

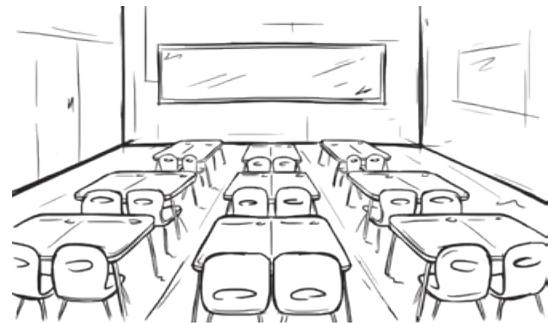
Wayne State University Increases Thermal Performance

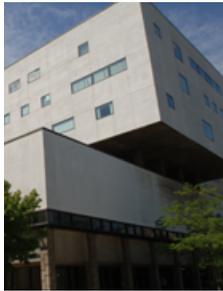
Case Study



Project Overview

Wayne State University is a nationally recognized metropolitan research institution with nearly 32,000 students. Annual maintenance evaluations identified a number of buildings on the campus with leaking roofs. This case study looks into four of these buildings that underwent a re-roof or re-cover application where ROCKWOOL's asphalt coated stone wool insulation was installed. The result of these upgrades resolved the water penetration issues and improved the long-term thermal performance of the roof assembly.

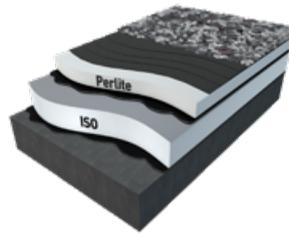




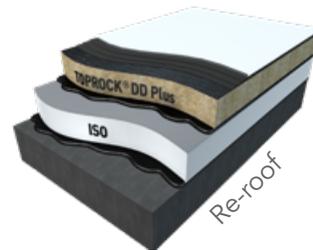
Student Services

- GAF Ruberoid® EnergyCap™ 30 FR SBS
- 3-ply GAF glas Flexply 6
- ROCKWOOL TOPROCK® DD Plus 2"
- Polyisocyanurate 2.75"
- Concrete & Steel Deck

Previous Construction



New Roof Assemblies



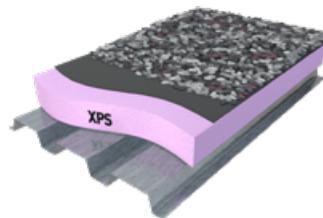
High roof steel deck section (not shown) was re-roofed using ISO mechanically fastened with ROCKWOOL TOPROCK® DD Plus mopped overtop.



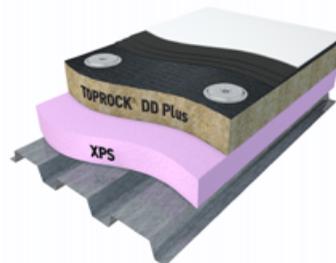
Biological Science

- GAF Ruberoid® EnergyCap™ 30 FR SBS
- 3-Ply GAF glas Flexply 6
- ROCKWOOL TOPROCK® DD Plus 3"
- XPS 2" (Full Tapered System)
- Steel Deck

Previous Construction



New Roof Assemblies

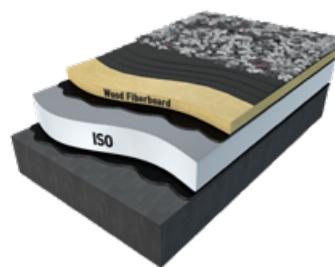




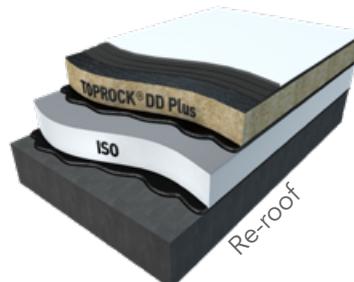
Shapero Hall

- GAF EverGuard® TPO 60mil Fleece Back membrane
- 3-Ply GAFGLAS® Flexply 6
- ROCKWOOL TOPROCK® DD Plus 2"
- Polyisocyanurate 2.75"
- Concrete Deck

Previous Construction



New Roof Assemblies



ROCKWOOL™ Products Installed

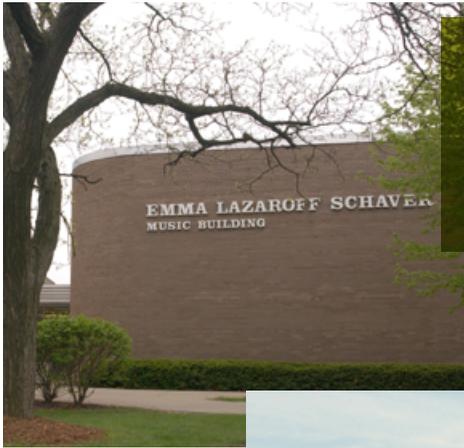
TOPROCK® DD Plus is a rigid dual-density stone wool board insulation, impregnated with a bitumen coating which is compatible with torch or mop applied membranes. MONOBOARD® Plus is a rigid uniform density, bitumen coated stone wool insulating coverboard.

Why TOPROCK DD Plus was chosen for this project

ROCKWOOL exclusive dual-density TOPROCK DD Plus with a higher density top layer, provided a strong point load resistance and effective load distribution – adding durability to the new re-roof/re-cover assemblies. In order to meet the new ASHRAE standards, the addition of stone wool insulation was a cost effective method for Wayne State University to both repair water penetration and improve the energy efficiency of all four buildings.



Wayne State University Re-roof and Re-cover Projects using ROCKWOOL™ Stone Wool Insulation



Benefits of ROCKWOOL Insulation

ROCKWOOL stone wool insulation, has a long term stable R-value, is dimensionally stable, non-combustible, water repellent, non-corrosive, sound absorbent, will not promote fungi growth, contains no blowing agents or fire retardants, and is environmentally sustainable. ROCKWOOL has achieved ICC-ES SAVE™ third-party certification on all products produced in the Milton facility, and contain a minimum of 75% and up to 93% recycled content.

Architects

A3C Colaborate Architects

Ann Arbor MI 48104

734.663.1910 | www.a3c.com

(Student Services, Biological Science and Shapero Hall)

NTH Consultants , Ltd.

Northville MI 48168

248.553.6300 | www.nthconsultants.com

(Schaver Music School)

Contractors

Port Huron Roofing & Sheet Metal Co.

Port Huron, MI

810.987.9490 | www.porthuronroofing.com

(Student Services, Biological Science and Schaver Music School)

LaDuke Roofing & Sheet Metal

Oak Park, MI 48237

248-414-6600 | www.ladukeroofing.com

(Shapero Hall)

Location:

Detroit MI

Project Sizes:

Varied

ROCKWOOL CEU Courses

ROCKWOOL supports building industry professionals by offering a number of online Continuing Education Courses. Participants can earn 1 LU Hour for AIA/ CES and 1 NARI CEU for their participation. Please check our website updated course opportunities.

A Global Leader

ROCKWOOL Inc. is part of Rockwool International, the largest producer of stone wool insulation, which is made from natural basalt rock and recycled material.

Rockwool International was founded in 1909 and today operates worldwide with more than more than 9,700 employees, with 27 factories in three continents.

Rockwool has more than 40 years experience in developing and manufacturing multipurpose insulation products for interior and exterior walls, ceilings, and roof underdecking. For more than 20 years, ROCKWOOL has been serving the North American market.

Environmentally Sustainable

Our stone wool production process utilizes some of the most advanced technology available. The ROCKWOOL facility is designed to capture and recycle rainwater, reduce energy consumption, and create zero waste to landfill by recycling raw materials back into the production process.

ROCKWOOL insulations are created using naturally occurring, inorganic raw materials and materials with a high-recycled content. Stone wool insulation is non-combustible and achieves its thermal performance without the use of blowing agents. The products do not off-gas and are fully recyclable, therefore contributing to a sustainable environment.

ROCKWOOL is the Better Insulation

ROCKWOOL has released a new limited thermal warranty that guarantees 100% of the originally declared R-value on all of its commercial roofing insulation products for up to 30 years. This is a first for the commercial insulation industry and is unmatched by any other insulation manufacturer in North America. The new limited thermal warranty will be available in Canada, United States and Mexico. When installed in accordance with ROCKWOOL instructions, ROCKWOOL maintains the originally declared R-value as published on the Technical Data Sheets for the extent of the warranty. For more information on these warranties please contact a ROCKWOOL sales representative in your area.



ROCKWOOL

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