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**save on energy costs?**



## Test Report: ElaProof™ Cool Roof Effect on Roof Surface

### Objective:

The objective of this test was to evaluate the impact of different roofing materials on surface temperature when exposed to direct sunlight at the same location. The focus was on comparing the temperature increase caused by sun on different coatings under identical conditions.

### Procedure:

- All samples were placed in direct sunlight at the same location.
- The outside temperature was recorded at 77.7 °F.

### Results:

#### 1. Coated bitumen membrane sample:

- Surface temperature: 145 °F
- Temperature rise: 56.6 °F The black roofing material resulted in a significant temperature increase, nearly doubling the outside temperature.

#### 2. Dark Grey sheet metal sample:

- Surface temperature: 134.3 °F
- Temperature rise: 67.3 °F The dark grey roofing material exhibited a temperature increase similar to that of the black roofing material, suggesting comparable heat absorption and retention properties.

#### 3. With ElaProof™ “Cool Roof” sheet metal sample:

- Surface temperature: 108.8 °F
- Temperature rise: 31.1 °F The steel sheet sample coated with ElaProof™ “Cool Roof,” which is designed to have reflective properties and minimize heat absorption, demonstrated a significant reduction in surface temperature compared to the other two samples.

### Conclusion:

The test results indicate that the black roofing material, had the highest surface temperature increase, followed by the dark grey roofing material. Conversely, the sample with ElaProof™ “Cool Roof” showcased the best performance in terms of minimizing heat absorption, resulting in lower surface temperatures.

It is evident that ElaProof™ “Cool Roof” successfully mitigates the temperature rise, as it exhibited a considerably lower surface temperature compared to the black and dark grey roofing materials. These findings highlight the effectiveness of ElaProof™ “Cool Roof” in maintaining cooler roof surfaces and potentially contributing to energy efficiency and improved thermal comfort within buildings.

Further investigations and assessments can be conducted to explore the long-term effects, durability, and energy-saving potential of ElaProof™ “Cool Roof” in various environmental conditions and building applications.

