

EnviroPly

(Division of EnviroMetal, Inc.)

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Cooley



Single-ply Roofing Systems

“Everything under one roof™”

C3[®] Plus

Mechanically-Fastened Membrane

For mechanically-fastened or ballasted roofs, you can't find a better roofing, or re-roofing membrane than Cooley C3.

C3 is an advanced formula single-ply membrane that beats its competitors in every category: ease of application, performance and long term cost savings!

C3[®] Plus Technical Data

Suitability:
Almost any commercial roofing application; sloped, curved & flat

Composition:
A tri-polymer alloy based on DuPont's high performance Elvaloy[®] compound

Reinforcement:
Wick-resistant industrial strength polyester scrim, patented aramid reinforced edge

Standard Width*:
1.98 m (78 in.)

Standard Thicknesses:
1.2 mm (45 mil)
1.5 mm (60 mil)

Colors:
White, Grey & Tan

Application:
Mechanically-fastened and hot-air welded (can also be ballasted)

Approvals:
Factory Mutual Class 1: I-90, (18" on center)
I-105, I-120, I-150 and UL Listing: Class A & B

*3.05 m (120") available

C3 is remarkably workable. It's easy to trim and shape, a time saver when your roof is broken up by pipes, structures, ducts, or air conditioners. Plus, Cooley's standard extra-wide rolls mean C3 installs quicker with fewer seams.

As for performance, our PVC with DuPont Elvaloy[®] based compound sets the industry standard for every kind of resistance: water, UV, oil, chemical, salt and other pollutants and contaminants. The system is fully approved for fire resistance by the major code organizations.

Installation is simple. Our hot-air welded seams are easy and foolproof, forming a fused bond along the overlapping rolls as strong as the C3 material itself.

Because C3 is so tough, with its high tenacity, low-wick polyester reinforcing scrim, you can choose just the thickness you need and save money on material. Cooley also uses a patented aramid fiber reinforced edge for superior strength.

Over 25 years ago, Cooley pioneered the white single-ply membrane. Since then, we've steadily improved it. Now you can enjoy the result: Cooley C3, the next generation single-ply roofing.

C3[®], C3 RAM[®], Illusions[®] and Coolgrip[®] are registered trademarks of Cooley Group. Elvaloy[®] is a registered trademark of DuPont.

C3[®] RAM[®]

Fleece-Backed Reinforced Adhered Membrane

The Cooley RAM system, with its polyester fleece backing, was specially designed for fully-adhered applications. It is particularly cost effective on concrete roof decks and roofs with unusual curves and slopes.



Using the same DuPont Elvaloy-based compound as our outstanding C3 material, Cooley RAM shields attacks by weather, pollutants, UV rays, salt air, exhaust and ozone.

Cooley fleece-backed RAM membrane can be adhered using either asphalt or Cooley's own speedy adhesive for a weather-tight roof that will last for years and years.



Contractors who also apply built-up roofs prefer the Cooley RAM system because it uses

the same hot asphalt equipment and expertise as built-up roofs.

RAM's fleece backing, added to its integral polyester reinforcing, means it's double reinforced, with more strength. . . and more protection than competing non-fleeced backed adhered systems.

C3 RAM is less expensive to apply directly to concrete, and typically offers better wind and hail resistance.

RAM Technical Data

Suitability:
Almost any commercial roofing application; sloped, curved & flat

Composition:
A tri-polymer alloy based on DuPont's high performance Elvaloy[®] compound

Reinforcement:
Wick-resistant industrial strength polyester scrim

Standard Width:
1.93 m (76 in.)

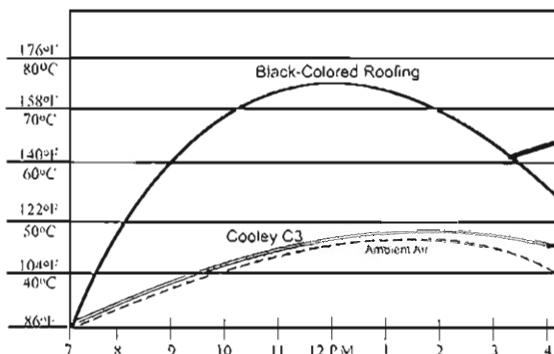
Standard Thicknesses:
1.1 mm (45 mil)
1.5 mm (60 mil)

Colors:
White, Grey & Tan

Application:
Simple gluing of fleece back to roof top with adhesive or hot asphalt

Approvals:
Factory Mutual Class 1: I-90 and UL Listing: Class A & B

Black vs. white roof comparison



△ \$36,000 Savings*

*Estimate based on annual air conditioning/electricity cost savings on an 80,000 sq. ft. (7440 gm/sq.mt.) building @ US \$0.10 per kilowatt hour in an average ambient air roof temperature during sunshine daylight hours of 106°F (41°C).

**Illusions
Technical Data**

Suitability:
Sloped and curved roofs; designed for architectural attractiveness

Standard Thickness:
1.1 mm (45 mil)

Weight:
1320 gm/sq.mt. (39 oz./sq.yd.)

Colors:
Grey, Green & Tan

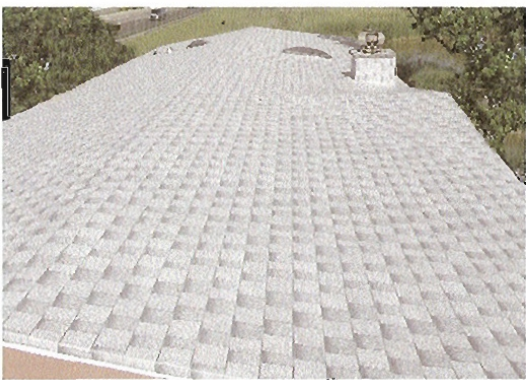
Application:
Mechanically-fastened and hot-air welded

Approvals:
Pending

Composition:
A tri-polymer alloy based on DuPont's high performance Elvaloy® compound

Reinforcement:
Wick-resistant industrial strength polyester scrim

Standard Width:
1.93 m (76 in.)



With an Illusions Roofing System from Cooley, homeowners can now get the performance of a commercial roofing system plus the warm, comfortable look of premium shingles. Based on Cooley's proprietary C3 membrane technology and DuPont's Elvaloy®, this durable, lightweight roofing system provides dependable, worry-free performance year after year.

Illusions can be installed directly over existing asphalt shingles or metal roofs, so there is no costly tearing off the old roof. The added benefit of insulation under the membrane adds value and can substantially lower heating and cooling costs.

Durable, scrim reinforced Illusions provides strong resistance to wind, punctures and tears. Illusions is easily cleaned so it stays looking new and usually installs in one day. Illusions also offers a limited life-time material warranty.

**Evolution
Technical Data**

Suitability:
Almost any commercial roofing application; sloped, curved & flat

Standard Thickness:
1.14 mm (45 mil)
1.50 mm (60 mil)
2.03 mm (80 mil)

Colors:
White

Application:
Mechanically-fastened or fully adhered

Approvals:
UL Listing: Class A
Factory Mutual Class 1, I-90

Composition:
A tri-polymer alloy based on DuPont's high performance Elvaloy® compound

Reinforcement:
Wick-resistant industrial strength polyester scrim

Standard Width:
1.98 m (78 in.)
3.05 m (120 in.)

Cooley took the outstanding performance features of our C3 single-ply membrane and combined them with the fleece-back characteristic of our C3 RAM product to create a lower-cost, two-in-one membrane, that can not only stand up to the toughest environments, but also offers the flexibility of installation options.

Evolution is manufactured from our quality C3 formula, made with DuPont's Elvaloy®, which has already been installed on commercial roofs worldwide for over 25 years, but now we've added a fleece backing which allows for installation with either mechanical fasteners or with adhesive or hot asphalt.



More importantly, where most single-ply membranes are designed with more thickness at the bottom of the membrane, Evolution is engineered to have more thickness on the top of the membrane, offering even more protection against the elements.

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Coolgrip® & Coolgrip® Plus
Slip-Resistant Rooftop Walkway

**COOLGRIP
Technical Data**



Coolgrip and Coolgrip Plus are designed for use with PVC and TPO roofing systems as a walkway material which provides a layer of protection around rooftop equipment. It is a polyester reinforced thermoplastic membrane engineered to provide a defined, slip-resistant traffic-bearing walking surface.

Coolgrip is mold, mildew and chemical resistant and is easy to clean. Coolgrip is also available in both high and low profile designs.



Coolgrip protects and preserves rooftop walkway surfaces

Suitability:
Flat roofs, for slip resistant walkways and protection from puncture damage

Standard Width:
36 in. (0.91 m)

Standard Thickness:
72 mil (Coolgrip)
156 mil (Coolgrip Plus)

Colors:
Grey, Yellow & Red

Application:
Mechanically-fastened and hot-air welded or fleece back adhesive

Composition:
A tri-polymer alloy based on DuPont's high performance Elvaloy® compound

Reinforcement:
Wick-resistant industrial strength polyester scrim

to clean. Coolgrip is also available in both high and low profile designs.

Benefits Comparison

	Cooley C3 Single-ply PVC with DuPont Elvaloy®	Asphalt Built-up Roof	TPO
Water Resistance (Standing)	Has been proven in applications such as roofing and pond liners for more than 25 years	Good for 1-5 years, but poor with age	Good initial, but unknown with age
Fire Resistance	Excellent; is naturally fire resistant due to chlorine content	Poor: Asphalt is naturally flammable	Fair to poor as a fire retardant, FR package such as magnesium hydroxide must be added at levels close to 50%
Wind Uplift	Excellent film strength of PVC combined with single layer adherence	Fair to good depending on installation	Similar to PVC
Building Load	Light in weight: 1 to 2 kg/sq mt (2 to 4 lbs./sq.yd.)	Heavy Building Load Requirements 6 to 9 kg / sq. mt (12 to 18 lbs./sq.yd.)	Similar weight as PVC
Chemical Resistance	Excellent due to PVC /Elvaloy® properties	Poor due to asphalt properties	Fair to poor; depending on chemicals eg. oil & fats break down TPO
Worker Application	Simple single ply hot air welding	Multiple layers, propane equipment, 300% more time to install, hazardous vapors	Much stiffer than C3
Repair	Simple: Proven easy to reweld aged exposed membranes	Difficult to locate leaks Requires new asphalt rolls	Difficult to re-weld exposed material Long term weldability is unknown
Cost	Savings through Longer Life Quick application, energy savings	Requires multiple applications initial low cost but higher comparable costs after 10 years	Low up-front material cost Unknown long term cost

Cooley has been a leading manufacturer of single-ply roofing membranes for over 25 years, with more than 750 million square feet installed worldwide. Just some of our satisfied, quality-conscious customers are:

Alcoa	BJs Wholesale	Burger King	Corning	Federal Express	Ford
Wal-Mart	IBM	KFC	Mazda	McDonald's	Nabisco
Nestle	Pepsi Cola	Sears	Subaru	TGI Friday's	Target
Toyota	UPS	Worldwide Airports	GM	Marriott Hotels	Wendy's

Cooley was a pioneer in membrane roofing technology and has designed numerous advances in PVC roofing membranes since 1978. Today, more than one billion square feet of Cooley single-ply roofing membranes have been successfully installed on various commercial and residential roofing projects around the world.

Cooley membranes have been used extensively for both new construction and re-roofing of commercial buildings including manufacturing plants, distribution warehouses, office buildings and shopping malls, as well as extreme applications such as automobile assembly plants and airports.

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