# GENERAL

## SUMMARY

### This Section specifies general administrative and procedural requirements for submittals required by the Contract Documents.

## SUBMITTAL PROCEDURES

### The Owner intends to utilize an internet-based construction management system (CMS) for submittals (see Section 01 35 00 “Electronic Communications”).

#### The electronic submittal process is not intended to be used for color samples, color charts, or material samples.

### Coordination: Contractor shall review submittals for completeness, accuracy, and compliance with the Contract Documents, and shall coordinate the transmittal of submittals to ensure there is no delay in the construction Progress Schedule. Submittal sequencing should coincide with the Contractor’s Submittal Schedule.

#### Allow fourteen (14) calendar days turnaround for each submittal, from time of receipt by the Owner. For complex submittals or submittals requiring coordination with subsequent submittals, plan additional turnaround time.

##### Provide a "Priority List" when submitting several submittals within a short time.

#### A/E reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.

#### Submittals received from sources other than Contractor will be returned without action.

### Submittal Preparation: Contractor shall place a label on each submittal for processing. Include the following information on the label:

#### Date

#### Owner’s Project name

#### Name of Contractor and submittal number

#### Name of the entity that prepared the submittal

#### Specification reference number

#### For Shop Drawing submittals, Contractor’s certification that the submittal has been coordinated and reviewed for compliance with the requirements of the Contract Documents, and is approved for A/E’s action

### Submittal Transmittal: Contractor shall include a transmittal with each submittal package.

#### Address no more than one topic, or related topics, on a single transmittal (i.e., mechanical items shall not be submitted with electrical items; miscellaneous specialties shall not be grouped; shoring shall be submitted separate from foundations).

#### Record relevant information including, but not limited to: the requested review return date (in order to maintain the construction Progress Schedule) and for Shop Drawings, variations from the requirements of the Contract Documents.

#### Provide the minimum number of each required submittal as noted in the Contract Documents and/or as follows:

##### Shop Drawings: one (1) PDF

##### Product data: one (1) PDF

##### Samples: five (5) samples

##### Mock‑ups: As required by the Contract Documents

##### Reference the Contract Documents for additional submittal requirements

#### Material and Color Samples: Submit samples of actual materials and colors.

##### Where variation in color, pattern, texture or other characteristics are inherent in the material, submit no less than four (4) variations of each sample to show approximate limits of the variations.

### Portable Document Format (PDF) Requirements:

#### All documents are to be created as PDF files from the original source files, unless approved otherwise in writing by Owner.

#### The CAD printer shall be Autodesk DWG to PDF.pc3 print configuration.

##### Layer information shall not be included.

#### All documents are to be created with a resolution of not less than 300 dpi.

#### All fonts are to be embedded in the PDF.

#### When compression is used, the algorithm must be LZW, CITT Group 4, or PackBits.

#### The PDF document size must be the same as the original document size if the document were printed (e.g., a 24”x36” print should have a PDF sheet size of 24x36).

#### Each document must be submitted as a single file.

##### A single O&M product reference is one file.

##### A single drawing is one file.

##### A document larger than 11”x17” is defined as single document and is one file.

### A/E’s Action: Except for submittals provided for the Owner’s information, the A/E will: review each submittal, mark each submittal with a uniform self-explanatory action stamp indicating action taken, and return promptly. Typically action stamps indicate:

#### Accepted without exception;

#### Subject to noted corrections;

#### Returned for re-submittal after correction; and

#### Rejected as non-compliant with the Contract Documents.

### Compliance with Contract Documents requirements is the Contractor’s responsibility.

#### A/E’s approval of submittals does not relieve the Contractor from responsibility for a proper installation, compliance with applicable codes, or coordination of the Work.

#### All submittals required by the Contract Documents will be reviewed by the Owner for CAD drafting compliance, PDF compliance, and to determine completeness of the documents provided.

## SHOP DRAWINGS

### General: Shop Drawing submittals are defined in the General Conditions and include, but are not limited to, product data, samples and mock-ups, and layout drawings.

#### Do not reproduce Contract Documents as Shop Drawings.

#### For CAD Shop Drawing submittals, see 01 77 00 “Closeout Procedures.”

### Product Data: Product data includes manufacturer's printed installation instructions, catalog cuts, standard color charts, rough-in diagrams and templates, standard wiring diagrams, and performance curves.

#### Submittal of standard product data is acceptable only when specific reference to the requirements of the Contract Documents is included. Submit specially prepared manufacture’s product data when standard product data is insufficient.

#### Mark each product data submittal and show the following information:

##### Compliance with specified product requirements, including LEED requirements

##### Compliance with any specified industry standards and testing agency standards, with testing agency labels and seals

##### Manufacturer's printed recommendations

##### Applicable choices and options

##### Notation of coordination requirements

##### Notation of dimensions established by field measurement, as appropriate

### Samples and Mock-ups: Samples include, but are not limited to, actual colors, materials and products to be provided. Mock-ups include field installations and partial assemblies of components.

#### Prepare samples to facilitate review. Provide the following information:

##### Generic description of the sample

##### Source of the sample

##### Confirmation of availability and delivery time

#### Where samples are for selection of appearance characteristics from a range of standard choices, submit a full set of choices for the material or products.

#### Maintain sets of approved samples and mock‑ups at the Project site for quality comparisons throughout the course of construction.

### Layout Drawings: Drawings include, but are not limited to, fabrication and installation drawings, layouts, schematics, diagrams, schedules, patterns, and templates.

#### Submit drawings drawn to accurate scale. Indicate, at a minimum, the following information:

##### Dimensions

##### Identification of products and materials included

##### Compliance with product installation requirements and/or industry standards

##### Notation of coordination requirements

##### Notation of dimensions established by field measurement

For projects that require Coordinated Shop Drawings, include the following language up to Ceiling Layout Drawings and modify as necessary for the Work of the Project. Otherwise, delete this language. Consult with the University’s Project Manager.

### Coordinated Shop Drawings:

#### Contractor shall coordinate the Work and require the Subcontractors to prepare and submit CAD (Computer Aided Drafting) composite coordinated Shop Drawings at a scale not less than 1/4" = 1'- 0". The coordinated Shop Drawings shall clearly show: how the Work is to be installed in relation to the work of the other Subcontractors including, but not limited to, the structural and the suspended ceiling Subcontractors; all systems routings, sizes and components; space for disassembly and/or removal of major equipment requiring maintenance; access to products and equipment that require periodic maintenance including, but not limited to, cable trays, pull boxes, valves, dampers, switches, motors, filters, control components; and that maintenance access is adequate and in accordance with the requirements of Authorities Having Jurisdiction. The requirements of this Section E shall apply to all mechanical and electrical rooms and tunnels.

##### Contractor, working through the Contractor’s mechanical Subcontractor, shall: coordinate the mechanical systems and equipment in relationship with other Subcontractor systems and equipment and the building components; and determine if the scheduling sequence and coordination of installations and movement and positioning of large equipment into the building are important to the efficient flow of the Work. The mechanical Subcontractor will at a minimum prepare drawings indicating the following:

###### Planned piping layout showing valve locations and valve-stem movement

###### Clearances for installing and maintaining insulation

###### Access doors

###### Equipment and accessory service connections and support details

###### Fire-rated wall and floor penetrations

###### Accessories such as sizes and location of concrete pads and bases

###### Penetrations in floors, walls, and ceilings and their relationship to other penetrations and installations

###### All equipment requiring maintenance access from ladders six feet or more in height, or from scaffolding

##### Contractor, working through the Contractor’s HVAC Subcontractor, shall prepare drawings indicating the location, size, and elevation of supply and exhaust systems ductwork and diffusers; fire and smoke dampers; ventilation equipment including terminal boxes, fans, and motors with VFD’s; seismic bracing; and access doors in ceilings. Coordinate equipment and dampers to avoid maintenance access conflicts with built-in work below (e.g., millwork and equipment).

##### Contractor working through the Contractor’s plumbing and piping Subcontractor shall prepare drawings indicating location, size, and elevation of piping, valves, controllers and headers, cleanouts, guides and rollers, expansion joints, seismic bracing, access doors in ceilings, and fixtures and equipment. Avoid routing plumbing through electrical and data/communications rooms.

##### Contractor, working through the Contractor’s sprinkler Subcontractor, shall prepare drawings indicating location, size, and elevation of the complete sprinkler system including supply and cross mains routing, valves, seismic bracing, and standpipes. Coordinate location of sprinkler heads on the ceiling layout plans.

##### Contractor working through the Contractor’s electrical Subcontractor and fire alarm Subcontractors, shall prepare drawings indicating the location, size, and elevation of primary distribution conduit runs, sleeves, pull boxes, junction boxes, CATV boxes, cable tray, seismic bracing, electrical equipment and panels(with working clearances), and fixtures including sound system speakers and terminal cabinets.

##### Electrical panels have been purposely located and have priority for indicated locations. Mechanical and plumbing installations provide shall provide all required offsets to ensure that electrical panels are installed in the indicated locations.

#### Contractor shall arrange meetings with its Subcontractors to resolve any apparent conflicts on the coordinated Shop Drawings.

#### For Owner’s information, submit a composite CAD Shop Drawing, showing the work of each participant Subcontractor at the conclusion of coordination of each logical component of the Work.

##### CAD backgrounds will be provided by the Owner, as reasonably required by Contractor.

For projects that do not require Ceiling Layout Drawings, delete the following paragraph. Consult with the University’s Project Manager.

### Ceiling Layout Drawings: Contractor shall submit for Owner’s review detailed reflected ceiling layout drawings at a scale not less than 1/8” = 1’– 0” showing gypsum wallboard soffits and headers with heights, and locations of access doors, roof openings, HVAC diffusers, sprinkler heads, fire alarm devices, lights, and other ceiling mounted appurtenances.

# PRODUCTS (Not Used)

# EXECUTION (Not Used)

END OF SECTION