

Project Profile



USG™ Drywall Suspension System

Application/Building Type:

Single Family Construction

Project Name:

Residence of John and Zoryada Poland

Location:

Atlanta, Georgia

Drywall Contractor:

Poland's Drywall and Construction Inc.

Subcontractor:

CNR

Featured Products:

Pre-engineered USG Drywall Suspension System SHEETROCK® Brand 1/4-inch Flexible Gypsum Panels
SHEETROCK® Brand Joint Compound



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A Dramatic Dome Framed in Five Hours

In March, CNR did the framing for an approximately 16-foot-by-7-foot dome in the private residence of John and Zoryada Poland. Instead of using a conventional suspension, which would have to have been built on site, hat channel and black iron suspension, CNR framed the domed vault located in the ceiling of the Poland home's foyer features with the pre-engineered [USG drywall suspension system](#) from USG Interiors.

The couple owns Poland's Drywall and Construction Inc., a successful Atlanta-area drywall contractor. But instead of using their employees to frame the dome, the Polands subcontracted the dome construction and turned to CNR, a specialist in this kind of work.

"The biggest hurdle was the height of the ceiling. It's a two-story foyer—probably 24 feet high," said Bond. "We had to build some scaffolding."

Imagine a 7-foot-diameter ball. Cut the ball in half, and you have a basic dome. Cut that dome in half and place a barrel vault between the two ends, and you have the shape of the dome in the Poland's foyer.

Technically, the dome ends have a 7.4-foot radius and are 3 feet high, so they're not true sections of sphere. Nevertheless, Bond's crew framed this structure—including the building of the scaffolding—in five hours, with only three men.

It took the three-man crew an hour and a half to snap together each dome end's metal main tees and cross braces. After framing the dome-ends on the floor, the crew raised each section overhead and placed them on a previously built wood frame, which formed a 16-foot-by-7-foot hole in the ceiling.

Once the dome-ends were properly suspended, the crew framed in the barrel vault section—running straight tees every 6 inches to form the curved shell of the barrel. Then, they installed radius track so the dome came out flush with the ceiling plane. Finally, they added extra bracing for a chandelier to hang in the dome's center.

In five hours, the framing work was done.

"Three men, five hours—it would have taken a week had we done this the traditional way," said Bond. "I'd say the job came out at literally one-tenth of the cost."

The Polands finished the dome using one of their crews. The barrel section received two layers of 1/4-inch SHEETROCK® brand gypsum panels, while the dome ends used a USG plaster system that was finished with SHEETROCK® brand joint compound products. Final decorative touches include a faux finish, stenciled artwork and trim molding.

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