

EXPANSION JOINTS



QUESTION: *We recently acquired a project that has brick veneer over CMU. The plans do not show any expansion joints and the specifications do not mention anything about locations. The GC told us to put them where we thought they should be located. What should I do?*

First, check your bid form scope of work and contract to make sure someone did not slip into your paperwork. This is design criteria and not your responsibility.

“EXPANSION JOINTS IN A BRICK VENEER ARE PART OF A GROUP OF JOINTS CALLED “MOVEMENT JOINTS.” THESE ARE VOID OF MORTAR AND ALLOW FOR DIFFERENTIAL MOVEMENT IN MASONRY.”

I do not have a “Gibbs List of Rules”, but if I did, this rule would be close to the top, if not #1! PUT IT IN WRITING! This is a classic opportunity to send to the GC a Request for Information (RFI). I have even had CM's and GC's complain that if I put it in writing, then they will “Have to” respond. Well, “Duh”, isn't that the point?

Expansion joints in a brick veneer are part of a group of joints called “Movement Joints.” These are void of mortar and allow for differential

movement in masonry. This movement can be caused by load, stress, shrinkage, deflection, or expansion. We are only dealing with brick veneer expansion joints.

So let's find out about TMS 402-13, aka the “Code”. In Chapter 12 – Veneer, paragraph 12.1.1 states, and I quote, “This chapter provides for requirement for design and detailing of anchored masonry veneer and adhered masonry veneer”. Keeping that idea moving forward, let's look at paragraph 12.1.6.3, which states,

“Design and detail the veneer to accommodate differential movement.” The Code has laid the type, size, and location of expansion joints in the designer's lap.

While we are in the book, let's go to TMS 602-13 (aka, the Specification). Paragraph 2.5.B provides the ASTM standard for product to be installed. Now that I have you in the Specification – please read with comprehension the “Forward to Specification Checklists.” Having digested that, now turn

the page to the Mandatory Requirement Checklist Part 3 – Execution. There under “Notes to the Architect/Engineer”. Let's read it together, “Indicate type and location of movement joints on the project drawings.”

We can now agree that it is not the masonry contractor's responsibility to design and locate expansion joints. However, make sure the design and construction teams understand that if they only provide guidance, such as giving you the maximum distance between the joints, but will not locate them on the drawing, YOU, the masonry contractor, are free to put them anywhere to your advantage. GET THIS IN WRITING ALSO!

The Brick Industry Association has a couple of technical notes, 18 and 18A, on the subject of movement. You may want to provide them to your CM/GC to pass on to the design team. To make a long story short – Do Not Deviate - one bit from the project drawing and specifications without getting it in writing. If they now provide you the layout, it could be the RFI could change to a Potential Change Order (PCO). The expansion joints will increase labor costs and if they require you to install the sealant joint, it is a PCO.

Thanks for the question and don't forget to “Raise the line and come on around the corner!”