

C505

CA3 - SUBMITTALS

Processing Submittals

Gloria Rasmussen AlA

June, 2017





Credit(s) earned on completion of this course will be reported to AIA CES for AIA members. Certificates of Completion for both AIA members and non-AIA members are available upon request.

This course is registered with AIA CES for continuing professional education. As such, it does not include content that may be deemed or construed to be an approval or endorsement by the AIA of any material of construction or any method or manner of handling, using, distributing, or dealing in any material or product.

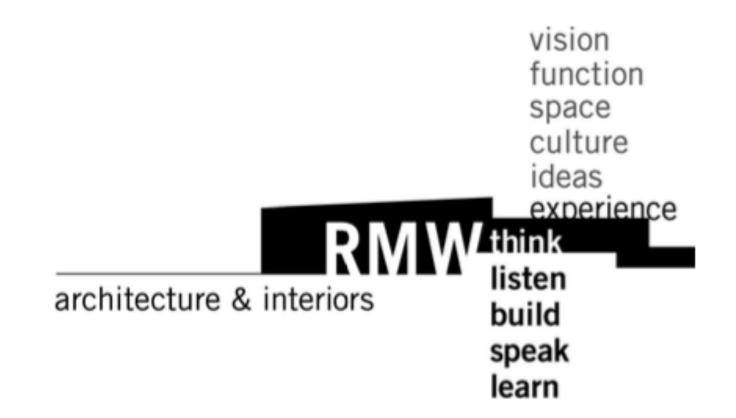
Questions related to specific materials, methods, and services will be addressed at the conclusion of this presentation.



Copyright Materials

This presentation is protected by US and International Copyright laws.

Reproduction, distribution, display and use of the presentation without written permission of the speaker is prohibited.



© RMW Architecture & Interiors 2017

Course Description



The contents of the course are as follows:

- Why are submittals required
- Contractual issues
- Control of the design
- Quality and cost control
- Submittals schedule
- Submittal procedures
- Types of submittals
- Reviewing the different types of submittals
- The Substitution request
- The Construction Manager's role.

Learning Objectives



At the end of the this course, participants will be able to:

- 1. Recognize the importance of submittals for controlling the design, cost, and schedule of the project and track their documentation in the construction documents (General Conditions and Specifications).
- 2. Understand the importance of the Submittal Schedule and learn how to use it.
- 3. Become familiar with the administration of submittals, including coordination with the consultants, the contractor, and the project schedule.
- 4. Become familiar with the types and processing of the different types of submittals: Action, Information, Delegated Design, LEED, Project Closeout, and Maintenance and processing Substitution Requests.

Module T3 - AIA Registered Talk - RMW copyright 2018

CONTENTS

T3 AIA Registered Courses | SUBMITTALS

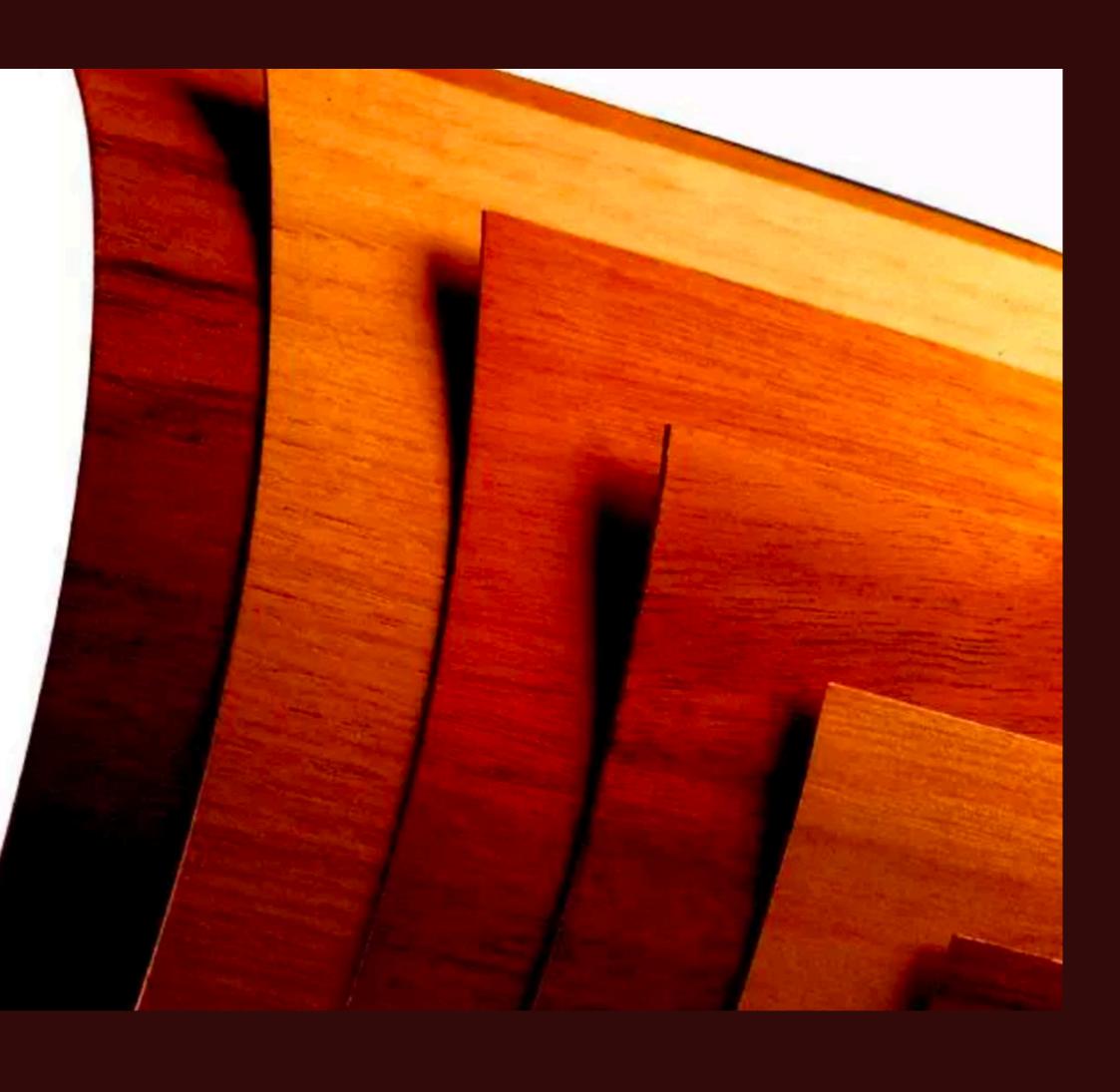
- Why are Submittals Required
 - Contractual issues
 - Control of the design
 - Quality and Cost Control
- Submittals Schedule
- Types of Submittals
- Submittal Procedures
- Substitution Request
- The Construction Manager's Role
- Reviewing the Different Types of Submittals

T3 AIA Registered Courses | SUBMITTALS

Our Contract Documents use the term "submittals" when referring to the "collection of different items and documents that the Contractor is required to submit."

The term "submittals" incorporates all the items that the Contractor is required to transmit to the Architect for review or further processing.

T3 AIA Registered Courses



submittals are a basic part of CA

Submittals represent the Contractor's interpretation of requirements in the Contract Documents.

- They show how the Contractor intends to fulfill these requirements.
- Reviewing submittals gives the Architect an opportunity to correct misunderstandings the Contractor might have about the Contract Documents.

Submittals include items such as:

- Construction Schedules
- Reports
- Applications for Payment
- Subcontractor's lists
- Warranties
- Punch list, etc.

Submittals are required almost by every section in the specifications.

The required submittals are typically **determined by the specifier** based on the office practice, standards, and the type of project, project team, construction contract, and other variables.

T3 AIA Registered Courses

Submittals are a vital component of the building process and are part of the Contract. Submittals do the following:

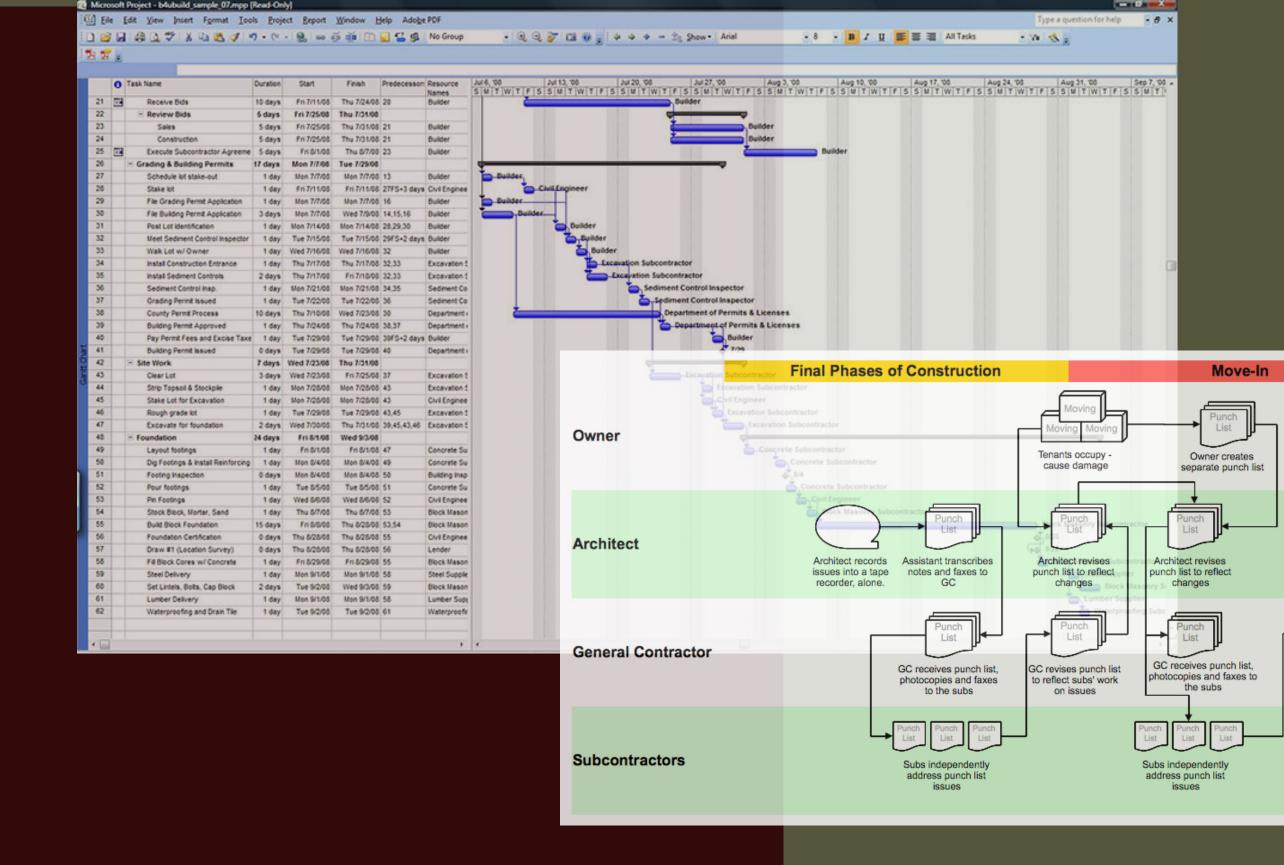
- Distribute information among the various parties involved in the Project;
- Represent the Contractor's interpretation of requirements in the Contract Documents;
- Indicate how the Contractor intends to fulfill these requirements.

T3 AIA Registered Courses

Submittals include items such as:

- Construction Schedules
- Reports
- Applications for Payment
- Subcontractor's lists
- Warranties
- the Punch List, etc.

Submittals are required almost by every section in the specifications.



T3 AIA Registered Courses | SUBMITTALS

- Sections in Division 01 require submittals related to **CA procedures**.
- Sections in the balance of the divisions include requirements for the products and methods of construction of the Project components.

- "Payment Procedures" Applications for Payment and the
 Schedule of Values.
- "Construction Progress
 Documentation" Schedules and reports, including Contractor's Construction Schedule.
- "Project Record Documents" Record Drawings, record
 Specifications, and record Product
 Data.

PROCUREMENT/ SUBMITTAL SCHEDULE

The Wetzikon Inn Kaffee & Lounge

Status Date: April 8, 2016

#	Submittal Description	Responsible Party	Lead Time (Days)	Date Required from Subcontractor	Forward to Architect	Date Required back from Architect	Forward to Subcontractor	Order Date	Delivery Date	Start Date
1	Cast-in-Place Concrete	GV Concrete	1	24-Dec-15	4-Jan-16	26-Jan-16	29-Jan-16	10-Feb-16	11-Feb-16	18-Feb-16
2	Precast Concrete Cap	Grand River Precast	25	8-Mar-16	15-Mar-16	6-Apr-16	11-Apr-16	21-Apr-16	26-May-16	3-Jun-16
3	Reinforcing Steel	Wasatch Steel	15	4-Dec-15	11-Dec-15	6-Jan-16	11-Jan-16	21-Jan-16	11-Feb-16	18-Feb-16
4	Masonry	Elevated Masonry	10	21-Dec-15	29-Dec-15	21-Jan-16	26-Jan-16	5-Feb-16	19-Feb-16	26-Feb-16
5	Structural Steel	Rocky Mountain Steel	20	10-Feb-16	17-Feb-16	10-Mar-16	15-Mar-16	25-Mar-16	22-Apr-16	29-Apr-16
6	Light Gage Metal Framing	Orca Acoustics	5	23-Mar-16	30-Mar-16	21-Apr-16	26-Apr-16	6-May-16	13-May-16	20-May-16
7	Wood Framing	Gates & Son's Framing	5	24-Mar-16	31-Mar-16	22-Apr-16	27-Apr-16	9-May-16	16-May-16	23-May-16
8	Pre-engineered Wood Trusses	Truss-Works	15	11-May-16	18-May-16	10-Jun-16	15-Jun-16	27-Jun-16	19-Jul-16	26-Jul-16
9	Architectural Casework	Old Growth Millwork	20	11-May-16	18-May-16	10-Jun-16	15-Jun-16	27-Jun-16	26-Jul-16	2-Aug-16
10	Exterior Trim, Shutters & Planters	Old Growth Millwork	15	16-Jun-16	23-Jun-16	18-Jul-16	21-Jul-16	2-Aug-16	23-Aug-16	30-Aug-16
11	Interior Standing & Running Trim	Old Growth Millwork	15	18-May-16	25-May-16	17-Jun-16	22-Jun-16	5-Jul-16	26-Jul-16	2-Aug-16
12	Waterproofing & Roofing	Contemporary Roofing	5	22-Jan-16	29-Jan-16	22-Feb-16	25-Feb-16	8-Mar-16	15-Mar-16	22-Mar-16
13	Insulation	Treetop Insulation	5	29-Mar-16	5-Apr-16	27-Apr-16	2-May-16	12-May-16	19-May-16	26-May-16

Date Required

Status Date: April 8, 2016

#	Submittal Description	Responsible Party	Lead Time (Days)	Date Required from Subcontractor	Forward to Architect	back from Architect	Forward to Subcontractor	Order Date	Delivery Date	Start Date
1	Cast-in-Place Concrete	GV Concrete	1	24-Dec-15	4-Jan-16	26-Jan-16	29-Jan-16	10-Feb-16	11-Feb-16	18-Feb-16
2	Precast Concrete Cap	Grand River Precast	25	8-Mar-16	15-Mar-16	6-Apr-16	11-Apr-16	21-Apr-16	26-May-16	3-Jun-16
3	Reinforcing Steel	Wasatch Steel	15	4-Dec-15	11-Dec-15	6-Jan-16	11-Jan-16	21-Jan-16	11-Feb-16	18-Feb-16
4	Masonry	Elevated Masonry	10	21-Dec-15	29-Dec-15	21-Jan-16	26-Jan-16	5-Feb-16	19-Feb-16	26-Feb-16
5	Structural Steel	Rocky Mountain Steel	20	10-Feb-16	17-Feb-16	10-Mar-16	15-Mar-16	25-Mar-16	22-Apr-16	29-Apr-16
0	Light Cage Metal Framing	Organ Acquestical Sheet Piling	-	Uinta Piles & Equipment	20 14-7010	10-Nov-15 1 17-Nov-	15 10 10 noc 15	15-Dec-15 1 28-D	ec-151 12-lan-16	19-Jan-16 J

DNA Helical Piers 9-Feb-16 16-Feb-16 16-Dec-15 14-Jan-16 9-Dec-15 11-Jan-16 29 Asphalt Paving/Accessories 11-Aug-16 2-Sep-16 8-Sep-16 20-Sep-16 27-Sep-16 4-Oct-16 King Paving 4-Aug-16 30 Precast Concrete Pavers Green Landscape & Supply 26-Aug-16 27-Sep-16 31-Aug-16 13-Sep-16 4-Oct-16 28-Jul-16 4-Aug-16 31 Landscape/Irrigation Green Landscape & Supply 6-Sep-16 13-Sep-16 20-Sep-16 21-Jul-16 28-Jul-16 19-Aug-16 24-Aug-16 32 Fire Sprinkler 26-May-16 Fogo Fire Specialists 5-Apr-16 2-May-16 12-May-16 5 29-Mar-16 27-Apr-16 19-May-16 33 Plumbing Poseidon Plumbing 22-Mar-16 19-May-16 26-May-16 15-Mar-16 15 18-Apr-16 28-Apr-16 34 HVAC 26-May-16 Luft Mechanical 15 15-Mar-16 22-Mar-16 18-Apr-16 28-Apr-16 19-May-16 Electrical Strom Electric 30-May-16 24-Mar-16 10 31-Mar-16 22-Apr-16 27-Apr-16 9-May-16 23-May-16

T3 AIA Registered Courses

The Submittal Schedule is required from the Contractor by the AIA A 101 (General Conditions of the Contract for Construction) and by our specifications.

The Submittal Schedule is reviewed and adjusted in the Progress Meetings.

The submittal schedule must be closely coordinated with or be a component of the Construction Schedule.



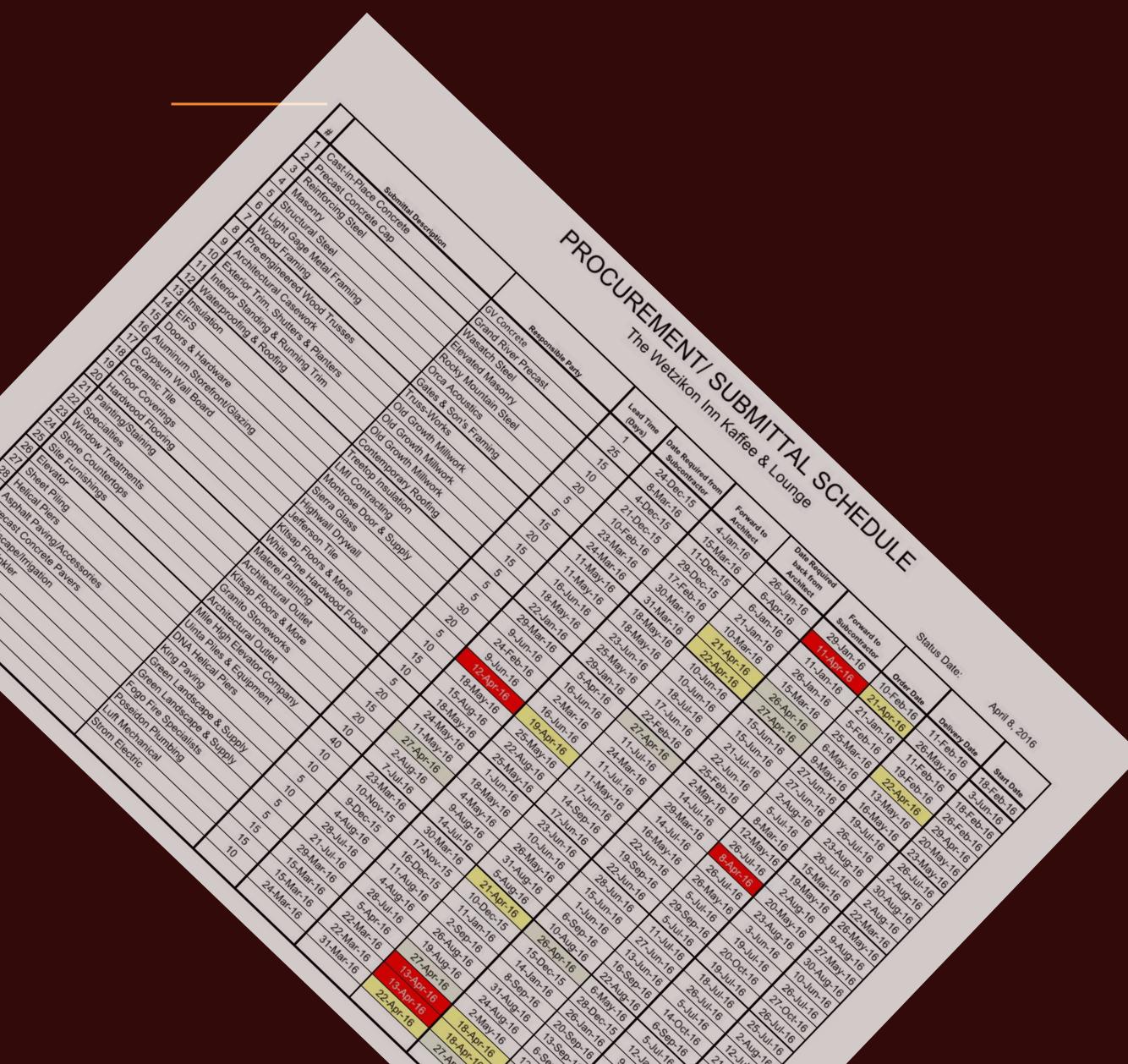
T3 AIA Registered Courses

WHY is it a GOOD THING?

- It helps the Contractor to assemble related submittals in a single package to be reviewed together.
- It helps the design team to schedule submittal review time.
- It helps everyone to track the required submittals and know when a submittal is late.



T3 AIA Registered Courses



- In our specs, the Submittal Schedule is tied to the Applications for Payment.
- When receiving a submittal schedule, make sure that the Contractor has input the right information, specially the following:
 - The number of days required for review each submittals.
 - The correct submittals (submittals specified).
 - Time for re-submittals.

TYPES OF SUBMITTALS

T3 AIA Registered Courses | SUBMITTALS

- The specifications include these types of submittals:
 - Action Submittals
 - Informational Submittals
 - Project Closeout Submittals
 - Delegated Design Submittals
 - LEED Submittals
 - Maintenance Submittals (attic stock)

Issue for Garage Permit February 16, 2017

SECTION 099653

HIGH PERFORMANCE COATINGS for CONCRETE

1.3 DEFINITIONS

Standard coating terms defined in ASTM D 16 apply to this Section.

1.4 ACTION SUBMITTALS

- A. Product Data: For each elastomeric coating system specified. Include crack fillers, block fillers, and primers.
 - **Material List**: An inclusive list of required coating materials. Indicate each material and crossreference the specific coating, finish system, and application. Identify each material by manufacturer's catalog number and general classification.
 - 2. **Manufacturer's Information**: Technical information including label analysis and instructions for handling, storing, and applying each coating material.
- B. **Samples for Verification**: For each color and material to be applied, with texture to simulate actual conditions, on representative Samples of actual substrate.
 - Provide stepped Samples, defining each separate coat, including block fillers and primers. Use representative colors when preparing Samples for review. Resubmit until required sheen, color, and texture are achieved.
 - Provide a list of materials and applications for each coat of each Sample. Label each Sample for location and application.

1.5 INFORMATIONAL SUBMITTALS

- Qualification Data: For Applicator.
- B. Material Certificates: For each elastomeric coating material, signed by manufacturers.
 - Certification by elastomeric coating manufacturer that products supplied comply with local VOC regulations.

1.6 QUALITY ASSURANCE

- A. **Applicator Qualifications**: A firm or individual experienced in applying elastomeric coating systems similar in material and extent to those indicated for this Project, whose work has resulted in applications with a record of successful in-service performance.
- B. Source Limitations: Obtain undercoat materials from same manufacturer as finish coats.
- C. Benchmark Samples (Mockups): Provide full-coat benchmark finish samples for each type of coating on each substrate required. Comply with procedures specified in PDCA P5. Duplicate finish of approved sample submittals.
 - Architect will select one concrete exterior wall surface and one to represent surfaces and conditions for application of elastomeric coatings.

RMW Job No. 16060.00

ISI ENGINEERING CAMPUS PHASE 1

1127 Sonora Court, Sunnyvale, CA 94086

Issue for Garage Permit February 16, 2017

SECTION 099653 HIGH PERFORMANCE COATINGS for CONCRETE

1.3 DEFINITIONS

A. Standard coating terms defined in ASTM D 16 apply to this Section.

1.4 ACTION SUBMITTALS

- Product Data: For each elastomeric coating system specified. Include crack fillers, block fillers, and primers.
 - Material List: An inclusive list of required coating materials. Indicate each material and crossreference the specific coating, finish system, and application. Identify each material by manufacturer's catalog number and general classification.
 - Manufacturer's Information: Technical information including label analysis and instructions for handling, storing, and applying each coating material.
- B. Samples for Verification: For each color and material to be applied, with texture to simulate actual conditions, on representative Samples of actual substrate.
 - Provide stepped Samples, defining each separate coat, including block fillers and primers. Use representative colors when preparing Samples for review. Resubmit until required sheen, color, and texture are achieved.
 - Provide a list of materials and applications for each coat of each Sample. Label each Sample for location and application.

1.5 INFORMATIONAL SUBMITTALS

- Qualification Data: For Applicator.
- B. Material Certificates: For each elastomeric coating material, signed by manufacturers.
 - Certification by elastomeric coating manufacturer that products supplied comply with local VOC
 regulations.

TYPES OF ACTION SUBMITTALS

- Product Data
- Shop Drawings
- Samples for Initial Selection
- Samples for Verification
- Product Schedules (for example, Hardware Schedule)
- Delegated Design Submittals

Product data (printed for mass distribution) are not the same as shop drawings (prepared exclusively for the project).

Issue for Garage Permit February 16, 2017

SECTION 099653

HIGH PERFORMANCE COATINGS for CONCRETE

1.3 DEFINITIONS

A. Standard coating terms defined in ASTM D 16 apply to this Section.

1.4 ACTION SUBMITTALS

- Product Data: For each elastomeric coating system specified. Include crack fillers, block fillers, and primers.
 - Material List: An inclusive list of required coating materials. Indicate each material and crossreference the specific coating, finish system, and application. Identify each material by manufacturer's catalog number and general classification.
 - Manufacturer's Information: Technical information including label analysis and instructions for handling, storing, and applying each coating material.
- B. Samples for Verification: For each color and material to be applied, with texture to simulate actual conditions, on representative Samples of actual substrate.
 - Provide stepped Samples, defining each separate coat, including block fillers and primers. Use representative colors when preparing Samples for review. Resubmit until required sheen, color, and texture are achieved.
 - Provide a list of materials and applications for each coat of each Sample. Label each Sample for location and application.

1.5 INFORMATIONAL SUBMITTALS

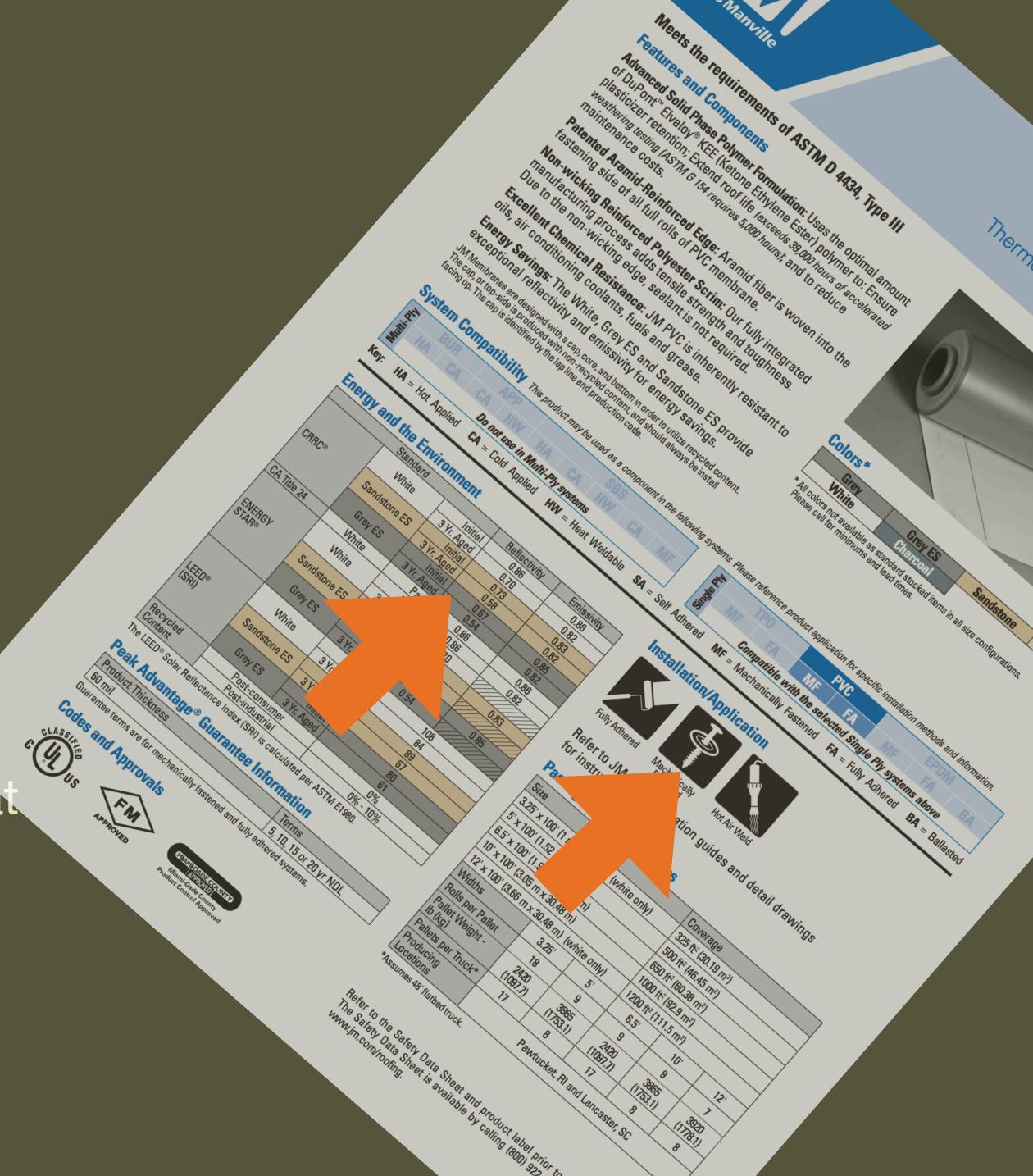
- A. Qualification Data: For Applicator.
- B. Material Certificates: For each elastomeric coating material, signed by manufacturers.
 - Certification by elastomeric coating manufacturer that products supplied comply with local VOC regulations.

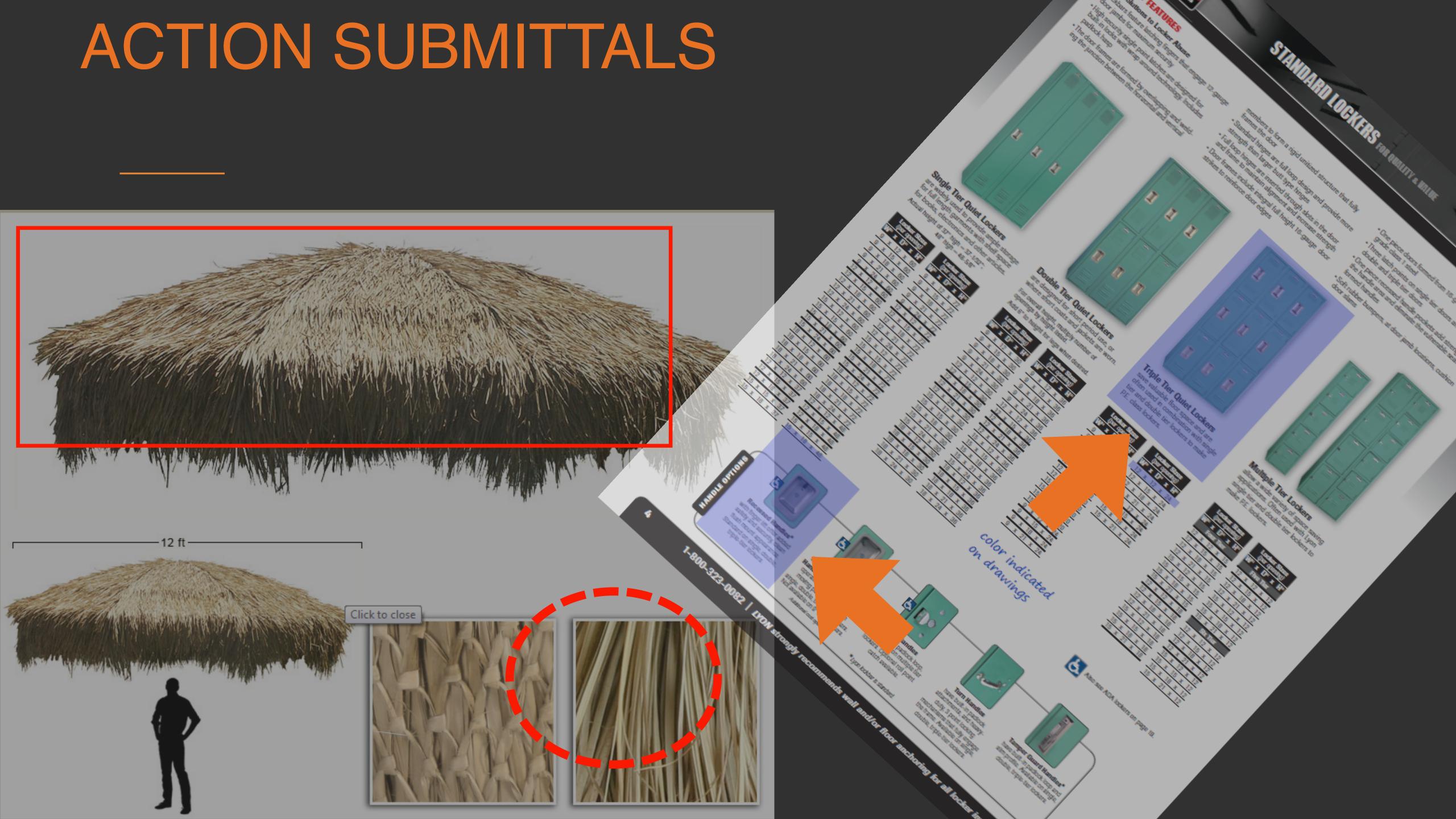
- ACTION Submittals require responsive action from the Architect or its consultants.
- Responsive action means that the Architect reviews and takes the appropriate action to communicate to the Contractor the status of the submittal and subsequent required action.
 - Submittals that do not require the Architect's responsive action are not action submittals.
 - Action Submittals might require some type of action by the Owner.

PRODUCT DATA

 Product Data should be marked by the Contractor to show Project-specific information if several items are included in the publication.

 Product Data often contain information needed for coordination with other portions of the Work, and to confirm that the proposed product has not changed since the time it was included in the Contract Documents.





SHOP DRAWINGS

DEFINITION

 The American Institute of Architects has defined shop drawings as "diagrams, schedules, drawings, and other types of data prepared specifically by a distributor, supplier, manufacturer, subcontractor, or contractor to show some part of the Work."

COORDINATION DRAWINGS

DEFINITION

 We require Coordination Drawings when we need to see how the components provided by two or more different trades are coordinated with each other.

PROTECTING OUR FILES

- BEFORE we allow the Contractor to use our digital files to prepare Shop Drawings, we protect our files.
- Our specs incorporate the use of AIA
 Document C106, Digital Data
 Licensing Agreement, as the basis for establishing ownership, use and reproduction rights, and procedures for use of Architect's digital files.

 Also include the AIA Document E201, Digital Data Protocol Exhibit, as an attachment to the Owner/Architect Agreement, the Owner/Contractor Agreement to establish protocols for the transfer and use of digital data on a project.

See Josh C.

SAMPLES

- Samples are "physical examples which illustrate materials, equipment, or workmanship and establish standards by which the Work will be judged".
- Samples are for "SELECTION" and for "VERIFICATION".
- Do not require samples unless it is necessary (\$\$).

- For Samples in which variation in color, pattern, or texture can be expected, multiple sets of range, or multiple units should be requested. This is a designer decision.
- Expensive samples can be returned to the Contractor for use in the project, for example, door hardware.

SAMPLES ARE NOT MOCKUPS

DELEGATED DESIGN SUBMITTALS

Reviewing delegated design submittals:

FIRST WE MAKE sure the submittal is complete, and the we only review the following:

- That the delegated design is **coordinated** with ours: Dimensions, size, installation, components, finishes, locations in the project, etc.
- That the calculations are signed and stamped by an engineer in the applicable discipline and licensed in California.
- That the **proper criteria** as indicated in the Contract Documents were used in the design (for example, wind load, temperature range, etc.)

RISKMANAGEMENT

THE DANGEROUS SDSs (MSDS)

Contractors send SDSs continually, even when not required.

 These forms describe the components of a product and some characteristics, including VOC's. For this reason RMW requires SDSs forms only as LEED submittals.

• WE DO NOT REVIEW SDSs because they contain instructions for protection of personnel installing or handling the product.

Do not send back MSDS. The specs say that MSDS will only be received for documentation to be submitted for LEED certification purposes only.

INFORMATIONAL SUBMITTALS

Informational Submittals do not require a responsive action but might require another type of action by the Architect, such as verification.

Some examples are:

- Pre-construction Submittals:
 Permits, bonds, insurance certificates, etc.
- Certificates and Certifications: To show compliance with standards, i.e., welding certificates, woodworking certificates etc.

- Testing Reports: Pre-construction testing, field testing, product testing on file with manufacturer.
- Construction photographs.
- Meeting minutes.

These submittals do not require approval, they are only for the record, but might require another type of action such as rejection of a materials or assembly.

CLOSEOUT SUBMITTALS

TYPICAL submittals delivered at Substantial Completion are:

- Project record documents
- Operation and maintenance manuals
- Records of staff training
- Warranties
- Commissioning documentation
- Other items transmitted under Project closeout requirements

The Architect reviews the closeout submittals for completeness and forwards them to the Owner.

These submittals do not require approval, but after review, might require rejection for inaccuracy or incompleteness.

MAINTENANCE MATERIALS SUBMITTALS

Maintenance materials submittals include:

- Extra stock materials (attic stock).
- Special tools.
- Spare parts.

ATTIC STOCK MATERIALS have to be ordered and approved by the Owner.

- Please obtain that information to be included in the specs.
- Check the form in Rspace.

The Architect verifies that submittals are correct and handed to the Owner in an orderly way.

SUBMITTALS REVIEW PROCEDURES

- Simultaneous Transmittal:
 Submittals are transmitted at the same time to the Architect and its consultants (nor recommended, but it is used in fast-track projects).
- Sequential Submittal: Multiple reviewers must review a single submittal.
 - Other procedures can be found in the SUBMITTAL REQUIREMENTS section.

• Contractor's Transmittal: Requires that submittals are listed and numbered and have been reviewed by the Contractor (GC) and that it has certified this in the transmittal.

RMW Standard contracts state that after the first re-submittal, additional reviews will be considered additional services by RMW.

THE CONSTRUCTION MANAGER'S ROLE

If a CM is involved in the CA procedures, the standard process is that the submittals are received, distributed, gathered, and returned by the CM.

- We should take care that the CM does not change the contractual requirements for reviewing submittals, such as time or the type of response.
- The CM is not liable.
- The CM does not review submittals except for completeness.

The CM's role should be very clearly defined in the Owner-Architect contract and in the Specifications.

T3 AIA Registered Courses | SUBMITTALS



RISK MANAGEMENT

Review only the submittals that:

- Are intended for portions of the contract documented in RMW's documents.
- Are disguised RFI's.
- Are incomplete.
- Have deadlines inconsistent with the documents (specifications) - always take a quick look at the submittals section!
- DO NOT REVIEW MSDSs or other materials that address "ways and means".

T3 AIA Registered Courses | SUBMITTALS



RISK MANAGEMENT

Do not review submittals that are for products not specified or labeled as "comparable" in the specifications.

- Products not specified should be submitted as "Substitution Requests". This requirement is in the contract for construction.
- Return these submittals marked as "submit Substitution Request."
- There are legal implications when not doing this, as well as "fee leaks."

SUBSTITUTION REQUEST

Substitution Requests are required by the Contract for Construction, therefore they are part of the Work.

We have already spent our fee in selecting the products for the Project; the Substitution Request assigns the cost of researching products which are proposed for substitutions to the Contractor.



THANKS ALL FOR COMING!