Before I apply self-furring lath over plywood, I always make sure that the plywood has been fastened to the studs with a 1/8 inch gap between the perimeter edges of all the panels. I just started working with a new builder and instead of plywood, he uses OSB for sheathing. He never puts a gap between the panels and claims he doesn’t have to because “OSB ain’t plywood, and it doesn’t have to be spaced the same way.” I don’t agree, and I’m worried about the stucco cracking if the panels aren’t spaced properly. Should I be worried?

Yes, you should be worried. Not leaving gaps between pieces of OSB when it is used as a sheathing behind stucco is an excellent way to cause plaster cracking problems.

OSB is the abbreviation for “oriented strand board.” Like plywood, OSB is considered to be a structural wood panel. As a result, it is subject to the same spacing requirements as plywood when used as a sheathing backup for stucco.

Like plywood, OSB is an engineered wood. OSB panels are made by processing low value logs into thin strands. After the stands are dried, they are glued and waxed into a triple-layered mat with the strands aligned perpendicular to each other. Successive layers of mat are then bonded together under heat and pressure to achieve the desired panel thickness and dimension.

Aligning the layers of wood strand using a perpendicular pattern helps give the finished product its final strength and makes it rigid and firm.

Plywood is manufactured using a similar process, the major difference between it and OSB being that plywood consists of a series of layers of adhesively attached thin wood veneer rather than layers of thin wood strand mat.

When used as a sheathing backup for stucco, structural wood panel products, including OSB, need to be installed so that a 1/8-inch space is maintained between panels. Without the proper spacing, the panels won’t be able to expand properly. Stymied in their ability to expand across their planer surface, the panels will buckle and force outward pressure on the back of the stucco system. This inevitably causes cracks to occur on the visible face of the plaster.

If the sheathing installer was having a bad day and didn’t gap the panels properly, all is not lost. If the proper authorities—generally the builder, the building inspector and the sheathing manufacturer—allow it, the edges of the butted together panels can be cut with a saw or router to create gaps of a sufficient width. It’s hard, slow work, however, and it requires a deft touch with a power tool to ensure that the studs aren’t inadvertently damaged or the sheathing over cut.

About the Author
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