

TOPCOAT | INTELLIKOAT™ SYSTEM

EnFlex™ 210

DuraFlect™ Reflective Weather-Barrier Topcoat

Water-based elastomeric acrylic | Initial SRI 100+ | < 25 g/L VOC



PRODUCT OVERVIEW

EnFlex™ 210 is a water-based elastomeric acrylic topcoat that reflects solar heat and seals exterior surfaces against weather. Its DuraFlect™ technology pairs high solar reflectance with high thermal emittance, so the surface turns away most incoming sunlight and sheds the heat it does absorb. The cured film is seamless and flexible, and it resists UV degradation, water uptake, cracking, chalking, and dirt pickup.

EnFlex 210 is the finish coat of the two-coat IntelliKoat™ System, applied over EnBase™ 110 to combine reflectance with thermal energy storage. It can also be applied on its own as a reflective, protective recoat over sound surfaces, which is the basis of the IntelliKoat™ ReNew line. Standard color is white, with custom tints available.

SRI 100+

Solar Reflectance Index

ASTM E1980, initial value. 0.90
initial solar reflectance, ASTM E903

<1%

Low Water Absorption

<1% vs. 22.2% average of 7 acrylic
coatings, 24 hr immersion

>2×

UV Shielding Life

About 26 days vs. 11 days average
for acrylic coatings, EnKoat method

7×

Thermal Performance

IntelliKoat System vs. conventional
reflective coatings, NREL validation

TYPICAL APPLICATIONS

- Flat and low-slope roofs, as a topcoat or standalone recoat
- Metal buildings, warehouses, and pre-engineered structures
- Data center, mining, and equipment enclosures
- Shipping containers and modular buildings
- RV, trailer, and mobile unit roofs
- Refresh of sound, previously coated surfaces

APPROVED SUBSTRATES

- EnBase™ 110 basecoat (IntelliKoat™ System)
- Metal: galvanized, Galvalume, and factory-painted panels
- Single-ply membranes: TPO, PVC, and EPDM
- Modified bitumen, smooth BUR, and asphalt
- Concrete and spray polyurethane foam (SPF)
- Previously coated surfaces, after a passing adhesion test

Not recommended for gravel-surfaced roofs, asphalt shingles or other steep-slope roofing, or surfaces in continuous immersion or below-grade service.

COVERAGE & FILM THICKNESS

Application	EnFlex 210 Rate	Wet Film	Dry Film (approx.)	Basecoat
IntelliKoat™ ReNew 7	1.00 gal/sq	16 mils	9.9 mils	None, topcoat only
IntelliKoat™ ReNew 10	1.25 gal/sq	20 mils	12.4 mils	None, topcoat only
IntelliKoat™ ReNew 15	2.00 gal/sq	32 mils	19.8 mils	None, topcoat only
Restore 10, Restore 15, Perform 20	1.25 gal/sq	20 mils	12.4 mils	EnBase 110, per tier
Non-roof surfaces	1.00 to 2.00 gal/sq	16 to 32 mils	9.9 to 19.8 mils	Per project spec

1 sq = 100 sq ft. Film thickness is theoretical at 62% volume solids, excluding surface profile, overspray, and waste. Minimum field-verified DFT: ReNew 7, 10 mils; ReNew 10, 12 mils; ReNew 15, 20 mils. Restore and Perform system totals are listed on the EnBase 110 data sheet.

PACKAGING

5 gal (19 L) pails, 55 gal (208 L) drums, and
275 gal (1,041 L) totes.

STORAGE & SHELF LIFE

Store at 40°F to 90°F (4°C to 32°C) and
protect from freezing. 12 months in unopened
containers.

WARRANTY

Issued separately. ReNew: material warranty.
Restore and Perform: NDL, through
EnKoat-Certified Contractors.

LIQUID & RADIATIVE PROPERTIES

Property	Method	Typical Value	Property	Method	Typical Value
Volume solids	ASTM D2697	62%	VOC	–	< 25 g/L
Weight solids	ASTM D1644	66%	Dry to touch	ASTM D5895	1 to 2 hours at 72°F, 50% RH
Density	–	10.25 lb/gal (1.23 kg/L)	Full cure	–	7 days
Viscosity	–	21,950 cP	Color	–	White; custom tints available
RADIATIVE PROPERTIES (CURED FILM) INITIAL / AGED					
Solar reflectance	ASTM E903	0.90 / 0.81	SRI	ASTM E1980	115 / 102
Thermal emittance	ASTM C1371	0.89 / 0.88			

CURED FILM PROPERTIES | ASTM D6083 PERFORMANCE REQUIREMENTS

Property	Test Method	ASTM D6083 Requirement	EnFlex 210 Result	Status
Initial elongation	ASTM D2370	Min. 100% at 73°F	125%	Pass
Initial tensile strength	ASTM D2370	Min. 200 psi at 73°F	260 psi	Pass
Elongation after 1,000 hr weathering	ASTM D2370	Min. 100% at 73°F	Meets	Pass
Water vapor permeance	ASTM D1653	Max. 50 perms	Meets	Pass
Water swelling	ASTM D471	Max. 20% by mass	Meets	Pass
Accelerated weathering	ASTM D4798	1,000 hr, no cracking or checking	1,000 hr, no cracking	Pass
Adhesion	ASTM D903	Min. 2.0 pli	Meets	Pass
Fungi resistance	ASTM G21	Zero rating	0 rating	Pass
Tear resistance	ASTM D624	Min. 60 lbf/in	Meets	Pass

COMPARATIVE PERFORMANCE DATA

Test	Method	EnFlex 210 Result	Competing Acrylics (Avg.)
Water absorption	24 hr immersion, cured film	<1%	22.2%
UV shielding	UV dye degradation, 40 mil wet film	83% dye retained at 4 days	63% dye retained
Projected UV-shielding life	Same method, extrapolated	~26 days	~11 days
Adhesion	ASTM D4541, EnKoat field test	15 pli	4.0 pli (lab, ASTM D903)
Temperature, lab heat box	Two-coat system, thermal camera	4°F to 7°F cooler	Baseline
Surface temperature, outdoor	Two-coat system, peak sun	27.6°F cooler than uncoated	–
Thermal performance	Independent validation, NREL	7× better	Baseline: reflective coatings

Laboratory comparisons were run by EnKoat side by side with commercially available acrylic roof coatings, June to July 2026; competing values are their average. Non-ASTM procedures are internal EnKoat methods and are not D6083 requirements. Adhesion is from EnKoat field testing. Temperature and NREL results reflect the full IntelliKoat System.

APPLICATION GUIDELINES

Surface preparation. Surfaces must be clean, dry, and sound. Power wash to remove dirt, chalking, oil, and loose coatings, then allow to dry and repair damage. In the IntelliKoat System, apply over EnBase 110 once it is dry to the touch.

Adhesion testing. Apply test patches on previously coated, weathered, or unfamiliar substrates before full application. Treat rust and prime bare or corroded metal with an EnKoat-approved primer.

Mixing. Stir thoroughly for at least 3 minutes before use. Do not thin or add other materials.

Application. Apply uniformly by airless sprayer, roller, or brush at the specified rate, checking wet film thickness with a gauge. Let each pass dry before the next.

Conditions. Apply at 50°F (10°C) and rising. Do not apply if rain, dew, or high humidity is expected within 8 hours, or when the surface temperature exceeds 120°F (49°C).

Cleanup and safety. Clean tools with water and mild detergent while the coating is wet. Wear gloves and eye protection, and read the Safety Data Sheet before use.

Information in this data sheet is based on laboratory testing and field experience and is believed accurate as of the revision date. Values are typical, subject to normal production variation, and are not specifications or performance guarantees. Users are responsible for confirming suitability for each application. EnKoat makes no warranty, express or implied, including merchantability or fitness for a particular purpose, except as stated in a written EnKoat warranty issued for a specific project, and is not liable for incidental or consequential damages arising from use of this information. Data may change without notice; see www.enkoat.com for the current version.