



Spencer Forge & Manufacturing: SPF renews multiple roofs on 125-year-old building

PROJECT INFORMATION

Project Year: 2021

Project Size: 3 roofs, 26,500 sq ft.

Project Location: Spencer, OH

Project Overview: Spray

Polyurethane Foam over existing
Metal and Shingles

Manufacturer Used (Foam): Carlisle

Manufacturer Used (Coating):

Carlisle

Spencer Forge's headquarters, a 125-year old, 85,000 square foot building began having significant leaks about three years ago. Their primary focus was solving the leaking issue, but also reducing their energy costs.

Heat has been provided through small space heaters. With a metal roof with no insulation and a shingled roof with only a wood deck, there was no opportunity to keep heat inside the building.

Spencer Forge became interested in spray polyurethane foam because of the increased R-value, the ability to minimize tear-off, and to eliminate any interruption to normal business functions.

The project took 21 working days to complete with only a 6-man crew. Two inches of spray foam will bring the R-1 roof to approximately an R-13.



Before



After



Foam over shingles



Foam over metal



Final Scope of Work

- Complete roof survey report
- Less than 5% of deck replacement
- In some areas, the shingles were removed, a cover board was installed, then spray foam over the board
- Due to severe sloping, 50% of the project required a man-lift
- Two internal drains eliminated and rerouted to the exterior gutter system
- 2" of spray foam
- 30 mils of coating w/embedded granules
- 20-year warranty

The alternative solution of performing a complete tear-off, transporting all the material to a landfill, and installing brand new metal and shingle roofs would've cost at least double. Future energy costs are expected to be reduced by 50-75%.

*****This project won 2nd place at SPFA22 for a spray foam roof under 40,000 sq. ft.*****

