

ROOFING & WATERPROOFING SIKALASTIC® LIQUID-APPLIED SYSTEMS FOR HIGH WIND REGIONS

A FULLY BONDED & SEAMLESS MEMBRANE SOLUTION

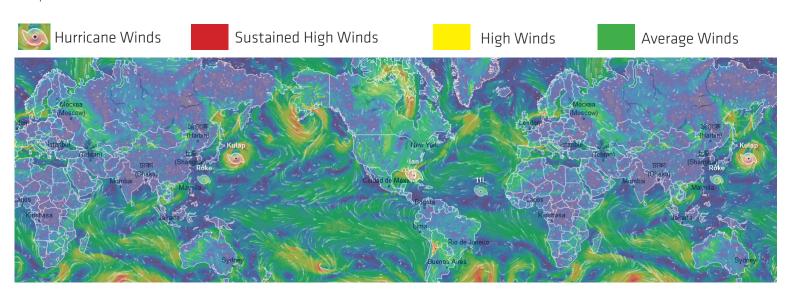


HIGH WIND ROOFING SYSTEMS

What Is A High Wind Event?

The National Oceanic and Atmospheric Administration's National Weather Service states that "a high wind event has occurred whenever there are sustained winds of 40 mph or more, or a peak gust of 58 mph or more, are reported from reliable observing equipment.

All too often roofing decisions are made without sufficient consideration for the wind performance. A roofing system will truly be tested when it experiences multiple wind events over time and in the most extreme weather conditions.











Projects Where A High Wind System Should Be Considered

High wind events are not just limited to buildings that are located near the coastline or in tornado prone areas. The following criteria should be consider when determining if your building should have a roof system designed to resist high wind loads.

- Located within hurricane prone areas
- Building height of 70 feet or taller
- Location near any large body of water (coastal or inland)
- Location in wide open land lock area
- Building codes requiring a roof to withstand winds greater than hurricane velocity (74 mph)
- Long term performance
- Complete security

Experience You Can Rely On

Sika is a reliable roofing and waterproofing manufacturer that has the experience to provide a solution that will sustain your high wind performance needs. Sikalastic® systems have stood the test of time in the harshest climates all over the world. Our experience with high-wind roofing systems is very diverse with roofs in locations such as the Swiss Alps, the coasts of the UK, the Caribbean, as well as the California and Florida coastlines in the United States. A Sika roofing system will provide you with the peace-of-mind that comes from working with an experienced and trusted partner.

Sikalastic® systems are widely recognized for exemplifying the highest standards of quality, reliability and watertight protection. Our record of proven performance is on display on buildings worldwide, in every imaginable climate. As a global market leader for liquid applied roofing systems Sikalastic® boasts a 30 plus years proven track record.

FULLY BONDED & SEAMLESS WATERPROOFING SYTEMS

Where Is Your Roof Most Vulnerable To Leaking?

At the seams and details!

Avoiding joints or seams is beneficial on any roof but more so where complex structures and busy roof tops need to be waterproofed.

Conventional sheet membrane systems do have joints or overlaps, and are either loose laid or partially bonded to the substrate. Sikalastic® liquid applied membrane systems form a 100 % seamless waterproofing membrane that is fully bonded to the substrate. The monolithic nature ensures the toughest performance in high wind zones. When the reinforced Sikalastic® system is cured, it becomes a waterproofing membrane impervious to moisture and water infiltration, including lateral water migration.

The characteristics of uniform adhesion performance and a 100 % seamless waterproofing are most crucial when you factor in high wind uplift resistance. Sikalastic® roofing/waterproofing systems have an outstanding performance in both, and are often the first choice in areas of high wind occurances.



Sikalastic® Systems - Technical Information

A seamless, fully bonded, liquid applied reinforced roofing and waterproofing solution that protects your building, even under the harshest weather conditions.

- Fully Bonded and Self Terminating Flashing No lateral water migration
- Very High Wind Load Resistant Up To 990 psf
- Highly UV Resistant Non yellowing Ideal for Cool Roofs
- Severe Hail Rating Lower risk of hail damage
- Highly Elastic Retains flexibility from -22 to 176 °F
- High Tensile Strength Durable and long lasting waterproofing solution
- Seamless Waterproofing Membrane No leaking seams
- Single Component No mixing errors
- Ultra High Solids High material yield
- Cold Applied Requires no heat or flame
- Low VOC Content California VOC and AQMD compliant
- Fully Reinforced Polyester Fleece or Fiberglass Reemat options
- Moisture Triggered Cure Technology (MTC)- rapidly weatherproof after application
- Chemical Resistance Strong resistance to wide range of reagents, fuel, etc.

GREATER THAN 30 YEARS HISTORY AND UP TO 25 YEARS SYSTEM WARRANTIES!

Proven Materials

A high quality membrane is the key to any successful roofing or waterproofing project that demands absolute system integrity. Sika's manufacturing process uses only the highest quality materials to produce systems that offer unmatched durability and longevity.

Expert Assistance

Our skilled technical field service team makes Sikalastic® stand apart from other manufacturers. We're involved at each major milestone – offering design assistance to architects and specifiers as needed, reviewing construction documents, and training of approved applicators in the classroom and at the job site. All of these are key requirements for the comprehensive warranty package.

Skillful Workmanship

Sikalastic® systems are limited to be sold only to authorized applicators to ensure highest quality standards in excecution – only the experienced and trained are invited to join our team. Maintaining strict control over the installation process means that quality is carried through from start to finish.









Approvals

- Miami Dade County Approved
- FM Approved
- CRRC Listed
- FRC







SYSTEM ASSEMBLIES

Sikalastic® systems

Sikalastic® Direct-to-Substrate Assembly

Direct application to structural concrete decks, plywood decks, and many existing smooth and granule-surfaced roofing systems. Reference Product/System Data Sheet for membrane/system requirements.

> 5- Sikalastic liquid resin with aggregate for pedestrian traffic (optional layer)

- 4- Sikalastic liquid resin
 - 3- Sika Reemat or Sika Fleece (saturated)
 - 2- Sikalastic liquid resin
 - 1- Sikalastic primer





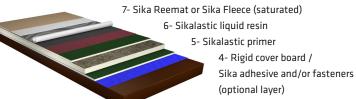


Sikalastic® Built-Up Insulated Assembly

For applications requiring the installation of insulation, including new construction, roof replacement, and upgrading of existing roofing systems. Full System Warranty available. Reference Product/System Data Sheet for membrane/system requirements.

9- Sikalastic liquid resin with aggregate for pedestrian traffic (optional layer)

8- Sikalastic liquid resin





Insulation/Cover Board Installation



Typical Built Up Finished Roof

- 3- Polyisocyanurate Insulation / Sika adhesive and/or fasteners
- 2- Rigid base board Sika adhesive and/or fasteners (optional layer)
- 1- Vapor control layer (optional)

Sikalastic® Plaza Deck and Protected Membrane Assembly

For applications where pavers, wood decking, or tile will be installed over the roofing/waterproofing membrane. An insulation layer may or may not be included. Full System Warranty available. Reference Product/System Data Sheet for membrane/system requirements.



1- Rigid base board (optional)



Re-bar Encapsulation



Pool Deck With Decorative Tiles

Sikalastic® Vegetated and Hardscape Assembly

Installation of either intensive and extensive vegetated roofing applications where growing media and plantings will be installed over the roofing/ waterproofing membrane. Typical applications include hardscape such as concrete pavers or stone ballast. An insulation layer may or may not be included. Full System Warranty available. Reference Product/System Data Sheet for membrane/system requirements.



- 7- Extruded polystyrene insulation
 - 6- Drainage, root barrier and seperation
 - 5- Sikalastic liquid resin
 - 4- Sika Reemat or Sika Fleece (saturated)
 - 3- Sikalastic liquid resin
 - 2- Sikalastic primer
 - 1- Rigid base board (optional)



Vegetated Roof Deck



Hardscape Terrace

Application Overview

Step 1 - SUBSTRATE PREPARATION



Step 4 - DETAILING/FLASHING



Step 2 - INSULATION/COVER BOARD (As specified)



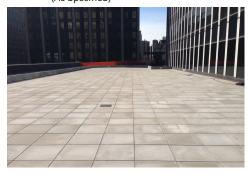
Step 5 - MEMBRANE APPLICATION



Step 3 - PRIMER APPLICATION



Step 6 – SURFACING/OVERBURDEN (As Specified)



Resin Options

Sikalastic® roofing/waterproofing systems are available with a number of liquid resin options to provide cost-effective, high performance solutions to various required applications

- Sikalastic®-621 TC Enhanced base and top coat resin for use with Reemat and Fleece reinforcements
- Sikalastic®-641 Lo-VOC Low odor and low VOC version of Sikalastic 621 TC, utilizing patented Moisture Trigered Cure (MTC) technology, meets California SCAQMD requirements
- Sikalastic®-624 WP Alkaline-resistant resin for use with Reemat and Fleece reinforcements under tile and concrete
- Sikalastic®-644 Lo-VOC Low odor and low VOC version of Sikalastic 624 WP, utilizing patented Moisture Trigered Cure (MTC) technology, meets California SCAQMD requirements



PACKAGING 5 Gal. Pail

COLORS
White
Pearl Gray
Steel Gray
Mushroom (MTO)
Custom Colors (MTO)



PACKAGING 5 Gal. Pail 50 Gal Drum (MTO)

COLORS
White
Pearl Gray
Steel Gray
Mushroom
Copper Green
Custom Colors (MTO)



PACKAGING 5 Gal. Pail

COLORS White Pearl Gray



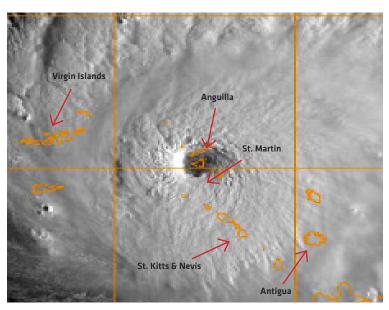
PACKAGING 5 Gal. Pail 50 Gal Drum (MTO)

COLORS White Standard Gray Mushroom

A HURRICANE SURVIVOR

Case Study: Sikalastic® Roofing/Waterproofing System Survives Hurricane Irma

On the morning of Wednesday September 6, 2017, the eye of Hurricane Irma passed over the small Caribbean islands of Anguilla and St. Martin causing widespread destruction on both islands.





Amid The Devistating Destruction Form The Affects Of The Hurricanes, There Was Some Good News To Report

Amongst the widespread destruction on these islands, two buildings were spared from the ravaging effects of water infiltration. The liquid-applied roof membrane systems did not fail.

When it made landfall on these two neighboring islands that are about 200 miles east of Puerto Rico, Irma was a category 5 hurricane with sustained winds of 185 mph that tore through buildings and ripped structures apart. On many commercial, hotel, and high-end residential buildings built with flat or low

slope reinforced concrete roofs, the roof structure remained in tact but their waterproof membranes were severely damanged by the high winds. In many cases, the waterproof membrane had been compromised to the point that they no longer kept water from entering the interior spaces of the building, rendering many buildings uninhabitable.

One building spared was the medical building at the American University of the Caribbean (AUC) on the Dutch side of St. Martin. Built in 2013, the roof was made watertight with 26,000 square feet of Sikalastic® liquid-applied membrane.



Sikalastic® membrane on the medical building roof at the American University of the Caribbean in St. Martin

Skid Marks in Sikalastic membrane from airborne debris during hurricane



Other than a few cuts and scrapes in the membrane that were caused by storm related airborn mechanical equipment flying accross the roof, the Sikalastic membrane was largely unscathed. Because the membrane is liquid-applied, it is fully bonded to the concrete roof deck. This bond did not allow for the water to get under the membrane and accumulate at low spots on the deck, which could then make its way into the building.

Hurricane Maria

Two weeks after Irma swept through the Caribbean region, Hurricane Maria completed a 1-2 punch. Except for the Virgin Islands, Maria hit a different set of Caribbeanislands; Dominica, St. Kitts & Nevis, Puerto Rico, Dominican Republic, and Turks & Caicos. These islands took the brunt of Hurricane Maria, with Dominica and Puerto Rico getting hit especially hard. After on-site inspections of the islands, initial reports from Sikalastic Roofing/waterproofing projects in Antigua, St. Kitts & Nevis, Puerto Rico, and Turks & Caicos were that the Sikalastic membranes on all of these island building roofs not only survived, but held up extremely well against two of the most powerful Caribbean hurricanes on record.



Coastal home with torn off roof



Hurricane dammaged building



Torn off loose laid membrane system



Mechanical equipment that became airborne on the CEP building during the hurricane caused skid marks in the Sikalastic membrane

On the island of Anguilla, during the winter of 2017, the Four Seasons Resort had 14,000 sq ft of Sikalastic membrane installed on the roof of its Central Energy Plant (CEP) building. Similar to what happened in St. Martin, the Sikalastic membrane on the CEP building only had some minor scrapes and cuts from moving mechanical equipment being pushed around by the high winds. The membrane suffered no significant damage which did not allow water to enter the building through the roof deck. Because of the success of the Sikalastic® membrane during Hurricane Irma, the Four Seasons Resort specified Sikalastic liquid applied membrane to replace the 300,000 sq ft of existing membrane that was damaged during the storm.

Sikalastic® Systems

- Tested system approvals in HVHZ (High Velocity Hurricane Zones)
 - Wood Decks
 - Wood Decks with Tiles or Paver System
 - Concrete Decks
 - Steel Decks
 - Waterproofing Systems
 - Pedestrian & Traffic Bearing Waterproofing



A closer look at gouge marks in Sikalastic membrane



Still bonded after 185 mph winds from Hurricane Irma - only gouges in top of membrane



Bonded membrane does not allow water to migrate laterally

GLOBAL BUT LOCAL PARTNERSHIP



VISIT OUR WEBSITE FOR: SIKA LAM CONTACTS INFORMATION ABOUT OUR PRODUCTS AND SYSTEMS



We are Sika

With more than 100 years of experience, Sika is a worldwide innovation and sustainability leader in the development and production of systems and products for commercial and residential construction, as well as the transportation, marine, automotive, and renewable energy manufacturing industries.

Sika has subsidiaries in 102 countries around the world and, in over 400 factories, produces innovative technologies for customers worldwide. In doing so, it plays a crucial role in the transformation of the construction and transportation sector toward greater environmental compatibility. With more than 34,000 employees, the company generated sales of CHF 11.76 billion in 2024.









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