PRINTER CABLE WITH PVC JACKET.
 - D. MAXIMUM 4 PAIR NO. 22 AWG CAT 6 COMPUTER CABLE.
 - E. MAXIMUM RG 6/U COAXIAL CABLE.
 - F. MAXIMUM 1/2" DIAMETER FIBER-OPTIC CABLE (24 FIBER) WITH PVC OR PE JACKET AND INSULATION.
 - G. MAXIMUM 20/C NO. 22 AWG SHIELDED PRINTER CABLE WITH PVC JACKET.
 - H. MAXIMUM 2/C NO. 18 AWG POWER OR NON-POWER LIMITED FIRE ALARM CABLE WITH OR WITHOUT METAL JACKET (MANUFACTURED BY AFC CABLE SYSTEMS, INC).
 - I. MAXIMUM 1/4" DIAMETER S-VIDEO CABLE CONSISTING OF MAXIMUM 24 AWG 75 OHM COAX OR TWISTED PAIR CABLE WITH PE INSULATION AND PVC JACKET.
3. HILTI CP 653 SPEED SLEEVE (2" OR 4") SLID INTO AND CENTERED WITHIN FLOOR OR WALL. DEVICE FLANGES SPUN CLOCKWISE ONTO DEVICE THREADS, BUTTING TIGHTLY TO TOP SIDE OF FLOOR OR BOTH SIDES OF WALL.
4. MINIMUM 2-1/2" DEPTH HILTI CP 637 FIRESTOP MORTAR FLUSH WITH BOTTOM SURFACE OF FLOOR OR BOTH SURFACES OF WALL.

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 4" (FOR 2" DEVICE) OR 6" (FOR 4" DEVICE).
 2. CABLES MAY REPRESENT 0 TO 100% VISUAL FILL OF DEVICE.
 3. MINIMUM ANNULAR SPACE BETWEEN DEVICE AND PERIPHERY OF OPENING = 0".



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UL/cUL SYSTEM NO. C-AJ-3283

CABLE BUNDLE THROUGH CONCRETE FLOOR/WALL OR BLOCK WALL ASSEMBLY

F-RATING = 2-HR.

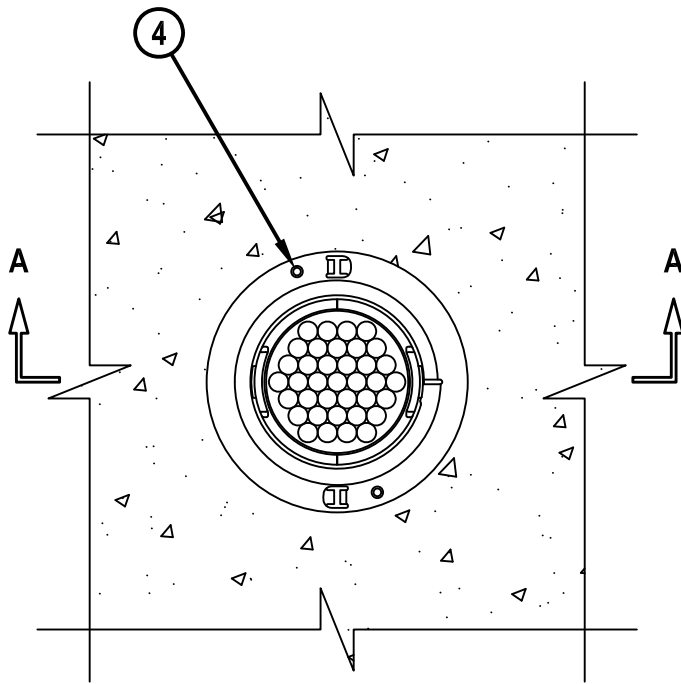
T-RATING = 1/2-HR.

L-RATING AT AMBIENT = 7 CFM/SQ. FT.

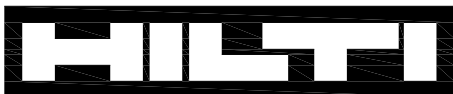
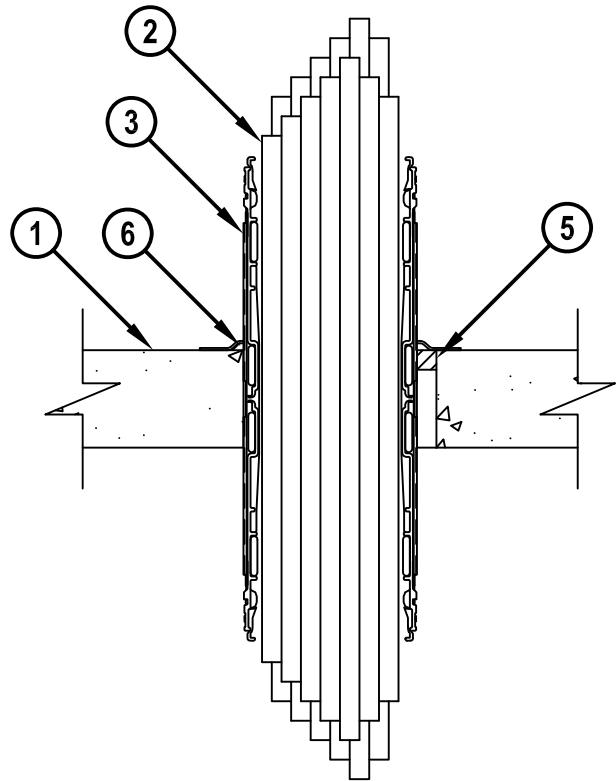
L-RATING AT 400°F = 7 CFM/SQ. FT.

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TOP VIEW



SECTION A-A



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CABLE BUNDLE THROUGH CONCRETE FLOOR/WALL OR BLOCK WALL ASSEMBLY

F-RATING = 2-HR.

T-RATING = 1/2-HR.

L-RATING AT AMBIENT = 7 CFM/SQ. FT.

L-RATING AT 400°F = 7 CFM/SQ. FT.

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1. CONCRETE FLOOR OR WALL ASSEMBLY (2-HR. FIRE-RATING) :
 - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR OR WALL (MINIMUM 2-1/2" THICK).
 - B. ANY UL/cUL CLASSIFIED CONCRETE BLOCK WALL.
2. CABLE BUNDLE TO BE A COMBINATION OF ANY OF THE FOLLOWING :
 - A. MAXIMUM 100 PAIR NO. 24 AWG TELEPHONE CABLE WITH PVC JACKET.
 - B. MAXIMUM 7/C NO. 12 AWG COPPER CONDUCTOR CONTROL CABLE WITH PVC OR XLPE JACKET AND INSULATION.
 - C. MAXIMUM 4/0 AWG SHIELDED PRINTER CABLE WITH PVC JACKET.
 - D. MAXIMUM 4 PAIR NO. 22 AWG CAT 6 COMPUTER CABLE.
 - E. MAXIMUM RG 6/U COAXIAL CABLE.
 - F. MAXIMUM 1/2" DIAMETER FIBER-OPTIC CABLE (24 FIBER) WITH PVC OR PE JACKET AND INSULATION.
 - G. MAXIMUM 20/C NO. 22 AWG SHIELDED PRINTER CABLE WITH PVC JACKET.
 - H. MAXIMUM 2/C NO. 18 AWG POWER OR NON-POWER LIMITED FIRE ALARM CABLE WITH OR WITHOUT METAL JACKET (MANUFACTURED BY AFC CABLE SYSTEMS, INC).
 - I. MAXIMUM 1/4" DIAMETER S-VIDEO CABLE CONSISTING OF MAXIMUM 24 AWG 75 OHM COAX OR TWISTED PAIR CABLE WITH PE INSULATION AND PVC JACKET.
3. HILTI CP 653 SPEED SLEEVE (2" OR 4") SLID INTO AND CENTERED WITHIN FLOOR OR WALL. DEVICE FLANGES SPUN CLOCKWISE ONTO DEVICE THREADS, BUTTING TIGHTLY TO TOP OR BOTTOM SIDE OF FLOOR (DEPENDENT ON SEALANT LOCATION) OR BOTH SIDES OF WALL.
4. SECURE DEVICE FLANGE TO TOP OR BOTTOM OF FLOOR WITH TWO 1-1/4" LONG CONCRETE SCREWS OR ANCHORS.
5. MINIMUM 1/2" DEPTH HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT FLUSH WITH TOP OR BOTTOM SURFACE OF FLOOR OR BOTH SIDES OF WALL.
6. MINIMUM 1/4" BEAD HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT APPLIED AT POINT OF CONTACT.

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 3" (FOR 2" DEVICE) OR 5" (FOR 4" DEVICE).
 2. CABLES MAY REPRESENT 50 TO 100% VISUAL FILL OF DEVICE.
 3. MINIMUM ANNULAR SPACE BETWEEN DEVICE AND PERIPHERY OF OPENING = 0".
 4. [OPTIONAL] AS AN ALTERNATE TO FS-ONE, HILTI CP 618 FIRESTOP PUTTY MAY BE INSTALLED ON TOP SIDE OF FLOOR OR BOTH SIDES OF A WALL.
 5. L-RATING APPLIES ONLY WHEN FS-ONE IS USED.

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Scale -

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CABLE BUNDLE THOROUGH CONCRETE/FLOOR OR BLOCK WALL ASSEMBLY

F-RATING = 2-HR.

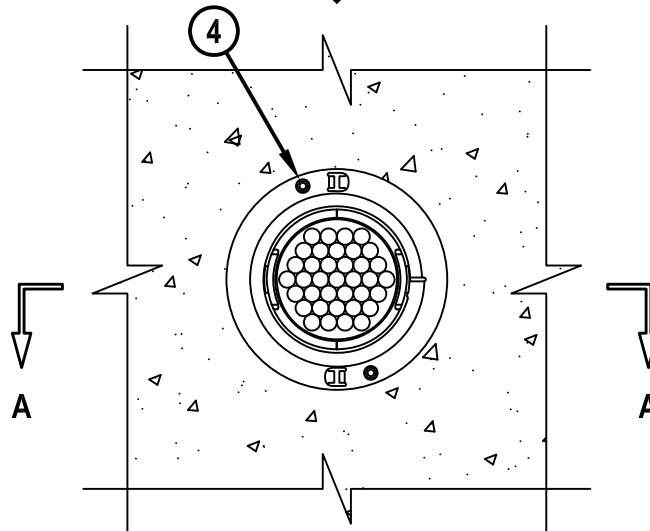
T-RATING = 1/2-HR.

L-RATING AT AMBIENT = 1 CFM/SQ. FT. (BLANK) AND 7 CFM/SQ. FT. (CABLES)

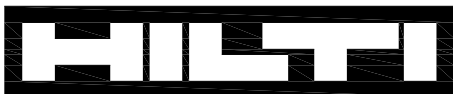
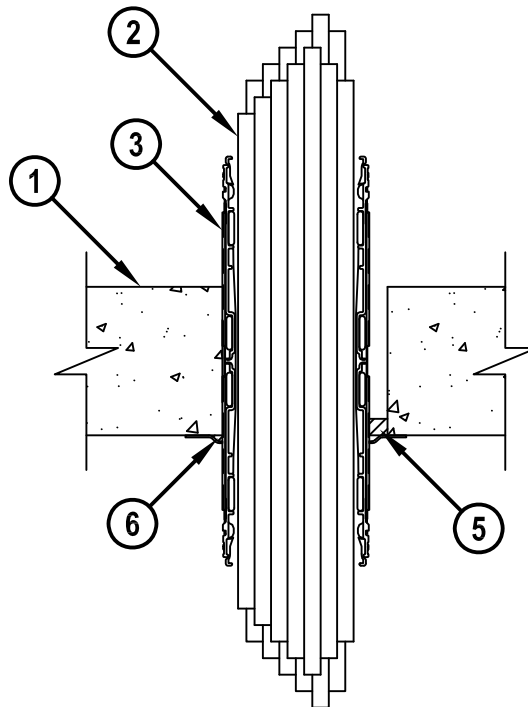
L-RATING AT 400°F = 2 CFM/SQ. FT. (BLANK) AND 7 CFM/SQ. FT. (CABLES)

CAJ3284a.112607

BOTTOM VIEW



SECTION A-A



Hilti Firestop Systems

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CABLE BUNDLE THOROUGH CONCRETE/FLOOR OR BLOCK WALL ASSEMBLY

F-RATING = 2-HR.

T-RATING = 1/2-HR.

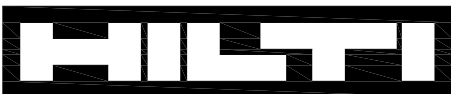
L-RATING AT AMBIENT = 1 CFM/SQ. FT. (BLANK) AND 7 CFM/SQ. FT. (CABLES)

L-RATING AT 400°F = 2 CFM/SQ. FT. (BLANK) AND 7 CFM/SQ. FT. (CABLES)

CAJ3284a.112607

1. CONCRETE FLOOR OR WALL ASSEMBLY (2-HR. FIRE-RATING) :
 - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR OR WALL (MINIMUM 4-1/2" THICK).
 - B. ANY UL/cUL CLASSIFIED PRECAST (HOLLOW-CORE) CONCRETE FLOOR (MINIMUM 6" THICK).
 - C. ANY UL/cUL CLASSIFIED CONCRETE BLOCK WALL.
2. CABLE BUNDLE TO BE A COMBINATION OF ANY OF THE FOLLOWING :
 - A. MAXIMUM 100 PAIR NO. 24 AWG TELEPHONE CABLE WITH PVC JACKET.
 - B. MAXIMUM 7/C NO. 12 AWG COPPER CONDUCTOR CONTROL CABLE WITH PVC OR XLPE JACKET AND INSULATION.
 - C. MAXIMUM 4/0 AWG TYPE RHH GROUND CABLE.
 - D. MAXIMUM 4 PAIR NO. 22 AWG CAT 6 COMPUTER CABLE.
 - E. MAXIMUM RG 6/U COAXIAL CABLE.
 - F. MAXIMUM 1/2" DIAMETER FIBER-OPTIC CABLE (24 FIBER) WITH PVC OR PE JACKET AND INSULATION.
 - G. MAXIMUM 20/C NO. 22 AWG SHIELDED PRINTER CABLE WITH PVC JACKET.
 - H. MAXIMUM 2/C NO. 18 AWG POWER OR NON-POWER LIMITED FIRE ALARM CABLE WITH OR WITHOUT METAL JACKET (MANUFACTURED BY AFC CABLE SYSTEMS, INC.).
 - I. MAXIMUM 1/4" DIAMETER S-VIDEO CABLE CONSISTING OF TWO MAXIMUM 24 AWG 75 OHM COAX OR TWISTED PAIR CABLE WITH PE INSULATION AND PVC JACKET.
3. HILTI CP 653 SPEED SLEEVE (2" OR 4") SLID INTO AND CENTERED WITHIN FLOOR OR WALL. DEVICE FLANGES SPUN CLOCKWISE ONTO DEVICE THREADS, BUTTING TIGHTLY TO BOTTOM SIDE OF FLOOR, OR BOTH SIDES OF WALL.
4. SECURE DEVICE FLANGE TO BOTTOM OF FLOOR WITH TWO 1-1/4" LONG CONCRETE SCREWS OR ANCHORS.
5. MINIMUM 1/2" DEPTH HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT OR 1" DEPTH CP 618 FIRESTOP PUTTY STICK FLUSH WITH BOTTOM SURFACE OF FLOOR, OR BOTH SURFACES OF WALL.
6. [FOR L-RATING] MINIMUM 1/4" BEAD HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT APPLIED AT POINT OF CONTACT.

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 3" (FOR 2" DEVICE) OR 5" (FOR 4" DEVICE).
 2. CABLES MAY REPRESENT 0% TO 100% VISUAL FILL OF DEVICE.
 3. ANNULAR SPACE BETWEEN DEVICE AND PERIPHERY OF OPENING = MINIMUM 0".
 4. L-RATING APPLIES ONLY WHEN HILTI FS-ONE FIRESTOP SEALANT IS USED.
 5. HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT IS REQUIRED ON BOTH SIDES OF A WALL.

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CABLE BUNDLE THROUGH CONCRETE FLOOR/WALL OR BLOCK WALL ASSEMBLY

F-RATING = 3-HR.

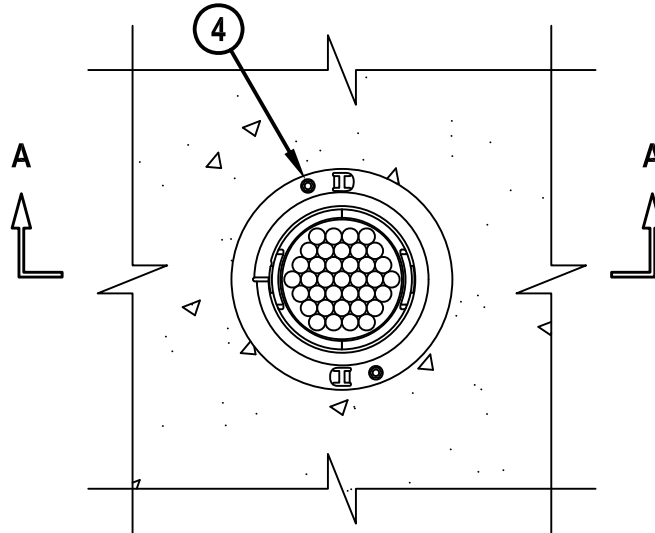
T-RATING = 1-HR., 1 1/2-HR. AND 3-HR.

L-RATING AT AMBIENT = 1 CFM/SQ. FT. (BLANK) AND 7 CFM/SQ. FT. (CABLES)

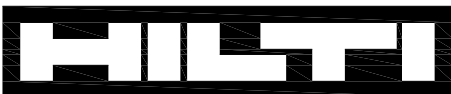
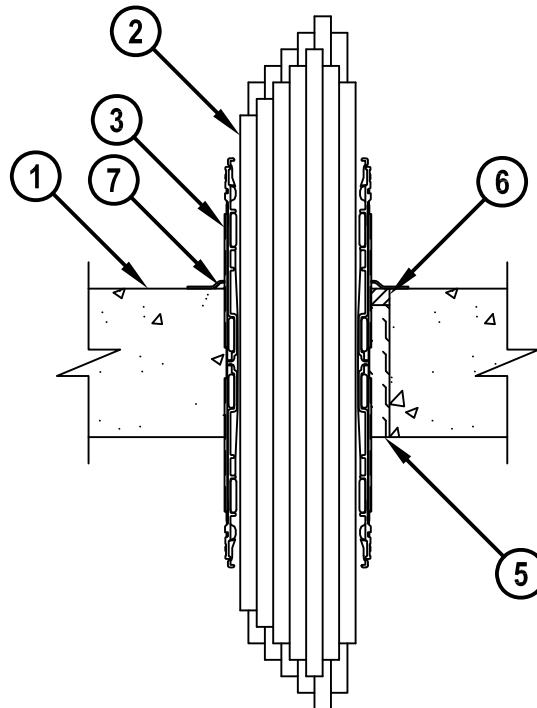
L-RATING AT 400°F = 2 CFM/SQ. FT. (BLANK) AND 7 CFM/SQ. FT. (CABLES)

CAJ3285b_112707

TOP VIEW



SECTION A-A



Hilti Firestop Systems

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Scale	1 1/4" = 1"
Date	Nov. 27, 2007

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CABLE BUNDLE THROUGH CONCRETE FLOOR/WALL OR BLOCK WALL ASSEMBLY

F-RATING = 3-HR.

T-RATING = 1-HR., 1 1/2-HR. AND 3-HR.

L-RATING AT AMBIENT = 1 CFM/SQ. FT. (BLANK) AND 7 CFM/SQ. FT. (CABLES)

L-RATING AT 400°F = 2 CFM/SQ. FT. (BLANK) AND 7 CFM/SQ. FT. (CABLES)

CAJ3285b_112707

1. CONCRETE FLOOR OR WALL ASSEMBLY (3-HR. FIRE-RATING) :
 - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 4-1/2" THICK).
 - B. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE WALL (MINIMUM 5" THICK).
 - C. ANY UL/cUL CLASSIFIED PRECAST (HOLLOW-CORE) CONCRETE FLOOR (MINIMUM 6" THICK).
 - D. ANY UL/cUL CLASSIFIED CONCRETE BLOCK WALL.
2. CABLE BUNDLE TO BE A COMBINATION OF ANY OF THE FOLLOWING :
 - A. MAXIMUM 100 PAIR NO. 24 AWG TELEPHONE CABLE WITH PVC JACKET.
 - B. MAXIMUM 7/C NO. 12 AWG COPPER CONDUCTOR CONTROL CABLE WITH PVC OR XLPE JACKET AND INSULATION.
 - C. MAXIMUM 4/0 AWG TYPE RHH GROUND CABLE.
 - D. MAXIMUM 4 PAIR NO. 22 AWG CAT 6 COMPUTER CABLE.
 - E. MAXIMUM RG 6/U COAXIAL CABLE.
 - F. MAXIMUM 1/2" DIAMETER FIBER-OPTIC CABLE (24 FIBER) WITH PVC OR PE JACKET AND INSULATION.
 - G. MAXIMUM 20/C NO. 22 AWG SHIELDED PRINTER CABLE WITH PVC JACKET.
 - H. MAXIMUM 2/C NO. 18 AWG POWER OR NON-POWER LIMITED FIRE ALARM CABLE WITH OR WITHOUT METAL JACKET (MANUFACTURED BY AFC CABLE SYSTEMS, INC.).
 - I. MAXIMUM 1/4" DIAMETER S-VIDEO CABLE CONSISTING OF TWO MAXIMUM 24 AWG 75 OHM COAX OR TWISTED PAIR CABLE WITH PE INSULATION AND PVC JACKET.
3. HILTI CP 653 SPEED SLEEVE (2" OR 4") SLID INTO AND CENTERED WITHIN FLOOR OR WALL. DEVICE FLANGES SPUN CLOCKWISE ONTO DEVICE THREADS, BUTTING TIGHTLY TO TOP SIDE OF FLOOR, OR BOTH SIDES OF WALL (SEE NOTE NO. 4 BELOW).
4. SECURE DEVICE FLANGE TO TOP OF FLOOR WITH TWO 1-1/4" LONG CONCRETE SCREWS OR ANCHORS.
5. MINIMUM 4" THICKNESS MINERAL WOOL (MIN. 4 PCF DENSITY) TIGHTLY PACKED.
6. MINIMUM 1/2" DEPTH HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT OR CP 606 FLEXIBLE FIRESTOP SEALANT FLUSH WITH TOP OR BOTTOM SURFACE OF FLOOR, OR BOTH SURFACES OF WALL.
7. [FOR L-RATING] MINIMUM 1/4" BEAD HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT OR CP 606 FLEXIBLE FIRESTOP SEALANT APPLIED AT POINT OF CONTACT.

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 3" (FOR 2" DEVICE) OR 5" (FOR 4" DEVICE).
 2. CABLES MAY REPRESENT 0% TO 100% VISUAL FILL OF DEVICE.
 3. ANNULAR SPACE BETWEEN DEVICE AND PERIPHERY OF OPENING = MINIMUM 0".
 4. AS AN OPTION IN FLOORS, STEEL SLEEVE OF DEVICE MAY BE INSTALLED FLUSH WITH BOTTOM OF FLOOR.
 5. HILTI FS-ONE OR CP 606 FIRESTOP SEALANT IS REQUIRED ON BOTH SIDES OF A WALL.



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CABLE BUNDLE THROUGH CONCRETE OR BLOCK WALL ASSEMBLY

F-RATING = 2-HR.

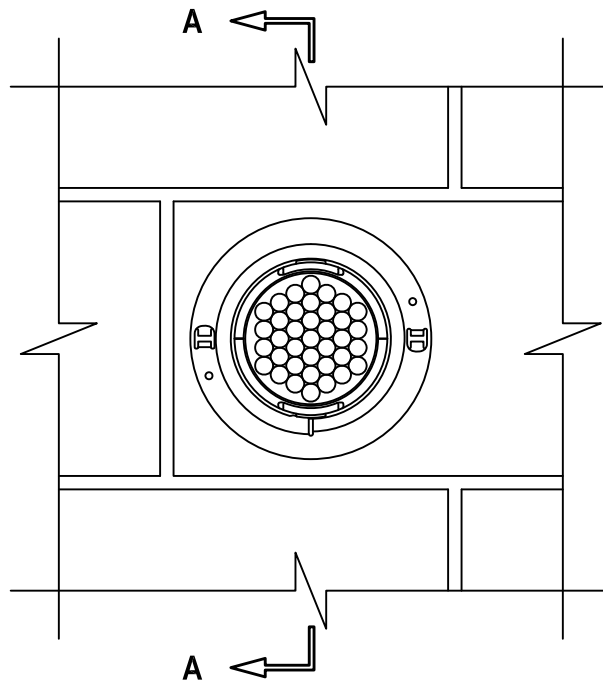
T-RATING = 0-HR., 1-HR., 1 3/4-HR., AND 2-HR.

L-RATING AT AMBIENT = LESS THAN 1 CFM/SQ. FT., 5 CFM/SQ. FT., AND 9 CFM/SQ. FT.

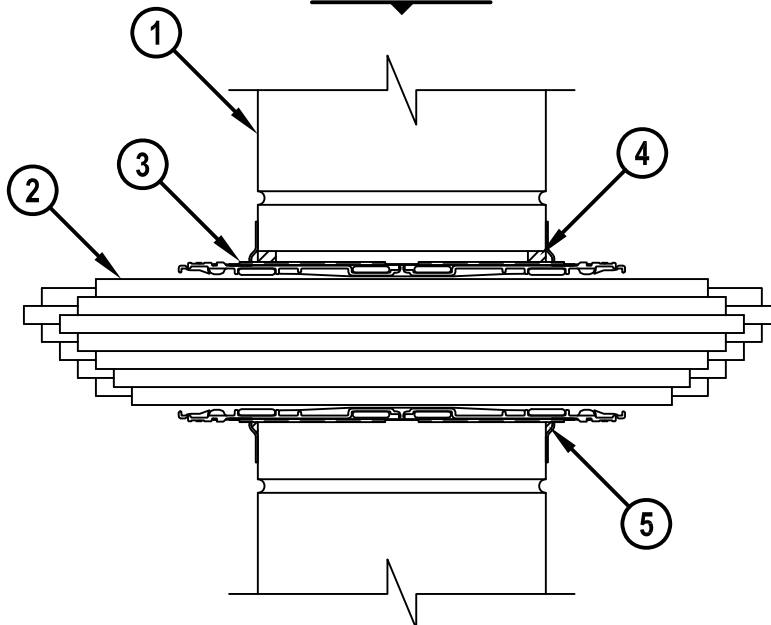
L-RATING AT 400°F = LESS THAN 1 CFM/SQ. FT., 1 CFM/SQ. FT., AND 10 CFM/SQ. FT.

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FRONT VIEW



SECTION A-A



Hilti Firestop Systems

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Sheet	1 of 2
Scale	3/16" = 1"
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3167a**

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CABLE BUNDLE THROUGH CONCRETE OR BLOCK WALL ASSEMBLY**F-RATING = 2-HR.****T-RATING = 0-HR., 1-HR., 1 3/4-HR., AND 2-HR.****L-RATING AT AMBIENT = LESS THAN 1 CFM/SQ. FT., 5 CFM/SQ. FT., AND 9 CFM/SQ. FT.****L-RATING AT 400°F = LESS THAN 1 CFM/SQ. FT., 1 CFM/SQ. FT., AND 10 CFM/SQ. FT.**

WJ3167a.112607

1. CONCRETE WALL ASSEMBLY (2-HR. FIRE-RATING) :
 - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE WALL (MINIMUM 5" THICK).
 - B. ANY UL/cUL CLASSIFIED CONCRETE BLOCK WALL.
2. CABLE BUNDLE TO BE A COMBINATION OF ANY OF THE FOLLOWING :
 - A. MAXIMUM 100 PAIR NO. 24 AWG TELEPHONE CABLE WITH PVC JACKET.
 - B. MAXIMUM 7/C NO. 12 AWG COPPER CONDUCTOR CONTROL CABLE WITH PVC OR XLPE JACKET AND INSULATION.
 - C. MAXIMUM 4/0 AWG TYPE RHH GROUND CABLE.
 - D. MAXIMUM 4 PAIR NO. 22 AWG CAT 6 COMPUTER CABLE.
 - E. MAXIMUM RG 6/U COAXIAL CABLE.
 - F. MAXIMUM 1/2" DIAMETER FIBER-OPTIC CABLE (24 FIBER) WITH PVC OR PE JACKET AND INSULATION.
 - G. MAXIMUM 20/C NO. 22 AWG SHIELDED PRINTER CABLE WITH PVC JACKET.
 - H. MAXIMUM 2/C NO. 18 AWG POWER OR NON-POWER LIMITED FIRE ALARM CABLE WITH OR WITHOUT METAL JACKET (MANUFACTURED BY AFC CABLE SYSTEMS, INC.).
 - I. MAXIMUM 1/4" DIAMETER S-VIDEO CABLE CONSISTING OF TWO MAXIMUM 24 AWG 75 OHM COAX OR TWISTED PAIR CABLE WITH PE INSULATION AND PVC JACKET.
3. HILTI CP 653 SPEED SLEEVE (2" OR 4") SLID INTO AND CENTERED WITHIN WALL. DEVICE FLANGES SPUN CLOCKWISE ONTO DEVICE THREADS, BUTTING TIGHTLY TO BOTH SIDES OF WALL (DEVICE FLANGES ARE OPTIONAL).
4. MINIMUM 1/2" DEPTH HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT OR CP 606 FLEXIBLE FIRESTOP SEALANT FLUSH WITH BOTH SURFACES OF WALL.
5. MINIMUM 1/4" BEAD HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT OR CP 606 FLEXIBLE FIRESTOP SEALANT APPLIED AROUND PERIPHERY OF DEVICE.

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 2-1/2" (FOR 2" DEVICE) OR 4-1/2" (FOR 4" DEVICE).
 2. CABLES MAY REPRESENT 0% TO 100% VISUAL FILL OF DEVICE.
 3. ANNULAR SPACE BETWEEN DEVICE AND PERIPHERY OF OPENING = MINIMUM 0".
 4. L-RATING APPLIES ONLY WHEN FLANGES ARE USED.



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 Tulsa, Oklahoma USA (800) 879-8000

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Drawing No.

WJ
3167a

CABLE BUNDLE THROUGH CONCRETE OR BLOCK WALL ASSEMBLY

F-RATING = 2-HR.

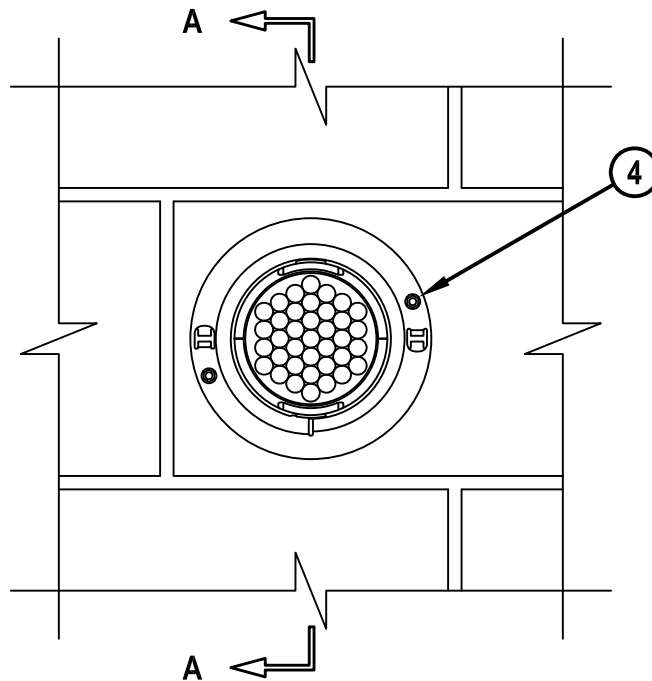
T-RATING = 0-HR., 1-HR., 1 3/4-HR., AND 2-HR.

L-RATING AT AMBIENT = LESS THAN 1 CFM/SQ. FT., 5 CFM/SQ. FT., AND 9 CFM/SQ. FT.

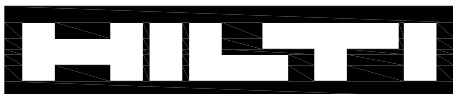
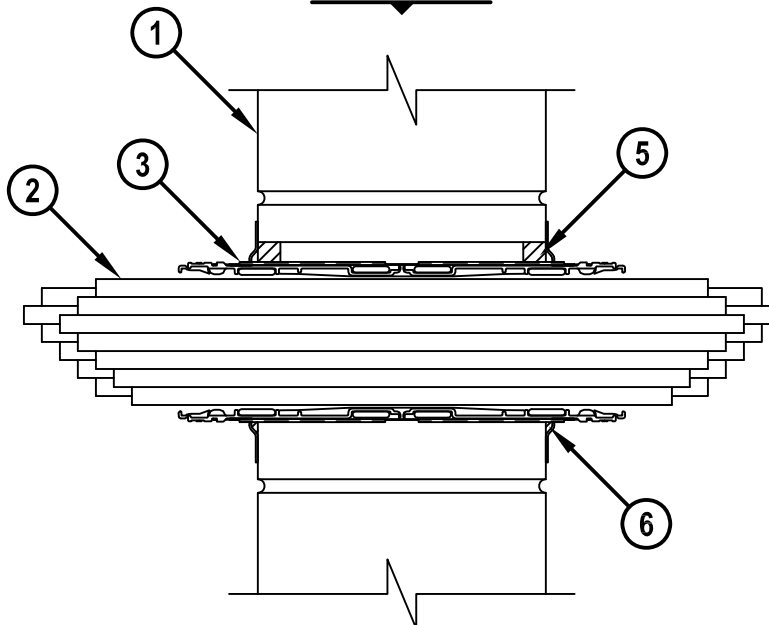
L-RATING AT 400°F = LESS THAN 1 CFM/SQ. FT., 1 CFM/SQ. FT., AND 10 CFM/SQ. FT.

WJ3168a.112607

FRONT VIEW



SECTION A-A



Hilti Firestop Systems

HILTI, Inc.
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Scale	3/16" = 1"
Date	Nov. 26, 2007

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3168a**

Saving Lives through Innovation and Education

CABLE BUNDLE THROUGH CONCRETE OR BLOCK WALL ASSEMBLY

F-RATING = 2-HR.

T-RATING = 0-HR., 1-HR., 1 3/4-HR., AND 2-HR.

L-RATING AT AMBIENT = LESS THAN 1 CFM/SQ. FT., 5 CFM/SQ. FT., AND 9 CFM/SQ. FT.

L-RATING AT 400°F = LESS THAN 1 CFM/SQ. FT., 1 CFM/SQ. FT., AND 10 CFM/SQ. FT.

WJ3168a.112607

1. CONCRETE WALL ASSEMBLY (2-HR. FIRE-RATING) :
 - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE WALL (MINIMUM 5" THICK).
 - B. ANY UL/cUL CLASSIFIED CONCRETE BLOCK WALL.
2. CABLE BUNDLE TO BE A COMBINATION OF ANY OF THE FOLLOWING :
 - A. MAXIMUM 100 PAIR NO. 24 AWG TELEPHONE CABLE WITH PVC JACKET.
 - B. MAXIMUM 7/C NO. 12 AWG COPPER CONDUCTOR CONTROL CABLE WITH PVC OR XLPE JACKET AND INSULATION.
 - C. MAXIMUM 4/0 AWG TYPE RHH GROUND CABLE.
 - D. MAXIMUM 4 PAIR NO. 22 AWG CAT 6 COMPUTER CABLE.
 - E. MAXIMUM RG 6/U COAXIAL CABLE.
 - F. MAXIMUM 1/2" DIAMETER FIBER-OPTIC CABLE (24 FIBER) WITH PVC OR PE JACKET AND INSULATION.
 - G. MAXIMUM 20/C NO. 22 AWG SHIELDED PRINTER CABLE WITH PVC JACKET.
 - H. MAXIMUM 2/C NO. 18 AWG POWER OR NON-POWER LIMITED FIRE ALARM CABLE WITH OR WITHOUT METAL JACKET (MANUFACTURED BY AFC CABLE SYSTEMS, INC.).
 - I. MAXIMUM 1/4" DIAMETER S-VIDEO CABLE CONSISTING OF TWO MAXIMUM 24 AWG 75 OHM COAX OR TWISTED PAIR CABLE WITH PE INSULATION AND PVC JACKET.
3. HILTI CP 653 SPEED SLEEVE (2" OR 4") SLID INTO AND CENTERED WITHIN WALL. DEVICE FLANGES SPUN CLOCKWISE ONTO DEVICE THREADS, BUTTING TIGHTLY TO BOTH SIDES OF WALL (DEVICE FLANGES ARE OPTIONAL).
4. SECURE DEVICE FLANGES TO BOTH SIDES OF WALL WITH TWO MINIMUM 1-1/2" LONG MASONRY SCREWS OR ANCHORS.
5. MINIMUM 5/8" DEPTH HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT, CP 606 FLEXIBLE FIRESTOP SEALANT, OR CP 618 FIRESTOP PUTTY STICK FLUSH WITH BOTH SURFACES OF WALL.
6. [FOR L-RATING] MINIMUM 1/4" BEAD HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT OR CP 606 FLEXIBLE FIRESTOP SEALANT APPLIED AT POINT OF CONTACT.

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 3" (FOR 2" DEVICE) OR 5" (FOR 4" DEVICE).
 2. CABLES MAY REPRESENT 0% TO 100% VISUAL FILL OF DEVICE.
 3. ANNULAR SPACE BETWEEN DEVICE AND PERIPHERY OF OPENING = MINIMUM 0".
 4. L-RATING APPLIES ONLY WHEN HILTI FS-ONE OR CP 606 FIRESTOP SEALANT IS USED.



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MULTIPLE PENETRATING ITEMS THROUGH CONCRETE OR BLOCK WALL ASSEMBLY

F-RATING = 2-HR.

T-RATING = 0-HR., 1/2-HR., 3/4-HR., 1 1/2-HR., OR 2-HR.

WJ8043a.010408

1. CONCRETE WALL ASSEMBLY (2-HR. FIRE-RATING) :
 - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE WALL (MINIMUM 6" THICK).
 - B. ANY UL CLASSIFIED CONCRETE BLOCK WALL.
2. ONE OR MORE OF THE FOLLOWING PIPES, AND IN ANY COMBINATION MAY BE INSTALLED WITHIN THE OPENING :
 - A. MAXIMUM 4" NOMINAL DIAMETER STEEL PIPE (SCH 10 OR HEAVIER).
 - B. MAXIMUM 4" NOMINAL DIAMETER CAST OR DUCTILE IRON PIPE.
 - C. MAXIMUM 3" NOMINAL DIAMETER COPPER PIPE OR TUBING.
 - D. MAXIMUM 3" NOMINAL DIAMETER STEEL CONDUIT OR EMT.
 - E. MAXIMUM 2" NOMINAL DIAMETER PVC PLASTIC PIPE (SCH 40, CELLULAR OR SOLID CORE) (VENTED OR CLOSED PIPING SYSTEM).
 - F. MAXIMUM 2" NOMINAL DIAMETER CPVC PLASTIC PIPE (SDR 13.5) (CLOSED PIPING SYSTEM).
3. [OPTIONAL] ONE OR MORE METALLIC PIPES MAY BE INSULATED WITH THE FOLLOWING TYPES OF PIPE INSULATION :
 - A. MINIMUM 1" TO MAXIMUM 2" THICK GLASS-FIBER PIPE INSULATION (3.5 PCF DENSITY).
 - B. MINIMUM 1/2" TO MAXIMUM 3/4" THICK AB/PVC PIPE INSULATION.
4. ONE MAXIMUM 3" DIAMETER CABLE BUNDLE CONSISTING OF ANY OF THE FOLLOWING :
 - A. MAXIMUM 25 PAIR NO. 24 AWG TELEPHONE CABLE WITH PVC JACKET.
 - B. MAXIMUM 7/C NO. 12 AWG COPPER CONDUCTOR POWER CABLE WITH PVC JACKET.
 - C. MAXIMUM 1/2" DIAMETER FIBER-OPTIC CABLE WITH PVC JACKET.
 - D. MAXIMUM 3/C NO. 8 AWG, WITH BARE ALUMINUM GROUND, STEEL METAL CLAD CABLE.
 - E. MAXIMUM 3/C (WITH GROUND) NO. 8 AWG NONMETALLIC SHEATHED CABLE (ROMEX) WITH PVC JACKET.
 - F. MAXIMUM 1/2" DIAMETER RG/U COAXIAL CABLE WITH PVC JACKET.
 - G. MAXIMUM 3/4" DIAMETER COPPER GROUND CABLE WITH OR WITHOUT PVC JACKET.
 - H. MAXIMUM 1-1/4" DIAMETER SINGLE OR MULTI-CONDUCTOR MINERAL-INSULATED COPPER-CLAD CABLE.
5. MINIMUM 4-3/4" THICKNESS MINERAL WOOL (MIN. 4 PCF DENSITY) TIGHTLY PACKED.
6. MINIMUM 5/8" DEPTH HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT.
7. MINIMUM 1/2" BEAD HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT APPLIED AT POINT OF CONTACT.

NOTES : 1. MAXIMUM AREA OF SQUARE, RECTANGULAR, OR CIRCULAR OPENING IS 240 SQ. IN. WITH A MAXIMUM DIMENSION OF 20".

2. ANNULAR SPACE BETWEEN PENETRANTS AND PERIPHERY OF OPENING = MINIMUM 0", MAXIMUM 22".

3. ANNULAR SPACE BETWEEN PENETRANTS = MINIMUM 1", MAXIMUM 22".



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WJ
8043a

UL/cUL SYSTEM NO. W-L-3334

CABLE BUNDLE THROUGH GYPSUM WALL ASSEMBLY

F-RATING = 1-HR. OR 2-HR.

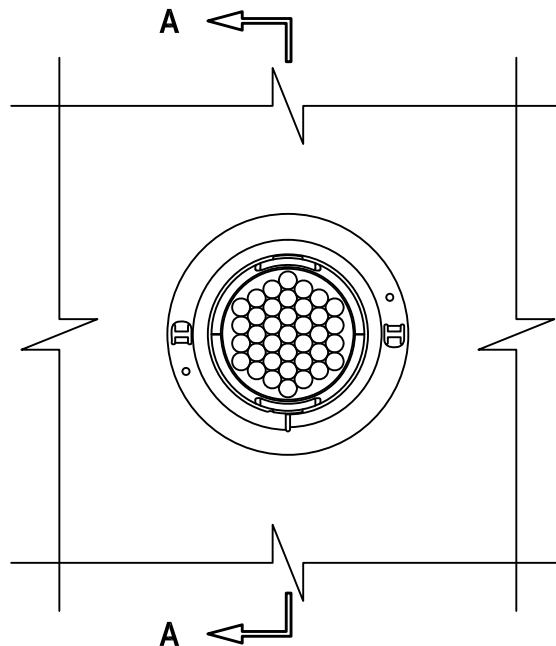
T-RATING = 0-HR., 1-HR., 1 3/4-HR., AND 2-HR.

L-RATING AT AMBIENT = LESS THAN 1 CFM/SQ. FT., 5 CFM/SQ. FT., AND 9 CFM/SQ. FT.

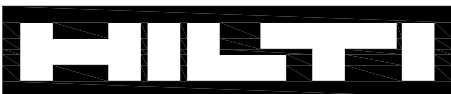
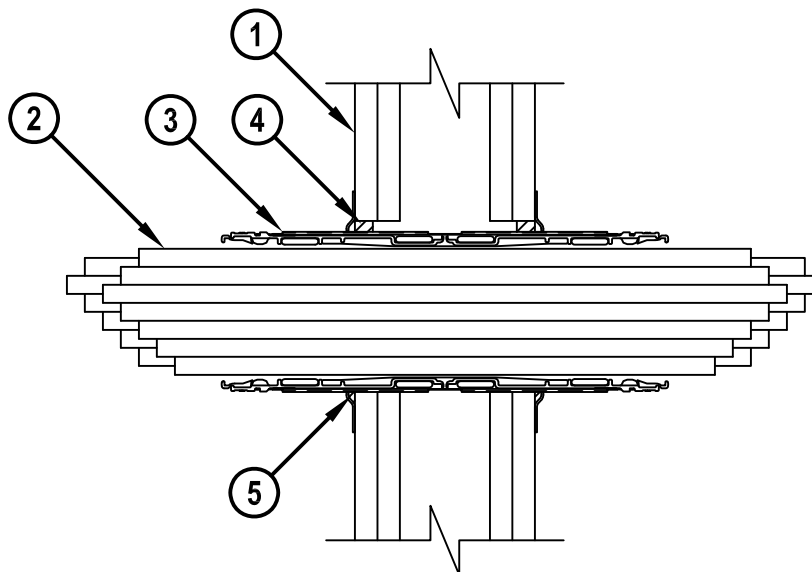
L-RATING AT 400°F = LESS THAN 1 CFM/SQ. FT., 1 CFM/SQ. FT., AND 10 CFM/SQ. FT.

WL3334a.112607

FRONT VIEW



SECTION A-A



Hilti Firestop Systems

HILTI, Inc.
Tulsa, Oklahoma USA (800) 879-8000

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Scale	3/16" = 1"
Date	Nov. 26, 2007

Drawing No.

**WL
3334a**

Saving Lives through Innovation and Education

CABLE BUNDLE THROUGH GYPSUM WALL ASSEMBLY

F-RATING = 1-HR. OR 2-HR.

T-RATING = 0-HR., 1-HR., 1 3/4-HR., AND 2-HR.

L-RATING AT AMBIENT = LESS THAN 1 CFM/SQ. FT., 5 CFM/SQ. FT., AND 9 CFM/SQ. FT.

L-RATING AT 400°F = LESS THAN 1 CFM/SQ. FT., 1 CFM/SQ. FT., AND 10 CFM/SQ. FT.

WL3334a.112607

1. GYPSUM WALL ASSEMBLY (UL/cUL CLASSIFIED U300, U400 OR V400 SERIES) (1-HR. OR 2-HR. FIRE-RATING) (2-HR. SHOWN) TO INCLUDE THE FOLLOWING CONSTRUCTION FEATURES :
 - A. [NOT SHOWN] WOOD STUDS TO CONSIST OF NOMINAL 2" x 4" LUMBER (SPACED MAXIMUM 16" OC). STEEL STUDS TO BE MINIMUM 2-1/2" WIDE (SPACED MAXIMUM 24" OC).
 - B. NOMINAL 5/8" THICK GYPSUM WALLBOARD. TYPE, NUMBER OF LAYERS, AND SHEET ORIENTATION AS SPECIFIED IN THE INDIVIDUAL UL DESIGN.
2. CABLE BUNDLE TO BE A COMBINATION OF ANY OF THE FOLLOWING :
 - A. MAXIMUM 100 PAIR NO. 24 AWG TELEPHONE CABLE WITH PVC JACKET.
 - B. MAXIMUM 7/C NO. 12 AWG COPPER CONDUCTOR CONTROL CABLE WITH PVC OR XLPE JACKET AND INSULATION.
 - C. MAXIMUM 4/0 AWG TYPE RHH GROUND CABLE.
 - D. MAXIMUM 4 PAIR NO. 22 AWG CAT 6 COMPUTER CABLE.
 - E. MAXIMUM RG 6/U COAXIAL CABLE.
 - F. MAXIMUM 1/2" DIAMETER FIBER-OPTIC CABLE (24 FIBER) WITH PVC OR PE JACKET AND INSULATION.
 - G. MAXIMUM 20/C NO. 22 AWG SHIELDED PRINTER CABLE WITH PVC JACKET.
 - H. MAXIMUM 2/C NO. 18 AWG POWER OR NON-POWER LIMITED FIRE ALARM CABLE WITH OR WITHOUT METAL JACKET (MANUFACTURED BY AFC CABLE SYSTEMS, INC.).
 - I. MAXIMUM 1/4" DIAMETER S-VIDEO CABLE CONSISTING OF TWO MAXIMUM 24 AWG 75 OHM COAX OR TWISTED PAIR CABLE WITH PE INSULATION AND PVC JACKET.
3. HILTI CP 653 SPEED SLEEVE (2" OR 4") SLID INTO AND CENTERED WITHIN WALL. DEVICE FLANGES SPUN CLOCKWISE ONTO DEVICE THREADS, BUTTING TIGHTLY TO BOTH SIDES OF WALL (DEVICE FLANGES ARE OPTIONAL).
4. MINIMUM 1/2" DEPTH HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT OR CP 606 FLEXIBLE FIRESTOP SEALANT FLUSH WITH BOTH SURFACES OF WALL.
5. MINIMUM 1/4" BEAD HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT OR CP 606 FLEXIBLE FIRESTOP SEALANT APPLIED AROUND PERIPHERY OF DEVICE.

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 2-1/2" (FOR 2" DEVICE) OR 4-1/2" (FOR 4" DEVICE).
 2. CABLES MAY REPRESENT 0% TO 100% VISUAL FILL OF DEVICE.
 3. ANNULAR SPACE BETWEEN DEVICE AND PERIPHERY OF OPENING = MINIMUM 0".
 4. L-RATING APPLIES ONLY WHEN FLANGES ARE USED.



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Drawing No.

**WL
3334a**

UL/cUL SYSTEM NO. W-L-3335

CABLE BUNDLE THROUGH GYPSUM WALL ASSEMBLY

F-RATING = 1-HR. OR 2-HR.

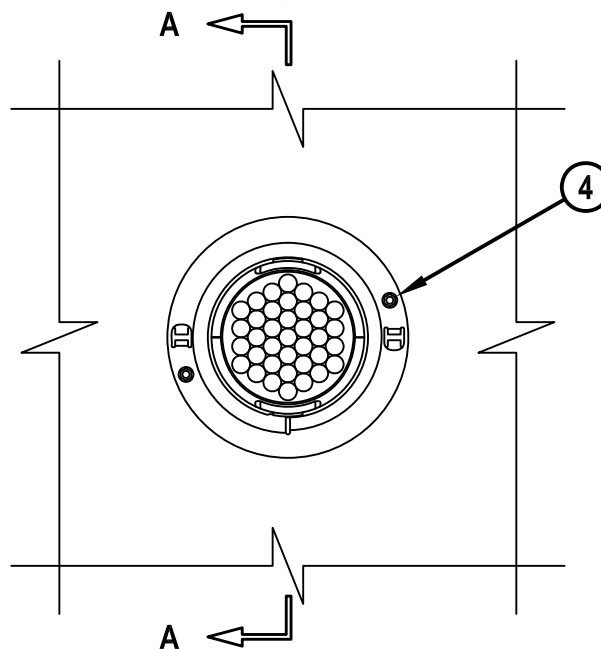
T-RATING = 0-HR., 1-HR., 1 3/4-HR., AND 2-HR.

L-RATING AT AMBIENT = LESS THAN 1 CFM/SQ. FT., 5 CFM/SQ. FT., AND 9 CFM/SQ. FT.

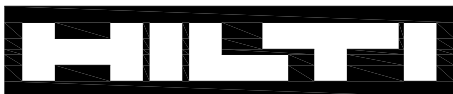
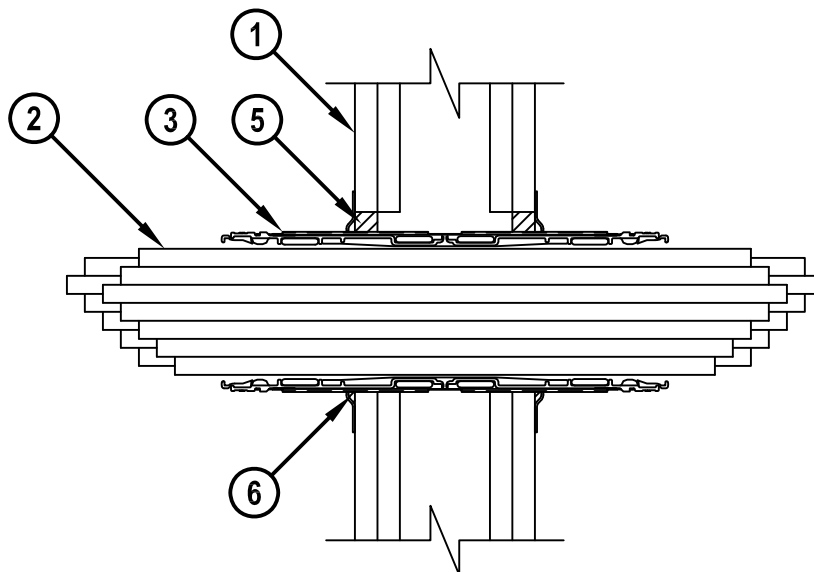
L-RATING AT 400°F = LESS THAN 1 CFM/SQ. FT., 1 CFM/SQ. FT., AND 10 CFM/SQ. FT.

WL3335a.112607

FRONT VIEW



SECTION A-A



Hilti Firestop Systems

HILTI, Inc.
Tulsa, Oklahoma USA (800) 879-8000

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Saving Lives through Innovation and Education

CABLE BUNDLE THROUGH GYPSUM WALL ASSEMBLY

F-RATING = 1-HR. OR 2-HR.

T-RATING = 0-HR., 1-HR., 1 3/4-HR., AND 2-HR.

L-RATING AT AMBIENT = LESS THAN 1 CFM/SQ. FT., 5 CFM/SQ. FT., AND 9 CFM/SQ. FT.

L-RATING AT 400°F = LESS THAN 1 CFM/SQ. FT., 1 CFM/SQ. FT., AND 10 CFM/SQ. FT.

WL3335a.112607

1. GYPSUM WALL ASSEMBLY (UL/cUL CLASSIFIED U300, U400 OR V400 SERIES) (1-HR. OR 2-HR. FIRE-RATING) (2-HR. SHOWN) TO INCLUDE THE FOLLOWING CONSTRUCTION FEATURES :
 - A. [NOT SHOWN] WOOD STUDS TO CONSIST OF NOMINAL 2" x 4" LUMBER (SPACED MAXIMUM 16" OC). STEEL STUDS TO BE MINIMUM 2-1/2" WIDE (SPACED MAXIMUM 24" OC).
 - B. NOMINAL 5/8" THICK GYPSUM WALLBOARD. TYPE, NUMBER OF LAYERS, AND SHEET ORIENTATION AS SPECIFIED IN THE INDIVIDUAL UL DESIGN.
2. CABLE BUNDLE TO BE A COMBINATION OF ANY OF THE FOLLOWING :
 - A. MAXIMUM 100 PAIR NO. 24 AWG TELEPHONE CABLE WITH PVC JACKET.
 - B. MAXIMUM 7/C NO. 12 AWG COPPER CONDUCTOR CONTROL CABLE WITH PVC OR XLPE JACKET AND INSULATION.
 - C. MAXIMUM 4/0 AWG TYPE RHH GROUND CABLE.
 - D. MAXIMUM 4 PAIR NO. 22 AWG CAT 6 COMPUTER CABLE.
 - E. MAXIMUM RG 6/U COAXIAL CABLE.
 - F. MAXIMUM 1/2" DIAMETER FIBER-OPTIC CABLE (24 FIBER) WITH PVC OR PE JACKET AND INSULATION.
 - G. MAXIMUM 20/C NO. 22 AWG SHIELDED PRINTER CABLE WITH PVC JACKET.
 - H. MAXIMUM 2/C NO. 18 AWG POWER OR NON-POWER LIMITED FIRE ALARM CABLE WITH OR WITHOUT METAL JACKET (MANUFACTURED BY AFC CABLE SYSTEMS, INC.).
 - I. MAXIMUM 1/4" DIAMETER S-VIDEO CABLE CONSISTING OF TWO MAXIMUM 24 AWG 75 OHM COAX OR TWISTED PAIR CABLE WITH PE INSULATION AND PVC JACKET.
3. HILTI CP 653 SPEED SLEEVE (2" OR 4") SLID INTO AND CENTERED WITHIN WALL. DEVICE FLANGES SPUN CLOCKWISE ONTO DEVICE THREADS, BUTTING TIGHTLY TO BOTH SIDES OF WALL.
4. SECURE DEVICE FLANGES TO BOTH SIDES OF WALL WITH TWO MINIMUM 1-1/2" LONG DRYWALL SCREWS.
5. MINIMUM 5/8" DEPTH HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT, CP 606 FLEXIBLE FIRESTOP SEALANT, OR CP 618 FIRESTOP PUTTY STICK FLUSH WITH BOTH SURFACES OF WALL.
6. [FOR L-RATING] MINIMUM 1/4" BEAD HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT OR CP 606 FLEXIBLE FIRESTOP SEALANT APPLIED AT POINT OF CONTACT.

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 3" (FOR 2" DEVICE) OR 5" (FOR 4" DEVICE).
 2. CABLES MAY REPRESENT 0% TO 100% VISUAL FILL OF DEVICE.
 3. ANNULAR SPACE BETWEEN DEVICE AND PERIPHERY OF OPENING = MINIMUM 0".
 4. L-RATING APPLIES ONLY WHEN HILTI FS-ONE OR CP 606 FIRESTOP SEALANT IS USED.

**Hilti Firestop Systems**

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Scale	-
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Date	Nov. 26, 2007
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Drawing No.

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Saving Lives through Innovation and Education

Innovations



Fast installation

- Round openings can be created via hole saws or core bits
- "Spin on" flanges promote fast product installation



Fast cable installation

- Cables do not need to be inserted in a uniform height to comply with the firestop detail installation



Easy penetration and re-penetration

- Opening and closing the device is easy and intuitive: from one side of the CP 653, depress the red tabs and twist the inner housing



Extremely low L-ratings

- Constrictive smoke seal limits smoke migration:
 - Less than 1 cfm/ft² for empty device
 - 5 cfm/ft² possible for cable bundles



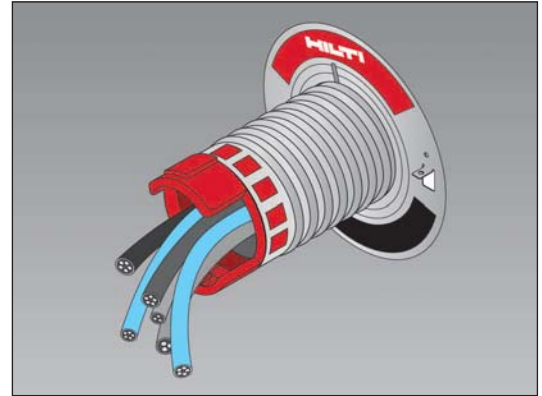
Withstands the rigors of usage and time

- Robust smoke seal fabric tested to 250 open-close cycles

When easy or quick aren't good enough.

Healthcare managers, telecom and datacom professionals, and electrical trades understand the importance of life safety and asset preservation. When selecting the correct cable management device, they know the right product

addresses a multitude of performance criteria. These aspects include fast product installation, ease of cable penetration and re-penetration, superior ability to limit smoke migration whether empty or 100% visual-fill, a wide portfolio of firestop details, and a robust, lightweight solution that endures long-term, high-traffic usage. The Hilti CP 653 Speed Sleeve is a ready-to-use, one-stop cable management firestop device that addresses all of these needs.



Ordering Information

Item No.	Description	Qty
236323	CP 653 2" Speed Sleeve	1
236324	CP 653 4" Speed Sleeve	1



CP 653 Technical Data

Device	OD (device only)	OD (flange)	ID	Total length	Weight (device and flanges)
2"	2.3 in	4.7 in	1.7 in	12.4 in	1.5 lbs
4"	4.3 in	6.7 in	3.7 in	12.4 in	2.6 lbs
Density		Approx. 1.35 g/cm ³			
Temperature resistance		22°F to 212°F (-30°C to 100°C)			
Intumescent activation		Approx. 320°F (160°C)			
Expansion ratio (unrestricted)		1:40			
Metal		Steel with zinc coating			
Plastic		ABS			
Fabric		Glass-fiber			

Approvals

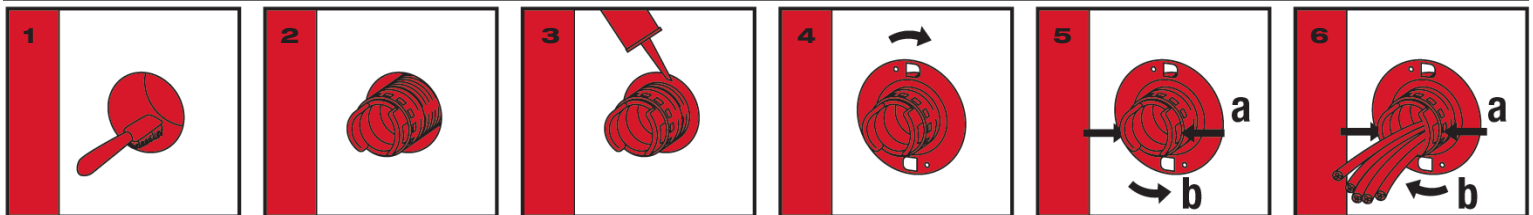
California State Fire Marshal
City of New York

In Progress
In Progress



Internationally tested and approved

Installation Instructions



Always refer to the MSDS before use and the UL Fire Resistance Directory or Hilti Firestop Systems Guide for complete installation information.

1. Use either a 2.5" or 4.5" hole saw to create the appropriate hole.
2. Insert the sleeve.
3. Seal the gap with firestop sealant to impede smoke and gas migration. Repeat on other side of the wall

4. Spin the flange clockwise onto the device. Repeat on other side of the wall.

5. To open the device:

- (a) On one side of the wall, press the clip closures inward.
- (b) Twist the device counterclockwise.

6. To close the device:

- (a) On the same side of the wall, press the clip closures inward.
- (b) Twist the device clockwise until finger-tight, allowing it to engage with a click.

For re-penetration of cables, repeat steps 5 & 6.

For installation options not presented here, consult your local Hilti representative for other rated firestop systems.

Hilti. Outperform. Outlast.

MSDS No.: 321
Revision No.: 000
Revision Date: 10/05/07
Page: 1 of 2

Product name: CP 653 - Speed Sleeve
Description: Reusable Firestop Insert containing a black intumescent material
Supplier: Hilti, Inc. P.O. Box 21148, Tulsa, OK 74121
Emergency # (Chem-Trec.): 1 800 424 9300 (USA, PR, Virgin Islands, Canada); 001 703 527 3887 (other countries)

INGREDIENTS AND EXPOSURE LIMITS

Not applicable. This product is considered to be an "article" as defined in the federal OSHA Hazard Communication Standard 29 CFR 1910.1200 / 1926.59.

PHYSICAL DATA

Appearance:	Galvanized metal sleeve with red plastic ends	Odor:	None.
Vapor Density: (air = 1)	Not applicable.	Vapor Pressure:	Not applicable.
Boiling Point:	Not applicable.	VOC Content:	7.6 g/l
Evaporation Rate:	Not applicable.	Solubility in Water:	Not determined.
Specific Gravity:	Not determined.	pH:	Not applicable.

FIRE AND EXPLOSION HAZARD DATA

Flash Point:	Not applicable.	Flammable Limits:	Not applicable.
Extinguishing Media:	Use extinguishing media appropriate for surrounding fire.		
Special Fire Fighting Procedures:	None known.		
Unusual Fire and Explosion Hazards:	None known. Product serves as a firestop; intumescent material metal sleeve expands when exposed to temperatures > 160°C / 320°F.		

REACTIVITY DATA

Stability:	Stable.	Hazardous Polymerization:	Will not occur.
Incompatibility:	None known.	Decomposition Products:	None known.
Conditions to Avoid:	None known.		

HEALTH HAZARD DATA

Known Hazards:	None known.	Routes of Exposure:	None known.
Signs and Symptoms of Exposure:	None expected from routine use/installation according to manufacturer's specifications and technical guides.		
Carcinogenicity:	No ingredients are classified as a carcinogen by IARC, NTP or OSHA.		
Medical Conditions Aggravated by Exposure:	None known.		

EMERGENCY AND FIRST AID PROCEDURES

Eyes:	Immediately flush with plenty of water. Call a physician if symptoms occur.
Skin:	Not applicable. Practice good hygiene; i.e. wash hands during breaks, before eating or smoking, and after work.
Inhalation:	Not applicable.
Ingestion:	Not a potential route of exposure.
Other:	Referral to a physician is recommended if there is any question about the seriousness of any injury/exposure.



Hilti Firestop
Saving Lives
through innovation
and education

Hilti. Outperform. Outlast.

MSDS No.:	321
Revision No.:	000
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Page:	2 of 2

CONTROL MEASURES AND PERSONAL PROTECTIVE EQUIPMENT

Ventilation:	General (natural or mechanically induced fresh air movements).
Eye Protection:	Not required, however, safety glasses should be worn in most industrial settings.
Skin Protection:	None required; however, gloves recommended.
Respiratory Protection:	No respiratory protection is needed for normal application of this product.

PRECAUTIONS FOR SAFE HANDLING AND USE

Handling and Storing Precautions:	Store in a cool dry area. Follow installation instructions.
Spill Procedures:	No special requirements.

REGULATORY INFORMATION

Hazard Communication:	This product is considered to be an "article" as defined in the federal OSHA Hazard Communication Standard.
DOT Shipping Name:	Not regulated.
IATA / ICAO Shipping Name:	Not regulated.
TSCA Inventory Status:	Chemical components listed on TSCA inventory.
SARA Title III, Section 313:	This product is classified as an "article" and is not subject to reporting under Section 313 of SARA Title III (40 CFR Part 372).
EPA Waste Code(s):	Not regulated by EPA as a hazardous waste.
Waste Disposal Methods:	Consult with regulatory agencies or your corporate personnel for disposal methods that comply with local, state, and federal safety, health and environmental regulations.

CONTACTS

Customer Service:	1 800 879 8000	Technical Service: 1 800 879 8000
Health / Safety:	1 800 879 6000	Jerry Metcalf (x6704)
Emergency # (Chem-Trec):	1 800 424 9300 (USA, PR, Virgin Islands, Canada); 001 703 527 3887 (other countries)	

The information and recommendations contained herein are based upon data believed to be correct; however, no guarantee or warranty of any kind expressed or implied is made with respect to the information provided.



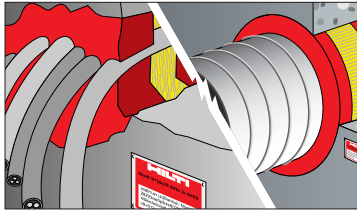
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Hilti, Inc. (U.S.) 1-800-879-8000 • www.us.hilti.com • en español 1-800-879-5000 • Hilti Firestop Systems Guide 2007

FS-ONE

High Performance Intumescent Firestop Sealant



System Advantage / Customer Benefits

- Protects most typical firestop penetration applications
- Easy to work with and fast cleanup
- Can be painted
- Single component systems available
- Meets LEED™ requirements for indoor environmental quality credit 4.1 Low Emitting Materials, Sealants and Adhesives and 4.2 Paints and Coatings

Installation instructions for FS-ONE

Opening

1. Clean the opening. Surfaces to which FS-ONE will be applied should be cleaned of loose debris, dirt, oil, moisture, frost and wax. Structures supporting penetrating items must be installed in compliance with local building and electrical standards.

Application of firestop sealant

2. Install the prescribed backfilling material type and depth to obtain the desired rating (if required). Leave sufficient depth for applying FS-ONE.
3. Application of firestop sealant: Apply FS-ONE to the required depth in order to obtain the desired fire rating. Make sure FS-ONE contacts all surfaces to provide maximum adhesion. For application of FS-ONE use a standard caulking gun, foil pack gun, bulk loader and bulk gun. With FS-ONE buckets, Graco type sealant pumps may be used. (Contact pump manufacturer for proper selection).
4. Smoothing of firestop sealant: To complete the seal, tool immediately to give a smooth appearance. Excess sealant, prior to curing, can be cleaned away from adjacent surfaces and tools with water.
5. Leave completed seal undisturbed for 48 hours.
6. For maintenance reasons, a penetration seal could be permanently marked with an identification plate. In such a case, mark the identification plate and fasten it in a visible position next to the seal.

Product description

- Intumescent (expands when exposed to fire) firestop sealant that helps protect combustible and non-combustible penetrations for up to 4 hours fire rating

Product features

- Smoke, gas and water resistant after material has cured
- Contains no halogen, solvents or asbestos
- High fire rating properties
- Water based, easy to clean

Areas of application

- Steel, copper and EMT pipes
- Insulated steel and copper pipes
- Cable bundles
- Closed or vented plastic pipes
- HVAC penetrations

For use with

- Concrete, masonry, drywall and wood floor assemblies
- Wall and floor assemblies rated up to 4 hours

Examples

- Sealing around plastic pipe penetrations in fire rated construction
- Sealing around combustible and non-combustible penetrations in fire rated construction

Notice about approvals

- Check that the penetration has been sealed according to the specified drawing in the UL Fire Resistance Directory or Hilti Firestop Manual. For further advice, please contact Hilti customer service. Refer to Hilti product literature and UL fire resistance directory for specific application details.

Not for use...

- High movement expansion joints
- Underwater
- On materials where oil, plasticizers or solvents may bleed i.e. impregnated wood, oil based seals, green or partially vulcanized rubber
- In any penetration other than those specifically described in this manual or the test reports

Safety precautions

- Before handling, read the product and Material Safety Data Sheet for detailed use and health information
- Keep out of reach of children
- Wear suitable gloves and eye protection

Storage

- Store only in the original packaging in a location protected from moisture at temperatures between 40°F (5°C) and 86°F (30°C)
- Observe expiration date on the packaging

FS-ONE

Technical Data

At 73°F (23°C) and 50% relative humidity

Chemical basis

Water-based intumescent acrylic dispersion

Density

Approx. 1.5 g/cm³

Color

Red

Working time

Approx. 20-30 min.

Curing time

Approx. 4 mm / 3 days

Shore A Hardness

Approx. 35

Movement capability

Approx. 5%

Intumescent Activation

Approx 482°F (250°C)

Expansion rate (unrestricted):

Up to 3-5 times original volume

Temperature resistance (cured)

-40°F to 212°F (-40°C to 100°C)

Application temperature

41°F to 104°F (5°C to 40°C)

Surface burning characteristics

(ASTM E 84-96)

Flame Spread: 0

Smoke Development: 5

Sound transmission classification

(ASTM E 90-99) 56

Approvals

ICBO (International Conference of Building Officials)

Report No. 5071

California State Fire Marshal

Listing No. 4485-1200:108

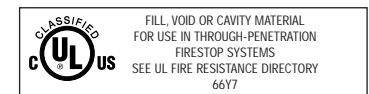
City of New York

MEA 326-96-M

Tested in accordance with

- UL 1479
- ASTM E 814
- ASTM E 84

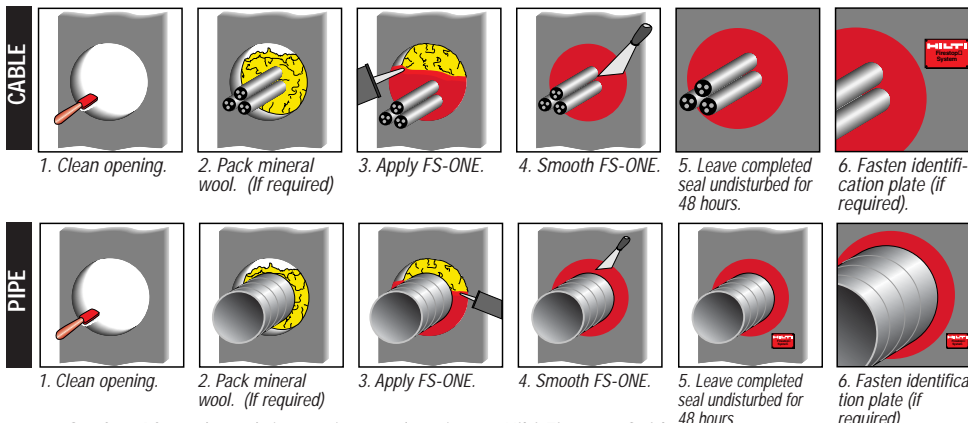
Internationally tested and approved



latest product information :
www.us.hilti.com

ordering information see page:

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MSDS No.: 259
Revision No.: 010
Revision Date: 08/17/04
Page: 1 of 2

Product identifier: FS-ONE High Performance Intumescent Firestop Sealant
Description: One-part acrylic-based sealant
Supplier: Hilti, Inc. P.O. Box 21148, Tulsa, OK 74121
Emergency # (Chem-Trec.): 1 800 424 9300 (USA, PR, Virgin Islands, Canada); 001 703 527 3887 (other countries)

INGREDIENTS AND EXPOSURE LIMITS

Ingredients:	CAS Number:	PEL:	TLV:	STEL:
Polyacrylate dispersion	Mixture	NE	NE	NE
Calcium carbonate	001317-65-3	5 mg/m ³ (T)	10 mg/m ³ (T)	NE
Zinc borate	138265-88-0	NE	NE	NE
Ammonium polyphosphate	068333-79-9	NE	NE	NE
Talc	014807-96-6	20 mppcf	2 mg/m ³	NE
Expandable graphite	012777-87-6	5 mg/m ³ (T)	2 mg/m ³ (T)	NE
Ethylene glycol	000107-21-1	NE	C:100 mg/m ³ (A)	NE
Polybutene	009003-29-6	NE	NE	NE
Iron oxide	001309-37-1	10 mg/m ³	5 mg/m ³	NE
Glass filament	065997-17-3	NE	5 mg/m ³ (T)	NE
Silicon dioxide	014808-60-7	0.05 mg/m ³ (T)	0.1 mg/m ³ (T)	NE
Water	007732-18-5	NE	NE	NE

Abbreviations: PEL = OSHA Permissible Exposure Limit. **T** = ACGIH Threshold Limit Value. **C** = Ceiling. **STE** = Short Term Exposure Limit.
NE = None Established. **NA** = Not Applicable. **T** indicates "as total dust". **R** indicates "as respirable fraction".
A indicates "as an aerosol". **mppcf** = million particles per cubic foot.

PHYSICAL DATA

Appearance:	Red paste.	Odor:	Odorless.
Vapor Density: (air = 1)	Not determined.	Vapor Pressure:	23mbar 20C / 68F
Boiling Point:	Not applicable.	VOC Content:	75.0 g/L.
Evaporation Rate:	Not applicable.	Solubility in Water:	Soluble.
Specific Gravity:	1.5	pH:	Not determined.

FIRE AND EXPLOSION HAZARD DATA

Flash Point:	Non-flammable.	Flammable Limits:	Not applicable.
Extinguishing Media:	Not applicable. Use extinguishing media as appropriate for surrounding fire.		
Special Fire Fighting Procedures:	None known. Use a self-contained breathing apparatus when fighting fires involving chemicals.		
Unusual Fire and Explosion Hazards:	None known. Thermal decomposition products can be formed such as oxides of carbon, sulfur and phosphorous.		

REACTIVITY DATA

Stability:	Stable.	Hazardous Polymerization:	Will not occur.
Incompatibility:	Strong acids, peroxides, and oxidizing agents.		
Decomposition Products:	Thermal decomposition can yield CO and CO ₂ .		
Conditions to Avoid:	None known.		

HEALTH HAZARD DATA

Known Hazards:	None known.
Signs and Symptoms of Exposure:	Possibly irritating upon contact with the eyes or upon repeated contact with the skin.
Medical Conditions Aggravated by Exposure:	Eye and skin conditions.
Routes of Exposure:	Dermal.
Carcinogenicity:	IARC classifies crystalline silica (quartz sand) as Group I based upon evidence among workers in industries where there has been long-term and chronic exposure (via inhalation) to silica dust; e.g. mining, quarry, stone crushing, refractory brick and pottery workers. This product does not pose a dust hazard; therefore, this classification is not relevant. Based upon the nature and intended use of this product, it does not pose an increased cancer risk to workers.

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Revision No.: 010
Revision Date: 08/17/04
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INTRODUCTION

APPLICATIONS / PRODUCTS

SYSTEM DETAILS

ESTIMATING TABLES / TECH DATA

EMERGENCY AND FIRST AID PROCEDURES

Eyes:	Immediately flush with plenty of water. Call a physician if symptoms occur.
Skin:	Immediately wipe off material and wash with soap and water. Material can adhere to the skin. If material has adhered to the skin, use an abrasive containing hand cleaner. If material does not come off, buff with a pumice stone.
Inhalation:	Move victim to fresh air if discomfort develops. Call a physician if symptoms persist.
Ingestion:	Seek medical attention. Do not induce vomiting unless directed by a physician. If a large quantity was ingested, give 1 to 2 glasses of water to dilute. Never give anything by mouth to an unconscious person.
Other:	Referral to a physician is recommended if there is any question about the seriousness of the injury/exposure.

CONTROL MEASURES AND PERSONAL PROTECTIVE EQUIPMENT

Ventilation:	General (natural or mechanically induced fresh air movements).
Eye Protection:	Not required, however, safety glasses should be worn in most industrial settings.
Skin Protection:	Avoid skin contact. Cloth gloves are suitable for hand protection.
Respiratory Protection:	None normally required. Where ventilation is inadequate to control vapors, use a NIOSH approved respirator with organic vapor cartridges. Never enter a confined space without an appropriate air-supplied respirator.

PRECAUTIONS FOR SAFE HANDLING AND USE

Handling and Storing	Precautions: Store in a cool, dry area preferably between 40° and 77° F. Keep from freezing. Do not store in direct sunlight. Avoid contact with the eyes or skin. Practice good hygiene; i.e. always wash thoroughly after handling and before eating or smoking. For industrial use only. Keep out of reach of children. Follow label/use instructions.
Spill Procedures:	Immediately wipe away spilled material before it hardens. Place in a container for proper disposal in accordance with all applicable local, state, or federal requirements.

REGULATORY INFORMATION

Hazard Communication:	This MSDS has been prepared in accordance with the federal OSHA Hazard Communication Standard 29 CFR 1910.1200.
HMIS Codes:	Health 1, Flammability 0, Reactivity 0, PPE B
DOT Shipping Name:	Not regulated.
IATA / ICAO Shipping Name:	Not regulated.
TSCA Inventory Status:	Chemical components listed on TSCA inventory.
SARA Title III, Section 313:	This product contains 3 ethylene glycol (CAS 107-21-1) and 15 zinc borate (re: zinc compounds) which are subject to reporting under Section 313 of SARA Title III (40 CFR Part 372).
EPA Waste Code(s):	Not regulated by EPA as a hazardous waste.
Waste Disposal Methods:	Consult with regulatory agencies or your corporate personnel for disposal methods that comply with local, state, and federal safety, health and environmental regulations.

CONTACTS

Customer Service:	1 800 879 8000	Technical Service:	1 800 879 8000
Health / Safety:	1 800 879 6000	erry Metcalf (x6704)	
Emergency # (Chem-Trec):	1 800 424 9300 (USA, PR, Virgin Islands, Canada); 001 703 527 3887 (other countries)		

The information and recommendations contained herein are based upon data believed to be correct; however, no guarantee or warranty of any kind expressed or implied is made with respect to the information provided.

Certificate of Compliance

Certificate Number **20060214-R13240E**
Report Reference **2006 February 14**
Issue Date **2006 February 14**

Page 1 of 1



Issued to: **Hilti, Inc.**
5400 S 122ND East Ave
Tulsa, OK 74146 USA


This is to certify that representative samples of **Fill, Void or Cavity Materials**
FS-ONE

Have been investigated by Underwriters Laboratories Inc.® in accordance with the Standard(s) indicated on this Certificate.


Standard(s) for Safety: **ANSI/UL 1479, ANSI/UL 2079, CAN/ULC-S115-05**

Additional Information: **FS-ONE Sealant for use in Joint Systems and FS-ONE for use in Through-Penetration Firestop Systems as currently described in the UL Fire Resistance Directory.**

Only those products bearing the UL Classification Mark should be considered as being covered by UL's Classification and Follow-Up Service.

The UL Classification Mark includes: UL in a circle symbol:  with the word "CLASSIFIED" (as shown); a control number (may be alphanumeric) assigned by UL; a statement to indicate the extent of UL's evaluation of the product; and, the product category name (product identity) as indicated in the appropriate UL Directory.

Look for the UL Classification Mark on the product

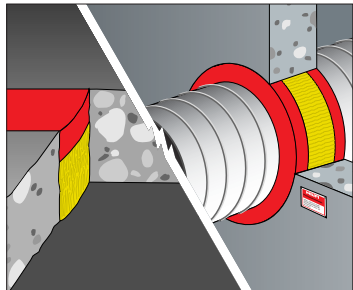
Issued by:

Mona Couloute
Underwriters Laboratories Inc.

Reviewed by: 
Christopher Johnson
Underwriters Laboratories Inc.



CP 606

Flexible Firestop Sealant



System Advantage / Customer Benefits

- Paintable
- Meets 500 cycle requirements (ASTM E 1966 & UL 2079)
- Smoke, fume and water resistant
- Easy clean up with water
- Single component systems available
- Meets LEED™ requirements for indoor environmental quality credit 4.1 Low Emitting Materials, Sealants and Adhesives and 4.2 Paints and Coatings

Installation instructions for CP 606

Opening

1. Clean the opening. Surfaces to which CP 606 will be applied should be cleaned of loose debris, dirt, oil, wax and grease. The surface should be moisture and frost free.

Application of firestop

2. Insert fill of mineral wool or backer (as required).
3. Apply firestop over backer.
4. Smooth firestop sealant with a trowel before the skin forms. Once cured, CP 606 can only be removed mechanically.
5. For maintenance reasons, a penetration seal can be permanently marked with an identification plate and fastened in a visible position next to the seal.

Notice about approvals

- When using Hilti CP 606 Flexible Firestop Sealant, check that the joint or pipe application has been sealed

according to the applicable drawing in the UL Fire Resistance Directory or the Hilti Firestop Manual.

Not to be used...

- On areas immersed in water

Safety precautions

- Keep out of reach of children
- Read the Material Safety Data Sheet
- Eyes and hands must be suitably protected
- Avoid contact with eyes/skin
- Only use in well ventilated areas

Storage

- Store only in the original packaging in a location protected from moisture at a temperature of 40°F to 77°F (5°C to 25°C)
- Observe expiration date on package

Product Information

CP 0

Technical Data

At 73°F (23°C) and 50% relative humidity

Chemical basis

Acrylic based firestop sealant

Density

Approx. 1.5 g/cm³

Color

Available in red or white

Application temperature

40°F to 104°F (5°C to 40°C)

Skin-forming time

Approx. 15 min

Curing rate

Approx. 2 mm / 3 days

Volume shrinkage

Less than 20%

Movement capability

Approx. 10%

Temperature resistance

-22°F to 176°F (-30°C to 80°C)

Surface burning characteristics (ASTM E 84-96)

Flame Spread: 0

Smoke Development: 5

Sound transmission classification (ASTM E 90-99)

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Approvals

ICBO Evaluation Service, Inc.

Report No. ER-5614

California State Fire Marshal

Listing no. 1452-1200:112

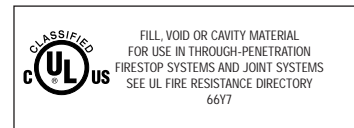
City of New York

MEA 100-99-M

Tested in accordance with

- UL 2079
- ASTM E 1966
- UL 1479
- ASTM E 814
- ASTM E 84

Internationally tested and approved



British Standard
BS 476

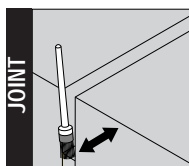


INTRODUCTION

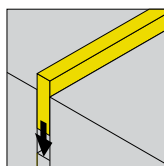
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SYSTEM DETAILS

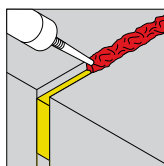
ESTIMATING TABLES / TECH DATA



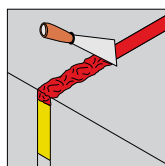
1. Clean opening



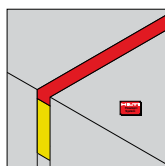
2. Insert backing material compressed per UL System



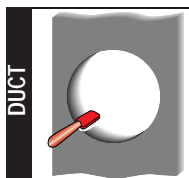
3. Apply CP 606



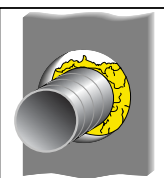
4. Smooth CP 606



5. Fasten identification plate (if required)



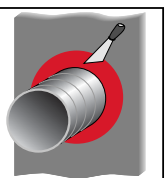
1. Clean opening



2. Insert backing material



3. Apply CP 606



4. Smooth CP 606



5. Fasten identification plate (if required)

MSDS No.: 267
Revision No.: 006
Revision Date: 08/17/04
Page: 1 of 2

Product name: CP 0 Fle i le Firestop Sealant
Supplier: Hilti, Inc. P.O. Box 21148, Tulsa, OK 74121
Emergency # (Chem-Trec.): 1 800 424 9300 (USA, PR, Virgin Islands, Canada); 001 703 527 3887 (other countries)

INGREDIENTS AND EXPOSURE LIMITS

Ingredients:	CAS Number:	TLV:	PEL:	STEL:
Calcium carbonate	01317-65-3	NA	NA	NE
Polybutene	09003-29-6	NE	NE	NE
Ethylene glycol	00107-21-1	C: 100 mg/m ³ (A)	NE	NA
Pigment	13463-67-7 ¹ or 1309-37-1 ²	NA	NA	NE
Isononyl phthalate	28553-12-0	NE	NE	NE

¹ CP 606 white; ² CP 606 red.

Abbreviations: PEL = OSHA Permissible Exposure Limit. TLV = ACGIH Threshold Limit Value. STEL = Short Term Exposure Limit.
NE = None Established. NA = Not Applicable.

PHYSICAL DATA

Appearance:	White or red paste.	Odor:	Negligible.
Boiling Point:	Not applicable.	Vapor Pressure:	Not applicable.
Melting Point:	Not determined.	VOC Content:	71.0 g/L
Evaporation Rate:	Not applicable.	Solubility in Water:	Miscible.
pH:	Not determined.	Specific Gravity:	1.55

FIRE AND EXPLOSION HAZARD DATA

Flash Point:	Not applicable.	Flammable Limits:	Not applicable.
Fire / Explosion Hazards:	None known.		
Extinguishing Media:	As appropriate for surrounding fire; material itself does not burn.		
Special Fire Fighting	Procedures: As appropriate for surrounding fire.		

REACTIVITY DATA

Stability:	Stable. Hazardous	Polymerization:	Will not occur.
Incompatibility:	Strong oxidizing agents.		
Hazardous Decomposition Products:	Not applicable.		
Conditions to Avoid:	Avoid temperature extremes that could shorten the shelf life of this product. See handling and storage requirements.		

HEALTH HAZARD DATA

Known Hazards: Acute: Product is slightly alkaline; minor irritation is possible. Chronic: None known.

Signs and Symptoms of Exposure: E es Can cause slight irritation but in ury is unlikely. S in Can cause irritation with some individuals.
n a ation No effects expected. n estion Not considered to be a route of exposure. Effects of
ingestion have not been determined.

Routes of Exposure: Inhalation, Dermal.

Medical Conditions Aggravated by Exposure: Eye, skin, and respiratory conditions.

Carcinogenicity: No ingredients are classified as a carcinogen by IARC, NTP or OSHA.

EMERGENCY AND FIRST AID PROCEDURES

Eyes:	Flush with plenty of water while holding eyelids apart. Seek medical attention if any effects develop.
Skin:	Wash with soap and water. Launder clothing before reuse.
Inhalation:	Move to fresh air.
Ingestion:	No ill effects expected. Not a likely route of exposure.
Other:	Referral to a physician is recommended if there is any question about the seriousness of the in ury/exposure.

MSDS No.: 267
Revision No.: 006
Revision Date: 08/17/04
Page: 2 of 2

INTRODUCTION

APPLICATIONS / PRODUCTS

SYSTEM DETAILS

ESTIMATING TABLES / TECH DATA

CONTROL MEASURES AND PERSONAL PROTECTIVE EQUIPMENT

Ventilation:	General (natural or mechanically induced fresh air movements).
Eye Protection:	Not required, however, safety glasses should be worn in most industrial settings.
Skin Protection:	Cloth gloves are recommended.
Respiratory Protection:	Not normally required. Where ventilation is inadequate to control vapors, use a NIOSH-approved respirator with organic vapor cartridges. Never enter a confined space without an appropriate air supplied respirator.

PRECAUTIONS FOR SAFE HANDLING AND USE

Handling and Storing Precautions:	Store in a cool dry area. Keep from freezing. Shelf life is one year from date of manufacture if stored between 40° and 77° F (5 – 25° C). For industrial use only. Keep out of reach of children. Keep container sealed when not in use to prevent curing of the product. Avoid contact with the eyes and skin. Practice good hygiene; i.e. wash after using and before eating or smoking.
Spill Procedures:	Allow to cure and place in a container for proper disposal in accordance with all applicable local, state, or federal requirements. Not regulated as a hazardous waste according to federal EPA definitions.

REGULATORY INFORMATION

Hazard Communication:	This MSDS has been prepared in accordance with the federal OSHA Hazard Communication Standard 29 CFR 1910.1200.
HMIS Codes:	Health 1, Flammability 0, Reactivity 0, PPE B (Gloves, Glasses)
DOT Shipping Name:	Not regulated.
IATA / ICAO Shipping Name:	Not regulated.
TSCA Inventory Status:	Chemical components listed on TSCA inventory.
SARA Title III, Section 313:	This product contains approximately 3% ethylene glycol which is subject to reporting under Section 313 of SARA Title III (40 CFR Part 372).
EPA Waste Code(s):	Not regulated by EPA as a hazardous waste.
Waste Disposal Methods:	Consult with regulatory agencies or your corporate personnel for disposal methods that comply with local, state, and federal safety, health and environmental regulations.

CONTACTS

Customer Service:	1 800 879 8000	Technical Service:	1 800 879 8000
Health / Safety:	1 800 879 6000	Jerry Metcalf (x6704)	
Emergency (Chem-Trec):	1 800 424 9300 (USA, PR, Virgin Islands, Canada);	001 703 527 3887 (other countries)	

The information and recommendations contained herein are based upon data believed to be correct; however, no guarantee or warranty of any kind expressed or implied is made with respect to the information provided.

Certificate of Compliance

Certificate Number **20060214-R13240B**
Report Reference **2006 February 14**
Issue Date **2006 February 14**

Page 1 of 1



Issued to: **Hilti, Inc.**
5400 S 122ND East Ave
Tulsa, OK 74146 USA


*This is to certify that
representative samples of* **Fill, Void or Cavity Materials
CP606**

*Have been investigated by Underwriters Laboratories Inc.® in
accordance with the Standard(s) indicated on this Certificate.*

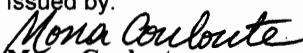
Standard(s) for Safety: **ANSI/UL 1479, ANSI/UL 2079, CAN/ULC-S115-05**

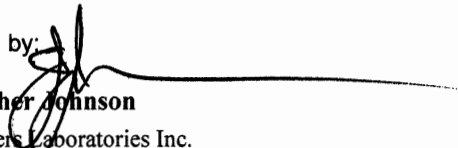
Additional Information: **CP606 Sealant for use in Joint Systems and CP606 Sealant for use in
Through-Penetration Firestop Systems as currently described in the UL Fire
Resistance Directory.**

**Only those products bearing the UL Classification Mark should be considered as being
covered by UL's Classification and Follow-Up Service.**

The UL Classification Mark includes: UL in a circle symbol:  with the word
"CLASSIFIED" (as shown); a control number (may be alphanumeric) assigned by UL; a
statement to indicate the extent of UL's evaluation of the product; and, the product category
name (product identity) as indicated in the appropriate UL Directory.

Look for the UL Classification Mark on the product

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