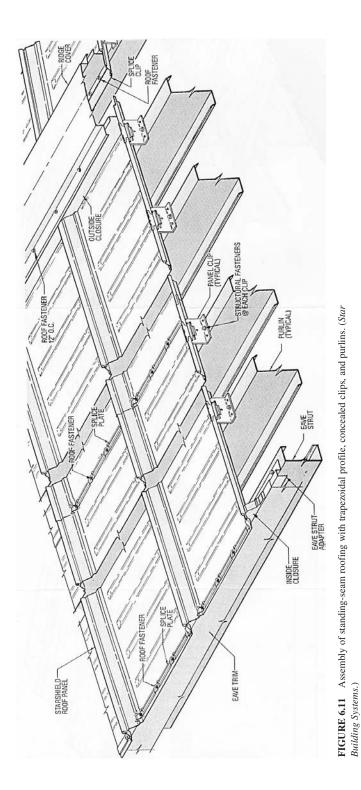
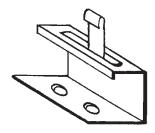
METAL ROOFING

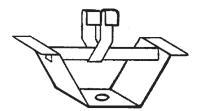


Downloaded from Digital Engineering Library @ McGraw-Hill (www.digitalengineeringlibrary.com) Copyright © 2004 The McGraw-Hill Companies. All rights reserved. Any use is subject to the Terms of Use as given at the website.

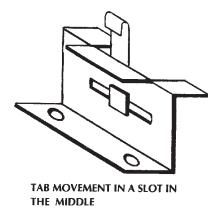
METAL ROOFING

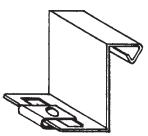


TAB MOVEMENT IN A SLOT AT THE TOP

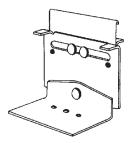


TAB MOVEMENT ON A BAR AT THE TOP





THE CLIP MOVES WITH THE PANELS THROUGH A SLOT IN THE BASE. THE "C" CLAMP ATTACHES AND ALLOWS THE CLIP TO MOVE



TAB MOVEMENT IN A SLOT IN THE MIDDLE WHILE BASE ARTICULATES TO ACCOUNT FOR SUBSTRUCTURE MISALIGNMENT

FIGURE 6.12 Common designs of standing-seam roof clips. (From Nimtz,¹⁸ courtesy of Metal Architecture.)

partly because it is better able to accommodate thermal expansion and contraction of the roofing perpendicular to the slope (Fig. 6.14). Spacing of the corrugations and width of the panels vary among the manufacturers. Some panels with widely spaced seams are provided with cross flutes approximately 6 in on centers for better rigidity and walkability, as well as for reduction of wind vibrations and noise. An example of the properties and configuration of standing-seam panels may be found in Fig. 6.15.

After corrugated sheets are seamed and engaged by clips, the individual sheets become parts of the metal roof membrane that moves as a unit with temperature changes. The movement capacity of the clips and the expansion details restrict the maximum uninterrupted roof width to about 200 ft, beyond which stepped expansion joints are needed. A typical detail of the stepped roof expansion joint is shown in Fig. 6.16.

Downloaded from Digital Engineering Library @ McGraw-Hill (www.digitalengineeringlibrary.com) Copyright © 2004 The McGraw-Hill Companies. All rights reserved. Any use is subject to the Terms of Use as given at the website.