



# JM PVC SYSTEMS

SINGLE PLY ROOFING



# THE INTEGRITY TO BUILD YOUR BUSINESS STRONG.

Integrity is the foundation of our relationship with you, and something we engineer into every roofing product we deliver. It's how we've built our reputation for more than 165 years – as a partner you can count on for the right products, support and information you need for a successful project. Integrity is more than a word. It's a way of business we strive to live every day.

**Because, like other great traditions, integrity is what truly stands the test of time.**



Cover: U.S. Bank Stadium,  
Minneapolis, MN

Right:  
BOK Center, Tulsa, OK

# MILLIONS OF SQUARE FEET. JM PVC PASSES THE TEST OF TIME. A QUARTER CENTURY OF PROVEN PERFORMANCE.

## Why Choose a PVC Membrane?

- Unmatched chemical resistance
- Inherent fire resistance (PVC is self-extinguishing)
- Excellent durability and life expectancy
- Recyclability
- Highly resistant to UV damage
- Low & steep slope approvals
- Up to 12-foot wide roll offerings

Relentless sun. Torrential rain. Severe heat and cold. Commercial roofs face no shortage of extremes. And the true test of any roofing system is how it stands up to these conditions over a long lifespan.

The JM PVC formulation has proven itself time and again – protecting airports, manufacturing facilities, educational buildings, stadiums and retail structures across the continent and continuing to pass the test of time.



## JM and Cooley Group: A Strategic Partnership Aimed at Your Success.

Our nearly two-decades long partnership with the Cooley Group is what allows us to deliver an advanced membrane formulation. We combine the Cooley Group's century of chemical expertise with our deep knowledge of the roofing industry, working side-by-side to deliver a quality product.

## Elvaloy® KEE: The Key to Unrivaled Performance.

JM PVC is born of the perfect combination of two robust polymers, PVC (polyvinyl chloride) and KEE (ketone ethylene ester). More than 29+ years ago, Cooley chemists achieved this ideal formulation. Elvaloy® ensures a pliable, durable and UV-resistant sheet with superior chemical resistance – even in the most extreme environments.

\*Elvaloy® KEE is a registered trademark of Dow.

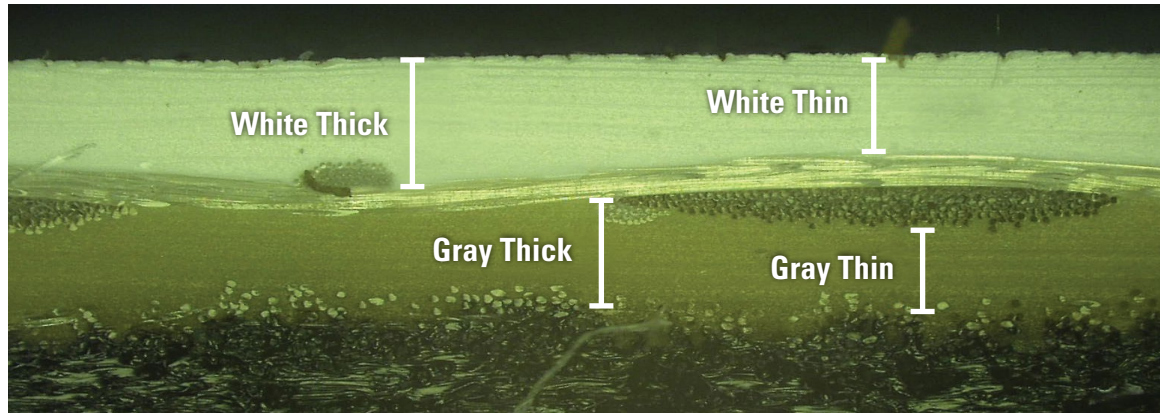


# THE PROOF IS IN THE DATA.

**18.14 inches average annual precipitation.**  
**18.69 mph average wind speed.**  
**63.62 inches average snow annually.**  
**26.00 inches of extreme snow on January 11, 1993.**  
**50.30 inches of record snow in January 1993.**  
**222 sunny days with 4.7 UV index.**  
**107° F plus July 13, 2002 record heat.**

## How JM PVC Stood Up To 18 Years Of Exposure.

We tested samples of a 40 mil Fleece Back asphalt applied PVC roof that was installed in 1992 and harvested in 2010. Still would pass like newly installed PVC



| Thickness Testing <sup>1</sup>      |             |                         |                              |                          |
|-------------------------------------|-------------|-------------------------|------------------------------|--------------------------|
| Tested Physical Properties          | Test Method | ASTM D4434 Requirements | Exposed 40mil Sample Average | Unexposed Sample Average |
| Thickness Minimum Inches            | ASTM D751   | +_- 10% From Nominal    | 0.040                        | 0.043                    |
| Thickness Over Scrim Minimum Inches | ASTM D4434  | 0.016                   | 0.0187                       | 0.0191                   |

| Low Temperature Bend Testing |             |                         |                              |                          |
|------------------------------|-------------|-------------------------|------------------------------|--------------------------|
| Tested Physical Properties   | Test Method | ASTM D4434 Requirements | Exposed 40mil Sample Average | Unexposed Sample Average |
| Low Temperature Bend, °F     | ASTM D2136  | Pass                    | Pass @ -40°F                 | Pass @ -40°F             |

<sup>1</sup> 2011, Long-term durability study conducted by SGH

# THE RIGHT FORMULATION MAKES ALL THE DIFFERENCE.

## **Maintains Flexibility, For Long-Term Performance Even In Extreme Temperatures.**

Some PVC membranes can become brittle over time. JM PVC never loses flexibility, because when the Elvaloy® and PVC molecules melt together, they stay together naturally – resulting in a compound that does not lose flexibility and is chemical resistant. Elvaloy® is a polymeric plasticizer that is 100% compatible with the PVC resin over its useful life.

## **Tested To Withstand Extensive Weathering.**

In ASTM G 53 (UV and water) testing, JM's 60 mil sample has exceeded 39,000 hours of exposure – more than seven times the ASTM minimum – and still shows no signs of cracking or other damage.

## **Excellent Chemical Resistance.**

With inherent chemical resistance, PVC is ideal for restaurants and food manufacturing – where roofs face challenges like exhaust stack spills of salts and oils. A study conducted by SGH Consulting Engineers found that PVC with Elvaloy® is the most chemical resistant of all single ply membranes.

**Chemicals Tested:** HVAC Oil, Canola Oil (Restaurants), Dry Heat (Arid Climates), Water (Humid Climate), 1N Acid (Acid Rain), pH11 Base (Cleaning Solution) **No Change In: Mass, Puncture Resistance, Dimensional Stability<sup>1</sup>**

<sup>1</sup> Study presented to ASTM, 2008.

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Salt River Fields at Talking  
Stick, Scottsdale, AZ

# WHATEVER THE DEMAND, JM PVC DELIVERS.

## An Extensive Portfolio To Meet Every Project's Requirements.

JM has the widest offering in the industry with a 12-foot roll for 60 mil - 80 mil membranes. This reduces seams by 20%\*.

The JM PVC offering includes energy-saving grey and sandstone (ES), along with a number of weather tested and approved colors.

| 12-FT MEMBRANES                                                                                                                                                                                 | PRODUCT           | THICKNESS        | COLOR     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------|-----------|
|                                                                                                                                                                                                 | JM PVC SD PLUS    | 12-FT 60 MIL     | WHITE     |
|                                                                                                                                                                                                 | JM PVC W/ KEE     | 12-FT 60 MIL MIN | GREY      |
|                                                                                                                                                                                                 | JM PVC FB W/ KEE  | 12-FT 72 MIL MIN | GREY      |
|                                                                                                                                                                                                 | JM PVC SD PLUS FB | 12-FT 80 MIL     | SANDSTONE |
| Other Special Request Colors Available at a premium and extended lead times.                                                                                                                    |                   |                  |           |
| <div>ADHERED APPLICATION    MECHANICALLY ATTACHED*    RHINOPLATE® APPLICATION</div> <div>FLEECEBACK PVC CAN BE USED AS A CAP SHEET IN BUR AND SBS SYSTEMS WHEN ADHERED USING HOT ASPHALT.</div> |                   |                  |           |
| APPLICATION                                                                                                                                                                                     |                   |                  |           |

## Polyester-Reinforced Seam Strength Provides Excellent Long-Term Waterproofing.

JM's polyester reinforcement offers improved strength and water resistance. Because the reinforcement is based on special low wick treated yarn, no edge sealant is needed. This results in lower installation cost and a more pleasing finish.



\*Seam reduction dependent on length of roll.



Streetsboro High School  
Streetsboro, OH

# BUILD YOUR BUSINESS STRONG WITH JM PVC.

## **Supporting The Complete Roofing System.**

We're committed to personalized technical and sales support whenever and wherever you need it – with an emphasis on helping you choose complete roofing systems that are right for the job

## **Invested In You.**

The best roofing systems are installed by the best-trained roofing professionals. That's why the JM Roofing Institute™ invests in specialized education and training, together with a comprehensive approved contractor program – the Peak Advantage® Contractor Program.

## **Strong Heritage. Unquestionable Stability.**

JM is owned by Berkshire Hathaway, a company known for maintaining the highest standards of ethics and operation, and one of the most financially sound corporations in the world. We have the financial strength to honor our guarantees and continue investing in our commitment to PVC and other single-ply solutions.

## **Stringent Manufacturing Standards.**

JM and Cooley are dedicated to ensuring quality control, continued testing and the development of innovative and enhanced PVC products. The formulation is the proof – as it has delivered more than two decades of proven field performance.

**To learn more visit [www.jm.com/roofing](http://www.jm.com/roofing).**



The Preserve at Palm-Aire,  
Pompano Beach, FL



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