Simple Specs For Small Jobs

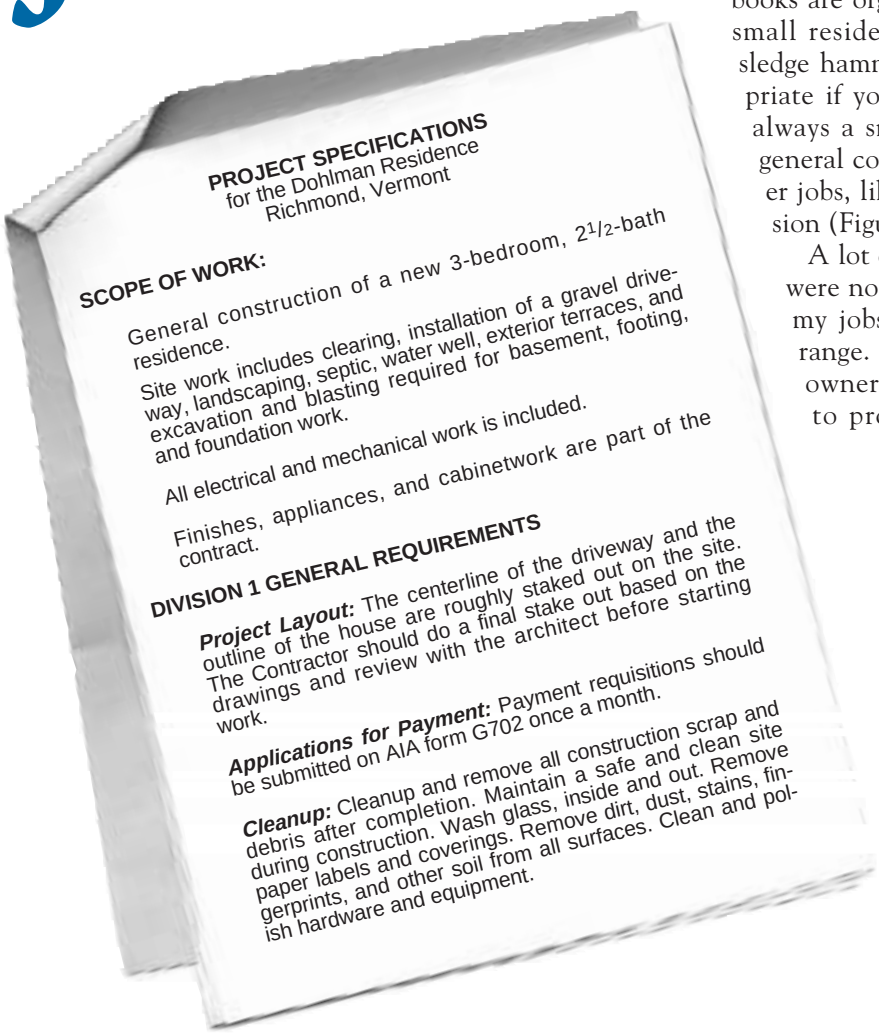
by Sal Alfano

Anyone who's ever worked on an architecturally designed project knows that construction specifications provide information not found on the drawings. The drawings may indicate a hardwood floor in the living room, but it's the specifications that describe what species of wood to use, what the moisture content of the flooring should be, how to store the material on site, and what procedures to follow during installation.

Most architects and designers organize their specs according to the 16 major divisions of the Construction Specifications Institute (CSI). The CSI structure has become the standard of the industry (many estimating price books are organized this way), but using the CSI system for small residential projects is a lot like using a 12-pound sledge hammer to drive a finish nail. CSI specs are appropriate if you're building the Sears Tower, but they're not always a smooth fit for residential work. When I was a general contractor, I found the CSI system useful for larger jobs, like whole houses, but I used an abbreviated version (Figure 1).

A lot of the projects I did as a small builder, however, were not whole houses or big additions. In fact, most of my jobs were renovations in the $10,000 to $25,000 range. I almost always prepared a drawing to show the owners what the final product would look like and to provide crucial dimensions and details to the

Writing a good set of specs is just as important as drawing the plans. Here are some ideas for how to organize your specs and what to include in them.



PROJECT SPECIFICATIONS
for the Dohlman Residence
Richmond, Vermont

SCOPE OF WORK:

General construction of a new 3-bedroom, 2 1/2-bath residence.

Site work includes clearing, installation of a gravel driveway, landscaping, septic, water well, exterior terraces, and excavation and blasting required for basement, footing, and foundation work.

All electrical and mechanical work is included.

Finishes, appliances, and cabinetwork are part of the contract.

DIVISION 1 GENERAL REQUIREMENTS

Project Layout: The centerline of the driveway and the outline of the house are roughly staked out on the site. The Contractor should do a final stake out based on the drawings and review with the architect before starting work.

Applications for Payment: Payment requisitions should be submitted on AIA form G702 once a month.

Cleanup: Cleanup and remove all construction scrap and debris after completion. Maintain a safe and clean site during construction. Wash glass, inside and out. Remove paper labels and coverings. Remove dirt, dust, stains, fingerprints, and other soil from all surfaces. Clean and polish hardware and equipment.

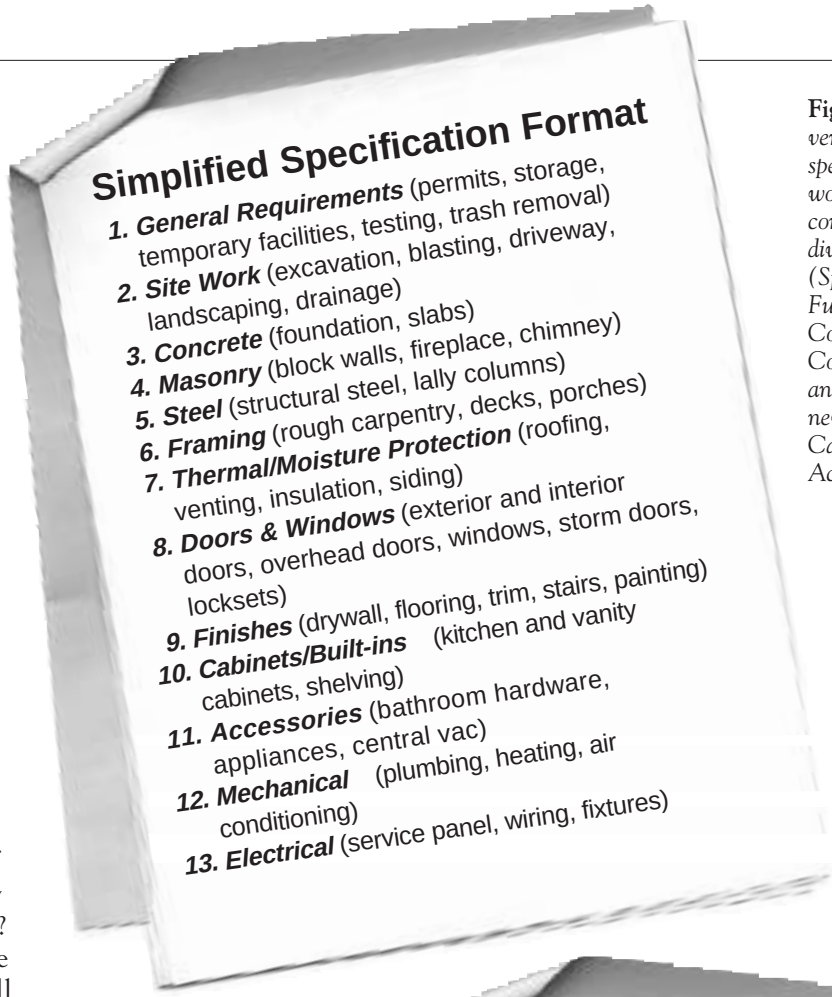


Figure 1. *This modified version of the CSI specification format works well for residential construction. Five CSI divisions are omitted (Specialties, Equipment, Furnishings, Special Construction, and Conveying Systems) and replaced with two new divisions — Cabinets/Built-ins and Accessories.*

production crew. But a floor plan and a simple elevation don't reveal much about the materials and methods used to construct it. To fill the gap, I wrote my own specs.

Who Needs Specs?

Many builders have a kind of allergic reaction to specs. If it's not on the drawing, they ask, how important can it be? While I agree that elaborate specs are overkill for some small jobs, there are plenty of good reasons to supplement your drawings with a written description of the work.

For one thing, a good set of specs can be a valuable sales tool. When you're bidding against other builders, submitting good specs along with your estimate makes you more competitive. Just as a drawing shows your clients what the completed product will look like, a good set of specs tells them how the materials and methods you plan to use will improve the quality of the finished product.

On negotiated jobs, a well-written specification proves to your clients that you've thought through the job and that you're looking out for their interests as well as your own. Writing specs for even a small project will distinguish you and your company from builders who only provide prices.

Finally, specs can help you settle misunderstandings. Not all homeowners can read a construction drawing, so when disputes arise over how something was supposed to be built, it helps to have a written description of the work to refer back to. Specs also make it easier to identify and document extra work and change orders.

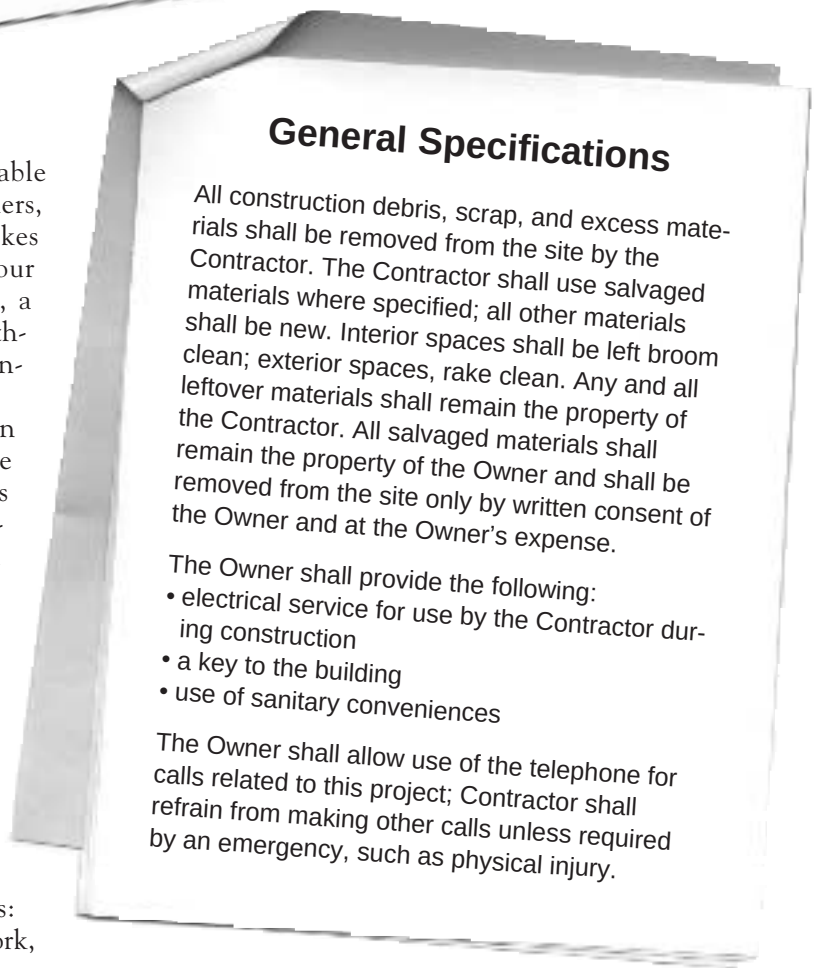


Figure 2. *Specifications can be used to set the ground rules for issues like site access, trash removal, and use of the owner's power and water supply.*

Organizing Your Specs

I organized all of my specs into several sections: General Specifications, Definitions, Scope of the Work, Construction Specifications, and Exclusions.

General Specifications. The purpose of the General Specifications was to deal with the process of building

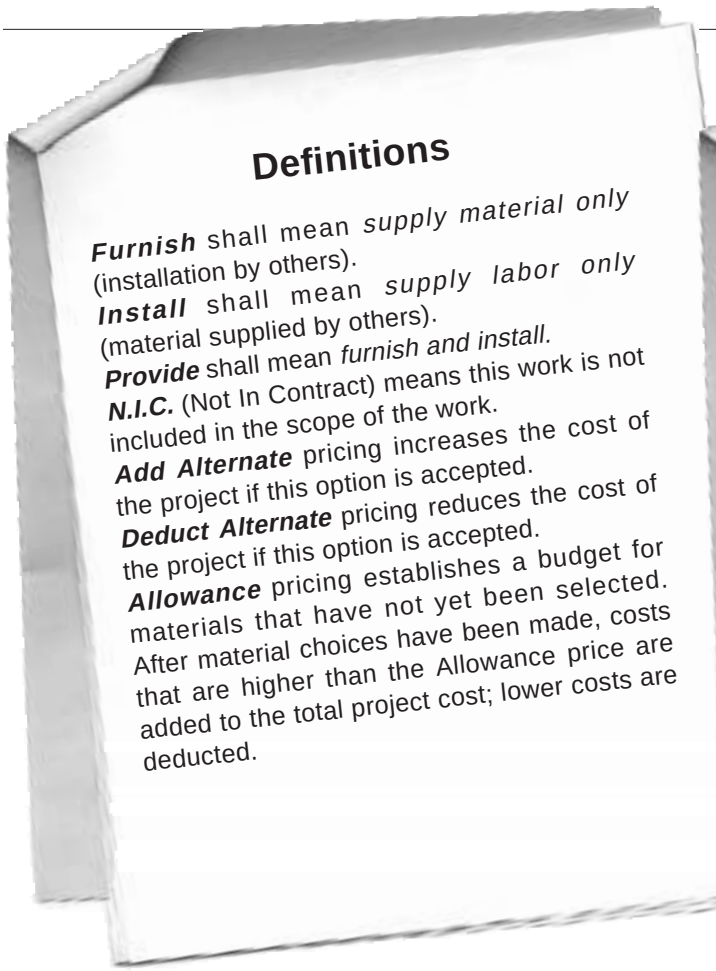


Figure 3. *Defining key terms prevents misunderstandings and establishes a shorthand that can be used throughout the specs.*

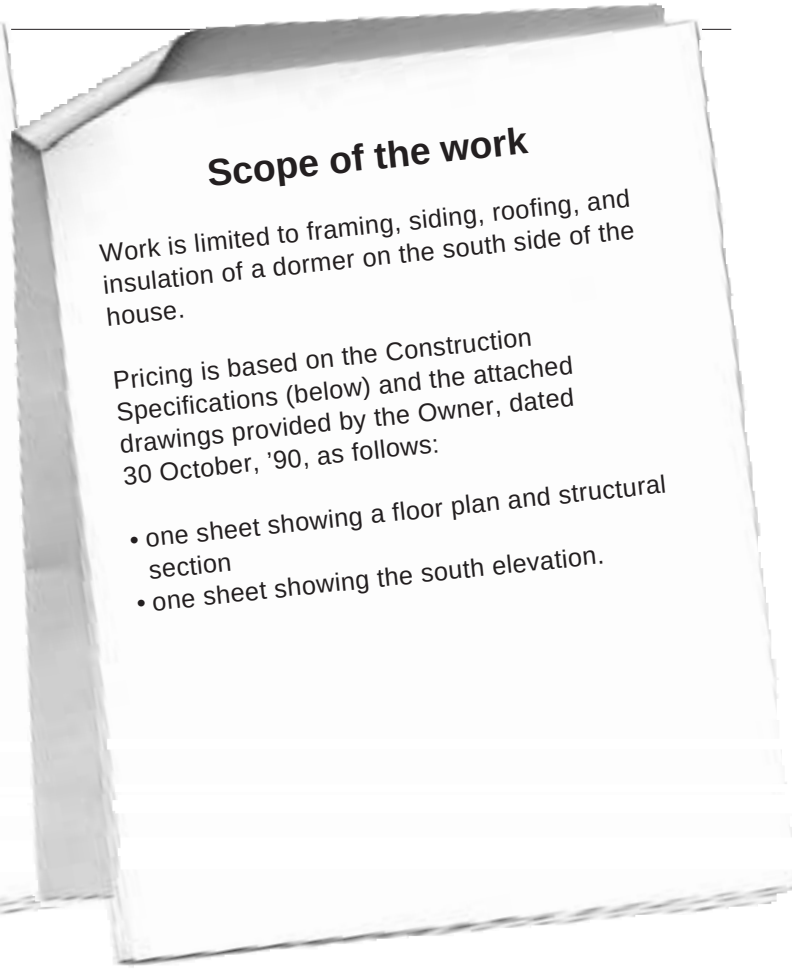


Figure 4. *To avoid disputes about what a job includes, define the scope of the work as clearly as you can. Refer to any drawings or other documents that help describe the work you plan to do.*

rather than with the product (Figure 2, previous page). This section covered general policy regarding site cleanup and leftover materials, and set the ground rules for use of the owner's electricity, water supply (including the bathroom), and telephone. Although the general specs remained essentially the same for every job, it was easy to tailor them to a particular project.

Definitions. Another standard section defined several terms used throughout the rest of the spec (Figure 3). By explaining terms like "allowance" and "alternate" at the outset, I established a kind of shorthand that could be used anywhere in the spec. Since I usually prepared the specs along with my estimate, this section served the additional purpose of making it clear to my clients whether my price included materials, labor, or both.

Scope of the Work. In a renovation, where the lines between existing work and new work can become blurred, the owner often assumes that you will do work that is not included in your price. I handled this problem in a section called *Scope of the Work* (Figure 4). I described as accurately as possible the portions of the building I planned to work on, making it clear that work in adjacent areas was out of bounds.

Construction Specs

The biggest part of the specs — and the section that took the most time to write — was the *Construction Specifications*. I tailored these to fit the job. To make this section easy to understand, I tried to use subheadings that broke the job down logically into its component parts. In most cases, the subheads were organized according to a single type of work, by work category, or by location.

A single type of work. Specs are easy to write when all of the work is of the same kind — all roofing, for example, or all siding. This is especially true when the job is to replace the existing construction without changing too many details. In cases like this, the specs follow the logical course of construction. In a job where we had to tear off and replace existing wood shingles, for example, the specs describe each step in the process (Figure 5).

Different types of work. A porch replacement is a good example of a job where the specs describe several different types of work — demolition, concrete work, and carpentry, for example. This is similar to CSI order, except that the work categories are organized chronologically. I often used a perspective drawing to show the owner what the completed work would look like, while the specs added detailed information about the materials and procedures that would be used.

By location. On some jobs, the work requires you to do a little bit here and a little bit there. I tried to organize the specs for this kind of job according to the location of the work instead of by the kind of work. It makes no sense to have a whole section called "Insulation" if only a small

Construction Specifications

1. Tear off existing cedar shingles and remove debris from job site.

Main Building: Only one (1) layer of shingles is to be removed. The plywood sheathing below will be left in place unless otherwise determined after it is uncovered.

Addition: Three (3) layers must be removed from the north roof plane (shingles, plywood, and a second layer of shingles); one (1) layer must be removed on the other three planes (plywood on these three roof planes will be left in place under the same conditions as Main Building).

2. Inspect existing sheathing. **NOTE:** Any repairs to sheathing or crown molding shall be authorized by the owner and performed at additional cost.

3. Provide the following: #50 felt over entire surface to be roofed; 1x3 strapping 5″ c.c. as nailers for shingles; 8″ galvanized drip edge at eaves and rakes; 16″ A-clear-extra red cedar shingles at 5″ exposure to weather; 1x8 cedar ridge boards to match existing.

4. Reuse existing metal chimney top on east side of Main Building. **NOTE:** Inspect chimney where metal meets roofing. If a cricket is needed, and if such work is authorized by the owner, provide cricket at additional cost.

5. Provide aluminum valley flashing where required at Addition.

6. Remove clapboards where Main Building meets wall of Addition. Provide step flashing and new clapboards. Apply roof cement at connection between Main Building and brick wall.

Figure 5. *When the work is all of one kind — such as all roofing or all siding — the specs can describe each step in the process. Use terms that describe specific tasks, such as "tear off," "inspect," "provide," and "reuse."*

part of the job requires you to insulate. A job specced by location of the work might have subheads like *Roof*, *Garage*, *Basement*, and *Kitchen*. The specs for each location would describe work to be done only in that particular part of the house.

This is also a good way to organize specs when you know the owner cannot afford to do all of the work. By specifying each portion of work separately, it's easy to pare the job down without having to rewrite the specs.

Exclusions

I used the last section of my specs — called *Exclusions* — to name specific elements, such as painting or landscaping, that were not included in the price for the job, or that were included as an exception rather than the rule (Figure 6). For example, I liked to paint wood entrance doors immediately after installation to prevent warping. On a job where the owner planned to do the painting, my specs would exclude all painting *except* the painting of the door. Coupled with the description of the job in the Scope of the Work section, the Exclusions section helped prevent misunderstandings about what work was covered by the estimate. ■

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Exclusions

All work not specifically described above is excluded. Work to be performed by others includes, but is not limited to

- all electrical circuitry and devices
- all interior finishes
- all painting (except as specifically noted above).

Figure 6. *By deliberately excluding work you have not priced, you can avoid misunderstandings later. Also use the exclusions section to name specific work, such as painting, that the owner has agreed to do.*