Be a Steel Framin’ Man

The Steel Framing Market Has Plenty of Opportunities For The Contractor Who’ll Make the Pursuit

By Durwood Humes
ML/SF Association

Light weight, low cost and construction-time savings are a combination many contractors find hard to pass up. These are the prime advantages of steel framing for low-rise construction and they are beginning to change the face of the business.

Wall and ceiling contractors are using steel framing more and more — particularly for structural framing and other load bearing applications in commercial, institutional and industrial construction. High strength in relation to weight, non-combustibility and fabrication flexibility add further to its appeal.

Manufacturers of cold-rolled steel structural framing produce the basic components of steel framing systems in a broad assortment of depths, lengths, and thicknesses. There are a variety of steel floor joists and steel studs to meet every application.

The steel floor joist is a “C” shaped section that can accommodate wood sub-flooring or concrete slab poured over a permanent steel form. The nailable joist has a rolled channel section and two angles welded to form an “I” section. Studs are available in wide-flange, “C” and nailable types.

In addition to these major components, steel framing systems include compatible accessories — tracts (for stud attachment to floor or ceiling, sill and fascia, and for joint end closure), hangers, bridging, strapping, channels, angles, clips and screws.

Heavy Equipment Not Necessary

Perhaps the greatest advantage of light-gage steel framing is that it can be prefabricated in complete wall and floor assemblies for faster erection. In addition, production of prefabricated sections can usually take place on-site, eliminating transportation problems and costs. Sections may be fabricated outdoors if weather permits or in a temporary shelter, and stock-piled well in advance of actual installation. Prefab sections can be stored as long as necessary since there is no shrinkage, warping or swelling.

Heavy equipment is unnecessary,

Continued on page 34
and complete sections usually can be lifted into place by hand. Since each section includes the necessary openings for doors, windows, air conditioning and heating units, additional construction time is saved.

Steel stud walls furnish a cavity for the location of mechanical services and, at the same time, offer the designer complete freedom in the choice of insulation. Punched openings in the studs reduce the weight and provide flexibility in the location of horizontal runs, pipe, or conduit. Since no time is lost in drilling these access holes, plumbers and electricians can rough in their work more rapidly.

Scheduling is also simplified. With the use of steel framing, the work schedule is so predictable that the builder can avoid the expense of having skilled craftsmen standing idle, waiting for the completion of preparatory work.

Light-gage steel framing systems are designed to accommodate all types of exterior finishing — from traditional stone and brick to intricate stucco, metal, wood and concrete panels, and composite facings. Since structural steel studs in various combinations offer one of the highest load capacity-to-weight ratios of any building product currently on the market, even surfaced sections impose less weight on the foundation, while providing the required structural support. This means savings on foundation, footings and reinforcing. The strength of steel framing also permits the architect to use greater spans than would be possible with wood framing.

Little Waste
With Steel

Steel frame construction involves little waste. Studs, joists, and other system elements normally are cut to size, sharply reducing waste.

Light-gage steel framing is essentially non-combustible often resulting in reduced fire and comprehensive insurance costs.

Light-gage steel framing is gaining in recognition and is being utilized more in the construction of banks, hospitals, libraries, shopping centers and small office buildings. With the proper equipment and knowledgeable assistance from your steel framing supplier, you can share in the growth of this important market.

The members of the Metal Lath/Steel Framing Association are always available to assist you in your building needs and answer your questions.

ML/SFA’s members are Angeles Metal Systems, Alabama Metal Industries Corp., The Bostwick Steel Lath Co., The Ceco Corp., Inryco, Inc., Keene Corp. — Building Products Div., and Western Metal Lath Co.

Or, write to the Metal Lath/Steel Framing Association, 221 North LaSalle Street, Chicago, Illinois 60601, for a listing of over 20 technical bulletins now available.