



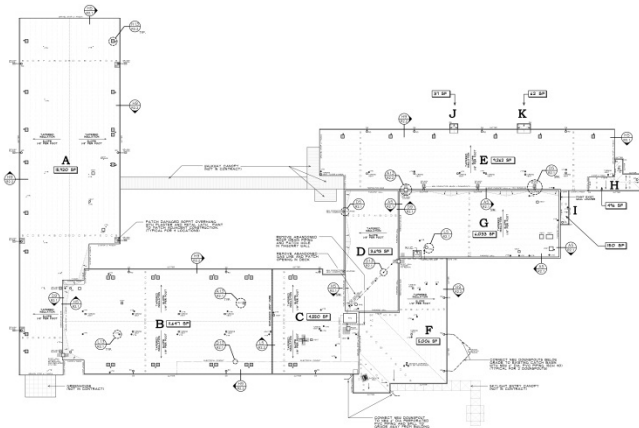
## Green Magnet Elementary & Vine Magnet Middle School Roof Replacement Knox County Schools Knoxville, Tennessee



ARCHITECTS  
WEEKS  
AMBROSE  
MCDONALD  
INC.

|                       |             |
|-----------------------|-------------|
| Green Elementary Roof | 56,856 s.f. |
| Vine Middle Roof      | 98,857 s.f. |
| Construction Cost     | \$1,073,030 |
| Cost/s.f.             | \$6.89      |
| Acoustical Smoke Vent | \$20,290    |
| Completion Date       | 2012        |

Architects Weeks Ambrose McDonald, Inc. was selected by Knox County Schools to perform design and inspection services for the largest roofing replacement project issued by the school system since the late 1990's. The project would consist of replacing the existing roof systems on two magnet schools in proximity of each other.

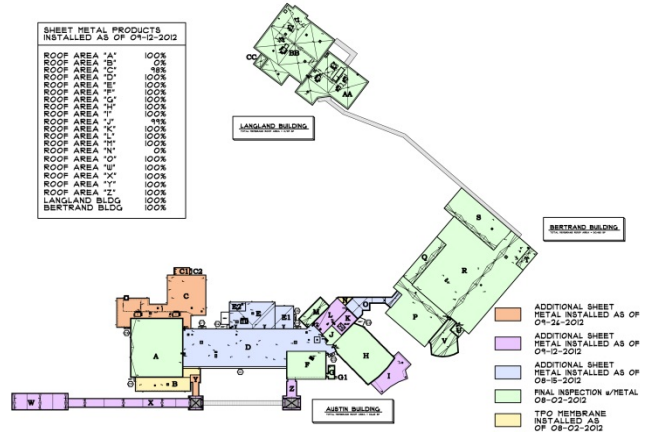


Green Magnet Elementary School Roof Plan

Green Magnet Elementary had an existing ballasted EPDM roof installed that had been difficult to maintain by the school system maintenance department. The school sits atop a hill near downtown Knoxville and the roof was consistently exposed to high winds which contributed to the movement of the ballast and billowing of the loosely laid EPDM roof membrane. The school system requested the new roof to be a fully adhered TPO roof membrane system to meet their

new cool roof reflectivity rating requirements. In addition to providing details and the tapered insulation layout for the design, Architects Weeks Ambrose McDonald recommended the problematic perimeter interior roof drains be abandoned and new roof drainage would be achieved through the use of gutters/downspouts around the perimeter of the building.

Vine Magnet Middle School was almost twice the size as Green Elementary. The existing roof systems varied across 34 different roof sections at varying levels and deck types. There were an additional 9 concrete canopies that were beginning to spall and deteriorate that also had to be corrected as well as minor repairs to the standing seam metal roofing at the bus canopies.



Vine Magnet Middle School Roof Plan



Existing Roof System



New Roof (Work In Progress)



Existing Roof System



New Roof (Work in Progress)



New Reflective White TPO Roof Membrane System