





FABRAL CASE STUDY



# VIRGINIA TECH INDOOR PRACTICE FACILITY

#### **PROJECT SUMMARY**

#### **Product Details**

Stand'N Seam® 16" 24-Gauge Steel

## **Building Owner**

Virginia Tech Blacksburg, VA

#### **General Contractor**

WM Jordan Newport News, VA

#### **Architect**

HKS Richmond, VA

### **Installing Contractor**

Roof Systems of Virginia Richmond, VA

#### **Distributor**

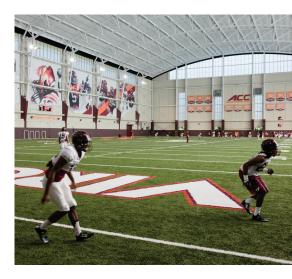
N.B. Handy, Co. Lynchburg, VA

#### Finish

Hokie Maroon







# VIRGINIA TECH INDOOR PRACTICE FACILITY SCORES A WINNING ROOF

Chances are you have flown on a Boeing 737 aircraft at some point in your life. The workhorse of the aviation industry, they shuttle passengers from city to city across the United States. Now imagine two of these 150+ seat aircraft, parked nose-to-nose, and you'll get a sense of the size and scope of the Virginia Tech Hokies new indoor practice facility.

At 400 feet long, 210 feet wide and 86 feet tall, the building contains more than eight million cubic feet of space and is a testament to the dreams of Tom Gabbard, Virginia Tech's longtime Senior Athletics Director for Facilities and Operations. Seventeen years in the making, the building stands taller than nearly all other college-level practice facilities, allowing team kickers to punt without hesitation. In addition to housing the football team, the mixed-use center hosts soccer, lacrosse and baseball practices and games.

Built to last, this substantial building includes an indoor practice field, a coaches' viewing deck and a 65-foothigh catwalk.

#### **BIG ROOF, BIG CHALLENGE**

Given the project size, creating the ideal roof system for this design-build project required significant consideration. At a massive 98,000 square feet, the structure must be strong enough to withstand the ice and snow common to Blacksburg, Virginia winters, but also resist the intense heat of summer. The general contractor, WM Jordan, recognized that most manufacturers would be unable to rollform a continuous 238 foot panel, the length needed to span the building's width. Typically, panels of that length would have to be spliced, creating potential points of weakness and leakage.

Offering one of the highest wind-uplift resistance of any standing seam panel on the market, Fabral® Stand'N Seam® panels proved to be the ideal solution. This high performance, mechanically seamed panel system allows unlimited thermal expansion while curving to fit the barrel vaulted roof. To allow continuous expansion, Stand'N Seam panels attach through double lock-seamed side joints. Without exposed fasteners or end laps that could introduce leakage, these panels expand and contract throughout their entire length.



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#### BRINGING EXPERIENCE TO THE JOB SITE

Since the panels were too large to be shipped, on-site rollforming was the only manufacturing option. The same mobile rollforming equipment and operators that fabricate Stand'N Seam panels in the plant were sent to the site.

The length of the panels required special consideration to reduce material waste. Prior to cutting and shipping, each coil was weighed to determine the length needed to fabricate panels with minimal material overage and waste.

While the operators are experienced with on-site fabrication, two unique challenges remained. First, steel panels of the length needed are too heavy to fabricate on the ground and lift up to the roof. Also, since spring practice was already in session, the facility could only be accessed from a wooded area on the building's back side. Only 30 feet were available to mobilize equipment, store the coil and rollform the panels.

Experience counts on both game day and in metal roofing. To accommodate the panel length and weight, a crane was used to hoist the rollformer, operator and coil up to the eave of the building. As the machine operator ran each panel, installers would lay and attach it across the building width. Approximately 12 minutes later, the next panel would be ready as the installers finished attaching the prior panel. Another rollform operator stayed on ground to reload coil as it was depleted. This iterative approach differs from the typical process in which all panels are initially run as a whole and subsequently installed—and proved to be a real time-saver on a project this size. The new roof was manufactured and installed in less than two weeks.



#### WINNING RESULTS

The roof was finished in a custom color, Hokie Maroon, a perfect fit for one of America's most spirited universities. Paint experts know that it can be difficult to ensure the longevity of red tones when exotic pigments are required. Fabral partnered with Valspar® to deliver a standard finish warranty that covers cracking, chipping, peeling, fading and chalking. Now this landmark building, positioned immediately behind the game-day scoreboard, beautifully displays the dominant team color during national TV appearances.

Unlike a membrane roof, Stand'N Seam panels will last the life of the building, providing superior life cycle costs. Backed by 20 years weathertight and paint warranties, these panels will be supporting Hokie sports for years to come.

#### **ABOUT FABRAL**

Lancaster, PA-based Fabral is the premier supplier of metal roofing and wall panels for architectural, educational, commercial, industrial and agricultural applications. Founded in 1967, Fabral has been widely recognized as the benchmark leader for over 45 years. As a leader in the metal roofing and wall panel systems, Fabral's quality product offering, advanced engineering support and dedicated customer service have elevated Fabral to become the provider of choice. Fabral is a division of Euramax International, Inc.

To learn more, visit www.Fabral.com.

#### **ABOUT EURAMAX**

Euramax International, Inc is a global producer of architectural copper, cladding, patio, roof and lawn drainage, snow retention, windows and transportation products for original equipment manufacturers, distributors, contractors and home centers worldwide. Formed in 1996, it leverages "the power of one" with its extensive product offering, advanced systems and dedicated team of experts. Through its network of twelve brands, Euramax collectively offers more than 1,000 quality products to serve the diverse needs of its customers. Euramax brands include Alumawood, Amerimax, Amerimax Fabricated Products, Amerimax Windows & Doors, Equinox Louvered Roof, Berger Building Products, CopperCraft, Euramax Coated Products, Euramax Industries, Ellbee, Fabral, and Global Expanded Metals.

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