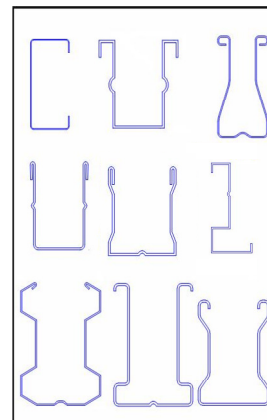


Proprietary Truss Designs and How They Affect Performance

Unlike metal plate connected wood trusses, there is no one typical chord or web shape for light gauge steel trusses. Wood trusses utilize rectangular members that are held together with various sizes of metal gusset plates. Light gauge steel truss fabricators have access to a variety of systems which have their own distinctive proprietary shape. Each design is different from the other. The shape of the proprietary design and way the truss is put together will determine how loads pass through the truss. The load path will take either a concentric (symmetrical) or an eccentric (non-symmetrical) path. The load path and the route it travels will have a great effect on how a light gauge steel truss performs in the field.

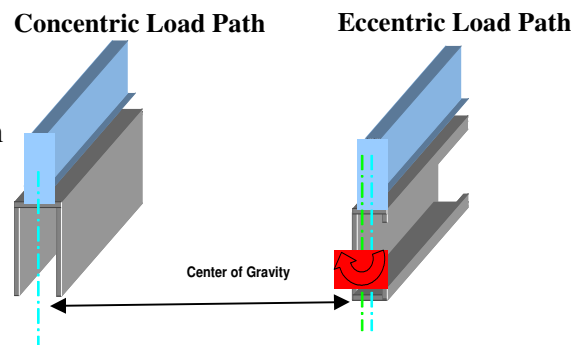


Examples of proprietary shapes

A concentric (symmetrical) design will be more stable due to the load path passing through the center of the chord and web members. An eccentric (non-symmetrical) design load path travels off-center of the center of the chord and web members. The eccentric design tends to be more unstable as the truss members tend to rotate. As a result more care is required in handling. A similar situation occurs when addressing truss bracing.

Stability of the member due to a concentric design results in less bracing when compared to the eccentric design. When taking into account longer spans and greater on-center spacing, this difference can be magnified considerably.

Because labor is an important part of the overall cost of a light gauge steel truss project, accurate labor cost estimating is essential. Lateral stability has a big impact on truss performance on the jobsite and the required amount of truss bracing; all of which can lead to higher labor costs.



Calculating accurate labor costs are critical to a successful and profitable truss project.