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Designers cannot restrict thermal movement, it must be accommodated.

Copper, stainless steel, or aluminum roof or wall pans that are longer than 12 ft (3.7 m) and steel pans longer than 20 ft (6 m) must employ an installation method that is designed to accommodate thermally-driven expansion and contraction. These are approximate minimum panel lengths that can be longer or shorter depending on the region, exposure to the daily sun, and other design factors. *See* Table A-8 for metal expansion data.

Pans can be segmented in shorter lengths up a long roof with staggered transverse seams like Figure 6–5 or expansion clips similar in design to those in Figure 6–23 can be used.

In roof designs where the pan is locked over a drip strip with a lock at the eave, that is where expansion can be accommodated. Most ridges are so designed such that that is the fixed point of the roofing panels. However, ridges can be designed and installed to accommodate expansion using a loose locked fold at the top of the panel.



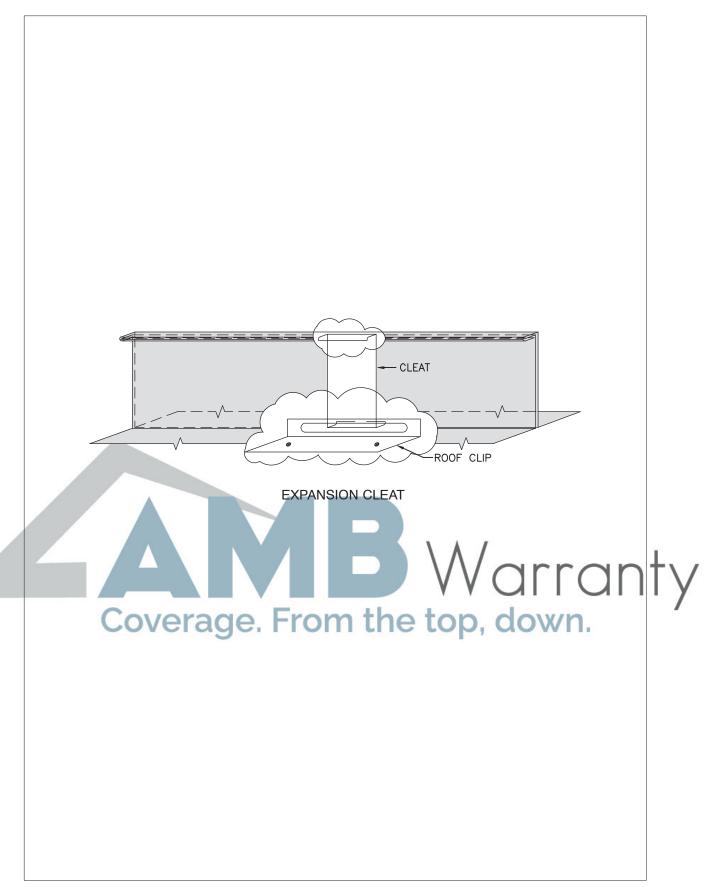


FIGURE 6-23 METAL ROOF PANEL EXPANSION AND CONTRACTION