Specifying Ground-Face Concrete Masonry Units

Ground-face concrete masonry units (CMU) provide architects and designers with an attractive architectural block texture. Ground-face CMU are produced by grinding the top 1/16 inch off the face of standard block with an abrasive cutting head to reveal the natural colors of the aggregates. This process provides a smooth textured unit available in a wide range of integral colors.

Many architects consider ground-face block (also called honed-face) an aesthetically pleasing, lower cost alternative to tile and marble. It should not be specified, however, if polished stone is the preferred material for a particular building project. Ground-face block are manufactured to meet the requirements of ASTM C-90 and can contain small face voids and minor edge chips. The provisions of ASTM C-90, Section 7 apply with regard to finish and appearance. This includes product sampling and exposed wall viewing requirements.

Care is required when handling ground-face block. Special palletizing methods are provided by local block manufacturers to minimize product damage during shipping. Ground-face block are laid in the same manner as a standard block and are available in various widths for either veneer or structural applications. Raked joints are not recommended, specify concave tooled or “Vee” mortar joints to fill small edge chips. Ground-face should be treated as any architectural concrete masonry unit in regards to cleaning and sealing. (See NWCMA Technical Note: Rain Resistant Architectural Concrete Masonry.) Glossy appearing, non-breathable sealers that can be film forming should not be used on exterior walls.

The underlying natural beauty hidden in standard smooth concrete masonry units is revealed through the grinding process. Numerous sizes and shapes of CMU can be ground. (Some unit shapes cannot be ground. It is advisable to check with your local concrete block manufacturer prior to specifying a special ground-face unit.) The units can be scored to alter pattern or change scale. Integral coloring may be added to further enhance the wall appearance.

Suggested Specification

Ground-face concrete masonry units shall conform to ASTM Standard C-90, with a minimum density of 110 pounds per cubic foot. (The block should contain the recommended amount of the integral additive “Dry Block” or equal, in western Washington and western Oregon where rain resistance is a major concern.) All exposed faces shall be ground to a depth sufficient to uniformly expose the aggregates.

A job site sample panel should be constructed for approval of workmanship, color, texture, and finish.