

denoting return and reveal, back surface finish, and right- or left-hand unit when required.

Because of the glazed surface, a larger variety of special shapes is required to facilitate door and window openings, headers, corners, and so on. In addition to full-size stretcher units, shapes include half-lengths, half-heights, and corner and jamb units, as well as sills, caps, lintels, cove bases, and coved internal corners (see Fig. 3-24). Some manufacturers prepare shop

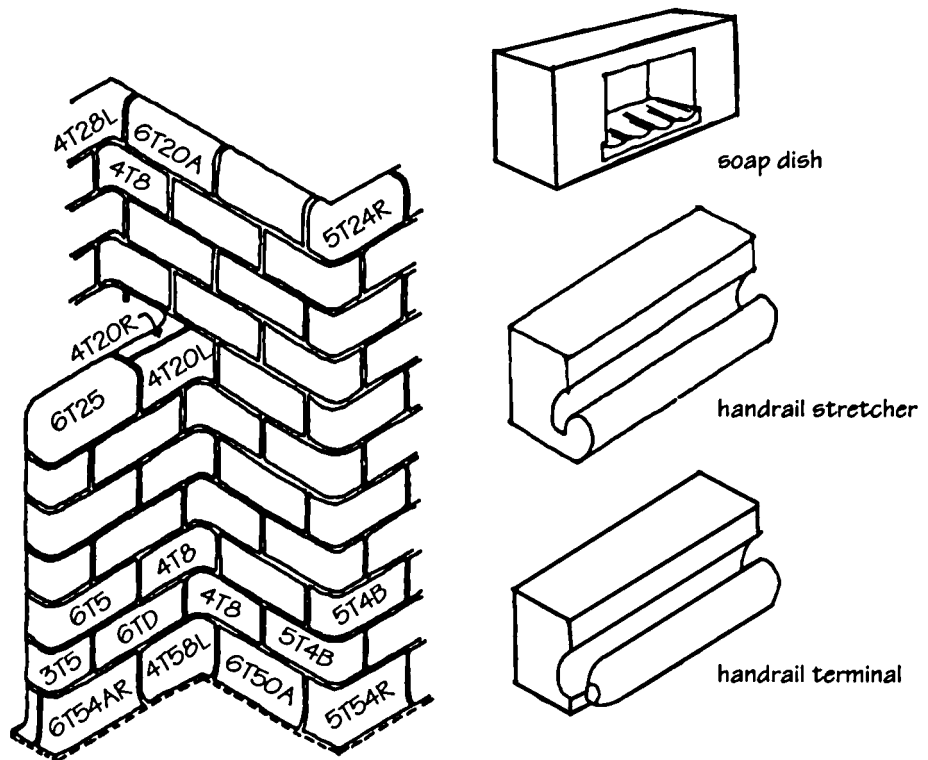
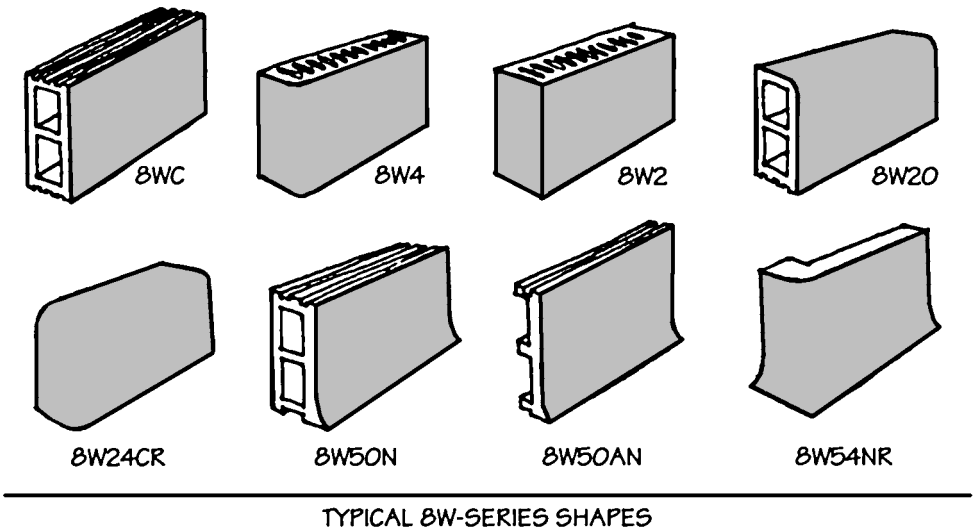


Figure 3-24 Glazed structural clay tile shapes and applications.

drawings from the architectural plans to show actual tile shapes and locations. If the project is laid out with modular dimensions, very few (if any) extraordinary special shapes will be required and job-site cutting and waste will be minimum.

Structural glazed tile has long had a place in commercial kitchens, bottling and food processing plants, schools, and hospitals because of its durable surface and low maintenance requirements. But more and more architects are turning to this material for use in correctional facilities and in high-traffic public buildings such as airports, shopping malls, and sporting arenas. Unlike glazed brick, glazed structural clay tile allows single-wythe construction of walls and partitions glazed on both sides.

Glazed tile is available in traditional pastels and in bold colors such as fire engine red and cobalt blue. It also comes with either smooth or textured surfaces. The 8 × 8-in. modular and 8 × 16-in. face sizes are most popular today because they course easily with other types of masonry. Scored 8 × 16-in. units are available that simulate the look of 8 × 8 stack bond. Like glazed brick, glazed structural tile is impervious to stains, resistant to fading and crazing, and unaffected by many chemicals including hydrochloric acid and caustic cleaning solutions. Its abrasion resistance is greater than that of ordinary steel when rated on the Mohs hardness scale. As long as the mortar is designed to resist the same abuse expected of the units, a structural glazed tile wall will last the life of the building with no maintenance other than washing. Even when concrete masonry is used for walls, a structural glazed tile cove base provides better resistance to the abuse of floor cleaning equipment and traffic than ordinary block.

For applications requiring extremely sanitary conditions, and for high-abuse areas, joints can be raked out and pointed with epoxy mortar. Walls can then be hosed down, scrubbed, or steam cleaned without damaging the mortar and without allowing moisture to enter the wall. After the joints are raked, the setting mortar should cure for 24 hours before pointing with the epoxy mortar.

### 3.2.5 Screen Tile

Clay masonry solar screens have always found wide acceptance whether constructed of screen tile or of standard units ordinarily used for other purposes. Screen tile is available in a variety of shapes and patterns (*see Fig. 3-25*). Lighter colors, because of greater reflectivity, provide brighter interiors. Darker colors absorb more of the sun's heat and light and give greater protection from its harsh rays.

Screen tile is covered by ASTM C530, *Standard Specification for Structural Clay Non-Loadbearing Screen Tile*. Grades SE, ME, and NE correspond to the severe weather, moderate weather, and no weather exposure durability ratings of other clay masonry products (*see Fig. 3-26*). Only two aesthetic types are included, though, Type STX (Select) and Type STA (Architectural).

## 3.3 TERRA COTTA

Architectural terra cotta has been used as a decorative veneer for centuries. The name itself, which means "baked earth," dates from Roman antiquity. Hand-molded slabs with either plain or sculptured surfaces are still produced in the traditional manner, and extruded units are mechanically fabricated with smooth-ground, beveled, scored, scratched, or fluted surfaces. Both the hand- and machine-made types may be glazed in clear, monochrome, or polychrome colors and in matte, satin, or gloss finishes.