

Cultured Stone Veneer

Manufactured stone, cultured stone, or pre-cast rock or stone veneer has become extremely popular in recent years. You may think it is stone, rock, or even brick. It is technically called *adhered manufactured stone masonry veneer* (AMSMV). Cultured Stone®, a name that is sometimes used generically, is actually a masonry product manufactured by Owens Corning.

It's a beautiful product; it makes the home look grand and gives the appearance of being very structurally sound. Regardless of what it is called, it can also be the nemesis of a home.

Installation is not normally a problem when applied over a concrete wall or foundation. Stones that fall off a wall may just be a cosmetic issue because too little or too much water was used when applying the stones. That sort of problem is usually a simple repair.

However, more significant problems may develop. Unlike synthetic stucco (EIFS), manufactured stone is not installed with an air space (drainage plain) between the cladding and the framed wall. Installation of manufactured stone should be treated in the same method as cement stucco, or to even more exacting standards. Because of its thickness and uneven upper surfaces, it can hold a larger moisture load than stucco. If flashing is not properly installed at the junctions of roofs, walls, where wall materials change, and around windows and doors, water can enter the wall structure. Incorrect installation can result in water penetration, structural damage, and mold.



Water damage to cultured stone veneer due to poor roof flashing

In an article written for The Journal of Light Construction, titled "**Manufactured Stone Nightmares**," Dennis McCoy discusses some of the problems and effects that have been encountered in his repair and remediation work. [[Read the full article](#)]



The problems that Mr. McCoy discusses can often be in structures less than two years old. The problems include rotten sheathing and framing members of the exterior walls. All troubles found with manufactured stone are not the result of the stone itself, but due to improper application of the materials.

Problems also commonly show up when a contractor extends the siding to, or even into the ground. Screeds and other base flashings should be held a minimum of 4" above grade and a minimum of 2" above hard surfaces such as driveways, patios, etc. Even though the exterior surface may be weather resistant, when the plywood or OSB backer sheathing is in contact with wet surfaces or soil, the OSB soaks up moisture like a sponge and will rot sooner or later.



This sturdy looking column base will eventually crumble, as the OSB box it is built on will rot away like wet cardboard.

Unfortunately, it is difficult to detect moisture hidden behind a cultured stone veneer. Once construction is complete, a home inspector is unable to see how the material was applied. Because the water resistive

barrier, metal lath, and base coat of cement stucco are completely concealed behind the manufactured stone veneer, it cannot be fully evaluated by a visual inspection. That is why a good home inspection includes a very detailed examination of flashing between different wall materials, along the roof where it butts up against veneer siding, and where the runoff from the roof may drain onto the stone veneer. Verification of moisture problems may require destructive investigation.

Reference: "**Manufactured Stone Nightmares**," by Dennis McCoy is available at http://www.wsrar.com/2011/Hi_Articles/JLC_stone_article.pdf