Is Plumb REALLY Plumb? . . . Level REALLY Level?

A look at tolerances

Tolerances are addressed by two AWCI technical committee chairmen and a request for help in dealing with the problem.

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and
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While plumb, level, straight and true are familiar words in the construction industry, they seem to be the victims of a case where laziness and complacency dictate over such important matters as quality, integrity and economy. Many of us today seem to have lost sight of the importance of building with pride, substituting instead nothing more than the financial rewards that we receive by performing less than we should.

Whether we want to admit it or not, plumb, level, straight and true are aspects of our industry that are, or should be, important to everyone involved in the construction of a building, from owner to subcontractor. These tolerances are the basis of constructing a structure that we can be proud of. However, these tolerances are also those that, if not taken into consideration and put in proper perspective, can make things miserable even for those who look for nothing more than the “financial rewards.”

For example, in government projects and specifications there are no specified tolerances or inspection procedures—except when the government inspector shows up, at which point you, as the installing contractor, are at his mercy. Now, if the inspector is one with little experience or just does not care, you could get away with murder. However, if he is an inspector who has been around for a while (and is having a bad day) there could still be a murder — YOURS. The government thrives on industry standards. They depend on these standards to determine, not only specifications, but inspection procedures as well. There are numerous cases where problems have arisen because of a lack of tolerances and industry standards.

A contractor in Minnesota has expressed concern with environmental conditions for drywall and plaster—mildew, high humidity and low temperature. The degree of “flatness” for plaster and drywall (which is one of the government inspector’s favorite tricks), and the application of high gloss paint to these surfaces.

We have encountered problems such as the way light washes a cement stucco or synthetic plaster wall. The applied thickness of spray applied materials is an area of great concern for those who perform such work. There is an endless list of various applications and conditions that require our attention in terms of tolerances.

Besides the conditions that are dictated directly by the wall and ceiling industry, there are those that are foisted upon us by other trades. These are probably the most difficult for us to live with . . . these are the ones that cost us the most time and money. Unfortunately, they are also the ones that become the responsibility of the wall and ceiling contractor because he is better able to rectify them. And, yes there are many times where such rectifications are made (or at least expected to be made) at no extra charge to the general contractor or the other involved subcontractors.

How often have we all been involved in making a masonry wall, that is extremely out of plumb, look good. And, how many times has a general offered (up front) to pay you for rectifying, at least superficially, someone else’s work.

From Florida comes a story where an AWCI contractor was asked to straighten out a masonry building that was four inches out of plumb by adding plaster at one end and maintaining what was specified at the other. No mention was ever made as to who would pay the additional expense or whether or not the masonry substrate had been installed according to industry standards.

We could continue on with these old battle stories for weeks, but the point of our discussion is not to “hash over” old business but to alleviate the prob-
problems in the future.
AWCI’s leadership has recognized these problems. As a result, the Task Force on Tolerances was formed and has for the past several months, diligently been assembling information on tolerance problems. The purpose of this effort is to assemble a manual on allowable tolerances for the wall and ceiling industry’s own products. The manual will contain realistic workable tolerance standards for our industry as

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well as listing standards from other trades. This will include allowable dimensions to plumb, level and straight; allowable highs and lows in temperature, humidity, dryness and other climatic or weather related conditions; time frames and schedule sequences that directly or indirectly effect our industry’s ability to perform.

What do we expect to accomplish? By providing the industry with tolerance standards, of our systems, and those that we must work with, we will be able to respond to many situations with authority. We feel a manual properly done and produced by AWCI will establish tolerance standards that can be used with authority by architects, inspectors, general contractors as well as our own people. Not only will we be able to establish a better position in job disputes, we will also be in a position to properly qualify our bids and eliminate most problemsup front.

Please join us in this effort. We need your input immediately. Forward any information you have available to help address this most important document. All information should be sent to AWCI in Washington, 25 K St., NE, Washington, DC 20002, attention: Gene Fisher; or call (202) 783-2924.