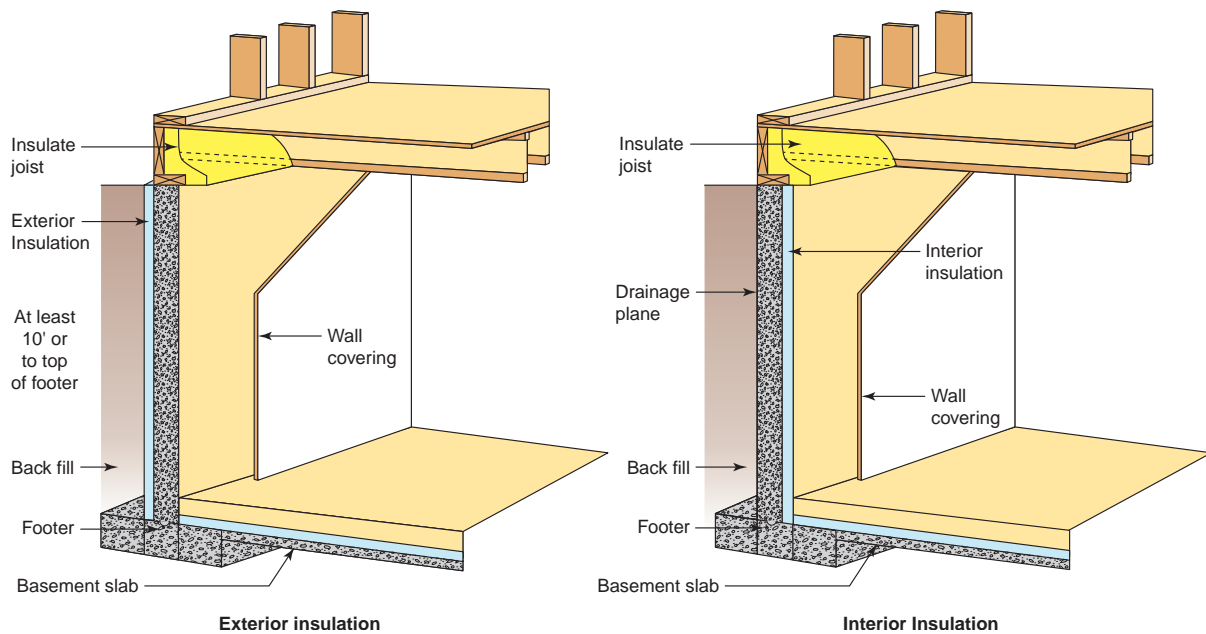
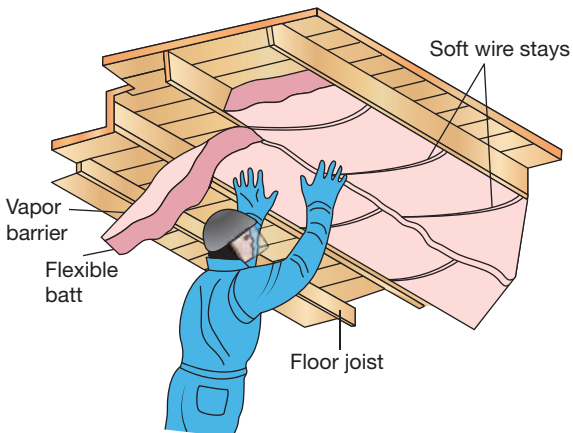


## Basement walls

In conditioned basements, walls (see definitions of *basement wall* and *above-grade wall*) [Ref. R202] must be insulated from the top of the basement wall to at least 10 feet below grade or to the basement floor, whichever is less (Figure 15-9). It is very important for the designer and builder to clearly indicate the final grade on the plans. This will speed building department review for compliance and permit issuance. If the basement is designed as unconditioned space, the thermal envelope boundary must be shifted to the underside of the floor above (Figure 15-10). In this condition, the rim joist is considered to be part of the thermal envelope, and care must be taken to insulate it to the same requirements as for the floors. [Ref. R402.2.9]



**FIGURE 15-9** Basement wall insulation



**FIGURE 15-10** Basement ceiling insulation