THE RIGHT PROTECTION.
THE RIGHT PERFORMANCE.
THE RIGHT ROOF.

DERBIGUM Product Brochure
DERBIGUM
ROOFING101

INNOVATING SINCE 1932.

In 1932, we began in Belgium as a family owned and operated business specializing in waterproofing roofs and flat surfaces. Forty-seven years later, we came to the US to offer building owners a smarter, more durable alternative. We produce over 161 million square feet of modified bitumen membrane and 77 million pounds of liquid products annually. Now, as a global community of owners and contractors, our focus is on sustainable building materials. So, what have we learned over the course of 75 years? Well, we’ve discovered what it takes to create a roof that outperforms any single ply or built up roof. And we’re here to share what we’ve found and what we’ve created – smart roofing systems for smart building owners.

Single ply versus DERBIGUM

The Difference is in the Durability

Single-ply systems just don’t measure up to DERBIGUM – especially when a building full of expensive equipment or other valuable property needs adequate protection. Born out of the oil crisis in the 1970s, single-ply systems were the easy and inexpensive alternative to petroleum-based roofing. The result? A thin layer of plastic that only lasted about 10 years. Even after many revised formulations, new methods of installation and innovations, single-ply is still not as effective as DERBIGUM systems.

DERBIGUM VS. SINGLE PLY: A HEAD-TO-HEAD COMPARISON.

Most single ply membranes are made of a thin layer of thermoplastics or synthetic rubber ranging from 30 – 60 mil thick. While this provides years of durability, sometimes up to 20 years with regular maintenance, the thickness just doesn’t stack up to DERBIGUM. Our membranes are made from patented modified bitumen with dual reinforcements. All DERBIGUM systems are redundant with a minimum of two layers and a typical total thickness of 300 mil. DERBIGUM systems are unrivaled in strength and durability and proven to last over 30 years.

LAB-TESTED LAYERS

30 YEARS PROTECTION

min 160 mil tougher than you think

You need a better line of defense.

This Is What Sets DERBIGUM Apart.

EXPERT SUPPORT

PREMIUM INSTALLATION – A roof’s lifespan can be drastically shortened if it isn’t properly installed. DERBIGUM Approved Contractors, or DACs, make sure your roof is installed correctly by specialized roof mechanics who are trained and familiar with the materials being applied. And with our regular in-progress inspections, you can rest assured that your DERBIGUM roof system will be properly installed – from start to finish.

REGULAR INSPECTION – DERBIGUM stays involved with your roof with a follow-up inspection within the first two years of completion, and regular inspection programs are available for the life of the DERBIGUM guarantee. DERBIGUM roofs often exceed their expected lifespans because our DACs and DERBIGUM Technical Support Staff will assist you from the moment of installation through every inspection throughout your roof’s lifespan.

PREMIUM CAPABILITIES

PERFORATION PROOF – Every time a person – like an air conditioning or maintenance technician – walks across a roof, they contribute to its ongoing deterioration. But our APP modified bitumen is reinforced with fiberglass and polyester mats, providing high resistance to abuse. Combine that with our roofs’ redundancy and thickness and you’ve got the puncture resistance you need.

AGE AND SHOCK RESISTANT – Roofs are exposed to ultraviolet rays from the sun on a daily basis. They also expand and contract daily – especially when daytime highs warm the surface and nighttime lows drop below freezing. Over time, some roof systems deteriorate from UV exposure and lose the ability to respond to this thermal shock. Not ours. DERBIGUM’s proven bitumen is blended with APP polymers that resist UV aging and provide long-term thermal shock resistance.

FEDERAL RESERVE BANK BUILDING CHICAGO, IL
IBM DATA CENTER COLUMBUS, OH
WRIGLEY BUILDING CHICAGO, IL
SCHWAB AUDITORIUM BOSTON, MA

INNOVATING SINCE 1932.
Cost-Effective Roof Recovering

Let’s face it. Replacing a roof is expensive. But we have a less expensive alternative. We simply recover an existing smooth surfaced asphaltic roof system with Derbigum, DerbiColor or DerbiBrite cold applied system. This means the original roof’s insulation and weatherproofing base can stay put for up to 20 more years. Plus, you won’t have to disrupt the operations of your building.

Proper planning and installation means up to 50 years of service. That’s a 30+ year DERBIGUM roof lifespan, plus 20 years of service after recovering. And it’s all made possible by our sustainable systems along with our approved contractors’ dedication to finding you the most cost-effective solutions.

Installing Reliability

For the best results, proper installation is a must. Our DERBIGUM Approved Contractor (DAC) Network knows every detail about our materials and systems. Not only do they receive professional training on application techniques, they know your building, climate and local regulations. When the installation takes place, you can count on a clean and safe job site with very little disruption.

See how the best contractors in the industry install our sustainable roofing solution.
A Breakdown of Mod-Bit Chemistry

The main ingredient in modified bitumen membranes is a carefully selected blend of asphalt. What sets ours apart is that we use asphalt high in saturants and aromatics – the oils that give membranes flexibility and waterproofing ability.

We use three APP polymers to prevent oils from escaping the asphalt blend and leaking out of the membrane. No matter what conditions your roof is exposed to, Derbigum’s polymer and asphalt formulation will increase the membrane’s life span.

SBS
- Popular because it’s less expensive.
- Contains higher elongation properties initially but diminishes over time due to poor UV and heat resistance.
- Better suited to cooler climates.

APP
- Increases UV and heat resistance.
- Adaptable to a variety of climates.

APP is more UV and heat resistant. Its flow resistance at high temperatures protects the light oils of the asphalt, keeping the membrane flexible and waterproof.

Most modified bitumen membranes have one layer of reinforcement made from polyester or fiberglass. Derbigum cap sheets use both fiberglass and polyester. The polyester mats provide greater elongation and puncture resistance, while fiberglass mats protect against UV radiation and provide dimensional stability and high tensile strength. Derbigum membranes are top-reinforced with 20–25 percent of the asphalt mix above the reinforcement and 75–80 percent of the mix below it.

We've done our research.
With research, tests and customized blending technology, Derbigum’s lifespan easily exceeds over 20 years in any geographical location. We use asphalt and polymer blending technology that helps our modified bitumen membranes retain light oils more efficiently. Our dual and triple reinforced polyester and fiberglass mats give our cap sheets better puncture resistance, greater elongation and UV resistance.

It doesn’t matter where your building is located. Derbigum is suitable for any climate and environment. In fact we cover parts of Europe, Africa and America – that’s over 5 billion square feet of the world’s skyline.

Smart Membranes for the Smart Building Owner

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The First Line of Defense Against Wear and Tear

Once your roof is installed, the elements will put it to the test. But there are several ways to combat these harmful forces. With DerbiColor cap sheets, you’ll have the extra durability you need for a little extra peace of mind. Let’s take a look at the damage that can happen to your roof and more importantly, look at how DerbiColor works to ensure that damage doesn’t occur.

Weatherability
As with all DERBIGUM membranes, DerbiColor’s APP asphalt blend has excellent resistance to heat and UV, while the granule surface provides an extra measure of protection.

Thermal Shock and Shrinkage
With both fiberglass and polyester mats, DerbiColor has the strength to resist thermal shock and the dimensional stability to prevent shrinkage.

Foot Traffic
In addition to multiple reinforcements, DerbiColor has factory-applied granules for protection from roof traffic.

Just under the surface, polyester and fiberglass mats provide high resistance to perforation and UV radiation.

Top It Off With Color
Make it interesting and add some color to your roof with DerbiColor. It’s produced with the same APP blended asphalt and multiple reinforcements as Derbigum. The difference is a granulated surface and colorful appeal.

Extra Protection for Extra Durability
DerbiColor is reinforced with an interwoven polyester and fiberglass mat in the middle of the cap sheet’s thickness. It has a factory-applied granule surfacing for additional protection from heat, UV rays and roof traffic. And DerbiColor’s granule embedment and retention is the best you will find.

Just the Right Shade
For a visible roof on an office building or commercial structure, appearance matters. Make it interesting and add some color to your roof with DerbiColor. It’s produced with the same APP blended asphalt and multiple reinforcements as Derbigum. The difference is a granulated surface and colorful appeal.

Choose from a variety of DerbiColor hues or create a custom color to give your building a distinctive identity.
**A Little Bit of Chemistry**

DerbiBrite is made with the brightest white pigments available. Its acrylic saturated composite scrim creates an extremely tight molecular structure that is impenetrable by light oils, animal fats and fungus. It does not require field coating. This means the surface is permanent and will not flake. Just clean the surface to maintain its reflectivity.

DerbiBrite began as a solution for fire-rated roofing membranes in Europe in 1996. Now it has all the proven performance and durability of Derbigum plus the solar reflectance of a factory-bonded, white acrylic surface. This gives building owners an effective advantage in dealing with environmental issues such as the urban heat island effect, energy conservation, sustainability and long-term performance.

**Permanent Brilliance**

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**Cool Roofing in California**

Under Title 24, California requires all buildings with 20 percent of occupied air-conditioned space to meet Cool Roof Rating Council (CRRC) approval. To be listed as CRRC approved, a roofing membrane needs initial reflectivity of 76 percent and an emissivity of .90 or better. Naturally, DerbiBrite is 76 percent and 0.94 respectively.
Solution requirements, but also keep aircraft runways clear and safe. Located adjacent to the George Bush Intercontinental Airport, the building needed a solution that would not only help meet city facilities to comply with its LEED program. This presented a challenge for Houston’s Fire Department Fire Station No. 92. In 2004, the City of Houston adopted a Green Building Resolution requiring all newly constructed and renovated

**Airport Fire Station Beats the Heat**

**Challenge** In 2004, the City of Houston adopted a Green Building Resolution requiring all newly constructed and renovated city facilities to comply with its LEED program. This presented a challenge for Houston’s Fire Department Fire Station No. 92. Located adjacent to the George Bush Intercontinental Airport, the building needed a solution that would not only help meet requirements, but also keep aircraft runways clear and safe.

**Solution** Our team started by tearing off the original PVC single-ply membrane and polyisocyanurate. We installed a multi-layer system with a DerbiBrite cap sheet. There was no need for asphalt tankers and hot asphalt kettles on the ground or roof, minimizing unacceptable noise, smoke and odors that could negatively impact the environment.

**ADHESIVES / INSULATION**

**A STRONG FOUNDATION**

**Strength Beneath the Surface**

See the first layers of our roofing system, and you’ll never look at single ply the same way again.

With a DERBIGUM roofing system, the protection is layered on. Look beneath the surface of a DERBIGUM roofing system, and you’ll find what sets us apart. We add in layers of protection – each one with its own purpose and benefits. And when all the layers work together you get what you expect: a roofing system that lasts.

**Maximum Durability**

Our cover board is a key component in ensuring you get the most out of your roofing system. Providing the resistance, insulation protection and wind uplift protection, it delivers increased levels of strength and durability.

**Climate Control**

Our DerbiBoard helps insulate the interior of the building and, in turn, helps deliver a higher R-value. What that means for you is simple: lower heating and cooling costs.

Looking for several decades of reliable protection? Then steer away from single ply membranes. They’re made of a thin layer of thermoplastics or synthetic rubber ranging from 30 - 60 mil thick. A typical DERBIGUM membrane system has two layers and is 240 to 340 mil thick.

**A Good Foundation Starts at the Top**

Why shell out millions of dollars on the interior of a building if it’s not protected? That’s where we come in. Our reliable roofing systems protect everything from new carpet and computers to expensive machinery and priceless works of art. In fact, NASA, The White House, British Airways and hundreds of universities, restaurants and hospitals have trusted our system. And it starts with our adhesives, insulation and overlay boards.

**DerbiBond LR/PR Permastic**

DerbiBond is the first step in the DERBIGUM installation process. It’s an elastomeric, low-rise, foamable adhesive that secures insulation boards or base sheets to the roof deck. Containing 100% solids, it sets in minutes. DerbiBond PR is the pump grade version. It’s offered in bulk to save time and storage space.

Decades ago, we invented the cold applied system. Today, we use Permastic adhesive to adhere our roofing membranes and base plies. It can be used over a wide range of application conditions. And it eliminates the need for large asphalt tankers and hot asphalt kettles on the ground or on the roof.

**DerbiBase**

**DerbiBase Ultra**

Although a single ply of DERBIGUM roofing membrane provides full waterproofing, you can double the security against punctures with DerbiBase. Its exceptional strength and long-lasting durability is perfect for rooftops prone to heavy traffic.

Both DerbiBase and DerbiBase Ultra are mid-reinforced with a fiberglass mat to provide extra tensile, strength, tear and puncture resistance while maintaining flexibility of the sheet. This extra layer gives you extra protection against leakage and damage.

**DerbiBoard**

**DerbiBoard CA**

Enhance the entire DERBIGUM system with up to four inches of high-performance polyisocyanurate roof insulation board. Available in a variety of thicknesses, its polyiso foam is laminated to heavy black, fiber-reinforced, felt facers. DerbiBoard CA is used for cold applied adhesives. Its coated glass facer adds strength and dimensional stability while providing a smooth, clean and stable surface for adhesives.

In the Real World | Houston, Texas
From vegetative roofing to reactive daylighting products, we’ve entered the green revolution with an aggressive and proactive mission.

DerbiPure
While virtually every roofing system contains petroleum products, DerbiPure is the first membrane in the world made only of vegetable oil and pine resin. It has the same longevity as traditional modified bitumen membranes. And with its white reflective surface, it reduces energy consumption and CO2 production during its entire lifespan.

DerbiFlash
No matter how your roof is designed DerbiFlash fully bonds to any properly prepared metal or cement surface. It creates a permanent watertight application to any vertical or horizontal substrate.

Liquid Applied Flashing
Extend the life of your roof even further with our fully reinforced liquid applied systems. These products are essentially waterproofing membranes that fully bond to substrates like metal or concrete. Made from liquid resin and reinforcing fabric, they’re impenetrable, making them a smart alternative to traditional flashing systems.

From LEED to Green Globes to local legislation, the trend is to establish guidelines that influence the impact of roofing systems on the environment and energy efficiency. Depending on your needs or guidelines, we offer a variety of options to meet the goal.

Derbiflash
No matter how your roof is designed DerbiFlash fully bonds to any properly prepared metal or cement surface. It creates a permanent watertight application to any vertical or horizontal substrate.
DERBIGUM
Mission Statement

We are a global manufacturer of high-quality modified bitumen roofing systems. We have over 35 years of proven performance in the United States, over 40 years worldwide and in all climatic conditions. We produce sustainable roofing systems installed by select, trained roofing contractors that add value to the building owner and provide long term waterproofing service life.

We create a positive customer experience by anticipating needs throughout the roofing process and roof life, thereby exceeding the expectations of internal and external customers. DERBIGUM creates a personal, trusting relationship with customers through a respectful attitude and education.

Our objective is total customer satisfaction through clear, concise communication and unparalleled service before, during, and after installation.