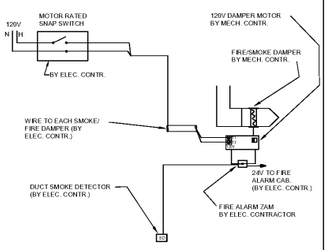
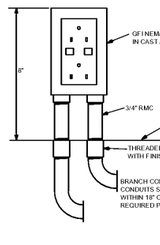
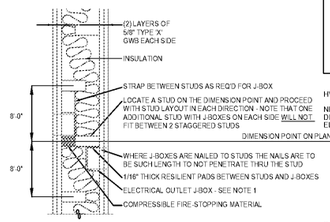


NOTES:
1. ALL FIRE/SMOKE DAMPERS SUPPLIED AND INSTALLED BY MECHANICAL CONTRACTOR. ALL FIRE ALARM WIRING INSTALLED BY ELECTRICAL CONTRACTOR.
120V WIRING TO DAMPER PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR.

9 / E.002 SMOKE/FIRE DAMPER WIRING DETAIL
NO SCALE

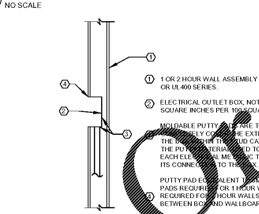


8 / E.002 STUBBED-UP RECEPTACLE DETAIL
NO SCALE



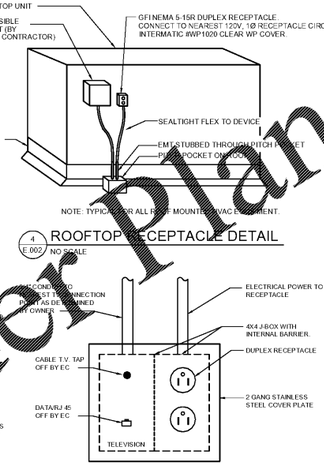
NOTES: 1. ELECTRICAL OUTLET BOXES AND SIMILAR BOXES FOR T.V., PHONE, ETC. IN PARTY WALLS MUST BE STEEL AND NOT OVER 16" SQUARE. SUCH BOXES ARE TO BE SEALED WITH 3M MPP-4S FIRE BARRIER PUDDY PAD OR EQUAL STACK MULTIPLE BOXES VERTICALLY WHEN ON SAME SIDE OF WALL.
2. CONTRACTOR TO VERIFY ACCEPTABILITY OF THIS DETAIL WITH LOCAL JURISDICTION'S BUILDING INSPECTOR

6 / E.002 OUTLET/J-BOX OFFSET DETAIL
NO SCALE



NOTE: THIS DETAIL APPLIES TO 1 AND 2 HOUR WALL ASSEMBLIES WITH 4"x4" FLUSH ELECTRICAL BOXES ON OPPOSITE SIDE OF WALLS THAT HAVE LESS THAN 24" SEPARATION BETWEEN THEM. BOXES NOT PERMITTED BACK-TO-BACK.

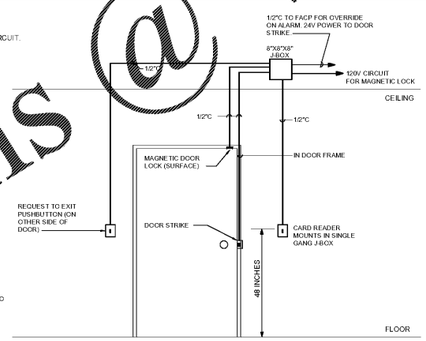
7 / E.002 PENETRATION DETAIL
NO SCALE



4 / E.002 ROOFTOP RECEPTACLE DETAIL
NO SCALE

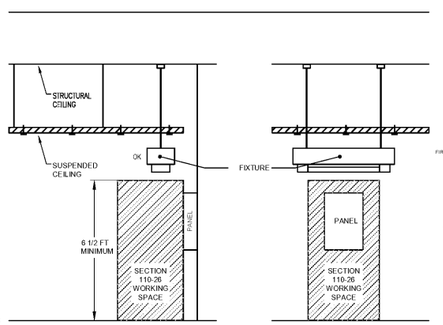
5 / E.002 TELEVISION/RECEPTACLE DETAIL
NO SCALE

NOTE:
1. THE ELECTRICAL CONTRACTOR SHALL PROVIDE WALL BACKING AS REQUIRED FOR INSTALLATION OF TELEVISION.
2. EACH TELEVISION LOCATION MOUNTING HEIGHT SHALL BE COORDINATED WITH ARCHITECT INDEPENDENTLY WITH ARCHITECT PRIOR TO ROUGH IN.

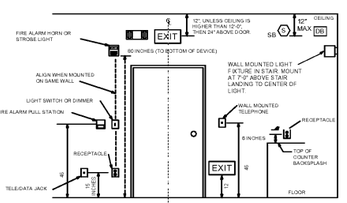


3 / E.002 DOOR ACCESS CONTROL ELEVATION
NO SCALE

NOTES:
IBC ARTICLE 1008.1.3.4"
1. A SENSOR SHALL BE PROVIDED ON THE EGRESS SIDE ARRANGED TO DETECT AN OCCUPANT APPROACHING THE DOORS. THE DOORS SHALL BE ARRANGED TO UNLOCK BY A SIGNAL FROM OR LOSS OF POWER TO THE SENSOR.
2. LOSS OF POWER TO THAT PART OF THE ACCESS CONTROL SYSTEM WHICH LOCK THE DOORS SHALL AUTOMATICALLY UNLOCK THE DOORS.
3. THE DOORS SHALL BE ARRANGED TO UNLOCK FROM A MANUAL UNLOCKING DEVICE LOCATED 40 INCHES TO 48 INCHES (1016MM TO 1219MM) OF THE SECURED DOORS. READY ACCESS SHALL BE PROVIDED TO THE MANUAL UNLOCKING DEVICE AND THE DEVICE SHALL BE CLEARLY IDENTIFIED BY A SIGN THAT READS "PUSH TO EXIT." WHEN OPERATED, THE MANUAL UNLOCKING DEVICE SHALL RESULT IN DIRECT INTERRUPTION OF POWER TO THE LOCK-INDEPENANT OF THE ACCESS CONTROL SYSTEM ELECTRONICS - AND THE DOORS SHALL REMAIN UNLOCKED FOR A MINIMUM OF 30 SECONDS.
4. ACTIVATION OF THE BUILDINGS FIRE ALARM SYSTEM, IF PROVIDED, SHALL AUTOMATICALLY UNLOCK THE DOORS, AND THE DOORS SHALL REMAIN UNLOCKED UNTIL THE FIRE ALARM SYSTEM HAS BEEN RESET.
5. ACTIVATION OF THE BUILDING AUTOMATIC SPRINKLER OR FIRE DETECTION SYSTEM, IF PROVIDED, SHALL AUTOMATICALLY UNLOCK THE DOORS. THE DOORS SHALL REMAIN UNLOCKED UNTIL THE FIRE ALARM SYSTEM HAS BEEN RESET.
6. ENTRANCE DOORS IN BUILDINGS WITH AN OCCUPANCY IN GROUP A,B,E, OR M SHALL NOT BE SECURED FROM THE EGRESS SIDE DURING PERIODS THAT THE BUILDING IS OPEN TO THE GENERAL PUBLIC.



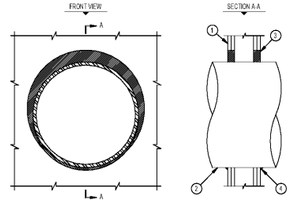
2 / E.002 WORKING CLEARANCE FOR ELECTRICAL EQUIPMENT
NEC ARTICLE 110.26



NOTES:
1. ALL DIMENSIONS ARE TO CENTER LINE OF DEVICE, UNLESS OTHERWISE NOTED.

1 / E.002 DEVICE MOUNTING ELEVATION
NO SCALE

U.L. SYSTEM NO. WL1054
METAL PIPE THROUGH GYPSUM WALL ASSEMBLY
F RATING = 1 HR. OR 2 HR.
T RATING = 0 HR.
L RATING AT AMBIENT = LESS THAN 1 CFM/SQ. FT.
L RATING AT 400°F = LESS THAN 4 CFM/SQ. FT.

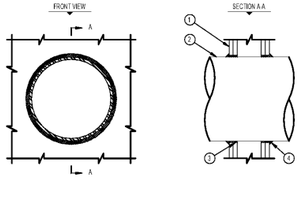


1. GYPSUM WALL ASSEMBLY (1 HR. OR 2 HR. FIRE RATING)(2 HR. SHOWN).
2. PENETRATING ITEM TO BE ONE OF THE FOLLOWING :
A. MAXIMUM 30" DIAMETER STEEL PIPE (SCHEDULE 10 OR HEAVIER).
B. MAXIMUM 8" DIAMETER COPPER PIPE.
C. MAXIMUM 6" DIAMETER STEEL CONDUIT.
D. MAXIMUM 4" DIAMETER STEEL EMT.
3. HILTI'S CP606 HIGH PERFORMANCE INTUMESCENT FIRESTOP SEALANT :
A. MINIMUM 5/8" DEPTH OF SEALANT FOR A 1 HR. FIRE-RATING.
B. MINIMUM 1 1/4" DEPTH OF SEALANT FOR A 2 HR. FIRE-RATING.
4. MINIMUM 6" BEAD HILTI'S ONE HIGH PERFORMANCE INTUMESCENT FIRESTOP SEALANT AT POINT OF CONTACT.

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 32 1/4".
2. ANNULAR SPACE = MINIMUM 0", MAXIMUM 2 3/4".

SEE HILTI FIRESTOP INSTALLATION MANUAL FOR ADDITIONAL INSTRUCTIONS
HILTI, INC. TULSA, OK 1-800-879-8000

U.L. SYSTEM NO. WL1085
EMT THROUGH 1-HR. OR 2-HR. GYPSUM WALL ASSEMBLY
F RATING = 1 HR. AND 2 HR.
T RATING = 0 HR.
L RATING AT AMBIENT = LESS THAN 1 CFM/SQ. FT.
L RATING AT 400°F = 4 CFM/SQ. FT.

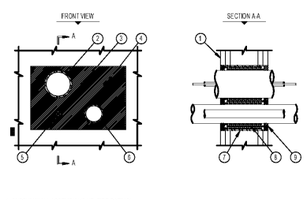


1. GYPSUM WALL ASSEMBLY (1 HR. OR 2 HR. FIRE RATING)(2 HR. SHOWN).
2. PENETRATING ITEM TO BE ONE OF THE FOLLOWING :
A. MAXIMUM 12" DIAMETER STEEL PIPE (SCHEDULE 20 OR HEAVIER).
B. MAXIMUM 12" DIAMETER CAST IRON PIPE.
C. MAXIMUM 8" DIAMETER COPPER PIPE.
D. MAXIMUM 6" DIAMETER EMT.
E. MAXIMUM 3" DIAMETER STEEL CONDUIT.
3. HILTI'S ONE HIGH PERFORMANCE INTUMESCENT FIRESTOP SEALANT FORCED INTO ANNULAR SPACE TO MAXIMUM EXTENT.
4. MINIMUM 1/2" BEAD HILTI'S ONE HIGH PERFORMANCE INTUMESCENT FIRESTOP SEALANT AT PIPE/GYPSUM WALLBOARD INTERFACE.

NOTE : ANNULAR SPACE = MINIMUM 0", MAXIMUM 5/8".

SEE HILTI FIRESTOP INSTALLATION MANUAL FOR ADDITIONAL INSTRUCTIONS
HILTI, INC. TULSA, OK 1-800-879-8000

U.L. SYSTEM NO. WL8004
MULTIPLE METAL PIPE AND CABLE THROUGH 2-HR. GYPSUM WALL
F RATING = 2 HR.
T RATING = 1HR.
L RATING AT AMBIENT = LESS THAN 1 CFM/SQ. FT.
L RATING AT 400°F = 4 CFM/SQ. FT.

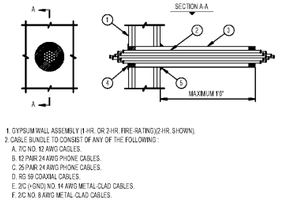


1. GYPSUM WALL ASSEMBLY (2 HR. FIRE RATING).
2. MAXIMUM 3" DIAMETER ELECTRICAL METALLIC TUBING (EMT).
3. MAXIMUM 25 PAIR NO. 24 AWG (OR SMALLER) TELEPHONE CABLES.
4. MAXIMUM 3/C NO. 10 AWG NM (WITH GROUND) POWER CABLE WITH PVC INSULATION.
5. MAXIMUM 300 KCMIL (OR SMALLER) POWER CABLE WITH PVC INSULATION & NYLON JACKET.
6. MAXIMUM 2" DIAMETER STEEL PIPE, COPPER PIPE, EMT, OR STEEL CONDUIT.
7. NO. 8 STEEL WIRE MESH, 4.3/8" LONG (OR STANDARD METAL DRYWALL TRACK SCREWED SECURELY IN PLACE) CENTERED IN OPENING.
8. MINIMUM 4" THICKNESS MINERAL WOOL (MIN. 4 PCF DENSITY) TIGHTLY PACKED.
9. MIN. 1/2" DEPTH HILTI'S ONE HIGH PERFORMANCE INTUMESCENT FIRESTOP SEALANT.

NOTES : 1. MAXIMUM AREA OF OPENING = 90 SQUARE INCHES WITH A MAX. DIM. OF 12".
2. DISTANCE BETWEEN ITEMS = MINIMUM 1 3/4", MAXIMUM 7".
3. DISTANCE FROM EDGE OF OPENING = MINIMUM 1/2", MAXIMUM 7". (EXCEPTION: 300 KCMIL POWER CABLE MUST BE MINIMUM 1-1/2" FROM EDGE OF OPENING.

SEE HILTI FIRESTOP INSTALLATION MANUAL FOR ADDITIONAL INSTRUCTIONS
HILTI, INC. TULSA, OK 1-800-879-8000

U.L. SYSTEM NO. WL3065
CABLE BUNDLE THROUGH 1-HR. OR 2-HR. FIRE-RATED GYPSUM WALL
F RATING = 1 HR. OR 2 HR.
T RATING = 0 HR.
L RATING AT AMBIENT = 5 CFM/SQ. FT.
L RATING AT 400°F = 7 CFM/SQ. FT.

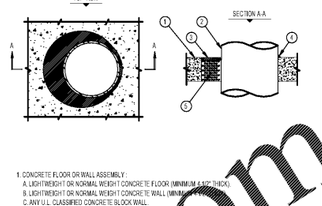


1. GYPSUM WALL ASSEMBLY (1 HR. OR 2 HR. FIRE RATING)(2 HR. SHOWN).
2. CABLE BUNDLE TO CONSIST OF ANY OF THE FOLLOWING :
A. 70/C NO. 12 AWG CABLES.
B. 62 PAIR 24 AWG PHONE CABLES.
C. 25 PAIR 24 AWG PHONE CABLES.
D. RG 59 COAXIAL CABLES.
E. 2/C (HOND) NO. 14 AWG METAL-CLAD CABLES.
F. 2/C NO. 8 AWG METAL-CLAD CABLES.
G. MAXIMUM 97 DIAMETER FIBER OPTIC CABLES.
3. OPTIONAL : MAX. 4" DIA. DN. STEEL PIPE SLEEVE (SCH. 40 OR THINNER)(SEE NOTE NO. 4).
4. HILTI'S CP606 HIGH PERFORMANCE INTUMESCENT FIRESTOP SEALANT :
A. MINIMUM 5/8" DEPTH OF SEALANT FOR A 1 HR. FIRE RATING.
B. MINIMUM 1 1/4" DEPTH OF SEALANT FOR A 2 HR. FIRE RATING.
5. SEE NOTE NO. 4 BELOW.

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 4 1/2".
2. CABLES TO FILL MAXIMUM 33% OF AREA OF OPENING.
3. ANNULAR SPACE = MINIMUM 1/4", MAXIMUM 3/4".
4. STEEL SLEEVE MAY BE FLUSH WITH WALL SURFACE OR EXTEND UP TO 1/8" BEYOND WALL SURFACE IN ANY COMBINATION. WHEN SLEEVE IS FLUSH WITH WALL, APPLY HILTI'S ONE FIRESTOP SEALANT ON TO WALL SURFACE. WHEN SLEEVE IS EXTENDED BEYOND ONE OR BOTH SIDES OF WALL, APPLY 1/2" CROWN HILTI'S ONE FIRESTOP SEALANT TO WALL/SLEEVE INTERFACE.

SEE HILTI FIRESTOP INSTALLATION MANUAL FOR ADDITIONAL INSTRUCTIONS
HILTI, INC. TULSA, OK 1-800-879-8000

U.L. SYSTEM NO. CAJ1149
METAL PIPE THROUGH CONCRETE FLOOR, WALL, OR BLOCK WALL
F RATING = 2 HR.
T RATING = 0 HR.

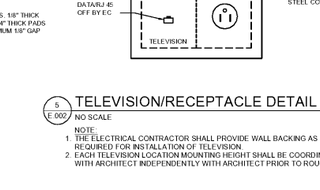


1. CONCRETE FLOOR OR WALL ASSEMBLY :
A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 4 1/2" THICK).
B. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE WALL (MINIMUM 4" THICK).
C. ANY U.L. CLASSIFIED CONCRETE BLOCK WALL.
2. THROUGH PENETRANTS TO INCLUDE ANY OF THE FOLLOWING :
A. MAXIMUM 10" NOMINAL DIAMETER STEEL PIPE.
B. MAXIMUM 4" NOMINAL DIAMETER COPPER PIPE.
C. MAXIMUM 4" NOMINAL DIAMETER EMT.
D. MAXIMUM 4" NOMINAL DIAMETER STEEL CONDUIT.
3. MIN. 1/2" DEPTH HILTI'S ONE HIGH PERFORMANCE INTUMESCENT FIRESTOP SEALANT.
4. MIN. 1/2" BEAD HILTI'S ONE HIGH PERFORMANCE INTUMESCENT FIRESTOP SEALANT.
5. MINIMUM 4" THICKNESS MINERAL WOOL (MIN. 4 PCF DENSITY) TIGHTLY PACKED. (SEE NOTE NO. 4).

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 12".
2. ANNULAR SPACE = MINIMUM 0", MAXIMUM 2".
3. ANNULAR SPACE IS REQUIRED FOR CONCRETE ONLY. MAY BE FILLED WITH CONCRETE, GROUT OR MORTAR.
4. MINIMUM 4" DIA. STEEL SLEEVE IS 4" NOM. DIA., A MINIMUM 3" THICKNESS OF MINERAL WOOL MAY BE USED.

SEE HILTI FIRESTOP INSTALLATION MANUAL FOR ADDITIONAL INSTRUCTIONS
HILTI, INC. TULSA, OK 1-800-879-8000

U.L. SYSTEM NO. FC1009
METAL PIPE/CONDUIT THROUGH 1-HR. OR 2-HR. WOOD FLOOR ASSEMBLY
F RATING = 1 HR. OR 2 HR.
T RATING = 1 HR. OR 2 HR.
L RATING AT AMBIENT = LESS THAN 1 CFM/SQ. FT.
L RATING AT 400°F = 4 CFM/SQ. FT.

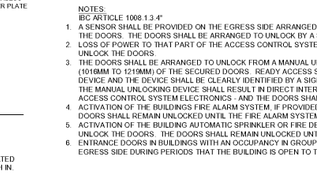


1. WOOD FLOOR ASSEMBLY : DESIGN NO. L500 SERIES IN THE U.L. FIRE RESISTANCE DIRECTORY.
2. LUMBER OR PLYWOOD SUBFLOOR WITH FINISH FLOOR OF LUMBER, PLYWOOD, OR FLOOR TOPPING MIXTURE.
3. PENETRATING ITEM TO BE ONE OF THE FOLLOWING :
A. MAXIMUM 4" NOMINAL DIAMETER STEEL PIPE (SCHEDULE 40 OR HEAVIER).
B. MAXIMUM 4" NOMINAL DIAMETER STEEL CONDUIT.
C. MAX. 4" NOM. DIA. NOM. OR STANDARD COPPER WATER TUBE (TYPE L OR HEAVIER)
D. MAXIMUM 4" NOMINAL DIAMETER COPPER PIPE.
E. MAXIMUM 4" NOMINAL DIAMETER EMT.
4. TOP PLATE.
5. GYPSUM WALL ASSEMBLY (1 HR. OR 2 HR. FIRE RATING)(2 HR. SHOWN).
6. PROVIDE A GENEROUS BEAD OF HILTI FS 601 ELASTOMERIC FIRESTOP SEALANT OR HILTI FS ONE HIGH PERFORMANCE INTUMESCENT FIRESTOP SEALANT AT THE TOP PLATE.
7. MIN. 3/4" DEPTH HILTI FS 601 ELASTOMERIC FIRESTOP SEALANT OR FS ONE FIRESTOP SEALANT.

NOTE : ANNULAR SPACE = MINIMUM 0", MAXIMUM 3/4".

SEE HILTI FIRESTOP INSTALLATION MANUAL FOR ADDITIONAL INSTRUCTIONS
HILTI, INC. TULSA, OK 1-800-879-8000

U.L. SYSTEM NO. FC3012
CABLE/CABLE BUNDLE THROUGH 1-HR. OR 2-HR. WOOD FLOOR ASSEMBLY
F RATING = 1 HR. OR 2 HR.
T RATING = 1 HR. OR 2 HR.
L RATING AT AMBIENT = 5 CFM/SQ. FT.
L RATING AT 400°F = 7 CFM/SQ. FT.

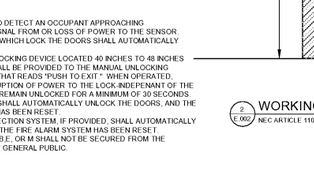


1. WOOD FLOOR ASSEMBLY : DESIGN NO. L530 SERIES IN THE U.L. FIRE RESISTANCE DIRECTORY.
2. LUMBER OR PLYWOOD SUBFLOOR WITH FINISH FLOOR OR LUMBER, PLYWOOD, OR FLOOR TOPPING MIXTURE.
3. MAXIMUM 2" DIAMETER CABLE BUNDLE MAY CONSIST OF ANY OF THE FOLLOWING :
A. RG 59 COAXIAL CABLE.
B. MAXIMUM 3/C NO. 10 AWG CABLE (ROMEX).
C. MAXIMUM 3/C NO. 10 AWG CABLE (ROMEX).
D. MAXIMUM 3/C (+GRND) 2/0 AWG SER CABLE (ALUMINUM OR COPPER).
E. MAXIMUM 3/C NO. 12 AWG CABLE.
4. TOP PLATE.
5. GYPSUM WALL ASSEMBLY (1 HR. OR 2 HR. FIRE RATING)(2 HR. SHOWN).
6. MINIMUM 3/4" DEPTH HILTI FS ONE FIRESTOP SEALANT.
7. PROVIDE A GENEROUS BEAD OF HILTI FS ONE HIGH PERFORMANCE INTUMESCENT FIRESTOP SEALANT AT THE TOP PLATE.

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 2 1/2".
2. ANNULAR SPACE BETWEEN CABLE BUNDLE AND OPENING = MIN. 0", MAX. 1/2".
3. CABLES TO FILL A MAXIMUM OF 45% OF CROSS-SECTIONAL AREA OF OPENING.

SEE HILTI FIRESTOP INSTALLATION MANUAL FOR ADDITIONAL INSTRUCTIONS
HILTI, INC. TULSA, OK 1-800-879-8000

U.L. SYS TEM NO. WL8013
MULTIPLE PENETRATIONS THROUGH 1-HR. OR 2-HR. GYPSUM WALL
F RATING = 1 HR. OR 2 HR.
T RATING = 0HR.
L RATING AT AMBIENT = 5 CFM/SQ. FT.
L RATING AT 400°F = 7 CFM/SQ. FT.

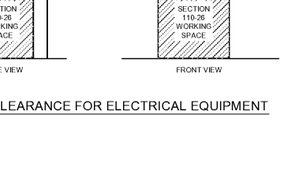


1. GYPSUM WALL ASSEMBLY (1 HR. OR 2 HR. FIRE RATING)(2 HR. SHOWN).
2. STEEL OR ALUMINUM CABLE TRAY (MAXIMUM 24" WIDTH MAX. WITH MAX. 6" DEPTH).
3. ANY OF THE FOLLOWING TYPES OF CABLE MAY BE INSTALLED IN THE MAX. 24" WIDTH MAX. FILL ON CABLE TRAY :
A. 500 KCMIL SINGLE CONDUCTOR POWER CABLE.
B. 70 NO. 12 AWG COPPER CONDUCTOR CABLE.
C. 300 PAIR NO. 24 AWG TELEPHONE CABLE.
4. MAXIMUM 4" DIAMETER PLASTIC PIPE (SCHEDULE 40)(CLOSED OR VENTILATED).
5. FIRESTOPPING SYSTEM TO INCLUDE ANY OF THE FOLLOWING :
A. 25 PAIR NO. 24 AWG TELEPHONE CABLES.
B. RG 59 COAXIAL CABLES.
C. 25 PAIR NO. 24 AWG TELEPHONE CABLES.
D. 70 NO. 12 AWG COPPER CONDUCTOR.
6. HILTI'S CP 606 FIRESTOP SEALANT 3" x 9" x 8" DEEP. REF. FRONT VIEW).

NOTES : 1. NOT SHOWN: PENETRATING ITEMS MAY ALSO INCLUDE A MAX. 4" DIA. STEEL OR COPPER PIPE, EMT, OR STEEL CONDUIT WITH A MAX. 1-1/2" CLASS FIBER INSULATION OR NON-INSULATED MAX. 4" STEEL PIPE, EMT, OR CONDUIT.
2. INSTALL HILTI'S ONE HIGH PERFORMANCE INTUMESCENT FIRESTOP SEALANT IN VOID THAT MAY EXIST (AROUND PENETRATING ITEMS, OR BETWEEN BLOCKS).

SEE HILTI FIRESTOP INSTALLATION MANUAL FOR ADDITIONAL INSTRUCTIONS
HILTI, INC. TULSA, OK 1-800-879-8000

U.L. SYSTEM NO. WL8014
METALLIC PIPE THROUGH 4-HR. CONCRETE/CONCRETE BLOCK WALL
F RATING = 4 HR.
T RATING = 0 HR.

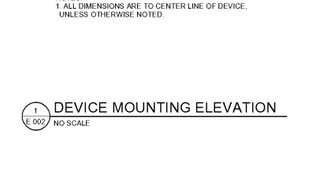


1. CONCRETE WALL ASSEMBLY (4 HR. FIRE RATING) :
A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE WALL.
B. ANY U.L. CLASSIFIED CONCRETE BLOCK WALL ASSEMBLY.
2. PENETRATING ITEM TO BE ANY ONE OF THE FOLLOWING :
A. MAXIMUM 12" DIAMETER STEEL PIPE.
B. MAXIMUM 8" DIAMETER COPPER PIPE.
C. MAXIMUM 8" DIAMETER STEEL CONDUIT.
D. MAXIMUM 4" DIAMETER EMT.
3. MIN. 2" DEPTH HILTI'S ONE HIGH PERFORMANCE INTUMESCENT FIRESTOP SEALANT.

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 13 3/4".
2. ANNULAR SPACE = MINIMUM 3/8", MAXIMUM 1/2".

SEE HILTI FIRESTOP INSTALLATION MANUAL FOR ADDITIONAL INSTRUCTIONS
HILTI, INC. TULSA, OK 1-800-879-8000

U.L. SYSTEM NO. WJ8007
MULTIPLE PENETRATING ITEMS THROUGH CONCRETE FLOOR OR WALL
F RATING = 4 HR.
T RATING = 0 HR.



1. CONCRETE FLOOR OR WALL ASSEMBLY (MINIMUM 4 1/2" THICK).
2. MAXIMUM 32" DIAMETER STEEL PIPE OR MAXIMUM 8" DIAMETER COPPER PIPE.
3. MAXIMUM 9.82" THICK GLASS FIBER PIPE INSULATION.
4. 4 1/2" DIAMETER STEEL CONDUIT (MAXIMUM QUANTITY = 15).
5. STEEL OR ALUMINUM CABLE TRAY (MAXIMUM SIZE - 36"x 5" WITH ANY OF THE FOLLOWING TYPES OF CABLE MAY BE USED WITH MAXIMUM 50% FILL OF CABLE TRAY :
A. MAXIMUM 500 KCMIL SINGLE CONDUCTOR POWER CABLE.
B. MAXIMUM 70 NO. 12 AWG COPPER CONDUCTOR CABLE.
C. MAXIMUM 300 PAIR NO. 24 AWG TELEPHONE CABLES.
6. MAXIMUM 32" DIAMETER STEEL PIPE (32" DIAMETER PIPE SHOWN).
7. 8" DIAMETER STEEL PIPE.
8. MAXIMUM 4" DIAMETER CABLE BUNDLE TO INCLUDE ANY OF THE FOLLOWING :
A. FIBER OPTIC CABLE (MAX. 60" DIA). D. 2/C NO. 10 AWG CABLES.
B. ROMEX (2/C NO. 10 +GROUND). E. RG 62A COAXIAL CABLES.
C. 25 PAIR NO. 24 AWG TELEPHONE CABLES. F. METAL CLAD CABLE (MAX. 3/4" DIA.).
G. 25 PAIR NO. 24 AWG TELEPHONE CABLES. F. METAL CLAD CABLE (MAX. 3/4" DIA.).
9. HILTI'S 657 INTUMESCENT FIRESTOP BLOCK (2" TALL x 5" WIDE x 8" DEEP, REF. FRONT VIEW).
10. SEE NOTE NO. 4 BELOW.

NOTES : 1. ANNULAR SPACING FOR CABLE TRAY = MINIMUM 1 1/2".
2. ANNULAR SPACING FOR PIPE AND CABLE PENETRATIONS = MINIMUM 1".
3. INSTALL HILTI'S ONE HIGH PERFORMANCE INTUMESCENT FIRESTOP SEALANT IN ANY VOID THAT MAY EXIST (AROUND CABLE TRAY, CABLES, OR PIPE PENETRATIONS).
4. IF THE ANNULAR SPACE IS GREATER THAN 1", PROVIDE A STEEL WIRE MESH (NOMINAL 2" SQUARES, NO. 18 SWG) INSTALLED ON EACH SIDE OF WALL ASSEMBLY.
5. MAXIMUM BLOCK OPENING = 288 SQUARE INCHES.

SEE HILTI FIRESTOP INSTALLATION MANUAL FOR ADDITIONAL INSTRUCTIONS
HILTI, INC. TULSA, OK 1-800-879-8000

Order Plans @ WWW.DILing.com

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HOME 2 SUITES BY HILTON

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HAWLEY AVE
BELMONT, NC 28012

KEY PLAN

Revisions

#	Date	Description

Project Number: 18021
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Issue Date: 2019-05-31

DRAWING TITLE
ELECTRICAL DETAILS

SHEET NUMBER
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