15.3 Installation 493

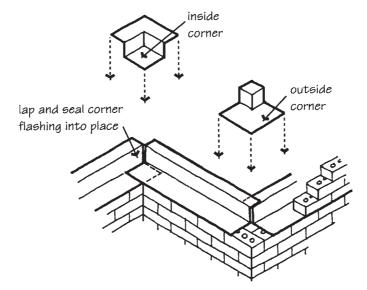


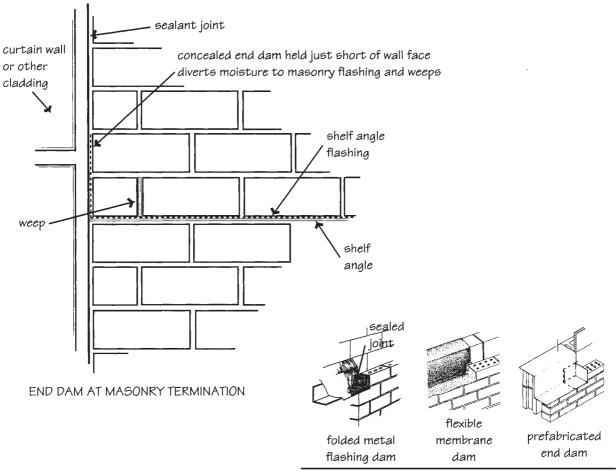
Figure 15-27 Corner flashing can be field or shop fabricated of metal, or prefabricated self-adhering rubberized asphalt flashing boots can be used.

lintels or studs, mold growth, and freeze-thaw damage can result (see Fig. 15-37). Weep hole tubes are most vulnerable to blockage, even when gravel drainage beds are used. Chapter 7 illustrates several proprietary drainage accessory products, all of which are intended to maintain the free flow of moisture to the weep holes. Some are more effective than others, but all are probably more effective than pea gravel in the bottom of the wall cavity (see Fig. 15-38). Use of a drainage accessory, however, does not eliminate the need for proper construction procedures to minimize mortar droppings.

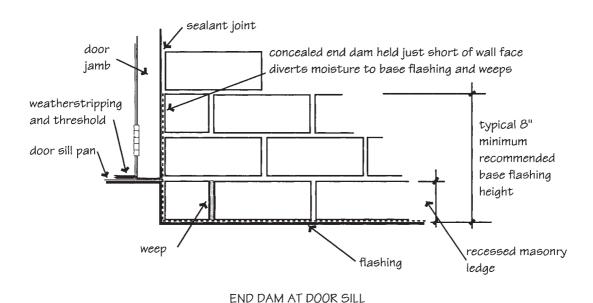
## 15.3.3 Control and Expansion Joints

Control joints and expansion joints are used to relieve stresses caused by differential movement between materials, and by thermal and moisture movement in the masonry itself (refer to Chapter 9). The terms control joint and expansion joint are not interchangeable. The two types of joints are different in both function and configuration.

Control joints are continuous vertical head joints constructed with or without mortar, to accommodate the permanent moisture shrinkage that all concrete masonry units experience. When shrinkage stresses are sufficient to cause cracks, the cracking will occur at these weakened joints rather than at random locations. Shear keys are used to provide lateral stability against wind loads, and elastomeric sealants are used to provide a watertight seal (see Fig. 15-39). Mortared control joints must be raked out to a depth that will allow placement of a backer rod or bond-breaker tape (to prevent three-sided adhesion) and a sealant joint of the proper width-to-depth ratio. Shrinkage always exceeds expansion in concrete masonry because of the initial moisture loss after manufacture. So even though control joints contain hardened mortar, they can accommodate reversible thermal expansion and contraction because it occurs after the initial curing shrinkage. Joint reinforcement should be stopped on either side of control joints.



FLASHING END DAMS



**Figure 15-28** Form end dams wherever flashing terminates at windows and doors and against adjacent construction.