New Veneers Allow Greater Flexibility

A number of new veneer systems are being used with exterior insulation or standard insulation batts to create panels that are easily applied, provide outstanding insulation characteristics, and give the appearance of real finished brick, stone or tile. These panel systems offer increased design freedom in the selection of surfacing materials, and they provide additional options for renovation as well as new construction. They offer the desirable qualities of “fat” brick including higher resale values, lasting beauty, fire protection, and low maintenance. They generally provide excellent wind-loading capacities and moisture resistance.

Previously, prefabricated curtain wall panels were made in the traditional manner with wire lath and a full mortar bed anchored to a skeletal steel framework. The new systems allow installation of thin brick, tile or stone on expanded polystyrene or other surfaces, saving time and money. Some systems come with the bricks or stone already factory attached to the backing, saving on installation time and insuring uniformity of appearance and attachment characteristics. Others require bricks to be attached in preparation for or during installation, which can allow for greater flexibility and unique patterns.

The major advantage of such systems is the significant savings in labor. Modern construction demands thin, lightweight systems that can be erected easily. Hand-applied traditional brick-and-mortar exteriors have become virtually prohibitive in installation cost, particularly when compared to these systems that use real brick or other surface veneers for the look, feel and texture of brick, stone or tile.

At least four companies serving the wall and ceiling industry are marketing panel systems. These companies include Laticrete International, Inc., Real Brick Products Group (a U.S. Brick company), E-Z Wall, Inc., and R-Brick®, manufactured by American Brick Company. Following are descriptions of systems available from each of these companies. (Note: Technical information included below is based on information supplied by the manufacturers and is not intended to serve as a complete set of specifications. For installation information and
complete specifications, contact the individual manufacturers.)


Laticrete Panel Systems are available with facades of ceramic tile, thin brick, and natural stone. The system allows a wide range of architectural design styles and surface finishes. The royalty of marble, the look of traditional brick, or a sleek corporate style can all be achieved with the Laticrete system.

The standard exterior Laticrete Panel System consists of Laticrete BP cement board mounted on metal stud frames, with standard batt insulation in the frames. A waterproof membrane protects the cement board, and adhesive mortar holds the veneer to the board. A grout kit fills the joints. Stud and track typically required are 16 gauge minimum, 6" wide. Stud spacing should be 16" o.c. maximum. Connections in the framing should be welded, ground and painted with rust inhibitor. The board is fastened to the framing with countersunk screws.

A characteristic of the Laticrete system is shop fabrication, which allows for greater quality control. Fabrication of the panels should be performed in accordance with the manufacturer’s specifications by a factory authorized Laticrete Panel System Fabricator. The thin veneer is attached to Laticrete BP cement board, grout is applied, and the system is allowed to cure for three to seven days. It can then be installed on metal frames with a separate vapor barrier. (Note: contact Laticrete for complete fabrication and installation specifications.)

*DuPont Center, Jacksonville, Florida, using “Travertine” cladding.*
Real Brick’s clay bricks are applied onto a polystyrene insulation template.

Real Brick Products Group (a U.S. Brick company), P.O. Box 907, Owosso, MI 48867. Telephone (517) 723-8380. Fax (517) 723-2800.

Real Brick Products Group provides a state-of-the-art system consisting of 1/2" kiln-fired clay brick symbiotically employed with a patented vacuum formed polystyrene template. It installs in four simple steps: (1) Install 1” thick extruded polystyrene panel with fasteners; (2) Run a single bead of adhesive; (3) Lock brick into place; and (4) Mortar and tool joints.

The panels install to wood, steel or masonry. Fasteners for attaching the panels, supplied by U.S. Brick, consist of a fastener/plate used in conjunction with a wood, metal or masonry screw. The panels are very lightweight and can be cut with a utility knife. Panels feature a brick lock that holds bricks in place as adhesive sets, and they include an imprinted tape measure on all four sides. The nominal R-6 insulation value of the entire system, which measures 1-1/2" total, is 15 times that of 4” brick. Tongue in groove construction of the panels helps seal the outside wall from air infiltration.

The system also provides the versatility to utilize 1/2” to 2” extruded polystyrene backer or type X drywall. Installation services available include training, technical support, print take-offs, a 22-minute installation video, and in some cases actual installation by Real Brick’s crews.

E-Z Wall offers veneers of brick, marble, tile, and granite. Unlike other masonry application systems, E-Z Wall is made of steel, which combines with the compressive strength of masonry to form a steel reinforced monolithic wall that endures against weather extremes. The mechanical support system, engineered and designed to ensure a strong, durable thin masonry mechanical support panel, is available for configurations including curved radius corners.

The patented E-Z Wall system features stucco-embossed, hot-dipped galvanized architectural grade steel panels sized and spaced for the veneer. Double steel tabs space the masonry vertically on the panel for easy installation. The steel sheet is fastened and applied to a wall like any other standard siding—no special clips, hooks, fasteners, trims or strips are needed.

You can select the installment method appropriate to each project. Choices include components, pre-glued and complete panels. Special engineering and design keep material and installation costs down.

E-Z Wall provides the complete system, including a high-solids mastic for attaching veneers to the steel panel and latex-modified mortar with a portland cement base.

R-Brick®, manufactured by American Brick Company, 27303 W. Eight Mile Road, Detroit, MI 48240. Telephone (313) 538-6636, toll free (800) 248-8280.

With the R-Brick system, bricks...
Above, an R-Brick veneer mounted on Styrofoam® insulation. Below, R-Brick’s finished appearance.

are factory applied to a Styrofoam backer, rather than field applied as with other systems. This allows a faster final installation. The insulation is tongue and grooved on all four edges. The panels and brick are mechanically attached to the structure with patented “interlock clips.”

Bricks are applied in running bond, soldier course, or stack bond patterns to 48” by 16” sheets of Styrofoam® brand insulation with specially formulated R-Brick adhesive. The clips that hold the panels to the structure feature a serrated and perforated extension which projects into the grout joint between the bricks. R-Brick latex-modified grout bonds to the bricks and “interlock clips,” creating a permanent mechanical connection between the brick surface and structure.

The panels are especially suitable for retrofit since they can be mechanically fastened directly to most structurally sound substrates, which eliminates the need for costly wall preparation and special foundations. At six pounds per square foot, the panels do not add excessive weight.