

SYSTEM DATA SHEET

Sikalastic®-644 Lo-VOC Waterproofing System

Liquid applied alkaline resistant, low odor, low VOC, single component polyurethane, elastomeric saturating resin.
For use in a Sikalastic roofing and waterproofing system fully reinforced with fiberglass mat or polyester fleece.

PRODUCT DESCRIPTION

Sikalastic®-644 Lo-VOC Waterproofing System combines a cold applied, low odor, aliphatic, single component, alkali resistant, moisture-triggered polyurethane, elastomeric resin with fiberglass mat or polyester fleece reinforcement to create a seamless membrane and flashing system. Typical applications include a separate wearing course (overlayment or overburden). Sikalastic®-644-Lo-VOC is UV resistant without over coat or overburden protection. It is suitable for direct exposed waterproofing or roofing applications.

USES

Sikalastic®-644 Lo-VOC Waterproofing System may only be used by experienced professionals.

- Embedment and top resin for Sikalastic®-644 Lo-VOC roofing and waterproofing systems reinforced with Sika® Reemat Premium
- Saturating resin for Sikalastic®-644 Lo-VOC systems reinforced with Sika® Fleece
- Typically applied in Sikalastic® systems direct to substrate for Deck, Plaza, Aeminity Deck, Foundation Walls
- Systems for both new construction and refurbishment
- Ideal for applications involving cementitious overlays and tile mortar
- Split-slab waterproofing
- Vegetated deck waterproofing
- Plaza decks with concrete pavers, and asphalt or

- concrete paving stones in a sand bed
- Waterproofing under tile in a mortar bed
- Applications involving cementitious and asphalt pavement overlays
- Waterproofing around/beneath mechanical equipment
- No limit on vertical surface applications

CHARACTERISTICS / ADVANTAGES

- Proven technology with over 30 year track record
- Single component - no mixing and ready to use
- Alkaline resistant - suitable for under tile applications
- Fully reinforced with highly conformable Sika® Reemat Premium or Sika® Fleece
- Moisture triggered chemistry that is rapidly weatherproof after application
- Resistant to ponding water
- Low VOC formula - low Odor
- Highly elastic and crack bridging
- Seamless and fully adhered
- Vapor permeable
- UV resistant and non-yellowing
- Abrasion resistant
- Adheres to most common construction materials when suitable primer is used
- Easy application by brush, roller, spray or squeegee

ENVIRONMENTAL INFORMATION

- Environmental Product Declaration (EPD) - Cradle-to-Grave

APPROVALS / STANDARDS

- Miami Dade
- UL 790 Class A
- Cool Roof Rating Council (CRRC)
- ANSI A118.10 - (load bearing Thin-Set Ceramic Tile & Stone)
- ANSI A118.12 - (crack isolation Thin-Set Ceramic Tile & Stone)
- Florida Building Code
- ASTM D-6083

SYSTEM INFORMATION

System Structure

Sikalastic® -644 Lo-VOC System Guide with Sika® Reemat Premium

	Sikalastic 15* with Sika Reemat Premium	Sikalastic 20* with Sika Reemat Premium	Sikalastic 25* with Sika Reemat Premium
1. Primer	See Priming Guide	See Priming Guide	See Priming Guide
2. Base Layer: Sikalastic®-644-Lo-VOC	45 mils wet 35 sf/gal.	45 mils wet 35 sf/gal.	45 mils wet 35 sf/gal.
3. Reinforcement:	Sika® Reemat Premium	Sika® Reemat Premium	Sika® Reemat Premium
4. Top Layer: Sikalastic®-644-Lo-VOC	25 mils wet 64 sf/gal.	30 mils wet 53 sf/gal.	25 mils wet 64 sf/gal.
5. Top Layer: Sikalastic®-644-Lo-VOC	-	-	25 mils wet 64 sf/gal.

Sikalastic® -644 Lo-VOC System Guide with Sika® Fleece

	Sikalastic 15* with Sika Fleece	Sikalastic 20* with Sika Fleece	Sikalastic 25* with Sika Fleece
1. Primer	See Priming Guide	See Priming Guide	See Priming Guide
2. Base Layer: Sikalastic®-644-Lo-VOC	45 mils wet 35 sf/gal.	50 mils wet 32 sf/gal.	60 mils wet 27 sf/gal.
3. Reinforcement:	Sika® Fleece 120 (US)	Sika® Fleece 140 (US)	Sika® Fleece 170 (US)
4. Top Layer: Sikalastic®-644-Lo-VOC	25 mils wet 64 sf/gal.	25 mils wet 64 sf/gal.	35 mils wet 45 sf/gal.

* Substrates: Concrete or cementitious, metals, woods, single-ply or bituminous, stone. Primer required (see Substrate Priming Guide). Detailing: Sika® Flexitape Heavy or Sika® Joint Tape SA centered over seams, transitions and properly treated cracks and joints.

Note: Coverage rates provided are optimal and are not guaranteed they will vary depending on temperature, surface roughness, porosity, aggregate selection, embedment, and application technique. For example, using Sikalastic®-644 Lo-VOC Waterproofing System with Sika® Fleece 140 in a Sikalastic 20 year build up, a potential full system coverage rate for a mod-bit surface could be 14 - 16 sf/gal.. Sikalastic®-644 Lo-VOC Waterproofing System with Sika Reemat Premium in a Sikalastic 15, 20 & 25 year build up, a potential base coat coverage rate could be 25 - 28 sf/gal.

Composition	Single component, moisture-triggered, aliphatic polyurethane		
Color	White, Standard Gray; custom colors available with minimum order quantity		
Dry film thickness	Sikalastic® -644 Lo-VOC System Guide with Sika® Reemat Premium		
	Sikalastic 15* with Sika Reemat Premium	Sikalastic 20* with Sika Reemat Premium	Sikalastic 25* with Sika Reemat Premium
	56 mils dry (min)	60 mils dry (min)	76 mils dry (min)
	Sikalastic® -644 Lo-VOC System Guide with Sika® Fleece		
	Sikalastic 15* with Sika Fleece	Sikalastic 20* with Sika Fleece	Sikalastic 25* with Sika Fleece
	56 mils dry (min)	60 mils dry (min)	76 mils dry (min)

TECHNICAL INFORMATION

Resistance to Static Puncture	Sikalastic® 20 with Sika® Reemat Premium > 55 lbf	Sikalastic® 20 with Sika® Fleece 140 > 55 lbf	(ASTM D-5602)
Note: Data for other Sikalastic assemblies available upon request			
Tensile Strength	Sikalastic® 20 with Sika® Reemat Premium 1030 psi	Sikalastic® 20 with Sika® Fleece 140 900 psi	(ASTM D-751 Proc. B)
Note: Data for other Sikalastic assemblies available upon request			
Elongation at Break	Sikalastic® 20 with Sika® Reemat Premium 21 %	Sikalastic® 20 with Sika® Fleece 140 82 %	(ASTM D-751)
Note: Data for other Sikalastic assemblies available upon request			
Tear Strength	Sikalastic® 20 with Sika® Reemat Premium 300 lbf/in	Sikalastic® 20 with Sika® Fleece 140 200 lbf/in	(ASTM D-624)
Note: Data for other Sikalastic assemblies available upon request			
External Fire Performance	UL 790 Class A		
Solar Reflectance	Initial Rating 0.87 Rapid Rating 0.87 Rapid Rating 0.33	White White Standard Grey	(CRRC) (ASTM D7897-18) (ASTM D7897-18)
Thermal Emittance	Initial Rating 0.92 Rapid Rating 0.91 Rapid Rating 0.91	White White Standard Grey	(CRRC) (ASTM D7897-18) (ASTM D7897-18)
Solar Reflectance Index	110 (white)		
Service Temperature	-22–176 °F (-30–80 °C) intermittent		

APPLICATION INFORMATION

Ambient Air Temperature	41 °F (5 °C) min. / 95 °F (35 °C) max
Relative Air Humidity	80 % R.H. max.

Dew Point	Beware of condensation. The substrate and uncured coating must be ≥ 5 °F (3 °C) above dew point.			
Substrate Temperature	41 °F (5 °C) min. / 140°F (60°C) max.			
Substrate Moisture Content	≤ 4 % moisture content Test method: Sika®-Tramex meter No rising moisture according to ASTM (Polyethylene-sheet)			
Waiting / Recoat Times	Ambient Conditions	Minimum Waiting Time Overcoating		
	+40 °F / 50 % r.h.	18 hours		
	+50 °F / 50 % r.h.	8 hours		
	+70 °F / 50 % r.h.	6 hours		
	*After 7days surface must be cleaned and primed with Sika® Concrete Primer Lo-VOC or Sika® Reactivation Primer before continuing. Note: Times are approximate and will be affected by changing ambient conditions particularly temperature and relative humidity.			
Test Results	Ambient Conditions	Rain Resistant	Touch Dry	Full Cure
	+40 °F / 50 % r.h.	1 hour	12 hours	24 hours
	+50 °F / 50 % r.h.	1 hour	6 hours	18–24 hours
	+70 °F / 50 % r.h.	1 hour	4 hours	12–18 hours
	Note: Times are approximate and will be affected by changing ambient conditions particularly temperature and relative humidity.			

BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

LIMITATIONS

- Minimum age of concrete must be 28 days depending on curing and drying conditions
- Do not thin with solvents
- Do not store materials outdoors directly exposed to sunlight and moisture. Cover and protect material with breathable type covers such as canvas tarpaulins to allow venting and protection from weather and moisture. Observe temperature storage and conditioning requirements
- Do not apply to substrate surfaces where moisture vapor transmission will occur during application and cure. This condition may be checked using ASTM D 4263 (Polyethylene sheet method)
- Substrate must be dry prior to application. Do not apply to a frosted, wet or damp surface. Allow sufficient time for the substrate to dry after rain or inclement weather, as there is the potential for bonding problems
- On substrates likely to exhibit outgassing apply during falling ambient and substrate temperature. If applied during rising temperature pinholing or blistering may occur
- Do not use for indoor applications unless sufficient air flow and ventilation are provided to prevent odors and/or vapors from leaving the immediate work area
- Precautions should be taken to prevent odors and/or vapors from entering the building/structure, including but not limited to turning off and sealing air intake vents or other means of ingress for odors and/or vapors into the building/structure during product application and cure
- For areas with direct exposure to heavy or frequent foot traffic, an additional wear coat protection with slip resistant aggregate is required. Opening to traffic prior to cure may result in loss of aggregate or permanent staining and subsequent premature failure
- Any repairs required to achieve a level surface must be performed prior to application (consult a Sika representative for guidance on various product solutions). Surface irregularities may reflect through the cured system
- When applying over existing coatings or membranes compatibility and adhesion testing and subsequent approval by Technical Services is required
- Opening to traffic prior to cure may result in permanent staining and subsequent premature failure
- On grade concrete decks should not be covered with Sikalastic® membrane systems
- Unvented metal pan, split/sandwich slab with encapsulated membrane and/or insulation, cinder fill decks, and lightweight insulating concrete deck overlays should not be covered with Sikalastic® RoofPro systems without additional deck evaluation and subsequent approval by Technical Services
- Do not subject to continuous immersion, i.e., fountains, ponds, pools, or interior of tanks
- Not recommended for use over ceramic tile

ENVIRONMENTAL, HEALTH AND SAFETY

For further information and advice regarding transportation, handling, storage and disposal of chemical products, user should refer to the actual Safety Data Sheets containing physical, environmental, toxicological and other safety related data. User must read the current actual Safety Data Sheets before using any products. In case of an emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

APPLICATION INSTRUCTIONS

Substrate Pre-Treatment

Refer to Priming Guide to select primer for properly evaluated and prepared substrate. Refer to separate primer Product Data Sheet for application methods, coverage rates, cure times and recoat windows. Always allow primer to cure thoroughly before applying detail or base resin layer.

Sikalastic® -644 Lo-VOC System Priming Guide

Substrates and Primer Options

Concrete *1

Sikalastic® Concrete Primer Lo-VOC
Sikalastic® DTE Primer
Sikalastic® GDC Primer
Sikalastic® EP Primer/Sealer
Sikalastic® EP Primer Rapid

Lightweight Structural Concrete *1

Sikalastic® Concrete Primer Lo-VOC
Sikalastic® DTE Primer
Sikalastic® GDC Primer
Sikalastic® EP Primer/Sealer
Sikalastic® EP Primer Rapid

Cement, Gypsum Based Roof Boards

Sikalastic® Concrete Primer Lo-VOC
Sikalastic® EP Primer/Sealer
Sikalastic® EP Primer Rapid

Brick, Stone *3

Sikalastic® Concrete Primer Lo-VOC
Sikalastic® EP Primer/Sealer
Sikalastic® EP Primer Rapid

Bituminous Substrate

Asphalt, Bituminous Felts, Bituminous Coatings, Granulated or Smooth SBS & Aged APP Cap Sheets *2,3

Sikalastic® EP Primer/Sealer
Sikalastic® EP Primer Rapid

Single Ply PVC Membranes *3

Sarnafil, Sikaplan *3

Sikalastic® EP Primer/Sealer

Hypalon *3

Sika® Bonding Primer

TPO, EPDM *3

Sikalastic® EPDM Primer
Sikalastic® EPDM / TPO Primer Lo-VOC

Roof Tiles (unglazed) *3,4

Sikalastic® EP Primer/Sealer

Sikalastic® EP Primer Rapid

Fiberglass *3

Sikalastic® EP Primer/Sealer

Sikalastic® EP Primer Rapid

Polyurethane Foam - Sprayed or Slab Stock

Sikalastic® EP Primer/Sealer

Sikalastic® EP Primer Rapid

Metal *3

Aluminium, Galvanized, Cast Iron,
Copper, Lead, Brass, Stainless Steel,
Steel, Zinc

Sikalastic® EP Primer/Sealer

Sikalastic® EP Primer Rapid

Pre-Coated Metal *3

Paints & Coatings *3

Aluminized Solar Reflective Coatings *3

Sikalastic® EP Primer/Sealer

Sikalastic® EP Primer Rapid

Wood - Timber & Plywood *5

Sikalastic® EP Primer/Sealer

Sikalastic® EP Primer Rapid

* Consult Sika.

1 New cementitious substrates must be Portland base and be cured min. 28 days.

2 The presence of volatile bitumen may cause discoloration of Sikalastic® if not properly primed.

3 Surface evaluation and field adhesion testing.

4 Glazed tile consult Sika.

5 Pressure treated lumber consult Sika.

SUBSTRATE PREPARATION

Concrete and Cementitious Substrates

New concrete shall be allowed to cure a minimum of 28 days. Concrete shall have a minimum compressive strength of 20.7 MPa (3000 psi) and exhibit a minimum tensile bond strength of 1.4 MPa (200 psi). time. Moist or sheet curing methods should be used, as opposed to the use of curing compounds, which may interfere with the bond of the membrane. Inspect the concrete, including upstands, and all areas should be hammer or chain drag tested. Concrete must be suitably finished, preferably by wood float or steel pan. A power float finish is acceptable where the surface is prepared to avoid laitance (a tamped finish is not acceptable). The surface finish must be uniform and free from defects such as laitance, voids or honeycombing.

Cementitious or mineral based substrates must be prepared mechanically using abrasive blast cleaning or scarifying equipment to remove cement laitance and to achieve an open textured surface (CSP 2-4 per ICRI guidelines). Loose friable material and weak concrete must be completely removed and surface defects such as blowholes and voids must be fully exposed. The amount of embedment coat required may increase over rough or highly porous surfaces.

Repairs to the substrate, filling of joints, blowholes/voids

System Data Sheet

Sikalastic®-644 Lo-VOC Waterproofing System

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and surface levelling must be carried out. Consult Sika for product recommendations based on project requirements. High spots must be removed by grinding or similar method. Outgassing is a naturally occurring phenomenon of concrete that can produce pinholes in liquid applied materials. The concrete must be carefully assessed for moisture content, air entrapment, and surface finish prior to any roofing work. Particular requirements for priming must also be considered. Installing the primer and membrane either when the concrete temperature is falling or stable can reduce outgassing. It is generally beneficial, therefore, to apply the primer and embedment coat in the late afternoon or evening.

Gypsum and Cement Based Sheathing

Sheathing boards shall be clean, dry and dust free, and shall be properly secured to the structure. Secure loose boards if in sound condition. Damaged or contaminated boards shall be removed and replaced.

Brick and Stone

Mortar joints must be sound and preferably flush pointed. Power wash and use biodegradable non-sudsing detergent with clean water rinse as required.

Asphalt

Asphalt contains volatiles which can cause bleeding and slight non-detrimental staining. The asphalt must be carefully assessed for moisture and/or air entrapment, grade and surface finish. Power wash and use biodegradable non-sudsing detergent with clean water rinse as required. All major cracks should be sealed to allow continuity of the Sikalastic® system.

Bituminous Felt

Ensure that bituminous felt is firmly adhered or mechanically fixed to the substrate. Bituminous felt shall not contain badly degraded areas. Power wash and use biodegradable non-sudsing detergent with clean water rinse as required. Treat blisters by star cutting and removing any underlying water. Allow to dry and re-adhere using suitable adhesive.

Bituminous Coatings

Bituminous coatings should not be sticky or mobile. Volatile mastic coatings, or old coal tar coatings are not acceptable. Remove any loose or degraded coatings.

Metals

Metals must be in sound condition. Ferrous metals

should be thoroughly cleaned by grinding or blast cleaning prior to priming (SSPC-SP3 to SP11 near-white metal). Non-ferrous metals are prepared by removing any deposits of dust and oxidation and abrading to bright metal. Wire brushing can be used for galvanized or soft metal such as lead and copper. The surface must be clean and free from grease which, if present, must be removed with a solvent wipe or wash with detergent, rinse and dry. Stainless Steel must be mechanically abraded or ground to create an appropriate anchor profile.

Wooden Substrates

Plywood and timber based roof decks must be in good condition, firmly adhered and mechanically fixed. All plywood should be identified as conforming to PS 1 for construction and industrial plywood by grade, APA (American Plywood Association) trademark, or equivalent. For maximum smoothness, EXT Type APA, Grade A-C should be used, and the "A" side should be positioned to receive the Sikalastic® resin. Plywood decks to receive resin directly shall be at least 1/2" thick and attached and supported according to APA guidelines, using only non-rusting screw, spiral or coated nail type fasteners. A good practice would be to recess or counter sink fasteners 1/8 to 1/4" and fill with Sikaflex® sealant. Suitable edge support to prevent differential deflection between panels shall be provided. Panel edges shall be tongue and groove or supported on solid blocking. Space panels 1/8 to 3/16" at panel ends.

Timber and timber based roof decks require additional reinforcement such as the installation of plywood, approved insulation or cover board. Small timber protrusions and suitable decks may be treated directly, provided that the timber is of exterior quality, e.g. plywood. Fill joints flush with Sikaflex® sealant.

Paints and Coatings

Ensure the existing material is sound and firmly adhered. Remove any loose or degraded coatings. Ensure the surface is clean and free from oxidation, dust, dirt, and debris. Power wash and use biodegradable non-sudsing detergent with clean water rinse as required. Allow to dry.

Existing Sikalastic® System

The existing Sikalastic® System shall be soundly adhered to the substrate. Clean the membrane using a pressure washer at approximately 140bar (2000 psi) and biodegradable non-sudsing detergent with clean water rinse. Allow to dry.

Sikaplan®/Sarnafil® Membranes

Clean the membrane using a pressure washer at approximately 140bar (2000 psi) and biodegradeable non-sudsing detergent with clean water rinse or use approved PVC membrane cleaner. Allow to dry.

MIXING

No mixing necessary for Sikalastic 644 Lo-VOC resin.

PRIMER MIXING

Refer to the individual primer Product Data Sheets for proper mixing instruction.

APPLICATION

Detailing

Non-structural Cracks Up To 1/16"

Detail application not necessary. Apply embedment/base resin layer per instruction. Non-structural cracks between 1/16" and 1/4" Rout and seal with Sikaflex® sealant. Apply 40–45 mil resin layer embedded with 3" Sika Flexitape Heavy or use Sika® Joint Tape SA centered over the crack. Apply embedment/base resin layer per instruction.

Cracks and Joints Between 1/4" and 1"

Rout and seal with Sikaflex® sealant. Apply bond breaker tape sufficient to span width of crack or joint followed by 40-45 mil resin layer embedded with 6" Sika® Flexitape Heavy or use Sika® Joint Tape SA centered over crack or joint. Apply embedment/base resin layer by terminating Sika® Reemat or Sika® Fleece at edges of crack or joint overlapping Sika® Flexitape Heavy or Sika® Joint Tape SA, a minimum of 2 inches on both sides of the crack or joint.

Joints Greater Than 1"

Treat as expansion joint. Consult Sika for recommendations.

Metal Seams and Plywood/Cover Board Joints

Apply 40–45 mil resin layer embedded with 3 or 6" Sika® Flexitape Heavy centered over seam. Alternatively Sika® Joint Tape SA can be applied centered over seam. Apply embedment resin layer per below.

Transitions Between Dissimilar Materials

Apply 40-45 mil resin layer embedded with Sika® Flexitape Heavy or use Sika® Joint Tape SA centered over

edge. Apply embedment/base resin layer per instruction.

Embedment/Base Resin Layer with Sika® Reemat Premium Reinforcement

Mixing not required. Apply Sikalastic®-644 Lo-VOC with a 1/2" nap phenolic resin core roller. Material can also be squeegee or spray applied, in which case it should be backrolled prior to embedding Sika® Reemat Premium. Place Sika® Reemat Premium in wet base resin layer overlapping seams a minimum of 2" (place frayed edge over cut edge of roll) and apply wet roller to topside to saturate completely. After approximately 5 minutes the binder will begin to dissolve allowing the fiber strands to conform to irregular surfaces.

Do not over work once the fibers have conformed to the substrate. Allow to cure 12 hours at 70 °F and 50 % R.H. or until tack free before top resin layer. Keep clean and dry and apply top resin layer within 7 days. If window is exceeded clean with non-sudsing detergent and clean water rinse, and allow to dry prior to application of Sika® Concrete Primer Lo-VOC or Sika® Reactivation Primer.

Top Resin Layer with Sika® Reemat Premium Reinforcement

Mixing not required. Apply Sikalastic®-644 Lo-VOC with a 1/2" nap phenolic resin core roller. Material can also be squeegee or spray applied, in which case it should also be backrolled. In the case of Sikalastic 25-year system allow the first top resin layer to cure 12 hours at 70 degrees F and 50 % R.H. or until tack free before applying second top resin layer. On top of the complete Sikalastic system additional resin layers may be applied with aggregate for slip resistance. Keep clean and dry and apply additional resin layers within 7 days. If window is exceeded clean with non-sudsing detergent and clean water rinse, and allow to dry prior to application of Sika® Concrete Primer Lo-VOC or Sika® Reactivation Primer.

Wet on Wet Application with Sika® Fleece Reinforcement

Mixing not required. To primed substrate apply two-thirds of the Sikalastic®-644 Lo-VOC with a 1/2" nap phenolic resin core roller. Immediately place specified Sika Fleece into wet resin overlapping seams a minimum of 3" along the edge and 6" end-to-end. Apply wet roller to topside with light pressure to saturate fleece from bottom and ensure air pockets are completely removed. Immediately apply all of remaining one-third of Sikalastic®-644 Lo-VOC resin. Ensure even and complete

fleece saturation from topside.

Aggregated Surfacing

Supplemental aggregate surfacing is required for all applications that will experience direct foot traffic such as balconies, terraces, walkways, and plazas. It is also recommended for areas that experience maintenance foot traffic. The aggregate surfacing is applied in a supplemental resin layer after the Sikalastic membrane has been installed. Aggregate is not applied into the top layer of the roofing/waterproofing membrane resin.

Seed and Back Roll Option

The Seed and Backroll option is primarily intended for use for maintenance traffic-type applications where enhanced slip resistance is required. Apply Sikalastic®-644 Lo-VOC resin at 15 mils wet film thickness to the installed, cured membrane system. While the supplemental resin application is still wet seed with kiln dried, iron free aggregate. Back roll the surface to encapsulate the aggregate in the Sikalastic resin.

Full Broadcast and Seal Option

The Full Broadcast and Seal option is intended for use for applications where both enhanced slip resistance and physical protection of the roofing membrane is required. Apply Sikalastic®-644 Lo-VOC resin at 15 mils wet film thickness to the installed, cured membrane system. While the supplemental resin application is still wet broadcast to rejection (full broadcast/beach) with kiln dried, iron free aggregate. Remove excess aggregate after cure. Seal with an additional coat of Sikalastic resin.

Aggregate Selection

Use clean, rounded or semi-angular, oven dried quartz sand that meets a minimum hardness of 6.5 per the Moh's scale. The aggregate should be supplied in prepackaged bags and free of metallic or contaminants. Recommended particle size gradations are 16–30 or 20–40 mesh.

Overburden Application

Sikalastic®-644 Lo-VOC is used as the waterproofing layer under a wide range of overburden materials. Depending on the overburden type, different surfacing, drainage, and protection layers may be required.

Protected Membrane Assemblies

Install Sika drainage mat over the Sikalastic®-644 Lo-VOC waterproofing system prior to adding the extruded

polystyrene insulation layer. No aggregated membrane surfacing is required.

Concrete Pavers with Pedestal Supports

Install Sika drainage mat over the Sikalastic®-644 Lo-VOC waterproofing system to provide additional protection of the membrane under the pedestal supports.

Tile Adhered in a Cementitious Thin-Set Adhesive

A complete aggregate broadcast surface is required to establish a strong bond for the tile adhesive. Apply a supplemental 15 wet mils of Sikalastic®-644 Lo-VOC resin, followed by a full broadcast of kiln-dried sand, sizes 16-30 or 20-40. Load to refusal, approximately 40-50 lbs./100 sf. (Miami Dade NOA specifies using either 16-30 or 20-40 aggregate). Once resin is cured thoroughly remove all loose sand. The aggregate surface should remain unsealed.

Tile in a Cementitious Setting Bed

Install Sika drainage mat over the Sikalastic®-644 Lo-VOC waterproofing system prior to installation of the cementitious setting bed, which is typically 1-1/2"-3" in thickness, and can be sloped to create positive drainage. Secure the Sika drainage mat by spot-adhering with Sikaflex® 11 FC to the Sikalastic®-644 Lo-VOC waterproofing system as required to prevent shifting during setting bed installation. Bi-level drains should be installed to provide drainage capability at the membrane level as well as drainage of the finished surface.

Concrete Pavers in a Sand Setting Bed

Install Sika drainage mat over the Sikalastic®-644 Lo-VOC waterproofing system prior to installing the sand setting bed, which is typically either graded silica sand or a mix of sand and asphalt. Secure the Sika drainage mat by spot-adhering with Sikaflex® 11 FC to the Sikalastic®-644 Lo-VOC waterproofing system as required to prevent shifting during setting bed installation. Bi-level drains should be installed to provide drainage capability at the membrane level as well as drainage of the finished surface.

Vegetation and Growing Media/Soil

The selection of a vegetated overburden assembly is specified by a qualified design professional. At a minimum, install Sika® GRS Drain Mat over the Sikalastic®-644 Lo-VOC waterproofing system prior to application of all other overburden components. Secure the Sika® GRS Drain Mat to the Sikalastic®-644 Lo-VOC waterproofing system by spot-adhering with Sikaflex® 11

FC as required to prevent shifting during vegetative overburden assembly components. Bi-level drains should be installed to provide drainage capability at the membrane level as well as drainage at grade level.

Concrete Pavement

Install Sika® 1000 Drain Mat over the Sikalastic®-644 Lo-VOC waterproofing system prior to application of the new concrete. Secure the Sika® 1000 Drain Mat to the Sikalastic®-644 Lo-VOC waterproofing system by spot-adhering with Sikaflex® 11 FC as required to prevent shifting during concrete placement. Bi-level drains should be installed to provide drainage capability at the membrane level as well as drainage of the finished surface.

Asphalt Pavement

Install Sika® 1000 Drain Mat over the Sikalastic®-644 Lo-VOC waterproofing system, followed by the installation of a ¼" thick asphalt protection board. Secure the Sika® 1000 Drain Mat and asphalt protection board as required to prevent shifting during asphalt pavement placement. Bi-level drains should be installed to provide drainage capability at the membrane level as well as drainage of the finished surface.

CLEANING OF TOOLS

Clean tools and application equipment with appropriate solvent immediately after use. Hardened and/or cured material is removed mechanically.

OTHER RESTRICTIONS

See Legal Disclaimer.

LEGAL DISCLAIMER

- KEEP CONTAINER TIGHTLY CLOSED
- KEEP OUT OF REACH OF CHILDREN
- NOT FOR INTERNAL CONSUMPTION
- FOR INDUSTRIAL USE ONLY
- FOR PROFESSIONAL USE ONLY

Prior to each use of any product of Sika Corporation, its subsidiaries or affiliates ("SIKA"), the user must always read and follow the warnings and instructions on the product's most current product label, Product Data Sheet and Safety Data Sheet which are available at usa.sika.com or by calling SIKA's Technical Service Department at 1-800-933-7452. Nothing contained in

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Sika Corporation

201 Polito Avenue
Lyndhurst, NJ 07071
Phone: +1-800-933-7452
Fax: +1-201-933-6225
usa.sika.com



System Data Sheet

Sikalastic®-644 Lo-VOC Waterproofing System
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