supported by clips in pockets. This is accomplished in either mortar or sealant systems by leaving a properly sized horizontal joint space between the top of the stone below and the bottom of the stone above. Typically these are sealant joints. Such relief joints must be sized for anticipated vertical movement and, if sealant-filled, must also consider the ability of the sealant to handle movement. They must be free of shims, pads or mortar or any other material that would interfere with their function. Dowel or other anchor holes or slots in such systems should have compressible material placed at their bottom and/or top as well.

As a general statement, installation of compressible material at the bottom and/or top of anchorage holes and slots will minimize the risk of high stress concentrations and potential stress failures in the stone at anchorage points.

false joints

When design requires a false joint in dimensioned stone, it should be cut the same width as the bed joints. If not pointed or sealed, false joints will not match the other joints. False joints reduce the effective thickness of the stone for handling and wind load purposes.

dampproofing

UNEXPOSED SURFACES

“Dampproofing” is the common term describing the various coatings and membranes used to control construction moisture and ground water. Proper attention to dampproofing procedures in Indiana Limestone construction will eliminate many cosmetic problems during and immediately after construction.

A continuing supply of water or moisture will not harm or discolor Indiana Limestone unless it carries with it a high alkalinity or soluble salts. Portland cement, concrete blocks and other cement products contain such alkalinity. It is important to isolate the stone from sources of alkaline solutions such as wash from concrete pours, untopped concrete block walls, unglazed window openings and the like.

Where Indiana Limestone is used at grade, or where supported on concrete ledges or haunches, or on continuous angles, a back-coating of either cementitious waterproof stonebacking or bituminous stonebacking should be used. This material may be placed on the stone prior to setting; however, the cementitious material must cure to become effective. The bituminous coatings often are difficult to apply cleanly, and will retard mortar adherence.

The stonebacking material should be applied to all unexposed surfaces of the stone up to 1'-0" above grade including joints. In those cases where stone is carried below grade, the covered portion of the face should also be coated. Below-grade mortar joints should be similarly treated.

Although coating the support surfaces is generally less effective, the same materials may be used on angles, concrete ledges and other bearing surfaces.

Figures 27A, B & C illustrate the placement of these coatings. Note that the intent of the coating is to isolate the stone from both high alkalinity and from soluble salts. Therefore, attention should be given to such conditions in design, and proper type and placement of coatings should be specified. These coatings should be applied in the field, to assure their undamaged condition.