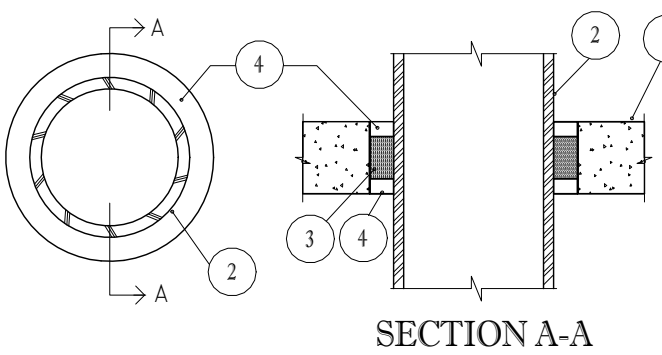


SYSTEM NO. CAJ1015  
(FORMERLY SYSTEM NO. 143)  
F RATING- 2 HR.  
T RATING- 0 HR.  
L RATING AT AMBIENT-LESS THAN 1 CFM /sq. ft. (SEE ITEM 4)  
L RATING AT 400 F-LESS THAN 1 CFM/ sq. ft. (SEE ITEM 4)



1. FLOOR OR WALL ASSEMBLY- MIN.2-1/2 in. THICK REINFORCED LIGHTWEIGHT OR NORMAL WEIGHT (100-150 PCF) CONCRETE. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS\*. MAX. DIAM. OF OPENING IS 6 in. .  
SEE CONCRETE BLOCKS (CAZT) CATEGORY IN THE FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS.
2. THROUGH PENETRANTS- ONE METALLIC PIPE, , CONDUIT OR TUBING TO BE CENTERED WITHIN THE FIRESTOP SYSTEM. A NOM. ANNULAR SPACE OF 3/4 in. IS REQUIRED WITHIN THE FIRESTOP SYSTEM. PIPE, CONDUIT OR TUBING TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES, CONDUITS OR TUBING MAY BE USED:

- A. STEEL PIPE NOM. 4 in. DIAM. (OR SMALLER ) SCHEDULE 5 (OR HEAVIER) STEEL PIPE.  
B. CONDUIT NOM. 4 in. DIAM. (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING OR STEEL CONDUIT.

PACKING MATERIAL- MIN 1-1/2 in. THICKNESS OF MIN. 4 PCF MINERAL WOOL BATT INSULATION FIRMLY PACKED INTO OPENING AS A PERMANENT FORM. PACKING MATERIAL TO BE RECESSED FROM BOTH SURFACES OF FLOOR OR WALL AS REQUIRED TO ACCOMMODATE THE REQUIRED THICKNESS OF FILL MATERIAL

4. FILL, VOID OR CAVITY MATERIAL\*-SEALANT -MIN. 1/2 in. THICKNESS OF FILL MATERIAL TO BE APPLIED AT BOTH SURFACES OF FLOOR OR WALL ASSEMBLY.

MINNESOTA MINING & MFG. CO.- TYPES FB-2000 , FB-2000+ ,FB-2003 (TOP SURFACE OF FLOORS ONLY). (NOTE: L RATINGS APPLY WHEN FB-2000+ IS USED)

\* BEARING THE UL CLASSIFICATION MARKING

1. FLOOR OR WALL ASSEMBLY- MIN 4-1/2 in THICK LIGHTWEIGHT OR NORMAL WEIGHT (100-150 PCF) CONCRETE. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS\*. MAX DIAM. OF CIRCULAR THROUGH OPENING IS 22-1/2"IN.

SEE CONCRETE BLOCKS (CAZT) CATEGORY IN THE FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS.

1A. STEEL SLEEVE - (OPTIONAL, NOT SHOWN)- NOM 12 in. DIAM. (OR SMALLER ) SCHEDULE 40 (OR HEAVIER) STEEL PIPE SLEEVE CAST INTO CONCRETE FLOOR OR WALL. SLEEVE TO BE FLUSH WITH OR PROJECT MAX 2 in. FROM TOP SURFACE OF FLOOR OR FROM BOTH SURFACES OF WALL.

2. PIPE OR CONDUIT -NOM. 20 in. DIAM. (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE, NOM 6 in. DIAM. (OR SMALLER ) RIGID STEEL CONDUIT OR TYPE L (OR HEAVIER) COPPER TUBE, NOM 4 in. DIAM. (OR SMALLER) CAST IRON PIPE OR STEEL EMT. MAX ONE PIPE OR CONDUIT PER THROUGH OPENING. MAX ANNULAR SPACE BETWEEN PIPE OR CONDUIT AND EDGE OF THROUGH OPENING NOT TO EXCEED 2-1/2 in. MIN. ANNULAR SPACE BETWEEN PIPE OR CONDUIT AND EDGE OF THROUGH OPENING IS ZERO IN. (POINT CONTACT). PIPE OR CONDUIT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY.

3. PACKING MATERIAL- POLYETHYLENE BACKER ROD OR NOM 1 in. THICKNESS OF TIGHTLY-PACKED CERAMIC (ALUMINA SILICA ) FIBER BLANKET, MINERAL-WOOL BATT OR GLASS FIBER INSULATION MATERIAL USED AS A PERMANENT FORM. PACKING MATERIAL TO BE RECESSED FROM TOP SURFACE OF FLOOR OR FROM BOTH SURFACES OF WALL AS REQUIRED TO ACCOMMODATE THE REQUIRED THICKNESS OF CAULK FILL MATERIAL (ITEM 4). AS AN ALTERNATE WHEN MAX PIPE SIZE IS 10 in. DIAM. AND WHEN MAX ANNULAR SPACE IS 1 in. A MIN. 1 in. THICKNESS OF TIGHTLY-PACKED CERAMIC FIBER BLANKET OR MINERAL-WOOL BATT PACKING MATERIAL MAY BE RECESSED MIN 1/2 in. FROM BOTTOM SURFACE OF FLOOR OR FROM EITHER SIDE OF WALL.

4. FILL, VOID OR CAVITY MATERIALS\*-CAULK- APPLIED TO FILL ANNULAR SPACE TO THE MIN. THICKNESS SHOWN IN THE FOLLOWING TABLE:

| MAX. PIPE DIAM. IN. | MAX ANNULAR SPACE IN | PACKING MATERIAL TYPE (a) | MIN CALUK THKNS IN |
|---------------------|----------------------|---------------------------|--------------------|
| 10                  | 1                    | BR, CF, GF OR MW          | 1/2 (b)            |
| 10                  | 1                    | CF OR MW                  | 1/2 (C)            |
| 20                  | 2-1/2                | BR, CF, GF OR MW          | 1 (b)              |

(a) BR= POLYETHYLENE BACKER ROD  
CF= CERAMIC FIBER BLANKET.  
GF= GLASS FIBER INSULATION  
MW= MINERAL-WOOL BATT

(b) CAULK INSTALLED FLUSH WITH TOP SURFACE OF FLOOR OR BOTH SURFACES OF WALL  
(C) CAULK INSTALLED FLUSH WITH BOTTOM SURFACE OF FLOOR OR ONE SURFACE OF WALL

MINNESOTA MINING & MFG. CO.- -TYPE CP 25 N/S

\*BEARING THE UL CLASSIFICATION MARKING

1. FLOOR OR WALL ASSEMBLY- MIN. 3-1/4 in. THICK REINFORCED LIGHTWEIGHT OR NORMAL WEIGHT (100-150 PCF) CONCRETE. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS\*. MAX. DIAM. OF OPENING 6 in. .  
SEE CONCRETE BLOCKS (CAZT) CATEGORY IN THE FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS.

2. THROUGH PENETRANTS- ONE METALLIC PIPE, CONDUIT OR TUBING TO BE CENTERED WITHIN THE FIRESTOP SYSTEM. A NOM. ANNULAR SPACE OF 3/4 in. IS REQUIRED WITHIN THE FIRESTOP SYSTEM. PIPE, CONDUIT OR TUBING TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES, CONDUITS OR TUBING MAY BE USED:

- A. STEEL PIPE NOM. 4 in. DIAM. (OR SMALLER ) SCHEDULE 5 (OR HEAVIER) STEEL PIPE.  
B. CONDUIT NOM. 4 in. DIAM. (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING OR STEEL CONDUIT.

3. FILL, VOID OR CAVITY MATERIAL\*-PUTTY -MIN. 3-1/4 in. THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH BOTH SURFACES OF FLOOR OR WALL.

NELSON FIRESTOP PRODUCTS- TYPE FSP PUTTY

\*BEARING THE UL CLASSIFICATION MARKING

1. WALL ASSEMBLY- THE 1 OR 2 H FIRE RATED GYPSUM WALLBOARD/STUD WALL ASSEMBLY SHALL BE CON-STRUCTED OF THE MATERIALS AND IN THE MANNER DESCRIBED IN THE INDIVIDUAL U300 OR U400 SERIES WALL AND PARTITION DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES:

A. STUDS - WALL FRAMING MAY CONSIST OF EITHER WOOD STUDS OR STEEL CHANNEL STUDS. WOOD STUDS TO CONSIST OF NOM. 2 BY 4 IN. LUMBER SPACED 16 in. OC. STEEL STUDS TO BE MIN 2-1/2 in. WIDE AND SPACED MAX 24 in. OC.

B. WALLBOARD, GYPSUM\* - ONE OR TWO LAYERS OF NOM 1/2 OR 5/8 in. THICK GYPSUM WALLBOARD AS SPECIFIED IN THE INDIVIDUAL WALL AND PARTITION DESIGN. THE HOURLY F RATING OF THE FIRESTOP SYSTEM IS EQUAL TO THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED.

2. THROUGH PENETRANTS - ONE NONMETALLIC PIPE TO BE CENTERED WITHIN THE FIRESTOP SYSTEM. PIPE TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF NONME-TALLIC PIPES MAY BE USED:

A. POLYVINYL CHLORIDE (PVC) PIPE - NOM 2 AND 3 in. DIAM. SCHEDULE 40 PVC PIPE FOR USE IN CLOSED (PROCESS OR SUPPLY) OR VENTED (DRAIN, WASTE OR VENT) PIPING SYSTEM.

B. CHLORINATED POLYVINYL CHLORIDE (CPVC) PIPE - NOM 2 AND 3 in. DIAM. SDR17 CPVC PIPE FOR USE IN CLOSED (PROCESS OR SUPPLY) PIPING SYSTEM.

3. FIRESTOP DEVICE - GALV. STEEL COLLAR LINED WITH INTUMESCENT WRAP STRIPS SIZED TO FIT THE SPECIFIC DIAM. OF THE THROUGH-PENETRANT. PRIOR TO THE INSTALLATION OF THE DEVICE INTO THE OPENING, THE GYP-SUM WALLBOARD IS TO BE NOTCHED ON ONE SIDE OF WALL TO ALLOW THE INSERTION OF THE DEVICE WITH THE HOSE CLAMP INTO THE OPENING. NOTCHED OPENING TO BE COMPLETELY FILLED WITH FILL, VOID OR CAVITY MATERIAL (ITEM 4). DEVICE SHALL BE INSTALLED AROUND THROUGH-PENETRANT IN ACCORDANCE WITH ACCOMPANYING INSTALLATION INSTRUCTIONS. THE DEVICE SIZE, DIAM. OF OPENING IN WALL AND ANNULAR SPACE BETWEEN PIPE AND PERIPHERY OF OPENING IS DEPENDENT UPON THE PIPE DIAM. AS SHOWN IN THE FOLLOWING TABLE:

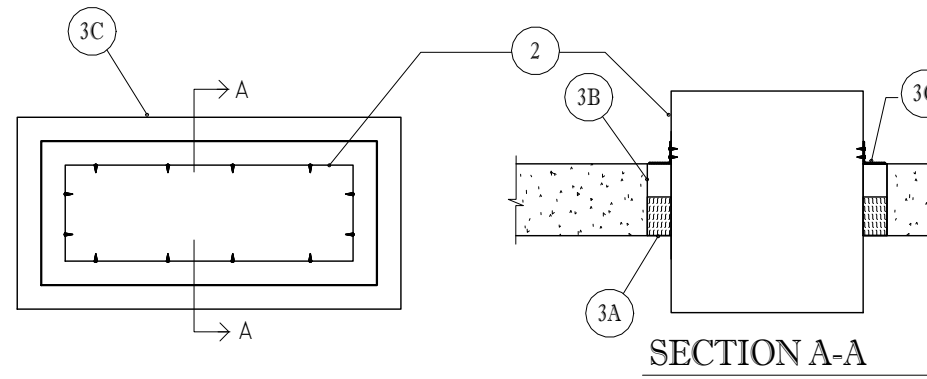
| MAX. PIPE DIAM. (IN.) | DEVICE SIZE | DIAM. OF OPENING (IN.) | ANNULAR SPACE |
|-----------------------|-------------|------------------------|---------------|
| 2                     | TS2         | 3-1/2                  |               |
| 3                     | TS3         | 4-3/4                  | 9/16<br>5/8   |

TREMCO INC. - FYRE-CAN SLEEVE  
THE FIRE CAN MANUFACTURING CO., INC. - FYRE-CAN SLEEVE

4. FILL, VOID OR CAVITY MATERIAL\* - CAULK - MIN. 1/4 in. BEAD OF FILL MATERIAL TO BE APPLIED AT THE INTERFACE OF THE GYPSUM WALL AND FIRESTOP DEVICE AND AT THE INTERFACE OF THE PIPE AND FIRESTOP DEVICE. ADDITIONAL FILL MATERIAL TO BE APPLIED TO FILL THE NOTCH CREATED FOR THE HOSE CLAMP TO THE FULL DEPTH OF THE WALLBOARD.  
TREMCO INC. - TREMSTOP WBM

\*BEARING THE UL CLASSIFICATION MARKING

SYSTEM NO. CAJ7010  
F RATING- 2 HR.  
T RATING- 0 HR.



1. FLOOR OR WALL ASSEMBLY- MIN.4-1/2 in. THICK REINFORCED LIGHTWEIGHT OR NORMAL WEIGHT (100-150 PCF) CONCRETE.FLOOR OR MIN. 6 in. THICK REFORCED LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE WALL. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS\*. MAX AREA OF OPENING IS 325 sq.in. WITH MAX DIMENSIONS OF 25 in.

SEE CONCRETE BLOCKS (CAZT) CATEGORY IN THE FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS.

2. STEEL DUCT- NOM 24 BY 12 in. (OR SMALLER ) NO. 28 GAUGE (OR HEAVIER) STEEL DUCT. ONE DUCT TO BE INSTALLED WITHIN THE FIRESTOP SYSTEM WITH A NOM. 1/2 in. ANNULAR SPACE. STEEL DUCT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY.

3. FIRESTOP SYSTEM- THE FIRESTOP SYSTEM SHALL CONSIST OF THE FOLLOWING:

A. PACKING MATERIAL- MIN 3 in.THICKNESS OF MIN 4 PCF MINERAL WOOL BATT INSULATION FIRMLY PACKED INTO OPENING AS A PERMANENT FORM. PACKING MATERIAL TO BE RECESSED FROM TOP SURFACE OF FLOOR AND FROM BOTH SURFACES OF WALL AS REQUIRED TO ACCOMMODATE THE REQUIRED THICKNESS OF FILL MATERIAL.

B. FILL, VOID OR CAVITY MATERIAL\*-PUTTY -MIN. 1-1/2 in. THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH TOP SURFACE OF FLOOR OR WITH BOTH SURFACES OF WALL.

C. STEEL ANGLE- MIN. 1-1/2 in. WIDE BY 1-1/2in. HIGH BY 0.030 in. (NO. 22 MSG) THICK GALV. STEEL ANGLES CUT TO FIT THE CONTOUR OF THE DUCT WITH A 1 in. LAP ON THE TOP SURFACE OF FLOOR OR BOTH SURFACES OF WALL. LEGS OF ANGLES SECURED TO DUCT WITH MIN. NO. 12 SHEET METAL SCREWS , SPACED A MAX 4 in. oc.

\*BEARING THE UL CLASSIFICATION MAKING

1. FLOOR OR WALL ASSEMBLY- MIN.4-1/2 in. THICK LIGHTWEIGHT OR NORMAL WEIGHT (100-150 PCF) CONCRETE. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS\*. MAX. DIAM. OF OPENING IS 6-1/4 in. .  
SEE CONCRETE BLOCKS (CAZT) CATEGORY IN THE FIRE RESISTANCE DIRECTORY FOR NAMES OF MANFACTURERS.

1A. STEEL SLEEVE - (OPTIONAL, NOT SHOWN)- NOM 4 in. DIAM. (OR SMALLER ) SCHEDULE 10 (OR HEAVIER) STEEL PIPE SLEEVE CAST INTO FLOOR OR WALL ASSEMBLY. SLEEVE TO BE FLUSH WITH FLOOR OR WALL SURFACES.

2. CABLES- MIN. 12 PERCENT TO MAX 40 PERCENT FILL AREA PER MAX 4 in. DIAM. STEEL SLEEVED THROUGH OPENING , MIN. 20 PERCENT TO MAX 40 PERCENT FILL AREA PER MAX 6-1/4 in. DIAM. UNSLEEVED THROUGH OPENING. CABLES TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF CABLE MAY BE USED:

A. MAX. NO. 12 AWG MULTIPLE COPPER CONDUCTOR POWER & CONTROL CABLES WITH POLYVINYL CHLORIDE (PVC) INSULATION AND JACKET MATERIALS.

B. MULTIPLE FIBER OPTICAL COMMUNICATION CABLE JACKETED WITH PVC AND HAVING A MAX OUTSIDE DIAM. OF 3/4in. .

C. MAX 150 PAIR NO. 24 AWG COPPER CONDUCTOR TELEPHONE CABLES PVC INSULATION AND JACKET MATERIALS

3. PACKING MATERIAL- NOM. 1 in. THICKNESS OF CERAMIC (ALUMINUM SILICA) FIBER BLANKET OR MINERAL WOOL BATT INSULATION FIRMLY PACKED INTO OPENING AS A PERMANENT FORM. PACKING MATERIAL TO BE RECESSED MIN. 1 in. FROM TOP SURFACE OF FLOOR OR FROM BOTH SURFACES OF WALL.

4. FILL, VOID , OR CAVITY MATERIALS\*-PUTTY- MOLDABLE PUTTY MATERIAL KNEADED BY HAND AND APPLIED TO FILL ANNULAR SPACE (AND INTERSTICES BETWEEN CABLES TO MAX EXTENT POSSIBLE ) TO A MIN. DEPTH OF 1 in. FLUSH WITH TOP SURFACE OF FLOOR. IN WALL ASSEMBLIES, REQUIRED PUTTY DEPTH TO BE INSTALLED SYMMETRICALLY ON BOTH SIDES OF WALL.

MINNESOTA MINING & MFG. CO.- TYPE MPS-2 +

\*BEARING THE UL CLASSIFICATION MARKING

1. FLOOR OR WALL ASSEMBLY- MIN.4-1/2 in. THICK REINFORCED NORMAL WEIGHT (140-150 PCF) CONCRETE. FLOOR OR MIN. 4-3/4 in. THICK REFORCED NORMAL WEIGHT CONCRETE WALL. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS\*. MAX AREA OF OPENING IS 3069 sq.in. WITH A MAX. DIMENSION OF 93 in.

2. STEEL DUCT- MIN. 0.021 in. THICK STEEL DUCT HAVING A MAX PERIMETER DIMENSION OF 216 in. AND A MAX INDIVIDUAL DIMENSION OF 84 in. . ONE DUCT TO BE CENTERED WITHIN THE FIRESTOP SYSTEM. DUCT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY. IN ADDITION , FOR DUCTS WITH ANY DIMENSION GREATER THAN 39 in. A 1-1/2in. BY 1-1/2in. BY 1/8in. THICK TRANSVERSE STIFFENING ANGLE APPROXIMATELY 2 in. LESS IN LENGTH THAN THE MAX. DIMENSION SHALL BE SCREW ATTACHED 8 in. O.C. TO THE DUCT, 3in. BEYOND THE TOP SURFACE OF THE FLOOR AND BOTH SURFACES OF THE WALL.

3. FIRESTOP SYSTEM- THE FIRESTOP SYSTEM SHALL CONSIST OF THE FOLLOWING:

A. DUCT WRAP MATERIALS\*- NOM 1-1/2 in. THICK, 6 PCF REFRACTORY CERAMIC BLANKET TOTALLY ENCAPSULATED WITHIN FOIL-SCRM FACERS. THE STEEL DUCT SHALL BE WRAPPED WITH ONE LAYER OF DUCT WRAP INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. MAINTAINING MIN. 3 in. TRANSVERSE AND LONGITUDINAL OVERLAPS. ALL CUT EDGES AND ENDS SHALL BE SEALED WITH 3 in. WIDE PRESSURE SENSITIVE ALUMINUM FOIL TAPE. A NOMINAL ANNULAR SPACE OF 3 in. IS REQUIRED BETWEEN THE INSULATED DUCT AND THE PERIPHERY OF THE OPENING.

\*MINNESOTA MINING & MFG. CO.- FIREMASTER DUCT WRAP

B. STEEL BANDING STRAPS- 1/2in. WIDE BY 0.015 in. THICK CARBON STEEL BANDING STRAPS USED IN CONJUNCTION WITH 1/2in. WIDE BY 1 in. LONG STAINLESS STEEL CRIMP CLIPS. BANDING STRAPS SPACED A MAX 12 in. OC AND 3 in. FROM TRANSVERSE JOINTS OF DUCT WRAP.

C. PACKING MATERIAL- MIN. 4-1/4 in. THICKNESS OF UNFACED SCRAP DUCT WRAP MATERIAL OR 3 PCF MINERAL WOOL BATT INSULATION FIRMLY PACKED INTO OPENING AS A PERMANENT FORM. PACKING MATERIAL TO BE RECESSED FROM THE TOP SURFACE OF THE FLOOR OR BOTH SURFACES OF WALL TO ACCOMMODATE THE REQUIRED THICKNESS OF FILL MATEIAL.

D. FILL, VOID OR CAVITY MATERIAL\*-CAULK -MIN. 1/4in. THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH TOP SURFACE OF FLOOR OR BOTH SURFACES OF WALL.

\*MINNESOTA MINING & MFG. CO.- FB-2000+

\*BEARING THE UL CLASSIFICATION MARKING

1. FLOOR OR WALL ASSEMBLY- MIN.4-1/2 in. THICK REINFORCED LIGHTWEIGHT OR NORMAL WEIGHT (100-150 PCF) CONCRETE. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS\*. MAX. DIAM. OF OPENING IS 8 in. .

SEE CONCRETE BLOCKS (CAZT) CATEGORY IN THE FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS.

2. METALLIC PIPES- NOM. 1 in. DIAM. (OR SMALLER ) SCHEDULE 40 (OR HEAVIER) STEEL PIPE. A MAX OF FIVE PIPES TO BE INSTALLED WITHIN THE OPENING. THE SPACE BETWEEN PIPES SHALL BE MIN. 1/2 in. THE SPACE BETWEEN PIPES AND PERIPHERY OF OPENING SHALL BE 1/2 in. MAX 3-1/2 in. PIPES TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY.

3. FIRESTOP SYSTEM- THE FIRESTOP SYSTEM SHALL CONSIST OF THE FOLLOWING:

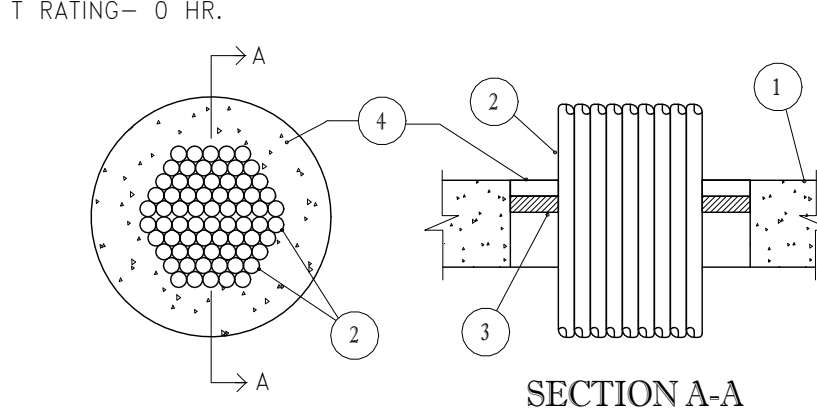
A. PACKING MATERIAL- MINERAL WOOL BATT INSULATION FIRMLY PACKED INTO OPENING AS A PERMANENT FORM. PACKING MATERIAL TO BE RECESSED FROM TOP SURFACE OF FLOOR OR FROM BOTH SURFACES OF WALL AS REQUIRED TO ACCOMMODATE THE REQUIRED THICKNESS OF FILL MATERIAL. AS AN OPTION TO THE ABOVE, BACKER ROD AND/OR FOAMED PLASTIC BACKER MATERIAL MAY BE USED.

B. FILL, VOID OR CAVITY MATERIAL\*-CAULK -MIN. 1-1/4 in. THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH TOP SURFACE OF FLOOR OR WITH BOTH SURFACES OF WALL.

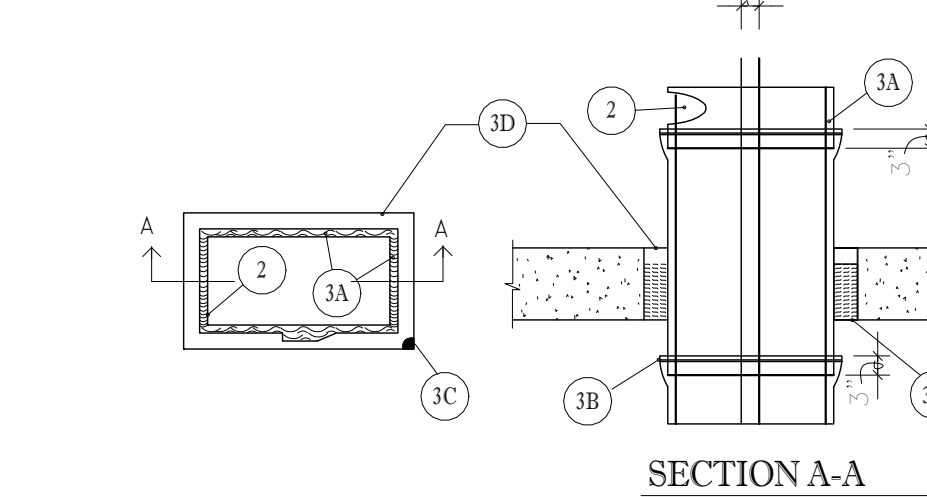
THE RECTORSEAL CORP.- METACAULK 950

\*BEARING THE UL CLASSIFICATION MARKING

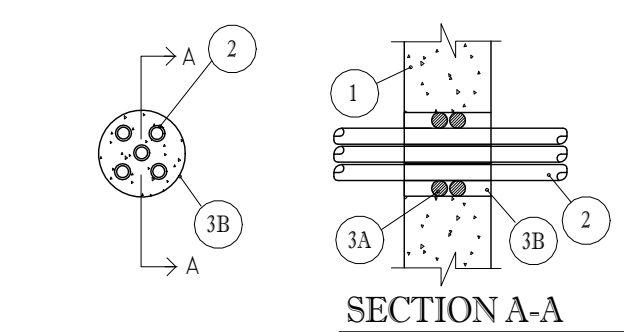
SYSTEM NO. CAJ3021  
(FORMERLY SYSTEM NO. 240)  
F RATING- 2 HR.  
T RATING- 0 HR.



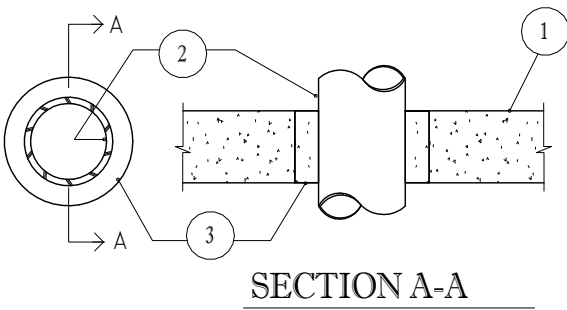
SYSTEM NO. CAJ7013  
F RATING- 1 HR.  
T RATING- 1 HR.



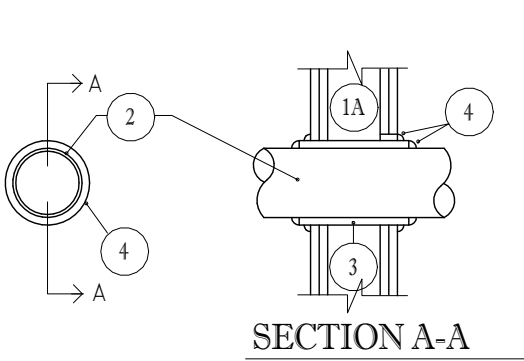
SYSTEM NO. CAJ1036  
(FORMERLY SYSTEM NO. 270)  
F RATING- 2 HR.  
T RATING- 1-1/2 HR.



SYSTEM NO. CAJ1041  
(FORMERLY SYSTEM NO. 283)  
F RATING- 2 HR.  
T RATING- 0 HR.



SYSTEM NO. WL2082  
F RATING- 1 AND 2 HR. (SEE ITEM 1)  
T RATING- 1 HR.



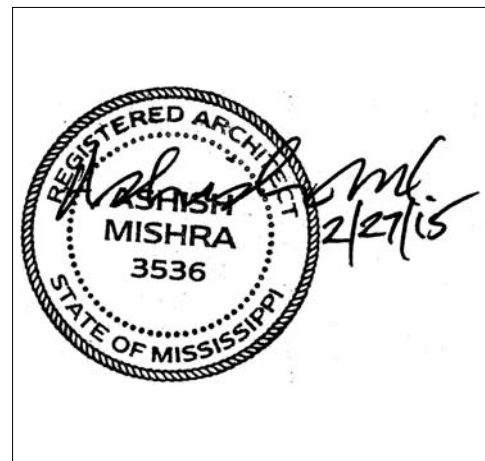
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| REVISIONS |      |             |
|-----------|------|-------------|
| No.       | Date | Description |
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**KEY PLAN**

**Shiva Southaven Inc.**

**Holiday Inn Express & Suites**

Lot 16 (Rev Lot 3) Southcrest Pkwy.  
Southcrest Subdivision  
Southaven, MS 38671

Drawing Title

**UL Details**

Phase  
Construction Documents

|             |               |           |
|-------------|---------------|-----------|
| Project No. | 14-081        | Sheet No. |
| Prepared by | Author        | T005      |
| Checked by  | Checker       |           |
| Date        | Feb. 27, 2015 |           |

Review