



THE INTELLIKOAT™ PLATFORM

A cooler, longer-lasting commercial roof.

A roof restoration system that seals and protects against leaks, reflects sunlight to keep your building cooler, and stores heat to reduce HVAC load through the day.

Inside: how it works, independent test results, and the three system options your contractor can quote for your building.

The roof is working harder than it used to.

Most commercial roofs were specified for a climate that no longer exists. Today's heatwaves, cold snaps, and freeze-thaw cycles are punishing assemblies that were built for milder conditions, and the cost shows up in utility bills, HVAC repair calls, and capital plans.

WHAT THAT LOOKS LIKE IN PRACTICE

- ✓ Roof surface temperatures over 150°F during summer heatwaves
- ✓ Aging membranes that crack and embrittle in winter cold snaps
- ✓ HVAC systems running harder year-round, shortening equipment life
- ✓ Small leaks and seam failures that compound into tear-off-and-replace problems within a few seasons

IntelliCoat™ goes over the existing roof to restore the weather barrier and add an active thermal layer that traditional coatings don't have. Independent testing at the National Lab of the Rockies found this approach delivers up to 7× the thermal resistance of reflective-only coatings.

30%

**HVAC ENERGY
REDUCTION**

Validated across installations

7×

**BETTER THAN
REFLECTIVE**

NLR independent testing

20°F+

**ROOF TEMP
REDUCTION**

ASU field validation, 2024–2026

20 yr+

**ASSET LIFE
EXTENSION**

Full warranty available

Comfort & Quality of Life

Roof surface temperatures stay 50–80°F cooler than dark roofs in peak afternoon sun. Indoor temperatures stay more even through the day.

Protection & Peace of Mind

A seamless, monolithic membrane that handles ponding water, expansion-contraction cycles, and weather extremes. Extends the life of your roof by 20+ years.

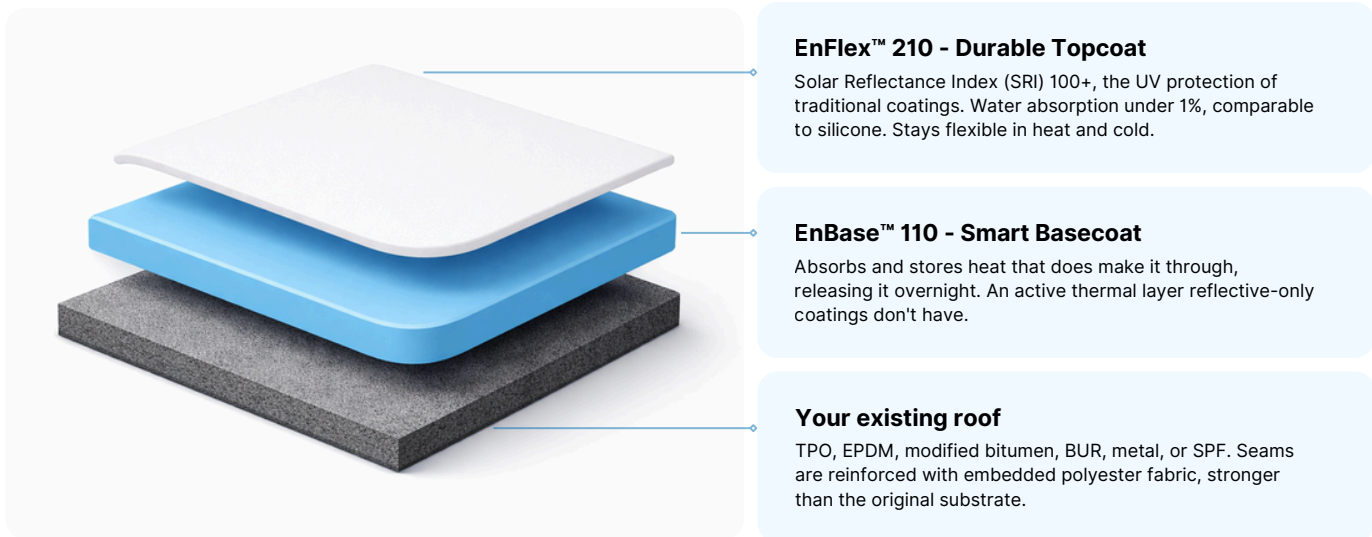
Lower Bills & Lasting Value

Up to 30% reduction in HVAC costs. A long-term investment that improves your building's energy efficiency without the cost or disruption of a full replacement.

How IntelliKoat™ works.

IntelliKoat™ is a liquid-applied, water-based coating system that goes directly over your existing roof. No tear-off, no replacement. A seamless, monolithic membrane with fabric-reinforced seams that protects against heat, cold, UV, and weather for the next decade or two.

THE TWO LAYERS



IntelliKoat™ is engineered from the ground up around two patent-protected technologies: **ActivTherm™** microencapsulated thermal energy storage in the basecoat, and **DuraFlect™** UV-IR pigment technology in the topcoat. Together, they deliver active thermal management and long-term UV resistance that goes beyond what a standard reflective coating can do.

30%

**Reduces HVAC
energy consumption
by up to 30%**

20+ yr

**Shields your roof
from UV and IR.
Extends roof life by
10+ years.**

8×

**Weatherproofs your
roof 8× more from
moisture damage**

1/3

**Less than one-third
the cost of
replacement**

Built different. From the chemistry up.

Most coatings do one thing. IntelliKoat™ is engineered around two patent-protected technologies that work together to provide active thermal management in the basecoat, long-term UV and moisture protection in the topcoat.



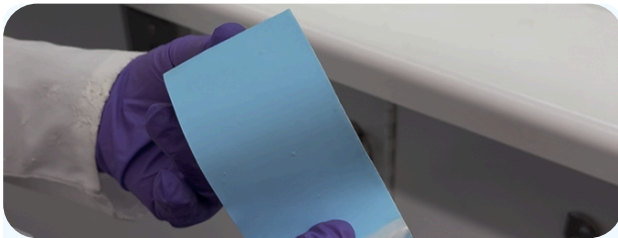
SRI 100+

Reflects UV and infrared at the highest industry rating, powered by DuraFlect™ pigment technology



Under 1% water absorption

Comparable to silicone, with a seamless monolithic membrane that eliminates seam failures where moisture infiltration starts



Stays flexible in heat and cold

Handles expansion-contraction cycles that crack and embrittle standard coatings over time



7x the thermal resistance

Independently validated at the National Lab of the Rockies



Fabric-reinforced seams

40" polyester embedded directly into the re-coat, stronger than the original substrate



Compatible with many roof types

TPO, EPDM, modified bitumen, BUR, metal, and many more.

Proven in the field. Across climates. At scale.



VALIDATED, FUNDED, & PEER-REVIEWED BY



U.S. DEPARTMENT
of ENERGY



AWARDS & RECOGNITION



Winner of the Global
Innovation Challenge



Top 10 PropTech Solution
in the 2025 QBE
AcceliCITY Resilience
Challenge



Innovator of the Year -
Arizona Governor's
Celebration of Innovation



Top 100 Deep Tech
Startups to Watch in
2026



15 Climate Tech Startups
to Watch in 2026



Incubate Energy Labs®
2026 Finalist

Residential Roof Restoration (AZ)



THE CHALLENGE

A 5,000 sq ft built-up roof, last coated in 2017 with a standard commodity coating. Nearly a decade of Arizona heat cycles had taken their toll. Before any protection could be applied, the surface needed to be properly prepared and primed for everything that follows.

THE SOLUTION

EnKoat applied the full two-layer IntelliKoat™ Restore system in two phases.

- EnBase™ 110 basecoat sealed the surface, established superior adhesion, and set the foundation for a complete engineered system.
- EnFlex™ 210 topcoat was applied, with 40" polyester fabric reinforced directly into the re-coat at all seams stronger than the original substrate.

THE RESULTS

MEASUREMENT	BEFORE	AFTER INTELLIKOAT™	IMPROVEMENT
Adhesion / Peel Strength	~2 lbs (industry std.)	13 lbs	6x stronger
Roof Surface Temperature	86.5°F	65.8°F	-20.7°F cooler
Waterproofing	Standard membrane	Full system seal	No penetration
Roof Life Extension	Aging / degrading	Fully restored	+20 yr extension
Energy ROI (Cooling Savings)	Baseline	Reduced load	Up to 30% savings

"This stuff sells itself when you show the experimental data."

The Applicator



ASU Library Archive Facility, Mesa (AZ)



THE CHALLENGE

Commercial roofs in high-heat climates face compounding stress, surface temperatures exceeding 150°F during peak summer, increased thermal load entering the building, and HVAC systems running harder year-round. The ASU Polytechnic Campus Library Archive Facility presented an opportunity to measure exactly how much IntelliKoat™ changes that equation, with independent sensors and a utility partner validating every data point.

THE SETUP

- 40,000 sq ft institutional building
- 2 roof sections tested: coated vs. uncoated
- 30+ sensors installed across both sections
- IntelliKoat™ applied July 2025
- Validated in partnership with Arizona State University and Salt River Project (SRP)

VALIDATED BY



30+ independent sensors

15–25°F

Reduction in Roof Temperature
(Daytime Coated vs. Uncoated)

Consistent reduction across peak summer conditions

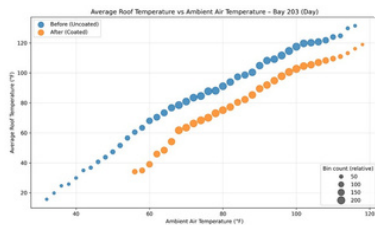
40,000
sq ft

Institutional Roof Validated
ASU Polytechnic Campus, 2025

ASU Library Archive Facility, Mesa (AZ)

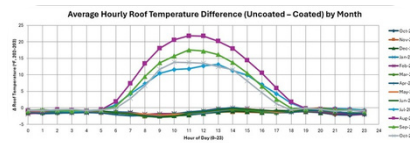


Roof Temperature vs. Ambient Air Temperature Daytime, Coated vs. Uncoated



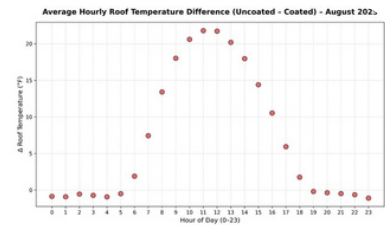
- The coated roof consistently operates at lower temperatures
- Temperature separation increases as the ambient temperature rises
- Strongest performance observed in high heat conditions

Seasonal Roof Temperature Reduction Trend



- Highest performance during peak summer months
- Reduced delta during cooler months (expected behavior)
- Performance correlates with ambient temperature and solar intensity

Average Hourly Roof Temperature Reduction August Peak Conditions



- Peak reduction occurs during midday hours
- Up to 20–22°F reduction during peak load window
- Aligns with the highest grid stress period

WHAT THIS MEANS

For Buildings

Reduced heat transfer through the roof assembly, lower thermal load, and reduced peak cooling demand in high-heat conditions.

For Utilities

Impacts load during peak hours, passive and always-on requiring no customer action, scalable across existing commercial building stock.

Peak Mining Data Center, Corpus Christi (TX)



THE CHALLENGE

Peak Mining operates a high-performance data center in Corpus Christi. The building is a metal-roof structure housing dense computing equipment in one of the hottest, most humid climates in the country.

- Rooftop temperatures regularly exceeded 130°F
- Internal facility temperatures hit 134–140°F with HVAC running flat-out
- Servers and electronic equipment were failing daily

THE SOLUTION

EnKoat applied the full IntelliKoat™ system to both the roof and exterior walls.

- EnBase™ 110 basecoat across the entire metal envelope
- EnFlex™ 210 durable topcoat sealed and weatherproofed the system

THE RESULTS

MEASUREMENT	BEFORE	AFTER INTELLIKOAT™	IMPROVEMENT
Outside ambient temperature	84°F	84°F	(unchanged)
Internal facility temperature	134–140°F	92°F	Up to 48°F reduction
Daily equipment failures	Multiple, daily	Zero	100% eliminated
Reported heat gain	Baseline	Cut in half	>50% reduction

"Before IntelliKoat™ was installed, we had explosive equipment failures daily. After installation, we have had zero failures. This is a game changer for how we manage heat in our facilities."

Alistair Edwards, Director of Infrastructure & Engineering, & David Bayler, Construction Manager - Peak Mining

"Happy tenants, lower bills, and a roof that looks brand new."

Building Owner, Arizona

"Amazing how much we are able to save with EnKoat."

Facility Manager, Arizona



SCAN ME!

HEAR IT
FROM ALISTAIR

When restoration is the right call.

Most commercial roofs in restoration condition don't need replacement. If the structure underneath is sound, restoration costs 50–70% less than a tear-off and adds another decade or two of asset life.

WHAT YOU GET	FULL TEAR-OFF & REPLACE	INTELLIKOAT™ RESTORATION
Capital outlay	Full replacement cost	50–70% lower than replacement
Warranty coverage	10–20 years on new system	Up to 20-year No-Dollar-Limit (labor + materials)
Project duration	Weeks of disruption	4 days per 10,000 sq ft, typical
Energy performance	No improvement over baseline	Up to 30% HVAC energy reduction validated
Tenant & operations	HVAC shutdowns, interiorexposure	No disruption. Water-based , no isocyanates.
Asset life extension	Replaces the asset	Adds 10–20 years to the existing asset

WHEN REPLACEMENT IS THE RIGHT CALL

If your roof has significant structural damage, widespread saturation, or has reached the end of its serviceable life, replacement may be necessary. IntelliKoat™ is for roofs in a restoration condition. Ask your contractor for an honest assessment.

NOT SURE WHICH CATEGORY YOUR ROOF IS IN?

Request a free roof assessment. We'll evaluate your roof's condition, identify whether it's a restoration candidate, and provide a comparison against replacement. No cost, no obligation.

 sales@enkoat.com

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The three tiers of protection.

ReNew

BEST FOR: REFRESH OF A SOUND ROOF

WARRANTY 7, 10, or 15 years Material warranty	SYSTEM LAYERS Single-layer topcoat	ENERGY SAVINGS Smart-roof reflective
Your roof is structurally sound, and you want to be fresh with smart-roof performance. Fastest single-coat install. Cool-roof rebates may apply.		

Restore

BEST FOR: FULL RESTORATION

WARRANTY 10 or 15 years Material warranty (NDL upgrade available at additional cost)	SYSTEM LAYERS Two-layer (basecoat + topcoat)	ENERGY SAVINGS 15–25°F surface temp reduction
You need full restoration with the option to upgrade to labor + materials coverage. Standard two-coat install. Cool-roof rebates may apply.		

Perform

BEST FOR: MAXIMUM LIFE AND ENERGY ROI

WARRANTY 20 years Material warranty (NDL upgrade available at additional cost)	SYSTEM LAYERS Two-layer at maximum coverage	ENERGY SAVINGS 20–30% HVAC reduction
You want the longest asset life and the strongest energy ROI available. Two-coat install at full dry film thickness. Cool-roof rebates may apply.		

IntelliCoat™ ReNew

Single-coat application designed for recoats. Industry-leading UV, moisture, and heat protection in a single coat application.

Best for: sound-membrane roofs (TPO, PVC, EPDM, modified bitumen, BUR, SPF) in restoration condition; maintenance refresh cycles, and multi-building portfolios where a faster install means more roofs completed per season.

THREE RENEW TIERS

Renew 7 Entry Tier

BEST FOR: 5–7 YEAR CAPITAL HORIZONS, MAINTENANCE RECOATS

APPLICATION
Single coat

MATERIAL WARRANTY
7 years

FINISH
**Smart-roof, white,
fully reflective**

Entry-tier option for refreshing a roof at a competitive price point with an EnCoat-backed written warranty.

Renew 10 Core Tier

BEST FOR: 8–12 YEAR CAPITAL HORIZONS, HEAD-TO-HEAD COMPETITIVE BIDS

APPLICATION
Single coat

MATERIAL WARRANTY
10 years

FINISH
**Smart-roof, white,
fully reflective**

The most common Renew tier. Matches what a conventional two-coat acrylic recoat delivers.

Renew 15 Top Tier

BEST FOR: 15-YEAR CAPITAL PLANS, OWNER-OCCUPIED BUILDINGS

APPLICATION
Single coat (thicker)

MATERIAL WARRANTY
15 years

FINISH
**Smart-roof, white,
fully reflective**

The highest tier option for buildings you intend to hold long-term, with maximum warranty life on a single coat application.

SYSTEM OPTION 2

IntelliKoat™ Restore

Industry-leading restoration system. Full two-layer restoration at a fraction of replacement cost. Both tiers use EnBase™ 110 + EnFlex™ 210 chemistry, with NDL warranty available as an upgrade.

TWO RESTORE TIERS

Restore 10

BEST FOR: 10-YEAR CAPITAL HORIZONS, TWO-LAYER RESTORATION WITH NDL UPGRADE OPTION

APPLICATION
**EnBase™ 110 +
EnFlex™ 210**

MATERIAL WARRANTY
10 years

NDL UPGRADE
Available at added cost

Best for multi-building portfolios and mid-tier capital horizons. Standard basecoat application.

Restore 15

BEST FOR: 15-YEAR CAPITAL HORIZONS, OWNER-OCCUPIED BUILDINGS, NDL UPGRADE OPTION

APPLICATION
**EnBase™ 110 (heavier)
+ EnFlex™ 210**

MATERIAL WARRANTY
15 years

NDL UPGRADE
**Available at
added cost**

Best for owner-occupied buildings and long-hold institutional assets. Heavier basecoat for extended performance.

SYSTEM OPTION 3

IntelliKoat™ Perform

The 20-year flagship. A smarter alternative to TPO overlay at a lower installed cost, no tear-off, no seams, no operational shutdown. NDL warranty upgrade available.

Perform 20

BEST FOR: TPO OVERLAY ALTERNATIVE, OWNER-OCCUPIED BUILDINGS, HEAT-SENSITIVE OPERATIONS

APPLICATION
**Two-coat at full
dry film thickness**

MATERIAL WARRANTY
20 years

ENERGY SAVINGS
**20–30% HVAC
reduction**

WHAT YOU GET

- 20-year Material Warranty (NDL upgrade available)
- 20–30% HVAC energy reduction validated
- 15–25°F roof surface temperature reduction

BUILT FOR

- Buildings considering TPO overlay or silicone restoration
- Owner-occupied buildings where utility savings hit the P&L
- Heat-sensitive operations: data centers, cold storage

CONNECT WITH US!

See IntelliCoat™ in action. Click to follow every project as it happens.

[LinkedIn](#)

[Instagram](#)

[YouTube](#)

[Facebook](#)





READY TO TALK ABOUT YOUR PROJECT?

Three Steps to a Better Roof.



REQUEST A FREE ASSESSMENT

Have your contractor or an EnKoat representative evaluates your roof. We'll tell you whether it's a restoration candidate. No cost, no obligation.



PICK YOUR SYSTEM

Renew, Restore, or Perform. Your contractor will recommend the system that matches your building, your budget, and how long you want it to last.



GET YOUR QUOTE

Your EnKoat-certified contractor delivers a project-specific quote with warranty terms, installation timeline, and applicable cool-roof rebate programs.

QUESTIONS? TALK TO ENKOAT DIRECTLY.



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www.enkoat.com 

Our team can provide a project-specific evaluation, substrate-compatible coverage calculations, warranty documentation, certified-applicator referrals, and guidance on cool-roof rebate programs. For technical specifications and engineering inquiries, contact engineering@enkoat.com.

A NOTE ON VALIDATION

All performance claims in this brochure reference independent testing at the National Lab of the Rockies (NLR, 2021), the Arizona State University Polytechnic Campus field study in partnership with Salt River Project (2024–2026, ongoing), a peer-reviewed publication of the ActivTherm™ chemistry in Energy and Buildings, and underlying research funded by the National Science Foundation. Warranty terms and cool-roof rebate availability vary by project, location, and substrate. Request a project-specific evaluation for documentation that applies to your roof.