

Liz O'Sullivan Architecture, LLC

Architectural Specifications

Masonry Spec-Writing, a panel discussion at Rocky Mountain Masonry Institute October 12, 2011

There are some basic spec-writing principles that apply to all spec sections, including masonry:

A. Coordinate, coordinate, coordinate.

- a. Coordinate the specifications with the architectural drawings, coordinate the specifications with the structural drawings, and coordinate your spec section within itself, and with other sections.
- b. A masonry spec section needs to be a joint effort between structural and architectural, if you have any structural masonry. (If you don't have any structural masonry, it's not really the structural engineer's job to write the masonry spec!)
 - i. I like to start the section, format it, and edit the architectural parts that I can, with the info I have at the time, then send it to the structural engineer. In the spec section, I write notes to the structural engineer, such as "Structural – I will complete this article after I see architectural drawings." and "Structural – do we need this?" I write something like "Structural – this part is for you to edit" on things that are clearly structural items, such as required unit compressive strength or grouting execution.

B. Say what you mean, and then, during construction, show that you mean what you said.

- a. To most effectively say what you mean, keep CSI's "4 C's" principles in mind – clear, concise, correct, and complete.
 - i. Do not have inapplicable things in the spec:
 1. If starting from a master spec section, understand that the "notes to specifier" don't always tell you that you may need to delete something that you will need to delete. Read and understand EVERYTHING in the section. And if you are using SpecLink or MasterSpec's Linx, don't just check the boxes, push a button to generate the product, and send it on without reviewing it! Delete information that is not applicable to your project, whether you are prompted by the "notes to specifier" in the master or not.
 2. If your intention is to leave options open for the Contractor, clearly state that intention in the specs. Don't just leave all the types of masonry ties in the Products part of the spec – if you want the contractor to choose what he wants, write something like "Masonry Ties: Contractor's Option – Select from the following."
 3. Do not leave extra stuff in the spec "In case you need it." If your intention is to use just one type of tie, delete all the other types! If you don't need colored mortar on the project, delete all the references to colored mortar! If it's in the specs, it's in the contract.
 - ii. Do not have incorrect stuff in the specs!
 1. You are likely to end up with incorrect stuff in the specs if you grab an entire section from another project (especially an old one) and reuse it without reviewing it. Masonry is basically still the same brick and mortar stuff it has been for thousands of years, but codes and standards and technologies change.

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2. Every project is different. For example, you may have insulation between sheathing and brick veneer on one project, and no insulation between sheathing and brick veneer on another, and although insulation is specified in another section, veneer anchors are specified in the masonry section, and you need to make sure that the type of anchors you use are coordinated with your insulation condition.
- b. To show that you mean what you said, enforce the specs during construction contract administration! This is more easily said than done if the spec writer isn't the same person who is doing contract administration. BUT the way the spec writer helps the person doing CA to enforce the specs is to point out some important things that may not be on the drawings, so that person knows to look for them in the field. Write a good spec, thoroughly understand everything that you have in your spec, and let the person doing CA know that they need to come ask you about things that don't make sense to them. If you've written a clear, concise, correct, and complete spec, it should be pretty clear to the person doing CA, and that person ought to be able to notice when it's not being followed in the field, and then ought to be able to enforce the spec.

C. Say it once, and in the right place.

- a. Qualitative info goes in the spec.
 - i. For example, do not call out "Type FBS brick" on the drawings. That info goes in the spec.
- b. Quantitative info and location info goes on the drawings.
 - i. For example, do not write "Install brick rowlock at sill" in the specs. That info must be shown on the drawings.
- c. This goes for things WITHIN the spec, too – there are correct places for info within the spec. Part 1 is "General," Part 2 is "Products," and Part 3 is "Execution." Sometimes if you're pulling info in from an owner's technical guide or a manufacturer's guide spec that wasn't organized very well, you might end up accidentally specifying products in Part 3. Products should be listed in Part 2. Installation should be indicated in Part 3. Do not write something like "Cavity Drainage Material: Install at bottom of wall cavity" in Part 2. Spec ONLY the product in Part 2, and spec ONLY its installation in Part 3.
 - i. Estimators don't have a lot of time – the more we put info in the correct location, the more likely we are to get an accurate price.

D. What the specs AREN'T.

- a. The specs are not just some sort of a "cover yourself" thing to "save" you if you forget to put something in the drawings.
 - i. The specs and drawings need to be coordinated with each other.
 - ii. The project architect needs to know what's in the spec, and make sure that the people doing the drawings know about the things in the spec that affect the drawings. (This is another one of those coordination things.)
- b. The specs are not some sort of reference book or index that you go to "when you need it."
 - i. Only put applicable info in the spec!

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- c. Construction documents are not complete without specifications. Drawings are not stand-alone documents. The specifications and the drawings are complementary. You need the specs ALL THE TIME, not just when something isn't shown on the drawings. Remember, as soon as the Owner-Contractor Agreement is executed, the specs become legally enforceable documents, just like the Agreement and the Drawings.
 - i. If the specs are clear, concise, correct, and complete, they should be easily understood by the Contractor team. The Contractor team needs the specs to know what type of brick is supposed to be ordered, what type of mortar is supposed to be used, what type of ties and reinforcing are needed.
- E. So...**
- a. Write your specs carefully.
 - b. Research things that you don't understand.
 - c. If you need help, ask for help from knowledgeable sources such as Diane Travis at the Rocky Mountain Masonry Institute. She'll give you 15 minutes free!