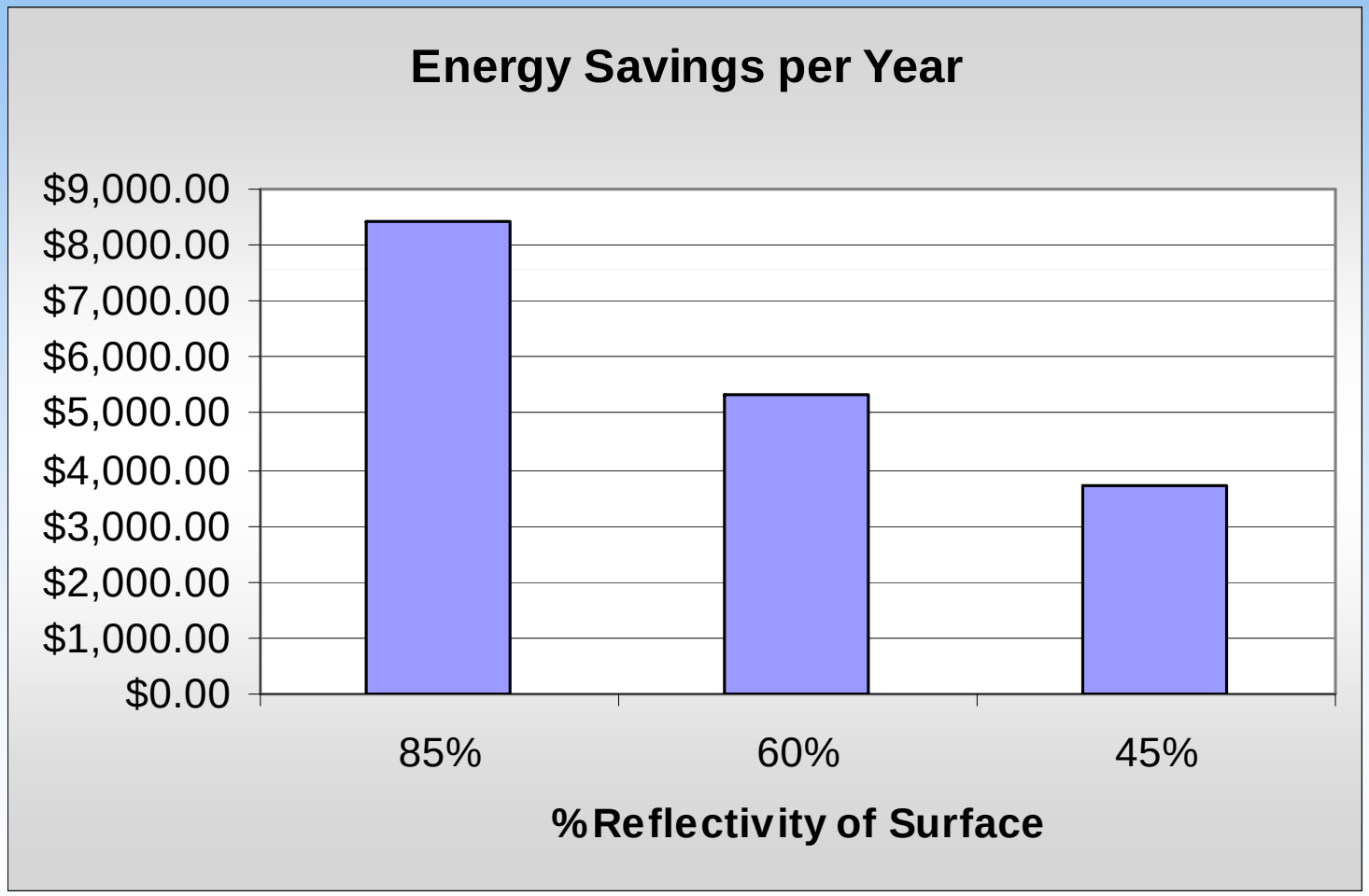
Effects of Reflectivity Loss

Example

- **100,000 ft^2 of EPDM**
- **R = 10**
- **Dallas**
- **$0.07 / kWh**
- **Energy savings based on 85% and 60% Solar reflectance with ORNL energy calculator.**

Effects of Reflectivity Loss



Effects of Reflectivity Loss

- **85% SR = $8300 saved**

  $3,100 difference
- **60% SR = $5200 saved**
- **Cost to wash, coatings=5cents=$5,000.**
- **Cost to wash, single-ply=10cents=$10,000**

- **EVALUATE EACH SITUATION-Energy cost and environmental implications, but washing typically does not provide a + financial return.**

New clean coating technology

New clean coating technology

Cool Coated Roofs save Energy

- **May increase insulation efficiency by up to 50%.**
- **May decrease roof-mounted HVAC demand by 10-15%.**
- **May increase roof-mounted HVAC efficiency by 10%.**
- **While white roofs get dirty, new technology may provide best return.**
- **All roof systems, including coatings should be maintained.**

Restored Coated Roofs last longer

- **Asphalt BUR, Norfolk VA**
  - **26 year old roof, Coated in 1996**
  - **Performing well – recoat in 2009**

Restored Coated Roofs last longer

- 11 year old Hypalon in GA
  - Coated in 1996 vs. tearing off
  - Performing well in 2008

Restoration saves $ up front

- Distribution Center, TX
  - 2003 , 4500 SQ
  - EPDM Restoration (16 yr old roof)
  - 100 SQ Replaced
  - Re-roof Bid $1.7 million
  - Cool Roof Restoration $ 560 thousand

High Performance Reflective Roof Coatings

- May be used to Restore roofs
  - Save money initially.
  - Extend the life of the original roof.
- May be used to conserve Energy.
- May positively impact the Environment.

ER SYSTEMS
ELASTOMERIC ROOFING

Prairie
TECHNOLOGIES

Thank You!

This concludes the American Institute of Architects
Continuing Education Systems Program.

Any Questions?

Speaker Company, Contact Information, Logo