



INTEROFFICE MEMORANDUM

Date: December 7, 2016

To: Code Services Staff

From: Brad Claussen, Building Official

Subject: Residential Deck Ledger Board Attachment

In the past we have had situations where the contractor stands the deck ledger board off of the house wall with shims. This is OK as long as a few key points are followed.

The IRC Table 507.2 and footnotes to that table contain a couple of important distances. One is 1" max. from the inside face of the ledger board to the face of the band joist. The other is 1/2" max from the face of the ledger to the wall sheathing. Stacked washers are the prescribed standoffs in the code but there are now polymer spacers manufactured for this specific purpose and those would be approved as well. Remember too, the bolt or lag screw max spacing in the above table. If spacers are not used and the ledger board is directly contacting the wall, the siding will need to be removed and appropriate flashing installed.

Interesting to note, the info in the code was largely based on testing done by both Virginia Tech and Washington State Universities. They actually used stacked washers to space out the ledger board to test for failure. Taking their data and applying a safety factor of 3.0 and then another safety factor of 1.6 for longevity, ICC came up with this table and associated code requirements. I spoke with the technical rep from James Hardy Co. (a siding manufacturer), and he indicated they don't have a problem with this method.

So in summary, no problem with spacing the board off of the wall a small distance. I would suggest either caulking or using silicone to install the spacers and bolts / lag screws in order to seal the hole. I know we are seeing the Simpson Strong Drive screws as well and those are fine. The key with any of those is to make sure they follow the fastener spacing table. Either the one in the code for bolts or the one Simpson or other manufacturers provide for their deck attachment fasteners.

Let me know if you have any questions.