

## Project Profile

# Henry® Building Envelope Systems® part of a new sustainable, state-of-the-art urban high-rise high school

Lincoln High School – Portland, Oregon



### Products used

*Blueskin® VP160 Self-Adhered Water Resistive Air Barrier*  
*Blueskin® Metal Clad® Self-Adhered Water Resistive Air Barrier*  
*Pumadeq™ Flex 31MV Flashing System*  
*Blueskin® LVC Spray Primer*  
*Blueskin® PE200HT High Temperature Roof Underlayment*

### Project at a glance

**Owner:** Portland Public Schools  
**Building location:** Portland, Oregon  
**Project size:** 289,000 sq. ft.  
**Architect:** Bora Architecture & Interiors  
**General contractor:** Hoffman Construction Company  
**Installer:** Insulpro Projects

### The Situation

For Portland Public Schools' new six-story, 289,000 square-foot Lincoln High School, project planners employed several efficient construction methods and sustainable building features. For example, a structural steel system with a special side connection system helped speed construction, as did concrete tilt-up panels and modular wall panels.

To help keep materials out of the waste stream, 10 million pounds of recycled concrete were used for the site's work area and to support the new track and field area. Also, the school chose to operate an array of solar panels on the roof to help keep the building energy efficient. And to make sure the weatherization system would be effective and install quickly in Portland's moist climate, the project's waterproofing consultant selected Henry Blueskin® VP160 Self-adhered Water Resistive Air Barrier for the vapor permeable membrane and Henry Blueskin® Metal Clad® Self-Adhered Water Resistive Air Barrier as the flashing membrane.

### The Solution

The contractor chose to apply Blueskin VP160 to modular wall panels on the job site in a controlled environment, which helped avoid weather delays during the winter months. Wall framing, insulation and Blueskin VP160-covered panels – including window panel rough openings flashed with Blueskin Metal Clad® – were then lifted into place with a crane and installed.

While Blueskin VP160 is a self-adhered membrane, it was chosen in part because it is available with a compatible primer that ensures an effective bond despite Portland's damp environment. Similarly, Blueskin Metal Clad® was chosen for its compatibility with a range of sealants even in wet, cold conditions.

### The Results

Not only did the Blueskin VP160 Self-Adhered Water Resistive Air Barrier system help contractors maintain an aggressive construction schedule through the Pacific NW winter, but it also contributed to the outstanding blower door testing results of 0.126 (positive pressure) and 0.107 (negative pressure) cfm/sf at 75 pa., exceeding the code maximum air leakage (per the 2021 IECC) of 0.4 cfm/sf at 75 pa.

Air tightness matters when designing a building in order to minimize the influx of unwanted pollutants while retaining as much quality indoor air as possible. Long term, the Henry weatherization products will help the Lincoln High School deliver decades of energy efficient building envelope performance for students, teachers, administrators and tax payers.

Ask us today about other Henry® solutions that help manage the flow of water, air, vapor and energy.

**Building Envelope Systems®**  
 Roofing | Air Barrier | Waterproofing