

IF YOU'VE EVER ASKED YOURSELF "WHY?" about something related to structural steel design or construction, *Modern Steel Construction's* monthly Steel Interchange column is for you! Send your questions or comments to solutions@aisc.org.

Extended End-Plate Stiffener

The stiffeners in the extended end-plate moment connection as shown in Design Guide 4 are detailed at a 30° angle. How is this angle selected? In many gusset connections the angles are set at 30°. What is the significance of the angle?

AISC Design Guide 4, titled "Extended End-Plate Moment Connections," provides design details for this type of connection. The stiffeners are detailed at a 30° angle to the horizontal. This angle is selected based on the design requirements for the connection. In many gusset connections, the angles are set at 30°. The significance of the angle is that it provides a balance between the strength and stiffness of the connection. A 30° angle is a common choice because it provides a good balance between the strength and stiffness of the connection. The angle is also chosen to provide a good balance between the strength and stiffness of the connection. The angle is also chosen to provide a good balance between the strength and stiffness of the connection. *Kurt Gustafson, S.E., P.E.*

Anchor Rod Tensile Strength

When calculating the strength of a threaded anchor rod per Section J of the *AISC Specification*, is the strength based on failure in the threads or in the gross area?

