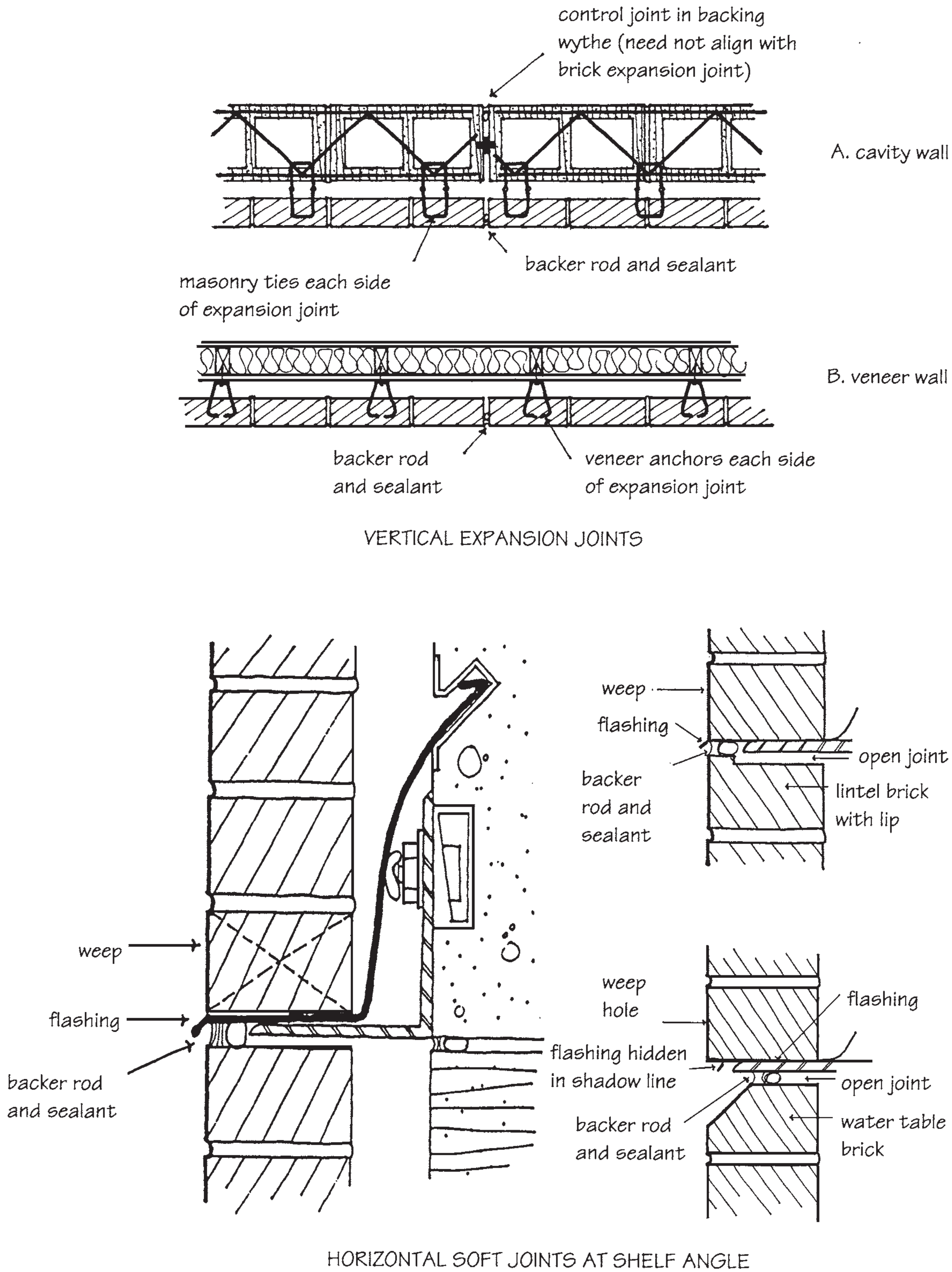

Figure 9-13 Clay masonry expansion joints.

Figure 9-14 Mortar bridges across an expansion joint can cause localized spalling where movement is restricted.

this additional limitation, using the sealant at only 80% of its capacity for this example, the formula is then

$$W_t = \frac{\Delta L_t}{0.8S} \tag{9.4}$$

where W_t = minimum joint width for thermal movement only, in.
S = sealant movement capacity
ΔL_t = dimensional change due to thermal movement, in. [using equation (9.3)]

To calculate the joint width required for moisture movement in masonry, the coefficients in *Fig. 9-4* must be used in the formula

$$W_m = \frac{M_c}{100\,(L)} \tag{9.5}$$

where W_m = minimum joint width for moisture movement only, in.
M_c = moisture movement coefficient (*see Fig. 9-4*)
L = panel length or joint spacing, in.

Material fabrication and erection tolerances must also be considered in determining the required joint width. When unanticipated construction tolerances result in increased or decreased joint width, sealant performance is seriously affected. Narrow joints especially are a frequent cause of sealant