

Figure 15-4 Visual inspection of moisture distribution within a brick. (From BIA Technical Note 17C.)

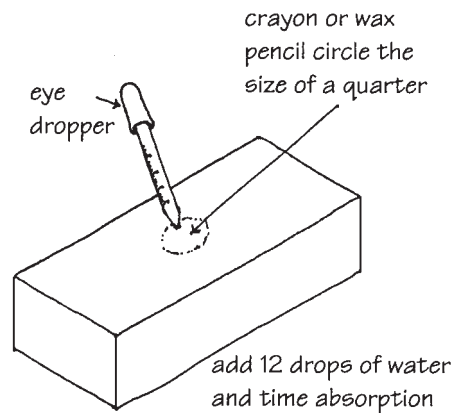


Figure 15-5 Simple field test to identify high-suction brick that should be prewetted before use.

Brick and architectural concrete masonry units must also be properly blended for color to avoid uneven visual effects. Units from four different cubes or pallets should be used at the same time, and brick manufacturers often provide unstacking instructions for even color distribution. For single-color units, this takes advantage of the subtle shade variations produced in the manufacturing process, and on a blend of colors, will prevent stripes or patchy areas in the finished wall (see Fig. 15-6). The wider the range of colors, the more difficult it is to get a uniform blend.

All masonry units should be clean and free of contaminants such as dirt, oil, or sand, which might inhibit bond.

15.2.4 Accessories

Steel reinforcement, anchors, ties, and other accessories should be cleaned to remove oil, dirt, ice, and other contaminants that could prevent good bond with the mortar or grout. Careful storage and protection will minimize cleaning



Figure 15-6 Masonry units must be properly blended for uniform color distribution.

requirements. Flashing materials should be protected from damage or deterioration prior to placement, and insulation materials protected from wetting.

15.2.5 Layout and Coursing

The design of masonry buildings should take into consideration the size of the units involved. The length and height of walls as well as the location of openings and intersections will greatly affect both the speed of construction and the appearance of the finished work. The use of a common module in determining dimensions can reduce the amount of field cutting required to fit the building elements together.

A number of the common brick sizes available are adaptable to a 4- or 6-in. module, and dimensions based on these standards will generally result in the use of only full- or half-size units. Similarly, a standard 16-in. concrete block layout may be based on an 8-in. module with the same reduction in field cutting (*see Fig. 15-7*). In composite construction of brick and concrete block, unit selection should be coordinated to facilitate the anchorage of backing and facing wall, as well as the joining and intersecting of the two systems. The table shown in *Fig. 15-8* gives vertical and horizontal coursing for modular brick and 8-in. concrete block. Three courses of standard modular brick equal the height of one concrete block course. As shown in *Fig. 15-9*, the brick and block units work together in both plan and section, thus increasing the speed with which the mason can lay up a wall and improving the general quality, workmanship, and appearance of the job.