

Consumer Products Client Saves over \$400,000 in Roofing Costs



Aerial View of Campus

Roof Asset Management Solutions

- 5-10 Year Life Extension with Basic Repairs/ Maintenance
- Aerial Infrared Finds Hidden Moisture Damage
- Diagnostic Field Survey Confirms Performance

Facility Background

The Client's Ohio Campus includes 20 buildings and nearly 700,000 sf of roofing systems. One building with two targeted roof sections, covering 25,000 sf, were deemed too old, but dry enough, for a contractor to recommend roof replacement. This option was budgeted at \$450,000 to \$600,000. The Facilities Team had the approved capital dollars, but needed an objective second opinion to quickly and cost effectively determine if this was the right solution.

Objective Second Opinion

RAM USA's approach included aerial infrared moisture scans and onsite construction assessments to develop a condition baseline. The site had a previous nuclear moisture scan that stated the roof was dry, but RAM's proprietary, aerial infrared scan and analysis did find hidden moisture damage. Secondly, a physical assessment and core analysis determined that, although the roofing system was 15-20 years old, it was still in excellent condition.

No Cost and Low-Cost Options

Although there are some points of surface degradation and areas of wet insulation, the Client could go another 5 years without investing additional capital dollars. Another option included implementing a repair and maintenance strategy to gain 5-10 years of life extension. This would cost roughly 10% of the original re-roof option.

Next Steps

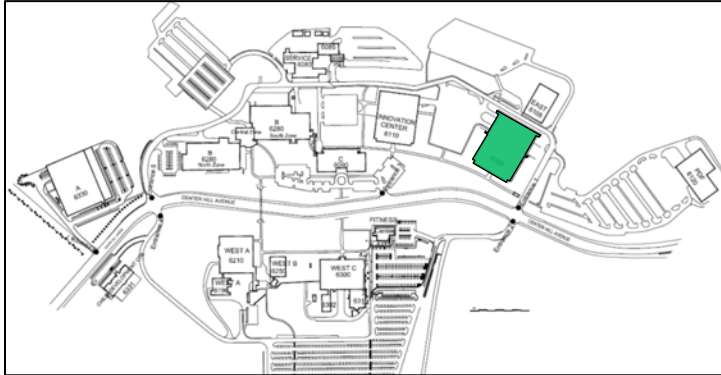
The Team is planning to roll out this process across the entire campus to develop a prioritized roadmap. Then, across its national portfolio. All information is available via RAM Command, an online asset management application to help the Team proactively and manage their portfolio. This process sustains The Client's differentiation and competitive edge.



Aerial Infrared Identifies Hidden Moisture Damage



Aerial Infrared Process Images

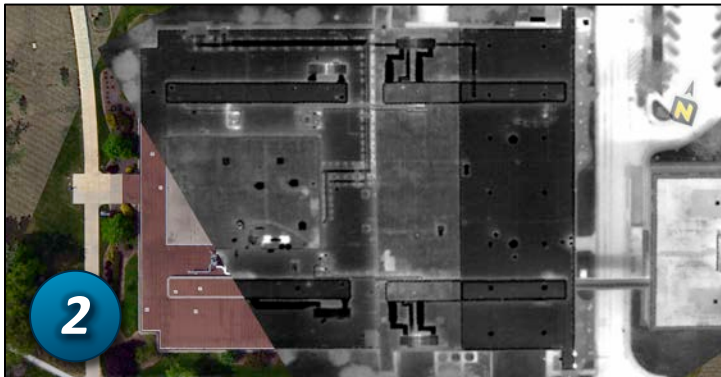


CAD Drawing - Depicts the entire campus, and the facility in question



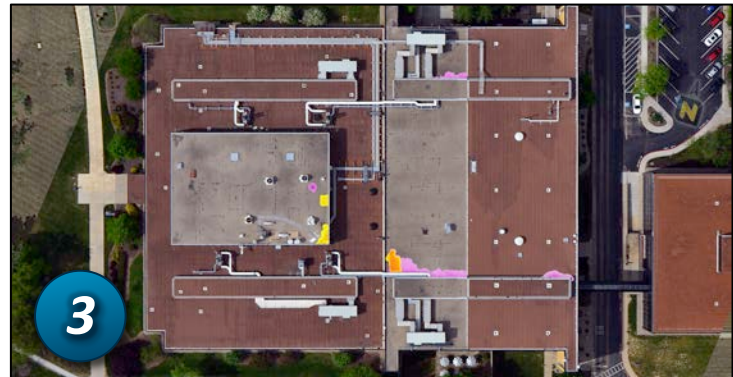
1

Visual Image - High resolution base photo to view the roof's current condition



2

Infrared Image - Accurately detects the roof's minute temperature differences



3

Blended Image - Pinpoints thermal anomalies in need of further investigation

PROJECT FINANCIAL SUMMARY

Contractor	RAM USA
Replacement	RAM Surveys & Analysis = \$ 5,000
Proposal	RAM Proposal = \$ 45,000
= \$ 500,000	RAM Total = \$ 50,000
	RAM Savings = \$ 450,000

1% of the proposed budget reduced expenditure by 90%

OUR METHODOLOGY = YOUR SUCCESS

RAM USA is a national roof and building envelope consulting and engineering services firm focused on **cost effective asset life extension solutions**. Our goal is to help **preserve and protect your portfolio of buildings** – Whether you have 1 or 100+ sites.

Our unique, **Condition-based Approach** is built upon **Information, Implementation and Continuation (IIC)**, which empowers you to **proactively** deploy systematic solutions to **reduce capital, O&M, and energy expenditures, while extending the life of your assets**.

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