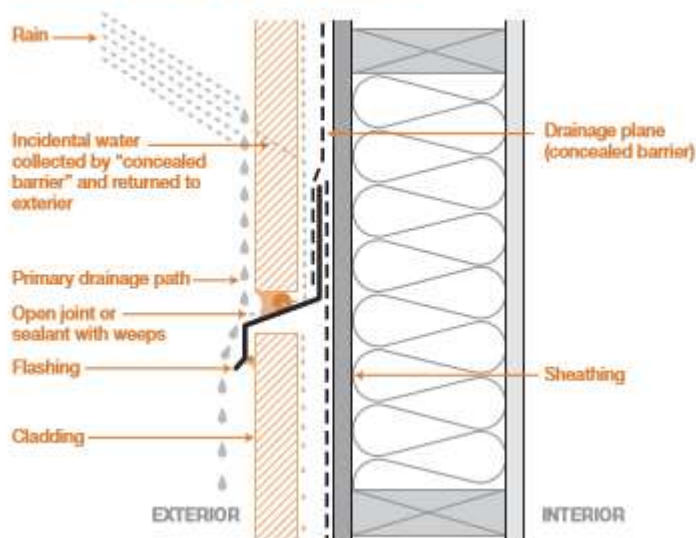


**GENERAL:** Stucco over masonry is considered a “barrier” moisture management system. When applied over framed walls, US code mandates stucco be converted to a “concealed barrier” system. Incidental water should be anticipated to get past the cement membrane. This typically occurs at terminations or cracks in the cement plaster. Masonry substrates are unaffected by incidental moisture, but wood or metal framing need protection. Good design anticipates incidental moisture intrusion and accounts for it with a concealed secondary barrier integrated with flashings. This generally includes a weep or drainage screed.

### Concealed Barrier Concept



**CEMENT MEMBRANE:** The stucco membrane deflects over 95% of the rain that impacts the wall surface. Only small amounts of water get past a properly applied cement cladding. Due to the nature of cement, the backside or inside of the stucco will absorb incidental moisture and allow it to escape outwards as vapor through the plaster membrane. Vapor impermeable coatings on stucco can inhibit this outward escape of moisture.

**CONCEALED BARRIER:** Incidental moisture should be anticipated to get past the cement membrane. This small amount of moisture is stopped by a concealed barrier or water-resistant barrier (WRB) over the framing. The SMA generally recommends a top layer of asphaltic saturated paper for concealed barrier stucco assemblies. Asphaltic paper wrinkles when fresh wet cement is applied, forming shallow channels on the backside of the cement stucco cladding. These channels allow water to weep down and out at the weep or drip screed. If additional or faster drainage is desired, the use of drainage mats made for stucco can be used between the WRB and the lath. This is called “rainscreen cladding”. Rainscreen cladding does not negate the need for proper flashings and a shingle-style installation process of the WRB and flashings.

*Owners should use licensed contractors, verify conditions and all materials used. The SMA is an industry wide not-for-profit trade association dedicated to the promotion and education of the stucco industry. Due to variables, the SMA can provide no warranty, express or implied for information contained herein. This is only a guide paper on moisture management for claddings.*