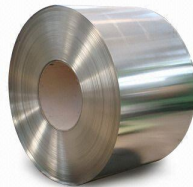


## How Cold-Formed Steel is Made



Cold-formed steel starts with the production of raw steel, which is made by combining iron ore or steel scrap with small amounts of carbon in a Basic Oxygen Furnace (BOF) or Electric Arc Furnace (EAF).

Molten steel is poured into slabs that are reduced into thinner strips of steel, called "hot band." Increasingly, steel mills are employing a new, very efficient process called direct reduction to make "hot band."



In the steel finishing process, the hot band is reduced once again into "cold rolled steel." A protective coating of zinc is then added through the galvanization process. The final product is called a "coil."

To convert coils into cold-formed steel framing members, they are first slit into widths that match the intended dimensions of the final product.



Cold-formed steel members are made from structural quality sheet steel that are formed into C-sections and other shapes usually by roll forming the steel through a series of dies. Penetrations for plumbing and electrical runs are also punched at pre-determined locations. No heat is required to form the shapes (unlike hot-rolled steel), and thus the name cold-formed steel. A variety of steel thickness is available to meet a wide range of structural and non-structural applications.



The cold-formed steel framing materials are then either used to build wall and floor panels, and roof trusses, or delivered to the job site in bundles.



CFS is the preferred material for curtain walls and partitions in commercial construction due to its light weight, high strength, non-combustible nature and ease of installation. But with advanced technological developments like panelized systems the building community has started using CFS for structural applications on buildings as high as 7-9 stories.

As a recognized green building material, steel framing projects can also earn credits or points for green building rating programs as well as other government incentives.