



**RFP 190607/ME - ADDENDUM 2**

**Smithville Relocation: Research Labs, Offices to 3SCRB Level 02**

RFP Deadline: **October 14, 2020 at 2:00 PM** (Local Time)

Page **1 of 23**

RFP Number: **190607/ME**

Date: **September 24, 2020**

**THIS SIGNED FORM MUST BE INCLUDED WITH PROPOSAL AFTER THE EXECUTION OF OFFER**

**RETURN PROPOSAL AS SHOWN BELOW**

**Proposal and HUB Subcontracting Plan must be submitted as two (2) separate emails to:**

**Mary Mueller**  
[memuelle@mdanderson.org](mailto:memuelle@mdanderson.org)

**PROPOSAL AND HUB SUBCONTRACTING PLAN MAY BE SUBMITTED AT ANY TIME BEFORE CLOSING DATE DEADLINE.**

**PROPOSAL AND HUB SUBCONTRACTING PLAN ARE TO BE SENT AS TWO (2) SEPARATE EMAILS.**

**THE UNIVERSITY OF TEXAS MD ANDERSON CANCER CENTER RESERVES THE RIGHT TO REJECT ANY AND ALL PROPOSALS OR ANY PART THEREOF.**

**RESPONDENT MUST COMPLETE AND SIGN BELOW**

Company Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_  
(STREET OR BOX #)

\_\_\_\_\_  
(CITY) (STATE) (ZIP)

Telephone No.: \_\_\_\_\_/\_\_\_\_\_

Email Address: \_\_\_\_\_

\_\_\_\_\_  
(Authorized Signature) (DATE)

\_\_\_\_\_  
(Typed or Printed Name and Title)

**THIS RFP ADDENDUM IS A FURTHERANCE OF A SOLICITATION FOR PROPOSALS  
AND IS NOT A CONTRACT OR OFFER TO CONTRACT.**

- 1. RFI Questions and Answers are attached.**
- 2. Construction Document Addendum 2 is attached.**

**Mary Mueller (Sourcing Specialist)**

**Email Address: [memuelle@mdanderson.org](mailto:memuelle@mdanderson.org)**

## **RFP No. 190607/ME**

### **“Smithville Relocation: Research Labs / Offices to 3 SCRB Level 02”**

#### **Addendum 2**

**September 25, 2020**

#### **RFI Questions and Answers**

##### **RFI no. 1 – 1 Question**

**Question 1:** Both the RFP (Section 2.4 Project Planning Schedule) and the Attachment D: Respondent’s Price and Delivery Proposal (Section 1.5 Construction Duration) indicate the project duration to be 150 Calendar Days. During the pre-submittal meeting the project duration was said to be 120 Calendar Days. Please clarify the correct project duration.

**Answer 1:** The correct Project Duration is 150 Days as stated in Section 1.5 of the “Respondent’s Pricing and Delivery Proposal and Execution of Offer” as well as Article 4 “Time of Completion” of the “Standard Agreement Between Owner and Contractor”.

##### **RFI no. 2 – 7 Questions**

**Question 2:** Is the Pricing and Delivery Proposal and Execution of Offer submitted in a separate email (per 4.1.2) or included as part of “Email #1 – Your firm’s completed RFP response” (per 1.5.3.)?

**Answer 2:** The Pricing and Delivery Proposal and Execution of Offer is an element of the complete RFP response submitted with Email #1 – “Your firm’s completed RFP response.” These components or elements of the RFP should be sent as separate pdf documents attached to the same Email #1:

Respondent’s Qualifications – consisting of responses to Criteria 3.1 through 3.9

Respondent’s Pricing and Delivery Proposal and Execution of Offer

Respondent’s Proposed Alternates See 1.5.4.2

Any price impact that the Proposed Alternate will have shall be clearly identified in an attachment to the Respondent’s Pricing and Delivery Proposal.

Email #2 is a separate email for the HUB Subcontracting Plan which must be received by the RFP deadline.

**Question 3:** Please advise if temporary double sided, to ceiling insulated drywall partitions are required. If so, please mark on the floor plan where they are to be built.

**Answer 3:** The existing wall around the renovation area will serve as the construction barrier with the understanding that the existing fire sprinkler in the renovation will remain active until any modifications to the existing sprinkler system is ready to be transitioned. Requirements for fire sprinkler shutdowns are covered in the Owners Special Conditions. Any work performed outside the new Core Lab area, for example: installing conduits to the area, work on Level 1, require full compliance with ILSM, ICRA's, containment etcetera, as required in the Specifications and Construction Documents. Other requirements for working inside the renovation area such as negative air machines and ante room etcetera, are required as per the Construction Documents and Contract Exhibit Documents.

**Question 4** Demolition General Note 4 on A04.01 indicates to repair any damaged fire-rated assemblies. Because we were not able to inspect the existing assemblies can an allowance be set for this scope of work?

**Answer 4:** Respondent shall include as a separate line item but added to the Contract Sum an Allowance of \$5,000 to cover any existing conditions, that are not covered in the contract documents, to provide fire caulking on existing penetrations not in compliance with the new rating. Notification to the Owner and approval to proceed is required prior to utilizing the Allowance.

**Question 5:** Please provide the Fire Alarm contractor for the building.

**Answer 5:** Simplex.

**Question 6:** Please provide the Controls contractor for the building.

**Answer 6:** Siemens.

**Question 7:** Please provide the Security contractor for the building.

**Answer 7:** Security to be provided by Contractor awarded the project.

**Question 8:** Please provide the deck height.

**Answer 8:** Initial construction (Sheet A-300) floor-to-floor height of Level 2 is 16'-0".

## **RFI no. 3 – 9 Questions**

**Question 9:** Please clarify what normal working hours are.

**Answer 9:** As stated in RFP Section 2.3 “Project Description and Scope”:  
Normal working hours are considered as work being performed between 6:00 AM and 6:00 PM Monday through Friday, excluding holidays.

**Question 10:** A11-02, note PT13 calls to patch flooring to match existing. Please clarify what is existing.

**Answer 10:** Existing flooring is SHV-2.

**Question 11:** A04-02, note D27 calls to replace stained/damaged carpet. Without walking the space, we do not know how much to replace. Should we carry an allowance? If so, how much?

**Answer 11:** Contractor shall document existing condition of carpet and protect during construction. Provide documentation to the Owner at the beginning of the project. Any stained /damaged carpet shall be identified prior to Contractor starting the work. Carpet shall be cleaned prior to Substantial Completion. Contractor shall replace any carpet damaged during construction. No allowance required.

**Question 12:** Please provide level 02 deck height.

**Answer 12:** Please see response to RFI Question 8.

**Question 13:** Will the owner directly contract TAB & Commissioning?

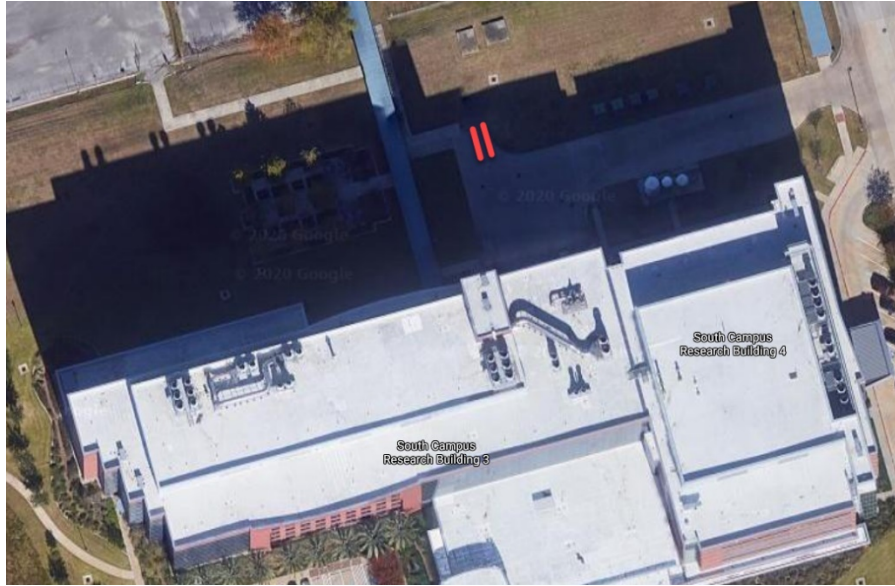
**Answer 13:** Yes.

**Question 14:** Will the owner directly contract data?

**Answer 14:** Yes.

**Question 15:** Please confirm that the General Contractor can drop a dumpster and where.

**Answer 15:** 20 yd dumpster.



**Question 16:** Door at west end of corridor 3SCRB2.3400B shows dash (demo) lines, but there is no demo or build notes. Please clarify scope.

**Answer 16:** Graphic/AutoCad issue; door is existing and to remain.

**Question 17:** Please specify what plastic laminate to use for doors.

**Answer 17:** Door finish is PL-38.

# Project Manual

for

The University of Texas MD Anderson Cancer Center  
Houston, Texas

## SMITHVILLE RELOCATION RESEARCH LABS / OFFICES TO 3SCRB LEVEL 02

**MD ANDERSON PROJECT :** 19-0607

**A/E PROJECT :** 185215.001

**PROJECT DELIVERY METHOD :** Competitive Sealed Proposal

Addendum 02 – September 24, 2020

### **OWNER'S REPRESENTATIVE**

Jason Sutton  
Facilities Planning, Design and Construction  
6900 Fannin, 10.1050  
713-792-4885

### **MD Anderson Cancer Center**

Facilities Planning, Design and Construction  
1515 Holcombe Blvd., Houston TX 77030  
713-745-1229

### **PROJECT ARCHITECT**

Diego Roza  
Perkins and Will  
1001 McKinney Ste 1300 Houston TX 77002  
713-366-4000

### **PROJECT ENGINEER**

Scott Sevigny  
Shah Smith and Associates  
2825 Wilcrest Drive Houston TX 77042  
713-780-7563

### **TECHNOLOGY CONSULTANT**

John Rob Hicks  
Datacom  
701 N Post Oak Rd Ste 426 Houston TX 77024  
(713) 589-9797

**DOCUMENT 00 01 07 - PROFESSIONAL SEALS PAGE**

The following Documents and Specification Sections have been prepared by or under the direct supervision of the Architect:

**ARCHITECT**

Perkins and Will  
1001 McKinney, Suite 1300  
Houston, Texas 77002

**SPECIFICATIONS**

**DIVISION 09 FINISHES**

09 29 00 Gypsum Board



END OF ARCHITECTURAL SECTIONS

**END OF DOCUMENT**

**PROJECT MANUAL TABLE OF CONTENTS**

**The Uniform General Conditions for University of Texas System Building Construction Contracts and the Division 00 and Division 01 Specification Sections have been Issued Under Separate Cover ("IUSC") as Exhibits to the Agreement Between Owner and Contractor.**

**A – PROCUREMENT AND CONTRACTING REQUIREMENTS GROUP**

<b>DIVISION 00</b>	<b>PROCUREMENT AND CONTRACTING REQUIREMENTS</b>	
	2013 Uniform General Conditions for University of Texas System Building Construction Contracts	IUSC
00 25 00	Owners Special Conditions	IUSC
00 25 00 A	Attachment "A" - Minimum Wage Rate Determination	
00 25 00 B	Attachment "B" - Facilities Planned Utility Outages Policy	
00 25 00 C	Attachment "C" - Project Sign Layout	
00 25 00 D	Attachment "D" - Bastrop Visitation and Tour Policy Statement and Medical Documentation Requirements	IUSC
00 73 16	Project Insurance (OCIP)	

**B - SPECIFICATIONS GROUP**

<b>DIVISION 01</b>	<b>GENERAL REQUIREMENTS</b>	
01 31 00	Project Administration	IUSC
01 32 00	Project Planning and Scheduling	IUSC
01 35 16	Alteration Project Procedures	IUSC
01 35 23	Project Safety (OCIP)	IUSC
01 35 25	Owner Safety Requirements	IUSC
01 35 25 A	Attachment "A" - Maintaining Indoor Air Quality During Construction And Maintenance Activities Policy	
01 45 00	Project Quality Control	IUSC
01 57 23	Temporary Storm Water Pollution Control	IUSC
01 57 25	Dust Control Plan	IUSC
01 77 00	Project Closeout Procedures	IUSC
01 78 39	Project Record Documents	IUSC
01 78 46	Maintenance Materials	IUSC
01 79 00	Demonstration and Training	IUSC



DIVISION 01	GENERAL REQUIREMENTS	
01 89 23	Site HVAC Utilities Performance Requirements	IUSC
01 91 00	General Commissioning Requirements	IUSC

DIVISION 02	EXISTING CONDITIONS	REVISION
	Not Used	

DIVISION 03	CONCRETE	REVISION
03 54 16	Hydraulic Cement Underlayment	

DIVISION 04	MASONRY	REVISION
	Not Used	

DIVISION 05	METALS	REVISION
05 50 00	Metal Fabrications	

DIVISION 06	WOOD, PLASTICS AND COMPOSITES	REVISION
06 10 00	Miscellaneous Carpentry	

DIVISION 07	THERMAL AND MOISTURE PROTECTION	REVISION
07 26 35	Moisture Vapor Emission Control System	
07 84 13	Penetration Firestopping	
07 84 43	Joint Firestopping	
07 92 00	Joint Sealants	

DIVISION 08	OPENINGS	REVISION
08 12 13	Hollow Metal Frames	
08 14 16	Flush Wood Doors	
08 71 11	Finish Hardware	
08 80 00	Glazing	

DIVISION 09	FINISHES	REVISION
09 05 65	Preinstallation Testing for Flooring	
09 21 16	Gypsum Board Shaft Wall Assemblies	
09 22 16	Non-Structural Metal Framing	

DIVISION 09	FINISHES	REVISION
09 29 00	Gypsum Board	<u>September 24, 2020</u>
09 51 13	Acoustical Panel Ceilings	
09 65 13	Resilient Base and Accessories	
09 65 18	Resilient Sheet Flooring	
09 68 13	Tile Carpeting	
09 91 00	Painting	

DIVISION 10	SPECIALTIES	REVISION
10 11 00	Visual Display Units	
10 26 00	Wall and Door Protection	
10 44 00	Fire Extinguishers	

DIVISION 11	EQUIPMENT	REVISION
11 53 13	Laboratory Fume Hoods	
11 53 43	Laboratory Service Fittings	
11 53 53	Biological Safety Cabinets	

DIVISION 12	FURNISHINGS	REVISION
12 35 53	Laboratory Casework	

DIVISION 13	SPECIAL CONSTRUCTION EQUIPMENT	REVISION
	Not Used	

DIVISION 14	CONVEYING EQUIPMENT	REVISION
	Not Used	

DIVISION 15	RESERVED	REVISION
-------------	----------	----------

DIVISION 16	RESERVED	REVISION
-------------	----------	----------

DIVISION 17	RESERVED	REVISION
-------------	----------	----------

DIVISION 18	RESERVED	REVISION
-------------	----------	----------

<b>DIVISION 19</b>	<b>RESERVED</b>	<b>REVISION</b>
--------------------	-----------------	-----------------

<b>DIVISION 20</b>	<b>COMMON FIRE SUPPRESSION, PLUMBING AND HVAC REQUIREMENTS</b>	<b>REVISION</b>
20 01 00	Basic Fire Suppression, Plumbing and HVAC Requirements	
20 05 29	Supports and Sleeves	
20 05 53	Piping and Equipment Identification	
20 07 19	Piping Insulation	

<b>DIVISION 21</b>	<b>FIRE SUPPRESSION</b>	<b>REVISION</b>
21 10 13	Wet Standpipe and Sprinkler Systems	

<b>DIVISION 22</b>	<b>PLUMBING</b>	<b>REVISION</b>
22 10 00	Plumbing Piping	
22 10 30	Plumbing Specialties	
22 40 00	Plumbing Fixtures	
22 45 00	Emergency Shower and Eye Wash Equipment	
22 60 53	Laboratory Vacuum and Gas Piping	
22 66 53	Laboratory Waste and Vent Piping (PP/Duriron)	

<b>DIVISION 23</b>	<b>HEATING, VENTILATING, AND AIR CONDITIONING</b>	<b>REVISION</b>
23 05 93	System Testing, Adjusting and Balancing	
23 07 13	Ductwork Insulation	
23 09 10	Laboratory Tracking Systems Having Venturi or Non-Blade Air Valves	
23 21 13	Hydronic Piping	
23 21 30	Hydronic Specialties	
23 31 00	Ductwork	
23 33 00	Ductwork Accessories	
23 36 00	Air Terminal Units	
23 37 00	Air Outlets and Inlets	

<b>DIVISION 24</b>	<b>RESERVED</b>	<b>REVISION</b>
--------------------	-----------------	-----------------

<b>DIVISION 25</b>	<b>INTEGRATED AUTOMATION</b>	<b>REVISION</b>
--------------------	------------------------------	-----------------

DIVISION 25	INTEGRATED AUTOMATION	REVISION
25 00 10	Building Automation Systems (BAS) General - Retrofit	
25 11 10	BAS Basic Materials, Interface Devices, and Sensors - Retrofit	
25 11 19	BAS Operator Interfaces - Retrofit	
25 14 10	BAS Field Panels - Retrofit	
25 15 10	BAS Software and Programming - Retrofit	
25 30 10	BAS Communication Devices - Retrofit	

DIVISION 26	ELECTRICAL	REVISION
26 01 00	Basic Electrical Requirements	
26 05 19	Cable, Wire and Connectors, 600 Volt	
26 05 26	Grounding	
26 05 33	Raceways, Cable Trays, and Boxes	
26 09 23	Lighting Control Devices	
26 27 26	Wiring Devices	
26 51 00	Lighting Fixtures	

DIVISION 27	COMMUNICATIONS	REVISION
27 00 00	Communications	
27 05 28	Pathways for Communications Systems	
27 05 53	Identification for Low-Voltage Cables	
27 11 00	Communications Equipment Room Fittings	
27 15 00	Communications Horizontal Cabling	
27 21 33	Data Communications WI-FI Access Points	

DIVISION 28	ELECTRONIC SAFETY AND SECURITY	REVISION
28 00 00	Electronic Security	Issued by Owner
28 10 00	Electronic Access Control and Intrusion Detection	Issued by Owner
28 20 00	Video Surveillance	Issued by Owner
28 30 00	Fire Alarm and Smoke Detector Systems	

DIVISION 29	RESERVED	REVISION
-------------	----------	----------

DIVISION 30	RESERVED	REVISION
-------------	----------	----------

<b>DIVISION 31</b>	<b>EARTHWORK</b>	<b>REVISION</b>
	Not Used	
<b>DIVISION 32</b>	<b>EXTERIOR IMPROVEMENTS</b>	<b>REVISION</b>
	Not Used	
<b>DIVISION 33</b>	<b>UTILITIES</b>	<b>REVISION</b>
	Not Used	
<b>DIVISION 34</b>	<b>TRANSPORTATION</b>	<b>REVISION</b>
	Not Used	
<b>DIVISION 35</b>	<b>WATERWAY AND MARINE CONSTRUCTION</b>	<b>REVISION</b>
	Not Used	
<b>DIVISION 36</b>	<b>RESERVED</b>	<b>REVISION</b>
<b>DIVISION 37</b>	<b>RESERVED</b>	<b>REVISION</b>
<b>DIVISION 38</b>	<b>RESERVED</b>	<b>REVISION</b>
<b>DIVISION 39</b>	<b>RESERVED</b>	<b>REVISION</b>
<b>DIVISION 40</b>	<b>PROCESS INTEGRATION</b>	<b>REVISION</b>
	Not Used	
<b>DIVISION 41</b>	<b>MATERIAL PROCESSING AND HANDLING EQUIPMENT</b>	<b>REVISION</b>
	Not Used	
<b>DIVISION 42</b>	<b>PROCESS HEATING, COOLING, AND DRYING EQUIPMENT</b>	<b>REVISION</b>
	Not Used	
<b>DIVISION 43</b>	<b>PROCESS GAS AND LIQUID HANDLING, PURIFICATION, AND STORAGE EQUIPMENT</b>	<b>REVISION</b>
	Not Used	

<b>DIVISION 44</b>	<b>POLLUTION CONTROL EQUIPMENT</b>	<b>REVISION</b>
	Not Used	
<b>DIVISION 45</b>	<b>INDUSTRY-SPECIFIC MANUFACTURING EQUIPMENT</b>	<b>REVISION</b>
	Not Used	
<b>DIVISION 46</b>	<b>RESERVED</b>	<b>REVISION</b>
<b>DIVISION 47</b>	<b>RESERVED</b>	<b>REVISION</b>
<b>DIVISION 48</b>	<b>ELECTRICAL POWER GENERATION</b>	<b>REVISION</b>
	Not Used	
<b>DIVISION 49</b>	<b>RESERVED</b>	<b>REVISION</b>

END OF SECTION 00 01 10

## **SECTION 09 29 00 - GYPSUM BOARD**

### **PART 1 - GENERAL**

#### **1.01 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

#### **1.02 SUMMARY**

- A. Section Includes:
  - 1. Interior gypsum board.
- B. Related Requirements:
  - 1. Section 09 22 16 "Non-Structural Metal Framing" for non-structural framing and suspension systems that support gypsum board panels.

#### **1.03 SUBMITTALS**

- A. Product Data: Submit manufacturer's technical data for each type of gypsum board product, including related accessories. Furnish a material list with technical data documenting the location and primary function, quality, and performance of each material component or system to be used in the Work, or other such primary characteristics as required by the Drawings or Specifications.
  - 1. Submit manufacturer's technical data for each gypsum drywall partition and each ceiling system.
- B. Samples: For the following products:
  - 1. Trim Accessories: Full-size Sample in 12-inch- (300-mm-) long length for each trim accessory indicated.

#### **1.04 QUALITY ASSURANCE**

- A. Single-Source Responsibility for Panel Products: Obtain each type of gypsum board and other panel products from a single manufacturer.
- B. Single-Source Responsibility for Finishing Materials: Obtain finishing materials from either the same manufacturer that supplies gypsum board and other panel products or from a manufacturer acceptable to gypsum board manufacturer.
- C. Mockups: Before beginning gypsum board installation, install mockups of at least 100 sq. ft. (9 sq. m) in surface area to demonstrate aesthetic effects and set quality standards for materials and execution.
  - 1. Install mockups for the following:
    - a. Each level of gypsum board finish indicated for use in exposed locations.

- b. Each texture finish indicated.
  - 2. Apply or install final decoration indicated, including painting and wallcoverings, on exposed surfaces for review of mockups.
  - 3. Simulate finished lighting conditions for review of mockups.
  - 4. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.
- 1.05 DELIVERY, STORAGE AND HANDLING
- A. Store materials inside under cover and keep them dry and protected against weather, condensation, direct sunlight, construction traffic, and other potential causes of damage. Stack panels flat and supported on risers on a flat platform to prevent sagging.
- 1.06 FIELD CONDITIONS
- A. Environmental Limitations: Comply with ASTM C 840 requirements or gypsum board manufacturer's written recommendations, whichever are more stringent.
  - B. Do not install paper-faced gypsum panels until installation areas are enclosed and conditioned.
  - C. Do not install panels that are wet, those that are moisture damaged, and those that are mold damaged.
    - 1. Indications that panels are wet or moisture damaged include, but are not limited to, discoloration, sagging, or irregular shape.
    - 2. Indications that panels are mold damaged include, but are not limited to, fuzzy or splotchy surface contamination and discoloration.

## PART 2 - PRODUCTS

### 2.01 GYPSUM BOARD, GENERAL

- A. Size: Provide maximum lengths and widths available that will minimize joints in each area and that correspond with support system indicated.

### 2.02 INTERIOR GYPSUM BOARD

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  - 1. American Gypsum.
  - 2. CertainTeed Corp.
  - 3. Georgia-Pacific Gypsum LLC.
  - 4. National Gypsum Company.
  - 5. USG Corporation.



- B. Gypsum Board, Type X: ASTM C 1396/C 1396M.
  - 1. Thickness: 5/8 inch (15.9 mm).
  - 2. Long Edges: Tapered
- C. Gypsum Ceiling Board: Type C: ASTM C 1396/C 1396M.
  - 1. Thickness: 5/8 inch (15.9 mm)..
  - 2. Long Edges: Tapered.

## 2.03 TRIM ACCESSORIES

- A. Interior Trim: ASTM C 1047.
  - 1. Material: Galvanized or aluminum-coated steel sheet or rolled zinc.
  - 2. Shapes:
    - a. Cornerbead.
    - b. Bullnose bead.
    - c. LC-Bead: J-shaped; exposed long flange receives joint compound.
    - d. L-Bead: L-shaped; exposed long flange receives joint compound.
    - e. U-Bead: J-shaped; exposed short flange does not receive joint compound.
    - f. Expansion (control) joint.
    - g. Curved-Edge Cornerbead: With notched or flexible flanges.
    - h. Curved Inside Corner: Use where indicated.
      - 1) Acceptable Product: Fry Reglet, DRMCIS-200.
- B. Aluminum Trim: Extruded accessories of profiles and dimensions indicated.
  - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
    - a. Fry Reglet Corp.
    - b. Gordon, Inc.
    - c. Pittcon Industries.
  - 2. Aluminum: Alloy and temper with not less than the strength and durability properties of ASTM B 221 (ASTM B 221M), Alloy 6063-T5.
  - 3. Finish: Corrosion-resistant primer compatible with joint compound and finish materials specified.

## 2.04 JOINT TREATMENT MATERIALS

- A. General: Comply with ASTM C 475/C 475M.
- B. Joint Tape:
  - 1. Interior Gypsum Board: Paper.
- C. Joint Compound for Interior Gypsum Board: For each coat use formulation that is compatible with other compounds applied on previous or for successive coats.
  - 1. Prefilling: At open joints and damaged surface areas, use setting-type taping compound.
  - 2. Embedding and First Coat: For embedding tape and first coat on joints, fasteners, and trim flanges, use setting-type taping compound.
    - a. Use setting-type compound for installing paper-faced metal trim accessories.
  - 3. Fill Coat: For second coat, use setting-type, sandable topping compound.
  - 4. Finish Coat: For third coat, use setting-type, sandable topping compound.
  - 5. Skim Coat: For final coat of Level 5 finish, use drying-type, all-purpose compound.

## 2.05 AUXILIARY MATERIALS

- A. General: Provide auxiliary materials that comply with referenced installation standards and manufacturer's written recommendations.
- B. Laminating Adhesive: Adhesive or joint compound recommended for directly adhering gypsum panels to continuous substrate.
  - 1. Laminating adhesive shall have a VOC content of 50 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).
- C. Steel Drill Screws: ASTM C 1002, unless otherwise indicated.
  - 1. Use screws complying with ASTM C 954 for fastening panels to steel members from 0.033 to 0.112 inch (0.84 to 2.84 mm) thick.
- D. Electrical Box Pads: Putty Pads: Moldable non-curing one component, intumescent, fire-rated material for through-penetration fire stop systems and sound attenuation systems; self-adhering; 1/8 inch thick minimum.
- E. Sound-Attenuation Blankets: ASTM C 665, Type I (blankets without membrane facing) produced by combining thermosetting resins with mineral fibers manufactured from glass, slag wool, or rock wool.
  - 1. Fire-Resistance-Rated Assemblies: Comply with mineral-fiber requirements of assembly.
  - 2. Thickness / STC Rating: As scheduled on Drawings.
  - 3. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

- a. CertainTeed; Sound Control Batts or Fire Batts.
- b. Johns Manville Sound Control Batts or Fire Batts.
- c. Knauf Insulation; EcoBatt with ECOSE Technology
- d. Owens Corning Company, SAB.
- e. Roxul Inc.; Acoustical Fire Batts.
- f. Thermafiber, Inc.; an Owens Corning Company, SAFB.

E.F. Acoustical Joint Sealant: Manufacturer's standard nonsag, paintable, nonstaining latex sealant complying with ASTM C 834. Product effectively reduces airborne sound transmission through perimeter joints and openings in building construction as demonstrated by testing representative assemblies according to ASTM E 90.

1. Products: Subject to compliance with requirements, provide one of the following:
  - a. Accumetric LLC; BOSS 824 Acoustical Sound Sealant.
  - b. Grabber Construction Products; Acoustical Sealant GSC.
  - c. Hilti Incorporated; CP 506 Smoke and Acoustic Sealant.
  - d. Pecora Corporation; AC-20 FTR.
  - e. Specified Technologies, Inc.; Smoke N Sound Acoustical Sealant.
  - f. Tremco; Acoustical Sealant.
  - g. USG Corporation; SHEETROCK Acoustical Sealant.
2. Acoustical joint sealant shall have a VOC content of 250 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).

### PART 3 - EXECUTION

#### 3.01 EXAMINATION

- A. Examine areas and substrates including welded hollow-metal frames and framing, with Installer present, for compliance with requirements and other conditions affecting performance.
- B. Examine panels before installation. Reject panels that are wet, moisture damaged, and mold damaged.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

#### 3.02 APPLYING AND FINISHING PANELS, GENERAL

- A. Comply with ASTM C 840.

- B. Install ceiling panels across framing to minimize the number of abutting end joints and to avoid abutting end joints in central area of each ceiling. Stagger abutting end joints of adjacent panels not less than one framing member.
- C. Install panels with face side out. Butt panels together for a light contact at edges and ends with not more than 1/16 inch (1.5 mm) of open space between panels. Do not force into place.
- D. Locate edge and end joints over supports, except in ceiling applications where intermediate supports or gypsum board back-blocking is provided behind end joints. Do not place tapered edges against cut edges or ends. Stagger vertical joints on opposite sides of partitions. Do not make joints other than control joints at corners of framed openings.
- E. Form control and expansion joints with space between edges of adjoining gypsum panels.
- F. Cover both faces of support framing with gypsum panels in concealed spaces (above ceilings, etc.), except in chases braced internally.
  - 1. Unless concealed application is indicated or required for sound, fire, air, or smoke ratings, coverage may be accomplished with scraps of not less than 8 sq. ft. (0.7 sq. m) in area.
  - 2. Fit gypsum panels around ducts, pipes, and conduits.
  - 3. Where partitions intersect structural members projecting below underside of floor/roof slabs and decks, cut gypsum panels to fit profile formed by structural members; allow 1/4- to 3/8-inch (6.4- to 9.5-mm-) wide joints to install sealant.
- G. Isolate perimeter of gypsum board applied to non-load-bearing partitions at structural abutments. Provide 1/4- to 1/2-inch (6.4- to 12.7-mm-) wide spaces at these locations and trim edges with edge trim where edges of panels are exposed. Seal joints between edges and abutting structural surfaces with acoustical sealant.
- H. Attachment to Steel Framing: Attach panels so leading edge or end of each panel is attached to open (unsupported) edges of stud flanges first.
- I. Install sound attenuation blankets before installing gypsum panels unless blankets are readily installed after panels have been installed on one side.

### 3.03 APPLYING INTERIOR GYPSUM BOARD

- A. Install interior gypsum board in the following locations:
  - 1. Type X: Vertical surfaces unless otherwise indicated.
  - 2. Ceiling Type: Ceiling surfaces.
- B. Single-Layer Application:
  - 1. On ceilings, apply gypsum panels before wall/partition board application to greatest extent possible and at right angles to framing unless otherwise indicated.
  - 2. On partitions/walls, apply gypsum panels vertically (parallel to framing) unless otherwise indicated or required by fire-resistance-rated assembly, and minimize end joints.

- a. Stagger abutting end joints not less than one framing member in alternate courses of panels.
    - b. At stairwells and other high walls, install panels horizontally unless otherwise indicated or required by fire-resistance-rated assembly.
  3. Fastening Methods: Apply gypsum panels to supports with steel drill screws.
  - C. Multilayer Application:
    1. On ceilings, apply gypsum board indicated for base layers before applying base layers on walls/partitions; apply face layers in same sequence. Apply base layers at right angles to framing members and offset face-layer joints one framing member, 16 inches (400 mm) minimum, from parallel base-layer joints, unless otherwise indicated or required by fire-resistance-rated assembly.
    2. On partitions/walls, apply gypsum board indicated for base layers and face layers vertically (parallel to framing) with joints of base layers located over stud or furring member and face-layer joints offset at least one stud or furring member with base-layer joints, unless otherwise indicated or required by fire-resistance-rated assembly. Stagger joints on opposite sides of partitions.
    3. Fastening Methods: Fasten base layers and face layers separately to supports with screws.
  - D. Laminating to Substrate: Where gypsum panels are indicated as directly adhered to a substrate (other than studs, joists, furring members, or base layer of gypsum board), comply with gypsum board manufacturer's written recommendations and temporarily brace or fasten gypsum panels until fastening adhesive has set.
- 3.04 INSTALLING TRIM ACCESSORIES
- A. General: For trim with back flanges intended for fasteners, attach to framing with same fasteners used for panels. Otherwise, attach trim according to manufacturer's written instructions.
  - B. Control Joints: Install control joints according to ASTM C 840 and in specific locations approved by Architect for visual effect.
  - C. Interior Trim: Install in the following locations:
    1. Cornerbead: Use at outside corners unless otherwise indicated.
    2. Bullnose Bead: Use at outside corners.
    3. LC-Bead: Use at exposed panel edges.
    4. L-Bead: Use where indicated.
    5. U-Bead: Use at exposed panel edges where indicated.
    6. Curved-Edge Cornerbead: Use at curved openings.

- D. Aluminum Trim: Install in locations indicated on Drawings.

### 3.05 FINISHING GYPSUM BOARD

- A. General: Treat gypsum board joints, interior angles, edge trim, control joints, penetrations, fastener heads, surface defects, and elsewhere as required to prepare gypsum board surfaces for decoration. Promptly remove residual joint compound from adjacent surfaces.
- B. Prefill open joints and damaged surface areas.
- C. Apply joint tape over gypsum board joints, except for trim products specifically indicated as not intended to receive tape.
- D. Gypsum Board Finish Levels: Finish panels to levels indicated below and according to ASTM C 840:
1. Level 1: Embed tape at joints in ceiling plenum areas, concealed areas, and where indicated, unless a higher level of finish is required for fire-resistance-rated assemblies and sound-rated assemblies. Level 1 finish shall be applied at ceiling plenum areas, concealed areas.
  2. Level 2: Embed tape and apply separate first coat of joint compound to tape, fasteners, and trim flanges. Level 2 finish shall be applied to WR gypsum board, where panels are substrate for tile, and other locations where indicated.
  3. Level 3: Embed tape and apply separate first and fill coats of joint compound to tape, fasteners, and trim flanges. Joint compound shall be smooth and free from tool marks and ridges. Level 3 finish shall be applied to panels in Mechanical Rooms, Electrical Rooms, and similar spaces.
  4. Level 4: Embed tape and apply separate first, fill, and finish coats of joint compound to tape, fasteners, and trim flanges. Joint compound shall be smooth and free from tool marks and ridges. Level 4 finish shall be applied to panels in all locations except where another level of finish is specified.
    - a. Primer and its application to surfaces are specified in other Section 09 91 00 "Painting."
    - b. Texture: None required. Provide smooth flat finish.
  5. Level 5: Embed tape and apply separate first, fill, and finish coats of joint compound to tape, fasteners, and trim flanges, and apply skim coat of joint compound over entire surface where indicated. Level 5 finish shall be applied where indicated on Drawings and under graphic vinyl wall covering.
    - a. Primer and its application to surfaces are specified in other Section 09 91 00 "Painting."
    - b. Texture: None required. Provide smooth flat finish.

**3.06 FIELD QUALITY CONTROL**

- A. Above-Ceiling Observation: Before installing gypsum board ceilings, conduct an above-ceiling inspection, and report and correct deficiencies in the Work observed. Do not proceed with installation of gypsum board to ceiling support framing until deficiencies have been corrected.
1. Notify Architect seven days in advance of date and time when Project, or part of Project, will be ready for Contractor's above-ceiling inspection. Provide Architect with copy of deficiencies report. Architect reserves the right to supplement Contractor's deficiency report with other incomplete or incorrect items that might be observed during Architect's site visit.
  2. Before notifying Architect, complete the following in areas to receive gypsum board ceilings:
    - a. Installation of 80 percent of lighting fixtures, powered for operation.
    - b. Installation, insulation, and leak and pressure testing of water piping systems.
    - c. Installation of air-duct systems.
    - d. Installation of air devices.
    - e. Installation of mechanical system control-air tubing.
    - f. Installation of ceiling support framing.
    - g. Touch-up / patching of spray fire-resistive materials (SFRM).
    - h. Installation of acoustical sealants at adjacent sound-rated partitions.

**3.07 PROTECTION**

- A. Protect adjacent surfaces from drywall compound and promptly remove from floors and other non-drywall surfaces. Repair surfaces stained, marred, or otherwise damaged during drywall application.
- B. Protect installed products from damage from weather, condensation, direct sunlight, construction, and other causes during remainder of the construction period.
- C. Remove and replace panels that are wet, moisture damaged, and mold damaged.
1. Indications that panels are wet or moisture damaged include, but are not limited to, discoloration, sagging, or irregular shape.
  2. Indications that panels are mold damaged include, but are not limited to, fuzzy or splotchy surface contamination and discoloration.

**END OF SECTION 09 29 00**