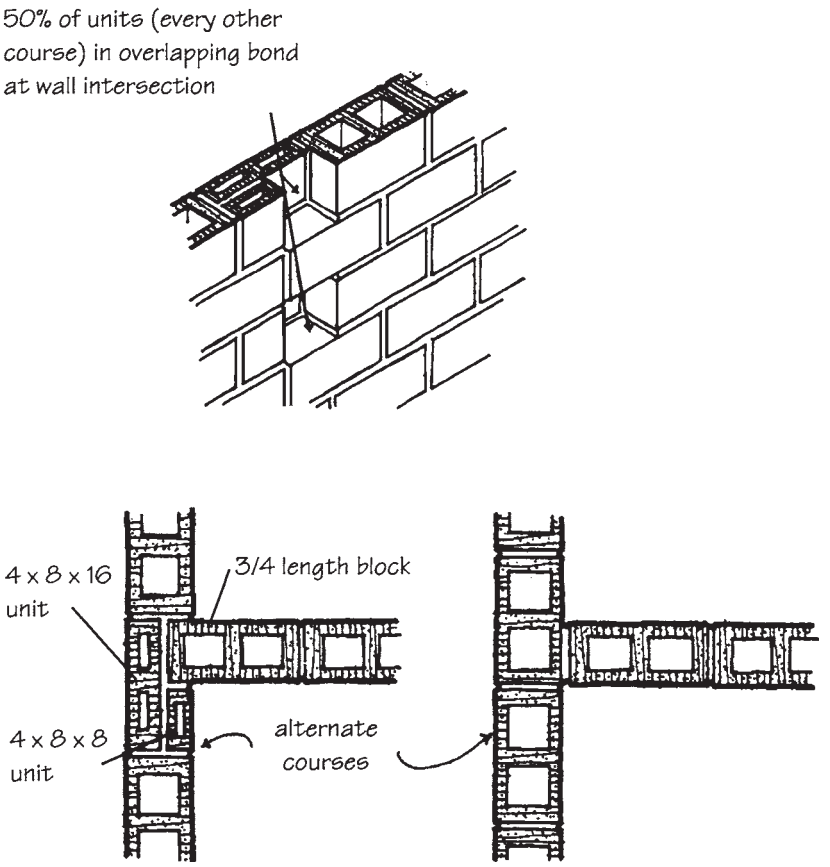

Figure 15-11 Masonry unit bonded wall intersection.

string line is pulled from one side, easily attachable to the masonry walls at the corners, and easily plumbed and maintained for the height of the wall.

15.3 INSTALLATION

Masonry construction includes the placement of mortar, units, anchors, ties, reinforcement, grout, and accessories. Each element of the construction performs a specific function, and should be installed in accordance with recommended practice.

15.3.1 Mortar and Unit Placement

Mortar is the cementitious material that bonds units, connectors, and reinforcement together for strength and weather resistance. Although it contributes to the compressive strength of the assemblage, its primary functions are in providing flexural and tensile bond and in filling the joints between units against the passage of air and water. To perform these functions, it must be properly mixed and placed to achieve intimate contact with the unit surface and form both a physical and chemical bond (refer to Chapter 6).

Masonry walls with full head and bed joints are stronger and less likely to leak than walls with furrowed bed joints and lightly buttered head joints. Partially filled mortar joints reduce the flexural strength of masonry by as much as 50 to 60%, offer only minimal resistance to moisture penetration,

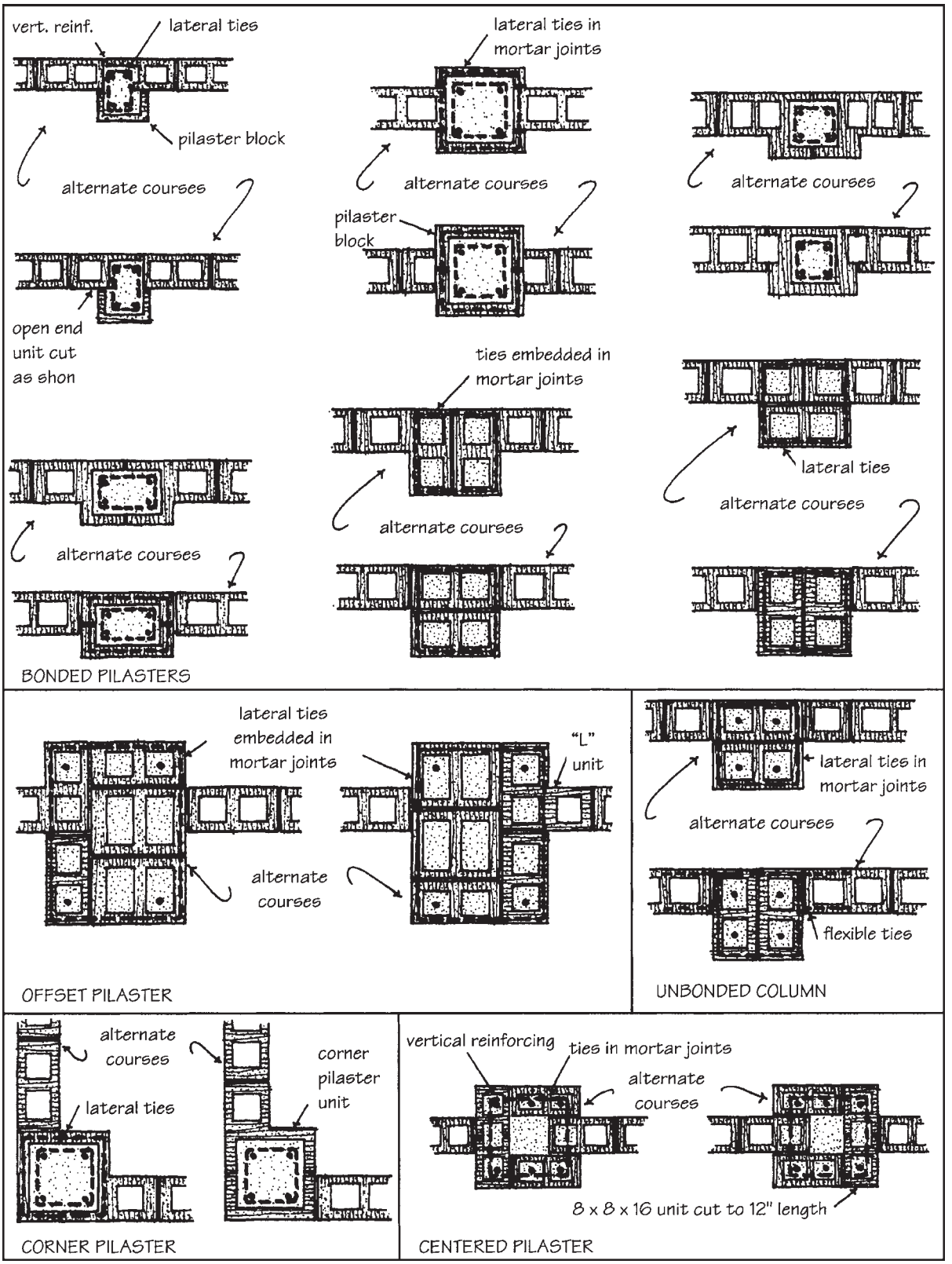

Figure 15-12 CMU pilaster and column coursing layout.