LOW FLOOR TO FLOOR HEIGHTS
COMPETITIVE BIDDING

In North America, mid to high-rise residential structures are typically cast-in-place reinforced concrete offering such benefits as low floor-to-floor height and fireproof construction.

With similar benefits, low to mid-rise buildings (eight stories and under) often utilize reinforced masonry bearing walls supporting precast slabs. While these structural systems have many worthy features, they are time-consuming, weather sensitive and labor intense.

For many, there has been a long-standing desire to bring the advantages of structural steel to the multi-story residential market. With the abundant use of steel for high-rise commercial structures, builders, developers and engineers have long recognized its qualities and benefits. However, until now the industry has been forced to adapt steel based systems used for commercial buildings but not ideal for residential construction.

Structural steel systems with poured concrete decks for commercial projects cannot achieve a low floor-to-floor height and requires ceilings to conceal beams, joists or deck.

Girder-Slab Technologies, LLC set out to develop a more efficient steel based framing system for mid and high-rise residential construction. It has specifically targeted apartments, condominiums, retirement communities, hotels, student housing and other multi-story residential buildings.

The Girder-Slab System has since changed the way the industry builds mid to high-rise residential structures.
**SYSTEM BENEFITS**

- Maximize unit floor to ceiling height while minimizing the height of the building
- Super-fast structure and building completion (11,000 square feet a day, current record)
- Floor plan design flexibility
- Limited weather impact (including cold climates)
- Structure assembly is one process, one source
- Reduced building structure weight
- Integrates well with mixed use spaces below
- Meets AISC tolerance standards
- Meets fire code ratings using UL K912-ULC J500
- Meets required STC and IIC levels
- Limited on-site labor - one trade Ironworkers
- Reduced “general conditions” costs
- Eliminates/reduces soffits
- Factory made quality components

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**Girder-Slab® System Application**

The Girder-Slab® System is a revolutionary framing system that combines the convenience and advantages of precast slabs with an integral steel girder to form a monolithic structural slab assembly.

At the heart of the assembly is the interior girder (known as an open-web dissymmetric beam or D-Beam®) which supports precast prestressed hollow core slabs on its bottom flange. Upon grouting, the Girder-Slab® System develops composite action enabling it to support significant live loads.

The Girder-Slab® System offers lightweight, assemble-in-place technology, resulting in rapid construction and assembly, saving valuable time and labor cost.

The application of the Girder-Slab® System technology requires design by your registered professional engineer or architect. The Girder-Slab System Design Guide provides all required engineering information and is available for use by industry professionals.

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**Why Choose Girder-Slab?**

The Girder-Slab® System has been recognized as one of the fastest growing steel framing systems in the construction industry.

Girder-Slab Technologies, LLC was presented with the AISC Special Achievement Award for making a positive and substantial impact on the structural steel design and construction industry, specifically for its contribution as a steel based solution to multi-story residential structures.

Girder-Slab Technologies shares its patent rights with the builder’s preferred steel fabricators. This distribution method guarantees the owner a traditional design, bid, build procurement of the building superstructure wherever structural steel and precast hollow core slabs are available.

**Design Guide Available at**

[www.Girder-Slab.com](http://www.Girder-Slab.com)