

Sikalastic[®] RoofPro Roofing & Waterproofing Systems APPLICATOR MANUAL





BUILDING TRUST

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1.0 Sikalastic RoofPro Warranty Program

1.1 Contractor Training

The Sikalastic RoofPro Warrenty Program begins with contractor training. Only Sikalastic RoofPro Approved Applicators may apply for project warranties that include workmanship in the warranty coverage. Contractor training is provided by Sika Technical Field Representatives only. Introductory training is often provided in an office, shop, or warehouse setting, but in-depth hands-on training is nearly always provided on-site on a RoofPro project. Successful hands-on training is a requirement for a company to become a Sikalastic RoofPro Applicator.

Contact Sika Technical Services to obtain an Approved Applicator Application and Approved Applicator Agreement.

1.2 Project Registration

All Sikalastic RoofPro projects for which a Sikalastic warranty is required must first be registered with, and approved by Sika Technical Services prior to job start. Projects not registered in this manner will be eligible for a 1 year Sika Defective Material warranty only.

Contact Sika Technical Services to obtain a Project Warranty Form.

1.3 Site Inspections

All Sikalastic RoofPro projects for which a Sikalastic warranty is required will receive a minimum of two inspections: a Jobstart/Initial Inspection, and a Completion/Final Inspection. Depending on the complexity of the project, additional inspections may be required by the responsible Sika Technical Field Representative.

1.4 Warranty Issuance

The responsible Sika Technical Field Representative will sign off on the Project Warranty Form once all installation requirements are satisfied and the project is deemed ready for warranty. The requested Sikalastic RoofPro warranty will be issued and must first be signed by the Building Owner/Owner's Representative and then countersigned by Sika Technical Services for the Warranty to be in force.

1.5 Warranty Claims

In the unlikely event that a leak develops that is believed to be caused by Sikalastic RoofPro material failure, or by workmanship failure for those warranties that include workmanship in the warranty coverage, Sika Technical Services must be contacted as required by the Terms and Conditions of the Warranty. A Sika Technical Field Representative will evaluate the site condition. Sika Technical Services will authorize warranty repairs as required.

Repairs to address non-covered conditions are not the responsibility of Sika Corporation, and must be performed in a timely manner for the Sikalastic RoofPro warranty to remain in effect.

2.0 Packaging and Ordering

Code	Name	Description	Packaging	Colors	Weight
		Primers			1
	Pri	ners For Concrete, Masonry, Metal,	Wood. Modified Bitumen		
557814	Sikalastic EP Primer/Sealer	2C epoxy	4 gal. kit.	Red	58 lbs
		part A	3.0 gal.		lbs
		part B	1.0 gal		lbs
432358	Sikalastic EP Primer/Sealer	2С ероху	1 gal. kit	Red	14 lbs
		part A	0.75 gal.		lbs
		part B	0.25 gal.		lbs
		Primers For Concrete, Masonry, I	JensDeck, Securock	<u>I</u>	
92471	Sika Concrete Primer	2C polyurethane	4.5 L kit	Amber	11 lbs
		part A	3.5 L pail		lbs
		part B	1.0 L can		lbs
438239	Sika Concrete Primer	2C polyurethane	11.5 L kit	Amber	53 lbs
		part A	9.0 L pail		lbs
		part B	2.5 L pail		lbs
523528	Sika Concrete Primer Lo-VOC	1C polurethane	5.0 gal	Amber	52 lbs
		Primers For Concrete,	Masonry	l	1
432356	Sika Bonding Primer	2C epoxy, water based	1 gal. kit	Lt. green	10 lbs
		part A	0.8 gal. pail - short filled		lbs
		part B	0.2 gal. can		lbs
432404	Sikalastic DTE Primer	2С ероху	1 gal. kit	Amber	34 lbs
		part A	0.75 gal. pail - short filled		22 lbs
		part B	0.25 gal. can		12 lbs
		Primers For Existing Sikalas	tic Membrane		
184328	Sika Reactivation Primer	1C polyurethane	1 gal. pail	Clear	9 lbs
		Saturating Res	ins		
		Base Coat for Reemat Rei			
402494	Sikalastic 601 BC	moisture-triggered aliphatic PU	5 gal. pail	red	61 lbs
		Base and Top Coat for Reemat and			
402520	Sikalastic 621 TC	moisture-triggered aliphatic PU	5 gal. pail	white	64 lbs
105429	Sikalastic 621 TC	moisture-triggered aliphatic PU	5 gal. pail	pearl grey	64 lbs
405385	Sikalastic 621 TC	moisture-triggered aliphatic PU	5 gal. pail	steel grey	64 lbs
413073	Sikalastic 621 TC	moisture-triggered aliphatic PU	5 gal. pail	mushroom	64 lbs
413074	Sikalastic 621 TC	moisture-triggered aliphatic PU	5 gal. pail	copper green	64 lbs
	Low	VOC Base and Top Coat for Reemat	and Fleece Reinforcement		I
194912	Sikalastic 641 Lo-VOC	moisture-triggered aliphatic PU	5 gal. pail	white	60 lbs
575998	Sikalastic 641 Lo-VOC	moisture-triggered aliphatic PU	5 gal. pail	standard grey	60 lbs
503584	Sikalastic 641 Lo-VOC	moisture-triggered aliphatic PU	5 gal. pail	pearl grey	60 lbs
503585	Sikalastic 641 Lo-VOC	moisture-triggered aliphatic PU	5 gal. pail	steel grey	60 lbs
503586	Sikalastic 641 Lo-VOC	moisture-triggered aliphatic PU	5 gal. pail	mushroom	60 lbs

	Alkaline-Re	sistant Base and Top Coat for Reemat	and Fleece Reinforcement		
474037	Sikalastic 624 WP	moisture-triggered aliphatic PU	5 gal. pail	white	60 lbs
474036	Sikalastic 624 WP	moisture-triggered aliphatic PU	5 gal. pail	pearl gray	60 lbs
	Low-VOC Alkalin	e-Resistant Base and Top Coat for Ree	emat and Fleece Reinforcemen	t	
544106	Sikalastic 644 Lo-VOC	moisture-triggered aliphatic PU	5 gal. pail	white	64 lbs
544107	Sikalastic 644 Lo-VOC	moisture-triggered aliphatic PU	5 gal. pail	pearl gray	64 lbs
		Accelerator			
503336	Sikalastic 600 Accelerator	water-based curing accelerator for all 600-se- ries saturating resins	4 oz. bottle (6 bottles per carton)	clear	0.5 lbs
		Sealers			
		Glazing Sealer			
182966	Sikalastic (Decothane) Clearglaze	solvent-based polycarbonate/aliphatic PU sealer	5 L (1.32 gal.) pail	clear	16 lbs
		Aggregate, Quartz and Flake	Sealer		
189349	Sikalastic 748 PA Sealer	2C polyaspartic	4 gal. unit (2 gal. A, 2 gal. B per ct.)	clear	42 lbs
189350	Sikalastic 748 PA Sealer	2C polyaspartic	4 gal. unit (2 gal. A, 2 gal. B per ct.)	special	46 lbs
514526	Cilles Deserved Deservices	Reemat Fiberglass Mat			02.15-
		Reemat Fiberglass Mat			
514526	Sika Reemat Premium	chopped strand fiberglass mat	49" x 295' roll	white	82 lbs
507909	Sika Reemat Premium	chopped strand fiberglass mat	12" x 295' roll		22.11
502749	Sika Reemat Standard	chopped strand fiberglass mat	39'' x 656' roll	white	23 lbs
420204	Cilia Elasar 120	Polyester Fleece	40%, 4501, -11		15 16 -
438294	Sika Fleece 120	non-woven neede-punched polyester fleece	48'' x 150' roll	white	15 lbs
438997	Sika Fleece 140	non-woven neede-punched polyester fleece	48'' x 150' roll	white	18 lbs
438996	Sika Fleece 170	1 1 /	48'' x 150' roll	white	22 lbs
174149	Sika Flexitape Heavy	Flexitape Heavy	3'' x 164' roll	gray	1 lbs
174148	Sika Flexitape Heavy	reinforcement woven nylon joint and transition reinforcement	6'' x 164' roll	charcoal	1.5 lbs
		Joint Tape SA			
503677	Sika JointTape SA	urethane adhesive tape with release sheet and polyester fabric facer	3" x 50' rolls (8 rolls per carton)	white/gray	16 lbs
503678	Sika JointTape SA	urethane adhesive tape with release sheet and polyester fabric facer	6'' x 50' rolls (4 rolls per carton)	white/gray	16 lbs
		polymeric resin in exempt solvent			

	Accessories							
	Vapor Barrier							
	Sarnavap Self-Adhered							
499885	Vapor Retarder SA 31	Self-adhered vapor barrier	44" x 133' roll - Boxed	White Facer	78 lbs			
185991	Primer SA	Solvent-based standard primer for SA vapor barrier	5 gal. pail	Amber	41 lbs			
469589	Primer VC	Solvent-based Lo-VOC primer for SA vapor barrier	5 gal. pail	Amber	39 lbs			
185997	Primer WB	Water-based Lo-VOC primer for SA vapor barrier	5 gal. pail	Amber	46 lbs			

		Heavy Duty Modified Bitumen Vapo	or Retarder		
481727	Vapor Retarder TA 138	Torch Applied Sanded Finish Vapor Barrier	39" x 33' Roll	White Facer	95 lbs
481738	Vapor Retarder Primer TA	Solvent Based Primer	5 gal. pail		43 lbs
	Heav	y Modified Bitumen Sanded Finish Ba	ase - Self Adhered		
481739	Vapor Retarder SA 106		39" x 49' Roll		103 lbs
	Heav	y Modified Bitumen Sanded Finish Ba	se - Torch-Applied	I	
512554	Vapor Retarder TA 87		39" x 49' Roll		101 lbs
	Heavy Modified Bitun	nen Sanded Finish Base - Cold Applied	w/2-Comp Reactive Cure Adhe	sive	
478175	Vapor Retarder HA 87		39" x 49' Roll		102 lbs
		Polyisocyanurate Foam Insulation and	Cover Boards		
Varies	Sarnatherm Insulation	Polyisocyanurate insulation, 20 psi, 25 psi, flat stock and tapered, standard black facer and coated glass facer	4' x 4' and 4' x 8' board sizes, from 1" – 4" in thickness. Contact Sika Cus- tomer Service with project specifics	Black or White facer	varies
Varies	Securock Cover Board	Gypsum Fiber Cover Boards	4' x 4' and 4' x 8' board sizes, from ¼" – 5/8" in thickness. Contact Sika Customer Service with project specifics	Brown	varies
Varies	Securock Cover Board	Cement Cover Boards	4' x 4' and 4' x 8' board sizes in ½" thickness. Contact Sika Customer Service with project specifics	Gray	varies
Varies	Dens-Deck Prime Cover Board	Glass-Faced Treated Gypsum Cover Boards	4' x 4' and 4' x 8' board sizes, from 1/4" – 5/8" in thickness. Contact Sika Customer Service with project specifics	Green/ White	varies
		Insulation Adhesive and Fastener	rs/Plates		
437693/615	Sarnacol OM Board Adhesive	Two-component urethane foam adhesive for insulation and cover boards	10 gallon bulk pack – 5 gal. A, 5 gal. B, for use in applicator cart	Amber	93 lbs
441647	Sarnacol OM Board Adhesive	Two-component urethane foam adhesive for insulation and cover boards	1.5 liter two-cartridge kit – 4 kits to carton with applicator nozzle	Amber	15 lbs
Varies	Sarnafasteners and Sarnaplates	#12 Screws, #14 Screws, CD-10 Spikes, 3" square Galvalume plates	Range of all common lengths. Contact Sika Customer Service with specific project requirements.	Black	Varies
		Extruded Polystyrene Foam Ins	ulation	·	
Varies	Sarnatherm Insulation	Extruded polystyrene insulation, 40 psi, 60 psi, 100 psi	2' x 8' board sizes, from 1-1/2" - 2" in thickness. Contact Sika Customer Service with specific project require- ments	Blue	Varies
		Filter Fabric		I	
438294	Sika Filter Fabric	120 g/m ² nonwoven polyester fleece	48" x 150' roll	White	15 lbs
		Drainage Mats			
184382	Sika Drainage Mat 420	Cuspated dimple drain with polypropylene non-woven filter fabric and membrane pro- tection sheet	4' x 50' roll	Black	43 lbs
184384	Sika Drainage Mat 720	Cuspated dimple drain with polypropylene woven filter fabric and membrane protection sheet	4' x 50' roll	Black	52 lbs
184378	Sika Drainage Mat 1000	Geonet drain with non-woven polypropylene filter fabric and membrane protection sheet for high load conditions	4' x 50' roll	Black	65 lbs
415940	Sika Drainage Mat GRS	Inverted oversized cuspated dimple drain with non-woven polypropylene filter fabric and membrane protection sheet for vegetated roof assemblies	4' x 50' roll	Black	88 lbs

		Concrete Pavers and Pedes	tals		
Varies	Concrete Pavers and Pedestal Systems	High compressive-strength pavers and com- plementary pedestal systems	Full-line concrete pavers and pedes- tal systems from Hanover, Wausau, and Westile. Contact Sika Customer Service with specific project require- ments	Varies	Varies
		Fascia and Coping Systen	ns		
Varies	Edge Grip Fascia	Drip edge/gravel stop	Custom fascia and coping systems	Varies	Varies
Varies	Edge Grip Extruded Fascia	Extruded drip edge/gravel stop	includes a range of metal types and colors, with optional interior and	Varies	Varies
Varies	Wall Grip Coping	Coping cap	exterior corners, scupper openings,	Varies	Varies
Varies	Wall Grip Coping Plus	Coping cap with high-wind resistance	and fascia extensions. Contact Sika Customer Service with specific proj- ect requirements.	Varies	Varies
		Decorative Aggregate	25		
189192	Bucks County Tan	Broadcast Colored Quartz	50 lb. bag		50 lbs
189208	Granite	Broadcast Colored Quartz	50 lb. bag		50 lbs
189194	Ocean Blue	Broadcast Colored Quartz	50 lb. bag		50 lbs
189191	Sandstone	Broadcast Colored Quartz	50 lb. bag		50 lbs
189199	Slate	Broadcast Colored Quartz	50 lb. bag		50 lbs
189193	Canada Brown	Broadcast Colored Quartz	50 lb. bag		50 lbs
189195	Desert Sand	Broadcast Colored Quartz	50 lb. bag		50 lbs
189200	Monterrey Brown	Broadcast Colored Quartz	50 lb. bag		50 lbs
189196	Seaweed	Broadcast Colored Quartz	50 lb. bag		50 lbs
189202	Sedona Red	Broadcast Colored Quartz	50 lb. bag		50 lbs
189201	Tweed	Broadcast Colored Quartz	50 lb. bag		50 lbs
189204	Quicksand	Broadcast Colored Quartz	50 lb. bag		50 lbs
189205	Garden Pool	Broadcast Colored Quartz	50 lb. bag		50 lbs
189077	Custom Color	Broadcast Colored Quartz	50 lb. bag		50 lbs
189220	Bluejay	1/8" DecoFlake Vinyl Flakes	50 lb. box		50 lbs
189210	Bog	1/8" DecoFlake Vinyl Flakes	50 lb. box		50 lbs
189211	Glacier	1/8" DecoFlake Vinyl Flakes	50 lb. box		50 lbs
189212	Granite	1/8" DecoFlake Vinyl Flakes	50 lb. box		50 lbs
189223	Hampton	1/8" DecoFlake Vinyl Flakes	50 lb. box		50 lbs
189224	Harvest	1/8" DecoFlake Vinyl Flakes	50 lb. box		50 lbs
189355	Mediterranean	1/8" DecoFlake Vinyl Flakes	50 lb. box		50 lbs
189213	Moss	1/8" DecoFlake Vinyl Flakes	50 lb. box		50 lbs
189214	Opal	1/8" DecoFlake Vinyl Flakes	50 lb. box		50 lbs
189215	Red Rock	1/8" DecoFlake Vinyl Flakes	50 lb. box		50 lbs
189216	Sahara	1/8" DecoFlake Vinyl Flakes	50 lb. box		50 lbs
189217	Sapphire	1/8" DecoFlake Vinyl Flakes	50 lb. box		50 lbs
189218	Smoke	1/8" DecoFlake Vinyl Flakes	50 lb. box		50 lbs
189226	Surfside	1/8" DecoFlake Vinyl Flakes	50 lb. box		50 lbs
189219	Terra Cotta	1/8" DecoFlake Vinyl Flakes	50 lb. box		50 lbs
189357	Custom Color	1/8" DecoFlake Vinyl Flakes	50 lb. box		50 lbs

3.0 Where to Use

3.1 Sikalastic RoofPro Roofing and Waterproofing Membrane Applications:

- Direct-to-deck/recover roofing
- Insulated assembly roofing
- Protected membrane roofing
- Vegetated assembly roofing
- Plaza deck waterproofing
- Balcony and terrace waterproofing

3.2 Sikalastic RoofPro Membrane Applications for Refurbishment:

- Parapet wall flashings
- Below grade foundations
- Expansion joints
- Valleys
- Gutters
- Dormers/eyebrows/ledges/cornices
- Canopies
- Pool decks
- Planters
- In-wall/through-wall flashings
- Metal/bituminous/single-ply roof repairs
- Skylights
- Clerestories

3.3 Sikalastic RoofPro Advantages:

- One-component formulation eliminates mixing errors and restrictive pot life
- Moisture-triggered formulation is rainproof within minutes
- Fully reinforced with highly conformable Sika Reemat or Sika Fleece
- Highly elastic and crack bridging
- Seamless and fully adhered
- Vapor permeable
- UV resistant and non-yellowing
- Abrasion and chemical resistant
- Self-adhering and self-terminating
- Alkali resistant formulation available allows use under tile and concrete
- Conforms to complex installation geometry and challenging details

4.0 Typical Design Requirements

4.1 General

Roofing system performance is dictated in large measure by building code requirements. These requirements can include, but may not be limited to, the following considerations:

- Fire resistance (Class A, B, C)
- Wind uplift resistance (High Velocity Wind Zones)
- Hail resistance
- Thermal performance (R-value)
- Slope to drain requirements

Depending on local requirements, additional considerations such as the following may apply as well:

- Solar reflectance index based upon reflectivity and emissivity
- Rooftop drainage retention requirements
- Vegetated roofing requirements
- Vapor barrier requirements
- Air barrier continuity requirements

Sikalastic RoofPro systems address and satisfy most building code requirements.

However, it is the responsibility of the project designer and/or building owner, not Sika Corporation, to be knowledgeable about the building code requirements that will affect the design of the roofing system and to make these requirements known prior to roofing system installation.

5.0 System Guides

Sikalastic 601 BC & 621 TC Sika Reemat
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Sikalastic RoofPro System Guide with Sika Reemat							
	RoofPro Metal 10	RoofPro 10	RoofPro 15	RoofPro 20	RoofPro 25		
Substrates	Qualifying Metals	Concrete or cementi	tious, metals, wood, sing	le-ply or bituminous, spra	ay foam, stone or tile		
1. Primer	Required - see Substrate Priming Guide						
2. Base layer	621 TC (US) 20 mils wet - 80 sf/gal.	601 BC (US): 35 mils wet - 45 sf/gal.	601 BC (US): 45 mils wet - 35 sf/gal.	621 TC (US): 45 mils wet - 35 sf/gal	621 TC (US): 45 mils wet - 35 sf/gal		
3. Reinforcement	Sika Reemat Standard Sika Reemat Premium embedded in base resin layer over entire surface						
4. Top Coat I	621 TC (US) 20 mils wet - 80 sf/gal.	621 TC (US) 30 mils wet - 53 sf/gal.	621 TC (US) 30 mils wet - 53 sf/gal.	621 TC (US) 30 mils wet - 53 sf/gal.	621 TC (US) 30 mils wet - 53 sf/gal.		
5. Top Coat II 621 TC (US) 30 mils wet - 53 sf,							
Total Film Thickness	Total Film Thickness 32 mils dry 52 mils dry 59 mils dry 61 mils dry 84 mils dry						
Detailing: Sika® Flexitape Heavy centered over seams, transitions and properly treated cracks and joints.							
NOTE Coverses rates provided are estimal, enverses rates will use depending on temperature, surface roughness, pareity and application							

NOTE: Coverage rates provided are optimal - coverage rates will vary depending on temperature, surface roughness, porosity, and application technique.

Sikalastic[®] RoofPro with Sika[®] RoofPro Metal (RoofPro Metal 10)



Sikalastic[®] RoofPro with Sika[®] Reemat (RoofPro 10 and RoofPro 15)



Sikalastic® RoofPro with Sika® Reemat (RoofPro 20 and RoofPro 25)



Sikalastic 621 TC Sika Fleece

Sikalastic RoofPro System Guide with Sika Fleece						
	RoofPro 15	RoofPro 20	RoofPro 25			
Substrates	Concrete or cementitious, metals, wood, single-ply or bituminous, spray foam, stone or tile					
1. Primer	Я	Required - see Substrate Priming Guid	е			
2. Base Layer	45 mils wet - 35 sf/gal. 50 mils wet - 32 sf/gal. 60 mils wet - 26					
3. Reinforcement	Sika Fleece 120 (US)	Sika Fleece 140 (US)	Sika Fleece 170 (US)			
4. Top Coat I	30 mils wet - 53 sf/gal.	35 mils wet - 45 sf/gal.	40 mils wet - 40 sf/gal.			
Tota Film Thickness 61 mils dry 69 mils dry 85 mils dry						
Detailing: Sika® Elexitane Heavy cer	Detailing: Sika® Elexitane Heavy centered over seams transitions and properly treated cracks and joints					

Detailing: Sika[®] Flexitape Heavy centered over seams, transitions and properly treated cracks and joints.

NOTE: Coverage rates provided are optimal - coverage rates will vary depending on temperature, surface roughness, porosity, and application technique.

Sikalastic[®] RoofPro with Sika[®] Fleece (RoofPro 10, 15, 20)



Sikalastic 624 WP Sika Reemat & Fleece

Sikalastic RoofPro WP System Guide with Sika Reemat							
	RoofPro WP 15 RoofPro WP 20 RoofPro WP 25						
Substrates Concrete or cementitious, metals, wood, single-ply or bituminous, spray foam, stone or tile							
1. Primer	. Primer Required - see Substrate Priming Guide						
2. Base Layer45 mils wet - 35 sf/gal.45 mils wet - 35 sf/gal.45 mils wet - 35 sf/gal.							
3. Reinforcement	Sika Reemat Pre	mium embedded in base resin layer o	ver entire surface				
4. Top Coat I	30 mils wet - 53 sf/gal.	40 mils wet - 40 sf/gal.	30 mils wet - 53 sf/gal.				
5. Top Coat II			30 mils wet - 53 sf/gal.				
Total Film Thickness 53 mils dry 60 mils dry 75 mils dry							
Detailing: Sika® Flexitape Heavy centered over seams, transitions and properly treated cracks and joints.							
			1. 1. 11.				

NOTE: Coverage rates provided are optimal - coverage rates will vary depending on temperature, surface roughness, porosity, and application technique.



Sikalastic RoofPro WP System Guide with Sika Fleece						
	RoofPro WP 15	RoofPro WP 20	RoofPro WP 25			
Substrates Concrete or cementitious, metals, wood, single-ply or bituminous, spray foam, stone or tile						
1. Primer	Required - see Substrate Priming Guide					
2. Base Layer 45 mils wet - 35 sf/gal. 50 mils wet - 32 sf/gal. 65						
3. Reinforcement	Sika Fleece 120 (US)	Sika Fleece 140 (US)	Sika Fleece 170 (US)			
4. Top Coat	25 mils wet - 64 sf/gal.	35 mils wet - 45 sf/gal.	40 mils wet - 40 sf/gal.			
Total Film Thickness	50 mils dry	60 mils dry	75 mils dry			
Detailing: Sika® Flexitape Heavy centered over seams, transitions and properly treated cracks and joints.						
NOTE: Coverage rates provided an technique.	e optimal - coverage rates will vary dep	ending on temperature, surface roug	nness, porosity, and application			





Sikalastic 641 Lo-VOC Sika Reemat & Fleece

Sikalastic RoofPro System Guide with Sika Reemat								
	RoofPro Metal 10	RoofPro 10	RoofPro 15	RoofPro 20	RoofPro 25			
Substrates	Qualifying Metals	Concrete or cementit	ious, metals, wood, sing	le-ply or bituminous, spra	ay foam, stone or tile			
1. Primer		Required - see Substrate Priming Guide						
2. Base layer	20 mils wet - 80 sf/gal.	30 mils wet - 53 sf/gal.	50 mils wet - 32 sf/gal.	50 mils wet - 32 sf/gal.	50 mils wet - 32 sf/gal.			
3. Reinforcement	3. Reinforcement Sika Reemat Standard Sika Reemat Attack Standard							
4. Top Coat I	20 mils wet - 80 sf/gal.	30 mils wet - 53 sf/gal.	20 mils wet - 80 sf/gal.	30 mils wet - 53 sf/gal.	23 mils wet - 69 sf/gal.			
5. Top Coat II					23 mils wet - 69 sf/gal.			
Total Film Thickness	36 mils dry	53 mils dry	62 mils dry	71 mils dry	85 mils dry			
Detailing: Sika® Flexitape Heavy centered over seams, transitions and properly treated cracks and joints.								
NOTE: Coverage rates provided are optimal - coverage rates will vary depending on temperature, surface roughness, porosity, and application technique.								

Sikalastic[®] RoofPro with Sika[®] RoofPro Metal (RoofPro Metal 10)



Sikalastic® RoofPro with Sika® Reemat (RoofPro 10,15, 20)



Sikalastic[®] RoofPro with Sika[®] Reemat (RoofPro 25)



Sikalastic RoofPro 641 Lo-VOC System Guide with Sika Fleece						
	RoofPro 15	RoofPro 20	RoofPro 25			
Substrates	Concrete or cementitious, metals, wood, single-ply or bituminous, stone					
1. Primer	Required - see Substrate Priming Guide					
2. Base Layer	45 mils wet - 35 sf/gal.	50 mils wet - 32 sf/gal.	66 mils wet - 24 sf/gal.			
3. Reinforcement	Sika Fleece 120 (US)	Sika Fleece 140 (US)	Sika Fleece 170 (US)			
4. Top Coat	25 mils wet - 64 sf/gal.	30 mils wet - 53 sf/gal.	34 mils wet - 47 sf/gal.			
Total Film Thickness	62 mils dry	71 mils dry	89 mils dry			
Detailing: Sika® Flexitape Heavy centered over seams, transitions and properly treated cracks and joints.						

NOTE: Coverage rates provided are optimal - coverage rates will vary depending on temperature, surface roughness, porosity, and application technique.



Sikalastic 644 Lo-VOC Sika Reemat & Fleece

Sikalastic RoofPro System Guide with Sika Reemat						
	RoofPro 15	RoofPro 20	RoofPro 25			
Substrates	Concrete or cementitious, metals, wood, single-ply or bituminous, spray foam, stone or tile					
1. Primer	Required - see Substrate Priming Guide					
2. Base layer	45 mils wet - 35 sf/gal.	45 mils wet - 35 sf/gal.	45 mils wet - 35 sf/gal.			
3. Reinforcement	Sika Reemat Premium embedded in base resin layer over entire surface					
4. Top Coat I	25 mils wet - 64 sf/gal.	30 mils wet - 53 sf/gal.	25 mils wet - 64 sf/gal.			
5. Top Coat II			25 mils wet - 64 sf/gal.			
Total Film Thickness	56 mils dry	60 mils dry	76 mils dry			
Detailing: Sika® Flexitape Heavy centered over seams, transitions and properly treated cracks and joints.						
NOTE: Coverage rates provided are optimal - coverage rates will vary depending on temperature, surface roughness, porosity, and application technique.						



Sikalastic RoofPro 644 Lo-VOC System Guide with Sika Fleece						
	RoofPro 15	RoofPro 20	RoofPro 25			
Substrates	Concrete or cementitious, metals, wood, single-ply or bituminous, stone					
1. Primer	Required - see Substrate Priming Guide					
2. Base Layer	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 Coat	25 mils wet - 64 sf/gal.	25 mils wet - 64 sf/gal.	35 mils wet - 45 sf/gal.			
Total Film Thickness	56 mils dry	60 mils dry	76 mils dry			
Detailing: Sika® Flexitape Heavy centered over seams, transitions and properly treated cracks and joints.						
NOTE: Coverage rates provided are optimal - coverage rates will vary depending on temperature, surface roughness, porosity, and application technique.						



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6.0 Health and Safety

Refer to product labels and Safety Data Sheets (SDS) for specific health and safety information on the products referenced in this Manual. In order to minimize worker exposure good workplace practices are necessary.

6.1 General Precautions

Keep flammable liquids away from all sources of heat, flame and sparks. Avoid eye and skin contact. Wash thoroughly after handling materials. Store containers in a cool, dry, well-ventilated area, and keep tightly closed when not in use.

6.2 Ventilation

Use only in areas with adequate air movement to remove vapors and prevent atmospheric concentrations of vapors or mists from exceeding current Permissible Exposure Limits (PEL) listed on the MSDS, Provide adequate ventilation for workplace as well as any area where vapors may migrate or be vented, Ventilate interior and exterior application areas and occupied spaces adjacent to application areas during application and for 24 hours minimum after application or until vapor concentrations are below the PEL.

6.3 Personal Protection and Equipment

Wear safety glasses or chemical goggles, impermeable gloves and long-sleeve clothing. Provide a facility at job site for workers to changed clothes before leaving for the day, and wash contaminated clothing before reuse. Use NIOSH approved respirators equipped for organic vapors and dust/mist for exposure levels below the PEL and for worker comfort. In confined areas, if spraying, or if vapor concentrations are unknown or above the PEL, a full face, supplied air respirator rated for isocyanates should be worn. The concentration of volatiles is found by sampling the air in the workplace and surrounding areas by a certified industrial hygienist or qualified testing laboratory.

6.4 Non-Worker Considerations

Consult with adjacent property managers and owners and take necessary steps to prevent vapors from migrating into their buildings through openings and air intakes. Seal doors, windows, air intakes, elevators and other openings that will allow vapors to migrate into occupied spaces, Consider the need to shut off mechanical fresh air intakes until vapors have dissipated as well as applying at night, on weekends or holidays to avoid exposure of building occupants.

7.0 Tools and Equipment

7.1 Checklist:

- Phenolic resin/solvent resistant roller covers (1/2 inch nap), heavy duty frames and extension handles 4 inch for detailing, and 9, 12 or 18 inch for base and top coats.
- ☑ Chip brushes for detailing
- ☑ Wet film thickness gauges
- Denatured alcohol for cleaning
- ☑ Rags or towels
- ☑ Mixing pails
- ☑ Measuring containers
- ☑ Duct tape or blue tape for masking
- Scissors, razor knife, razor blades, tape measure, flat blade screwdriver, 5 in 1 scraper
- 60 grit sandpaper or vibratory sander for proud fiber removal
- ☑ Drop cloth or polyethylene sheeting
- Mixing drill and appropriately sized mixing paddles for primers
- ☑ Drum opener
- Sikaflex joint sealant, caulking gun and coving/finishing tools
- SikaRepair, SikaTop, or SikaQuick cementitious repair mortars
- Sikadur crack and surface profile repair resins
- 🗹 🔹 Backer rod and bond breaker tape
- ☑ Shot blaster or scarifier
- 🗹 Grinder
- 🗹 🛛 Broom, shovel, blower and vacuum
- Moisture meter or moisture test materials
- ☑ Work lights and extension cords
- Hand truck for moving materials
- ☑ Coveralls and rubber boots
- ☑ Rubber and leather gloves
- ☑ Goggles or appropriate eye protection
- ☑ NIOSH approved respirators (as required)

8.0 Surface Preparation

8.1 Concrete

Concrete should be cleaned and prepared to achieve a laitance and contaminant free, open textured surface by blast cleaning or equivalent mechanical means. Required profile is CSP (Concrete Surface Profile) 3 - 4 per ICRI (International Concrete Repair Institute) guidelines. Remove dust, laitance, grease, curing compounds, bond inhibiting impregnations, waxes, and any other contaminants.

Structures should be inspected to determine surface tensile strength, overall compressive strength, moisture content and movement, presence of contaminants, evidence of shrinkage, thermal movement or structural movement. Problems stemming from physical abuse, chemical contamination or design error will require different methods of repair. A change in the use of the facility can also subject the Sikalastic RoofPro System to a different set of service parameters from those for which it was originally designed.

Concrete should have a minimum compressive strength of 24.13 MPa (3500 psi), and should be cured a minimum of 7 days and aged a minimum of 21-28 days, including curing time, before applying the Sikalastic RoofPro roofing/waterproofing membrane. Moist or sheet curing methods should be used, as opposed to chemical curing, which may interfere with the bond of the membrane system. Generally, the membrane system should only be installed on structural concrete with dense stone aggregates, as moisture content of cured concrete should be no more than 4% by weight. Use of lightweight aggregates should be avoided, as they may have lower compressive strength and generally will result in concrete moisture content over 5% and even up to 20% when cured.

The concrete surface should exhibit minimum tensile bond strength of 1.4 MPa (200 psi) or 100% cohesive failure in the concrete substrate, per the pull-off strength procedure described in ASTM D7234-12: Standard Test Method for Pull-Off Adhesion Strength of Coatings on Concrete Using Portable Adhesion Tes-ters.

Concrete structures that have been subjected to mechanical damage caused by impact or abrasion, chemical attack, or reinforcing steel corrosion should be restored to provide a uniform, sound substrate for membrane application. Deteriorated concrete is typically removed and the surrounding sound concrete is saw-cut using procedures described in ICRI No. 310.1R-2008. Sika provides a wide range of replacement, patching and repair materials. Consult your Sika representative for recommendations based on project requirements.

Surface voids, excess porosity, and elevated moisture content of a concrete deck can cause pinholes and other adverse effects on the performance of the Sikalastic RoofPro System. If voids are not filled prior to application, trapped air may expand to create a condition known as "out-gassing", resulting in the formation of bubbles during or immediately after base coat installation. This can be worsened by water vaporizing within the concrete, as well as by membrane application during mid-day when the air and substrate temperatures are increasing. Bubbles that pop and back fill are not a problem. However, porosity in the concrete surface can result in pinholes that do not pop and backfill, resulting in avenues for moisture and moisture born chemical intrusion.

If pinholing is an issue or if measures are taken to minimize their occurrence, the effect of surface voids, excess porosity, and elevated moisture content can usually be addressed by the application of cementitious repair mortars and epoxy-based surfacings and primers, and by working during cooler times of the day or in the evening.

Rough edges and protrusions in the surface of the concrete, such as trowel chatter, mortar splatter, fins, ridges or sharp projections should be removed during surface preparation to avoid a non-uniform surface to apply the Sikalastic RoofPro System. Surface irregularities will reflect through the installed roofing/waterproofing membrane system.

Drainage at the membrane level is important as well. A monolithic concrete substrate slope of a minimum 1/8 in/ft should be maintained. Slope is best achieved with a monolithic pour as opposed to separate concrete fill. Consult Sika for various methods to create slope to drain or treat low areas and depressions.

8.2 Steel, Copper and Aluminum

Structural steel decks should be a minimum of 24 gauge Type B decking, with side and end laps secured to steel purlins or bar joists in accordance with standard industry practices using welds and/or Tek-type screws. Structural steel decking should be galvanized or painted to resist corrosion. Structural steel decking is not a suitable substrate for the direct installation of Sikalastic RoofPro membrane – the installation of insulation, coverboard, and/or plywood is required. Consideration must be given to the ability of the covering material to span the deck flutes without breaking or deflecting.

Standing seam-type structural metal decking should be a minimum of 24 gauge steel or 0.60" aluminum, with side and end laps secured to steel purlins or bar joists in accordance with the manufacturer's recommendations using Tek-type screws. Clip-type securement is typically used to allow thermal expansion/contraction of the decking. Structural steel decking should be galvanized to resist corrosion.

Standing seam-type non-structural metal roof panels should be a minimum of 24 gauge steel, 0.50" aluminum, or 0.40" copper with side and end laps secured to steel purlins or bar joists in accordance with the manufacturer's recommendations. Clip-type securement is typically used to allow thermal expansion/contraction of the roof panels. Copper roof panels can also be installed in a flat-seam configuration with soldered seams.

All loose metal panels should be resecured to the structure, and any damaged/rusted metal should be removed and replaced in kind prior to the application of any membrane system.

All surfaces to be coated should be thoroughly cleaned by conventional means. Steel is ideally prepared by blast cleaning to SSPC SP10 (near white metal). Where blast cleaning is not permitted metal preparation by power tools to SSPC SP3 or SSPC SP11 is acceptable. Stainless steel must be abraded to create an anchor profile for the Sika Primer. Non-ferrous metals are prepared by removing deposits of dust and oxidation and abrading to shiny metal. Wire brushing can be used on soft metals, such as copper. Ensure that surfaces are free from visible dampness and that all dust and loose, friable material is completely removed.

Standing seam-type steel and metal roof panels are typically finished with a fluoropolymer or enamel-type coating, which may require additional surface preparation to achieve adequate adhesion of the Sikalastic RoofPro membrane.

8.3 Plywood

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 membrane system. Plywood should be at least ½" thick and attached and supported according to the APA Plywood Construction Guide and other APA literature, using only non-rusting screws as fasteners. A good practice would be to recess or counter sink fasteners 1/8 to ¼" and fill with Sikaflex sealant. Suitable edge support to prevent differential deflection between panels should be provided. Panel edges should be tongue and groove or supported on solid blocking. Space panels 1/8 to 3/16" at panel ends and fill joints flush with Sikaflex sealant. Seams should generally be detailed with embedded fabric reinforcement placed in membrane detail coat.

Any damaged/rotted wood should be removed and replaced in kind prior to the application of any Sikalastic RoofPro membrane system.

8.4 Vertical and Incidental Substrates

The vertical surfaces to which the roofing/waterproofing membrane is adhered should have a clean, sound finish, free from moisture, untreated cracks and bond inhibiting materials. All incidental substrates, such as metal, PVC and coated materials should be cast in place or firmly anchored to prevent any horizontal shear of the installed membrane system. Joints at edges or any substrate that is not firmly anchored should be treated as expansion joints terminating on the deck substrate. Metal should be thoroughly cleaned by grinding or blast cleaning followed by solvent wiping before primer application.

8.5 Existing Roofing and Membranes

The suitability of an existing roofing/membrane system to serve as a substrate for the application of a new roofing system is contingent on the integrity of the existing roofing membrane/system, the securement of the existing roofing/membrane system to the structure, and the adhesive bond of the new roofing membrane to the existing membrane surface.

All existing roofing or membranes being considered for recover should be sound, well adhered and without voids or defects. Existing roofing membranes being considered for recover should have a moisture scan performed to identify any possible wet insulation. All wet insulation or trapped moisture must be removed and replaced with like materials. Seal all major cracks and repair any voids before cleaning.

Power wash and use a biodegradable non-sudsing detergent with clean water rinse as required to provide a clean substrate to receive the intended membrane system.

8.6 Gypsum and Cement Based Sheathing

Sheathing boards should be clean, dry and dust free. Gypsum boards shall be treated for water resistance, and all sheathing boards must be recommended for use in exterior wall or roof applications by their manufacturer. Damaged or contaminated boards should be removed and replaced. Gaps and voids should be addressed with Sikaflex sealant prior to membrane system installation. Seams should generally be detailed with embedded fabric reinforcement placed in membrane detail coat or self-adhering fabric-faced tape.

8.7 All Other Substrate Surfaces

Consult the Sikalastic technical data sheet and/or Sika Technical Services.

9.0 Priming

Refer to the Primer Selection Table to select an appropriate primer for properly evaluated and prepared substrates. 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.

9.1 Primer Selection Table

Sikalastic RoofPro Priming Guide								
Substrate	Remark	Concrete Primer 280 g/L	Concrete Primer Lo-VOC 95 g/L	DTE Epoxy Primer 16 g/L	Bonding Primer 12.5 g/L	EP Primer Sealer 78 g/L	Reactivation Primer 385 g/L	Consult Sika
CONCRETE	(1)							
LIGHTWEIGHT STRUCTURAL CONCRETE	(1)							-
GYPSUM AND CEMENT BASED ROOF BOARDS								
BRICK, STONE	(3)							
BITUMINOUS SUBSTRATE								
Asphalt, Bituminous Felts, Bituminous Coatings, Granulated or Smooth SBS & APP Cap Sheets	(2,3)					-		
SINGLE PLY ROOFING MEMBRANES								
Hypalon, TPO, EPDM, PVC	(3)							
ROOF TILES (UNGLAZED)	(3,4)							
POLYESTER (GLASS FIBER REINFORCED)	(3)							
POLYURETHANE FOAM - SPRAYED OR SLAB STOCK					-			
METALS								
Aluminum, Galvanized, Cast Iron, Copper, Lead, Brass, Stainless Steel, Steel, Zinc	(3)					-		
PRE-COATED METAL	(3)							
PAINTS								
Paints & Coatings	(3,6)							
Aluminized Solar Reflective Coatings	(3)							
WOOD - TIMBER & PLYWOOD	(5)							
EXISTING SIKALASTIC ROOFPRO MEMBRANES	(7)							
APPROXIMATE POT LIFE	n/a	45 min- utes	45 minutes	45 minutes	12 hours	1 hour	Indefinite	
CURING TIME	n/a	30 min- utes at 68°F	45 minutes at 68°F	8 hours at 68°F	2 hours at 68°F	8-10 hours at 77°F	4 hours at 68°F	

(1) New cementitious substrates must be Portland base and be cured min. 14 days.

(2) The presence of volatiles 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

(6) Silicone-based paints and coatings are not acceptable

(7) Required at tie-ins once 7 day recoat window has been exceeded

9.2 Sika Concrete Primer

Sika Concrete Primer is a quick-dry two-component polyurethane-based primer.

Packaging

Sika Concrete Primer is packaged in both 4.5 L and 11.5 L kits.

Mixing

Premix Part A with a drill and appropriately sized paddle mixer (Jiffy type). Pour entire contents of Part B into Part A and mix together until a homogenous mixture and uniform color is achieved (typically 3 minutes) using care to avoid entrapment of air.

Application

Apply Sika Concrete Primer by roller at an approximate coverage rate of 200-350 sf/gal. Ensure a uniform application without puddles and dry spots.

9.3 Sika Concrete Primer Lo-VOC

Sika Concrete Primer Lo-VOC is a liquid applied, single component, rapid curing, high solids, moisture cured primer

Packaging

Sika Concrete Primer is packaged in 5 gallon pail.

Mixing

No mixing necessary.

Application

Apply by brush or phenolic resin core roller at an approximate coverage rate of 200 - 350 sf/gal. Correct amount of primer

will saturate the substrate and leave a slight film on the substrate top surface. Apply evenly without puddling.

9.4 Sikalastic DTE Epoxy Primer

Sika DTE Epoxy Primer is a damp tolerant two-component epoxy-based primer.

Packaging

Sika DTE Epoxy Primer is packaged in a 1 gallon kit.

Mixing

Premix Part A with a drill and appropriately sized paddle mixer (Jiffy type). Pour entire contents of Part B into Part A and mix together until a homogenous mixture and uniform color is achieved (typically 3 minutes) using care to avoid entrapment of air.

Application

Apply Sika DTE Epoxy Primer by roller at an approximate coverage rate of 100 - 200 sf/gal. Ensure a uniform application without puddles and dry spots.

9.5 Sikalastic Bonding Primer

Sika Bonding Primer is a two-component water-borne epoxy-based primer.

Packaging

Sika Bonding Primer is packaged in a one gallon kit.

Mixing

Premix Part A with a drill and appropriately sized paddle mixer (Jiffy type). Pour entire contents of Part B into Part A and mix together until a homogenous mixture and uniform color is achieved (typically 3 minutes) using care to avoid entrapment of air.

Application

Apply Sika Bonding Primer by roller at an approximate coverage rate of 200-350 sf/gal. Ensure a uni form application without puddles and dry spots.

9.5 Sikalastic EP Primer/Sealer

Sika EP Primer/Sealer is a two-component epoxy-based primer.

Packaging

Sika EP Primer/Sealer is packaged in a one gallon kit.

Mixing

Premix Part A with a drill and appropriately sized paddle mixer (Jiffy type). Pour entire contents of Part B into Part A and mix together until a homogenous mixture and uniform color is achieved (typically 3 minutes) using care to avoid entrapment of air.

Application

Apply Sika EP Primer/Sealer by roller at an approximate coverage rate of 100 - 250 sf/gal. Ensure a uniform application without puddles and dry spots.

9.6 Sika Reactivation Primer

Sika Reactivation Primer is a moisture-triggered polyurethane-based primer. It is intended for application to existing Sikalastic RoofPro membrane that is to be overcoated, repaired, or otherwise modified. In addition, Sika Reactivation Primer is intended to be applied to recently installed RoofPro membrane over 7 days old at tie-ins, between applications of Sikalastic RoofPro base and top coats, and between Sikalastic RoofPro top coats and surfacing coats.

Packaging

Sika Reactivation Primer is packaged in a one gallon kit.

Mixing

No mixing required

Application

Clean localized area with a scrub brush or pad, and clean larger areas with a pressure washer at approximately 2000 psi and biodegradable non-sudsing detergent with clean water rinse. Allow to dry prior to application of Reactivation Primer. In all cases, membrane must be clean and dry.

Apply Reactivation Primer by roller at an approximate coverage rate of 250 sf/gal. Ensure a uniform application without puddles and dry spots.

10.0 Detailing

10.1 Non-structural cracks up to 1/16 inch

Detail application not required. Apply embedment/base resin layer as normal.

10.2 Non-structural cracks between 1/16 and 1/4 inch

Rout and seal with Sikaflex sealant. Apply 40-45 mil resin layer embedded with Sika Flexitape Heavy centered over crack. Apply embedment/base layer as normal.

10.3 Cracks and joints between 1/4 and 1 inch

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" wide Sika Flexitape Heavy centered over crack or joint. Apply embedment/base layer by terminating Sika Reemat at edges of crack or joint overlapping onto the Sika Flexitape Heavy a minimum of 2 inches on both sides.

10.4 Metal, Plywood, Roof Cover Board and Cement Board Joints and Seams

Apply 40-45 mil resin layer embedded with Sika Flexitape Heavy, or apply fabric-faced Sika SA Joint Tape. Apply embedment resin layer as normal.

10.5 Transitions Between Dissimilar Materials

Apply 40-45 mil resin layer embedded with Sika Flexitape Heavy centered over transition. Apply embedment resin layer as normal.

10.6 90° Transitions

Install a ½ to 1" tooled cant cove of Sikaflex sealant. Locally reinforce with 40-45 mil resin layer embedded with Sika Flexitape Heavy as required by project specific details. Apply embedment resin layer as normal.

For specific or complicated detailing, please consult with Sika Tech Field Service Department or your local Sika Tech Field Service Representative.

11.0 Membrane and Flashing Application

Sikalastic RoofPro membranes for the field and detail locations consist of a Sikalastic saturating resin and either a Reemat chopped-strand fiberglass or a non-woven polyester Fleece reinforcement.

11.1 Sikalastic Saturating Resins

General

All Sikalastic saturating resins are single-component and require no mixing. They are all packaged in 5 gallon containers. Sikalastic saturating resins are applied with phenolic core rollers or natural bristle brushes.

Sikalastic 601 BC

Sikalastic 601 BC is a cost-effective single-component moisture-triggered polyurethane saturating resin intended to be used as the base resin layer in some 10 year and 15 year warranted membrane assemblies that utilize Reemat reinforcement. Standard color is red.

Sikalastic 621 TC

Sikalastic 621 TC is a single-component moisture-triggered polyurethane saturating resin intended to be used as the top resin layer in some 10 year and 15 year warranted membrane assemblies that utilize Reemat reinforcement. In addition, Sikalastic 621 TC is used as the base and top resin layers with all other assemblies utilizing Reemat and with all assemblies utilizing non-woven polyester fleece. Standard colors are energy-reflective white, pearl gray, steel gray, charcoal, mushroom, and copper green.

Sikalastic 624 WP

Sikalastic 624 WP is a single-component moisture-triggered alkaline-resistant polyurethane saturating resin intended to be used as the base and top resin layers in all assemblies utilizing Reemat or non-woven polyester fleece where a cementitious overburden such as tile in a cementitious setting bed or other overburden is intended to be installed. Standard colors are white and pearl gray.

Sikalastic 641 Lo-VOC

Sikalastic 641 Lo-VOC is a single-component moisture-triggered polyurethane saturating resin intended to be used as the base and top resin layers in all assemblies utilizing Reemat or non-woven polyester fleece where a low odor membrane is required due to sensitive application conditions such as schools, hospitals, and residences. Sikalastic-641 Lo-VOC is meets the strict SCAQMD regulations in California (< 50 g/l). Standard colors are energy-reflective white, pearl gray, standard gray, steel gray, mushroom, and copper green.

Sikalastic 644 Lo-VOC

Sikalastic®-644 Lo-VOC is a cold applied , highly elastic, aliphatic, single component, alkali resistant, moisturetriggered polyurethane resin designed for easy application as part of Sikalastic®-644 Lo-VOC RoofPro waterproofing systems.

11.2 Sikalastic Reinforcement Fabrics

Sika Reemat Premium

Sika Reemat Premium is a chopped-strand fiberglass mat intended to be used in 15, 20, and 25 year warranted assemblies

Sika Reemat Standard

Sika Reemat Standard is a chopped-strand fiberglass mat intended to be used in 10 year warranted assemblies as well as to reinforce some Sika wall coatings.

Sika 120 Fleece

Sika 120 Fleece is a non-woven needle-punched polyester fleece intended to be used in 15 year warranted assemblies

Sika 140 Fleece

Sika 140 Fleece is a non-woven needle-punched polyester fleece intended to be used in 20 year warranted assemblies

Sika 170 Fleece

Sika 170 Fleece is a non-woven needle-punched polyester fleece intended to be used in 25 year warranted assemblies

Sikalastic Flexitape Heavy

Sikalastic Flexitape Heavy is a 3" or 6" wide woven nylon tape intended to be saturated in a base resin layer at all changes of plane, over cracks, and over joints in plywood and cover board sheets.

Sika Joint Tape SA

Sika Joint Tape SA is a self-adhering polymeric rubberized tape with woven polyester facer intended to be adhered at substrate joints and angle changes prior to application of Sikalastic membrane.

11.3 System Application

Refer to the System Assembly Table for the selected Sikalastic RoofPro system being installed. Refer to separate system Product Data Sheet for application methods, coverage rates, cure times and recoat windows. Always allow each resin application to cure thoroughly before applying subsequent resin layers.

Sikalastic 601 BC (US) as a Base Coat with Sika Reemat

Apply Sikalastic 601 BC per RoofPro System Guide wet film thickness with a ½ inch nap phenolic resin core roller. Material can also be squeegee or spray applied, in which case it should be back rolled prior to embed-ding Sika Reemat. Place Sika Reemat in wet base resin layer overlapping seams a minimum of 2 inches (place frayed edge over cut edge of roll) and apply wet roller to topside to conform and saturate completely to the substrate. After approximately 5 minutes the binder will begin to dissolve allowing the fiber strands to con-form 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% RH or until tack free before applying 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, allowing to dry prior to application of Sika Reactivation Primer.

Sikalastic 621 TC (US), 624 WP, 641 Lo-VOC, and 644 Lo-VOC as a Base Coat with Sika Reemat

Apply specified Sikalastic resin per RoofPro System Guide wet film thickness with a ½ inch nap phenolic resin core roller. Material can also be squeegee or spray applied, in which case it should be back rolled prior to embedding Sika Reemat. Place Sika Reemat in wet base resin layer overlapping seams a minimum of 2 inches (place frayed edge over cut edge of roll) and apply wet roller to topside to conform and saturate completely to the substrate. 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% RH or until tack free before applying 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, allowing to dry prior to application of Sika Reactivation Primer.

Sikalastic 621 TC (US), 624 W, 641 Lo-VOC, and 644 Lo-VOC as Top Coats with Reemat Premium

Apply specified Sikalastic resin at the coverage rate in the RoofPro System Guide with ½-¾ nap phenolic resin core roller. Material can also be squeegee or spray applied in which case it should also be back rolled. In the case of RoofPro 25 allow the first top resin layer to cure 12 hours at 70°F and 50% RH or until tack free before applying second top resin layer. Keep clean and dry and apply additional resin layers as system requires within 7 days. If window is exceeded clean with non-sudsing detergent and clean water rinse, allowing to dry prior to application of Sika Reactivation Primer.

Sikalastic 621 TC (US), 624 WP (AR), 641, and 641 Lo-VOC with Sika Fleece

This is a wet on wet application process. Apply 2/3 of the Sikalastic resin specified in the RoofPro System Guide with a ½ inch phenolic resin core roller. Immediately place specified Sika Fleece into the wet resin overlapping seams a minimum of 3 inches along the edges and 6 inches end to end. Apply wet roller to topside with light pressure to saturate from the bottom and ensure air pockets are completely removed. Immediately apply all of remaining 1/3 of Sikalastic resin specified in the RoofPro System Guide to ensure even and complete saturation from topside and uniform texture.

12.0 Aggregate & Flake Surfacing

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

12.1 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 the specified Sikalastic 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 surfaceto encapsulate the aggregate in the Sikalastic resin.

12.2 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 the specified Sikalastic 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.

12.3 Decorative Quartz and Decorative Flake Options

The Decorative Quartz and Decorative Flake options are intended for use for applications where enhanced slip resistance, physical protection of the roofing membrane, and a decorative element is required.

Apply the specified Sikalastic 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 colored quartz aggregate or synthetic flakes. Remove excess aggregate/flakes after cure. Seal with a coat of Sikalastic 748 PA at 15 mils wet film thickness.

Decorative flakes can also be seeded at less than full broadcast quantities. Remove excess aggregate/ flakes after cure. Seal with a coat of Sikalastic 748 PA at 15 mils wet film thickness.

12.4 Full Broadcast Adhesion Key Option

The Full Broadcast Adhesion Key option is intended for use for applications where adhesion of the overburden to the waterproofing membrane is required.

Apply Sikalastic 624 WP resin at 15 mils wet film thickness to the installed, cured Sikalastic 624 WP membrane system. While the resin is still wet broadcast to rejection (full broadcast, beach) with kilndried, iron free aggregate. Remove excess aggregate after cure. DO NOT seal.

12.5 Aggregate Selection

Use clean, rounded or semi-angular, oven dried quartz sand with a minimum hardness of 6.5 per the Moh's scale. It should be supplied in pre-packaged bags and free of metallic or other impurities. The following size gradations are recommended:

- 16-30 or 20-40 mesh for pedestrian traffic systems
- Sika Broadcast Quartz Blends or equivalent for Decorative Quartz systems
- 16-30 mesh for full broadcast adhesion key systems

Quality of uniformity, shape and purity varies widely throughout the US, in some cases even from the same supplier, and care should be taken to verify suitability prior to use. The following sources are known to provide aggregates that meet the above criteria:

- Carmeuse Industrial Sands, Brady, TX or Colorado Springs, CO
- Unimim, Ottawa, MN, Junction City, GA, or Voca, TX
- Sika Corporation, Wheeling, IL (Broadcast Quartz only)

Of particular concern is to use quartz sand with minimal iron oxide/iron-containing impurities, as ironbased contaminants may cause rust stains in the finished coating system. It is highly recommended that the quartz sand supplier provide certifications that specifically list iron oxide/iron content – 0.05% maximum is suggested.

12.6 Flake Selection

Use virgin vinyl flakes, supplied in pre-packaged bags and free from impurities, from the following source:

• Sika Corporation, Sheboygan Falls, WI (DecoFlake only)

In all cases, pre-installation mockups to verify application methods and substrate conditions as well as desired skid resistance and aesthetics are highly recommended.

13.0 General Application Techniques

13.1 Coverage Rates

Coverage rates are suggested as a guide only. Applicators must take into account actual coverage rates based on job site conditions, surface texture and human error. As a guide it is suggested to use wet film thickness gauges and to monitor square foot coverage on a per gallon or pail basis.

13.2 Brush Application

Brush application is usually only used for small detail areas like drains, scuppers, pipe penetrations, etc. Use chip brushes for application of the Sikalastic resins. Use of brushes is a one-time only application and a new brush will be required once the resin sets in the brush.

13.3 Roller Application

Use heavy gauge roller frames and ½ inch phenolic resin core rollers. When applying base coat always refer to the technical data sheets for coverage rates and wet film thickness, but as a rule of thumb one full dip of the ½ inch roller placed in the center of the width of the reinforcing roll then rolled both directions not going any wider than the 9 inch width of the roller will leave roughly 40-45 mils WFT. Check this application technique with wet film thickness gauges to ensure that proper base coat thickness is being achieved. Top coat applications should always be checked on a regular basis with wet film thickness gauges to ensure proper coverage. It is recommended that a cross hatch rolling pattern be used when applying top coat by roller to achieve a more uniform application. Use of roller covers is a one-time only application and a new roller cover will be required once the resin sets in the roller cover. Soak roller frames in solvent in a bucket with a tightly fitting lid to assist with extending the life of the roller frame and keep it rolling smoothly.

13.4 Squeegee Application

All squeegee applications whether for base coat or top coat must be back rolled before Reemat reinforcement embedment and to leave a smooth top coat. Sikalastic saturating resins are not self-leveling products. Use an appropriately size notched squeegee to achieve the desired wet film thickness specified in the RoofPro System Guides. The roughness of the substrate will wear the squeegee, so check the film thickness on a regular basis with wet film thickness gauges and replace worn squeegee blades as required to maintain proper mil thickness during application.

Walking in the wet Sikalastic resin with spike shoes is acceptable, but once Reemat reinforcing scrims are laid into the wet resin do not walk over the reinforcing scrim with spike shoes. Work only as much square footage as can be embedded before skinning of the surface and only as wide a run as can be reached with the roller and extension handle.

13.5 Spray Application

Airless spray equipment should achieve a minimum of 3000 psi at 1-gallon per minute delivery rate. Use appropriately sized hoses for the distance the materials are being pumped, i.e. the longer the distance the larger diameter hose should be used to deliver product to the spray gun. Use spray tip sizes from .021 to .035. Caution: Spraying these products could lead to overspray drifting onto structures and vehicles where it is not wanted.

14.0 Insulated Built-up Assembly Application

14.1 General

Insulated Built-Up Assemblies include the following additional components installed under the Sikalastic RoofPro membrane:

- Sarnavap SA Vapor Barrier
- Sarnatherm Polyisocyanurate Foam Insulation (Flat Stock and Tapered)
- DensDeck Prime or Securock Cover Board
- Sarnafasteners and Sarnaplates
- Sarnacol Insulation Adhesive
- Joint Tape
- Modified Bitumen Membrane Base Sheets

Refer to the individual product data sheets for additional installation information.

14.2 Sarnavap SA Vapor Barrier

The Sarnavap SA vapor barrier is a peel & stick bituminous self-adhering vapor barrier. It has a textured polyethylene facer that will accept Sarnacol Insulation adhesive, but is not intended for the direct application of Sikalastic RoofPro membranes.

Priming of the substrate surface is required prior to Sarnavap SA vapor barrier installation. Three SA primers are available: SA Primer, VC Primer (low voc), WB Primer (water based).

The Sarnavap SA vapor barrier is suitable for application to concrete, metal, and plywood decks.

In addition to its use as a vapor barrier, the Sarnavap SA vapor barrier can also be used as a temporary roof membrane, and can be left exposed for up to 6 months.

Installation

The Sarnavap SA vapor barrier must be applied to a clean and dry substrate surface.

Apply the selected Sarnavap SA primer to the substrate surface and allow to cure tack free.

Roll out the Sarnavap SA vapor barrier prior to removing the backer sheet in order to establish correct positioning of the sheet. Once the vapor barrier has been properly positioned, remove the backer sheet and lay the vapor barrier onto the primed substrate surface. Roll the vapor barrier with a 100 lb. flooring roller to ensure a positive bond.

Overlap Sarnavap SA vapor barrier by 3" for side laps and 6" for end laps.

14.3 Sarnatherm Polyisocyanurate Foam Insulation (Flat and Tapered)

Sarnatherm polyisocyanurate foam insulation is available in many board thicknesses, and in two compressive strengths – standard 20 psi, and 25 psi for high load conditions. Sarnatherm insulation is available with a standard organic black facer, and with a coated glass facer for improved stability and curl resistance, particularly in applications where the facer may become wet.

Installation

Insulation must be installed as dry, undamaged boards, with staggered joints. Joint width should be 1/4" maximum, and should be carefully fitted against curbs, walls, wood blocking, and penetrations with a 1/2" maximum gap. All gaps between adjacent insulation boards and between insulation boards and perimeter conditions/penetrations must be filled with sealant or a flexible spray foam.

Insulation may be installed in one or multiple thicknesses. Joints between insulation layers must be offset from the underlying joints by 12" minimum.

Insulation must be positively secured to the structural deck or existing roofing system, and multiple insulation layers must be secured to the underlying layer. Positive securement is achieved by the use of Sarnacol low-rise foam adhesive, Sarnafasteners and Sarnaplates, or a combination of both.

14.4 Tapered Insulation Systems

Sarnatherm polystyrene foam insulation is also available as a tapered insulation system, in all compressive strengths and facer types referenced for flat insulation.

The most common insulation taper is ¼" : 12", with a ½" : 12" insulation taper for crickets and saddles located between scuppers and drains, and behind large curb-mounted rooftop equipment. This taper is generally sufficient to provide positive slope to drain and to accommodate minor deck irregularities. More gradual tapers of 1/8" : 12" and 3/16" : 12" are available but not commonly used. All tapered insulation boards are provided in a 4' x 4' panel size.

Tapered insulation systems require a project-specific, roof area-specific design that incorporates the exact drain and scupper locations (within 6" measured off of two points of reference), the location of large equipment curbs (greater than 4' in any dimension), and the overall dimensions of the roof area/ areas to receive a tapered insulation system. It is the responsibility of the project design professional or contractor to provide accurate roof drawings with all required dimensions to Sika Customer Service. A tapered insulation plan with insulation board count will be generated from the roof drawings provided.

Most tapered insulation systems include a base layer of flat stock insulation boards, sometimes followed by additional flat stock, with a tapered panel installed on top. The thickness of the tapered panels varies to create a consistent tapered surface. Tapered insulation board panels are referred to with letter designations (eg. A, B, C, X, Y) to identify their taper and thickness, and this designation is used on the tapered insulation plan to specify the location of each board.

As a general rule, the base layer of flat stock insulation is mechanically attached or adhered to the substrate, as described for flat insulation installation, with all subsequent insulation boards adhered to the underlying insulation.

14.5 Dens Deck Prime and Securock Cover Board

The installation of a 1/2" thick hard-surfaced cover board over polyisocyanurate foam insulation is required by Sika. The hard-surfaced cover board can be Dens-Deck Prime, Securock Fiber Gypsum Board, or Securock Cement Board. Hard-surfaced cover boards provide a sound and even surface for the application of a Sikalastic RoofPro membrane system, and help to resist roof system damage from pedestrian traffic, rolling carts, hand trucks, and other lightweight wheeled equipment.

For installations of a hard-surfaced cover board applied over an existing roof assembly or concrete deck substrate that is uneven or otherwise unsuitable for direct membrane application, the use of Securock

Cement Board is recommended due to its high resistance to moisture. Existing roof assemblies and concrete decks can contain moisture at levels that could result in long-term damage to gypsum-based cover boards. Hard-surfaced cover boards are generally available in 4' x 4' and 4' x 8' panel sizes.

Installation

Cover boards must be installed as dry, undamaged boards, with staggered joints. Joint width should be 1/4" maximum, and should be carefully fitted against curbs, walls, wood blocking, and penetrations with a 1/2" maximum gap. All gaps between adjacent cover boards and between cover boards and perimeter conditions/penetrations must be filled with Sikaflex sealant.

Cover board joints must be offset from the underlying insulation joints by 12" minimum. This minimizes thermal losses through insulation joints.

Cover boards must be positively secured to the structural deck or existing roofing system, and multiple insulation layers must be secured to the underlying layer. Positive securement is achieved by the use of Sarnacol low-rise foam adhesive, or by the use of Sarnafasteners and Sarnaplates. However, adhesive application is recommended wherever possible. This minimizes thermal losses from thermal bridging through the metal fasteners.

14.6 Attachment with Mechanical Fasteners - Minimum Requirements

Insulation/coverboards are typically secured to metal decks and often times wood decks, and occasionally to concrete decks, by the use of Sarnafasteners and Sarnaplates. Mechanically attached insulation/ coverboards may be 4' x 4' or 4' x 8' in dimension. Install Sarnafasteners and Sarnaplates at a minimum of 1 fastener & plate per 2 sq.ft. in an FM approved pattern, starting within 6" of the board edge. Ensure that the proper length and type of fastener is used:

Steel Decks

#12 or #14 screws of a length ³/₄" longer than the thickness of the insulation/coverboard assembly being attached.

Wood Decks

#12 or #14 screws of a length that will pass through the insulation/coverboard assembly into the deck, and will achieve 1" thread penetration into the deck, or will extend through the deck by ½" minimum in the event that the wood substrate is less than 1" thick.

Concrete Decks

#14 screws or CD-10 spikes of a length that will pass through the insulation into the deck, and will achieve 1-1/4" penetration minimum. Note: all attachment to concrete decks requires predrilling with the correct diameter drill bit as provided with the fasteners.

Multiple layers of insulation/coverboard may be mechanically attached simultaneously. As an alternative, the first layer of insulation is mechanically attached, and all subsequent insulation/coverboard layers are adhered in low-rise foam adhesive.

NOTE: These are minimum attachment requirements. Building code/design requirements may require additional securement.

14.7 Attachment with Low-Rise Foam Adhesive - Minimum Requirements

Insulation/coverboards that are adhered with low-rise foam must be a maximum of 4' x 4' in dimension. Low-rise foam adhesives beads are applied to the substrate surface at a minimum of 12" oc, beginning 6" away from the board edge, or in accordance with an FM-approved pattern. The beads can be applied either linearly or in a serpentine pattern. Apply the insulation/coverboards into the adhesive beads once the adhesive has turned to a pink color and press the boards down to achieve a positive bond between insulation/coverboards and adhesive. After approximately 5 minutes, walk on the insulation/coverboards to further ensure a positive bond.

NOTE: These are minimum attachment requirements. Building code/design requirements may require additional securement.

14.8 Joint Detailing

All cover board joints must be stripped in following board priming and tack-free curing.

Installation

Board joints can be stripped in with 3" or 6" wide Sika Flexitape saturated in the same Sikalastic resin used for the roofing/waterproofing membrane. A minimum of a 1" bond must be provided on either side of the board joint.

Alternatively, an approved self-adhering 3" or 6" wide peel & stick tape can be used to strip in the board joints. A minimum of a 1" bond must be provided on either side of the board joint. Roll the installed tape with a steel lap seam roller to ensure a positive bond.

14.9 Modified Bitumen Membrane Base Sheets

The installation of an approved modified bitumen membrane base sheet over the hard-surfaced cover board is an acceptable alternative to joint detailing with Sika Flexitape or self-adhering tape. The modified bitumen membrane base sheet may also serve as a temporary waterproofing membrane or as the base sheet layer in a hybrid roof assembly.

The modified bitumen membrane must be granule-surfaced or sanded, and can either be torch-applied or self-adhered. Modified bitumen membrane that is adhered in a solvent-based or water-based adhesive is not recommended due to the potential for solvent/moisture entrapment beneath the modified bitumen membrane, as this has been shown to affect long-term system performance. Modified bitumen membrane that is adhered in a two-component reactive cure adhesive is acceptable.

Installation

Prime the hard-surfaced cover board with a primer recommended by the modified bitumen membrane manufacturer and allow to cure tack-free.

Install the modified bitumen membrane in accordance with the membrane manufacturer's recommendations and requirements. Typical sheet overlaps are 4" for side laps and 6" for end laps. Roll self-adhered sheets with a 100 lb. flooring roller to ensure a positive bond to the cover board.

Modified bitumen membrane sheets should be carefully fitted against curbs, walls, wood blocking, and penetrations with a ¼" maximum gap. All free edges of modified bitumen membrane sheets must be sealed with a ¾" cove bead of Sikaflex sealant to provide a temporary watertight condition.

15.0 Plaza Deck/Protected Membrane Assembly Application

15.1 General

Plaza Deck/Protected Membrane Assemblies include the following additional components installed above the Sikalastic RoofPro membrane:

- Sika Drainage Mat
- Extruded Polystyrene Foam Insulation
- Non-woven Polyester Filter Fabric
- Concrete/Wood Pavers and Pedestal Systems
- Stone Ballast

Refer to the individual product data sheets for additional installation information.

15.2 Sika Drainage Mats

Sika drainage mats are available in three types typically used in a plaza deck system:

420: 15,000 psf polypropylene dimple drain with membrane protective bottom facer and a non-woven polypropylene top filter sheet. Suitable for applications with concrete and wood pavers, stone ballast, pavers in a sand setting bed, and other hardscape materials typically installed with a vegetated system.

720: 21,000 psf polypropylene dimple drain with membrane protective bottom facer and a woven polypropylene top filter sheet. Suitable for applications with cast-in-place concrete pads and slabs, and pavers and tile in a thinset or cementitious setting bed.

1000: 40,000 psf polyethylene entangled fiber drain with membrane protective bottom facer and non woven polypropylene top filter sheet. High compressive strength for applications where heavy applied loads such as vehicular traffic are anticipated.

Installation

Drainage mats are installed loosely laid directly over the Sikalastic membrane, but can be temporarily secured in place with Sikalastic 11FC sealant. Drainage mats should be installed to within ½" of adjacent mats as well as at perimeter walls, curbs, and penetrations. Drainage mats are provided with a 4" width of filter fabric along their long edge that is placed over adjacent mats at side joints. Separate 12" widths of filter fabric are applied over butt joints. Separate pieces of filter fabric are to be extended vertically at perimeter walls, curbs, and extended to match the level of the intended overburden.

15.3 Sarnatherm Extruded Polystyrene Foam Insulation

Sarnatherm extruded polystyrene foam insulation is available in many board thicknesses, and in three compressive strengths – standard 40 psi, 60 psi for high load conditions, and 100 psi for very high load conditions. Sarnatherm extruded polystyrene foam insulation is a closed cell foam, with little tendency to absorb water, and is therefore suitable for use above the roofing/waterproofing membrane where it will become wet on a periodic but regular basis. The selection of compressive strength is based on the type and weight of the overburden to be applied, as well as on the intended use of the plaza deck/ roof area. It is the responsibility of the design professional or contractor to determine the appropriate compressive strength for the project.

Installation

Insulation must be installed as undamaged boards, with staggered joints. Joint width should be ¼" maximum, and should be carefully fitted against curbs, walls, wood blocking, and penetrations with a ½" maximum gap. Insulation may be installed in one or multiple thicknesses. Joints between insulation layers must be offset from the underlying joints by 12" minimum.

15.4 Sika Filter Fabric

Sika Filter Fabric (Sika 120 Fleece) is required to be applied over extruded polystyrene insulation if insulation has been installed above the membrane for all applications where stone ballast is to be installed. This prevents stone fines from working between the insulation boards, and provides a protection layer above the Sikalastic RoofPro membrane. Sika Filter Fabric is required to be applied directly over the Sikalastic RoofPro membrane if concrete pavers are to be installed directly over the membrane without a pedestal system. This provides a protection layer above the Sikalastic RoofPro membrane. Alternatively, a layer of Sika Drainage mat can be installed in lieu of the Sika Filter Fabric.

Installation

Sika Filter Fabric is rolled out over the substrate surface and installed without wrinkles. Filter Fabric overlaps are 6" for both side and end laps.

Extend Sika Filter Fabric vertically at penetration and perimeter conditions to prevent stone fines from working under the fabric and abrading the membrane surface.

15.5 Concrete Pavers and Pedestal Systems

Concrete pavers installed as roof ballast or as a functional plaza deck trafficable system must be hydraulically pressed or manufactured in some other manner so that a high compressive and flexural strength is achieved, and susceptibility to freeze-thaw damage is minimized. Concrete pavers available through Sika meet this requirement.

Typical concrete paver size is $2' \times 2' \times 2''$ in thickness, although other sizes are available.

Concrete pavers installed as part of a plaza deck assembly are typically installed on pedestal systems or into a sand bed to allow height adjustment to achieve an even finished surface.

Concrete paver systems require a project-specific, roof area-specific design that incorporates roof access locations, substrate slope, desired height of the finished concrete paver installation, aesthetic issues regarding any patterns or other finished system requirements, and the overall dimensions of the roof area/areas to receive a concrete paver system. It is the responsibility of the project design professional or contractor to determine all design-related requirements, paver count, and number/height of pedestal components as part of the submittal package and to submit this information to Sika Customer Service.

Installation

Concrete pavers must be installed in accordance with the paver manufacturer's recommendations and guidelines, and in accordance with the project specifications. Cracked, chipped, and otherwise damaged pavers should not be installed.

In general, full pavers are to be installed wherever possible, with cuts and alterations to the pavers made to accommodate penetrations and perimeter edge conditions. Pavers smaller than half-sections are often not installed, and instead replaced with stone ballast.

Concrete pavers utilizing a pedestal system must be installed in a manner that fully supports each paver corner and achieves a level surface. The use of blocks of extruded polystyrene insulation as a pedestal support system is not an acceptable practice for a Sikalastic system assembly.

Concrete pavers installed in a sand bed must be installed over a layer of Sika Drainage Mat.

15.6 Stone Ballast

Stone ballast installed as part of a protected membrane assembly must be of a size gradation and weight per square foot to meet the recommendations of ANSI/SPRI RP-4, as follows:

- #4 Gradation (3/4" to 1-1/2" diameter), 10 lbs./sf minimum
- #2 Gradation (1-1/2" to 2-1/2" diameter), 13 lbs./sf minimum

Stone ballast may either be crushed stone, or rounded river-washed stone. The selection of stone ballast is the responsibility of the design professional or contractor, and must take into consideration wind resistance requirements of the application based upon geographic location, building height, building exposure, and parapet wall height.

The use of stone ballast in locations subject to hurricane-force winds is not recommended due to the potential for stone ballast to become airborne projectiles, which is particularly the case for buildings without sufficient parapet height (typically 3 ft.).

Installation

Stone ballast must be installed over a layer of Sika Drainage Mat.

Stone ballast shall be spread evenly over the roof surface in accordance with the design specifications.

16.0 Vegetated/Hardscape Roof Assembly Application

16.1 General

Vegetated/Hardscape Roof Assemblies include the following additional components installed above the Sikalastic RoofPro membrane:

- Root Barrier
- Water Retention Mat
- Sika Drainage/Water Retention Mat
- Extruded Polystyrene Foam Insulation
- Breathable Separation Sheet
- Non-woven Polyester Filter Fabric
- Growing Media or Dirt
- Plants and Hardscape

Refer to the individual product data sheets for additional installation information.

16.2 Root Barrier

The purpose of a root barrier is to protect the waterproofing membrane from damage due to root activity. Sikalastic membranes are naturally root resistant; however, if the use of a root barrier is specified, an acceptable 10 mil polyethylene root barrier is available from the following source:

Root Barrier WSF-40, by ZinCo Corporation, Stoughton, MA

Note: There are certain plants, including bamboo, which may require a more robust root barrier due to the aggressive nature of their root system. Consult a horticulturist or other vegetated roof professional for recommendations.

Installation

Root barriers are installed loosely, laid directly over the Sikalastic membrane, but can be temporarily secured in place with Sikalastic 11FC sealant. Root barriers should be extended vertically at all perimeter walls, curbs, and penetrations to a height equal to the thickness of the growing medium. Overlap root barriers at side and end laps a minimum of 12".

16.3 Water Retention/Protection Mat

The purpose of a water retention/protection mat is to protect the waterproofing membrane from physical damage, and to absorb and retain moisture beneath the growing media where it can naturally rehydrate the growing media through capillary action. If a water retention/protection mat is specified, an acceptable 150 mil polypropylene mat is available from the following source:

• Protection Mat SSM-45, by ZinCo Corporation, Stoughton, MA

Installation

Water retention/protection mats are installed loosely, laid directly over the Sikalastic membrane or root barrier. Water retention/protection mats should be extended vertically at all perimeter walls, curbs, and penetrations to a height equal to the thickness of the growing medium. Overlap water retention/protections mats at side and end laps a minimum of 4".
16.4 Sarnatherm Extruded Polystyrene Foam Insulation

Sarnatherm extruded polystyrene foam insulation is available in many board thicknesses, and in three compressive strengths – standard 40 psi, 60 psi for high load conditions, and 100 psi for very high load conditions. Sarnatherm extruded polystyrene foam insulation is a closed cell foam, with little tendency to absorb water, and is therefore suitable for use above the roofing/waterproofing membrane where it will become wet on a periodic but regular basis. The selection of compressive strength is based on the type and weight of the overburden to be applied, as well as on the intended use of the plaza deck/ roof area. It is the responsibility of the design professional or contractor to determine the appropriate compressive strength for the project.

Installation

Insulation must be installed as undamaged boards, with staggered joints. Joint width should be ¼" maximum, and should be carefully fitted against curbs, walls, wood blocking, and penetrations with a ½" maximum gap.

Insulation may be installed in one or multiple thicknesses. Joints between insulation layers must be offset from the underlying joints by 12" minimum.

16.5 Sika Filter Fabric

Sika Filter Fabric (Sika 120 Fleece) is required to be applied over extruded polystyrene insulation if insulation has been installed above the membrane. This prevents condensation/water entrapment within the extruded polystyrene insulation layer.

Installation

Sika Filter Fabric is rolled out over the substrate surface and installed without wrinkles. Filter Fabric overlaps are 6" for both side and end laps.

Extend Sika Filter Fabric vertically at penetration and perimeter conditions to prevent stone fines from working under the fabric and abrading the membrane surface.

16.6 Sika Drainage Mat

Sika drainage mats are available in three types typically used with a vegetated/hardscape system:

420: 15,000 psf polypropylene dimple drain with membrane protective bottom facer and a non-woven polypropylene top filter sheet. Suitable for applications with concrete and wood pavers, stone ballast, pavers in a sand setting bed, and other hardscape materials typically installed with a vegetated system.

720: 21,000 psf polypropylene dimple drain with membrane protective bottom facer and a woven poly propylene top filter sheet. Suitable for applications with cast-in-place concrete pads and slabs, and pavers and tile in a thinset or cementitious setting bed.

GRS: 9,500 psf large inverted polystyrene dimple drain with membrane protective bottom facer and nonwoven polypropylene top filter sheet. Inverted dimples provide a water retention capability for applications with vegetative overburden.

Installation

Drainage mats are installed loosely laid directly over the Sikalastic membrane, but can be temporarily

secured in place with Sikalastic 11FC sealant. Drainage mats should be installed to within ½"adjacent mats as well as at perimeter walls, curbs, and penetrations. Drainage mats are provided with a 4" width of filter fabric along their long edge that is placed over adjacent mats at side joints. Separate 12" widths of filter fabric are applied over butt joints. Separate pieces of filter fabric are to be extended vertically at perimeter walls, curbs, and penetrations and extended to match the level of the intended overburden.

16.7 Growing Media

Growing media (soil) for vegetated roof assemblies varies in content depending on the type and size of the plantings, as well as the intended use of the vegetated roof system.

Vegetated roof systems intended primarily for roof drainage control and minimal plant maintenance utilize a shallow bed of growing media (4 – 6" depth). This growing media consists of a very high percentage of gravel and other inorganic materials, with minimal organic content.

Vegetated roof systems intended for use as flower gardens, grasslands, meadows, and mixed-planting beds tend to use a lesser percentage of inorganic materials, with increased organic content and the use of more typical soils to achieve the necessary volume (12 – 24" depth).

Note: The type and depth of growing media must be selected based upon the type of plants that will be installed. Consult a horticulturist or other vegetated roof professional for recommendations.

16.8 Extensive Systems

Extensive systems are vegetated roof systems intended primarily for roof drainage control and minimal plant maintenance, including minimal or no irrigation. These types of systems typically involves a type of plant called sedum. There are many types of sedum available, but they are generally low-height (3 – 6"), become dormant during periods of minimal rainfall, and then become green as rainfall increases.

Installation

Sedums can be planted in a variety of ways, including cuttings, plugs, hydroseeding, sod-type blankets, or pregrown trays. Some maintenance is required during the first year after planting, primarily weeding and limited irrigation, in order to ensure plant survivability. Good system drainage is critical for these types of applications, as root rot can occur if the system does not drain properly and too much water is retained on the roof.

16.9 Intensive Systems

Intensive systems are vegetated systems that replicate more typical vegetated environments such as gardens, grasslands, turf fields, meadowlands, etc. These systems tend to use a mixture of plants to achieve a specific aesthetic appearance. Some applications are intended to minimize maintenance, while other applications are maintenance-intensive. Built-in irrigation systems are often installed with intensive systems, as irrigation is usually required during periods of minimal rainfall and in periods of hot weather.

Installation

Intensive systems are installed in a manner similar to the installation of grade-level landscaped installations. These systems typically require regular weeding, fertilization, irrigation, and mowing for

turf fields. More maintenance is required during the first year after planting in order to ensure plant establishment, but a regular maintenance program is required every year to ensure plant survivability. Good system drainage is not as critical for these types of applications as it is for extensive systems due to the increased thickness of growing media, but it is still an important consideration.

16.10 Hardscape

Most vegetative roof assemblies are not intended for pedestrian traffic, so the installation of a walkable hardscape surface is generally required at locations where periodic maintenance-type or frequent use-based pedestrian traffic is anticipated.

Most vegetative systems include hardscape of some sort - stone ballast, tile, pavers, decking, or pavement. Stone ballast and pavers are two practical options for periodic maintenance-type pedestrian traffic; multiple hardscape options are available for terrace-type applications where hardscape is an important design element.

For limited hardscape applications such as the installation of stone ballast or pavers at the roof perimeter, at the base of walls and curbs, and at drainage locations, the use of a different assembly (eliminating components such as the root barrier, or changing the type of drainage/water retention mat, for example) is not cost effective and does not significantly affect the system performance.

For larger hardscape applications, such as terrace areas, concrete paver systems and wood decks, etc., it may be advisable to construct the roof assembly in these areas to be more like a plaza deck system assembly.

17.0 Wood Blocking and Metal Flashing

17.1 Wood Blocking

Wood blocking must be installed at perimeter edges of roofs and along the sides of expansion joints as an insulation stop for all built-up insulated systems. Wood blocking shall be 2" x 6" pressure-treated dimensional lumber for all perimeter edge applications, and shall be 2" x 4" or 2" x 6" pressure-treated dimensional lumber at expansion joints. Wood blocking shall be continuous and not shimmed, and shall be of a height to match the total insulation/cover board thickness.

Installation

The base layer of wood blocking shall be secured to the structural deck or other structural building component with FM-approved corrosion-resistant screw-type or expansion-type fasteners. A minimum of three fasteners per wood section is required, with attachment provided a minimum of 2' on center, staggered. Subsequent layers of wood blocking shall be secured to the underlying layer of wood block-ing with FM-approved corrosion-resistant screw-type fasteners a minimum of 2' on center, staggered. Wood blocking shall be installed to provide a minimum of 200 lbs. uplift resistance at any point.

17.2 Metal Edging – Shop Fabricated

Metal edging shall be secured to solid pressure-treated wood blocking at all perimeter edge applications and at expansion joints for all built-up insulated systems. Metal edging shall be secured to a solid deck substrate (concrete, plywood) for direct-to-substrate applications and other applications that do not include insulation and cover board under the membrane. The Sikalastic membrane shall be installed over the wood blocking prior to the installation of the metal edging, and an additional layer of membrane installed to strip in the metal edging flange so that the flange is sandwiched between two layers of Sikalastic membrane.

Installation

Metal edging shall be provided with a continuous cleat with a ³/₄" long 45° bent leg secured to the face of the blocking 12" on center with FM-approved corrosion-resistant screw-type fasteners, in accordance with SMACNA requirements. The gauge of the cleat shall be one size thicker than the metal edging. Metal edging shall be secured on the horizontal 4" on center staggered to the wood blocking with galvanized roofing nails with a minimum of 1" penetration into the blocking.

17.3 Sarnametal Prefabricated Edge Grip and Wall Grip

Sarnametal prefabricated Edge Grip and Wall Grip systems consist of several components including decorative fascia, securement cleats, prefabricated inside and outside corner sections, prefabricated scupper sections, and joint fittings. Edge Grip and Wall Grip systems are designed for project-specific applications, and require the submittal of Edge Grip/Wall Grip worksheets that itemize all necessary system components, provide fascia and wall dimensions, and identify the metal type, gauge and color.

Installation

Edge Grip and Wall Grip metal systems shall be installed in accordance with separate installation guidelines that are provided as part of the system.

18.0 Skylight and Clerestory Waterproofing

18.1 General

Skylight and clerestory waterproofing consists of two parts: repair and waterproofing of metal framing and mullion elements, and coating of glass/acrylic.

The repair and waterproofing of metal framing and mullion elements is performed with Sikalastic 621 or 641 resin and Reemat or fleece reinforcement. The coating glass/acrylic is performed with Sikalastic (Decothane) Clearglaze, a transparent resin. Cracks in the glass/acrylic can be reinforced and made waterproof by using Sikalastic Flexitape saturated in Sikalastic Clearglaze. The application of Sikalastic Clearglaze can improve the light transmission characteristics of scratched and pitted glass/acrylic surfaces.

Installation

Metal preparation and priming requirements are the same as for standard Sikalastic membrane installation requirements.

Joints between metal frames/mullions and glass/acrylic panels shall be sealed with a coving of Sika Hyflex 150 to provide a gradual transition.

The glass/acrylic panels must be cleaned vigorously to remove all contaminants. The glass/acrylic panels shall be primed for a 2 inch width adjacent to the metal frames/mullions with Sikalastic Clearglaze applied at 11 wet mils. Allow the Sikalastic Clearglaze to cure tack-free. Mask the glass/acrylic panels with painter's tape to achieve a sharp, consistent primer termination, making sure to remove the tape while the primer is still wet.

Install the Sikalastic membrane over metal framing and mullion elements in accordance with standard Sikalastic membrane application requirements, extending 2 inches onto the primed glass/acrylic. Allow to cure tack-free. Mask the glass/acrylic panels with painter's tape to achieve a sharp, consistent membrane termination, making sure to remove the tape while the membrane coating is still wet. The use of Reemat reinforcement will require masking of both the base resin coat and the top resin coat.

The glass/acrylic panels must be cleaned vigorously to remove all contaminants immediately prior to Sikalastic Clearglaze application. Apply Sikalastic Clearglaze over the cleaned glass/acrylic panels at 20 wet mils, utilizing foam rollers and soft nylon or natural bristle brushes. Apply the Sikalastic Clearglaze over the 2 inches of Sikalastic membrane that has been extended onto the glass/acrylic panels. Allow to cure tack-free.

Apply an additional 20 wet mils of Sikalastic Clearglaze for enhanced long-term performance.

19.0 Installation Under Tile, Concrete, and Other Overburden

19.1 General

Sikalastic membranes may be 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.

Membranes utilizing Sikalastic 624 WP saturating resins are alkaline-resistant and may be installed under tile set in a cementitious thin-set adhesive or a cementitious setting bed, under poured-in-place concrete, and under other overburden such as concrete pavers and growing media. Other Sikalastic saturating resins are not alkaline resistant and should not be used under wet-applied cementitious overburden.

19.2 Protected Membrane Assemblies

Install Sika 420 Drain Mat over the specified Sikalastic membrane prior to the installation of the extruded polystyrene insulation layer. No aggregated membrane surfacing is required.

19.3 Concrete Pavers with Pedestal Supports

Install Sika 420 Drain Mat over the specified Sikalastic membrane to provide additional protection of the membrane under the pedestal supports.

19.4 Tile Adhered in a Cementitious Thin-Set Adhesive

A full aggregate broadcast surfacing is required to provide an adhesion key for the tile adhesive. Apply a supplemental 15 wet mils of Sikalastic 624 WP resin, followed by a full broadcast of 16-30 or 12-20 kiln-dried sand to refusal, typically 40-50 lbs./100 sf. Remove all loose sand once resin has cured. Do not seal the aggregated surface.

19.5 Tile in a Cementitious Setting Bed

Install Sika 720 Drain Mat over the Sikalastic 624 WP membrane prior to installation of the cementitious setting bed, which is typically 1-1/2"-3" in thickness, and which may be sloped to create positive drainage. Secure the Sika 720 Drain Mat to the Sikalastic 624 WP membrane as required to prevent shifting during setting bed installation by spot-adhering with Sikaflex 11 FC. Bi-level drains should be installed to provide drainage capability at the membrane level as well as drainage of the finished surface.

19.6 Concrete/Asphalt Pavers in a Sand Setting Bed

Install Sika 420 Drain Mat over the Sikalastic 624 WP membrane prior to installation of the sand setting bed, which is typically either graded silica sand or a mix of sand and asphalt. Secure the Sika 420 Drain Mat to the Sikalastic 624 WP membrane as required to prevent shifting during setting bed installation by spot-adhering with Sikaflex 11 FC. Bi-level drains should be installed to provide drainage capability at the membrane level as well as drainage of the finished surface.

19.7 Vegetation and Growing Media/Soil

The selection of a vegetated overburden assembly is typically project specific and specified by a qualified design professional. At a minimum, install Sika GRS Drain Mat over the specified Sikalastic membrane prior to application of all other overburden components. Secure the Sika GRS Drain Mat to the Sikalastic membrane as required to prevent shifting during vegetative overburden assembly components by spot-adhering with Sikaflex 11 FC. Bi-level drains should be installed to provide drainage capability at the membrane level as well as drainage at grade level.

19.8 Concrete Pavement

Install Sika 1000 Drain Mat over the Sikalastic 624 WP membrane prior to application of the fresh concrete. Secure the Sika 1000 Drain Mat to the Sikalastic 624 WP membrane as required to prevent shifting during concrete placement by spot-adhering with Sikaflex 11 FC. Bi-level drains should be installed to provide drainage capability at the membrane level as well as drainage of the finished surface.

19.9 Asphalt Pavement

Install Sika 1000 Drain Mat over the specified Sikalastic membrane, followed by the installation of a ¹/₄" thick asphalt protection board. Overlap the protection board at all end and side laps by 2" min. Secure the Sika 1000 Drain Mat and asphalt protection board as required to prevent shifting during asphalt pavement placement by spot-adhering with Sikaflex 11 FC. Bi-level drains should be installed to provide drainage capability at the membrane level as well as drainage of the finished surface.

DIRECT TO SUBSTRATE

Direct to Structural Deck Assembly Direct to Existing System Assembly **Base Flashing** Wall Flashing with Metal Cap Wall Flashing with Coping Stone Metal Edge Pipe/Conduit Flashing Hot Stack Flashing Curb Flashing Irregular Penetration Flashing Drain Flashing Thru-Wall Scupper Horizontal Expansion Joint Horizontal to Vertical Expansion Joint Non-Moving Crack Repair Moving Crack Repair

BUILT-UP INSULATED

Built-Up Assembly with Cover Board Base Flashing Wall Flashing with Metal Cap Wall Flashing with Coping Stone Metal Edge Pipe/Conduit Flashing Hot Stack Flashing Curb Flashing Irregular Penetration Flashing Drain Flashing Thru-Wall Scupper Horizontal Expansion Joint Horizontal to Vertical Expansion Joint Cover Board Joint Detail Roof Zone Layout Standard Fastener Attachment FM Fastener Attachment Standard Adhesive Attachment FM Adhesive Attachment

PLAZA DECK/PROTECTED MEMBRANE

Plaza Deck Assembly with XEPS Insulation Plaza Deck Assembly without XEPS Insulation Protected Membrane Assembly with Pavers Protected Membrane Assembly with Stone Ballast Wall Flashing with Metal Cap Wall Flashing with Coping Stone Pipe/Conduit Flashing Hot Stack Flashing Curb Flashing Irregular Penetration Flashing Drain Flashing Double Level Drain Flashing Horizontal Expansion Joint Horizontal to Vertical Expansion Joint Non-Moving Crack Repair Moving Crack Repair

VEGETATED/HARDSCAPE

Vegetated Assembly – Extensive Vegetated Assembly – Extensive with Trays Vegetated Assembly – Intensive Wall Flashing with Metal Cap Wall Flashing with Coping Stone Pipe/Conduit Flashing Hot Stack Flashing Curb Flashing Irregular Penetration Flashing Drain Flashing with Access Box Drain Flashing with Access Box Drain Flashing with Perforated Stack Horizontal Expansion Joint Horizontal to Vertical Expansion Joint Non-Moving Crack Repair Moving Crack Repair













21.0 Cautions and Troubleshooting

21.1 Limitations

Common problems can be avoided by observing the following general limitations.

- To avoid dew point conditions during application, relative humidity must be no more than 95% and substrates temperature must be at least 5°F (3°C) above the measured dew point temperatures.
- Minimum ambient temperature during application of material is 36°F (2°C); maximum is 95°F (35°C). Surface temperatures must be no higher than 140°F (60°C). Frequent monitoring of ambient and substrate temperature should always be done when applying polyurethane resins. Note that low temperatures and low humidity will slow down the cure and high temperatures and high humidity will accelerate it.
- Do not apply on substrates with moisture content greater than 4% by weight, measured by Tramex Concrete Moisture Encounter meter (5% by weight when using Sikalastic DTE Primer).
- Minimum age of concrete must be 21-28 days depending on curing and drying conditions.
- Do not thin with solvents.
- Do not store materials outdoors exposed to sunlight and moisture for prolonged periods.
- 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 temperatures pinholing or blistering may occur.
- Use sunglasses with UV filter when applying highly reflective white resins.
- Do not use for indoor applications without provision for adequate ventilation.
- Do not apply cementitious products, such as tile mortar directly onto Sikalastic 621 TC, and 641 Lo-VOC. See Sikalastic 624 WP or Sikalastic 644 Lo-VOC Product Data Sheet.
- 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 will 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 loss of aggregate or permanent staining and subsequent premature failure.
- On grade concrete decks should not be covered with Sikalastic RoofPro membrane system.
- Unvented metal pan, split/sandwich slab with encapsulated membrane and/or insulation, cinder fill decks and lightweight insulating concrete overlays should not be covered with Sikalastic RoofPro membrane systems without additional deck evaluation and subsequent approval by Technical Services.
- Do not subject to continuous immersion, i.e., fountains, ponds and other water features. Ponding water is not considered to be continuous immersion.
- 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.
- Not recommended for use over ceramic tile.
- Going over asphaltic surfaces or residuals without the proper primer can lead to staining of the RoofPro membrane system due to volatile bleed.

21.2 Common Problems and Causes

Blisters

- Moisture in deck or on preceding coat
- Concrete outgassing at time of application
- Entrapping air during application

Pinholes

- Porous concrete
- Air and/or substrate temperatures rising at time of application
- Moisture in the deck
- Inadequate primer

Poor Adhesion to Concrete

- Improper surface preparation
- Hard trowel finish (surface too smooth)
- Contamination by moisture, dirt, impregnations, etc.
- Incompatibility with curing compounds or admixtures
- Lack of primer or improper mixing of primers.

Poor Intercoat Adhesion

- Recoat window missed
- Preceding coat dirty or damp
- Chemical contamination

Tenting/Voids At Changes In Plane

• Lack of care during embedding of reinforcing scrim to conform to the substrate.

Pinhole and Blister Correction

- Apply additional coat of urethane resin on falling air and substrate temperatures.
- Apply additional coat of primer before installing RoofPro membrane system.
- Cut out blisters and repair with specified RoofPro membrane resin or system.

Tenting Correction

• Cut out tented area and repair with specified RoofPro membrane resin system extending onto sound, well adhered existing RoofPro membrane by 2-3 inches.

Recoat Window Missed Correction

 Clean the surface of the RoofPro membrane and allow to dry. Apply a coat of the Sika Reactivation Primer at 300-400 ft²/gallon. Always refer to the current Product Data Sheet for full details.

22.0 Maintenance & Repair

22.1 General

In normal use, Sikalastic RoofPro roofing/waterproofing systems require no routine maintenance. However, it is strongly recommended that periodic inspections be carried out to check for damage by accidental impact or by building modifications on or through the installed Sikalastic RoofPro roofing/ waterproofing membrane system.

During the course of such inspections, sharp objects such as screws, stones, broken glass and other material should be removed from the surface in order to minimize the chances of accidental damage by subsequent foot traffic. In order to prevent damage by excessive localized loading, particularly on roofs incorporating soft insulation, a safe method of load-spreading should be placed under ladders or the supports of free standing structures on the roof. It is strongly recommended that roofs be inspected for damage following adverse weather that may reasonably be suspected to have caused building damage. It is also advisable to inspect roofing/waterproofing membrane systems after work has been carried out by other trades.

If pavers or other approved overburden are to be installed over the RoofPro membrane system then a proper drainage protection course must be used. Please consult Sika for specific requirements.

22.2 Inspections

It is strongly recommended that inspections be carried out by the client at least annually and be recorded. Inspections in spring should detect any winter related damage and in autumn should ensure that the roof or waterproofed area is cleared of leaves and other debris. Roofs and waterproofed areas in close proximity to trees, subject to high dust/dirt, other pollutants or in other high risk locations should be inspected more frequently.

The following is a list of typical areas of to inspect, although each individual installation may have other areas that require inspection:

- **General areas** remove leaves, debris, dirt and any other extraneous material. Cut back over hanging tree limbs.
- **Parapets**, curbs, flashings, covers, expansion joints/covers, and copings check exposed mem brane for damage and ensure the components themselves, sealants and pointing, are in good condition and still performing.
- Mastic joints PU sealants (or similar) application to parapets, curbs or other details does not form part of the warrantee and may require replacing as joints fatigue and sealants weather. It is recommended that any necessary replacement work must be undertaken by a trained applicator, utilizing the original contractor whenever possible. All renewals should ensure complete removal of old sealants and the correct cleaning and reinstatement of the joint.
- **Edge details, drip edges** check that edge details are properly secured to provide protection against wind uplift.
- **Membrane flashings** at walls, curbs and gutters check exposed membrane for any damage and ensure sealants, mastics and pointing are in good condition and effective. Gutters should be cleaned regularly and maintained free flowing.
- **Penetrations** and protrusions e.g. pipes, outlets, skylights, etc. check exposed membrane for any damage and ensure sealants, mastics and clamps are in good condition and effective.

The anti-slip/anti-skid finish is an optional additional coat to the RoofPro system. The longevity of this non-skid application depends on factors such as volume and type of traffic. Check this non-skid finish periodically to evaluate the condition. A reduction in the non-skid layer will obviously produce a reduction in the slip-resistance quality of the surface.

The anti-slip/anti-skid finish is not covered under warranty and should be renewed as and when necessary.

22.3 Chemical Spills

On roofing/waterproofing membrane systems where plant is installed and maintained, chemical spillage is always possible. In the event of such an accident or routine maintenance, the area should be washed down thoroughly with a domestic detergent solution and rinsed with fresh clean water until all traces of the chemical have been removed from the surface. Ensure sufficient measures are in place to prevent potentially harmful chemical from entering the water drainage system. If in doubt about chemical reagents and their effect on the RoofPro membrane system, contact Sika Technical Services. **Always refer to product SDS sheets for cleaning up chemical spills.**

22.4 Cleaning

The membrane will not ordinarily support organic growth. However, accumulated dirt on the surface due to uneven slope, bird baths, etc., may provide nutrient. Algae and other such dirt accumulations should be removed by washing with a domestic detergent solution and rinsed with clean water. Failure to remove heavy dirt accumulations may result in severe vegetation growth which could lead to damage of the membrane.

22.5 Repairs

In the event of localized damage, or to reinstate a completely seamless membrane following structural modifications, repairs can be made quickly and easily. All such repairs should be carried out by the original installing contractor whenever possible to avoid any division of responsibility.

Temporary repairs may be appropriate for short term exposure only. A full permanent repair of the Sika RoofPro system must be done at the earliest opportunity to maintain the warranty.

Typical Repair Steps:

- Cleaning with a scrub brush or pad with a low-sudsing detergent and a clean water rinse.
- Wiping with denatured alcohol and a clean rag.
- Membrane Priming with Sika Reactivation Primer.
- Membrane Installation of Sikalastic RoofPro membrane extended 2-3" beyond area to be repaired.

Areas of exposed substrate will typically require mechanical abrasion and repriming with an appropriate Sika primer.

Contact Sika Technical Services for exact repair procedures for your conditions.







The information contained in this Maintenance Guideline, including but not limited to any recommendations regarding the use and application of Sika product(s), is given in good faith based on Sika's current experience and knowledge of its products when properly stored, handled and applied under normal conditions in accordance with Sika's instructions. The information contained in this guide is valid only for the applications and uses of the Sika product(s) described herein. Any deviation from any of the instructions, uses, applications and recommendations contained in this guideline regarding the Sika product(s) will void any Sika warranty. The user of the Sika product(s) must test each product for suitability for the intended application and purpose. The user of Sika product(s) must always read and follow the warnings and instructions for each product on the current Product Data Sheet, product label and Material Safety Data Sheets prior to product use. Nothing contained in any Sika materials relieves the user of the obligation to read and follow the warnings and instructions for each Sika product as set forth in the current Product Data Sheets, product label and Material Safety Data Sheet. Product Data Sheets for the products comprising Sikalastic RoofPro Systems as well as Material Safety Data Sheet(s) for such products, are available at www.sikausa.com or by contacting 1-800-933-SIKA.

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Sika is a specialty chemicals company with a leading position in the development and production of systems and products for bonding, sealing, damping, reinforcing and protecting in the building sector and the motor vehicle industry. Sika's product lines feature concrete admixtures, mortars, sealants and adhesives, structural strengthening systems, industrial flooring as well as roofing and waterproofing systems.

Our most current General Sales Conditions shall apply. Please consult the Product Data Sheets prior to any use and processing.

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