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WALL AND CEILING BUREAU

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TECHNICAL BULLETIN

Weather Resistive Barriers

The Bureau believes that the secondary weather barriers whether they are building paper or polymeric-based barriers should be just that…secondary. The primary barrier consisting of metal flashing, caulking and a good Portland Cement Plaster panel, should have characteristics that minimize the amount of moisture that the secondary barrier is forced to handle.

The building code defines Grade D paper or polymeric-based barriers on their ability to resist moisture migration through the material (water hold out capability). Grade D requires a minimum of 10 minutes water holdout, with 60 Minute paper the more commonly specified. However, the most important characteristic is a breathability characteristic of at least 35 perms, which means 35 grams of water vapor through a square meter of material in 24 hours.

The Federal Specification that defines the different types of paper and their characteristics is UU-B-790A. It defines the characteristics of several Grades of Paper. The 1997 UBC Standard 14-1 defines what should happen as the barrier is installed. The important points include vertical joints should overlap at least 6", horizontal joints should overlap at least 2" and attachments of the paper and lath should penetrate a framing member. The barrier should be installed free from tears, holes or breaks.

The barrier is an important part of managing moisture in a Plaster Wall System, but it is just a part and should not viewed as more than what it is.

15# felt based barriers and Grade B paper should not be specified on walls or ceilings because of a lack of breathability under Portland Cement Plaster.

Projects should be scheduled to minimize the amount of time the barrier is exposed to the weather. In other words, apply the plaster as soon as you can after the lath and barrier are installed.

The debate seems to center around how Plaster reacts under paper-based barriers and polymeric-based barriers. Definitely a debate for the message board.