## **METAL ROOFING**

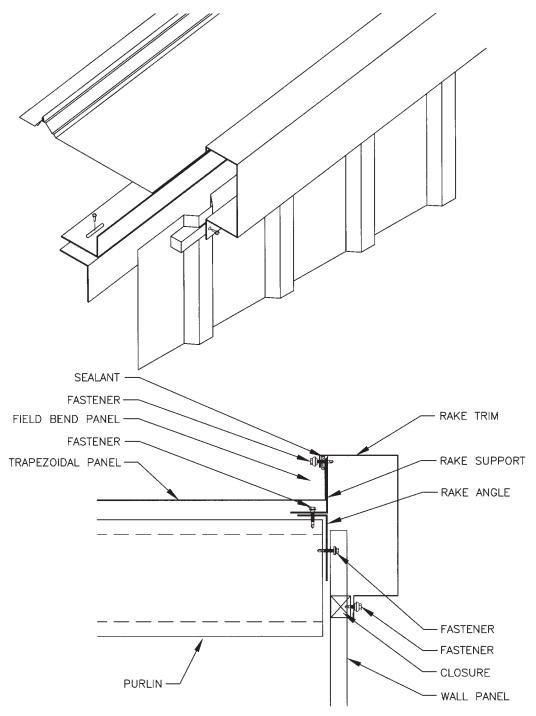


FIGURE 6.21 Detail of standing-seam roofing with trapezoidal profile at fixed rake, panel placed off-module. (In this common detail, panel movement is impeded, and it is not recommended by the author.) (*MBMA*.)

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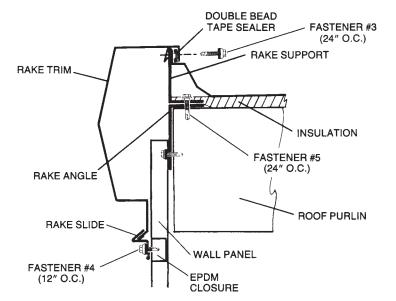


FIGURE 6.22 Rake detail for standing-seam roof. (MBCI.)

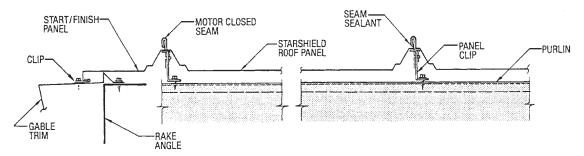


FIGURE 6.23 Sliding connection of structural roofing with trapezoidal profile to gable trim at the rake. (Star Building Systems.)

Vertical-seam panels are often selected for architecturally demanding applications, such as roofto-fascia transitions (Fig. 6.33) and roofs with hips and valleys (Fig. 6.34). Indeed, the vertical-seam products were originally developed for architectural roofing, but have since become popular in structural roofing applications. Unfortunately, some manufacturers continue to call these products architectural roofing, which causes confusion. In our definition, these panels represent structural roofing with vertical seams, because they can span the distance between the purlins unassisted, as demonstrated by the load table in Fig. 6.32.

The better aesthetics cannot compensate for the fact that vertical seams are not as good as trapezoidal seams in accommodating temperature expansion and contraction perpendicular to the slope. Slim vertical seams leave no space for the concealed clips with movable inserts, and the movement must take place below the panels. One of the clips used with vertical-seam roofing is shown in the top right-hand corner of Fig. 6.12. The seams can be either rolled by a portable machine or snapped together.

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