



Building a Steel Home for a Hero

What would you do for a wounded marine who fought for his country and others, but returned from his tour of duty needing help? For all that he did defending democracy, liberty and peace, you'd build him a new home if you could.

That's what **Homes for Our Troops** and Super Stud Building Products, Inc., did for **Marine Sergeant Luis Remache**, who was severely injured in Afghanistan in 2011.

A 501(c) (3) nonprofit organization, Homes for Our Troops builds mortgage-free, specially adapted homes for veterans, and continues to partner with the veteran and their families after the home is completed, helping them rebuild their lives. Super Stud donated steel wall panels, front and rear steel porch beams and columns, the exterior insulation finish system (EIFS), labor to install all of these products, roof trusses, interior steel wall framing, and additional materials for this Long Island, New York project.

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HOME FEATURES STRUCTURAL STEEL PANELS

The exterior steel walls for Sgt. Remache's house were erected in less than two days.

The walls feature the patented **FRO MAR™ Steel Panel System** from Super Stud. The system's individual steel panels are custom fabricated for each project, numbered and shipped in sequence to the job site.

This **time-lapse video** shows how quickly the walls of Sgt. Remache's new home went up.



SYSTEM IS THERMALLY EFFICIENT

Besides being resistant to pests, moisture and mold, the structural steel exterior is strong and durable. It's like having a home wrapped in a sheet of steel, making it supremely resistant to the elements. The steel wall system replaces exterior sheathing, provides shear wall lateral capacity, and provides resistance to airborne missile impacts and air and moisture infiltration. Officials with Miami-Dade County, for example, tested the FRO MAR system to withstand Category V hurricane conditions and approved its use on area projects.

"The steel panels, with their interlocking joints, provide an excellent barrier for air, vapor, and moisture," says Don Allen, P.E., director of engineering, Super Stud.

The EIFS on the outside and spray foam on the inside, coupled with the steel panels at Sgt. Remache's home, provide an excellent barrier against air, moisture, vapor, and thermal transfer.

"The steel panels, with their interlocking joints, provide an excellent barrier for air, vapor, and moisture," says Don Allen, P.E., director of engineering, Super Stud. "Coupled with the continuous insulation of the EIFS on the exterior and the spray foam on the interior, the Remaches will save on heating and cooling for decades."

"The panels replaced not only wood studs, but also exterior gypsum panels and wood sheathing," Allen says. "Steel provides shear resistance and impact resistance as well as structural capacity."



AN ECONOMICAL CHOICE

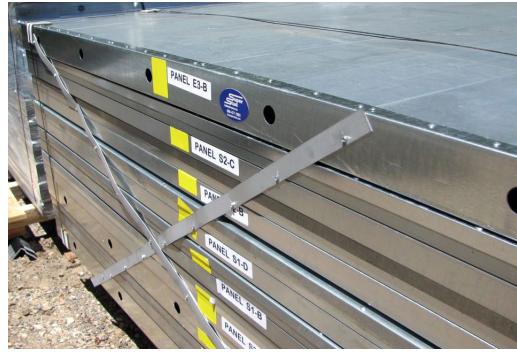
Structural steel panels were an economical choice for the Marine Sergeant's home.

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While wood trusses were used on the project, the steel exterior panels and cold-formed steel interior walls provide the home's structural and dimensional stability. Steel panels and a custom steel door and frame were even used to build a special safe room inside the home.



The project was completed in June 2016. Here are photos showing the construction of Sgt. Remache's new home:



- ▶ (LEFT) Work began with a ground-breaking ceremony that included Marine Sgt. Louis Remache.
- ▶ (RIGHT) FRO MAR steel panels are color-coded, labeled and sequenced for speedy installation.



- ▶ (LEFT) The first FRO MAR panel was aligned, plumbed and leveled at 10:40 a.m. on Day 1.
- ▶ (RIGHT) All steel panels were in place by 1:30 p.m. on Day 2, a little over a day after work began.



- ▶ Wood trusses were set on the steel walls.



- ▶ (LEFT) Sgt. Remache's new home was shingled and windows were put in place.
- ▶ (RIGHT) HFOT board member and retired Army Colonel Shelley Yarborough assists the Remaches at the ribbon cutting ceremony for their new home in July 2016.

About Build Steel

BuildSteel provides valuable resources, education, and complimentary project assistance related to the use of cold-formed steel framing in low and mid-rise and multi-family construction projects.

As a centralized source for information, BuildSteel offers resources to help move your next cold-formed steel framing project forward efficiently and effectively.



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