

## Modern designs introduce complexity

Pitched rooflines can pose complex challenges for commercial construction projects, particularly when it comes to attaching pipe hangers to buildings. Hanger drawings often depict threaded rods suspended in thin air, leaving it up to contractors to figure out how to attach hangers to buildings.

Choosing the correct method can reduce installation time, materials and cost, and contribute to the turnover rate. It's important to follow the manufacturer's installation instructions to ensure easy and safe installation as well as achieve the published performance values.

But contractors must also consider architectural and engineering designs. The need to support sprinkler systems from an 8-foot spanner or trapeze distorts an architect's vision of introducing natural light through creative peaks and angles. Traditional pipe hanger attachments detract from this aesthetic and can lead to negotiation and/or expensive redesign. Alternative structural attachments that are designed to meet fire protection contractors' performance and installation needs can be an acceptable solution for all parties.

## ITW Sammys hanger assemblies rescue U.S. Army base and middle school construction projects

A 37-degree pitched metal roof for a barracks construction project at Fort Bragg, N.C., posed an uphill battle for crews who needed to support 2-inch Schedule 40 branch lines. Apprentices formed an assembly line to create hangers that employed nine components from two vendors. The journeyman was then able to take the completed assembly to the structural I-beam and wedge the device between the deck and the structural member. This was a clear conflict of new design versus old technology.

This wasn't the first time ITW Sammys witnessed a slow and painful installation brought on by an extremely pitched roofline. The need to suspend threaded rod by using a swiveling device was obvious – not only to increase the speed of installation and prevent bent threaded rods, but also to improve the overhead clutter.

ITW Sammys helped the U.S. Army Corps of Engineers provide a safe, aesthetically pleasing hanging solution using its SXP solution. As a result, crews reduced installation time to 30 seconds per hanger from 30 minutes each.



**SXP 20 Installation** Fort Bragg, N.C., construction



## ITW Sammys hangers earn an 'A' at middle school

Increasing use of tubular steel, or hollow structural steel, in open-space design projects has caused its share of installation woes. During construction of a middle school in Battlement Mesa, CO, contractors had to hang pipes on a 400-foot, 31-foot-high corridor with a roofline pitched at 45 degrees.

Thanks to ITW Sammys swivel and time-tested Teks<sup>®</sup> technology, Sammys produced a fastener that eliminated the need for outsourced welding and pre-drilling. The specialty anchor solution was designed to work in the tubular substrate.

The conflict between the fire protection installer or the structure and the hanger was easily remedied by a hanger that provides the design flexibility mandated by the structure itself. Moreover, the solution allowed crews to reduce installation time to 2.5 days from 5 days.



SH-TEK 50 Installation Battlement Mesa Middle School Project

## Build with confidence

Today's specialty anchors are compatible with modern design techniques as they're designed for each application. ITW Sammys has produced innovative threaded fastening systems to the commercial construction industry for more than four decades.

ITW Sammys Anchors are equipped with Tapcon self-tapping screws for concrete applications and Teks self-drilling screws for steel applications. They're always a commercial contractor's go-to product. The company provides safe, time-saving solutions to attachment challenges resulting from the evolution of construction materials and substrates.