



**CASE STUDY**

# MODERN MARVEL

Doultan Drive • Mississauga, Ontario



**BuildSteel**  
**Steel Framing Industry Association**  
513 W. Broad Street Suite 210  
Falls Church, VA 22046-3257  
P 703.538.1613  
[BuildSteel.org](http://BuildSteel.org)



 **BuildSteel™**  
Powered by the Steel Framing Industry Association

## OVERVIEW

### PROJECT

#### Use

Luxury home

#### Size

19,601 sq. ft. living space.

#### Completion Date

End of 2021

### PEOPLE

#### Owner

Private Client

#### Project Architect

JP Thomson Architects,  
Windsor, ON

#### Structural Engineer

Moses Structural  
Engineers, Toronto, ON

#### Homebuilder

Chatsworth Fine  
Homes, Oakville, ON

#### Cold-Formed Steel

#### Contractor

Life Drywall Systems,  
Ltd., Oakville, ON

#### STEEL

33 - 118 mil cold-  
formed steel framing

# Luxury Home Designed for High Performance with Cold-Formed Steel

A large, ultra-modern home is being custom-built outside of Toronto, and it features not wood studs, but cold-formed steel (CFS) framing.

Located in Mississauga, Ontario, the residence on Doulton Drive will have “a completely noncombustible rigid steel frame and solid concrete floors,” says the web site for homebuilder, Chatsworth Fine Homes, Oakville, Ontario.

“The architect designed this home to have a life expectancy of more than 100 years,” says Fil Capuano, president of Chatsworth Fine Homes. “Resilient products like the steel framing system were carefully chosen to meet that life span.”

Since energy efficiency is also paramount in the build, high-performance techniques are being used to seal the shell tightly, Capuano

says. The stability of steel helps with the air sealing, since wood shrinkage could open up air leaks.

### HYBRID STEEL SYSTEM

The home features a hybrid system that combines structural steel and CFS wall framing. The interior partitions will make use of CFS framing and wallboard.

“It’s in-fill framing using all wind-bearing metal studs,” says Chris Sliskovic, president of Life Drywall Systems, Ltd., an Oakville, Ontario residential and commercial contractor that has the framing, drywall and finishing contract for the project.

Life Drywall Systems is a Steel Framing Industry Association (SFIA) certified CFS installation contractor and one of the first contractors to receive SFIA’s CFS certifica-

This custom home under construction near Toronto features a noncombustible framing system that includes cold-formed steel.





Resilient products like the steel framing system were chosen for their long lifecycle.



"Those walls and reveals, no matter the finish, will always be straight," says Chris Sliskovic, president of contractor Life Drywall Systems, Ltd.



Doulton Drive features a hybrid of structural steel and CFS framing.



"Steel doesn't warp. It doesn't twist," Sliskovic says.



tion. SFIA Certification ensures the CFS contractor or truss fabricator has the experience, expertise and commitment to meet the highest standards.

The firm is responsible for the gypsum board installation and the Level 5 Finish of all interior drywall surfaces. A Level 5 finish, the highest degree of quality in drywall finishing, features a skim coat of joint compound to provide a uniformly smooth surface.

### MINIMALISTIC CONTEMPORARY DESIGN

Built for a private client, Doulton Drive contains 1,821 square meters, or 19,601 square feet, of livable space. The project architect is JP Thomson Architects, Windsor, Ontario. The structural engineer on the project is Moses Structural Engineers, Toronto.

"The interior will be replete with sleek modern lines and minimalistic contemporary décor," says the Chatsworth web site. "Large floor-to-ceiling glass brings a modern feeling to the home, with the outdoors embracing [the] inside with cascading light."

The interior partition frames are being stick-built on site.

"There's a lot of 20 gauge interior structural framing," Sliskovic says. "The exterior shell isn't much. I'm trying to see how much exterior sheathing there is. The exterior is mostly glass. Inside, there's about 7,200 sq. ft. of interior sheathing."

The CFS framing products being used range from 33 to 118 mils. The project will make use of a total of 20,333 lineal ft. of 10-ft. CFS studs and 42,343 lineal ft. of 12-ft. CFS studs. Some additional 8-ft. studs, track and bracing will also be installed.

### STEEL DOESN'T WARP, NO NAIL POPS

What makes this home a standout? Floor-to-ceiling glass. An eight-car underground garage. Minimalist decor. And, the use of CFS framing instead of wood.

"Not a lot of guys do steel-framed houses

around here," Sliskovic says. "It's not common to see houses built with steel. This will be my third."

Sliskovic prefers working with light-gauge steel rather than wood. He says so do others working on the project.

"Everybody prefers it — not just our guys, but also the site superintendent," Sliskovic says. "And he's got a residential wood framing background."

"Believe it or not, he's completely 'nuts' about the steel — that is, he likes it," Sliskovic continues. "The builder likes it, and I like it, because it goes up fast."

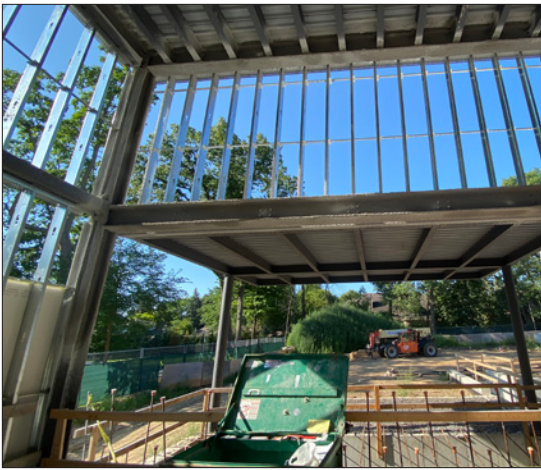
The steel framing is durable. Sliskovic believes the framing will remain true for the life of the home.

"Those walls and reveals, no matter the finish, will always be straight," Sliskovic says. "Steel doesn't warp. It doesn't twist. The homeowner won't ever get nail pops. And for sound, it's just a no-brainer — the walls will be finished next to perfection."

At the time of publication, Sliskovic and his crew had a lot of work ahead of them. The project is expected to be completed by the end of 2021.

“Those walls and reveals ... will always be straight.”





The hybrid framing solution provides spacious rooms and large windows.

**life**  
DRYWALL



Life Drywall Systems is an SFIA Certified CFS Contractor.



Although not a Net Zero project, the Doulton Drive home will be Energy Star rated.

## Doulton Drive • Mississauga, Ontario

### DESIGN

- 19,601 sq. ft. private residence
- Ultra-modern family home
- Waterproofed foundations
- Solid concrete floors
- Shell insulated with spray foam and sealed from air leaks
- Large floor to ceiling glass

### SPECIAL FEATURES

- Underground 8-car garage
- Large generator to guarantee seamless power

### CFS-FRAMED WALL DETAILS

- Hybrid system: structural steel with CFS wall framing
- 20,333 lineal ft. of 10-ft. CFS studs
- 42,343 lineal ft. of 12-ft. CFS studs
- Additional 8-ft. studs, track and bracing

**Submit a case study to [submissions@BuildSteel.org](mailto:submissions@BuildSteel.org).**

The information presented here is for illustrative purposes only. SFIA accepts no responsibility for the accuracy or completeness of the information or for loss or damage caused by any use thereof.  
© 2020 Steel Framing Industry Association

