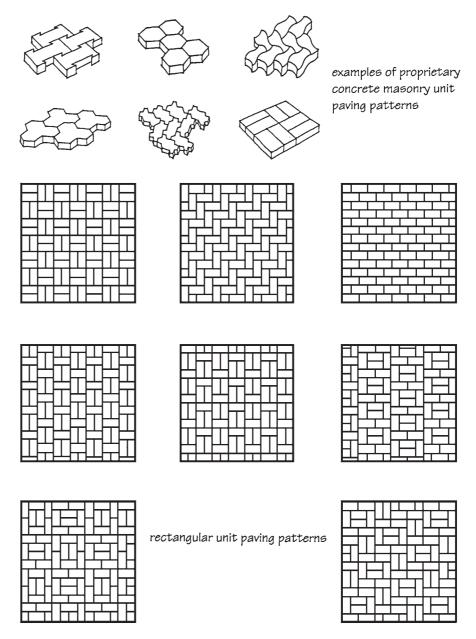
14.2 Fireplaces 455



For vehicular traffic on flexible sand bed paving, long continuous joints should be oriented perpendicular to the direction of travel. Patterns without long continuous joints are more stable against sliding, displacement, and the formation of ruts from the repeated braking and acceleration of vehicles.

Figure 14-8 Masonry paving patterns.

chamber influences both the draft and the amount of heat radiated into the room. The dimensions recommended in the tables may be varied slightly to correspond with brick coursing for modular and non-modular unit sizes, but it is inadvisable to make significant changes. A multifaced fireplace can be a highly effective unit, but presents certain problems of draft and opening size that must sometimes be solved on an individual basis. The single-face fireplace is the most common and the oldest design, and the majority of the standard detail information is based on this type. ASTM C315, *Standard Specification for Clay Flue Linings*, covers minimum material requirements,

Chapter 14 Masonry Paving and Fireplaces

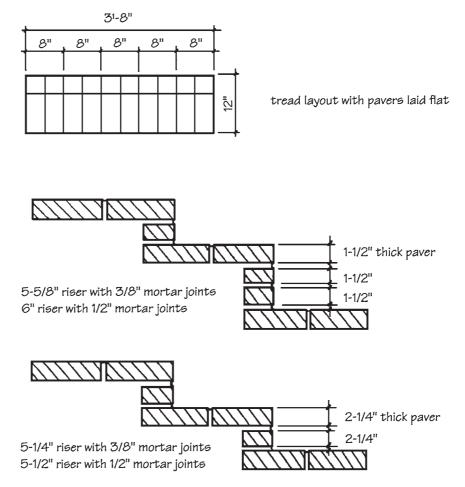


Figure 14-9 Brick steps using flat pavers. (From Beall, Masonry and Concrete for Residential Construction, McGraw-Hill Complete Construction Series, 2001.)

and ASTM C1283, Standard Practice for Installing Clay Flue Lining, covers minimum installation requirements for residential masonry chimneys not exceeding 40 ft in height. Code requirements for fireplace details and dimensions are shown in Fig. 14-13 and the section drawings in Figs. 14-14 and 14-15. Flue size requirements are shown in Fig. 14-16.

In seismic areas, masonry chimneys must be designed to withstand large lateral forces, and must be anchored to the building frame to prevent overturning. Adequate foundation size and strength are critical for stability in any exposure. Flashing and counterflashing details are shown in *Fig. 14-17*.