

Squash Blocks & Web Stiffeners

Q. I've been using wood I-joists for my floor framing. The designs have called for 1x4 crush blocking inserted between the top and the bottom 2x2 flanges and nailed directly to the OSB web. I've also heard of using 2x4s nailed to the face of the 2x2s, instead of being inserted between them. Which way is better?

A. Paul Fiset responds: It sounds like you're confusing squash blocks with web stiffeners. Squash blocks are blocks of wood that are slightly taller than the

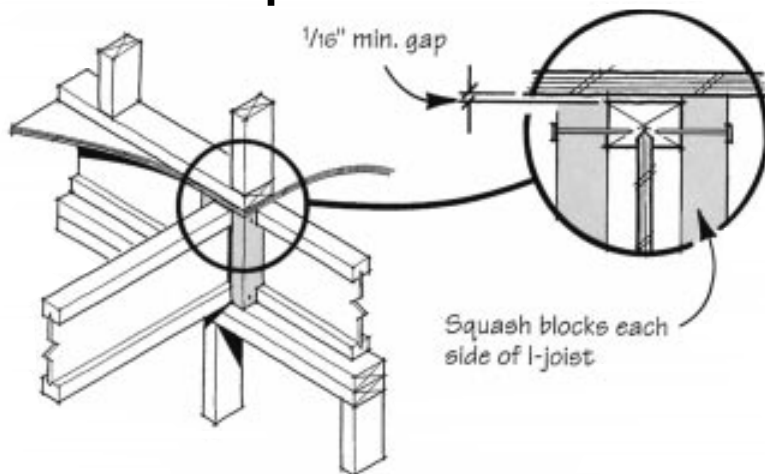
depth of the joist. The function of squash blocks is to transfer loads created by walls and roofs above to a sill or wall plate below the I-joists. Because these loads in effect bypass the I-joist, the squash blocks also prevent "knifing" of the thin web into the top and bottom flanges.

Web stiffeners are blocks of plywood or OSB that fit between the flanges of an I-joist. These blocks are used at points of support and are fastened with nails right up against the I-joist web. However, web

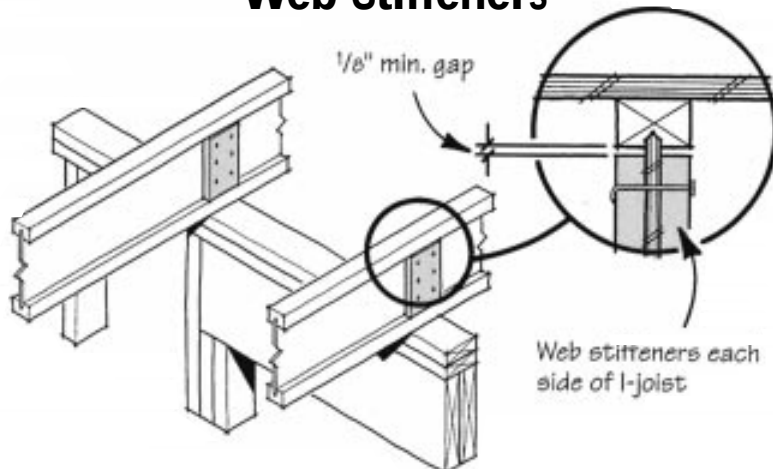
stiffeners are not fit tightly between the top and bottom flange. Typically, a space is left between the top of the stiffener and the underside of the top flange. Web stiffeners reinforce the I-joist and prevent it from buckling. Sometimes they are required as fillers so that there is solid nailing for joist hangers.

Paul Fiset is director of the Building Materials and Wood Technology program at the University of Massachusetts in Amherst.

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Web Stiffeners



Flood-Damaged Receptacles

Q. I am doing renovation in a house that was flooded. Is it necessary to replace electrical receptacles that were under water?

A. Rex Cauldwell responds: Just because they got wet from fresh water doesn't automatically mean they are doomed (if it was salt water, replace them). In a fogged-up bath, the receptacles are also getting wet all the time. It all comes down to a matter of corrosion. Turn off the power and take a few of the receptacles out and look at them. If there are signs of corrosion, you should replace them. Any corrosion that you can see would indicate that there might be corrosion on the internal contacts, which you can't see. This corrosion will act as a semiconductor and create heat, which will destroy the receptacle and the male plug.

If the receptacles in question are the standard cheap hardware-store variety that I see in most buildings, I would replace them with high-quality commercial-grade ones — perhaps higher on the wall in case the room floods again.



Rex Cauldwell is a master electrician in Copper Hill, Va.