SBS-Modified Bitumen Roof Systems

High-performance solutions from the developers of SBS-modified bitumen

siplast®

With you every step of the way

The first SBS-modified bitumens...

In the 1960s, Siplast® had an SBS/bitumen breakthrough. By modifying bitumen (asphalt) with SBS (styrene butadiene styrene), we produced asphalt sheets with better elongation, durability, and recovery properties than many other existing asphalt system.

Since then, our two-ply Paradiene®, Parafor® and Veral® systems have been used in commercial building projects in 40-plus countries. Today, our SBS-modified bitumen solutions offer key advantages for a range of project challenges and budgets.

Low Maintenance

Low Life Cycle Cost

Multi-Ply Longevity

Easy Material Handling
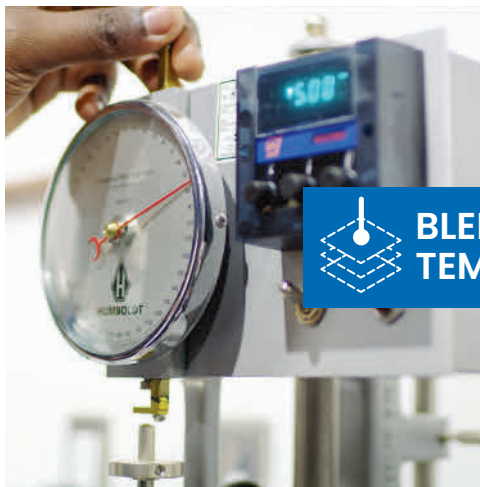
Strong Durability

Exceptional Flexibility

Water/ UV-resistant

siplast® With you every step of the way

BLENDING TIME

BLENDING TEMPERATURE

FORMULATION

RAW MATERIALS

Premium SBS-modified bitumens

As SBS-modified bitumen pioneers, **Siplast knows that product performance depends on four factors – blending time, blending temperature, formulation, and raw materials.** Using chemically compatible raw materials is an important factor since untested materials can reduce product quality.

Siplast prioritizes consistency in its manufacturing and material selection processes to help eliminate variations in product quality and ensure a premium product for our customers, every time.

Maple Leaf Farms

After several repairs, the maintenance manager of the Maple Leaf Farms duck processing facility decided that with increasing leaks, vegetation growth, and poor insulation value, it was time to replace the original coal tar and smooth-surfaced BUR systems with a new roof that could reliably ensure the sanitation of the duck processing zones by protecting the structure for the long-term.

A Siplast SBS-Modified Bitumen Paradiene 20/30 System was selected as a durable solution that would ensure business effectiveness for years into the future.

The Paradiene Family of Products

Premium product line designed for long-lasting durability

The robust Paradiene 20/30 system is a premium two-ply membrane system that maintains its elasticity despite exposure to solar loads, ultraviolet rays, roof stresses, and low temperatures.

The Paradiene 20 base ply helps absorb roof stresses while the granule-surfaced Paradiene 30 FR top ply protects the base from the elements. Both membranes feature a uniquely formulated elastomeric asphalt blend reinforced with a fiberglass reinforcement for long-lasting durability.

The granule surface of the top ply eliminates the need for additional gravel, cutting the system's installed weight to about 2 pounds per square foot and making inspection and maintenance repairs easier.

The Paradiene family offers a wide range of membranes which include ASTM D6162 Type I and ASTM D6163 Type I and II membranes as well as FR (fire rated) versions.

Color and Surfacing

Bright White   White   Gray A-9

Application options

Hot Asphalt   **Cold Adhesive**   **Self-Adhesive**   **Torch-Applied**   **Mechanical**

Discover more about the Paradiene Family of Products.

Paradiene SBS-Modified Bitumen System ▶ over polyisocyanurate with coverboard
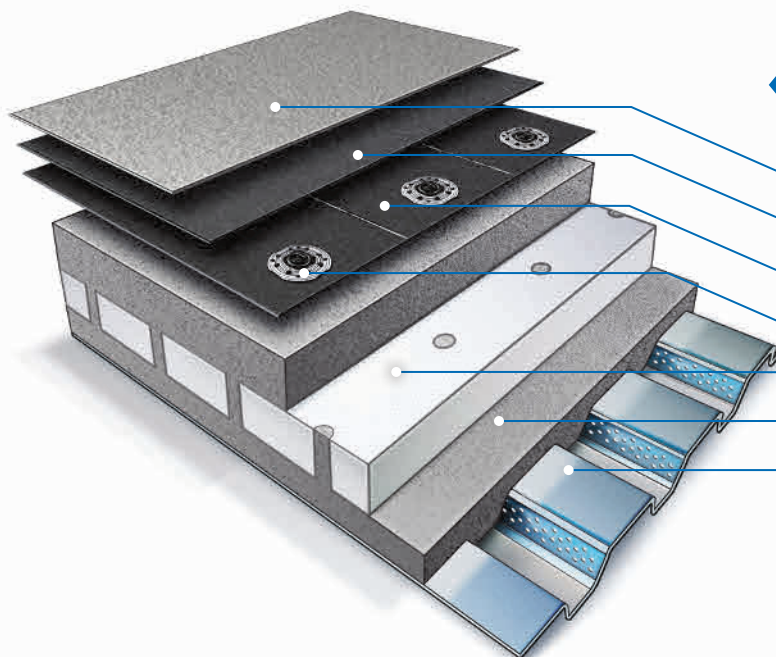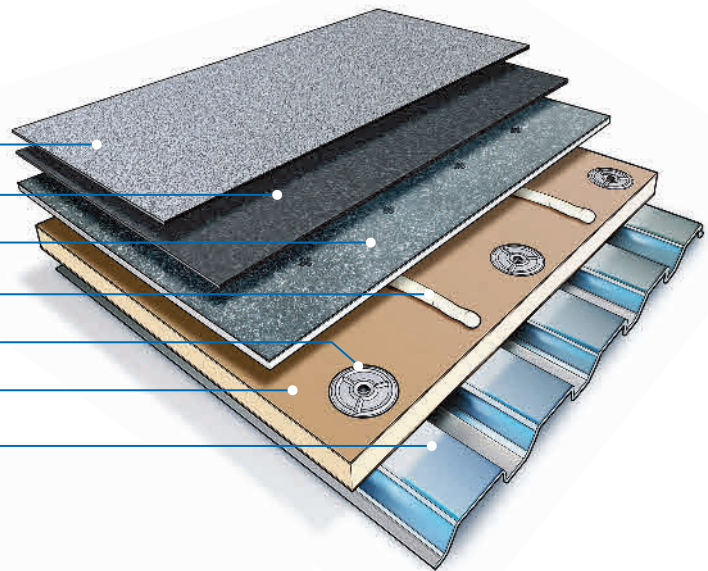
- Paradiene 30 FR
- Paradiene 20
- Coverboard
- Parafast Insulation Adhesive
- Parafast Fastener
- Paratherm Polyisocyanurate
- Metal Deck

◀ Paradiene SBS-Modified Bitumen System over lightweight insulating concrete

- Paradiene 30 FR
- Paradiene 20
- Parabase
- NVS Fastener
- NVS
- Insulperm Insulation Board
- Metal Deck

SBS-Modified Bitumen Roof System

Systems for commercial multi-use facilities

Paratech two-ply systems can help building owners prevent problems and control costs. By guarding against water intrusion, Paratech two-ply systems help owners prevent leaks and repairs.

Versatile Paratech two-ply membranes can be torch-, hot- or cold-applied. All systems offer the hallmark durability of a Siplast-engineered SBS-modified bitumen roof and are backed by our second-to-none support and service.

The Paratech® Family of Products

Meets ASTM* standards for long-term performance and value

The two-ply Paratech System offers the proven redundancy and durability of a Siplast SBS-modified bitumen roof for long-term performance and value.

Paratech base and cap plies are produced with a proprietary elastomeric blend, fiberglass or polyester reinforcement, and granule surfacing for use in homogeneous multi-layer systems.

Available with several surfacing and application options, the Paratech System meets ASTM standards and is compatible with all Siplast SBS-modified bitumen system accessories.

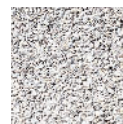### Application options

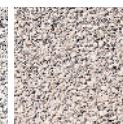| Hot Asphalt	Cold Adhesive	Self-Adhesive	Torch-Applied	Mechanical

Color and Surfacing

Bright White   White   Gray A-9

Discover more about the Paratech Family of Products.

* ASTM D6163 and ASTM D6164 – check product technical data sheet for more details
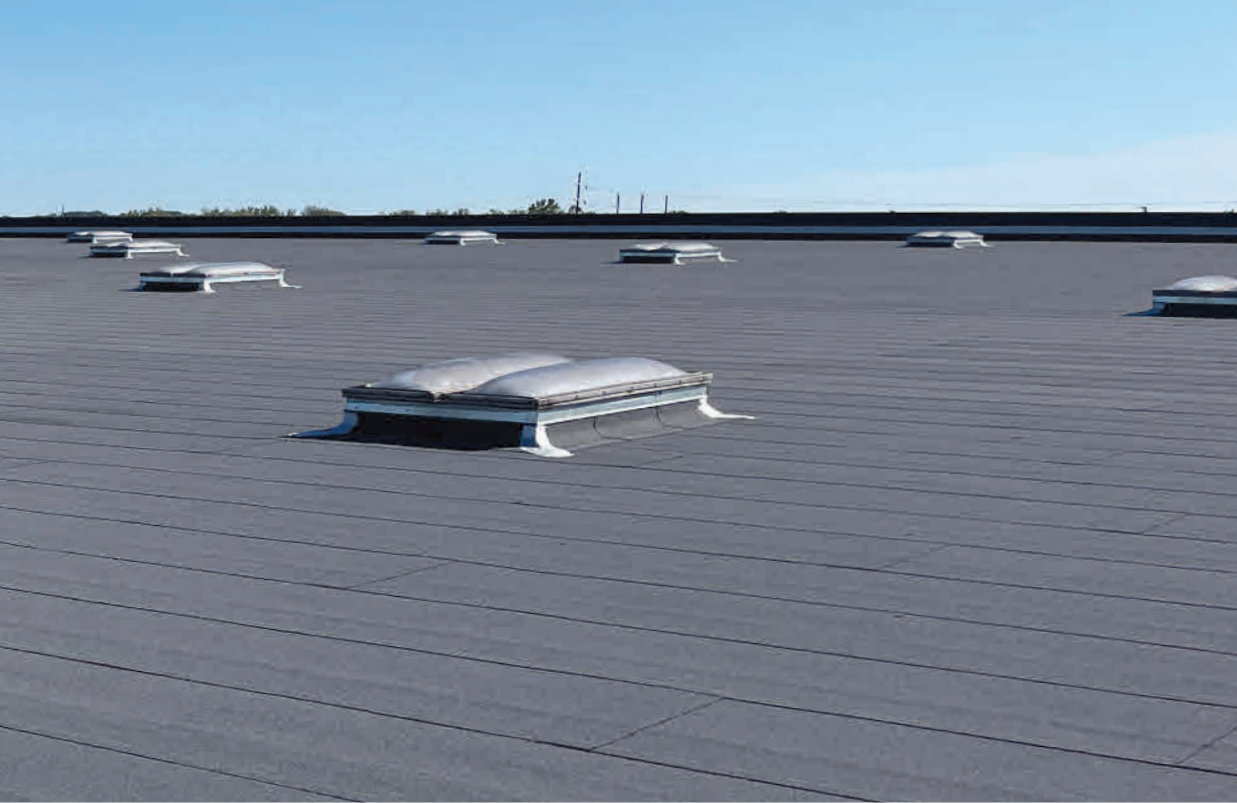
Paratech SBS-Modified Bitumen System over lightweight insulating concrete ▶
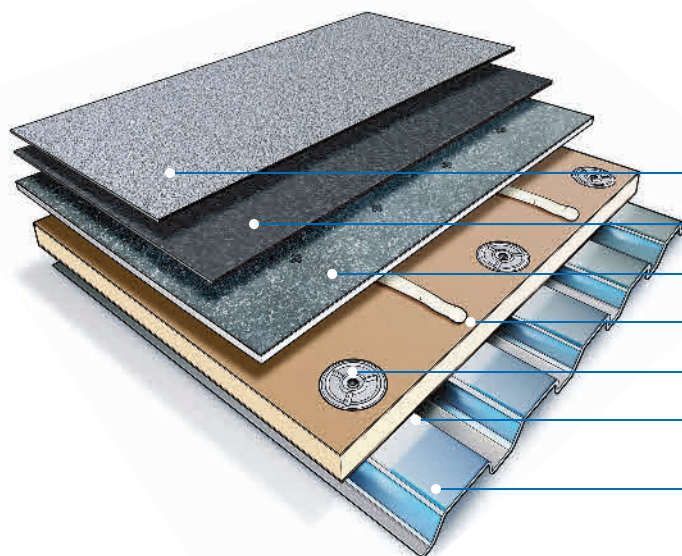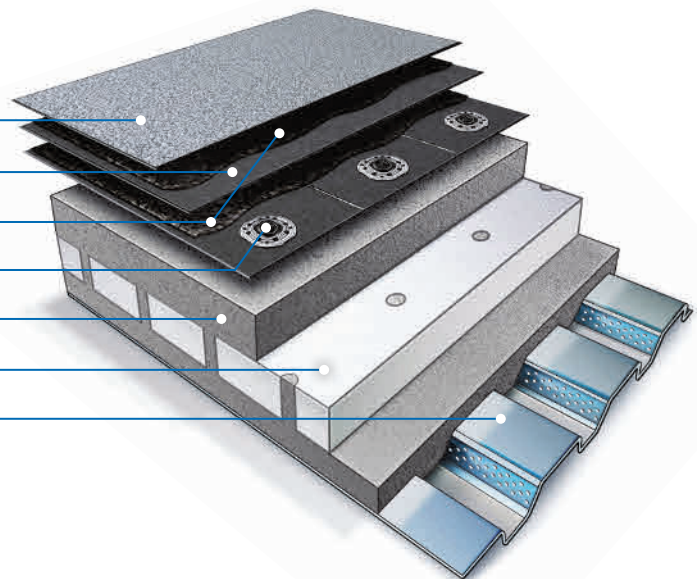
Paratech 180 Cap FR

Paratech 180 Base

SFT Adhesive

Zono-Tite Fastener

Insulcel

Insulperm Insulation Board

Metal Deck

◀ Paratech SBS-Modified Bitumen System over polyisocyanurate with coverboard

Paratech 250 Cap FR TG

Paratech 250 Base TG

Coverboard

Parafast Insulation Adhesive

Parafast Fastener

Paratherm Polyisocyanurate

Metal Deck

SBS-Modified Bitumen Roof System

The Parafor Family of Products

Tough and flexible for roofs that take abuse

The Parafor family of products are roof membranes designed for vertical flashings, but can also be used for complete low-slope roof systems. Tough and flexible, the system offers the stability and strength of a fiberglass and polyester composite reinforcement.

Siplast Parafor features a base material combining elastomers and high-quality asphalt with a polyester/fiberglass scrim reinforcement. It can be applied with a torch, an approved mopping asphalt, or a Siplast cold adhesive product.

Parafor torch-applied products have a unique micro-grooved torching surface, providing additional surface area for more rapid torch application.

Application options
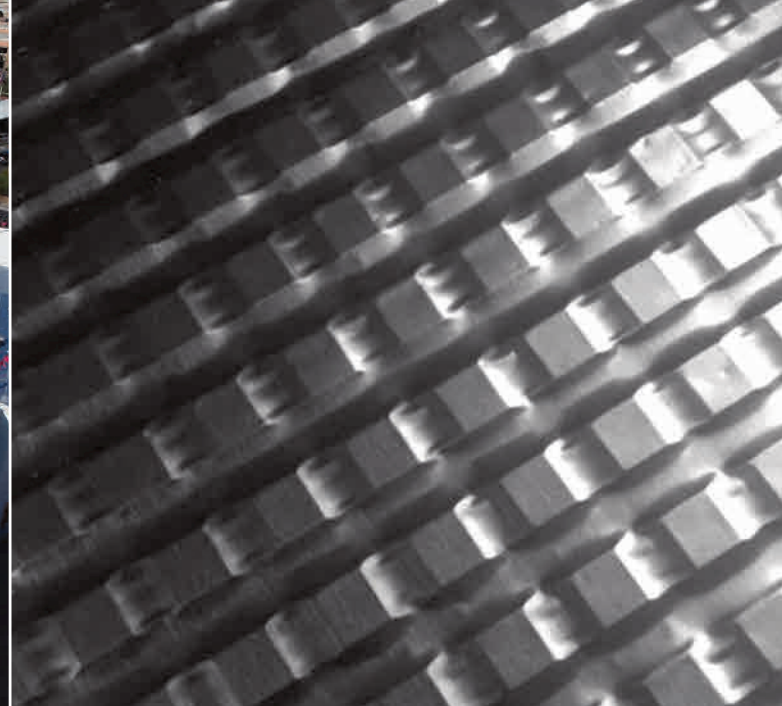
| Hot Asphalt | Cold Adhesive | Self-Adhesive | Torch-Applied |

Discover more about the Paratech Family of Products.

The Veral System

Offering the dramatic appearance and protection of aluminum foil, the Veral System delivers proven waterproofing performance and strength for sloped roofs and flashing applications.

The Veral System consists of two sheet components – a smooth-surfaced base ply (Paradiene 20 or Irex® 40) and the Veral finish ply that combines a glass mat/glass scrim-reinforced SBS-modified bitumen base with a protective aluminum foil facing.

To compensate for the different expansion rates of aluminum and asphaltic materials, the Veral finish ply features a unique embossing system with small control channels built into the metal facing. A thin layer of low-melt asphalt is applied beneath these channels, allowing the metal to expand and contract independently of the underlying modified bitumen blend.

Veral System Assembly Illustration
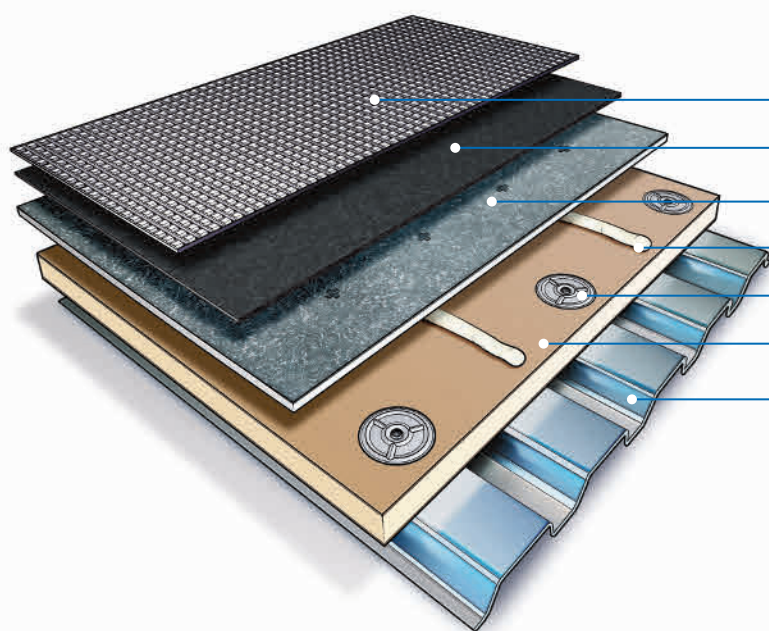
- Veral
- Irex 40 or Paradiene 20
- Coverboard
- Parafast Insulation Adhesive
- Parafast Fastener
- Paratherm Polyisocyanurate
- Metal Deck

SBS-Modified Bitumen Roof System

Eco-Activ®
Roof Membranes

Designed to protect buildings and the planet, Eco-Activ Roof Membranes provide robust roofing protection while helping to remove harmful nitrogen oxide (NOx) molecules from the air.

Eco-Activ Roof Membranes include Paradiene or Parafor cap sheets that are surfaced with Noxite® granules. When sunlight hits an Eco-Activ roof, the Noxite granules absorb UV light and generate electrical charges that turn NOx molecules into harmless by-products that wash away with rainwater.

Noxite's depolluting capabilities are long lasting and help projects qualify for LEEDS points.

NOx NITROGEN OXIDE

HARMLESS BY-PRODUCT (water run-off)
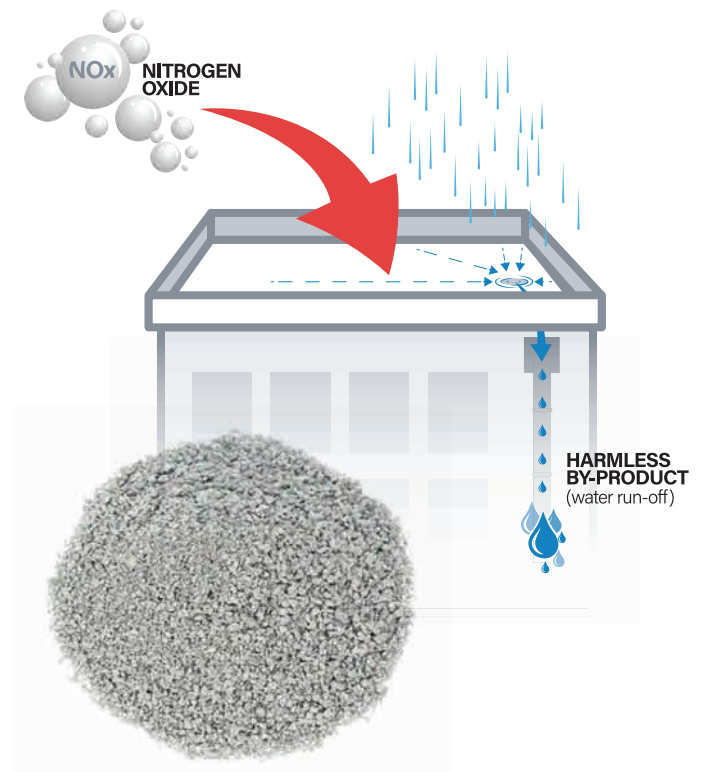
Siplast RoofTag:
RF Technology for
Roof Asset Identification

Siplast roof membranes outfitted with RoofTag give owners and designers access to key product and installation data by simply scanning the roof surface.

Siplast RoofTag features RF (radio frequency) chips that are factory-embedded in the membrane sheets. Scanning the sheets lets you access our Certificate of Analysis test data, product information, and job history.

Offering an easy way to verify that the product installed matches the product quality specified, Siplast RoofTag reflects our commitment to your project's long-term success – one that's built right into the roof.

Siplast Certificate of Analysis

The Siplast Certificate of Analysis program documents the results of our stringent material quality control tests. Siplast membranes with RoofTag provide scannable access to the test results of the product on your site.
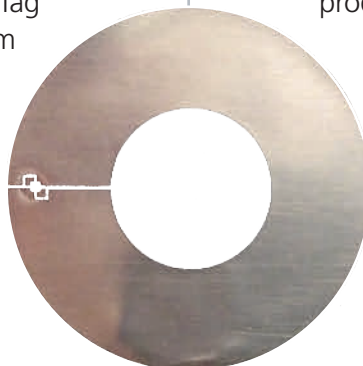
SBS-Modified Bitumen Roof System

Types of SBS Roofing Membranes

No one product is appropriate for every use, which is why Siplast offers three families of SBS-modified bitumen systems. Our SBS solutions have varying combinations of thickness, carriers, and surfacing, with all meeting Siplast's high performance standards.

	Paradiene	Parafor	Paratech
Reinforcement type	Composite and Fiberglass	Composite	Polyester and Fiberglass
Surfacing options	Mineral/Sand	Mineral/Sand	Mineral/Sand
Asphalt blend	Premium Blend	Premium Blend	Quality Blend
Available gaurantee/ Warranty coverage	Options up to 30 years*	Options up to 30 years*	Options up to 20 years*
Application options	Hot Asphalt · Cold Adhesive · Self-Adhesive	Hot Asphalt · Cold Adhesive · Self-Adhesive	Hot Asphalt · Cold Adhesive · Self-Adhesive · Mechanical

	Paradiene 20	Paradiene 30 FR /40 FR	Parafor 30	Parafor 50	Paratech 180	Paratech 250	Paratech Glass
Base sheet	X				X	X	X
Cap sheet		X	X	X	X	X	X
Composite ASTM D6162	X		X	X			
Fiberglass ASTM D6163	X	X					X
Polyester ASTM D6164					X	X	

* For qualified systems only. Additional requirements apply. Contact Siplast for more information.
Refer to our sample guarantees and warranties, available at siplast.com, for complete coverage and restrictions.

Accessories

Siplast offers a full line of accessories compatible with all of our SBS-Modified Bitumen membranes, including:

- Base sheets

- Polyisocyanurate roof insulation board

- Coverboards

- Protective walk pads

- Adhesives

- Primers

- Mastics and flashing cements

- Elastomeric sealant

- Elastomeric roof coating

With you every step of the way

Since developing the first SBS-modified asphalt for roofing applications more than half a century ago, Siplast has been helping to protect some of the most unique and iconic structures across North America. We are committed to doing the same for your project and ensuring your success at every step, from design guidance to installation and decades beyond.

For more about how Siplast is meeting modern building enclosure demands, visit siplast.com.

Accessory		Description	Packaging
Parapro Flashing		PMMA liquid flashing resin	10 kg
Parabase FS		Nailable base sheet meets ASTM D4601, Type II	Roll Size: 3 squares
Paratread		SBS modified bitumen sheet material designed to be used as a walktread	Roll Size: 50 sq. ft.
PA-311 E Series Adhesive		Asphalt based cold process interply adhesive	5 gallon pail, 55 gallon drum or 350 gallon tote
Paratech Membrane Adhesive		Specially formulated cold process adhesive designed for use with Siplast Paratech Roofing Systems	5 gal pail 55 gal drum
PA-828 Flashing Cement		Specially blended flashing cement which resists slump on sloped and vertical applications	5 gal pail
SFT Adhesive		A low-odor liquid adhesive designed for use with Siplast SBS-modified bitumen roofing and waterproofing systems	5 gal pail
SFT Cement		A low-odor, asphalt-modified urethane adhesive	3.5 gal pail
PS-209 Elastomeric Sealant		Flexible, moisture-curing, gun-grade sealant	28 oz cartridge
PS-715 NS Elastomeric Sealant		Moisture-curing, non-slump, gun-grade sealant	28 oz cartridge
Parafast Roof Fasteners and Plate		A variety of roof fasteners and plates for use with SBS-modified bitumen roofing systems	Varies based on size
Paracoat PMMA Roof Coating		High-performance, multi-component, fast-curing, and flexible PMMA roof coating resin	20 kg

SBS-Modified Bitumen Roof System

siplast®

With you every step of the way