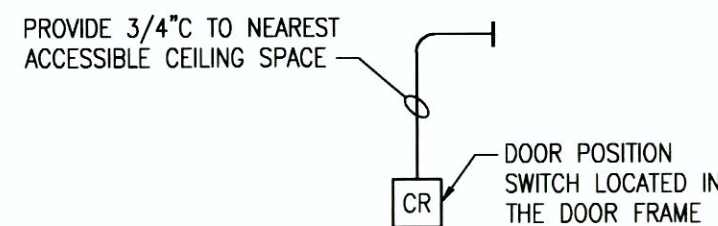
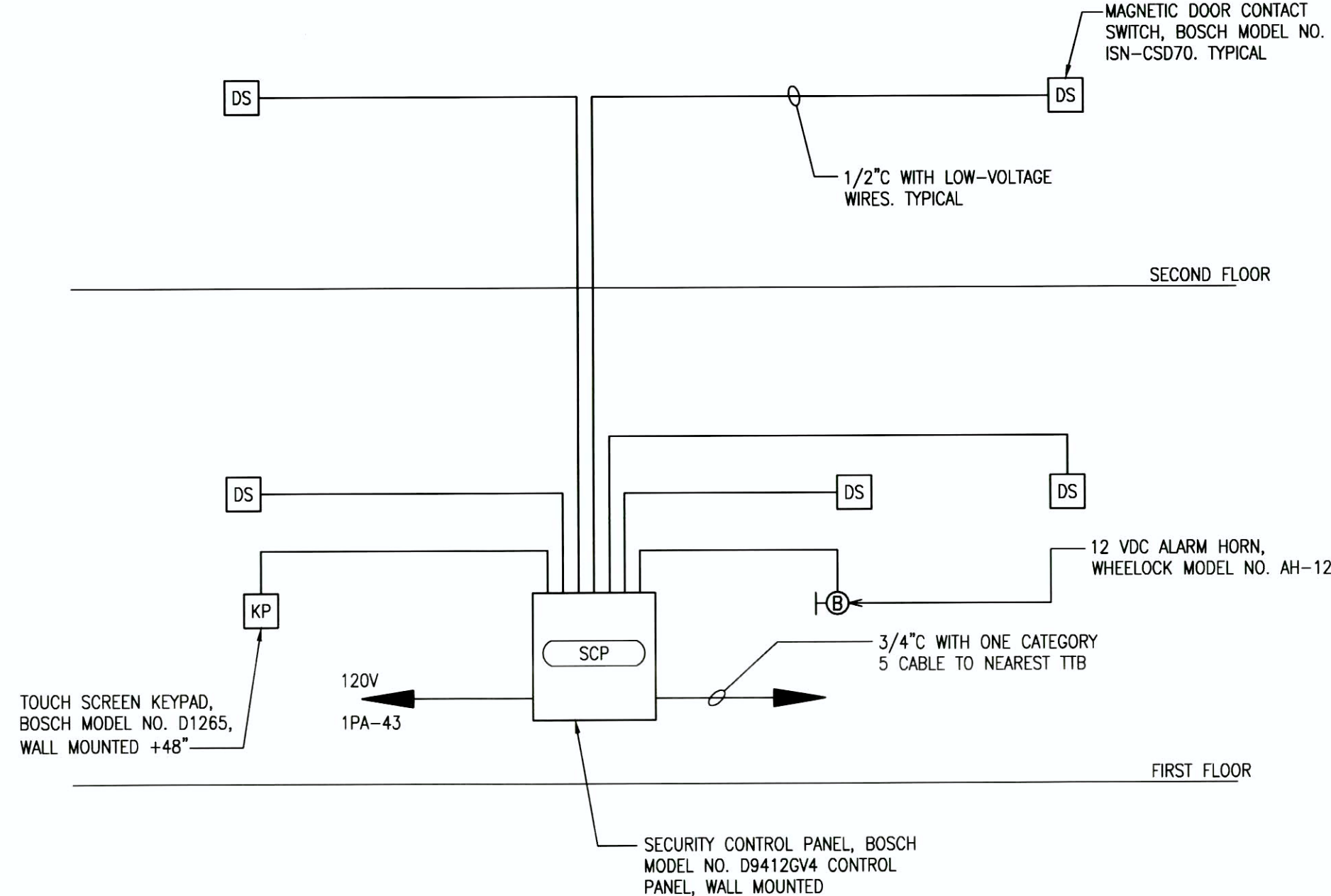


CARD READER AND ELECTRIC STRIKE DIAGRAM



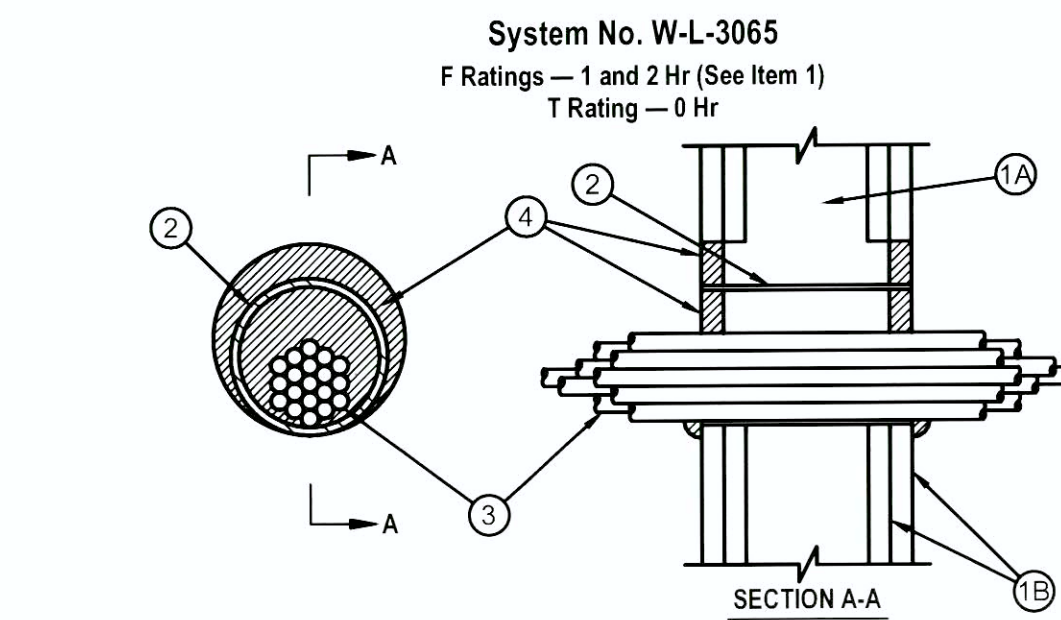
DOOR POSITION SWITCH



DOOR ALARM RISER DIAGRAM

SHEET NOTES - DETAIL 2

- 3/4" WITH ONE CATEGORY 6A CABLE (4-PAIR, 24-GA COPPER CABLE) FOR TELEPHONE, TERMINATE ONE 4-PAIR CABLE PER BEDROOM.
- 3/4" WITH TWO CATEGORY 6A CABLES FOR TELEPHONE, TERMINATE ONE 4-PAIR CABLE PER BEDROOM.
- 1" WITH THREE CATEGORY 6A CABLES FOR TELEPHONE, TERMINATE ONE 4-PAIR CABLE PER BEDROOM.
- TELEPHONE WIRING FOR BEDROOMS, UP TO 3 BEDROOMS PER HOMERUN.
- 8"x4"x3/4" THICK UL-LISTED BACKBOARD, PAINTED WHITE. TERMINATE ALL TELEPHONE AND DATA CABLES TO GROUND FLOOR CLOSET.
- 3/4" WITH THREE CATEGORY 6A CABLES; ONE CABLE FOR TELEPHONE AND TWO CABLES FOR DATA. PROVIDE A HOMERUN PER TELE-DATA OUTLET.
- PROVIDE TELEPHONE JACK. TYPICAL.
- PROVIDE 3 JACKS; ONE FOR TELEPHONE, TWO FOR DATA.
- ONE 100-PAIR CABLES FOR TELEPHONE WIRING AND ONE 12-STRAND MULTIMODE FIBER OPTICS CABLE FOR DATA. COORDINATE TIE-IN OF SERVICES WITH VAMC. ONE CONDUIT IS SPARE, ONE IS ACTIVE.
- PROVIDE A 24-PORT DATA PATCH PANEL WITH FIBER OPTIC CABLE FEED. PROVIDE A FIBER OPTIC TERMINATION PANEL. PROVIDE 110-PUNCH DOWN BLOCKS FOR TELEPHONE WIRING WITH 50% SPARE TERMINALS.
- TWO 3" CONDUIT SLEEVES; ONE ACTIVE, ONE SPARE. SEAL ANNULAR SPACE AND OPENINGS UPON INSTALLATION OF CABLES.



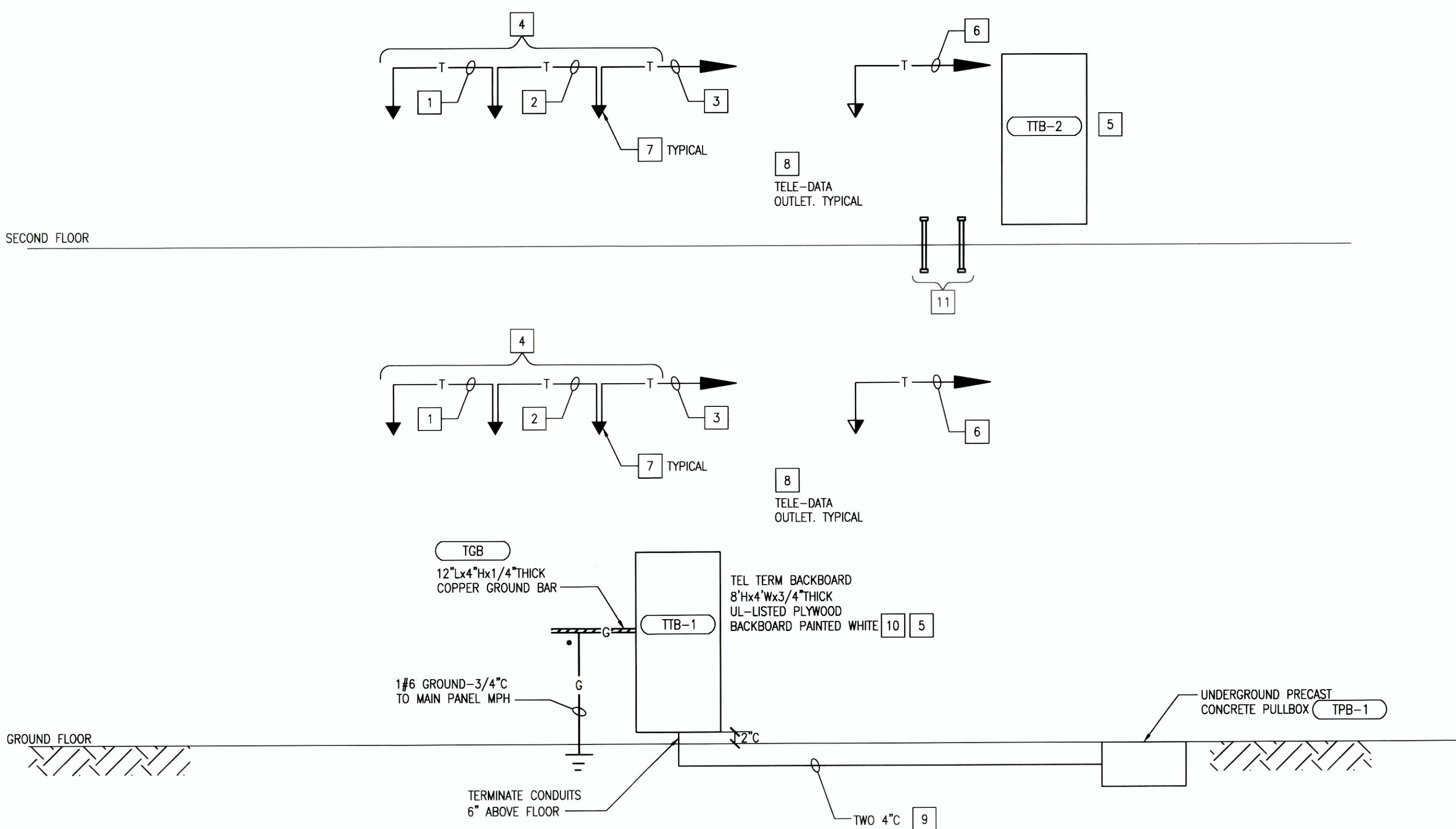
- Wall Assembly - The 1 or 2 fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner specified in the individual US00, U400 or V400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
A. Studs - Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nominal 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 2-1/2 in. (64 mm) wide and spaced max 24 in. (610 mm) OC.
B. Gypsum Board - Nom 5/8 in. (16 mm) thick gypsum board, with square or tapered edges. The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual US00, U400 or V400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 5-1/2 in. (138 mm) when sleeve (Item 2) is employed. Max diam of opening is 4 in. (102 mm) when sleeve (Item 2) is not employed.
The F Rating of the firestop system is equal to the fire rating of the wall assembly.
- Metallic Sleeve - (Optional) - Nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing (EMT) or Schedule 5 (or heavier) steel pipe or min 0.016 in. thick (0.41 mm, No. 28 g) galv steel sleeve installed flush with wall surfaces. The annular space between steel sleeve and periphery of opening shall be min 0 in. (0 mm, point contact) to max 1 in. (25mm). When Schedule 5 steel pipe or EMT is used, sleeve may extend up to 18 in. (457 mm) beyond the wall surfaces. Cables - Aggregate cross-sectional area of cable in opening is to be max 45 percent of the cross-sectional area of the opening. The annular space between the cable bundle and the periphery of the opening to be min 0 in. (0 mm, point contact) to max 1 in. (25 mm). Cables to be rigidly supported on both sides of the wall assembly. Any combination of the following types and sizes of copper conductor cables may be used:
A. Max 7/8 in. (22 mm) dia with polyethylene (PE) insulation and jacket.
B. Max 25 pair No. 24 AWG telephone cable with PVC insulation and jacket.
C. Type RG/U coaxial cable with polyethylene (PE) insulation and PVC jacket having a max outside diameter of 3/8 in. (9.5 mm).
D. Multiple fiber optical communication cable jacketed with PVC and having a max OD of 5/8 in. (16 mm).
E. Through Penetrating Product - Max three copper conductor No. 8 AWG - Metal-Clad Cable.
F. Max 3/4 in. (19 mm) dia copper conductor cable with PVC insulation and jacketing.
G. Max 3/4 in. (19 mm) dia copper ground cable with or without a PVC jacket.
H. Fire Resistant Cable - Max 1-1/4 in. (32 mm) diam single conductor or multi conductor Type M cable. A min 1/8 in. (3 mm) separation shall be maintained between M cables and any other types of cable.
I. Max 4/8 in. (12 mm) dia aluminum SER cable with PVC insulation and jacket.
J. Through Penetrating Product - Any cables, Metal-Clad Cable or Armored Cable currently Classified under the Through Penetrating Products category.
See Through Penetrating Product (TPP) category in the Fire Resistance Directory for names of manufacturers.
4. Fill, Void or Empty Material - Sealant or Putty - Fill material applied within the annulus, flush with each end of the steel sleeve or wall surface. Fill material installed symmetrically on both sides of the wall. A min 5/8 in. (16 mm) thickness of sealant is required for the 1 or 2 hr F Rating. An additional 1/2 in. (13 mm) diam head of fill material shall be applied around the perimeter of sleeve on both sides of the wall when sleeve extends beyond surface of wall.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC. - CP6015, CP606, FS-One Sealants or CP616 Putty
Bearing the UL Classification Mark
Bearing the UL Listing Mark



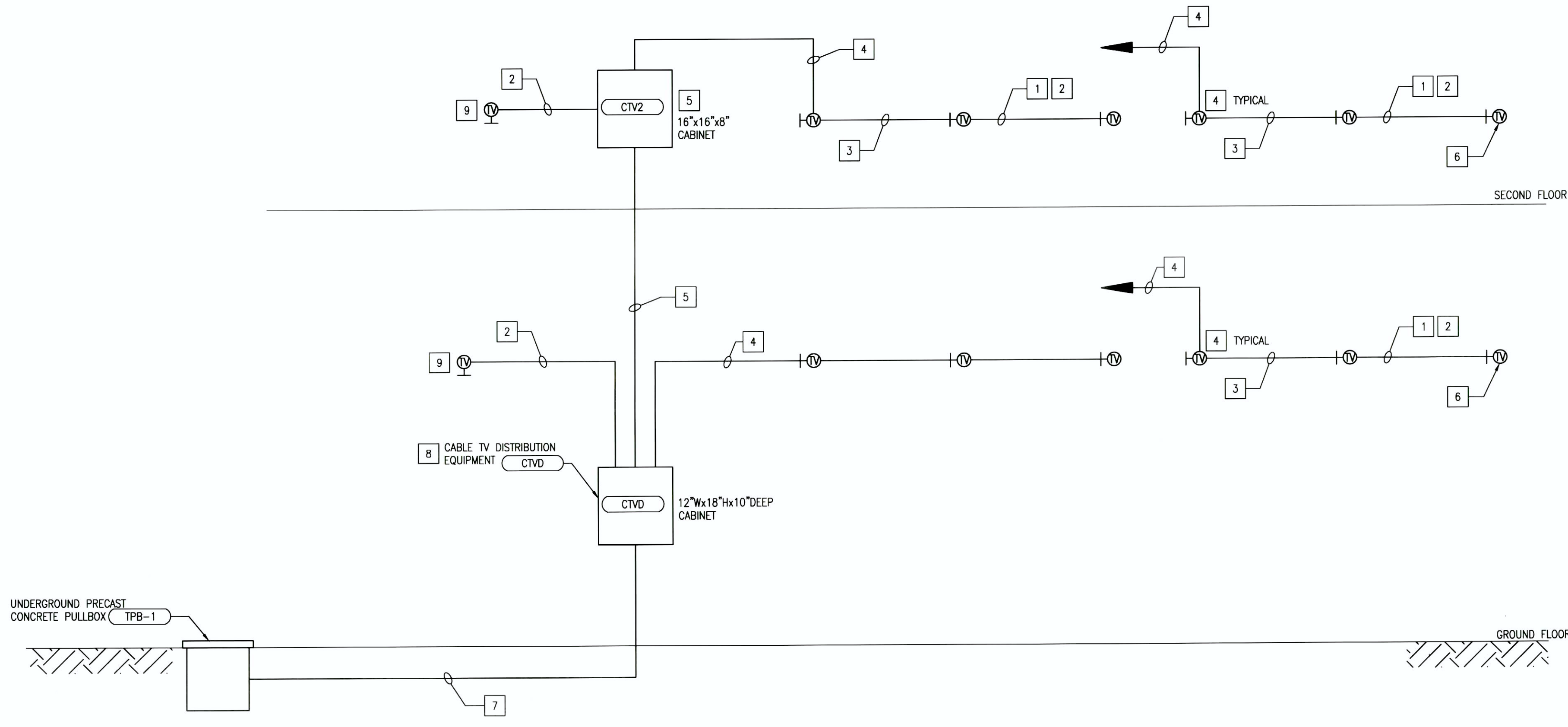
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December 23, 2008.



CABLES THROUGH RATED PARTITION



BUILDING 22 - TELEPHONE-DATA RISER DIAGRAM



BUILDING 22 - CABLE TV RISER DIAGRAM

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MECHANICAL: HTC ENGINEERS; 1529 CYPRESS ST., SUITE 103; WALNUT CREEK, CA 94596
ELECTRICAL: BAY AREA CONSULTING ENGINEERS; 311 CALIFORNIA STREET, SUITE 720; SAN FRANCISCO, CA 94104
CIVIL ENGINEER: GHD CIVIL ENGINEERS; 2235 MERCURY WAY, SUITE 150; SANTA ROSA, CA 95407
ESTIMATING: CUMMING CORPORATION; 1970 BROADWAY, SUITE 630; OAKLAND, CA 94612
SURVEYORS: MARTIN M. RON ASSOCIATES, INC.; 859 HARRISON ST., SUITE 200; SAN FRANCISCO, CA 94107
UTILITY LOCATORS: CRUZ BROTHERS LOCATORS; P.O. BOX 66768; SCOTTS VALLEY, CA 95067

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N TRUE

Drawing Title
ELECTRICAL - CABLE TV AND TELE-DATA RISER DIAGRAMS

Scale
NONE

Approved: Project Director

Project Title
VA Medical Center Seismic Replacement And Retrofit

Location
San Francisco, CA

Date
10 / 22 / 2012

Checked
AEM

Drawn
BAC

Project Number
2941-001-00

Building Number
22

Drawing Number
E502

Office of Facilities Management

