

Building Statistics Part 1

Unionville High School Additions and Renovations

Michael Beam | Construction Option | August 25th 2011

General Building Data



Figure 1: Building Front

General Building Data

Building Name	Unionville High School
Location and Site	750 Unionville Road, Kennett Square PA
Occupant Name	Unionville-Chadds Ford School District
Building Area	319,00 Square Feet
Stories Above Grade	3 Stories

Construction Data

Construction Cost	\$52,895,000
Construction Timeframe	June 2009 - December 2012
Contract Type	Hard Bid Public Work

Project Team Data

Owner	Unionville-Chadds Ford School District
Architect	MM Architects, Inc.
General Contractor	Wohlsen Construction Company
Site/Civil Engineer	ELA Group, Inc.
Structural Engineer	Joseph Barbato Associates, LLC.
Mechanical & Electrical Engineer	Gipe Associates, Inc.
Kitchen Design Consultant	Clark Food Service Equipment
Acoustical Programming & Design	Metropolitan Acoustics

Architecture

Architecture

Unionville High School, located in Kennett Square Pennsylvania, is a multi-purpose educational building. In addition to housing Unionville High School, the building is also the new location of the Unionville-Chadds Ford School District Administrative Office. Originally designed with a simplistic brick façade, UHS has kept some of the old features but has also gone in a new direction with rock face architectural blocks and several barreled roofs. Various new finishes appear on the interior of the building including oak trim, ceramic floor tile, and the same rock face architectural block used on the exterior.



Figure 2: View from stage

As a result of the many different uses within the building, numerous different tiers and depths are present in the exterior elevations. Among the many features within the building are a new state-of-the-art auditorium (figure 2), a new gymnasium, and renovated classroom space. With a seating capacity of over 1,200 and state of the art audio, video, and lighting equipment, the new auditorium is the clear focal point of the building. Many acoustical measures have also been incorporated in the design including carpet, upholster seats, acoustical CMU blocks, floating aerial acoustical panels, and vertical curtains (figure 3).



Figure 3: Curtains and Acoustical Block

Zoning Data

Occupant Name	Unionville-Chadds Ford School District
Use Group	Educational Group – E (most restrictive)
Construction Type	Construction Type 11A
Allowable Height	3 stories, 65’ high
Allowable Area	138,495 Square Feet (per story)

Code and Standard Data

2006 International Building Code
2006 International Fire Code
2006 International Mechanical Code
2006 International Plumbing Code
National Electrical Code, 2008 Edition
National Fire Protection Association 70

Note: There are no historical requirements for this project

Building Enclosure

Façade

While there are several different elements involved in the various facades of the Unionville High School building, the building façade is made up primarily of architectural rock faced CMU block courses with red brick accent striping (figure 1). Other features include large louvers, black metal flashing, fixed windows with cast stone sills, frosted glazing, metal panel systems, and curtain wall systems.



Roofing

With several different types of roofs comes a variety of materials. The majority of the building has a cold applied bituminous roofing system which is applied on top of 3 ½" polyiso insulation, ½" fiber board, and either concrete roof slab or metal roof decking. On the auditorium and gymnasium, however, the roofing system is to be a double locked standing seam metal roofing system utilizing panels at 2 ¾" in height and 24" on center.

Sustainability Features

Unionville High School is designed with the goal of achieving a LEED certification but no rating has been designated. T5 lamps, occupancy sensors, and sensor actuated faucets are utilized in order to help achieve this rating.

Note: All non-sited photographs and figures were created by myself, Michael Beam.