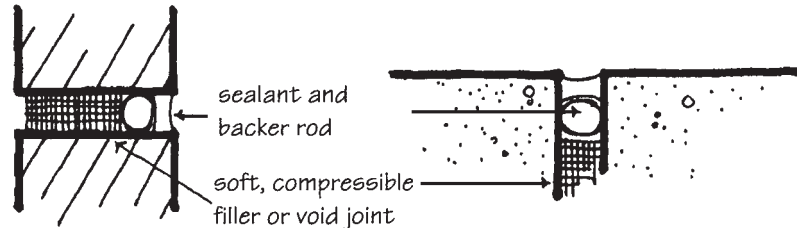


Figure 9-10 Flexible anchorage of concrete masonry.

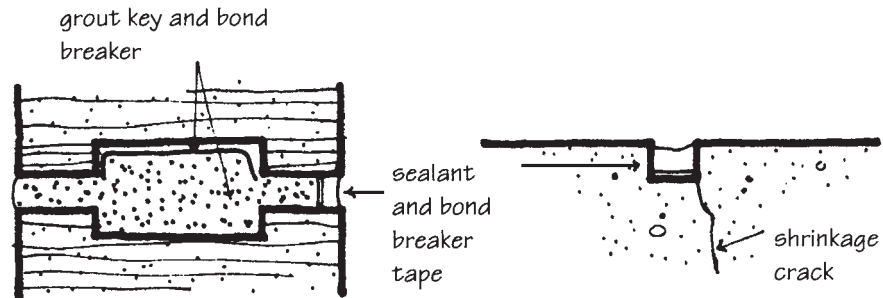
In loadbearing masonry construction the brick or block walls support concrete floor slabs or steel joist and metal deck floors. The methods of anchorage will vary for different conditions (see Chapter 12). With concrete block and concrete slabs, there is less concern about differential movement because of the similarity of the material characteristics. Connections may be either rigid or flexible, depending on the particular design situation. In brick masonry, however, it is more common to provide a bond break or slippage plane at the point where a concrete slab rests on the wall. Roofing felt or flashing is commonly used for this purpose, and allows each element to move independently while still providing the necessary support. The bond break may be detailed for both conditions where wall-to-slab anchorage is or is not required (see Fig. 9-8). Where masonry walls rest on a concrete foundation, mechanical anchorage between the two elements often is not necessary because the weight of the wall and its frictional resistance to sliding are adequate for stability. In shear wall design where floor-wall connections must transfer loads through diaphragm action, anchorage must be designed as part of the engineering analysis (see Chapter 12).

9.3 MOVEMENT JOINTS

In addition to the flexible anchorage of backing and facing materials, control joints and expansion joints are used to alleviate the potential stresses caused by differential movement between materials, and by thermal and moisture movement in the masonry. The terms *control joint* and *expansion joint* are not interchangeable. The two types of joints are different in both function and configuration (see Fig. 9-11).



EXPANSION JOINTS IN MATERIALS, IN WALL SYSTEMS, OR IN BUILDINGS ALLOW FOR BOTH EXPANSION AND CONTRACTION



CONTROL JOINTS IN CONCRETE, STUCCO AND CONCRETE MASONRY CONTROL THE LOCATION OF SHRINKAGE CRACKS
(in concrete work, control joints are sometimes called contraction joints)

Figure 9-11 Expansion joints and control joints are different, and the terms should not be used interchangeably.