

Understanding Submittals

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You return from lunch and lying on your desk is a thick package of papers, drawings, and color samples. With a major project in construction, you immediately recognize what it is: a submittal. You remove the massive clip that holds it all together, check the transmittal, and begin to review it for compliance with the contract documents. But before delving too deeply into your review, there are some things you should understand about submittals and the submittal process.

Every design professional responsible for construction contract administration has experienced the task of reviewing submittals. As tedious as the job may be, the submittal is one of the design professional's best tools to ensure that a construction project is completed in accordance with the contract documents. However, some design professionals, and even some construction professionals (*i.e.* contractors, subcontractors, and construction managers) do not give submittals the full attention they deserve.

Generically, submittals can be defined as any item required to be delivered to the architect or engineer (A/E) as a requirement of the contract documents.

Most submittals are considered part of the quality *assurance* process, since the review occurs prior to the installation of the submitted item. This allows the design professional to catch problems before any product or material is ordered and installed on the project.

However, some submittals are considered a part of the quality *control* process, which follows the installation of a material or product. These include field inspection and testing reports and laboratory test results. Since these submittals occur after installation, if the submittal indicates noncompliance with contract requirements, the design professional may require the removal of the non-conforming product or material.

Types of Submittals

There are several types of submittals, but each can fall into one of four classifications:

- **Action Submittals:** Submittals that require a response (*i.e.* an "action") by the A/E.

- **Informational Submittals:** Submittals that do not require a response by the A/E unless the submittal does not comply with contract requirements.
- **Closeout Submittals:** Submittals given to the A/E to review at or near the end of the project as a condition of project closeout.
- **Maintenance Material Submittals:** Extra materials and parts required by the contract documents to be used by maintenance personnel to replace materials damaged as a result of normal building occupation.

It is easy to determine what constitutes a closeout or maintenance material submittal, but it is not quite so easy to distinguish action and informational submittals. That is why the contract documents (ideally the specifications) should classify applicable submittals as one or the other so the A/E and the contractor know what to do and expect when a submittal is delivered to the A/E. This can be accomplished using one of two methods.

The first method is to describe each type submittal (*e.g.* product data, shop drawings, certificates, etc.) specified in other sections of the project manual in Section 01 33 00 "Submittal Procedures" and then classify them as either action or informational submittals. For example, the Section could include articles titled "ACTION SUBMITTALS" and "INFORMATIONAL SUBMITTALS." Within each article would be a description of each type of submittal assigned to the class.

The problem with this first method is that once a submittal type is identified as action or informational in Section 01 33 00, then all submittals of that type specified in other sections are considered to have the same classification. Additionally, there may be instances where some submittals of one type may need to be action submittals while others of the same type may only need to be informational. For example, if product certificates are classified as action submittals in Section 01 33 00, then all product certificates required in other specification sections must be considered action submittals, even if some of the product certificates were intended to be informational.

If this first method is used, then other specification sections must either identify the submittal type under the same classification used in Section 01 33 00, which could lead to discrepancies, or delete any reference to the submittal classification in the other specification sections.

The second method is to identify the types of submittals and procedures under a general “SUBMITTALS” Article in Section 01 33 00 “Submittal Procedures,” but instead of classifying each submittal as action or informational in that Article, classify the submittals in the applicable specifications sections. For example, include in each specification section a list of required submittals under the appropriate article heading (*i.e.* “ACTION SUBMITTALS” and “INFORMATIONAL SUBMITTALS”) in PART 1 GENERAL. The Construction Specifications Institute’s (CSI) *SectionFormat* provides for this method and includes a list of the kinds of submittals that could be included under either type.

The benefit of this second method is that it reduces the level of effort required to coordinate the submittal requirements in individual sections with Section 01 33 00. Also, this allows more flexibility on the part of the A/E to assign submittals of the same type to different classifications if needed. It should be emphasized that contractors and design professionals handling the contract administration will need to carefully review the specifications upon receipt of each submittal to ensure they are processed in accordance with the contract specifications, but this should happen regardless of which method is used.

Specifying Submittals

Identifying the types and classes of submittals in the specifications is just the beginning of the process of specifying submittals. Many master guide specifications, as well as some manufacturer-prepared guide specifications, include all the submittals that could potentially be required. Without thorough examination of the master specifications’ content on submittals, the design professional will likely be the recipient of numerous requests for information (RFIs), unwanted submittals, or both.

When editing specification sections, it is important to retain only those submittals that are considered important to the A/E and relevant to the content remaining in the specification section. Retaining all or most of the submittals in a master specification section will create unnecessary work for both the contractor and the A/E with little or no benefit in return.

For example, if a project only requires two common 10-inch-square metal access panels for valve access in a

restroom, then is it necessary to retain submittal requirements for shop drawings and a product schedule? Probably not.

General Submittal Requirements

The general conditions of a contract may require that a contractor provide for the A/E’s review and approval a submittal schedule. AIA Document A201, *General Conditions of the Contract for Construction*, requires the contractor to submit one but does not provide any detailed criteria beyond coordination with the contractor’s construction schedule. To ensure the most benefit, the A/E may specify the specific format of the schedule and the timeframe in which it should be submitted.

Another aspect of submittals that should not be overlooked in the specifications is the length of time that the A/E has to process submittals. To ensure the A/E is given enough time, Section 01 33 00 should stipulate the maximum number of days the A/E should have to review submittals. If the submittal requires additional review by the A/E’s consultant, then additional time may be included, as long as the submittals requiring the additional time are identified.

In addition to the review time, the specifications should establish the format with which submittals should comply when they are submitted to the A/E for review. Like the A/E review time, the format should be specified in Section 01 33 00. The format description should, at a minimum, include transmittal requirements, review stamps, and number of copies.

Most master guide specifications will have these basic requirements in their standard submittals section; however, before editing the section, the specifier should review the owner’s general conditions and supplementary conditions. These documents, in some cases, may include general submittal requirements. If the A/E creates submittal requirements in the specifications without knowledge of the requirements in the general conditions, it may lead to discrepancies. If the owner’s general conditions do provide some requirements for submittals, there is no need to repeat them in the specifications, but it may be necessary to expand upon those requirements to suit the A/E’s office practices.

Electronic Submittals

To reduce paper and expedite the submittal review process, many A/E and contracting firms are utilizing methods that incorporate today's technology. These include electronic documents, such as the Portable Document Format (PDF), and building information model (BIM) file integration. Since the BIM option is drawing related, it is limited to shop drawing type submittals.

If electronic submittals are used, Section 01 33 00 should establish the requirements for format and transmission. Regarding format, for example, PDF documents should not have a security level that would prevent annotation of the files. Also, if multiple documents are submitted in a single file, a requirement to bookmark each document for easy navigation may be beneficial. Transmission of electronic submittals can include various methods.

The most common method of electronic submittal transmission is the email method, where submittal documents are attached to an email sent to the contractor, A/E, and consultants. It should be emphasized in the specification section, however, that proper channels of communication should be followed so that subcontractors and suppliers do not send submittals directly to the A/E and its consultants prior to review by the contractor.

To reduce overloading inboxes with emails containing large file attachments, submittal documents may be posted to a file transfer protocol (FTP) site that is shared by all parties. To inform others that submittal documents have been posted and are available for review, an email can be sent to inform the necessary individuals. A drawback to this method is in the control of access to files if access is permitted beyond the contractor and A/E—it is probable that a submittal can be altered by one party (e.g. subcontractor) while in review by another (e.g. architect).

Some contractors, A/E firms, or owners may utilize project management software that is internet-based and incorporates both transmission and tracking features. The transmission feature may include emails that have the submittals attached or emails that provide links to the documents uploaded by the originators. The tracking feature allows everyone with access to see the status of a submittal review.

Execution

Understanding submittals goes beyond just specifying requirements in the construction documents. Much of understanding submittals relies on proper execution and enforcement of the contract requirements. Individuals assigned construction contract administration responsibilities need to read, understand, and follow the requirements in the contract documents and ensure the contractor does the same.

Lax enforcement of the contract requirements may lead to additional work effort on part of the A/E, installation of defective or noncompliant work, or delay of the project. However, when the documents lack sufficiently detailed requirements, there may be very little recourse for the construction contract administrator as it is very difficult to enforce expectations.

To comment on this article, suggest other topics, or submit a question regarding specifications or construction documents in general, contact the author at ron@specsandcodes.com.

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