When reroofing, a spotless deck is not necessary

by **Thomas Smith, AIA**

Q: *In removing a two-ply built-up vapor retarder from a concrete deck, is it necessary to remove all of the felt?*

A: It is common for small areas of a vapor retarder or built-up membrane that has been mopped to a deck to remain bonded to the deck. Attempting to remove all of the felt from such small, randomly located areas can be very time consuming and unnecessary. If portions of plies do not spud-off, it generally means they are securely bonded to the deck and can be left in place if they are dry. It is much more critical to remove wet plies and portions of plies that are not well bonded.

Q: *When installing asphalt shingles, should the metal drip edge be placed under or over the underlayment?*

A: The metal drip edge should be placed *under* the underlayment at the eave. This procedure is illustrated in the third edition of the *NRCA Roofing and Waterproofing Manual* on page 20 of the manual's steep roofing section. This is a change from the second edition of the manual, which shows the eave metal on top of the underlayment. NRCA now recommends placing the metal under the underlayment so that water reaching the underlayment flows out of the system and over the drip edge.

Both the second and third editions of the manual show the proper placement of the rake metal, which should go over the underlayment.

Q: *What type of fastener is suitable for an old gypsum deck?*

A: The general guide to fasteners that can be found in the Appendix of the *NRCA Roofing and Waterproofing Manual* shows a number of fasteners that are made for use with gypsum decks. It should be remembered, however, that gypsum becomes stronger over time. This may make it necessary to predrill holes in the deck before installing the fasteners. Predrilling is generally not required for new gypsum. Neither the NRCA manual's fastener guide nor the Roofing Industry Educational Institute's fastener guide mentions the need to predrill most old gypsum decks.

Q: *Are there design aids other than the manufacturer's literature for mechanically attached membranes?*

A: Some publications recently released by the Single Ply Roofing Institute (SPRI) may be of help. In the latter part of 1988, SPRI issued its *Wind Design Guide for Mechanically Fastened Single-Ply Roofing Systems.* This document was released along with the institute's *Wind Design Guide for Adhered Single-Ply Roofing Systems.* These two works join SPRI's *Wind Design Guide for Ballasted Single-Ply Roofing Systems,* which was introduced at NRCA's 1986 convention. SPRI may be contacted at 312/940-8800.

With mechanically attached membranes, it's important to remember that if a code is applicable to the building, uplift pressures should be in accordance with the code's wind design provisions.

NRCA now recommends placing the metal drip edge under the underlayment so that water flows out of the system.

Q: *Should a slip sheet be used between the membrane and insulation on protected membrane roofs?*

A: The design of a protected membrane roof (PMR) places the insulation above the membrane. Typically, extruded polystyrene insulation that is manufactured specifically for PMRs is used. When the membrane below the insulation is PVC, a slip sheet should be used to prevent plasticizer migration. For other types of single-ply membranes, a slip sheet is generally not required. Unsurfaced modified bitumen may need a slip sheet, so it is best to check with the membrane and insulation manufacturers before proceeding.

For built-up roofing in a protected membrane configuration, the membrane is typically surfaced with a heavy flood coat of asphalt. This asphalt should be separated from the insulation with a slip sheet to prevent the insulation from bonding to the asphalt and possibly causing damage to the membrane because of board flotation. Although slip sheets are often only specified for Type I and Type II asphalt, they should also be used over Type III. Typically, 4-mil polyethylene is used for slip sheets over BUR. PR