ENERGY SAVING STUCCO:

Insulation/Energy is opening up new, profitable markets for contractors

In the last several years a new kind of exterior plaster system has experienced increased acceptance and use throughout the country. The concept is to combine a veneer plaster system with cellular plastic insulation which acts as the plaster base and the exterior wall insulation. The unique features of this concept are that the wall insulation performs most efficiently when placed on the outside or “weather side” of the building and that the resultant system is light and flexible.

Obvious Importance

The importance of insulating buildings is obvious to even the most casual observer. Last winter has been an object lesson, and energy saving systems are given primary consideration by all members of the building team for every type of project whether new construction or renovation.

Placing the wall insulation to the exterior of the building has been recommended as one of the most efficient ways to insulate. The wall is not subject to large changes in temperature of “thermal shock” as with other methods. In addition the wall structure stores heat (or not, as with air conditioning) acting like a “heat bank” which greatly reduces “peak load heat demand” and the size of the heat or air conditioning plant.

Provides Insulation

As important, is the theory that placing the insulation on the exterior results in 100% insulation. With the exception of the windows the exterior wall is insulated completely. There are no thermal bridges or places that cannot be insulated with normal techniques.

Architects and engineers are becoming increasingly aware of the fact that “thermal leaks” are significant. It does no good to have huge amounts of insulation in 80% of the wall and absolutely none in the other 20%. This condition is similar to a bucket of water with a hole in the bottom.

While the ability to insulate efficiently is important and unique in an exterior plaster system there are many other functions to be satisfied. While these systems look like stucco and are applied by wall and ceiling contractors the similarity ends here. The system is light flexible and tensile. Large areas (up to 70,000 square feet) have been installed without expansion joints. The fiberglass fabric is embedded in the base coat to prevent cracking, leaking and other deterioration.

(Continued on Page 38)
common to stucco, permitting its use in northern climates without the problems normally ascribed to exterior plaster systems.

System Available

The fact that a weather proof, maintenance free exterior plaster system can be achieved has met with considerable favor by architects that have not previously considered an exterior plaster system.

The increased popularity of light gauge metal framing is of particular importance as regards the system. The insulation on the exterior of the wall eliminates any condensation on the stud or shadowing of the interior finish. In addition the light flexible nature of the system allows the framing to be designed to utilize its strength rather than to limit deflection as required with brittle facing materials. The system can be used also with light gauge framing as a prefabricated wall assembly which is light weight, economical and thin.

Another aspect of the use of the insulation board as a plaster base is its versatility and ability to be fabricated in an infinite variety of custom shapes. Many architectural designs can be incorporated by custom fabricating the insulation and eliminate the need to fabricate these shapes in expensive framing. The three dimensional feature of the system permits a wide variety of design features at little additional cost.

New Markets

The exterior wall insulation and finish system is opening up a new and vital market for the wall and ceiling contractor. Many more building owners than ever before are renovating existing buildings. Many of these renovations are for the purpose of conserving energy and include factories and school buildings with large expanses of glass. The energy crises have opened everyone’s eyes in this regard. Not only is energy becoming more expensive but energy allocations and the inability to maintain a satisfactory temperature in many buildings has led many building owners to look for an economical, easy way to insulate their buildings.

The exterior insulation and finish system is by far the best solution for any building and is especially appropriate to block in glass areas. This type of work is a viable new market for the wall and ceiling contractor and the volume of work of this type can only be expected to increase in the near future.

Exterior wall insulation and finish plaster systems represent an opportunity for the contractor that is in tune with today’s problems. It makes him a part of the solution with a system that is functional as well as attractive. The resultant wall assemblies are indeed “something better for less.”