

Solving problems early goal of pre-job conferencing

The long-standing feud between architects and roofing contractors has at times made the Hatfield and McCoy quarrel look like a minor tiff. Architects, according to the contractors, were a bunch of ivory tower types too lost in their airy aesthetics to be bothered with practical matters such as effective roof design. Contractors, the architects countered, were a common lot all too ready to waste the designers' time with mundane details. Such animosity made it impossible to imagine an architect and a roofing contractor discussing an upcoming job without the aid of a referee.

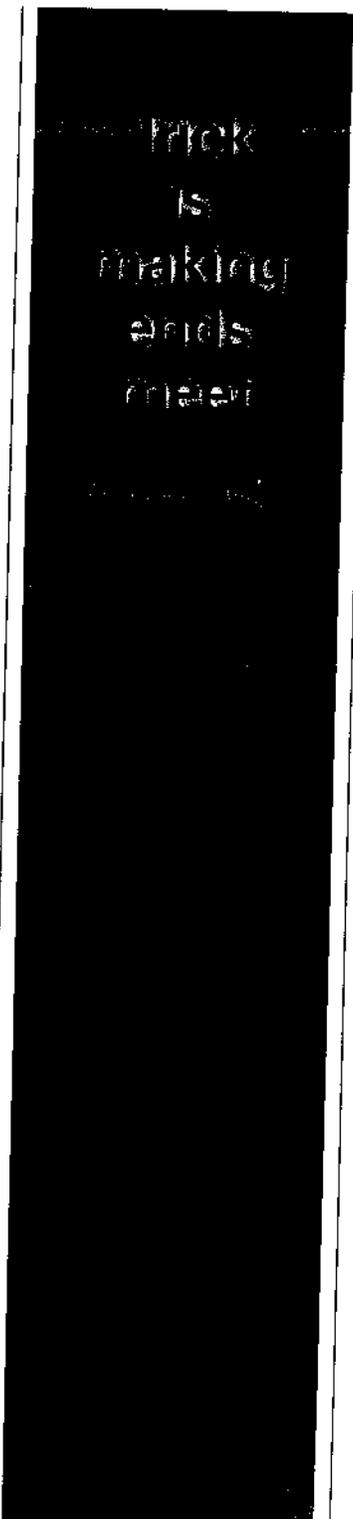
But more and more of these adversaries are putting away their longrifles and sitting down together to discuss designs, specifications and roofing techniques before the work begins. Both architects and roofing contractors are discovering that a pre-job meeting can be an excellent place to bring the expertise of the entire building team to bear on construction problems instead of letting those problems become major headaches on the job.

Getting it out on the table

According to those who have tried pre-job conferencing, the meetings allow mutual communication and understanding to take place between building team members. This exchange of ideas can be useful for jobs of any scale, they say, although the need for pre-job conferencing may be less pressing on smaller projects.

The information that is offered at a pre-job conference "lets us know that the contractor understands the specifications and gives him the opportunity to indicate how he'll carry out the requirements," says architect Chuck Sumner, a partner of Johnson-Graham Associates, Billings, Mont. "We've found that there are different ways of doing things and different contractors have different approaches. The pre-job conference allows us to share in that process."

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Contractor Zachary Ellis, president of Ellis Roofing Co., Kenner, La., says a pre-job conference "gives everybody involved a chance to get a clear view of the specifications and allows the roofer to express how he'll do the job in step-by-step detail. Getting it all out on the table this way is a very important part of the job."

Small changes

Others say the pre-job conference is the best and least costly place to make changes in plans, specs or procedures. It can also alert the roofing contractor to design modifications that might affect the roofing installation. For instance, construction problems might force an architect to relocate roof drains, making it necessary to adjust the taper of the insulation panels that direct water to these drains. If the contractor learns of the relocation at the pre-job meeting, he will have plenty of time to make the necessary changes before the first panel is cut.

Contractor Dick Unrue, vice president of Pacific Rainier Roofing, Inc., Seattle, Wash., likes to use the pre-job conference to determine the appropriateness of the roofing specification. "If there's something in the specs that doesn't apply or another [spec] that is better in that situation, that's the time to make corrections," he says.

Architect Dean Read, who recently designed a roofing membrane over a parking deck, says that none of the 30 hours he spent in pre-job conferencing were wasted. "It's helpful when you start talking, for you find yourself thinking about all sorts of things you don't normally think about," he says.

One of the problems Read was able to discover and correct during the parking deck pre-job meetings concerned his flashing specs. "We found that what we thought at first was good flashing was susceptible to ultraviolet rays, so we saved a lot of time by starting out with the right type."

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Read says that he was at first confused by the products that contractors were proposing to use for the parking deck. But the pre-job conferences gave him the chance to discuss the products with the contractors, and he was able to determine which were most suitable for his application. "We also saved money in taking off the old membrane," he says. "We were going to use jackhammers, but found out by talking to the people who put it on that we could save \$4,000 by torching it."

Some suggest reroofing meetings

Some contractors also believe that a pre-job conference can help a reroofing job run more smoothly. Pete Stanley, president of the Stanley Roofing Co., Woodinville, Wash., says that there are always things that aren't addressed in the specs that must be discussed before reroofing can begin.

But contractor John Bradford, Bradford Roofing & Insulation, Billings, Mont., doesn't believe the need to conduct a pre-job meeting is as great in reroofing. He says that pre-job conferences are held for only 50 percent of his company's reroofing projects, while more than 90 percent the company's new construction begins with a pre-job meeting. "The reason we don't do more on reroofing is that we are the ones who write the specs," Bradford says. "Only the owner, and no other professionals are involved. We tell the owner what we intend to do and work out with him where to set the materials and other details."

Hopping on the bandwagon

From these glowing reports it seems clear that pre-job conferencing is an idea whose time has come. Many in the industry, including professional organizations such as NRCA and the American Institute of Architects (AIA), are getting behind the concept. A booklet jointly prepared by NRCA and the Associated General Contractors of America (AGC) and reviewed by AIA and Production Systems for Architects and Engineers says, "It is our joint recommendation that a pre-job conference be required well in advance of the time a roof deck and roofing work begins, and this requirement should be included in the specifications." AIA is also promoting the use of pre-job conferences to the 3,500 architects and engineers who subscribe to its *Masterspec* service.

The realities of modern construction practices have also made pre-job conferences necessary. As architect Read explains, "Roofing has grown so complicated, it's hard to keep up, and so hard to imagine someone not being for the pre-roof conference."

Unrue gives perhaps the most telling reason for the growing use of pre-job conferences. He says, "Up to now, something like less than 2 percent of the construction budget was dedicated to roofing, but an excess of 70 percent of the litigation began there. People are finally beginning to look beyond the first line of defense in terms of weather penetration."

The malice of absence

But before we paint too rosy a picture, we should mention that there are still some small pockets of resistance. "It bothers me that some architectural professionals don't take the conferences seriously enough to come themselves, but instead send their understudies," Unrue says. "I don't like going into a pre-job meeting having to educate the architect on proper roofing techniques."

And contractor Bruce Martin, president of AN-CO Roofing, Inc., Woodinville, Wash., says, "Sometimes you can have too many people at the conference, but not the key person authorized to sign a check, which just means you're going to have to have another conference anyway."

Others complain of a certain amount of foot-dragging due to the time pre-job conferencing involves, especially when it conflicts with other commitments.

But by and large, almost everyone agrees that pre-job conferences are a good idea. The problems that do occur generally center around getting a particular architect, owner or contractor to a particular meeting.

Architect Tim Kirby, senior associate and chief of specifications at Thompson, Ventulett, Stainback and Associates of Atlanta, has one way to get obstinate building team members to attend a pre-job conference. "We put it into the specifications so that it's mandatory," he says.

Contractor Melvin Kruger, of L.E. Schwartz & Son, Inc., Macon, Ga., also has a method of encouraging attendance. "If we're absolutely stonewalled, we'll document that the pre-job conference was declined, and then do our own unilaterally," he explains. "We'll put in writing all the things needed to be done prior to roofing, insisting that all openings and penetrations be done. We then set out our requirements before the other crafts. If they don't object, it becomes a part of the record. But this usually gets their attention and then we call a meeting."

The invitation list

To make sure all the right people attend the pre-job meeting, it is, of course, necessary to invite them in the first place. Contractor Bradford says the guest list should be fairly extensive. "In addition to the roofing contractor, the general contractor should be involved," he advises, "because he's the one who will make sure all the decisions will be carried out, especially in terms of the electricians and plumbers and all the other subcontractors whose work will impact the roofing."

Bradford also says that, if the architect is not the owner's representative, another person should be present who can make sure the interpretations of the specifications and the changes made at the meeting coincide with the owner's intentions. Others agree that having someone at the meeting to protect the owner's interests is important. Stanley says the owner's input "allows everyone to set up equipment in a way that won't upset the owner or interfere with the way he conducts his business."

The presence of manufacturers' reps from the companies producing the major materials used in the project is also important, according to Bradford, so that someone will be there to answer questions about the products' warranties and guarantees.

The deck contractor should also attend the meeting to ensure that the deck will be properly aligned and reasonably free of imperfections, Bradford says. But because the deck contractor is not a structural engineer, he should not be required to make decisions about the structural integrity or stability of the roof.

Choosing a leader

The person chosen to conduct the pre-job conference should have the ability to anticipate problems and keep the participants in line. Kirby says, "Typically, we require the general contractor to conduct the conference. If there is any reluctance among the subcontractors, he can require they be there. The general contractor conducts the meeting, keeps the minutes, records the sequence of procedures and the logistics of different people bringing their equipment on site in an orderly way."

Choosing the right time to conduct the meeting can be as important as choosing the right person. Though a few say the pre-job conference should take place before any construction begins, most say that it should wait until some of the structure is up. "It doesn't do much good unless you have the foundation on the ground," says Martin. Before a reroofing pre-job conference begins, Ellis says, "You should walk the roof, and also the inside of the building to check for water damage from previous roof leaks so at the end of the job you're not hung with stained tiles or other damage."

What should you talk about?

Most conferences will focus on the problems that might crop up once work gets underway. There are some other topics, however, that are equally important and should be discussed. One topic is the logistics of the entire operation. "Normally, there's a number of points that need clarification," says Bradford, "such as where materials should be stored, and where the general contractor or owner wants the equipment set up. Without this type of communication it's difficult for a job to run smoothly. For instance, if you choose a spot to set up, and it's been claimed, then someone has to move, and that's costly."

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Day-to-day scheduling of work should also be planned at this meeting as well as the time each day when work is to be terminated. Protecting the roof against the weather at night should also be a topic of discussion.

Keith Rupert, senior project architect and principal at CTA Architects/Engineers, Billings, Mont., likes to have tangible items to talk about at his conferences. "Samples not only of the roofing material are brought in, but also many of the materials used by plumbers, electricians, flashers or anyone else who will affect the roof," he says. "Having everybody seeing and touching everything that will be involved helps everyone understand exactly what's going on."

The project's insurance requirements should also be reviewed at the pre-job meeting to ensure that the finished roof will achieve the desired rating. Any Factory Mutual or Underwriters Laboratories requirements that are part of the specifications should be examined at this time to resolve conflicts between the requirements and the architect's or manufacturer's specifications.

The NRCA/AGC pamphlet on pre-job conferencing also suggests that the meeting be used to review applicable federal and local regulations. These include Occupational Safety and Health Administration rules; and federal, state or local environmental control laws. Once all parties understand their respective responsibilities concerning these regulations, they can come to some agreement about methods of compliance.

Pre-job conference discussions needn't always center around mundane details, however. Some time may also be devoted to satisfying the architect's aesthetic sensibilities. Rupert says that a little conversation can

improve the looks of the roof and add to the overall quality of the project. "Often there are slick ways of cutting corners or lapping over mechanical curves in a way to end up with only one seam," he says.

Preparing an agenda

Once the topics of discussion have been chosen, the person conducting the meeting should list the topics in the order they are to be discussed and distribute this list to the meeting's participants. By preparing an agenda such as this, the conference leader can keep the meeting on course and make sure no questions are left unresolved. A follow-up letter that summarizes the meeting's key points should be sent to all participants after the conference.

This is the procedure architect Ray K. Parker says his company, Cromwell, Trumper, Levy, Parker, Woodsmall in Little Rock, Ark., follows with good results. "For any larger job, we go in with an agenda that proceeds point-by-point," he says. "Then we do a follow-up with a memorandum. The agenda covers all areas of concern, and the memorandum covers what was discussed."

Unrue seconds Parker's point. "I like it when someone is responsible to record the meeting and then gives copies of what transpired to all the parties involved. These notes take on a special meaning when referenced to something that comes up later. Nobody can then say they were misrepresented in what they said verbally."

A point of agreement

The idea that pre-job conferencing can be a valuable construction management tool is one point on which almost everyone on the building team agrees. Both roofing contractors and architects can name several specific instances where pre-job conferencing saved them time and money by clarifying specifications, clearing up misunderstandings and correcting problems early. As Martin describes it, it's "a way to get the BS out of the way before the job starts."

"It's the lack of this communication mechanism which can always be pointed back to as the cause of the problem," Kruger says. "The pre-job conference is an absolutely essential idea."