

## ADH-Thermal Coating vs Reflective Paint

Feature / Aspect	ADH-Thermal Coating	Reflective Paint
<b>Core Technology</b>	Ceramic microspheres (micro-sized particles)	Metallic flakes or light-colored pigments
<b>Main Function</b>	Thermal insulation + reflectivity	Solar reflectivity only
<b>Thermal Conductivity</b>	Low (typically 0.05–0.07 W/m·K)	Not specified for insulation purposes
<b>R-Value Contribution</b>	✓ Yes, provides measurable R-value	✗ Minimal or negligible R-value
<b>Heat Reflection</b>	✓ High (blocks radiant & conductive heat)	✓ High (mainly reflects solar radiation)
<b>Application</b>	Spray, roller, or brush	Paint roller, spray, brush
<b>Durability</b>	✓ High (resistant to UV, moisture, cracking)	Moderate (may degrade faster under intense UV)
<b>Waterproofing / Breathability</b>	Often included in formulation	Varies by brand (usually not waterproof)
<b>Energy Savings</b>	✓ Significant (up to 30–40% in cooling)	⚠ Limited unless combined with insulation
<b>Use Case Examples</b>	Roofs, walls, HVAC ducts, tanks	Roofs, metal sheets, external walls
<b>Cost (per m<sup>2</sup>)</b>	Moderate to High	Low to Moderate
<b>Best For</b>	Hot climates, energy-efficient buildings	Budget-friendly surface heat reflection