A joint effort

ARMA and NRCA partner to publish quality control guidelines for installing asphalt shingles

by Mark S. Graham

NRCA and the Asphalt Roofing Manufacturers Association (ARMA) have published *Quality Control Guidelines for the Application of Asphalt Shingle Roof Systems*. The document provides guidelines for the on-site evaluation of asphalt shingle roof system application at the time of installation.

Quality

Quality control and quality assurance are essential elements of all roof system applications.

Quality control is performed by the installing roofing contractor, who designates an individual to be on-site during roof system application. A designated individual may be a crew member and should be knowledgeable of the roof system type being installed and have the authority to immediately correct noncompliant work.

Quality assurance is the responsibility of the building owner or his or her authorized representative, such as a design professional, roof consultant, builder or general contractor. The person performing quality assurance should be knowledgeable of the roof system being installed and notify the roofing contractor immediately if noncompliant work is observed so corrective action can be taken.

Visual inspection

NRCA and ARMA consider the most effective means to evaluate the quality of asphalt shingle roof system installation to be visual examination and evaluation at the time of application.

The NRCA and ARMA document provides quality assurance and control evaluation criteria and appropriate corrective actions for roof substrate surfaces; underlayments; drip edges; fasteners; asphalt shingle starter courses; horizontal offsets; course spacing; fastening; hand-tabbing; hips and ridges; valleys and appearance; and flashings.

For example, for roof substrate surfaces, the document indicates the proper design and installation of roof decks and nailable substrates to which asphalt shingle roof systems are applied are beyond the responsibility of asphalt shingle manufacturers and roofing contractors. Roofing contractors inspect and accept surfaces of nailable roof decks and substrates only to schedule asphalt shingle roof system installation.

Attention to substrate surface dryness and cleanliness during application also is essential. The evaluation criteria for roof substrate surfaces indicates a surface should be sufficiently dry, clean and prepared to receive a new asphalt shingle roof system. Damaged or deteriorated deck areas should be identified and repaired or replaced. The indicated corrective action for these conditions is to delay shingle installation until the condition is corrected.

The document also includes a glossary, an NRCA statement of fastener placement, a project sequencing and housekeeping checklist, and references.

In NRCA's statement on fastener placement, NRCA acknowledges proper attachment of asphalt shingles according to manufacturer's printed installation instructions is an important consideration in the overall performance of asphalt shingles. However, NRCA believes too much emphasis is sometimes placed on manufacturers' exact fastener placement locations. Allowable fastener placement tolerances need to be considered for asphalt shingle installation. Asphalt shingle manufacturers should be consulted for fastener placement tolerances specific to their products.

NRCA also believes too much emphasis sometimes is placed on fasteners being improperly placed when fastener heads are located within asphalt shingles' self-seal strips. Research has shown once self-sealing asphalt shingles have sealed, fastener placement has little effect on the wind resistance and overall performance of an asphalt shingle roof system.

Using it

I encourage you to provide the document to building owners or include it in project submittals to establish a basis for your rooftop quality control programs.

Copies of the document are available by contacting NRCA's Customer Service Department at (866) ASK-NRCA (275-6722) or accessing shop.nrca.net.

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