

# Pennsylvania Drilling Company

Imperial, Pennsylvania

SYNTHEON™

ACCEL-E®  
STEEL THERMAL EFFICIENT PANEL

*"We saw that we could use the ACCEL-E wall system for about the same price, with a lot less waste material, a lot more insulation value, and a simpler construction process."*

Thomas Sturges  
President, Pennsylvania Drilling Company

#### PROJECT FACTS

**SIZE:** 3,400 square feet

**PURPOSE:** Company headquarters

**MAXIMUM WALL HEIGHT:** 10 feet

**PANEL DEPTH:** 8 inches

**WALL TYPE:** Load bearing wall

**OWNER:** Pennsylvania Drilling Company

**CONTRACTOR:** Exterior Systems Industries



#### PROJECT PROFILE

When Thomas Sturges decided to move Pennsylvania Drilling Company into new offices, his main interest was in building a solid, energy efficient headquarters that would serve his company for many years to come.

Sturges was introduced to the SYNTHEON® ACCEL-E® Steel Thermal Efficient Panel wall system by his building contractor, Anthony Rosenberger of Exterior Systems Industries, who was contracted to construct the new 3,400-square-foot office building. "We had originally contracted for a split-block exterior using conventional construction techniques, but Tony said he had something else we might be interested in," Sturges recalled.

#### SYNTHEON SOLUTION

The ACCEL-E wall system replaces traditional framing, cavity insulation and continuous rigid foam sheathing components with strong, energy-efficient insulating panels. The panels are formed using a proprietary production technology, which combines the strength and performance of cold-formed steel framing with the superior insulation properties of expanded polystyrene (EPS) to create lightweight, strong, easy-to-use panels.

As impressive as those benefits are, however, Sturges said it was a visit to a traditional construction site that convinced him to build using ACCEL-E panels.

"We saw how they were using the chip board, and the insulation and the wall studs, and by comparison to the ACCEL-E panels, it just looked flimsy," said Sturges.

But the most compelling advantage was the energy efficiency made possible by the new wall system, which features 8-inch thick ACCEL-E wall panels, finished with a brick exterior.

#### A BETTER RESULT...WITH LESS ENERGY

The ACCEL-E system was a first step that ultimately resulted in the new company headquarters becoming a model of energy efficiency, using eight geothermal wells, a geothermal heat exchanger, and a combination of forced-air heating and cooling with radiant tube heating in the floor.



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# SYNTHEON™

## ACCEL-E®

STEEL THERMAL EFFICIENT PANEL



## A More Efficient System

*"We saw a lot more insulation value, and a simpler construction process."*

"We won't know for sure how that works until we go through a winter, but so far it is working out very well," Sturges said, recalling one hot summer day, after the building shell was finished but before the cooling system was installed.

"Even then, you could tell when you walked into the building that it was so much cooler, just because of the insulation value," he said. "It was really amazing."

An added benefit of the ACCEL-E wall system is the much quieter work environment. The new offices are located near buildings in which the company carries out heavy contracting work, but Sturges says, "When they fire up a drill outside we can just barely hear it. It's very nice."

In the end, all the various advantages of the ACCEL-E wall system contribute to greater owner satisfaction, as Sturges is quick to point out.

"This is an extremely comfortable, very quiet building," he concluded. "It's just great."

### PRODUCT PROFILE

The SYNTHEON ACCEL-E Steel Thermal Efficient Panel is a lightweight, easy-to-install, high performance wall system that shortens construction time, optimizes crew use, greatly improves energy efficiency – and does it all in just one step. The secret behind the exceptional construction efficiency of ACCEL-E is an exclusive manufacturing process that combines the strength and performance of cold-formed steel framing with the superior insulation properties of

expanded polystyrene (EPS). This unique fusion process provides each panel with the highest levels of engineered performance, yet delivers thermal efficiency so exceptional it exceeds new ASHRAE 2007 90.1 and IECC 2009 requirements for the building envelope. Plus, the materials used in the panels resist mold and mildew. No other wall system combines framing, cavity insulation and continuous rigid foam insulation in such an easy, one-step installation process.

The ACCEL-E panels are produced in thicknesses of 5-1/2, 6 and 8 inches, and can be manufactured in virtually any height, limited only by the mode of transport.



ACCEL-E is a contributor to LEED points.

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