Steel Framing Alliance™

FRAMEWORK

YOUR GATEWAY TO THE STEEL FRAMING INDUSTRY

presented in metal HOME DIGEST

A FEW WORDS ABOUT STEEL

ANOTHER GOOD REASON FOR STEEL

NEW CLASSIFICATIONS FOR BUILDERS RISK INSURANCE MEAN LOWER PREMIUMS

BY JEFF BENSON

QUALITY, NON-COMBUSTIBLE CONSTRUCTION TYPES ARE A WAY TO PREVENT CATASTROPHIC LOSSES ON THE JOB SITE. BECAUSE OF THE SUPERIOR NATURE OF COLD-FORMED STEEL AS A BUILDING MATERIAL, ZURICH, A LEADING INTERNATIONAL INSURER, HAS PARTNERED WITH STEEL FRAMING ALLIANCE TO CONSISTENTLY CLASSIFY STEEL FRAMING AS NON-COMBUSTIBLE. THIS MEANS THAT YOU, AS A MEMBER OF THE STEEL FRAMING ALLIANCE, CAN REDUCE YOUR BUILDERS RISK INSURANCE PREMIUMS WHEN COMPARED TO COMBUSTIBLE FRAME CONSTRUCTION.

Zurich's Builders Risk Plan provides residential and commercial builders with a comprehensive course of construction insurance for their projects. While the Builders Risk Plan can be written for projects framed in wood, Zurich recognizes steel's exceptional inherent qualities that make it a product worth extending better rates.

The Builders Risk Plan, backed by A-rated Zurich's is ideal for a wide spectrum of construction classes, including apartments, offices, assisted-living facilities, schools, warehouses, hotels, and cell and water towers. As a builder, you will appreciate the Plan's quick turnaround, consistent methodology, dedicated customer service and, of course, the competitive pricing available to SFA members.

Features of Zurich's Builders Risk Plan's coverage include:

- Construction forms and scaffolding.
- Backup of sewers, drains, etc.
- Debris removal.
- Fire department service charge.
- Materials in transit.
- Valuable papers.
- Pollutant cleanup and removal.
- Ordinance and law.
- Temporary storage.
- Reward program.

In addition to traditional course of construction coverage, Zurich's Builders Risk Plan has several optional coverages available, including:

- Time element.
- Soft costs.
- Ordinance and law.

New or renovation construction projects are ideal for the Builders Risk Plan. Plans designed for residential and small commercial projects and for large commercial structures up to $50 million in estimated completed value. The policy also has the option of deposit premium ("blanket" coverage) for large builders. If it's being built, Zurich wants to see it!

The Builders Risk Plan is available through Zurich's nationwide network of more than 30,000 licensed producers. If your insurance agent doesn't already do business with Zurich's Small Business group, he or she can access the product through a special Zurich Web site, www.buildersrisk.com. Say you're a member of Steel Framing Alliance and ask your agent to contact Zurich at (866) 279-8253 or visit www.buildersrisk.com for easy enrollment.

By using cold-formed steel on your next building project, you'll know you are building with an outstanding product plus saving money in builders risk insurance premiums over other framing materials.

Take advantage of your membership with the Steel Framing Alliance and choose Zurich's Builders Risk Plan to be your partner through the course of your construction products.

Jeff Benson is senior vice president, Builders Risk Plan, sales, at Zurich Insurance Services Inc. in Jacksonville, Fla.

Framing with steel can help you achieve significant savings on your builders risk insurance premiums!

Call Steel Framing Alliance at (866) 303-4906 or tell your agent you're a member of Steel Framing Alliance and ask him or her to contact (866) 279-8253 or www.buildersrisk.com.

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FROM THE FORUM

GUIDES TO EDUCATE

Q: *Where can I find Load and Span tables for cold-formed steel wall studs and floor joists?*

A: The Steel Framing Alliance has two publications with span data for floors and walls, the Steel Floor Guide and the Steel Wall Guide.

These not only contain information about the spans, but also include details and tips on construction methods and resources, as well as frequently asked questions with answers, and step-by-step instructions on construction techniques. The tables in the Steel Floor Guide are for 30 and 40 pounds per square foot live load, the typical values for residential construction. The values in the Steel Wall Guide include interior non-bearing walls only, but provide values for both composite and non-composite construction.

Composite construction means that the gypsum board on each face of the wall not only braces the flanges of the stud, but also works with the stud to help stiffen the wall against lateral deflection. These composite tables typically have longer spans than the non-composite walls, all other things being equal. Both the Floor Guide and the Wall Guide are available on the Steel Framing Alliance Web site at www.steelframingalliance.com.

For a more comprehensive list of span tables, for both commercial and residential applications, the Steel Stud Manufacturers Association has its 52-page "Product Technical Information" guide. This not only contains information on studs and joists, but also covers spans for ceiling framing and furring channels, and gives allowable connection loads for both screws and welds used with different thicknesses of steel framing. The stud tables contain information on both loadbearing and non loadbearing walls, with wind loads up to 50 psf. This guide is available at the SSMA's Web site, www.ssma.com, along with downloadable commercial construction details and technical notes on wall bracing and deflection track.

For a different type of table, one that shows what thickness of steel is required for various spans, see the Standard for Cold-Formed Steel Framing-Prescriptive Method. This standard, available from both the American Iron and Steel Institute (AISI) and the Steel Framing Alliance, has been adopted by many building codes for residential construction. This standard is referenced by the International Code Council's 2003 International Residential Code. The Prescriptive Method may be purchased from either the AISI (at www.steel.org, click on "construction,") or from the Steel Framing Alliance at www.steelframingalliance.com. This guide is only for one- and two-family residential construction, and has certain applicability limits on building height and width.

As the building codes evolve, and are adopted in different regions, make sure that the table you use matches what is required in your area. If you are unsure, check the footnotes for the table, and check with your local jurisdiction to see what code is in force for your particular type of construction. For spans or loads that are outside the tabulated values, you may need to hire an engineer or get software that provides assistance with this type of design.

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www.steelframingalliance.com.

RESEARCH

STEEL'S MANY USES

BY NADER ELHAJJ P.E.

MARKETS FOR COLD-FORMED STEEL ARE EXPANDING. LET'S TAKE A LOOK AT TWO AREAS WHERE ITS USE IS SHOWING THE HIGHEST POTENTIAL.

CONCRETE FOUNDATIONS

Cement or concrete is used in almost every building project, whether new construction or remodeling, especially in foundations. However, in certain parts of the country, the availability of concrete has been significantly depleted, driving prices up and leaving builders to search for alternatives. In addressing current issues associated with concrete, the National Association Home Builders Association Research Center recently proclaimed foundations of steel an excellent solution.

Nationwide, the United States imports about 22 percent (totaling about 23 million metric tons) of the 107.5 million metric tons Portland cement consumption each year. The top exporters of cement to the United States are Canada (about 25 percent),

Panelized steel systems, which are similar to structural insulated panels, are one alternative to concrete (far top).

Panelized steel systems for foundations are fabricated from steel sheet skin (typically 27 mils) and extruded or expanded foam sandwiched between the steel sheets (above, left).

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China (about 24 percent), Thailand (about 18 percent) and Greece (about 10 percent), according to the Portland Cement Association, a trade association based in Skokie, Ill. China's booming economy and its growing domestic demand for raw materials have forced it to curtail its cement exports in recent months. This, coupled with the current construction boom in the United States and overburdened shipping companies, is causing a worldwide shortage of cement, the key ingredient in the manufacture of concrete.

These systems eliminate the need for a concrete contractor, as poured concrete walls are not needed and footings can be poured without a concrete contractor.

The panels are either mechanically interlocked (with fasteners) or welded together. Whichever system is employed, the panels can be successfully used as basement or foundations walls.

In parts of the country such as Florida, the home construction market is particularly vulnerable to price fluctuations and shortages because it imports about 40 percent of its cement annually. Beginning in the spring of 2004, South Florida home builders began reporting delays in getting concrete deliveries, according to Beth McGee, executive vice president of the Home Builders Association of Metro Orlando. These delays resulted from concrete rationing to builders in the state as concrete producers cut back production due to the cement shortages. The concrete shortage is likely to spread across the Southeast, reports George Hossenlopp, president of Florida Concrete & Products Association and president of Jacksonville-based Florida Rock Industries' Southern Concrete Group.

With little indication of short-term relief in the cement prices and shortages, what can builders and contractors do to cope with this disruption and continue to run profitable businesses? Alternative materials and construction methods, including steel, may be the answer.

Cold-formed steel foundations

Cold-formed steel, or light-gauge steel, has been gaining wider market share because of its many advantages in high-hazard regions and insect infested areas. Its price stability, until recently, has attracted many builders and framers in the Southwest, West Coast, and Hawaii. The Steel Framing Alliance reported that over 60 percent of new housing starts in Hawaii today are steel-framed.

The price of steel had gone down over the past three decades due to higher productivity, improvements in steel mills, and the start-up of minimills. However, the building boom in China has affected steel prices as it has for other materials. As the Chinese economy has grown, the construction market there has started to consume more steel creating a shortage worldwide. This had caused steel prices to increase by up to 100 percent since summer 2003. Despite these price fluctuations, there are still ways to use steel foundations economically.

While steel foundations are not recognized by the International Residential Code and there are no prescriptive tables for them, they can be used effectively if they are properly designed and installed. A below-grade steel stud is no different than an above-grade steel stud-the below-grade stud is subjected to lateral soil loads, just as the above-grade stud is subjected to lateral wind loads. The designer has to be careful though in selecting the exterior sheathing for steel foundations. Pressure-treated wood containing copper is highly corrosive to steel and needs to be isolated from steel members.

Insulated steel panels

Panelized steel systems are similar to structural insulated panels. They are fabricated from steel sheet skin (typically 22-gauge thick) and extruded or expanded foam sandwiched between the steel sheets. Other systems consist of steel studs embedded in extruded or expanded foam. The panels are either mechanically interlocked (with fasteners) or welded together. Whichever system is used, the panels can be successfully used as basement or foundations walls.

Cost savings for these foundations come from the ease of installation as work can be done by framing crews under a wide variety of weather conditions. These systems also eliminate the need for a concrete contractor, as poured concrete walls are not needed and footings can be poured without a concrete contractor. A recent time and motion study performed by the NAHB Research Center for the Mid-Atlantic Steel Framing Alliance documented construction time for a single-family

For more information on steel foundations from the NAHB Research Center, refer to the Technology Inventory Listing at:

www.toolbase.org

or visit the following company Web sites:

Premium Steel:
www.premiumsteel.com

The Hughes Group:
www.safebldg.com

home using Premium Steel Building Systems panels. The labor cost for the foundations was 18 cents per square foot of living area. It took 19 labor hours to construct the foundation. The cost of these panels usually comes at a premium, therefore, a builder should look at the total cost rather than the labor cost alone.

Other wall panels

There are a variety of panelized systems that combine the strength of steel or other composites with concrete to form wall panels. Tridipanel, for example, produces a prefabricated polystyrene wire mesh panels that becomes a structural wall when concrete, gunnite, Portland cement, plaster and stucco are shotcreted into place. Tridipanels have been tested to withstand extreme temperatures; they are earthquake tested and use recycled green products. These systems are not always available in all markets, nor do they provide a complete solution. However, when available, these alternative systems, as well as all systems of steel, can provide an economical alternative to concrete or block walls.

Manufactured Homes

Cold-formed steel has been widely and successfully used in commercial structures. Its use in residential site-built and panelized construction has also taken hold in some markets. However, cold-formed steel could offer more value in the manufactured housing environment where currently it has no market share.

More than 300,000 manufactured homes are built annually in the United States. The majority of these homes are built to the HUD Code with very few homes fabricated and built to the International Residential Code (IRC 2000) provisions.

Few attempts have been made with a little success to introduce cold-formed steel to the manufactured-housing industry. The work to develop cost-effective cold-formed steel-frame solution for factory built homes began in 1998 with an effort to assess the viability of substituting steel for wood as the structural skeleton of homes built under the HUD manufactured-home standards.

In 2001, the Manufactured Housing Research Council further explored the use of cold-formed steel for factory buildings by developing a design intended to demonstrate the economic and regulatory viability of steel for HUD-Code construction. In 2002, a MHRI steel-framing research project demonstrated that steel is an acceptable framing material under the performance-based HUD standards. The research project concluded that steel framing of factory-built homes has the potential to improve home durability,

Research from the MHRC concluded that steel framing of factory built-homes has the potential to improve home durability, quality, affordability and resistance to natural disaster damage, and to reduce their environmental impact.

Subsequent reports offer recommendations for the steel industry to increase share in the growing market of manufactured homes.

Builder's Guide To Fire And Acoustic Details

A new Builder's Guide to fire and acoustic details for cold-formed steel wall and floor assemblies was just completed by the NAHB Research Center.

The guide was developed with sponsorship from the U.S. Department of Housing and Urban Development, the Steel Framing Alliance and the National Association of Home Builders under the auspices of PATH program.

The project started a couple of years ago to document and gather existing fire- and sound-rated steel assemblies from private, public and industry sources. Frequently used assemblies that did not have a rating (where their wood counterparts do) were tested and fire and sound ratings were established.

The new guide acts as a starting search point for designers, engineers and builders who do not want to go through dozens of directories and catalogs looking for a particular rated assembly. The guide contains a registry of all available fire- and sound-rated steel floor and wall assemblies.

More than 500 assemblies were compiled from dozens of sources including UL Directory, Gypsum Systems Fire Resistance Design Manual, Factory Mutual, California Catalog of STC and IIC Ratings. The guide also contains construction and design tips and guidelines on how to improve the fire and sound rating of a steel wall or floor assembly.

For more information on this guide, please contact Nader Elhajj at (301) 430-6281. This guide will be available for download soon at www.pathe.net or www.steelframingalliance.com.

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quality, affordability and resistance to natural disaster damage, and to reduce their environmental impact. The 2002 study culminated in a publication titled *"Design for a Cold-Formed Steel Framed Manufactured Home"* for a steel-framed HUD-code home that was nearly equal to a wood-framed home on a first-cost basis and was approved by a Design Approval Primary Inspection Agency.

In 2003, MHRA built upon the previous work by exploring the commercial viability of cold-formed steel framing designs through a case study approach conducted in cooperation with industry partners. The objective of this work was to develop steel framing to the point of viability as a technology that can offer advantages consistent with the Partnership for Advancing Technology in Housing goals, the overall mission of which is to improve the affordability and value of America's homes through technology, including the development of new housing technologies.

The 2003 study focused on two manufactured housing producers: R-Anell Housing Group in North Carolina and Quality Homes of the Pacific in Hawaii. Both companies designed and fabricated manufactured homes using cold-formed steel framing. The outcome of the case studies was documented in a MHRI report titled *"Steel Framing Prototype Development: Final Report."* The report makes detailed recommendations for the development of manufactured steel-framed homes to the point of viability as a technology that can offer advantages consistent with the PATH goals. These findings are tabulated in the sidebar **(above, right)**.

Although the detailed component description provided a cost-effective manufactured steel house design, the report identifies several areas where further research is needed to develop a highly competitive steel frame product. The following are some of the recommendations:

- Build steel homes to the modular code rather than the HUD code.
- Improve fastening techniques by using alternative options such as pins, welding, and clinching, as well as reduce the total number of screws.
- Develop a hinged roof system using steel members, particularly the hinge details.
- Develop a more efficient system for installing the manufactured home to the foundations.
- Determine what steel components are most efficient to produce in-house at the plant versus out-sourced to fabricators.
- Develop design values for fiber-cement siding on exterior walls with studs spaced at 24 inches on center for high-wind regions.
- Develop effective methods for training plant staff in the use of steel.
- Produce an in-depth cost analysis for labor and material for the production of steel manufactured homes.
- Transportation testing of the full-scale steel home.
- Investigate the potential integration of structural steel into the floor system which would eliminate light-gauge members and fasteners in the rim joist and make the modules easier to transport.
- Develop a thermal solution for the northern regions especially for floor systems where the floor is placed over an unconditioned space.

Component	Description
Roof Truss Spacing	24 inches on center
Roof Truss Type	Wood "drag" trusses
Roof Design	Gable, Dutch hip and hip
Ridge Beam	Split girder truss on each half of house
Truss/Stud Alignment	Aligned eliminating the need for structural wall top track
Wall Stud Size & Spacing	Exterior: 350S162-43 @ 16 or 24 inches o.c. Interior: 350S162-33 @ 24 inches o.c.
Foundation	CMU discontinuous wall
Chassis Connection	Modified mechanical strap connection
Wall Bottom Track to Chassis Connection	Fastened directly to chassis
Shear walls	Factory fabricated X braces (96 inches long) or Hardy Frame (48 inches long)
Elements Contributing to Lateral Strength	Contribution to lateral resistance provided by all walls and the roof
Fasteners	Seven screw types, fewer screws, reduced welding, more pin connections
Floor Joists	600S162-54 @ 16 inches o.c. or 925S162-54 @ 24 inches o.c.

Nader Elhajj is director, structure and materials, for the NAHB Research Center, based in Upper Marlboro, Md.

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EDUCATION

FOUNDATIONS FOR STEEL FRAMING
PART 2

BY MARIBETH RIZZUTO

THE FOUNDATION OF A STEEL-FRAMED HOUSE HAS A DISTINCT IMPACT ON THE STRUCTURE. THE TYPE AND QUALITY OF FOUNDATION AFFECTS THE STEEL FRAME DESIGN, ANCHOR SYSTEM, AND STRAIGHTNESS OF THE WALLS.

This second installment in our educational series addresses the types of foundations commonly used and the impacts they have on steel-framed houses, the details available to anchor a steel-framed house and the factors framers should consider when choosing foundations are also examined.

Foundations not only support the weight of the structure above with all the superimposed loads, they also provide a level surface to support the framing.

EPOXIED BOLTS

Anchor bolts may also be installed using epoxy. A hole is driven into the concrete, cleaned, then injected with epoxy. A threaded rod is placed in the epoxy that hardens quickly and forms a strong bond with the concrete.

- Epoxied bolts may save time because they do not have to be set in position like embedded bolts prior to concrete pouring.
- If an embedded anchor is in the wrong location after the concrete has been placed, an epoxied bolt may be used to replace it.

Companies such as Simpson Strong-Tie and Hilti produce epoxy adhesives. Directions should be strictly followed for good results.

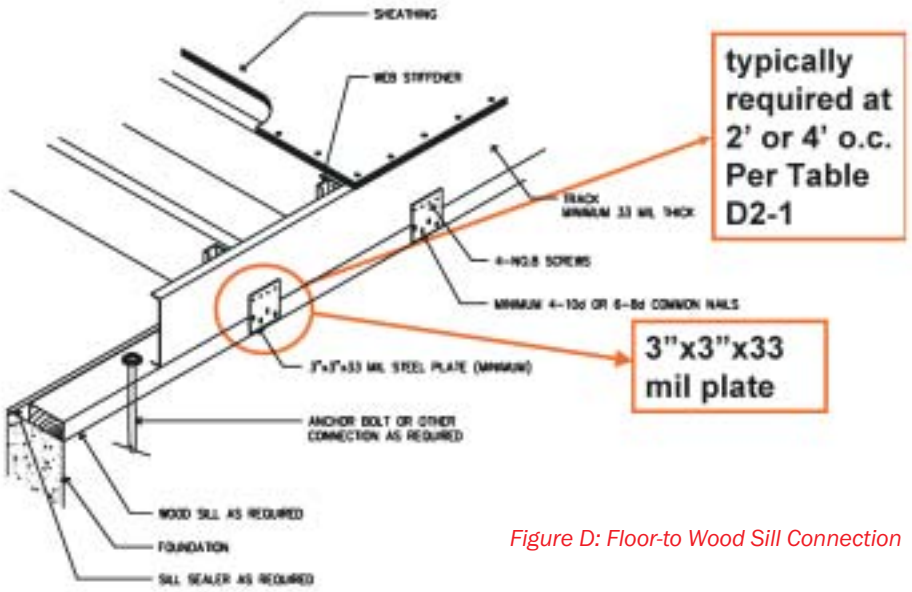

Figure D: Floor-to Wood Sill Connection

Anchor bolt hold-downs

The anchor bolt alone will not properly connect the steel track or stud to the foundation. A hold-down bracket, plate, or washer is necessary to distribute the pullout to a larger area of steel to prevent puncturing the track. The following sections describe the different types of hold-downs used with anchor bolts.

Sill anchor

A hold-down may be as simple as a washer and a nut over an anchor bolt and plate in a steel track to distribute

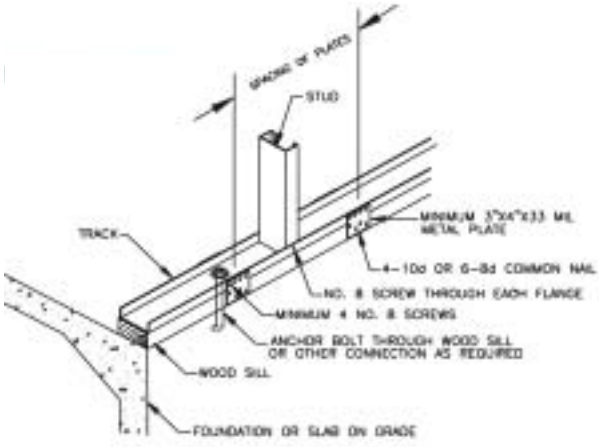

Figure E: Wall-to-Wood Sill Plate Attachment

the load. **(See Figures D and E.)** The plate prevents the track from tearing around the anchor bolt when under stress. A steel plate, C-shape stud, or even a piece of lumber in the bottom track all serve to form a sill anchor.

Mudsill anchor

Mudsill anchors are prefabricated pieces of steel made by companies including Simpson Strong-Tie, where one end is embedded in concrete and the other folds over the top track. A piece of C-shape stud is fit into the track and screwed into place through the flanges. The straps bend over the C-shape. Four No. 8 screws minimum are screwed through the mudsill anchor straps into the C-shape in the track. **(See Figures F and G, next page.)**

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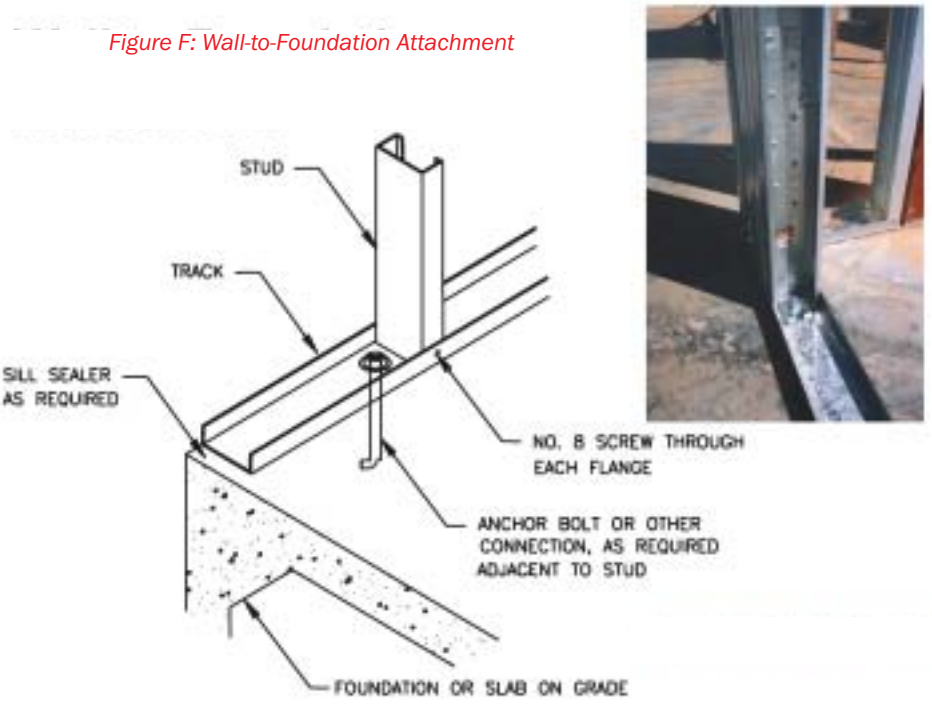

Figure F: Wall-to-Foundation Attachment

Anchor Straps

Anchor straps are another way of anchoring a steel frame. They are steel straps with one end embedded in concrete and the other attached to the wall system.

- Manufacturers like Simpson Strong-Tie pre-manufacturer anchor straps.
- When the concrete foundation forms are removed, the straps are bent up to screw into a wall stud or the structural sheathing.
- Anchor straps should not be attached to cripple studs under windows if they are to be attached to wall studs.

Mushroom spikes

Mushroom spikes are expansion bolts that expand in pre-drilled concrete holes. Powers Fasteners is one manufacturer of this kind of anchor. They may be used to anchor steel to concrete. Mushroom spikes can be used to anchor:

- Bottom track to concrete.
- Recessed rim joists to concrete.
- An exterior flat strap to a concrete foundation (used in high-wind areas instead of anchoring every wall stud). This is a 6-inch flat strap that bands across the bottom of the wall, with 3 inches above the floor and 3 inches below. The top of the strap is screwed to the wall, and the bottom is anchored to the foundation using mushroom spikes.

Figure G: Mudsill Anchor

Powder-actuated fasteners

These are pins fired by a special gun for temporary anchoring of exterior walls or permanent anchoring of non-load bearing walls. The head of the fastener and the pullout value is not enough to withstand wind and seismic loads.

Concrete Tolerances

Irregularities may occur in the top of the floor slab or the foundation wall, depending on the quality of the concrete finish. If they are significant, the irregularities may have a noticeable impact on steel-framed houses.

- The bottom track of a steel-framed wall contours to the bumps and dips in a foundation. If the floor is not level, then the walls will also not be level.
- For this reason, framers should work closely with concrete finishers to ensure flat, smooth framing surfaces. Time spent with the concrete finishers making sure the slab is straight, square, and without bumps or valleys results in straighter walls and less work compensating for abnormalities in the foundation.
- Any bumps should be chipped down before framing.
- If irregularities still occur, contractors may need to stiffen the bottom track with a C-shape to span a dip in the foundation wall or slab.

Girders and Interior Foundation Walls

Slab-on-grade

Slab-on-grade foundations are easiest to frame. Girders and bearing walls are not required in the foundation, as there are no floor joists to be supported. They also provide a surface where

FOUNDATIONS...
CONTINUED FROM PAGE 31

the walls may be panelized and tilted into place.

Crawl spaces

There are two ways of constructing a crawl space, depending on the framing site location. East and West Coast crawl spaces are constructed differently; therefore, floor joist selection and framing methods will differ.

East Coast crawl spaces

East Coast crawl spaces typically have a girder beam or interior stem wall that runs down the middle of the house.

- If concrete stem walls are used, the size of the stem wall may be selected in the Model Building Code.
- Girder beams may be selected in the Residential Steel Beam and Column Load/Span Tables, publication RG-936 by American Iron and Steel Institute.
- Columns that support girder beams may also be selected.
- Footings that support the columns may be selected in the building code.

West Coast crawl spaces

West Coast crawl spaces usually have more interior supports than East Coast crawl spaces. Instead of splitting the floor down the center, they generally have three or more supports to reduce the span lengths (to usually about 8 feet).

- West Coast interior foundation walls (sometimes called pony walls) can also be concrete stem walls with footings (specified in the building code).
- An alternative to the concrete pony wall is a steel stem wall on a concrete footing.
- A post and beam system is another alternative consisting of girders and columns. Footing sizes for the columns can be found in the building code.
- An alternative to the concrete pony wall is a steel stem wall on a concrete footing.
- A post and beam system is another alternative consisting of girders and columns. Footing sizes for the columns can be found in the building code.

Basements

The exterior basement walls are specified in the building codes for thickness of concrete and reinforcement. As with crawl space foundations, the girders and columns must be placed to support the floor joists. Joists spanning over a basement foundation may be split by a center girder, or by two or more girders.

The girders may be steel beams supported by columns or interior foundation walls.

The different types of foundations were discussed to help understand how floor joists are selected and supported. Regardless of the foundation, a steel-framed house is adaptable and can easily conform to the system used. Careful planning and familiarity with the foundation are important for both floor joist and anchor selection and sizing. Level foundations make it easier to frame with steel.

Maribeth Rizzuto is director, U.S. East Region, and industry training for the Steel Framing Alliance.

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Education, Training and More Training
Part 2

Building Code Officials, Plans Examiners, Inspectors

Building officials, plans examiners, and building inspectors perform vital services in the area of proper building construction and occupant safety. Their work can be daunting with the number of new construction materials and standards that cross their desks every year.

While much has been done in the past few years through the work of various code bodies, it will take years for all jurisdictions to get close to being on the same page. Different localities have special circumstances, such as high wind or seismic conditions to varying degrees that require specific remedies. What works in Columbus, Ohio, probably won't pass in Dade County, Fla. Any wonder why code officials might be skeptical about that new widget, cold-formed steel? Sure, most have seen cold-formed steel (formerly know as light-gauge) in non-structural partition-wall applications—but now it's appearing in structural applications, as well. What's a building code office supposed to do?

To assist code jurisdictions nationwide, the Steel Framing Alliance has developed a day-long presentation titled, **"Steel Framing Workshop: Design and Inspection of Cold-Formed Steel Structures."** Based on the American Iron and Steel Institute Standards, ***Standard for Cold-Formed Steel Framing—General Provisions, Prescriptive Method for One and Two Family Dwellings, Header Design, and Truss Design,*** this ANSI-approved standard covers all of the topical issues surrounding cold-formed steel used in construction today. From required markings on cold-formed steel framing structural members for easy identification in the field to the three different types of headers most commonly used, it is a step-by-step process covering every-

thing from floors to walls to roof rafters and trusses.

The program reviews the different fastening methods and schedules for appropriate steel-to-steel connections, as well as the appropriate fastening method and schedules for attaching products like gypsum board, sub-flooring and sheathing. Long story short, it is the most comprehensive program available for building jurisdictions and/or independent inspectors available today.

Where We've Been

This program has been conducted for continuing education credits for the states of California, Ohio, Pennsylvania, Tennessee, North and South Carolina, Florida, Texas, Louisiana, New York, New Jersey, Michigan and Wisconsin, to name just a few. The sessions have included building officials, plans examiners and inspectors, as well as contractors, builders, architects and engineers. Go figure—all of the stakeholders for the construction industry in one room hearing the same message about cold-formed steel!

Most recently at the International Code Council 2004 Annual Conference Education Forum, during two back-to-back day-long programs, the engineers out numbered code officials two to one.

Where We're Going

Over the next couple of months we are on tap to present this seminar in the following locations:

Location	Sponsoring Organization	Date
Overland Park, Kans.	Contractor's Licensing	Nov. 4, 2004
Las Vegas	So. Nevada Chapter, ICC	Feb. 9, 2005
Seattle	Washington Association of Building Officials	April 8, 2005
Helena, Mont.	Department of Labor and Industry, Business Standards Division, Building Codes Bureau	First Quarter of 2005

To Schedule a Workshop

Scheduling a Steel Framing Workshop: Design and Inspection of Cold-Formed Steel Structures is easy. Simply email your request to msrizzuto@aol.com, specifying your preferred date, location and approximate number of participants (25 person minimum, please). You handle the logistics and we supply the instructors and all workshop materials. Our only request is that you cover reasonable expenses.

Make sure that you are informed of the latest methods and construction standards for cold-formed steel construction.

Be prepared the next time a set of drawings using cold-formed steel crosses your desk!

-Maribeth Rizzuto

American Iron and Steel Institute

Errata To AISI Prescriptive Method Standard

The American Iron and Steel Institute's Committee on Framing Standards has released **"Errata to the Standard for Cold-Formed Steel Framing—Prescriptive Method for One and Two Family Dwellings, 2001 Edition."**

Corrections released on Sept. 29, 2004, are:

1. In Tables E3-1a, E3-2a, E3-3a, E3-4a, E3-5a, E3-6a, E3-7a, E3-8a, E3-9a and E3-10a, for the case of wind exposure C, 350S162 member size, 24-inch spacing and 8-foot stud length, reverse the values for 120 mph and 130 mph wind speeds.

2. In Table E3-4b, for the case of 130 mph wind speed exposure C, 350S162 member size, 24-inch spacing, 8-foot stud and 20 psf snow load, change the value from "543" to "54."

3. In Table F7-1, for the case of 130 mph basic wind speed, exposure C, 24-inch framing spacing and 28-foot roof span, change the value from "9130" to "913."

Please use these Errata to "mark up" and correct your copy of the Prescriptive Method. Please also share this information with those who might be interested or impacted. Also, feel free to post this notice or a link to the Errata on your Web site, particularly if you already provide information on or links to the Prescriptive Method standard.

The Errata document may be downloaded at: www.steel.org/construction/framing/index.html.

Jay Larson, secretary,
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