TRUSS FRAMING

DIETRICH
METAL FRAMING
A Worthington Industries Company

TRUSS FRAMING OVERVIEW

Light-gauge steel trusses are an economical, lightweight rigid roof framing system used in educational, assisted living, hotels/motels, military, industrial and countless other commercial and institutional structures when a "residential look and feel" is desired. Steel trusses are also used in residential roof and floor assemblies. They provide fully noncombustible assemblies that meet required fire codes. They are the ideal, cost-effective alternative to structural steel, bar joist and fire-retardant wood trusses. Steel trusses are compatible with almost every construction type, method or system including light-gauge steel, structural steel, CMU, concrete and wood framing.

Light-gauge steel trusses have the design flexibility to accommodate almost any roof line including complex roof geometries. Some of the more common truss styles include fink, fan, pratt, king, flat, gable, hip, mansard, mono, cantilever, overhang and scissor trusses. Light-gauge components can also be assembled to provide open web floor trusses.

*UL is a trademark of Underwriters Laboratories, Inc.
**AEGIS is a trademark and tradename of AEGIS Metal Framing, LLC.

Advantages

Light-gauge steel trusses offer many advantages over traditional roof framing components. Because of steel's incredible strength, light-gauge trusses can be designed for clear spans over 100'. They can eliminate intermediate bearing walls and create large open spaces. Steel trusses not only span farther, they permit wider on-center spacing that results in additional labor and material savings.

One of steel's greatest benefits is noncombustibility. Steel will not burn, and does not add fuel to a burning fire. Steel trusses are fully noncombustible and meet even the most stringent fire codes. In many cases they reduce insurance premiums and possibly eliminate expensive sprinkler systems.

In general, steel provides straighter, tighter and truer framing, resulting in better, long term performance. Steel isn't susceptible to rot, insects or mold. It doesn't warp, twist, bow, shrink or swell like its wood counterpart. Ceilings remain flat, even and virtually free from unsightly cracks and "nail pops."

Light-gauge trusses can be field assembled using conventional C-studs, or they can be prefabricated in controlled factory environments and delivered directly to your jobsite. Prefabricated trusses offer many advantages over field assembled trusses including shorter construction cycles, higher quality and consistency.

Metal Truss Fabrication Options

Dietrich Metal Framing provides a number of light-gauge metal truss options to meet your specific requirements, including prefabricated or field-assembled C-stud trusses.

AEGIS Metal Framing, our joint venture company with Mitek, provides pre-engineered, prefabricated and UL* rated trusses that are delivered to your site ready for installation. The AEGIS** international fabrication network uses state-of-the-art AEGIS® software to accurately bid and fabricate a complete truss system. AEGIS™ fabricators also provide sealed truss design drawings. Depending on the job requirements, your AEGIS® fabricator can also provide certified permanent bracing and connection design. Many AEGIS® fabricators can also provide truss installation.

C-stud field-cut and field-assembled trusses provide another option for light-gauge trusses. C-stud assemblies require independent design drawings by engineering companies like Dietrich Design Group. Dietrich Design Group can also provide fabrication drawings for an additional fee.

Light-Gauge Metal Truss Types

Pitched or common truss is characterized by its triangular shape and is most often used in roof construction.

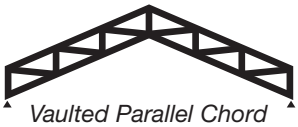
Flat or parallel chord truss is most often used in floor or flat roof construction.

Top Chord-Bearing Floor Truss With Chase

Bottom Chord-Bearing Floor Or Roof Truss
(can design with a chase as well)

Other Types Of Trusses Include:

Scissors



Vaulted Parallel Chord

Vault

Flat Vault

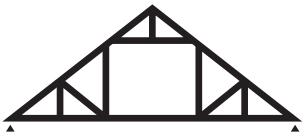
Studio Vault

Tray Or Coffer

Barrel Vault

Polynesian

Gambrel



Room-In-Attic

Bowstring

Double Cantilever

Tri-Bearing

Multi Piece

Celestory

Cantilevered Mansard w/Parapets

Hip

Dual Pitch

Mono

Half Scissors

Half Hip

Sloping Flat

Double Inverted

For more information or to contact a sales representative, see page 3.