

FIGURE 5.28 Diagonal purlin bracing.

The straps must be properly positioned so that they are placed in tension. The strap orientation of Fig. 5.31 works when the straps are located above the purlins' top flanges, directly below the roofing. The mirror-image orientation, where the straps extend at an angle from the frames toward the bottom of the sheet in Fig. 5.31, works when the straps are placed below the purlins' bottom flanges. (Visualize the purlins' top flanges moving toward the ridge and the bottom flanges away from the ridge, and the proper strap orientation becomes easier to grasp.)

This bracing system traces its origins to heavy mill buildings with purlins made of structural steel channels. The channels were laterally restrained by round sag rods, sometimes arranged in a diagonal manner similar to that illustrated in Fig. 5.31.

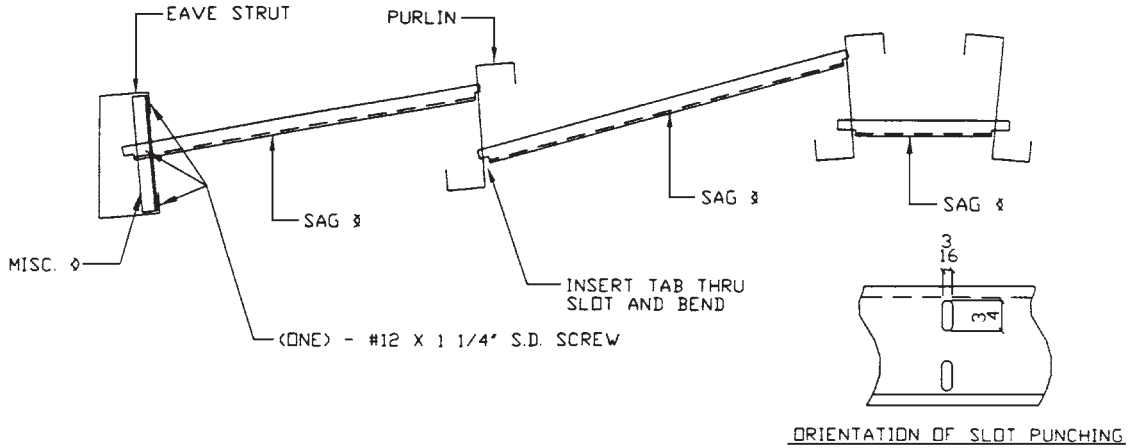


FIGURE 5.29 Details of diagonal bracing anchorage used by some manufacturers. (A&S Building Systems.)



FIGURE 5.30 Diagonal purlin bracing. Note sturdy ridge channels.