

QUALITY MANAGEMENT OF THE EIFS PROJECT

By Jason Josephs

During the past few years, as the market for EIFS has blossomed, EIFS applicators have made major strides in developing ways to expediently and efficiently manage projects. Now many are learning that by integrating certain comprehensive quality management procedures into the earliest stages of projects, they can avoid the costly pitfalls that potentially can plague any job. By thoughtfully addressing the key areas of the project, EIFS applicators can greatly enhance their profitability and their reputations for quality.

Estimating

Quality management of the EIFS project must address estimating. Without a good system for estimating the applicator can inadvertently incur incorrect materials costs, overlook necessary details or steps, or end up with the wrong amount of material. A good estimating system not only avoids these shortcomings, it also accommodates the common requirement for last-minute changes in the bid.

By definition, a good "system" extends beyond software or worksheet tools. A good system begins with the clear understanding by the estimator of the complete scope of the project. A good system prevents the estimator from assuming that costs for the job at hand will replicate historical costs without first understanding the nuances of the current job.

As the EIFS industry matures, esti-

matoms are increasingly confronted with having to consider differences in the systems that are specified. Not understanding the differences between PB (polymer based) and PM (polymer modified) or between products can seriously impact estimated costs. The estimator also cannot afford to overlook costs associated with the following:

- Scaffolding.
- Tenting.
- The difficulty associated with the building layout and configuration.
- Back wrapping.
- Insulation board application and special shapes.
- Rasping EPS.
- Trim accessories.
- Aesthetic grooves.
- Impact resistance requirements.
- Finish coat materials and applications.
- Project schedule.

Given the negative repercussions associated with omission of any of these considerations from the estimate, the full understanding of the specifications and the establishment of a good dialogue between the estimator, general contractor and the specifier are essential to the success of any project.

The mechanics of estimation begin with the applicator's basic labor and materials costs: applying and rasping EPS, and applying reinforcing mesh, base coat and finish coat. Next, the system must account for production rates

of the application crew, material coverage rates, price of materials and any "add-ons" the project requires. These add-ons will include such activities as backing wrapping, aesthetic joints, banding, corner reinforcement and foam shapes. Unless all these items are considered at the time of the bid, the applicator can end up with unanticipated costs that can lead to decreased profit.

Because application procedures vary by manufacturer, it is important for the estimator to carefully study the product specs. The thickness of the base coat, the requirement for a double layer of reinforcing mesh at ground level, or the need for a primer are examples of such requirements that might vary by manufacturer and that will definitely affect the cost of the bid.

When estimating the cost of the finish, the estimator must account for differences in material costs and for differences in labor costs associated with applying or working the various products and systems. For example, some finishes by their nature will demand a higher skill level and may also require more time to work to achieve the proper texture. The EIFS manufacturer should be able and willing to provide detailed information regarding the application procedures for each product and system.

The Senergy Technical Services Department has developed a software package that is designed to address all

the factors that affect the estimate. The Senergy Estimating System, or S*E*S, not only provides the checklist to cover every consideration, it also performs the calculations after adjusting for the estimator's local labor rates as established by the applicator.

Field Application Checklist

A complete yet concise application checklist is an excellent tool for helping site managers to spot potential problems that, if not corrected, could result in costly disasters. If the essential procedures for quality application are available to the applicators and supervisors at the job site, the chance for error will be greatly reduced or eliminated. Some of the points

If the essential procedures for quality application are available to the applicators and supervisors at the job site, the chance for error will be greatly reduced or eliminated.

a good checklist will address include storage of materials, acceptable job conditions, examination of the substrate, mixing materials and protecting completed work.

Senergy offers a laminated field application checklist so that site managers can monitor procedures and verify their correctness. If applicators want to develop their own checklists, it is important that they confer with the EIFS manufacturer to confirm its accuracy in addressing all steps from substrate inspection through finish coat application and protection during curing.

Field Management

Maximizing the efficiency and the quality of work performed by the EIFS application crew requires the crew to first have a clear understanding of the project plans and specifications. If crew members don't know before they begin, there are bound to be work stoppages while desperate phone calls are placed to gain clarification of key points. This fact underscores the necessity of complete communication among the applicator, general contractor and the specifier. In fact, for its new

EIFS, QA21, Senergy requires preconstruction conferences of all parties involved in the design and construction of the EIFS walls. In any EIFS project, it is in everyone's best interest to avoid problems by discussing the work to be done on the wall before starting that work.

In addition to reviewing the project requirements, the applicator should also ask other questions about items that affect his or her efficiency. Using a checklist to review considerations such

field manager must confirm that his or her crew understands all details, materials to be applied, starting and stopping points and special requirements.

Quality Control

To ensure that the application proceeds smoothly and yields results that coincide with the customer's expectations of aesthetics and performance, job-site quality control is essential. One person should be designated as the quality controller whose duty it is to ensure that the system is being applied in accordance with the manufacturer's specifications and that the mechanics are achieving a consistent appearance over the entire wall surface.

The manufacturer can assist in this goal. For example, at Senergy, technical application consultants train applicators throughout the year to familiarize them with the nature and application of the products. By working with new applicators, Senergy can ensure that they are competent to perform the

basics of EIFS installation, and Senergy continues a contract with approved applicators via quarterly technical bulletins, job-site visits and other forums to demonstrate new or enhanced products and systems. When questions arise on the job, the applicator can call the manufacturer's technical department for guidance. On some jobs, the manufacturer may even be able to provide technical advisers for periodic site visits.

Taking these measures saves money for the applicator and results in quality that can only enhance the firm's reputation.

Those who have adopted a quality program consider it a bargain. With some planning and a little effort, an applicator firm will begin the process of upgrading its image and its profitability. □

About the Author

Jason Josephs is a staff engineer for Senergy Inc., Cranston, R.I.

*cedures for
available
pervisors at
for error
or eliminated.*

as substrate, required staging, ground conditions, scheduling, temperature and weather protection, availability of water and electricity, and available work space, the applicator can gain information that will enable better planning and execution.

Once the job approaches its starting date, the field manager must follow a predefined plan of attack. This plan should identify starting points and potential stopping points. It should confirm that all materials are at the job site and have been protected according to the manufacturer's specs and as safety dictates. It should initiate all masking, staging and other site preparation to ensure that these steps have been completed prior to the starting time of the actual EIFS application. Above all, the