

**ADDENDUM NO. 17**

**April 12, 2021**

**REQUEST FOR PROPOSALS  
(BID DOCUMENTS)**

**FOR**

**STUDENT HEALTH AND COUNSELING CENTER  
PROJECT NO. 950578**



The following changes, additions, or deletions shall be made to the following documents as indicated for this Project; and all other terms and conditions shall remain the same. Each Proposer (Design Builder) is responsible for transmitting this information to all affected subcontractors and suppliers before the Proposal Deadline.

**1. CAMPUS STANDARDS**

Add "Division 7 – Thermal Protection" to the Campus Standards in this addendum.

**2. REQUEST FOR INFORMATION**

RFI No.	QUESTIONS AND ANSWERS
173	<p><b>Question:</b> Per Room Data Diagrams and Checklists in the Basis of Design, the MDF / IDF Rooms are required to have Acoustic Tile ceilings. Based on similar projects in the market, please confirm it is acceptable for the space to be open to the structure / exposed ceilings. Please also confirm the following spaces are not required to have ACT ceilings: Mechanical, Fire Pump, Emergency and Normal Power Electric Rooms.</p> <p><b>Answer:</b> Open to structure is acceptable.</p>
174	<p><b>Question:</b> Medical Supply Room: The industry standard is to use solid surface countertops and laminate casework for medical supply rooms in outpatient clinics. Please confirm these finishes are acceptable.</p> <p><b>Answer:</b> Per the Performance Specifications, solid surface countertops are acceptable. Please refer to Section 12 of the Performance Specifications for more information on casework.</p>
175	<p><b>Question:</b> The Room Data Checklists indicate that toilet rooms are to receive floor to ceiling tiled walls. Please confirm if tile could be reduced to wainscott height on wet walls (and those directly perpendicular to plumbing fixtures) and omitted entirely from non-wet toilet room walls (public, patient, and/or staff).</p> <p><b>Answer:</b> A minimum 48" tiled wainscott on all restroom walls is acceptable.</p>
176	<p><b>Question:</b> Per the Campus Standards, epoxy grout is required for tile in wet areas. Please confirm this applies to shower rooms but not to toilet rooms in general.</p> <p><b>Answer:</b> Confirmed.</p>
177	<p><b>Question:</b> Please confirm that under-cabinet strip lighting is not required. Please also confirm that supplemental task lighting is not required at hand washing sinks.</p> <p><b>Answer:</b> Strip lighting and supplemental task lighting at hand washing sinks are not required.</p>
178	<p><b>Question:</b> Please confirm that carpet tiles are acceptable to help delineate Lobby waiting spaces from circulation and to aid in acoustical mitigation of the space.</p> <p><b>Answer:</b> Carpet tiles for uses as described in this question are acceptable to the University as long as the submittal meets all other University specifications.</p>

RFI No.	QUESTIONS AND ANSWERS
<b>179</b>	<p><b>Question:</b> The room data sheets consistently request a seamless vinyl floor in many of the patient clinic spaces. However, in our experience, linoleum flooring is a comparable product in performance and maintenance, and has the added benefit of being PVC-free/inherently more sustainable. Please confirm that a linoleum sheet good, such as Marmoleum, is acceptable in the rooms that are currently marked in the room data sheets as receiving a seamless vinyl floor.</p> <p><b>Answer:</b> Linoleum sheet goods such Marmoleum or its equivalent will be an acceptable replacement for the specified seamless vinyl flooring, as long as the submittal meets the University's expectations for performance, as outlined in the BOD and specifications.</p>
<b>180</b>	<p><b>Question:</b> The room data sheets for the Psychiatrists' offices indicate a seamless vinyl floor. Based on experiences with similar projects, please confirm it is acceptable to use carpeting in these offices.</p> <p><b>Answer:</b> Carpet tile is an acceptable flooring material in the psychiatrist offices. Please refer to the revised room data sheet attached to this addendum.</p>
<b>181</b>	<p><b>Question:</b> There (sp) are a few existing Jacaranda mimosifolia trees on the lawn south of the project site. The landscape concept desires to integrate the campus and incorporate 7 to 8 Jacaranda trees around the proposed courtyard. This species is not currently on the approved campus tree list. Please confirm it is acceptable to incorporate the Jacaranda species on this project.</p> <p><b>Answer:</b> Yes, it is acceptable to use Jacaranda trees on this project.</p>
<b>182</b>	<p><b>Question:</b> Due to sample procurement delays resulting from the COVID-19 pandemic, please confirm it is acceptable to deliver the physical exterior and interior finish samples at the time of the team's oral presentation on May 3rd in lieu of April 20th as part of the Technical Proposal.</p> <p><b>Answer:</b> It is not acceptable to the University, nor in the best interest of the Proposer. The interior finish samples should be as complete as possible for the Technical Proposal Submittal. The scoring of the Tabs occurs prior to the oral presentation. If material is missing or fails to meet the criteria noted in the RFP, it will negatively impact the scoring for the proposal.</p>
<b>183</b>	<p><b>Question:</b> Please confirm the Co-Location Requirements (01 4900) that prescribe specific requirements for trailer space and custom layouts can be adjusted to a typical, more common trailer facility common to this size of project and the proposed staffing plan.</p> <p><b>Answer:</b> In your proposal, you must provide a co-location solution that meets the needs of the University per the contract documents. Layouts that vary from that prescribed layout will be scored according to their alignment with that criteria.</p>

RFI No.	QUESTIONS AND ANSWERS
184	<p><b>Question:</b> Per the BOD and a previous Question and Answer response in Addendum XX, the University has stated a preference for a HVAC system utilizing VAV boxes. Would the University consider allowing teams to propose an HVAC system that utilizes VRF in the return system instead of the VAV boxes?</p> <p><b>Answer:</b> The University will accept as responsive, proposals which propose an VRF system for return air with the condition that the proposal response for the system includes a detailed analysis of any savings in cost which includes initial and longer -term operating cost, utility cost savings, energy cost savings, and lifetime cost factors and comparisons to the VAV system requested per the BOD.</p> <p>Secondly, the University would want to see an analysis of the difference in the annual maintenance costs resulting from moving from a VAV system to a VRF system.</p> <p>Third, the University expects that the proposer will also provide a detailed analysis of the energy savings that the proposer would expect the University to benefit from in moving from the VAV system to the VRF system. This should include expectations of improvements in EUI performance and any other related long-term energy savings resulting from this change.</p> <p>The University expects that the proposer would also clearly define and identify any other benefits or challenges in moving from the VAV system to an VRF based system, including but not limited to, any warranty or system guarantee benefits.</p> <p>The University would also expect to work with the proposer if this approach is part of their proposal during the Design Development stages to ensure that the system can be maintained as efficiently as possible and with a minimum of disruption to the operations of the Student Health &amp; Counseling Center.</p> <p>The University also expects that any proposed system would be compliant with all applicable codes and meet Campus Standards.</p>
185	<p><b>Question:</b> Is there a possibility the last day for RFI's can be extended?</p> <p><b>Answer:</b> Yes. The last day to submit RFI's is April 23, 2021.</p>
186	<p><b>Question:</b> Please confirm that polished concrete is an acceptable flooring surface in toilet rooms that are directly adjacent to a polished concrete floor.</p> <p><b>Answer:</b> Polished concrete is acceptable in conditions as described above.</p>
187	<p><b>Question:</b> Please confirm that a resilient sheet/linoleum floor with integral 6" cove is an acceptable flooring for toilet rooms that are directly adjacent to a resilient floor.</p> <p><b>Answer:</b> Linoleum sheet goods are an acceptable replacement for the specified seamless vinyl flooring, as long as the submittal meets the University's expectations for performance, as outlined in the BOD and specifications.</p>
188	<p><b>Question:</b> In coordination with UCR, the requirements for the co-location trailer that prescribe specific parameters for trailer space such as custom layouts and sizes of windows can be adjusted to a typical, more common, trailer facility appropriate for this size of project. Therefore, please confirm many of the extra requirements that are custom or not typical will not be required as an effort to help with putting value in the building vs. the temp trailer space.</p> <p><b>Answer:</b> It is acceptable to share space with the contractor, provided that there are two dedicated UCR workstations and access to the conference room.</p>

RFI No.	QUESTIONS AND ANSWERS
189	<p><b>Question:</b> Per Addendum 13, page 10 of 13 for RFP, it notes the job shall be done on or before 4/18/2023. However, if we are to follow the phase durations and have a start of 6/7/21, adding 697 calendar days, the finish date would be 5/5/23. Please confirm we to follow the NTP plus the phase durations outlined in the document referenced.</p> <p><b>Answer:</b> Each phase shall be completed within the calendar days identified in each respective phase as identified in the Request for Proposals; start and completion days shall be contingent upon date of authorization for each Notice to Proceed.</p>
190	<p><b>Question:</b> Per Section 4 of the Room Data Diagrams the Shared IT Office, Standard Offices, Counseling Offices, Counseling Offices-Assistant Director, Counseling Offices- Director, Counseling Office-Consultation, Group Room and Biofeedback Room are all to have panic buttons. In the clinic there are panic buttons for the nurse call system which signals to the nurse station that assistance is needed. However, the rooms noted above are not connected to the clinic nurse call system. Please clarify the intent for these buttons? Are they to notify the nurse station on the first floor?</p> <p><b>Answer:</b> Panic buttons are connected directly to UCPD. They are specific to a room and in the event they are depressed, UCPD immediately comes to the center and go directly to that room.</p>
191	<p><b>Question:</b> In Section 12.5, it states the generator to have a diesel particulate filter, which is required per SCAQMD due to proximity to dorms. Specification 263213 indicates an active particulate filter in lieu of standard diesel particulate filter. If we provide a load bank along with a diesel particulate filter which would keep the passive filter clean, can we remove the requirement for active particulate filter?</p> <p><b>Answer:</b> Please provide the minimum required by SCAQMD and all applicable State and local codes.</p>
192	<p><b>Question:</b> In Section 12.5, it states the generator to have a sound attenuated N3R enclosure. Specification 263213 indicates to provide super critical "Hospital" grade silencer. Since this not a hospital would it be acceptable to provide the industry standard Level 3 enclosure which the overall sound level would be 75DBA level at 23'? The existing generators on the campus have the Level 3 enclosure and not the super critical "Hospital" grade silencer.</p> <p><b>Answer:</b> An industry-standard Level 3 enclosure with an overall sound level of 75DBA at 23' is acceptable.</p>

**END OF ADDENDUM**

DIVISION 07 – THERMAL AND MOISTURE PROTECTION

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## 1.1 GENERAL

### A. Design Criteria

1. When designing roof access ladders and stairways to roof shall not be alternating tread type. Provide 18 gauge flashing at roof locations accessible to students or building occupants to prevent damage and vandalism.
2. All rooftop mounted equipment shall be mounted on platforms.
3. All platforms (curbs) shall be a minimum of 8 inches in height from the finished roof surface. Walk-pads shall be provided from roof access points to and around all rooftop equipment.
4. All conduits and piping shall have a 4-inch minimum height and all conduit and piping supports shall be made from DURA-BLOK as supplied by Cooper B-Line, Inc. Roof Topper by Arlington, Safety Yellow Pipe guard, or equal.
5. Building Envelope shall comply with California Energy Code, ASHRAE 90.1-2010.
6. A method to clean all exterior glazing must be incorporated into the project. Verify method with Facilities Services Administration.
7. Maximize insulation value of the building envelope to conserve energy and incorporate an air barrier. Avoid all insulation material containing formaldehyde and consider insulations with recycled content.
8. Non-combustible or FM Approved insulation is recommended in place of foam-based products (polyurethane, polystyrene, etc.), and is especially important in unprotected, concealed spaces, such as attics and crawl spaces, or in hollow-core walls that will be penetrated by electrically-rated equipment.
9. FM Approved foam insulations for wall/ceiling have been evaluated according to FM Approvals Standard 4880, and are listed at [www.approvalguide.com](http://www.approvalguide.com) under Building Materials/Building Insulation/Foam Insulation

### B. Renovation Projects

1. When rooftop equipment is removed from roof, all associated components shall be removed as well. This includes: complete removal of any curbs, supports, piping, conduits, electrical lines, blocking, etc.

### C. Fall Protection

1. All areas that expose workers to a fall of six feet or greater shall be protected by parapet walls or permanent guardrails that comply with Cal OSHA Title 8 section 3209. When guardrails or parapets are not feasible, provide one of the following:
  - a. Horizontal Lifelines as part of a complete fall arrest system that is compliant with Cal OSHA Title 8 section 1670 (<https://www.dir.ca.gov/title8/1670.html>) designed by a "Qualified Person" as defined by ANSI/ASSE Z359.0-2007-2.109.
  - b. Anchorages that comply with Cal OSHA Title 8 section 1670 as designed by a "Qualified Person" as defined by ANSI/ASSE Z359.0-2007-2.109. (<https://www.dir.ca.gov/title8/1670.html>)

## 1.2 REFERENCES

### A. American Society for Testing and Materials (ASTM):

1. ASTM E 84 Standard Test Method for Surface Burning Characteristics of Building Materials.
2. ASTM E 814 Test Method for Fire Tests of Through-Penetration Firestops.

3. ASTM E 1966 Standard Test Methods for Fire Tests of Joints.
- B. National Fire Protection Association (NFPA):
  1. NFPA 70 National Electric Code.
  2. NFPA 101 Life Safety Code.
- C. Underwriters Laboratories, Inc. (UL):
  1. UL 1479 Fire Tests of Through-Penetration Firestops.
  2. UL 2079 Tests for Fire Resistance of Building Joint Systems.
  3. UL Fire Resistance Directory:
    - a. Fills, Voids or Cavity Materials (XHHW).
    - b. Firestop Devices (XHJI).

### 1.3 DAMPPROOFING AND WATERPROOFING

- A. For more information, refer to the University's Standard Specification Section 07 25 00 Water Resistive Barrier System.

### 1.4 SHEET WATERPROOFING

- A. On all below grade applications: Prior to installation of any product all areas shall be clean and have an approved primer applied per manufacturer's specification. All non-exposed areas shall be a minimum of 40mil self-adhering sheet, composed of butyl rubber based adhesive, backed by a layer of protection board separating it from contact with soil or other damaging properties. Grace Ice & Water Shield self-adhered underlayment; or equal. For special applications only, consult University's Representative before applying.

### 1.5 WATER REPELLENTS

- A. All exterior exposed masonry and concrete (to receive no other finish) shall be treated with a clear penetrating waterproofing.

### 1.6 ROOFING

#### 1.6.1 Roofing

- A. All new roof assemblies and roof recovers should be an FM Approved Roof Assembly, designed in accordance to the applicable FM Data Sheets: 1-28 *Wind Design*, 1-29 *Roof Deck Securement and Above Deck Components*, 1-31 *Metal Roof Systems*, 1-49 *Perimeter Flashing*, and 1-54 *Roof Loads for New Construction*. All roof submittals should include the FM RoofNav Roof Assembly Identification Number. Further guidance on Wind Design (FM DS 1-28) and FM Approved Roof Assembly Listings is available at [www.roofnav.com](http://www.roofnav.com)
- B. Roofing system shall be determined by local Facilities Services Administration or as indicated in this Division.
- C. Specify service walkways (minimum 2'0" in width) appropriately located to service all roof top equipment from the roof access.
- D. Carefully detail roof expansion joints and flashing.
- E. Completely detail all parapet walls, caps, coping and scuppers. Top of coping should slope toward roofs.
- F. Detail roof edges sufficiently high to prevent water from spilling over and spotting walls and fascia where roof drains are used.

- G. Provide drips on overhangs, ledges, window stools and coping to prevent discolorations of fascia's, soffits and walls.
- H. Ensure that sealants specified are to be used within their limitations. When pre-cast concrete wall panels are used, ensure proper compatibility between the surface sealant and the concrete panel when caulking a joint.
- I. Flashing materials for permanent type buildings to be aluminum, stainless or copper (not galvanized metal).
- J. Slope roof adequately to drain (minimum 1/4"/ft. slope). Design primary roof slopes for new buildings into structural frame and not by roof insulation. Crickets to roof drains may be sloped with insulation. Metal building roofs (minimum 1/4"/ft. slope).
- K. Lightweight concrete insulating fill roof decks will not be used in conjunction with urethane roof system. Lightweight structural concrete is allowed.

### 1.6.2 COMPOSITION ROOFING

- A. Composition roofing shall be installed in accordance with current NCRA guidelines for installation and shall have a minimum 40-year warranty. Composition roofing Systems shall meet the following standards:
  - 1. UL 997
  - 2. ASTM D3018 TYPE 1
  - 3. ASTM D3161 TYPE 1, CLASS F
  - 4. ASTM D3462
- B. Fasteners shall be in accordance with the manufacturer's specifications for application.
- C. Type 30 felt underlayment or better shall be used. For special applications consult University's Representative before applying.

### 1.6.3 CLAY AND CONCRETE TILE ROOFING

- A. All roofing tile shall be installed in accordance with the manufacturer specifications.
- B. A minimum of two layers Type 30 Felt underlayment or better shall be installed. For special applications, consult University's Representative before applying.
- C. Tiles shall be installed on an elevated battened system. For special applications, consult University's Representative before installing.
- D. Fasteners shall be in accordance with the manufacturer specifications for the application used.

### 1.6.4 ROOFING AND SIDING PANELS

- A. All metals used shall be prefinished Zinalume/Galvalume sheet metal or G-90 galvanized steel in minimum 24 gauge as described in ASTM A792.

### 1.6.5 METAL PANEL ROOFING

- A. Standing seam roofing system shall consist of integral self-locking seams with a minimum seam height of 1-3/4 inches. Standing seam roofing system shall have no exposed fasteners. Panels shall have clips designed to allow for thermal expansion and contraction.

- B. Type 30 felt underlayment or better. For special applications, consult University's Representative before applying. Sealants shall be gunnable grade single component polyurethane caulk or gunnable grade butyl. Tape Sealant shall be Butyl.
- C. Manufacturer shall provide a standard 35 year coating performance warranty. All installations shall be in accordance with specified manufacturer guidelines.

**1.6.6 SINGLE-PLY MEMBRANE ROOFING**

- A. PVC Single-Ply Membrane (Thermoplastic) Roofing System (SMR) is the standard roofing system for low sloped applications. TPO membranes are not approved for campus installations. SMR systems shall be fully adhered or mechanically fastened qualifying for a UL Class A Roof Covering with Factory Mutual I-60 Windstorm Classification for Class 1 Construction. The SMR system shall be covered by the material manufacturer's 20-Year Total System Warranty covering all roofing components installed above the roof deck upon completion and acceptance of Work.
- B. All roofing systems shall meet ASTM standards per their respective systems.
- C. Roofing materials shall meet ASTM D4434, minimum 60 mil thickness and have a Solar Reflectance Index (SRI) as required below for a minimum of 75 percent of the roof surface. (Product shall meet current CA Title 24 Requirements for reflectivity.)

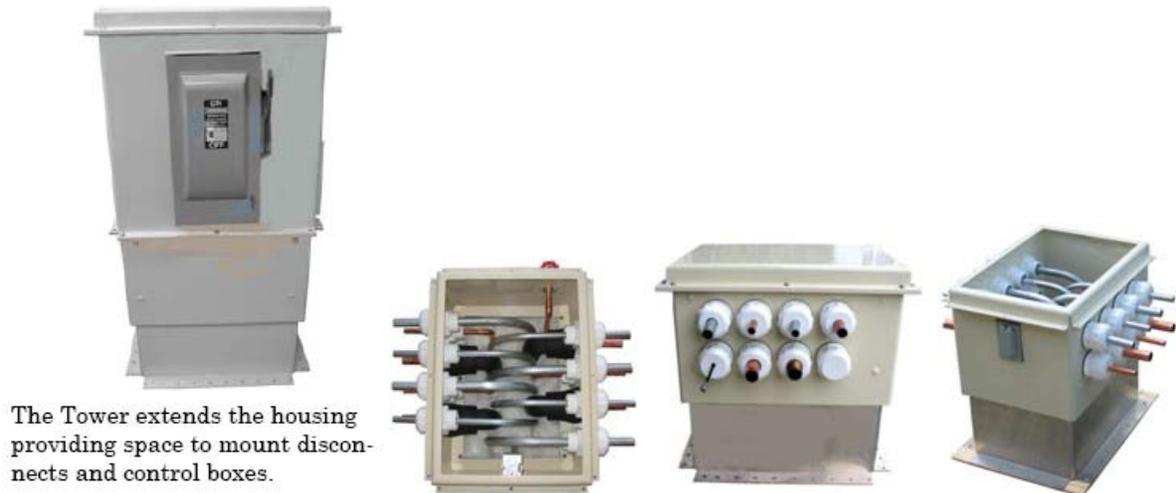
Roof Type	Slope	SRI
Low-Sloped Roof ≤	2:12	78
Steep-Sloped Roof >	2:12	29

- D. For special applications, consult University's Representative before applying. All installations shall be in accordance with manufacturer recommendations.
  - 1. Products: The following SMR systems are listed to establish a standard of quality:
    - a. Plasticized Polyvinyl Chloride (PVC): Sarnafil S327, manufactured by Sarnafil, Inc.; EGSR-60 Roofing Membrane distributed by Everguard/GAF; or equal.
- E. Emissions: The following maximum emissions are listed in grams per liter.
  - 1. Trowelable Mastic and Pitch Pocket Sealant: 450
  - 2. Sealant: Refer to Section 07 92 00 Water Resistive Barrier System
  - 3. Adhesive: 250

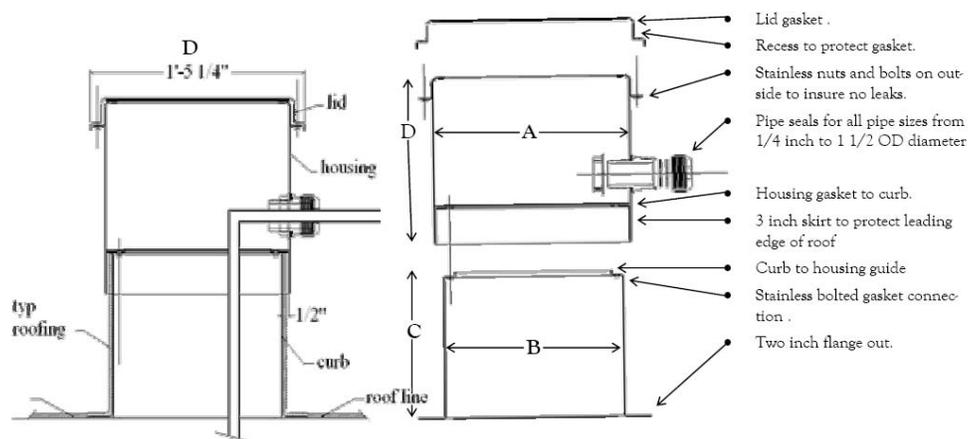
**1.6.7 SHEET METAL ROOFING SPECIALTIES**

- A. **Campus Preference:** For roof penetrations service utilities.
  - 1. Manufacturer: LSC Corp., POB 6308, Phoenix, AZ 85005. Phone: 877-301-8592; Fax: 602278-6397; Email: [dougmh@msn.com](mailto:dougmh@msn.com)
    - a. **Pipe Chase Housing** – Removable lid with gasket. Pipe seals for pipes from ¼-inch to 1½ inches outside diameter. Housing with gasket to curb. 3-inch skirt protects leading edge of roof. Constructed of welded power coated aluminum and stainless steel bolted connections. 2-inch flange out onto roof. Tower extension allows for space to mount disconnects and

control boxes. Some models are equipped with hose bib and knock-outs for GFCI.



The Tower extends the housing providing space to mount disconnects and control boxes.



Typical installation

**1.7 FIRE AND SMOKE PROTECTION**

**1.7.1 GENERAL**

A. Section includes:

1. Fire stopping at fire rated openings for conduit and cable trays.

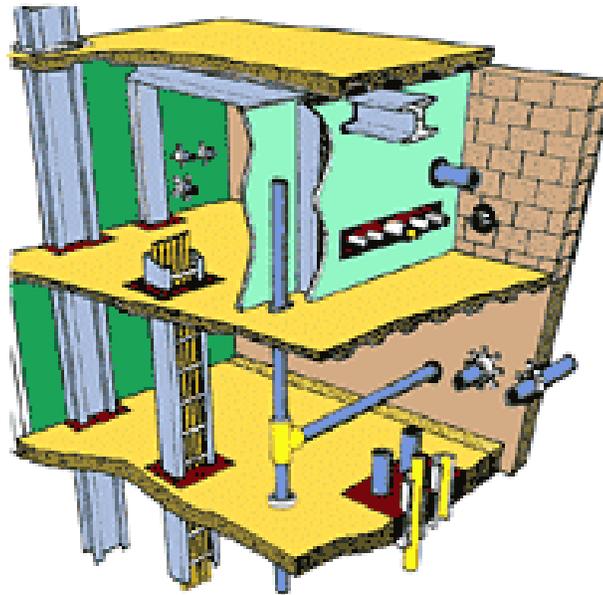
B. Quality Assurance:

1. Through Penetration Fire stopping of Fire Rated Assemblies: ASTM E814 with 0.10-inch water gage (24.9 Pa) minimum positive pressure differential to achieve fire F-Ratings and temperature T-Ratings not less than 1-hour.

- a. Wall Penetrations: Fire F-Ratings not less than 1-hour.
  - b. Floor Penetrations: Fire F-Ratings and temperature T-Ratings not less than 1-hour.
  - c. Through Penetration Fire stopping of Non-Fire Rated Floor Assemblies: Materials to resist free passage of flame and products of combustion. 1. Noncombustible Penetrating Items: Noncombustible materials for penetrating items connecting maximum of three stories.
- C. Penetrating Items:
1. Materials approved by authorities having jurisdiction for penetrating items connecting maximum of two stories.

### 1.7.2 FIRESTOPPING

- A. **Campus Preference:** For wall and floor penetrations of cabling for telecommunications, fire alarm and security.

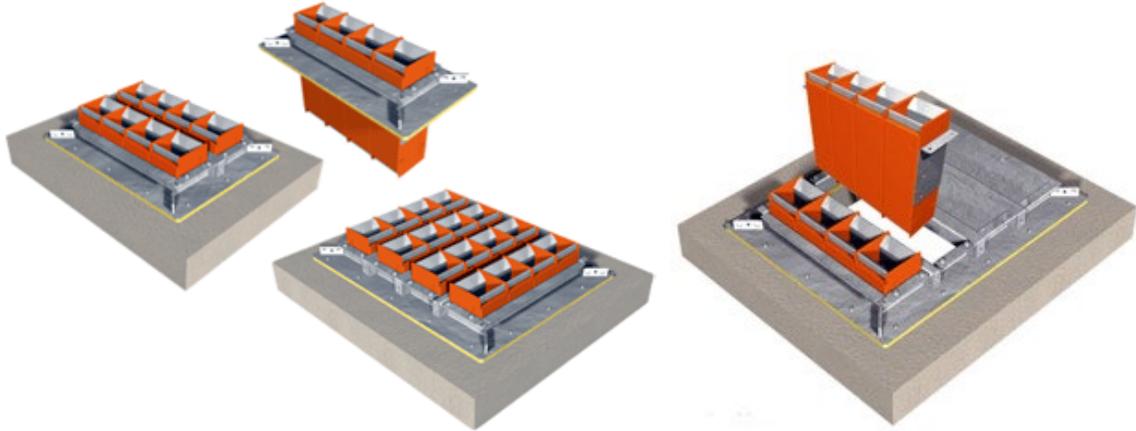


1. Manufacturer: Specified Technologies Inc. Model Series: EZ Path Fire Rated Pathways. **Website:** [http://sti.fmpdata.net/ftp/Estimation\\_Installation/ZIS1029\\_Grid\\_Install\\_Sheet.pdf](http://sti.fmpdata.net/ftp/Estimation_Installation/ZIS1029_Grid_Install_Sheet.pdf)
  - a. Wall – Model: **EZDP433GK-C** with four colored pathways to be organized as follows:  
**ORANGE** = Fire Alarm, **BLUE** = Communications-Horizontal Cabling, **YELLOW** = Security and Door Access, and **WHITE** = Communications-Backbone Cabling (between telecom rooms).



2. Floor – Model: **Series 44** Modular Grid System in either one, two or four modules with pathways in banks of four with the option to utilize blank firestop filler panels in multi-slot grids. Four colored pathways to be organized as follows:

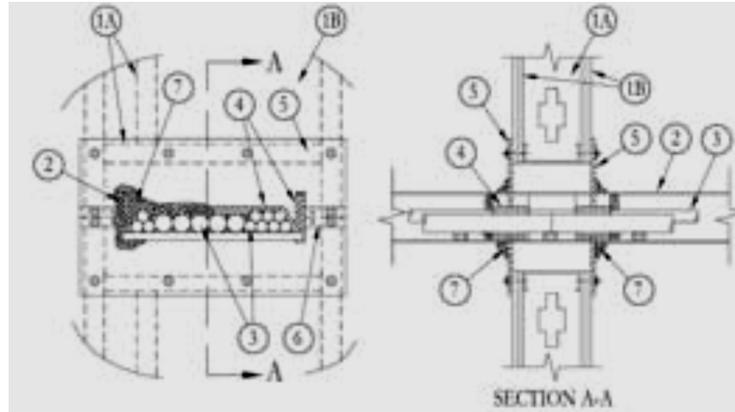
ORANGE = Fire Alarm, YELLOW = Security and Door Access, and WHITE = Communications-Backbone Cabling (between telecom rooms).



### 1.7.3 PRODUCTS

#### A. Fire stopping products

1. Campus Preferred Manufacturers and Models:
  - a. 3M Fire Protection Products Phone: 800-328-1687  
[www.3m.com/firestopProduct](http://www.3m.com/firestopProduct) Data:  
[http://solutions.3m.com/wps/portal/3M/en\\_US/Telecom/Home/Products/Products/?PC\\_7\\_RJH9U5230GE3E02LECIE20O4M7\\_nid=PM982QZG92beVSPHNLN1LCqI](http://solutions.3m.com/wps/portal/3M/en_US/Telecom/Home/Products/Products/?PC_7_RJH9U5230GE3E02LECIE20O4M7_nid=PM982QZG92beVSPHNLN1LCqI)
  - b. Tremco Inc. Phone: 866-209-2404 [www.tremcofirestop.com](http://www.tremcofirestop.com)
  - c. Substitutions: Section \_\_\_ - Product Options and Substitutions.
  
2. Cable Tray:
  - a. 3M, Model W-L-4004 - 24" x 4" steel or aluminum cable tray, 32% fill. Also referred as WL4004.



- b. Tremco, Model TREMstop PS, fire containment pillow system.
  - c. **Prohibited:** Intumescent putty.
3. Metal Pipe:
- a. 3M- [http://solutions.3m.com/wps/portal/3M/en\\_US/fire-protection-systems-NA/firestop/](http://solutions.3m.com/wps/portal/3M/en_US/fire-protection-systems-NA/firestop/)
  - b. Tremco- <http://tremcosealants.com/>
4. Non-Metallic Pipe:
- a. 3M-[http://solutions.3m.com/wps/portal/3M/en\\_US/fire-protection-systems-NA/firestop/](http://solutions.3m.com/wps/portal/3M/en_US/fire-protection-systems-NA/firestop/)
  - b. 3M Fire Barrier FS-195+ Wrap/Strip – 2"x24", Intumescent elastomeric strip with foil on one side (UPC # 00051115071157), and Plastic Pipe Device PPD6 (UPC # 00051115082535) for 6" pipe, or Restricting Collar RC-1-2" (UPC #00054007083245) for 2" pipe.
  - c. Tremco- <http://tremcosealants.com/>

**B. Cabling:**

- 1. 3M, Models
  - a. Single, Fire Barrier Pass-Through Devices:
    - 1. 2-1/2" Square (UPC # 00051115165962) and Mounting Brackets 2-1/2" SQ Single Mount (Pair) (UPC # 00051115187506)



2. Fire Barrier Pass-Through Device 4" Square (UPC # 00051115165979) and Mounting Brackets 4" SQ Single Mounting (Pair) (UPC # 00051115187520)
3. Fire Barrier Pass-Through Device 4" Round (UPC #00051115165986) and Mounting Brackets 4" Round Single Mount (Pair) (UPC # 00051115187544)



b. Multiple, Square Pass-Through:

1. Fire Barrier Pass-Through Device 4" Square and Mounting Brackets 4" SQ Triple Mount (Pair) UPC # 00051115187537).



2. Tremco, Model

## 1.8 ROOF SPECIALTIES AND ACCESSORIES

A. Roof Hatches:

1. Standard Roof Hatch size is 30 inches by 36 inches. For special applications or sizes, consult the University's Representative. Roof hatches that are larger than the standard size shall require hydraulic or spring loaded hinges.
2. Roof hatches shall be designed to comply with Cal OSHA Title 8 section 3212 and to provide safe egress and ingress through roof and access hatches
3. Roof hatches shall be designed such that opening and closing of the roof hatch can be done with three points of contact on the ladder at all times.

4. Where no roof hatch is provided, a fixed ladder shall be provided that complies with Cal OSHA Title 8 section 3277.
5. Consideration shall be given for the safe exit and approach to the hatch and ladder. The roof hatch shall be located such that there is a sufficient clear space directly in front of the ladder at the roof level.

**1.9 JOINT SEALANTS**

- A. Detail all special conditions. All materials used shall be top-of-the line available suited for the conditions being sealed and in compliance with the following VOC requirements.

<b>Sealants</b>	<b>VOC Limit (g/L Less Water)</b>
Architectural	250
Non-membrane Roof	300
Roadway	250
Single Ply Roof Membrane	450
Other	420
<b>Sealant Primers</b>	<b>VOC Limit (g/L Less Water)</b>
Architectural – nonporous	250
Architectural – porous	775
Modified Bituminous	500
Other	750
Requirements from South Coast Air Quality District Rule 1168 effective date (01/07/05) & rule amendment date of (1/07/05) except for aerosol adhesive requirements which come from Green Seal Standard GS 36 (10/19/00). Applicable definitions apply.	

END OF SECTION 7