



Improved Stucco Systems

Ensure a proper drainage plane with stucco finishes

Think stucco finish can stop rainwater and moisture in its tracks? Think again. Stucco finishes are actually porous, which means that water can get sucked up through the pores and enter into the walls. What's more, stucco can crack over time, practically inviting water to enter the home, damage the building materials, and potentially produce mold.

When designing a stucco wall system, it's critical to assume that water *will* get past the stucco and enter the wall system. The best practice is to apply two layers of moisture protection, either asphalt-impregnated felt paper or housewrap, against the sheathing of the house.

It's critical to use two layers to create a drainage plane. In the past, builders used only one drainage plane, like housewrap. Because it's bonded to the stucco, water that gets past the stucco will wet the housewrap, which deteriorates its drainage properties and renders it useless. In addition, the wet housewrap can in turn cause the framing materials to get wet. Wet materials that can't dry out can deteriorate and become a food source for mold.

In addition to two layers of moisture protection, it's also critical to install weep screeds behind the stucco finish and to ensure flashing around windows, doors, and penetrations are integrated with the drainage plane.

The first layer of moisture protection should be fastened to all exterior wall surfaces. Make sure to install it shingle-fashion. Start at the lowest point on the wall, with newly placed material overlapping the preceding material. For example, a roofer begins applying shingles at the roof's edge, lapping each successive course over the preceding course all the way to the eaves. Also, make sure that it's continuous, as gaps will allow water to infiltrate. For step-by-step guidelines on creating a continuous drainage plane, visit BuildIQ's website [BuildIQ's website](#).

Next, install weep screeds at the bottom of each wall. Make sure they're installed behind the first layer of the drainage plane.

The second layer of housewrap or building paper should be applied as a backing onto which stucco is applied over metal lath. The stucco finish should also terminate with a weep screed at least eight inches above grade.

By installing a continuous drainage plane consisting of two layers of housewrap or building paper, using weep screeds, and ensuring flashing is integrated with the drainage plane, you'll create a water management system designed to stop water before it can enter and damage the home.

For more information about flashing and other moisture control strategies, visit BuildIQ's best practice website. [BuildIQ's best practice website](#)