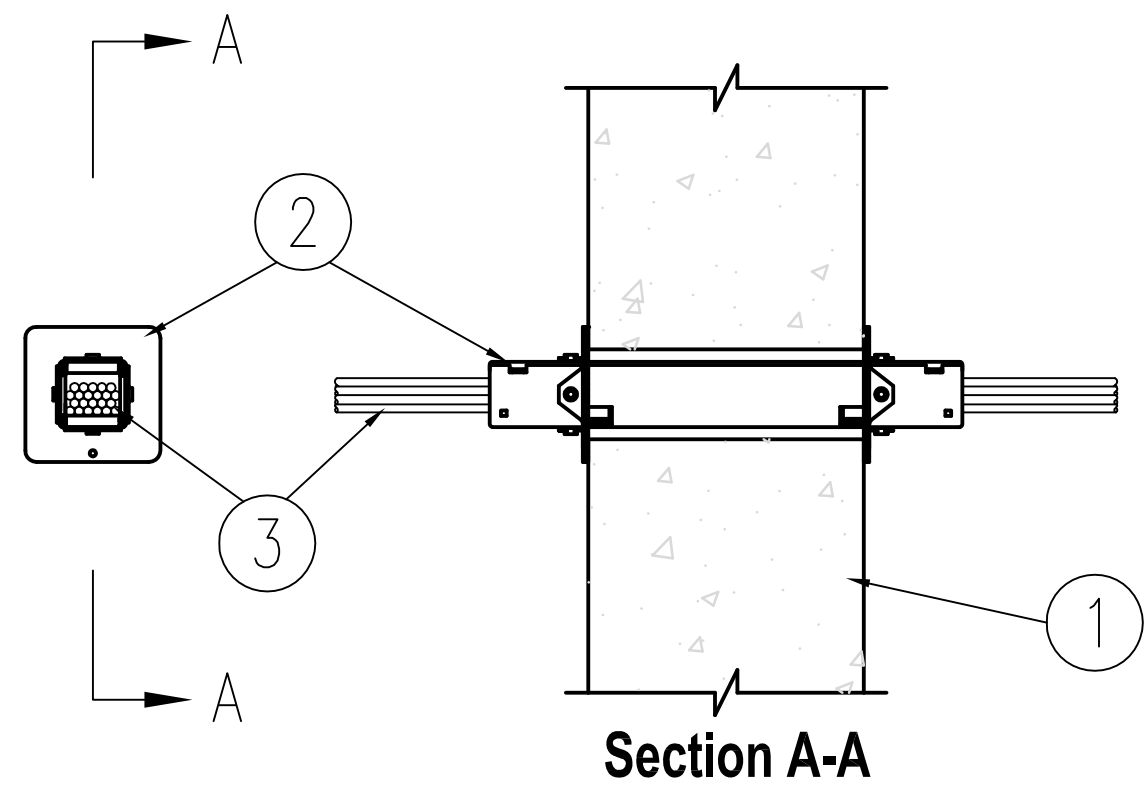
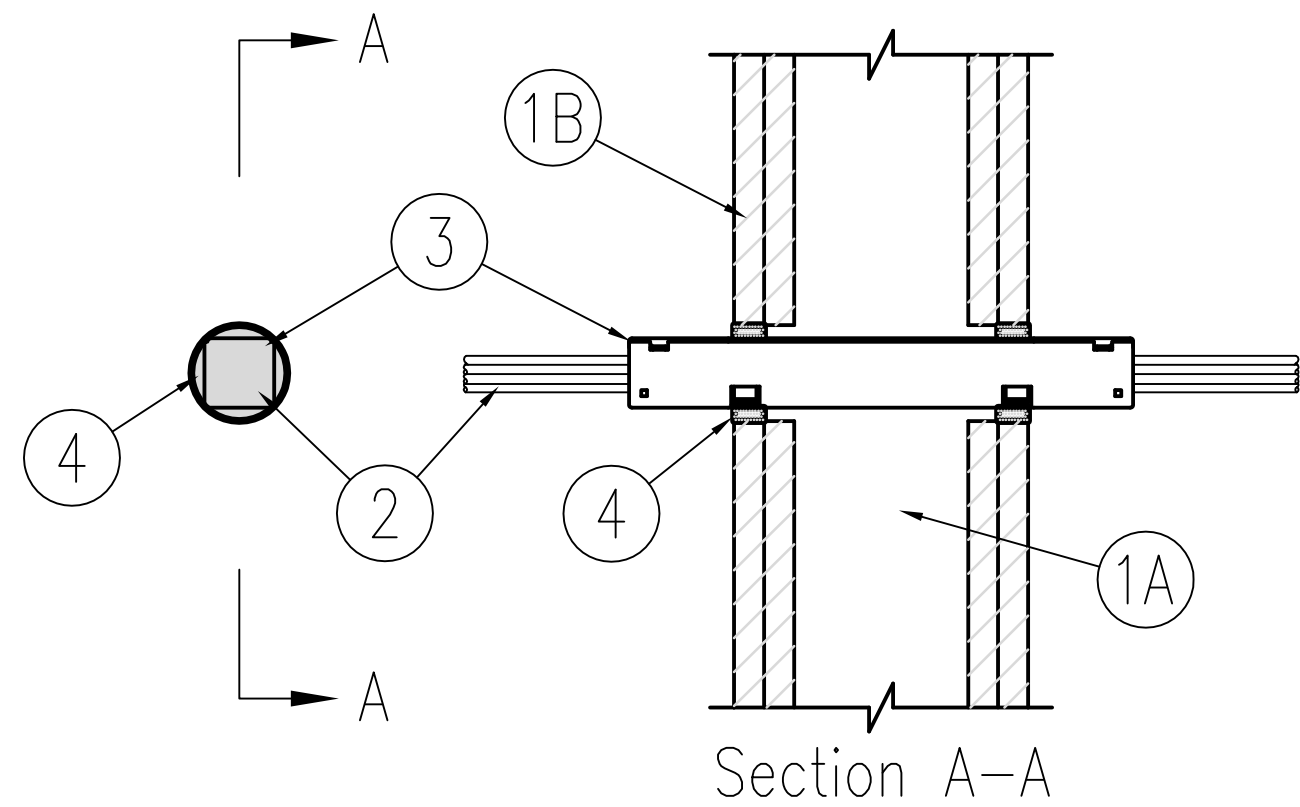


three inches = one foot
one and one half inches = one foot
one inch = one foot
three quarters inch = one foot
three eighths inch = one foot
one half inch = one foot
one quarter inch = one foot
one eighth inch = one foot
one sixteenth inch = one foot



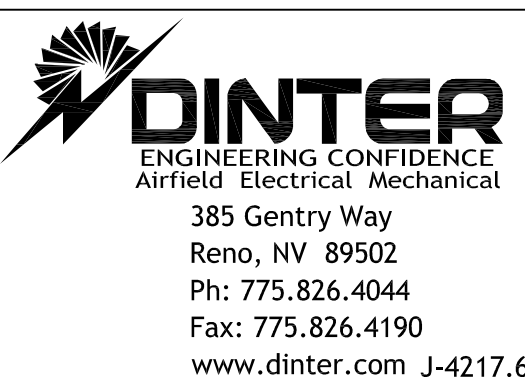
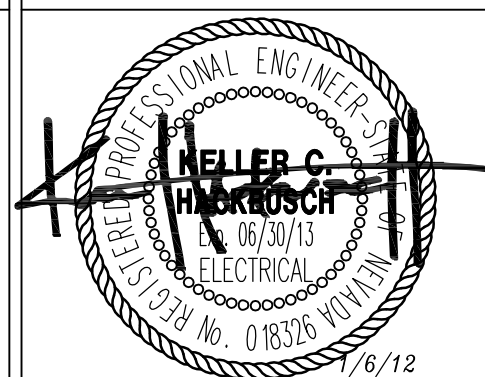
1. **Wall Assembly** – Minimum 6 inch thick reinforced lightweight or normal weight (100–150 pcf or 1600–2400 kg/m³) concrete wall. Wall may also be constructed of any UL Classified **Concrete blocks**, opening to be maximum 2 inch diameter or maximum ¼ inch larger width and height dimensions of firestop device.
- Firestop Device** – Firestop device module to be installed in accordance with the accompanying installation instructions. The space between the firestop device module and the periphery of the opening shall be minimum 0 inch to maximum ⅛ inch. Firestop device module(s) secured in place by means of steel wall plates installed with gasketing material supplied with product. Steel wall plates installed on both sides of wall and secured to each device by means of steel set screws provided with device. The firestop device module is to be installed with ends projecting an equal distance beyond each surface of the wall assembly.
- A. **SPECIFIED TECHNOLOGIES INC - EZ PATH Mini** – one firestop device module consisting of a 1.4 by 1.4 by 10–1/2 inch long galvanized steel tube with an intumescent material lining.
- B. one **SPECIFIED TECHNOLOGIES INC - EZ PATH** – one firestop device module consisting of a 3 by 3 by 10–1/2 inch long galvanized steel tube with an intumescent material lining.
- Cables** – Within the loading area for each firestop device module, the cables may represent a 0 to 100 percent visual fill. Cable fill to be distributed at a uniform height across the width of the firestop device module. Cables to be rigidly supported on both sides of the wall assembly. Any combination of the following types of cables may be used:
3. A. For the EZ PATH mini – Any combination of the following types of cables may be used:
1. Maximum four No.22 AWG (or smaller) copper conductor data cable with polyvinyl chloride (PVC) or plenum rated jacketing and insulation.
 2. Max RG/U coaxial cable with fluorinated ethylene insulation and jacketing.
 3. Fiber optic cable with polyvinyl chloride (PVC) or polyethylene (PE) jacket and insulation having a maximum diameter of 1/4 in.
- The T Rating is 1-1/4 hour when cables are installed. Otherwise, the T Rating is 1-3/4 hr.**
- B. For the EZ PATH – Any combination of the following types of cables may be used:
1. Maximum 100 pair No. 24 AWG (or smaller) copper conductor data cable with polyvinyl chloride (PVC) or plenum rated jacketing and insulation.
 2. Maximum four pair No. 22 AWG (or smaller) copper conductor data cable with polyvinyl chloride (PVC) or plenum rated jacketing and insulation.
 3. Max RG/U coaxial cable with fluorinated ethylene insulation and jacketing.
 4. Fiber optic cable with polyvinyl chloride (PVC) or polyethylene (PE) jacket and insulation having a maximum diameter of 5/8 in.
 5. **Optical Fiber Raceway±** – Maximum 1–1/2 inch diameter (or smaller) optical fiber raceway ("innerduct") formed of either polyvinyl chloride (PVC) or polyvinylidene fluoride (PVDF) with optical fiber cable fill. Raceways installed in accordance with article 770 of the NEC (NFPA 70)
- The T rating is 3/4 hr when Item 2B1 is used. Otherwise the T rating is 1 Hr. When no cables are installed T rating is 1-1/2 hr**

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E14
CONCRETE FIRE WALL CABLE THRU
NO SCALE



1. **Wall Assembly** – The 1 or 2 hr fire-rated gypsum board/ stud wall assembly shall be constructed of the materials and in the manner described within the individual U300 or U400 Series Wall or Partition Designs in the UL Fire Resistance Directory and shall incorporate the following construction features:
- A. **Studs** – Wall framing shall consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 inch lumber spaced maximum 16 inch OC. Steel studs to be minimum 3–1/2 inch wide and spaced maximum 24 inch OC.
- B. **Gypsum Board** – Thickness, type, number of layers and fasteners as specified in the individual Wall and Partition Design. Opening in gypsum board to accommodate firestop device to be depending on size of firestop as follows:
- EZ PATH Mini – maximum 3 inch wide by 2–1/2 inch high or nom 2 inch diameter.
- EZ PATH – Maximum 4 inch by 3–1/2 inch or nom 4 inch diameter.
- The hourly F rating of the firestop system is dependent upon the hourly rating of the wall in which it is installed.**
- Cables** – Within the loading area for each firestop device module, the cables may represent a 0 to 100 percent visual fill. Cable fill to be distributed at a uniform height across the width of the firestop device module. Cables to be rigidly supported on both sides of the wall assembly. Cables amounts depend on the size of the firestop device.
2. A. For the EZ PATH mini – Any combination of the following types of cables may be used:
1. Maximum four No.22 AWG (or smaller) copper conductor data cable with polyvinyl chloride (PVC) or plenum rated jacketing and insulation.
 2. Max RG/U coaxial cable with fluorinated ethylene insulation and jacketing.
 3. Fiber optic cable with polyvinyl chloride (PVC) or polyethylene (PE) jacket and insulation having a maximum diameter of 1/4 inch.
- The T Rating is 1 hr and 1-3/4 hr in 1 and 2 hr rated walls, respectively, when no cables are installed in firestop device. The T Rating is 1 hr and 1-1/4 hr in 1 and 2 hr walls, respectively, when cables are installed in firestop devices.**
- B. For the EZ PATH – Any combination of the following types of cables may be used:
1. Maximum 100 pair No. 24 AWG (or smaller) copper conductor data cable with polyvinyl chloride (PVC) or plenum rated jacketing and insulation.
 2. Maximum four pair No. 22 AWG (or smaller) copper conductor data cable with polyvinyl chloride (PVC) or plenum rated jacketing and insulation.
 3. Max RG/U coaxial cable with fluorinated ethylene insulation and jacketing.
 4. Fiber optic cable with polyvinyl chloride (PVC) or polyethylene (PE) jacket and insulation having a maximum diameter of 5/8 in.
 5. **Optical Fiber Raceway±** – Maximum 1–1/2 inch diameter (or smaller) optical fiber raceway ("innerduct") formed of either polyvinyl chloride (PVC) or polyvinylidene fluoride (PVDF) with optical fiber cable fill. Raceways installed in accordance with article 770 of the NEC (NFPA 70)
- The T Rating is 3/4 hr in 1 hr rated walls. The T Rating is 3/4 hr in 2 hr walls. The T rating is 3/4 hr in 2 hr walls, when Item 2B1 is used. Otherwise the T rating is 1 Hr.**
- Firestop Device** – Firestop device module to be installed in accordance with the accompanying installation instructions. The space between the firestop device and module(s) and the periphery of the opening shall be minimum 0 inch to maximum 1/2 inch. Firestop device module(s) secured in place by means of circular steel wall plates installed with gasketing materials supplied with product. Circular steel wall plates installed on both sides of wall and secured to each device by means of steel set screws provided with device. Fire stop device module is to be installed with ends projecting equal distance beyond each surface of the wall assembly.
- A. **SPECIFIED TECHNOLOGIES INC - EZ PATH Mini** – one firestop device module consisting of a 1.4 by 1.4 by 10–1/2 inch long galvanized steel tube with an intumescent material lining.
3. B. **SPECIFIED TECHNOLOGIES INC - EZ PATH** – one firestop device module consisting of a 3 by 3 by 10–1/2 inch long galvanized steel tube with an intumescent material lining.
- Fill, Void or Cavity Material - Sealant** – minimum ⅝ inch thickness of sealant to be applied in annular space between firestop device and periphery of opening on each side of wall assembly. Nom ⅝ inch diameter bead fill material applied at the point of contact location between the firestop device and gypsum board wall on both sides of the wall assembly.
- SPECIFIED TECHNOLOGIES INC** – SpecSeal 100, 101, 102, 105, 120 or 129 Sealant, SpecSeal LCI Sealant, SpecSeal LC150 Sealant or Pensil 300 Silicone Sealant

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E14
GYP-BOARD FIRE WALL CABLE THRU
NO SCALE

Revisions:		Date:		CONSULTANTS:		ARCHITECT/ENGINEERS:		Drawing Title		Project Title		Project Number		Office of Construction and Facilities Management Department of Veterans Affairs	
				 ENGINEERING CONFIDENCE Airfield Electrical Mechanical 385 Gentry Way Reno, NV 89502 Ph: 775.826.4044 Fax: 775.826.4190 www.dinter.com J-4217.6		 HELLER C. HANTSCH PROFESSIONAL ENGINEER ELECTRICAL No. 09326 VAIL 1/6/12		ELECTRICAL DETAIL FIREWALL PENETRATION		VA SIERRA NEVADA HEALTH CARE SYSTEM - CANTEEN RELOCATION DESIGN - , RENO, NEVADA		654-11-227			
												Building Number XXXX			
								Approved Project Director		Location 975 KIRMAN AVE, RENO, NEVADA 89502		Drawing Number E 10.4			
										Date 06 JAN, 2012		Checked ERG		Drawn RLB	
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