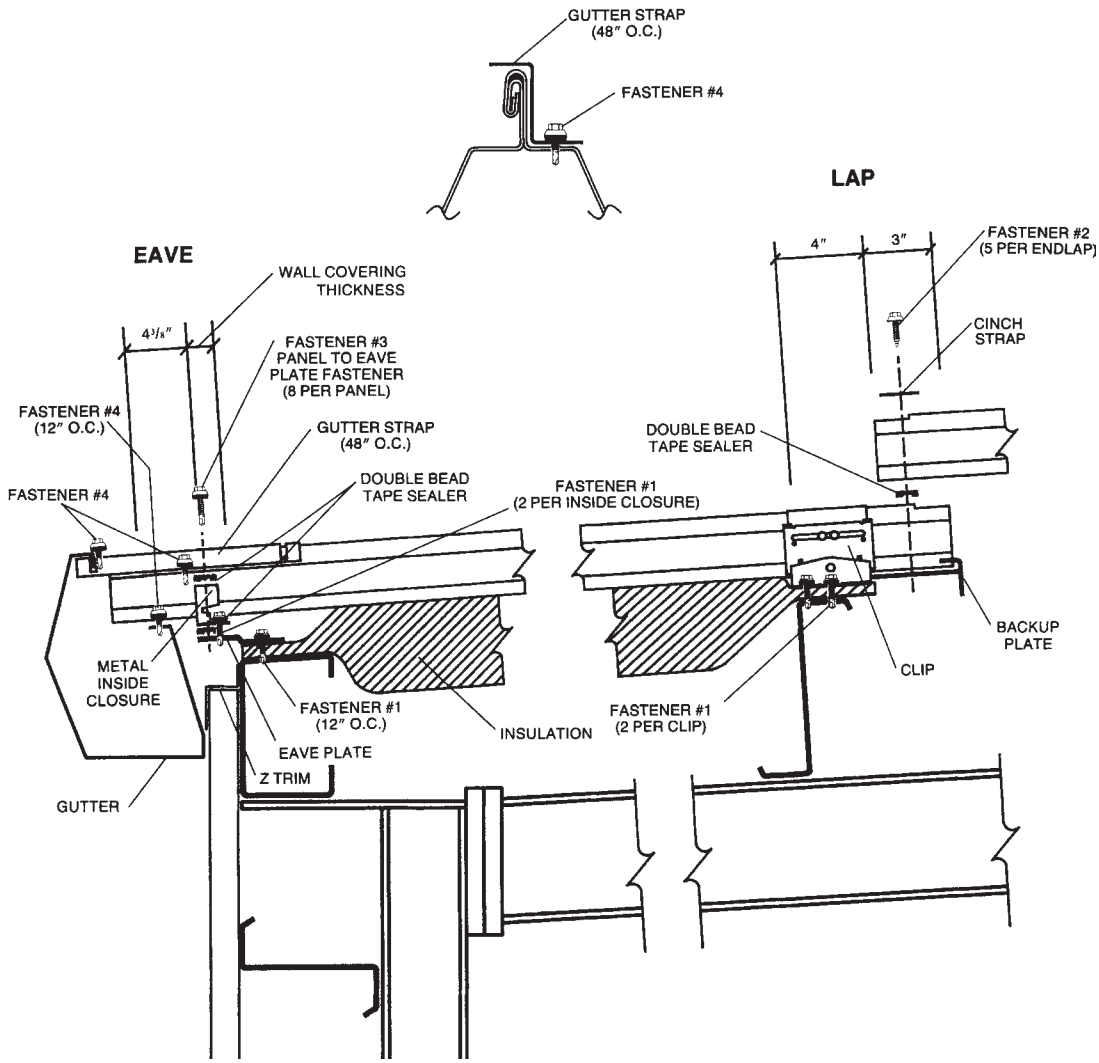

FIGURE 6.19 Fixed eave detail for standing-seam roof. (*MBCI.*)

A more complicated detail of Fig. 6.30 can be used when the joint occurs at the cut edges of panels. The curved expandable flashing helps accommodate transverse movement of the roofing. This design allows more flexibility in the layout of the roofing panels, but it introduces a number of additional metal pieces.

With either detail, corresponding expansion joints in the eave and gable trim and in the gutters are required.

And finally, Fig. 6.31 illustrates how the roofing can be "fixed" at a valley, as called for in Fig. 6.18. Two channel ("cee") secondary structural members, braced at the bottom by an angle, close off Z purlins at each side of the valley. The channels support the valley plate that carries valley flashing with a raised center rib. The center rib allows for some transverse roofing movement and promotes

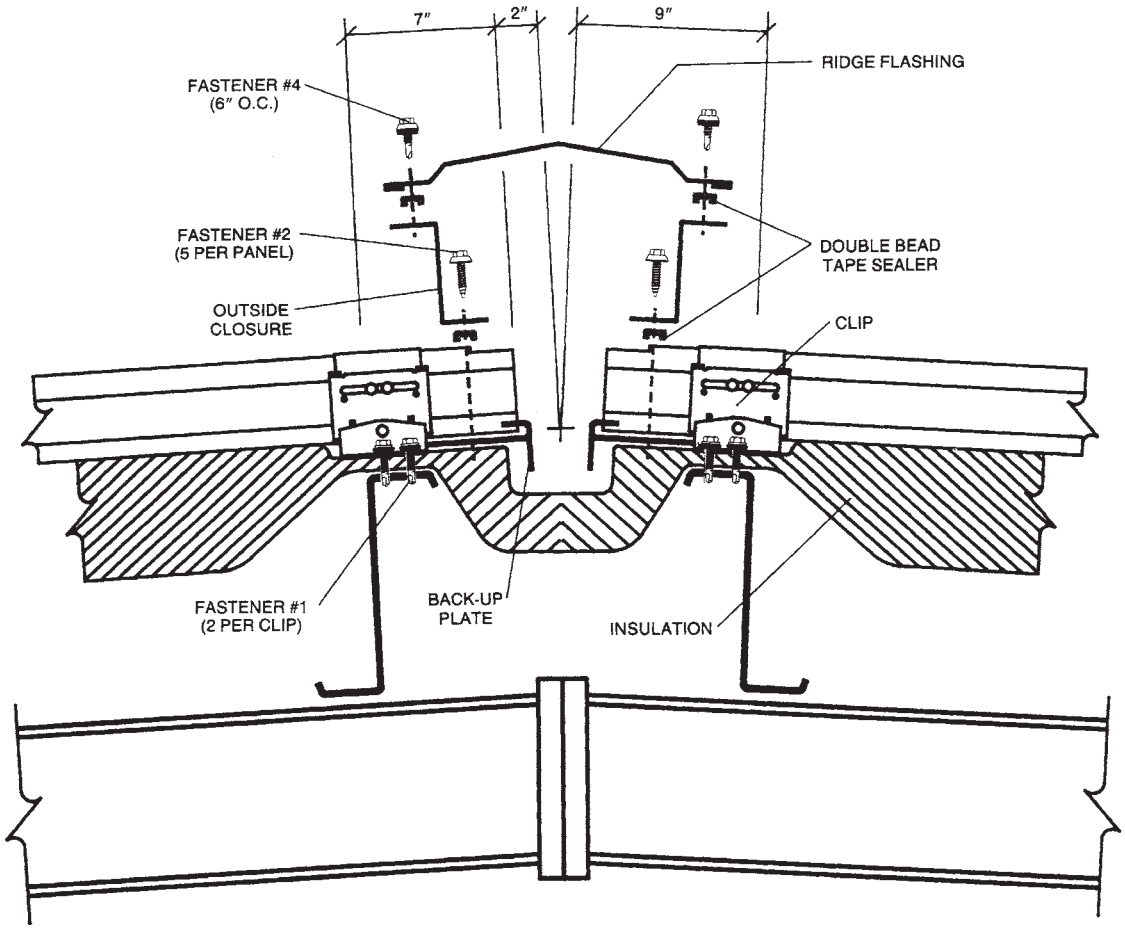

FIGURE 6.20 Floating ridge detail for standing-seam roof. (*MBCI.*)

water runoff. This detail has been obviously given a lot of thought, but on balance, roofs with hips and valleys work better with vertical-seam roofing.

6.5.4 Design Details for Vertical-Seam Structural Roofing

Structural roofing with vertical standing seams has its place in commercial and institutional buildings where the utilitarian look of trapezoidal metal roofing may be out of place. Some examples of vertical-seam roofing products are Butler Manufacturing's VSR* Roof System, and MBCI's Battenlock† (Fig. 6.32).

*VSR is a registered trademark of Butler Manufacturing Co.
†Battenlock is a registered trademark of MBCI.