

Left Standing

The devastating impact of the earthquake that hit Port-au-Prince, Haiti, in January has been well documented. Along with the human toll, much of the infrastructure in the city was destroyed. Ironically, perhaps, among the structures left standing were an emergency operations center and disaster relief warehouse, under construction at the time of the quake.

The United States Army contracted out the humanitarian project to Newco Structures Inc., Miami, in September 2009. The structures, each approximately 5,000 square feet (465 m²) and manufactured by American Buildings Co., Eufaula, Ala., were 100 percent erected when the 7.0 earthquake struck on Jan. 12. The foundations, slabs and steel structure, amazingly, suffered no damage.

Newco Structures has a history of working in developing countries, which can benefit from the stability and durability of metal buildings. President Eric Newman said the company is fully committed to finishing the project. The disaster relief warehouse is already complete and the emergency operations center is expected to be finished by the end of May. American Buildings is supplying the structure and metal skin for both buildings, because it was able to provide cost-effective yet high-performing, quality panels. Newco is an authorized dealer for American Buildings.

"We are proud of our design teams who worked hard on this project to meet the appropriate building code for seismic and weather conditions," added Jack Jordan, general manager of American Buildings' South Division.

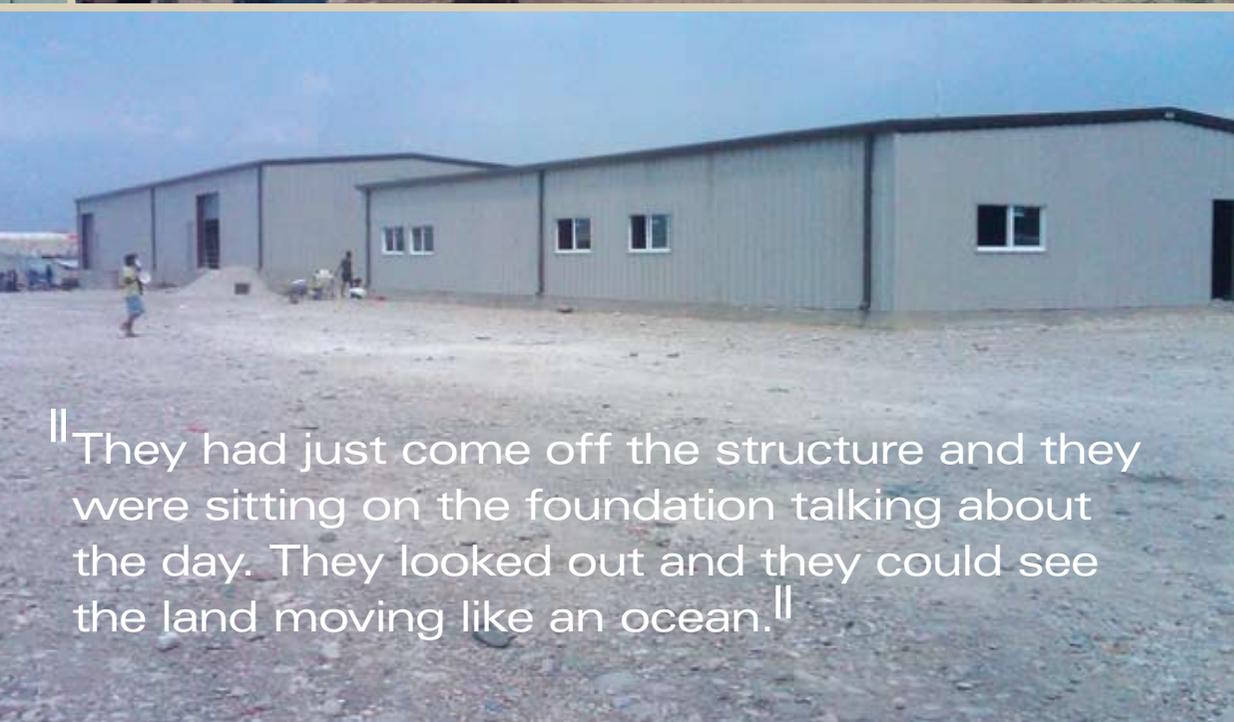
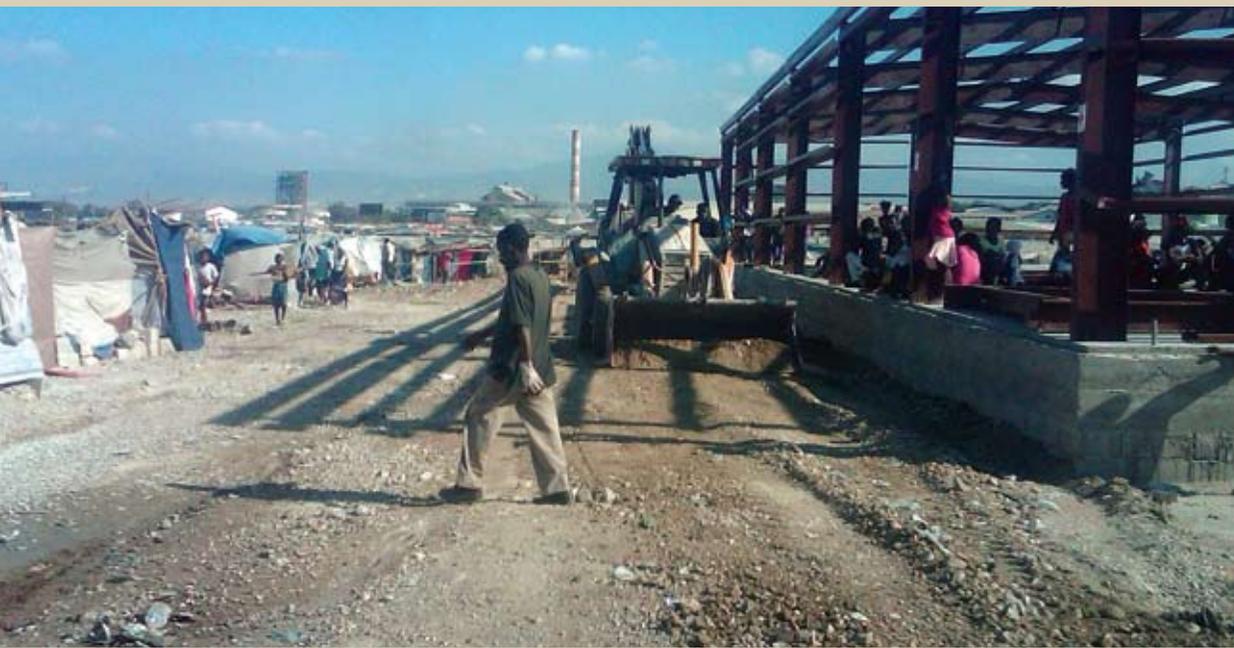
When it Hit

"There are two separate buildings and we had both foundations and slabs, and the steel structure 100 percent complete on both of them," Newman said, describing the conditions just before the earthquake. "We were just getting ready to skin the buildings. We put in a four-man steel crew and partnered with a Haitian contractor and we were on the job when the earthquake hit.

"The way the guys described it to me, they had just come off the structure and they were sitting on the foundation talking about

Metal building undamaged by Haiti earthquake





“They had just come off the structure and they were sitting on the foundation talking about the day. They looked out and they could see the land moving like an ocean.”

the day. They looked out and they could see the land moving like an ocean—a ripple effect in the land. Everything was moving, and they got away from the structure.”

Newco’s workers were not injured, however they had to be evacuated and the owner of the Haitian contractor lost her home and office in the earthquake. Despite everything that happened, Newman said everyone was back to work within a couple weeks.

Designed to Withstand

The structures were built to meet the International Building Code, designed to withstand seismic and high-wind conditions. Metal also has the ability to flex as opposed to something rigid that could crack. This is why the operations center and relief warehouse were left standing with no damage. People had to use some of the panels for shelter, but Newco built them a tent city to use in place of the panels.

“We had a good concrete mix and we put reinforcing steel in the concrete,” Newman said. “We had it designed and engineered for those loads. It’s meant to move as one unit. It’s designed like a plate.”

Knowing the Environment

According to Newman, Haiti’s local building code is not regulated or enforced.

A design-build contractor, Newco has often built in the Caribbean and Central America. It has worked on hospitals and schools in Haiti for the past five years. GOM International, the Haitian contractor that worked with Newco on this project, operates with U.S. standards, and Newman credited its owner Georgia Nicolas for her strength in moving forward with the work after everything that happened.

It seems fortuitous that this project happened to focus on emergency operations and disaster relief. The U.S. Army will be able to use it for strategic planning. Newco’s experience in the region assured that it would build the operations center and relief warehouse to hold up against events such as the earthquake.

“We had to understand the environment where we were building and offer a good quality building,” Newman said. 