For several years, the Gypsum Association has stated in its technical brochure that:

“. . . Exterior Finish Systems applied over gypsum sheathing should be applied with mechanical fasteners through the shifting into the wall fasteners . . .”

At the beginning of this year, the Gypsum Association released its revised gypsum sheathing brochure, GA-252-86. In this modification, the association has delicately included adhesive attachment to gypsum sheathing by stating:

“. . . Exterior Insulation Finish Systems (EIFs) incorporating gypsum sheathing may be used with either mechanical fasteners or adhesives. The performance of these systems . . . are the sole responsibility of the EIFS manufacturer”

However, in several different locations within the same bulletin, the Association recommends mechanical fasteners for attachment of EIFS Systems.

United States Gypsum Company (USG), a major manufacturer of gypsum sheathing and a member of the Gypsum Association, points out in its “Tech News” of March 1987, that this contradiction appears to mean the Gypsum Association has not really changed its recommendation on mechanical fasteners, but is bowing to pressure and changing its wording to accommodate a widespread practice of the EIFS industry. This adhesive installation method is confined to the “soft systems” on the market, which are the major competitors of our SUREWALL mechanically attached systems.

According to the “Tech News”, USG’s policy remains the same:

“. . . Exterior Insulation Finish Systems applied over gypsum sheathing must be applied with mechanical fasteners through the sheathing into the wall framing.”

There are two primary points to understand in this issue:

1. The biggest point is that sheathing paper was not designed or ever intended to take the dead load weighting of adhesively attached EIFS Systems.
2. We must also realize that by installing insulation to the exterior of a building the dew point (condensation location of water vapor traveling through the wall) is now the interface of the sheathing paper and the insulation board. This water condensation action will eventually erode the bond between the gypsum matrix and the paper facing. This consequently reduces the adhesion capacity of the EIFS to zero.

There have been numerous occasions when entire walls of hotels, condominiums and houses have literally fallen off or been blown away. This is the basic case which supports the use of mechanical fasteners for EIFS applications.

In addition, most soft systems do not or cannot incorporate a fastening system because the actual base coat and finish texture used are only 1/16” thick which makes it difficult to conceal or prevent the fastener from telegraphing to the surface. The SUREWALL Systems incorporate a minimum of 1/4” fiber-reinforced cement plaster which alleviates this problem.

The issue of mechanical fasteners is obviously a sensitive, but crucial one to the commercial construction and renovation industry. The good news is that architects, engineers and developers are becoming increasingly aware of the attributes of mechanical fastening and that certain metropolitan building authorities are already requiring all EIFS to be mechanically fastened.

We would appreciate hearing where you stand. Please write or call: SUREWALL Producers Council, P.O. Box 241148, Charlotte, NC 28224, 704/525-1621.