

Farming & Agriculture Market

TOBACCO PRODUCER

<u>CONFIDENTIAL</u>

- Markets: Farming & Agriculture
- Country: USA
- Courtesy of: Superior Products International

PROJECT DESCRIPTION

A 74.320 m² roof for a tobacco warehouse in Memphis, Tennessee, USA. Company had extremely high-energy costs due to air-conditioning that was needed to cool the facility, which had a black EPDM roof.

COATING SOLUTION

One layer of 10 dry mils (250 μ) of SUPER THERM on top of existing membrane.

RESULTS

Summary of official results submitted in report.

- 1. Roof temperature black EPDM roof uncoated is 190,8°F (88,2°C)
- 2. Temperature on underside uncoated surface is $103^{\circ}F(39,4^{\circ}C)$
- 3. Roof temperature black EPDM membrane coated with SUPERTHERM is 121°F (49,4°C)
- 4. Temperature on underside coated surface is 95°F (35°C)
- 5. Uncoated surface allows 7,85 BTU/HR/SQ.FT (24,75 W/m²) to enter the building
- 6. Coated surface allows 2,33 BTU/HR/ SQ.FT $(7,35 \text{ W/m}^2) = 70,32\%$ reduction
- 7. Difference of 5,52 BTU/HR/ SQ.FT (17,40 W/m²) for the 800.000ft² roof reflects in 4.416.000 BTU/HR (1.294 KW/hr) or 368 Tons equipment savings.
- 8. Uncoated roof load is 6.468.277 CFM/ SQ.FT over 800.000 SQ.FT.
- 9. Coated roof load is 3.374.318 CFM/ SQ.FT over 800.000 SQ.FT. = 47,8% savings

PRODUCTS WE USED

Super Therm®

