

SECTION 07 56 00 FLUID APPLIED ROOFING

SIKALASTIC[®] ROOFPRO (DECOTHANE[®]) SYSTEM

SPEC NOTE: This specification includes materials and methods for the application of Sikalastic RoofPro roofing/waterproofing membrane direct to concrete, plywood, metal, or other approved substrate and left exposed with no overburden. Sikalastic RoofPro is a cold applied, seamless, self-flashing roofing & waterproofing system that is fully reinforced for added tensile strength. Waterproof immediately after application, Sikalastic RoofPro is guaranteed not to leak for up to twenty-five (25) years.

This specification serves as a guideline and should be adapted to suit the needs of each individual project by the designer. It is prepared in accordance with the CSI three-part section format and should be included as a separate section under DIVISION 07 - Thermal and Moisture Protection. Improvements and other changes to the contents may be made only with the written approval of the designer. Upon completion of editing, we recommend you contact your local Sika representative to review for accuracy prior to issuance for bid or construction.

PART 1 GENERAL

- 1.01 SUMMARY
- A. This section specifies all labor, materials, transportation, equipment and services necessary to install a **Sikalastic[®] RoofPro (Decothane[®])** waterproofing system, on structural concrete, plywood, metal, or other approved substrate by manufacturer and shown on the drawings and described herein.
- B. Sections Included
 - 1. Section 07 56 00 : Fluid-Applied Roofing
- C. Related Sections

1.	Section 03 00 00	:	Concrete
2.	Section 07 60 00	:	Flashing and Sheet Metal

- 3. Section 22 14 26.13 : Roof Drains
- 1.02 REFERENCES
- A. Factory Mutual (FM Global) Approval Guide
- B. American Society for Testing and Materials (ASTM) Annual Book of ASTM Standards
- C. National Roofing Contractors Association (NRCA)
- D. American Society of Civil Engineers (ASCE)

1.03 DEFINITIONS

A. Roofing Terminology: Refer to ASTM D1079 and the glossary of the National Roofing Contractors Association (NRCA) *Roofing and Waterproofing Manual* for definitions of roofing terms related to this section.

1.04 PERFORMANCE REQUIREMENTS

- Provide an installed roofing membrane that does not permit the passage of water, and will withstand the design pressures calculated in accordance with the most current revision of ASCE 7.
- B. Manufacturer shall provide all primary waterproofing materials that are physically and chemically compatible when installed in accordance with manufacturers current application requirements.

1.05 SUBMITTALS

- A. Provide product data sheets for each type of product indicated in this section.
- B. Provide manufacturers standard details and approved shop drawings for the specified system.
- C. Installer shall provide written documentation from the manufacturer of their authorization to install the system, and eligibility to obtain the warranty specified in this section.
- D. Certification showing full time quality control of production facilities and that each batch of material is tested to ensure conformance with the manufacturer's published physical properties.
- E. Certification that the waterproofing membrane meets FM Global Approval Standard 4470 for Class I roof covers, on non-combustible substrates, with a Class 1-990 wind uplift rating, a hail rating of SH and is ASTM E-108-00 Class A approved at a slope of 1 in 12.
- F. Manufacturer's certification that all waterproofing system products meet current Volatile Organic Compund (VOC) regulations as established by the State in which they are being installed; and stating total VOC content, in grams per litre, for all system components (i.e. primers, adhesives, coatings, etc.).

1.06 QUALITY ASSURANCE

- A. Manufacturer's Qualifications: Manufacturer shall demonstrate qualifications to supply materials of this section by certifying the following:
 - 1. Membrane Manufacturer must show evidence that the specified membrane has been manufactured by the same organization or direct affiliate for fifteen (15) years.
 - 2. Membrane Manufacturer shall have available an in-house technical staff to assist the contractor, when necessary, in application of the products and final inspection of the assembly.
- B. Installer's Qualifications: The Contractor shall demonstrate qualifications to perform the work of this Section by submitting the following documentation:
 - 1. Certification or license by the waterproofing membrane manufacturer as a **trained** applicator of the product the installer intends to use.
- C. Source Limitations: All components listed in this section shall be provided by a single manufacturer or approved by the primary waterproofing manufacturer.

D. Final Inspection

1. Manufacturers representative shall provide a comprehensive final inspection after completion of the waterproofing system. All application errors must be addressed and final punch list completed.

1.07 PRE-INSTALLATION CONFERENCE

A. Prior to scheduled commencement of the waterproofing installation and associated work, conduct a meeting at the project site with the installer, architect, owner, manufacturer's representative and any other persons directly involved with the performance of the work. The installer shall record conference discussions to include decisions and agreements reached (or disagreements), and furnish copies of recorded discussions to each attending party. The main purpose of this meeting is to review foreseeable methods and procedures related to waterproofing work.

1.08 REGULATORY REQUIREMENTS

- A. All work shall be performed in a safe, professional manner, conforming to all federal, state and local codes.
- B. All waterproofing system components shall meet current VOC regulations as established by the State in which they are being installed; and stating total VOC content, in grams per litre, for all system components (i.e. primers, adhesives, coatings, etc.)
- 1.09 DELIVERY, STORAGE AND HANDLING
- A. Deliver all waterproofing materials to the site in original containers, with factory seals intact.
- B. Store all pail goods in their original undamaged containers in a clean, dry location within their specified temperature range.
- C. Do not expose materials to moisture in any form before, during, or after delivery to the site. Reject delivery of materials that show evidence of contact with moisture.
- D. Remove manufacturer supplied plastic covers from materials provided with such. Use "breathable" type covers such as canvas tarpaulins to allow venting and protection from weather and moisture. Cover and protect materials at the end of each work day. Do not remove any protective tarpaulins until immediately before the material will be installed.
- E. Materials shall be stored above 55°F (12.6°C) a minimum of 24 hours prior to application.

1.10 PROJECT CONDITIONS

- A. Weather
 - 1. Proceed with waterproofing only when existing and forecasted weather conditions permit.
 - 2. Membrane installation can proceed when ambient temperatures are above 40°F (4.4°C), provided the substrate temperature is a minimum of 5°F above the dew point.
 - 3. It is recommended that overnight temperatures be above 40°F (4.4°C) when applying the membrane system. Consult with the manufacturer for cold weather installation procedures when ambient temperatures are expected to fall below the minimums established herein.

- B. All surfaces to receive the membrane shall be free from visible water, dew, frost, snow and ice.
- C. Application of membrane should be conducted in well ventilated areas.
- D. Over its service life, do not expose membrane to a constant temperature below -58°F (-50°C) or in excess of 176°F (80°C) (i.e., hot pipes and vents or direct steam venting, etc.).
- E. **Sikalastic RoofPro (Decothane)** is <u>non-flammable</u> and VOC compliant. Consult container or packaging labels and Material Safety Data Sheets (MSDS) for specific safety information.
- F. **Sikalastic RoofPro (Decothane)** is resistant to gasoline, paraffin, fuel oil, mineral spirits, and moderate solutions of acids and alkalis, acid rain and detergents. Some low molecular weight alcohols can soften. Any exposure to foreign materials or chemical discharges must be presented to membrane manufacturer for evaluation to determine any impact on the waterproof membrane assembly performance prior to warranty issuance.
- G. Contractor shall ensure adequate protection during installation of the waterproofing system. Sikalastic RoofPro (Decothane) may be applied to properly prepared concrete decks, at a wet film thickness of 15-20 mils, for use as a temporary waterproofing barrier. Sikalastic RoofPro (Decothane) applied as a temporary waterproofing membrane does not have to be removed prior to installation of the specified waterproofing system.
- 1.11 WARRANTY
- A. Each warranty varies in scope and terms. Contact Sika for exact warranty terms and conditions to meet the specific project requirements.
- B. Warranties available from the manufacturer: ***(Edit to project requirements)***
 - 1. **Watertightness Warranties**; includes labor and material. Duration *10, 15, 20 or 25* Years.

****CONTACT SIKA FOR EXACT WARRANTY TERMS AND CONDITIONS.****

PART 2 PRODUCTS

- 2.01 ACCEPTABLE MANUFACTURER
- A. Sika Coporation

201 Polito Avenue Lyndhurst, NJ 07071 Phone: 800-933-7452 Fax: 201-922-6225 www.sikaconstruction.com

- B. Substitutions: As approved in writing prior to receipt of bid and membrane must meet or exceed the performance requirements set forth in 2.04C and ASTM D7311-07.
- 2.02 CONCRETE REPAIR
 - A. A single component, rapid hardening, early strength gaining, cementitious, Patching material for concrete, **SikaQuick**[®] **1000**, or equal approved by membrane manufacturer.

2.03 SEALANTS and PRIMERS

- A. A rapid curing, water-based primer consisting of two components for brick, concrete unit masonry (CMU), wallboard, exterior grade gypsum sheathing and previously coated surfaces, **Sika Bonding Primer**.
- B. A two-component, solvent free, epoxy primer and damp proof membrane, which is designed to be applied to damp or new concrete with high moisture drive prior to the application of Decothane systems, **Sikalastic DTE Primer**.
- C. A two-component, rapid curing, high solids, solvent based, dampproof primer designed for sealing cementitious substrates, **Sika Concrete Primer (Quick Cure Primer)**.
- D. A two-component, cyclo-aliphatic, amine cured material with a high level of corrosion resistance for metal, modified bitumen surfaces, and chemically treated wood, **Sikalastic EP Primer/Sealer (Epoxy Primer)**.
- E. A single component, polyurethane based primer for the reactivation of existing Sikalastic RoofPro (Decothane) systems prior to overcoating, **Sika Reactivation Primer.**
- F. One part polyurethane sealant suitable for sealing reglet terminations, cracks and providing a suitable transition between the waterproofing system and roof penetrations prior to the installation of the membrane system. Meets or exceeds ASTM C-920-87, Type S, Grade NS, Class 25, **Sikaflex**[®] **1a**, or equal as approved by membrane manufacturer.
- 2.04 FLUID APPLIED MEMBRANE MATERIALS
- A. A conformable, random woven fiberglass mat for total reinforcement of the roofing/waterproofing membrane system, which provides greater impact resistance and greater resistance to excessive thermal and structural movement while maintaining elasticity and membrane film integrity, **Sika Reemat**.
- B. A nylon mesh for local reinforcement of the roofing/waterproofing membrane at structural cracks, expansion joints, and transitions between dissimilar materials, **Sika Flexitape Heavy**.
- C. A single component, cold, fluid applied, moisture triggered, aliphatic, polyurethane meeting the following physical properties and ASTM D7311-07: <u>Standard Specification for Liquid Applied,</u> <u>Single Component, Moisture-Triggered, Aliphatic Polyurethanes used in Roofing</u>, **Sikalastic 601 BC and Sikalastic 621 TC (Decothane EC and Decothane SP)**.

PHYSICAL PROPERTIES	ASTM	REQUIREMENTS
VISCOSITY	D2196	5 to 20 Pa.s (pascal.seconds)
VOLUME SOLIDS	D2697	76% minimum
WEIGHT SOLIDS	D1644	83% minimum
SAG RESISTANCE	D4400	No sag at 700 micrometers
		(0.028 in. / 28 mil)

LIQUID PROPERTY REQUIREMENTS

FILM PHYSICAL PROPERTY REQUIREMENTS

PHYSICAL PROPERTIES	ASTM	REQUIREMENTS
TENSILE STRENGTH (TENSION)	D412	MIN 1.86 MPa (270lb/in ²)
ELONGATION	D412	MIN 200%
ACCELERATED WEATHERING	G154	NO CRACKING OR CHECKING
FL/UV – 5000 HOURS		
WATER VAPOR TRANSMISSION	E96	MAXIMUM 8.5 gms/m ² / day
PERMEABILITY / PERMEANCE		(0.033 perm-inches)
FLEXIBILITY –	D522	PASS
MANDREL BEND		NO CRACKING OR FLAKING
TEAR RESISTANCE	D624	MINIMUM 5.8 kN/m (33 lbf/in)
INDENTATION HARDNESS	D2240	82 Durometer Units (+/- 5 units)
DYNAMIC PUNCTURE RESISTANCE	D5635	MINIMUM 15 joules (357
		ft.poundals)
STATIC PUNCTURE RESISTANCE	D5602	MINIMUM 20.7 kg. (45.5 lbs.)

2.05 FLASHING MATERIALS

A. The fluid-applied membrane system is seamless and self-flashing. No special flashings are required for system installation.

PART 3 EXECUTION

- 3.01 INSPECTION
- A. Verify that the surfaces and site conditions are ready to receive work.
- B. Verify that the deck is supported and secured.
- C. Verify that the deck is clean and smooth, free of depressions, waves, or projections, and properly sloped to drains, valleys, eaves, scuppers or gutters.
- D. Verify that the deck surfaces are dry and free of ice or snow.
- E. Verify that all roof openings or penetrations through the roof are solidly set.
- 3.02 SUBSTRATE PREPARATION ***(Select deck type, delete others)***
- A. Structural Concrete Deck
 - 1. Minimum deck thickness for structural concrete is 4" (10.2 cm).
 - 2. Only poured in place concrete decks that provide bottom side drying are acceptable. Decks that are installed over non-vented metal decks or pans that remain in place may trap moisture in the deck beneath the roof system and may not be acceptable. Contact manufacturer for approval.
 - 3. Structural Weight Concrete: Recommend 28 days, minimum 14 days cure, dependent upon substrate moisture (less than 20% WME on a protimeter is acceptable), prior to application of the membrane.
 - 4. Lightweight Structural Concrete: Recommend 28 days, minimum 14 days dependent upon substrate moisture (less than 20% WME on a protimeter is acceptable), prior to application of membrane. Venting of the deck from the underside is recommended to facilitate drying.

- 5. The above minimum cure/dry times are recommended based upon basic concrete fundamentals and experience. **Sikalastic RoofPro (Decothane)** can be applied to any cementitious substrate with a moisture content of less than the maximum 20% wood moisture equivalent (WME) as measured by a protimeter. Contact manufacturer for specifics when less than the minimum drying time is desired.
- 6. Light broom finish equivalent.
- 7. Curing agents must be checked for compatibility with waterproofing materials.
- 8. Sumps for the roof drains should be provided in the casting of the deck.
- 9. In all retrofit roof applications, it is required that deck be inspected for defects.
- 10. Using most effective means, prepare structural concrete deck to minimum CSP 3-5 standards, as required by manufacturer based upon actual field conditions, as outlined in International Concrete Repair Institute (ICRI) Guideline No. 03732: <u>Selecting and</u> <u>Specifying Concrete Surface Preparation for Sealers, Coatings, and Polymer Overlays.</u>
- 11. Patch all unsound or defective concrete with repair mortar acceptable to membrane manufacturer.

B. Plywood Deck

- 1. Plywood sheathing must be exterior grade, minimum 4 ply, and not less than 15/32" (12 mm) thick.
- 2. Preservatives or fire retardants used to treat the decking must be compatible with roofing materials.
- 3. The deck must be installed over joists that are spaced 24" (61 cm) o.c. or less.
- 4. The deck must be installed so that all four sides of each panel bear on and are secured with screws to joist and cross blocking. "H" clips are not acceptable.
- 5. Panels must be installed with a 1/8" to 1/4" (3mm 6mm) gap between panels and must match vertically at joints to within (1/8" (3mm).
- 6. Decking should be kept dry and roofed/waterproofed promptly after installation.

3.03 INSTALLATION - GENERAL

A. Install **Sikalastic RoofPro (Decothane)** roofing/waterproofing system according to all current application requirements in addition to those listed in this section.

3.04 FLUID APPLIED MEMBRANE APPLICATION

- A. Surface Preparation:
 - 1. Plywood
 - a) All surfaces should be blown clean using an air compressor to remove any remaining loose debris, and to facilitate the drying process.
 - b) All cracks and voids >0.040" should be routed and caulked with a polyurethane sealant. Allow to cure per manufacturer's instructions prior to overcoating with the membrane system.
 - c) At all inside corners and any gaps or voids at the juncture of the deck and penetrations, apply a minimum ½" bead of polyurethane sealant, and allow to cure per manufacturer's instructions prior to installaing the membrane system.
 - d) Install minimum 1" bond break, centered over all board joints, cracks, inside corners, and at all transitions between dissimilar materials.

- e) Membrane terminations should be finalized prior to project start-up and documented in shop drawings, but in general, terminations should occur in raked out mortar joints, saw cut terminations, and where feasible, under installed counter-flashing materials.
- f) Tape lines should always be used to achieve a straight and professional looking edge detail.
- 2. Concrete and Masonry
 - a) All previously prepared concrete and masonry surfaces to receive the fluid applied membrane should be low-pressure (5,000 psi or less) power-washed, in accordance with ICRI Guideline No. 03732: <u>Selecting and Specifying Concrete</u> <u>Surface Preparation for Sealers, Coatings, and Polymer Overlays</u> to remove all dirt, debris, or surface contamination that would compromise bonding of the roofing/waterproofing membrane system. Remove oil or grease with solvent or detergent and water. Rinse surface clean of all cleaning agent remains.
 - b) All surfaces should be blown clean using an air compressor to remove any remaining loose debris, and to facilitate the drying process.
 - c) All cracks and voids >0.040" should be routed and caulked with a single component polyurethane sealant. Allow to cure per manufacturer's instructions prior to overcoating with the waterproofing system.
 - d) At all inside corners and any gaps or voids at the juncture of the deck and penetrations, apply a minimum ½" bead of a single component polyurethane sealant, and allow to cure per manufacturer's instructions prior to overcoating with the waterproofing system.
 - e) Membrane terminations should be finalized prior to project start-up and documented in shop drawings, but in general, terminations should occur in raked out mortar joints, saw cut terminations, and where feasible, under installed counter-flashing materials.
 - f) Tape lines should always be used to achieve a straight and professional looking edge detail.
- 3. Metal
 - a) All exposed metal surfaces and drain bowls to be coated must be cleaned by power tool cleaning (SSPC SP-3) to remove all corrosion deposits back to a clean, bright metal, followed by a solvent wipe prior to application of specified primer.
 - b) Fill any gaps or voids at the juncture of the deck penetrations with a single component polyurethane sealant, and allow to cure per manufacturer's instructions prior to overcoating with the waterproofing system.

B. Priming

- 1. Concrete and Masonry
 - a) Mix and apply **Sika Bonding Primer** to concrete/masonry/wood surfaces by brush, roller or airless spray at a rate not to exceed 320 sf/gallon (porous, rough or absorbent surfaces will decrease coverage rate). Allow to cure and dry in accordance with manufacturer's instructions.

Or

- b) Mix & apply **Sikalastic DTE Primer or Sika Concrete Primer** onto the prepared and exposed concrete/masonry substrate by brush or roller at a coverage rate not to exceed 269 ft²/gallon (porous or absorbent surfaces will decrease coverage). Allow to cure and dry in accordance with the technical data sheets.
- 2. Metal
 - a) Apply **Sikalastic EP Primer/Sealer (Epoxy Primer)** to previously prepared metal and drain bowls by brush, roller at a rate of 200-250 SF/gallon, to achieve an overall wet film thickness of 6-8 mils. High porosity and roughness of the substrate will decrease coverage rates.
 - b) Allow to cure and dry in accordance with manufacturer's instructions.
- 3. Previously Applied Sikalastic RoofPro (Decothane)
 - Apply Sika Reactivation Primer to all previously applied Sikalastic RoofPro (Decothane) that has been in place longer than seven (7) days, by roller at a maximum coverage rate of 250 SF/gallon. Allow to cure prior to applying subsequent layers of Sikalastic RoofPro (Decothane).
- 4. All Other Surfaces
 - a) Check with manufacturer for specific priming instructions.
- C. Local Reinforcement (Cracks, Plywood Board Joints, and Dissimilar Material Transitions)
 - 1. Apply a minimum 1" bond break at repaired cracks in concrete decks, joints between plywood sheets, and transitions between dissimilar materials, prior to applying the specified membrane system. Bond break should be installed centered over each joint or crack.
 - 2. Follow by applying a local stripe coat of polyurethane resin at a width a minimum of 1" wider than the reinforcement, and while wet, insert nylon tape reinforcement into the wet membrane and backroll to full embedment adding additional material as needed.
 - 3. Ensure that local reinforcing mesh is not in tension during embedment.

D. Membrane Application

The following **Sikalastic RoofPro (Decothane)** system is specified for this project. Please note, these tables specify the warranted roofing/waterproofing system components and do not include additional optional anti-skid or decorative finishes which may be specified.

Choose one system table below for either a 10, 15, 20 or 25 year warranted system

Sikalastic RoofPro 10	Film Thickness	*Est. Coverage
	(wet mils)	Rate (sf/gal)
Sikalastic 601 BC (Decothane EC)	40	34-38
Sikalastic 621 TC (Decothane SP)	20	70-75

*Note: Coverage rates <u>include</u> a reasonable amount of wastage. Rough and textured substrates can significantly affect coverage rates.

Sikalastic RoofPro 15	Film Thickness (wet mils)	*Est. Coverage Rate (sf/gal)	
Sikalastic 601 BC (Decothane EC)	45	28-32	
Sikalastic 621 TC (Decothane SP) 30 45-50			
*Note: Coverage rates include a reasonable amount of wastage. Rough and			

textured substrates can significantly affect coverage rates.

Sikalastic RoofPro 20	Film Thickness	*Est. Coverage
	(wet mils)	Rate (sf/gal)
Sikalastic 621 TC (Decothane SP)	45	28-32
Sikalastic 621 TC (Decothane SP)	30	45-50

*Note: Coverage rates <u>include</u> a reasonable amount of wastage. Rough and textured substrates can significantly affect coverage rates.

Sikalastic RoofPro 25	Film Thickness	*Est. Coverage	
	(wet mils)	Rate (sf/gal)	
Sikalastic 621 TC (Decothane SP)	45	28-32	
Sikalastic 621 TC (Decothane SP)	30	45-50	
Sikalastic 621 TC (Decothane SP) 30 45-50			
*Note: Coverage rates include a reasonable amount of wastage. Rough and			
textured substrates can significantly affect coverage rates			

- 1. The base embedment coat shall be applied to all horizontal and vertical surfaces by $\frac{1}{2}$ $\frac{3}{4}$ nap roller, brush or airless spray to achieve minimum wet film thicknesses as specified above.
- 2. While the base embedment coat is still wet, immediately lay precut lengths of conformable reinforcing scrim (Sika Reemat) into the wet base embedment coat, and using a short nap roller with the appropriate roller frame and handle, roll the scrim to force the wet coating up through the scrim to achieve full saturation and embedment. Add additional material, if necessary, to ensure that the mesh is fully saturated and fully conformed to the substrate without any visible pinholes.

- 3. Minimum overlap of the reinforcement mesh shall be 2" in all directions. Reinforcement shall turn up all adjacent wall surfaces, etc. until the termination point is accomplished according to the project details and specifications. Membrane terminations should be finalized prior to project start-up and documented in shop drawings, but in general, terminations should occur in raked out mortar joints, saw cut terminations, and where feasible, under installed counter-flashing materials. Tape lines should always be used to achieve a straight and professional looking edge detail.
- 4. Allow the base embedment coat to cure and dry prior to the next application procedure.
- 5. Apply intermediate coat by $\frac{1}{2}$ $\frac{3}{4}$ nap roller, brush or airless spray to achieve minimum wet film thicknesses, as specified in table above.
- 6. Allow the intermediate coat to cure and dry prior to the next application procedure. If the intermediate coat remains exposed for > seven (7) days or becomes heavily soiled as a result of trafficking, it must be primed per the manufacturer's instructions prior to application of additional coats.

Delete 5 and 6 above when specifying Sikalastic RoofPro 15 and 20 membranes

- 7. Apply top coat by $\frac{1}{2}$ $\frac{3}{4}$ nap roller, brush or airless spray to achieve minimum wet film thicknesses, as specified in the table above.
- 8. Allow top coat to dry overnight prior to exposing to foot traffic.

E. Anti-Skid/Decorative Finishes ***(An anti skid aggregate finish is applied on top of the warranted membrane. It is required where the membrane will be subject to regular foot traffic and is an optional finish for all other applications. Delete section if not required)***

- 1. Field Mockup: It is highly recommended that sample mockup(s) be installed using selected quartz size, textures, colors, etc. prior to installation for review and approval by the owner or owner's representative.
- 2. Silica Quartz Broadcast and Backroll
 - (a) Apply Sikalastic 621 TC (Decothane SP) to the previously cured top coat of the waterproofing system at a wet film thickness (wft) of 15 mils (approximately 100 square feet per gallon) to all areas where an anti-skid finish is required;
 - (b) While the top coat is still wet; seed with clean, dry silica quartz sand followed by backrolling the surface to encapsulate the quartz sand. Size and texture to be selected by the owner or owner's designated representative.

3. Silica Quartz Broadcast ***(This system uses a colored topcoat over quartz aggregate)***

 (a) Apply Sikalastic 621 TC (Decothane SP) to the previously cured top coat of the waterproofing system at a wet film thickness (wft) of 15 mils (approximately 100 square feet per gallon) to all areas where an anti-skid finish is required;

- (b) While the top coat is still wet; broadcast clean, clear silica quartz, until fully beached. Size and texture to be selected by the owner or owner's designated representative
- (c) Once the top coat is cured, remove all loose/excess silica quartz
- (d) Apply a "lock-down" coat of **Sikalastic 621 TC (Decothane SP)** to all areas at a wet film thickness (wft) of 15 mils (approximately 100 square feet per gallon), ensuring complete coverage of the broadcast quartz.

4. Color Quartz Broadcast ***(This system uses a clear topcoat that will allow the color of the quartz aggregate to be visible in the finished system)***

- (a) Apply Sikalastic 621 TC (Decothane SP) to the previously cured top coat of the waterproofing system at a wet film thickness (wft) of 15 mils (approximately 100 square feet per gallon) to all areas where a color quartz finish is required;
- (b) While the top coat is still wet; broadcast a clean colored, silica quartz, until fully beached. Color, size and texture to be selected by the owner or owner's designated representative
- (c) Once the top coat is cured, remove all loose/excess silica quartz
- (d) Apply a "lock-down" coat of clear **Sikalastic 748 PA** sealer to all sanded areas at a wet film thickness (wft) of 15 mils (approximately 100 square feet per gallon), ensuring complete coverage of the broadcast quartz.

3.05 FLASHINGS

- A. Parapet and Building Walls:
 - 1. Terminate the **Sikalastic RoofPro** fluid applied membrane at a tape-line to ensure a clean edge.
 - 2. Where possible, terminate the fluid applied membrane within a sawcut reglet and finish the reglet with **Sikaflex 1a**, single component polyurethane sealant.
 - 3. Metal counterflashings are optional, but recommended.
 - 4. Flash wall scuppers with a coated metal insert that is mechanically attached to the wall and integrated as part of the fluid applied membrane.
- B. Roof Drains:
 - 1. Remove the strainer basket and clamping ring from the drain bowl prior to membrane application.
 - 2. Replace the drain bowl bolts prior to application
 - 3. Extend the Decothane fluid applied waterproofing membrane directly into the throat of the prepared drain.
 - 4. Remove drain bowl bolts, replace clamping ring and strainer, and resecure.

3.06 WATER TEST

A. It is strongly recommended that the deck area or portions thereof be water tested by means of ponded water to a minimum depth of 2" for a period of 4 hours to check the integrity of the membrane installation.

- B. Verify that the structure can support the deadload weight of a water test before testing.
- C. If leaks should occur, the water must be drained completely and the membrane installation repaired. The repaired area should then be retested per the procedures specified in section A above.
- 3.07 ROOF/WATERPROOFING PROTECTION
- A. Protect all partially and fully completed waterproofing work from other trades until completion.
- B. Whenever possible, stage materials in such a manner that foot traffic is minimized over completed areas.
- C. When it is not possible to stage materials away from locations where partial or complete installation has taken place, temporary walkways and platforms shall be installed in order to protect all completed areas from traffic and point loading during the application process.
- D. Temporary tie-ins shall be installed at the end of each workday and removed prior to commencement of work the following day.

3.08 CLEAN-UP

- A. All work areas are to be kept clean, clear and free of debris at all times.
- B. Do not allow trash, waste, or debris to collect on the roof. These items shall be removed from the roof on a daily basis.
- C. All tools and unused materials must be collected at the end of each workday and stored properly off of the finished roof surface and protected from exposure to the elements.
- D. Dispose of or recycle all trash and excess material in a manner conforming to current EPA regulations and local laws.
- E. Properly clean the finished roof surface after completion, and make sure the drains and gutters are not clogged.
- F. Clean and restore all damaged surfaces to their original condition.

END OF SECTION

The preceding specifications are provided by Sika Corporation as a guide for informational purposes only and are not intended to replace sound engineering practice and judgment and should not be relied upon for that purpose. SIKA CORPORATION MAKES NO WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, AS TO THE ACCURACY, COMPLETENESS OR THE CONTENTS OF THESE GUIDE SPECIFICATIONS. Sika Corporation assumes no liability with respect to the provision or use of these guide specifications, nor shall any legal relationship be created by, or arise from, the provision of such specifications SIKA SHALL NOT BE RESPONSIBLE UNDER ANY LEGAL THEORY TO ANY THIRD PARTY FOR ANY DIRECT OR CONSEQUENTIAL DAMAGES OF ANY KIND ARISING FROM THE USE OF THESE GUIDE SPECIFICATIONS. The specifier, architect, engineer or design professional or contractor for a particular project bears the sole responsibility for the preparation and approval of the specifications and determining their suitability for a particular project or application.

Prior to each use of any Sika product, the user must always read and follow the warnings and instructions on the product's most current Technical Data Sheet, product label and Material Safety Data Sheet which are available at www.sikaconstruction.com or by calling (201) 933-7452. 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 Technical Data Sheet, product label and Material Safety Data Sheet prior to product use.