

Requirements for Facing [‡]	
Property or Characteristic	Requirement
Resistance to crazing, cracking, or spalling	None when tested in accordance with specified method
Chemical resistance	No change after testing with specified chemicals [†]
Adhesion of facing	No failure of adhesion of facing material at unit compression test failure
Abrasion resistance	Wear index shall exceed 130 when tested in accordance with specified method
Surface burning characteristics	Flame spread less than 25, smoke density less than 50
Color, tint and texture	As specified by purchaser, change less than 5 Delta units when tested in accordance with specified method
Soiling and cleansability	Visible stain not to exceed trace when tested in accordance with specified method Spotting media completely removed when tested in accordance with specified method

[‡] Facing of resin, resin and inert filler, or cement and inert filler producing a smooth resinous tile facing.

[†] See table below.

Chemical Resistance	
Chemical	Duration of Test (hr.)
Acetic acid, CH ₃ COOH, 5%	24
Hydrochloric acid, HCl, 10%	3
Potassium hydroxide, KOH, 10%	3
Trisodium phosphate, Na ₃ PO ₄ , 5%	24
Hydrogen peroxide, H ₂ O ₂ , 3%	24
Laundry detergent, 10%	24
Vegetable oil	24
Blue-black ink	1
Ethyl alcohol, industrial denatured, 95%	3

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Manufacturing Tolerances	
Type of Tolerance	Requirement
Size	Total variation from specified dimensions of finished face height and length shall not exceed $\pm 1/16$ in.
Distortion	Distortion of plane and edges of facing from plane and edges of unit, maximum 1/16 in.
Cracking, chippage	Units shall be sound and free of cracks or other defects which interfere with placement or impair strength. Facing shall be free of chips, crazes, cracks, blisters, crawling, holes, and other imperfections which detract from appearance when viewed from a distance of 5 ft. perpendicular to facing surface using daylight without direct sunlight.

Figure 4-17 Requirements for ASTM C744 prefaced concrete masonry units.

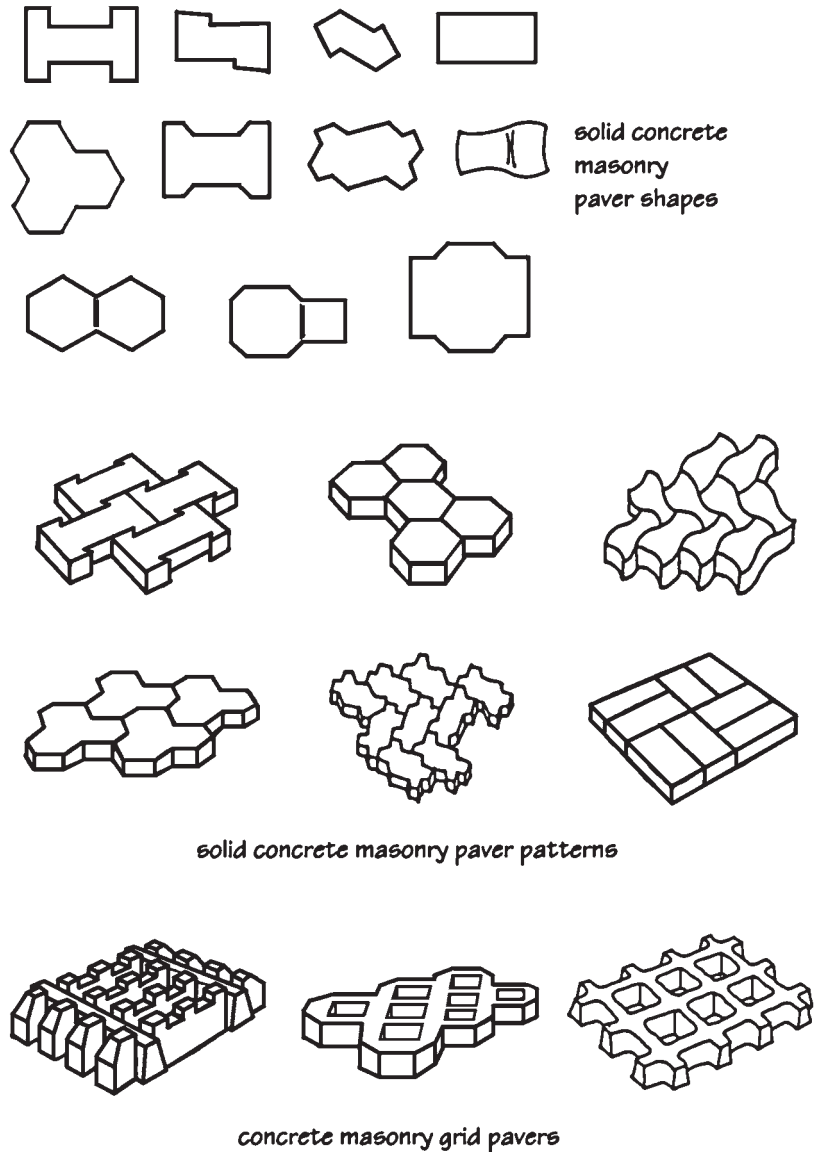


Figure 4-18 Concrete masonry paving units. (From *National Concrete Masonry Association, TEK 11-3, NCMA, Herndon, VA.*)

strength, *flexural strength* from 7 to 10%, and the *modulus of elasticity* from 150 to 600 times the value in compression. For engineering calculations in reinforced masonry construction, exact figures must be computed, but for general design purposes, these rules of thumb give a fairly accurate idea of the properties and capabilities of the block or concrete brick being considered.

4.7.2 Absorption

Water absorption characteristics are an indication of durability in resistance to freeze-thaw cycles. Highly absorptive units, if frozen when permeated with