SECTION 013000 – SUBMITTAL PROCEDURES

Latest Edition: 05/28/2024. See Underlined Text for Latest Edits.

(Engineer shall edit specifications and blue text in header to meet project requirements. This includes but is not limited to updating Equipment and/or Material Model Numbers indicated in the specifications and adding any additional specifications that may be required by the project. Also turn off all <u>Underlines</u>)

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. This Section includes administrative and procedural requirements for submittals by the Contractor as required by the contract documents.

1.3 DEFINITIONS

- A. Action Submittals: Written and graphic information and physical samples that require Architect's responsive action. Action submittals are those submittals indicated in individual Specification Sections as "action submittals."
- B. Informational Submittals: Written and graphic information and physical samples that do not require Architect's responsive action. Submittals may be rejected for not complying with requirements. Informational submittals are those submittals indicated in individual Specification Sections as "informational submittals." Informational Submittals will be acknowledged.
- C. Closeout Submittals: Written and graphic information regarding the operations and maintenance of a product or system, and that do not require Architect's responsive action. Closeout submittals are those submittals indicated in individual Specification Sections as "closeout submittals." Closeout Submittal will be acknowledged.
- D. Shop Drawings, Product Data and Samples: Instruments prepared and submitted by Contractor, for Contractor's benefit, to communicate to Architect the Contractor's understanding of the design intent, for review and comment by Architect on the conformance of the submitted information to the general intent of the design. Shop drawings, product data and samples are not Contract documents. Drawings, diagrams, schedules and illustrations, with related notes, are specially prepared for the Work of the Contract, to illustrate a portion of the Work.

- E. Product Data: Standard published information ("catalog cut sheets") and specially prepared data for the Work of the Contract, including standard illustrations, schedules, brochures, diagrams, performance charts, instructions and other information to illustrate a portion of the work.
- F. Samples: Physical examples that demonstrate the materials, finishes, features, workmanship or and other characteristics of a portion of the Work. Accepted samples shall service as quality basis for evaluation the Work.
- G. Other Submittals: Technical data, test reports, calculations, surveys, certifications, special warranties and guarantees, operation and maintenance data, extra stock and other submitted information and products shall also not be considered Contract Documents but shall be information from Contractor to Architect to illustrate a portion of the Work for confirmation of understanding the design intent.
- H. e-Builder: The University employs the e-Builder Construction Project Management System. The software enables members to manage work via a web based graphical interface. Owner will establish project specific page on e-Builder with project specific members. The site login address is https://app.e-builder.net/.
- I. Portable Document Format (PDF): An open standard file format licensed by Adobe Systems used for representing documents in a device-independent and display resolution-independent fixed-layout document format.
- J. XLS: A file format created by Microsoft for use with Microsoft Excel which is a spreadsheet program that presents table of values arranged in rows and columns.

1.4 SUBMITTAL SCHEDULE

- A. Submittal Schedule: Contractor shall prepare and submit a Submittal Schedule which lists submittal items per the product specifications for review and approval by the Architect. Contractor shall allow seven (7) days for Architect and University review. The Submittal Schedule shall identify all specified submittals to be made and shall serve as a checklist for submittals. Arrange the submittals in numerical order by specification section. Include time required for review, ordering, manufacturing, fabrication, and delivery when establishing dates. Include additional time required for making corrections or revisions to submittals noted by Architect and additional time for handling and reviewing submittals required by those corrections.
 - 1. Use the Preliminary Project Submittal Register (when provided by the Architect) as a basis for submittals required to be submitted, including requirements for concurrent submittals, and complex submittals which may require additional review time by the Architect at Initial Review.
 - 2. Coordinate Submittal Schedule with list of subcontracts, the Schedule of Values, and Contractor's construction schedule.
 - 3. Format: Submit the Submittal Schedule as a Microsoft Excel file. Use the Universityprovided excel template which can be found in the eBuilder submittal folder.
 - 4. The first submittal shall be the Submittal Schedule.
 - 5. Review of any submittal without submission and approval of submittal schedule does not relieve Contractor of responsibility to provide Submittal Schedule for approval.

- 6. Contractor shall review Submittal Register and supplement as required to provide complete Submittal Schedule for review and approval.
- 7. Contractor shall revise Submittal Schedule as required to include addition or deletion of submittals during project duration.

1.5 SUBMITTAL FORMATS

- A. Action Submittals: Assemble all Action Submittals for each specification section into a single Submittal Package for submission into eBuilder unless otherwise specified or agreed to during the Submittal Schedule review. Failure of Contractor to assemble all Action Submittals in single package may result in Architect withholding action on submittal(s) until associated submittal(s) required by applicable specification section are received.
 - 1. Product Data can be submitted as a separate Submittal Item before or concurrent with Shop Drawings and before or concurrent with Samples unless otherwise noted in individual specification sections. Product data, shop drawings, color charts and/or samples can be submitted as a single submittal where appropriate.
 - 2. Each Action Submittal shall clearly indicate the products that will be provided by the contractor, including indicating selected options when specified. Where published data sheets are provided which indicate the availability of multiple products or multiple options/selections for products, clearly mark the submittal using arrows, clouds, boxes, or highlighting to indicate intended options and selections for each product.
 - 3. Action submittals shall not include manufacturer's warranty and/or operation and maintenance instructions. This information shall be included in the project's operation and maintenance manual submittal.
- B. Informational and Closeout Submittals: Submit Informational and Closeout Submittals in separate Submittal Package as applicable rather than in single Action Submittal package described above.
- C. Processing Submittals: Submittals shall be processed electronically using e-Builder. Transmit all submittals from Contractor to Architect via e-Builder, unless otherwise directed. Submittals received from sources other than the Contractor will be returned without action. Include all information specified below for identification of submittals.

1.6 <u>SUBMITTAL IDENTIFICATION FORM</u>

- A. Submit each Submittal Item with <u>the standard UMB</u> Submittal Identification Form, <u>as the first</u> page of the submittal file, including the following information for each submittal:
 - 1. Project name and University project number.
 - 2. Submittal Title and Revision
 - a. Submittal name shall match eBuilder Submittal Register.
 - 3. Specification Section
 - a. Include subsection if project uses condensed specifications.
 - 4. Submission date.
 - 5. Name of Architect <u>or Primary Consultant</u>.
 - 6. Name of Contractor.
 - 7. Names of subcontractor <u>or firm that prepared the submittal as applicable</u>.

- 8. Submittals not including a Submittal Identification Form will be returned as "Not Reviewed".
- B. <u>The Submittal Identification Form shall be updated by each reviewer to show review action, notes, signature, and date.</u>
- C. <u>The Submittal Identification form shall remain the first page of the submittal throughout the review process.</u>

1.7 <u>CONTRACTOR SUBMITTAL COVER SHEET</u>

- A. Contractor, subcontractor or vendor cover sheet shall include the following:
 - 1. Project name and University project number.
 - 2. Submission date.
 - 3. Name and address of Contractor.
 - 4. Name of firm or entity that prepared submittal.
 - 5. Names of subcontractor, manufacturer, and supplier as applicable.
 - 6. <u>Category : Action or Informational.</u>
 - 7. Specification section.
 - 8. Unique submittal title, including revision identifier.
 - 9. Type of submittal (product data, test report, etc.).
 - a. When a submittal item includes multiple types of submittals (Product Data, Shop Drawings, Qualifications, etc) note all that apply.
 - b. eBuilder only allows selection of one type of submittal. When multiple submittal types are submitted together, choose the category that is the most explanatory.
 - 10. All listed information shall be identical to that listed in the approved <u>eBuilder Submittal</u> <u>Register</u>.
 - 11. Other necessary identification.
 - 12. Contractor's certification that information submitted complies with requirements of the Contract Documents.
- B. Identify each element in a Submittal Item by a unique identifier that can be used to clearly correlate the submittal with Contract Drawings such as:
 - 1. Specifications article and paragraph, bullet,
 - 2. Drawing sheet number, detail, or schedule,
 - 3. Room number,
 - 4. Assembly or Equipment number,
 - 5. Other pertinent identifying information
- C. On the Submittal Identification Form, Record deviations from Contract Document requirements, including minor variations and limitations. Include Contractor's certification that information submitted complies with requirement of the Contract Documents.
- D. Input each Submittal Item using the eBuilder Submittal Module with identical information as found on the approved Submittal Schedule.
- E. Options: When the specification does not identify a manufacturer's specific feature, such as color, provide options available for selection by the Architect.

1.8 SUBMITTAL PDF FILE REQUIREMENTS

- A. PDF Submittals: Prepare submittals as PDF package, incorporating complete information into each PDF file.
- B. Submitted file shall be a searchable PDF electronic file.
- C. Bookmarks: Include bookmarks for files larger than 15 pages with bookmarks for each product in the submittal file. Label each product bookmark with the UMB Article # and Title. See examples below and sample bookmarks in Part 3:
- D. Example:
 - 1. 2.2 Shut Off Valves
 - 2. 2.4 Check Valves
 - 3. 2.5 Special Valves
- E. Clearly identify submitted products and any selected options and selections for each product when multiple options are shown in submitted product data. Mark the selections in the pdf using arrows, clouds, boxes or highlighting.
- F. Owner Selected Options: When the specification does not identify a manufacturer's specific feature, such as color, provide options available for selection by the Architect and Owner.
- G. A submittal must be complete without any external links. Hyperlinks to documents on the web are not allowed and are not acceptable as a substitution for product data.
- H. Submittal File Names
 - 1. Submittal file names shall follow the convention:
 - a. [UMB Project Number][UMB specification section number][submittal title].pdf.
 - 2. For projects using condensed specifications:
 - a. [UMB Project Number][UMB division number, article number][submittal title].pdf.
 - 3. Use short titles to avoid long file names while still remaining identifiable when compared to the eBuilder Submittal Register. Provide revision number where applicable.
 - 4. <u>See examples below:</u>
 - a. <u>Full Version Specification:</u>
 - 1) <u>19-357 087100 Door Hardware.pdf</u>
 - 2) <u>19-357 230523 Valves for HVAC Piping Systems.pdf</u>
 - b. <u>Condensed Specification:</u>
 - 1) <u>19-357 22 2.6 Plumbing Valves.pdf</u>
 - 2) 19-357 23 2.2 HVAC Valves R1.pdf
 - 5. <u>Contractor's file names shall not be altered by the A/E and UMB except adding the A/E and UMB Initials (XXX) at each review step. See examples below:</u>
 - a. <u>Full Version Specification:</u>
 - 1) <u>19-357 087100 Door Hardware AE.pdf</u>
 - 2) 19-357 230523 Valves for HVAC Piping Systems AE UMB.pdf
 - b. <u>Condensed Specification:</u>
 - 1) <u>19-357 22 2.6 Plumbing Valves AE.pdf</u>
 - 2) <u>19-357 23 2.2 HVAC Valves R1 AE UMB.pdf</u>

1.9 SUBMITTAL PROCEDURES

- A. Prepare and submit types of submittals with submittal items as required by individual Specification Sections. Examples of types of submittals include product data, shop drawings, color charts and/or samples. Each submittal shall be one e-Builder item.
- B. Use the eBuilder Submittal Module to create each Submittal Item. Persons entering submittals shall be trained by UMB on the eBuilder Submittal Module prior to entering the Submittal Schedule and any other submittals. Upload the pdf of the submittal directly to the e-Builder Submittal Module.
- C. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
 - 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
 - 2. Submit all submittal items required for each Specification Section concurrently unless partial submittals for portions of the Work are indicated on approved submittal schedule.
 - 3. Submit action submittals and informational submittals required by the same Specification Section as separate submittal items.
 - 4. Coordinate transmittal of submittals for related parts of the Work specified in different Sections so processing will not be delayed because of need to review submittals concurrently for coordination.

EDIT FOR PROJECT AND CLEARLY PROVIDE INSTRUCTIONS TO CONTRACTOR IN PRELIMINARY SUBMITTAL REGISTER

- a. Certain submittals need to be reviewed concurrently, including but not limited to, the following:
 - 1) 087100 Door Hardware with 281300 Access Control System
 - 2) 042100 Brick and Mortar.
 - 3) 090000 Wall and floor finishes for coordination of colors.
- b. Submittals that require selection of colors will be reviewed. Color selection may not be provided until all submittals requiring color selection have been received and reviewed, and color selections have been approved by the Architect.
- c. Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
- D. Submittal Comments: Submittal comments entered on the submittal by the Supplier, CM / Contractor, Consultant (A/E), and UMB Personnel shall follow the assigned color codes, based on using Bluebeam Colors, as follows:
 - 1. Supplier, CM / Contractor: Use color Dark Green
 - 2. Consultant (A/E): Use color Red
 - 3. UMB: Use color Blue
- E. Processing Time: Allow time for submittal review, including time for resubmittals, as follows: Time for review shall commence on Architect's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the work to permit processing, including resubmittals.
 - 1. Initial Review: Allow 15 working days for initial review of each submittal (which includes University's review)

- a. 10 business days for AE review
- b. 5 business days for University Review
- 2. Complicated submittals may be allocated additional time as noted on the approved Submittal Schedule. Allow additional time if coordination with concurrent submittals is required. The Architect will advise Contractor when a submittal being processed must be delayed for coordination.
- 3. Initial Review of Concurrent Submittals: Allow additional time if coordination with concurrent submittals is required. Architect will advise Contractor when a submittal being processed must be delayed for coordination.
- 4. Initial Review of Complex Submittals: At the time of review and approval of the Submittal Schedule, the Architect will advise Contractor of certain submittals that are substantially complicated or require multiple reviewers and need an extended initial review time, including but not limited to, the following:

EDIT FOR PROJECT AND PROVIDE INSTRUCTIONS TO CONTRACTOR IN PRELIMINARY SUBMITTAL REGISTER

- a. 081113 Hollow Metal Doors and Frames (21 days)
- b. 084413 Glazed Aluminum Curtainwall (30 days).
- c. 087100 Door Hardware (21 days).
- d. 123600 Wood Laboratory Furniture (21 days)
- e. 142100 Elevators (45 days) includes Elevator Inspector review.
- f. 210000 Fire Protection Submittal (45 days) includes Fire Marshal review.
- g. 230923 Control Sequences (21 days)
- h. 281300 Access Control System (21 days)
- i. 282300 Video Surveillance (21 days)
- j. 283111 Digital Addressable Fire-Alarm System (45 days) includes Fire Marshal review.
- 5. Resubmittal Review: Allow 15 days for review of each resubmittal.
- F. Resubmittals: Make resubmittals in same form as initial submittal.
 - 1. Note date and content of previous submittal only (do not include entire rejected submittal).
 - 2. <u>Note date and content of revision in Submittal Identification Form. Clearly indicate extent</u> of revision on Contrator's Cover Sheet. Provide responses to Architect's review comments as appropriate to address concerns raised. Annotate the product data sheets, shop drawings, calculations, etc. to clearly indicate compliance with the original specification requirements and to demonstrate compliance with review comments.
 - 3. Resubmit submittals until they are marked with approval notation from Architect's action stamp.
- G. Delegated Design Services Certification: In addition to other required submittals, submit digitally-signed PDF electronic file paper copies of certificate, signed and sealed by the responsible design professional.
- H. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities.

I. Use for Construction: Establish and maintain access to eBuilder so that all submittals are available for use on Project site. Use only final action submittals that are marked with approval notation from Architect's action stamp.

1.10 CONTRACTOR'S REVIEW OF SUBMITTALS

- A. Contractor's Review of Submittals: Prior to submission to Architect for review, Contractor shall collect complete submittal documentation from the Sub/Manufacturer, create the Submittal Package, and assign Submittal Items to it. Each Submittal Item shall be reviewed by the Contractor.
 - 1. Upon receipt of a submittal from the vendor the contractor shall be responsible for reviewing and verifying the submittal is complete and complies with all the requirements of the construction documents before forwarding the submittal to the CM/GC. If the submittal does not comply, the contractor shall identify the deficiencies and promptly return the submittal to the vendor for correction. If the incomplete or incorrect submittal is forwarded on by the CM/GC to the A/E and/or UMB, the CM/GC or contractor shall be responsible for any cost issues resulting from re-processing the submittals.
- B. The Contractor shall <u>include</u> one Submittal Identification Form for each Submittal Item. The Contractor shall certify that submittals have been reviewed and approved. Note corrections and field dimensions. <u>Mark each Submittal Item with a uniform approval stamp including the name of the reviewer and the date of the Contractor's approval and sign each Submittal Item. Submittals without stamp and signature will not be reviewed and will be returned. Electronic signatures are acceptable. Contractor's submittal approval shall certify the following actions by Contractor:</u>
 - 1. Field measurements have been determined and verified.
 - 2. Conformance with requirements of Contract Drawings and Specification is confirmed.
 - 3. Catalog numbers and similar data are correct and indicated with arrow or highlighting; items not used, but on same page shall be crossed out.
 - 4. Work being performed by various subcontractors and trades is coordinated.
 - 5. Field construction criteria have been verified, including confirmation that information submitted has been coordinated with the work being performed by others for the University and actual site conditions.
 - 6. All deviations from requirements of Drawings and Specifications have been identified and noted.
 - 7. Submittals not certified by being stamped and signed by Contractor electronically on the Submittal Identification Form will be returned without action, as will submittals which, in the Architect's opinion, have not been adequately reviewed and coordinated by Contractor.
- C. Changes in Work: Changes in the Work shall not be authorized by submittal review actions. No review action, implicit or explicit, shall be interpreted to authorize changes in the Work. Changes shall only be authorized by separate written direction from the University, in accordance with the Contract General Conditions. However, to minimize the ordering of incorrect equipment/parts, notes may indicate forthcoming changes via CDC.
- D. Submittal Comments: Submittal comments entered on the submittal by the Supplier, CM / Contractor, shall follow the assigned color codes:
 - 1. Supplier, CM / Contractor: Dark Green

REVIEW OF SUBMITTALS BY ARCHITECT AND UNIVERSITY 1.11

- Review of Submittals by Architect and University: Submittals shall be a communication aid A. between Contractor and Architect by which interpretation of Contract Documents requirements may be confirmed in advance of construction.
 - Reviews by University, Architect and Architect's consultants shall be only for general 1. conformance with the design concept of the Project and general compliance with the information given in the Drawings and Specifications.
 - The Architect's review shall not be construed as an "approval," or to relieve the 2. Contractor(s) and material suppliers of responsibility for errors or omissions in the submitted documents.
 - Acceptance of a specific item does not include acceptance of the assembly of which the 3. item is a component.
 - 4. Except for submittals for record, information or similar purposes, where action and return is required or requested, the Architect will review each submittal, mark to indicate action taken, and return promptly via the web-based software (e-Builder) system.
- Architect's Review Action: Architect will mark each submittal with a uniform, self-explanatory B. action. Architect's action may be a stamp on the Contractor's Submittal Identification Form or a separate review sheet on Architect's standard form.

< The below listing of submittal actions are the University standard stamp action and the abbreviation/notation for eBuilder. If A/E's stamp abbreviation/notations differ provide the equivalent as highlighted below.>

- Submittal will be appropriately marked as follows to indicate the action taken: 1.
 - Action 1 APP (no exceptions taken) Means fabrication, manufacture, or construction a may proceed providing submittal complies with Contract Documents.
 - Equivalent to Architect's stamp Action <Insert Note Here>. 1)
 - Action 2a AAN (note markings; no resubmission required): Means fabrication, b. manufacture, or construction may proceed providing submittal complies with Architect's notations and Contract Documents. (Note: If Contractor cannot comply with notations, make revisions and resubmit.)
 - Equivalent to Architect's stamp Action <[Insert Note Here]. 1)
 - Action 2b RFR (note markings/resubmit for record): Means fabrication, c. manufacture, or construction may proceed; however, submittal did not fully demonstrate full extent of all conditions, details and coordination with other surrounding work and therefore requires additional information and rework as noted. Resubmit shop drawings for final Action 1 or 2. Should Contractor proceed with fabrication, manufacturing or construction, it shall do so at its own risk. 1)
 - Equivalent to Architect's stamp Action < Insert Note Here>.
 - Action 3 A&R (amend and resubmit): This is the equivalent to R&R (revise and d. resubmit). Means submittal does not comply with design intent of Contract Documents. Do not use submittals stamped Action 4. Make revisions and resubmit. Equivalent to Architect's stamp Action <[Insert Note Here]. 1)
 - Action 4 REJ (rejected, submit specified item or resubmit with related assembly e. items): Means submittal varies from specified item or system specified in Contract Documents and is not acceptable for use on the project. Do not use submittals stamped Action 5. Make revisions and resubmit.
 - Equivalent to Architect's stamp Action <a>

 1)

- f. Action 6 NAR (no action required): Means documents have not been reviewed by Architect and submittal is returned to Contractor for several possible reasons: submittal not requested, submittal not complete, Submittal Transmittal form is not included, submittal not coordinated, or submittal bears no resemblance to design intent. 1)
 - Equivalent to Architect's stamp Action <[Insert Note Here].
- 2. Do not permit submittals marked "Rejected or Revise and Resubmit" to be used at the Project site, or elsewhere where Work is in progress.
- Any work performed prior to receiving a fully approved submittal shall be done at the 3. Contractor's risk and shall be subject to being replaced if Contract requirements are not met.
- 4. Submittal Comments: Submittal comments entered on the submittal by Consultant (A/E), shall follow the assigned color codes:
 - Consultant (A/E): Red a.
- C. University Review: The University will review the submittal, stamp, and upload the stamped submittal to e-Builder.
 - Submittal Comments: Submittal comments entered on the submittal by UMB Personnel 1. shall follow the assigned color codes, based on using Bluebeam Colors, as follows:
 - UMB: Blue a.
- D. Final Review Action: The Architect will provide final Action for the submittal and return stamped submittal to the Contractor.
- Contractor Action: The Contractor will be notified through eBuilder that the submittal is ready E. for his action. The Contractor shall incorporate all review comments and resubmit if so indicated by the eBuilder and Architect's actions and markings.
- F. **Contract Requirements:**
 - Review actions by Architect and Architect's consultants or the University shall not relieve 1. the Contractor from compliance with requirements of the Contract Drawings and Specifications.
 - Acceptance of submittals with deviations shall not relieve Contractor from responsibility 2. for additional costs of changes required to accommodate such deviations.
 - Deviations included in submittals without prior acceptance will be considered an exception 3. from review of submittals whether noted or not on returned copy.
 - 4. No review action, implicit or explicit, shall be interpreted to authorize changes in the Work. Changes shall only be authorized by separate written Change Order or Field Instruction, in accordance with the Contract General Conditions.
 - When professional certification of performance criteria of materials, systems or equipment 5. is required by Contract Documents, the Architect shall be entitled to rely upon accuracy and completeness of such calculations and certifications.
- Resubmittals: Subject to same terms and conditions as original submittal. G.
 - The University will not accept excessive resubmittals. 1.
 - Should excessive resubmittals be required, Contractor may be subject to reimburse the 2. University for Architect's accounts for time spent in processing additional resubmittals at their contractual hourly rate.

1.12 SUBMITTAL REQUIREMENTS

- A. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment included in the specification section.
 - 1. If information must be specially prepared for submittal because standard published data are unsuitable for use, generate specific shop drawings for the submittal, and title the submittal as product data.
 - 2. Mark each submittal to show which products and options are applicable. Clearly indicate all aspects of the proposed items, including material selections and all options specified. Failure to indicate such details could result in the submittal being returned as incomplete.
 - 3. Include the following information, as applicable:
 - a. Manufacturer's catalog cuts.
 - b. Manufacturer's product specifications.
 - c. Standard color charts.
 - d. Statement of compliance with specified referenced standards.
 - e. Testing by recognized testing agency, including credentials.
 - f. Application of testing agency labels and seals.
 - g. Notation of coordination requirements.
 - h. Availability and delivery time information.
 - 4. For equipment, include the following in addition to the above, as applicable:
 - a. Wiring diagrams that show factory-installed wiring.
 - b. Printed performance curves.
 - c. Operational range diagrams.
 - d. Clearances required to other construction, if not indicated on accompanying Shop Drawings.
- B. Shop Drawings: Prepare and submit Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data, unless submittal based on Architect's digital data drawing files is otherwise permitted.
 - 1. Preparation: Fully illustrate requirements as shown in the Contract Documents. Include the following information, as applicable:
 - a. Identification of products.
 - b. Schedules.
 - c. Compliance with specified standards.
 - d. Notation of coordination requirements.
 - e. Notation of dimensions established by field measurement.
 - f. Relationship and attachment to adjoining construction clearly indicated.
 - g. Seal and signature of professional engineer if specified.
 - 2. e-Builder: Submit one PDF copy of each submittal, with any scaled drawings capable of being printed as a full-size drawing.
- C. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other materials.
 - 1. Transmit Samples that contain multiple, related components such as accessories together in one submittal package.
 - 2. Sample Identification: Permanently attach label on unexposed side of Samples that includes the following:
 - a. Project name and submittal number.
 - b. Generic description of Sample.

- c. Product name and name of manufacturer.
- d. Sample source.
- e. Number and title of applicable Specification Section.
- f. Specification paragraph number and generic name of each item.
- 3. Transmittal: Provide Submittal Identification Form and include complete submittal information indicated. Include photographic image(s) illustrating Sample characteristics, and Sample Identification information for record.
- 4. e-Builder: Prepare transmittal in PDF form, and upload to e-Builder. Enter required data in e-Builder to fully identify submittal.
- 5. Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
 - a. Samples that may be incorporated into the Work are indicated in individual Specification Sections. Such Samples must be in an undamaged condition at time of use.
 - b. Samples not incorporated into the Work, or otherwise designated as Owner's property, are the property of Contractor.
- 6. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.
 - a. Number of Samples: Submit two full sets of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. Architect will return one set with options selected.
- 7. Samples for Verification: Submit full-size units or Samples of size indicated, prepared from same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.
 - a. Number of Samples: Submit two sets of Samples. Architect will retain one Sample set; remainder will be returned. Retain one returned Sample set as a project record Sample.
 - 1) Submit a single Sample where assembly details, workmanship, fabrication techniques, connections, operation, and other similar characteristics are to be demonstrated.
 - 2) If variation in color, pattern, texture, or other characteristic is inherent in material or product represented by a Sample, submit at least three sets of paired units that show approximate limits of variations.
- D. Product Schedule (when required or applicable): As required in individual Specification Sections, prepare a written summary indicating types of products required for the Work and their intended location. Include the following information in tabular form:
 - 1. Type of product. Include unique identifier for each product indicated in the Contract Documents or assigned by Contractor if none is indicated.
 - 2. Manufacturer and product name, and model number if applicable.
 - 3. Number and name of room or space.
 - 4. Location within room or space.

- E. Qualification Data: Prepare and submit written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, contact information of architects and owners, and other information specified.
- F. Design Data: Prepare and submit written and graphic information indicating compliance with indicated performance and design criteria in individual Specification Sections. Include list of assumptions and summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Number each page of submittal.
- G. Certificates:
 - 1. Certificates and Certifications Submittals: Submit a statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity. Provide a notarized signature where indicated.
 - 2. Installer Certificates: Submit written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.
 - 3. Manufacturer Certificates: Submit written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.
 - 4. Material Certificates: Submit written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.
 - 5. Product Certificates: Submit written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.
 - 6. Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of Welding Procedure Specification and Procedure Qualification Record on AWS forms. Include names of firms and personnel certified.
- H. Test and Research Reports:
 - 1. Compatibility Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for primers and substrate preparation needed for adhesion.
 - 2. Field Test Reports: Submit written reports indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements in the Contract Documents.
 - 3. Material Test Reports: Submit reports written by a qualified testing agency, on testing with requirements in the Contract Documents.
 - 4. Preconstruction Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements in the Contract Documents.
 - 5. Product Test Reports: Submit written reports indicating that current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.

- 6. Research Reports: Submit written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project. Include the following information:
 - a. Name of evaluation organization.
 - b. Date of evaluation.
 - c. Time period when report is in effect.
 - d. Product and manufacturers' names.
 - e. Description of product.
 - f. Test procedures and results.
 - g. Limitations of use.
- 7. Corrective Action Report: Testing agency shall submit written documentation of any defects found and any corrective action taken, or proposed solutions.

1.13 DELEGATED-DESIGN SERVICES

- A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.
 - 1. If criteria indicated are insufficient to perform services or certification required, submit a written request for additional information to Architect.
- B. Delegated-Design Services Certification: In addition to Shop Drawings, Product Data, and other required submittals, submit digitally signed PDF file of certificate, signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional.
 - 1. Indicate that products and systems comply with performance and design criteria in the Contract Documents. Include list of codes, loads, and other factors used in performing these services.

DELETE PARAGRAPH BELOW IF IT DOES NOT APPLY

- C. BIM Incorporation: Incorporate delegated-design drawing and data files into BIM established for Project.
 - 1. Prepare delegated-design drawings in the same digital data software program, version, and operating system as original Drawings

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

Submittal Bookmark Example: The following bookmark example is based on using an outline type arrangement with each line linked to the appropriate submittal page:

- A. UMB Submittal Stamp
- B. CM/Contractor Transmittal

SUBMITTAL PROCEDURES

- C. CM/Contractor Replies (Resubmittal Only)
- D. Consultant's Comments
- E. Manufacturer's Transmittal
- F. Manufacturer's Replies (Resubmittal Only)
- G. Product Data
 - 1. Product A (Example for A: 2.2 Shut Off Valves)
 - 2. Product B (Example for B: 2.4 Check Valves)
 - 3. Product C (Example for C: 2.5 Special Valves)
- H. Fabrication Drawings
 - 1. Drawing 1
 - 2. Drawing 2
 - 3. Drawing 3
- I. Maintenance Data (Leave blank for submittal)
 - 1. Manufacturer's Maintenance Data [Include data in approved submittal for project manual]

END OF SECTION 013000