FULLY ADHERED

POLYVINYL CHLORIDE ROOFING

SECTION 07 54 19.11

**[EDITOR’S NOTES: DESIGNATED BY [ ], EDITOR TO SELECT OPTIONS PROVIDED FOR PROJECT SPECIFIC SPECIFICATIONS.]**

1. GENERAL
   * + 1. SUMMARY
          1. Sika Corporation - Roofing System: This specifies the following adhered roofing system.

**[CHOOSE project system]**

Water Based Adhesive (Bareback or Feltback)

Solvent Based Adhesive (Bareback)

Solvent Based Adhesive (Feltback)

Urethane Based Adhesive (Feltback)

* + - * 1. Related Work: Include the following sections.

**[ADD or DELETE sections as required]**

Section 072100 – Thermal Insulation

Section 072200 – Roof and Deck Insulation

Section 072600 – Vapor Retarders

Section 072700 – Air Barriers

Section 076200 – Sheet Metal Flashing and Trim

Section 077100 – Roof Specialties

Section 077200 – Roof Accessories

Section 077600 – Roof Pavers

Section 079500 – Expansion Control

* + - 1. REFERENCES
         1. Current Edition of: Identified reference requirements as put forth by the project specification.

**[ADD or DELETE as required]**

State Building Code

International Building Code (IBC)

American Society of Testing Materials (ASTM)

National Roofing Contractors Association (NRCA)

Single Ply Roofing Institute (SPRI)

Sika Corporation Roofing Applicator Handbook

Sika Technical Bulletins

* + - 1. SUBMITTALS
         1. Literature: Copies of current relevant information pertaining to the primary components to be used in the roof system including but not limited to:

Specifications

Sika Corporation - Roofing’s Warranty

Applicator’s Warranty

Product Data Sheets

Safety Data Sheets

FM/UL listings/approvals

UL Environment validation of recycling claims

* + - * 1. Samples for Verification: Representative samples of primary components to be used in the roof system.
        2. Shop Drawings: Include roof plans, elevations, sections, details, and attachments to other work, including:

Base flashings and membrane terminations.

Tapered insulation, including slopes.

Roof plan showing orientation of roof deck, orientation of roofing membrane, patterns for insulation attachment, location of expansion joints, and membrane fastening spacing.

Fastening patterns for corner, perimeter, and field-of-roof locations.

* + - 1. QUALITY ASSURANCE
         1. Sika Corporation Roofing Qualifications:

Demonstrated performance history of producing PVC roof membranes no less, in duration of years, than the warranty duration specified.

Manufactured by membrane supplier and not private labeled.

Minimum of five years’ experience recycling membranes at the end of their service life back into new membrane products. Provide a minimum of five reference projects.

* + - * 1. Installer Qualifications:

A qualified firm that is authorized by Sika Corporation - Roofing to install all work pertaining to product manufacturer's roof system and that is eligible to receive manufacturer's warranty.

* + - * 1. Preinstallation Roofing Conference: Conduct conference at Project site.

**[ADD or DELETE meeting parties]** Sika Corporation – Roofing representative, Owner, Architect, Owner's Insurer, Testing and Inspecting Agency representative, Roofing Installer, Deck Installer, and installers whose work interfaces with or affects roofing, including installers of roof accessories and roof-mounted equipment.

Review methods and procedures related to roofing installation, including manufacturer's most current requirements.

Review base flashings, special roofing details and transitions, roof drainage, roof penetrations, expansion joints, equipment curbs, and condition of other construction that affects roofing system.

Review governing regulations and requirements for insurance and certificates.

Review temporary protection requirements for roofing system during and after installation.

Deviations from the project specifications or the approved shop drawings are not permitted without prior written approval by Sika Corporation – Roofing, the owner, the owner’s representative, and the designer.

* + - * 1. Fire Design:

**[CHOOSE one]**

Underwriters Laboratories, Inc. (Class\_\_\_Assembly; \_\_\_Hour rated assembly))

Other

* + - * 1. Wind Design:

**[CHOOSE one]**

System shall meet minimum requirements in accordance of ASCE 7 per code jurisdiction

Field Pressure (\_\_\_) Prime ( ) if applicable

Perimeter Pressure (\_\_\_)

Corner Pressure (\_\_\_)

Other

* + - * 1. Special Design:

**[ADD or DELETE as required]**

Florida Building Code (FBC)

Miami-Dade

California Energy Commission Title 24

SCAQMD

IECC

ANSI-SPRI ES-1

CRRC

OTC

Other

* + - 1. DELIVERY, HANDLING, AND STORAGE
         1. Deliver roofing materials to project site in original containers with seals unbroken and labeled with product manufacturer's name or product brand name.
         2. Comply with most current product data sheet requirements when handling, storing, protecting, or installing roofing materials. Including but not limited to avoiding physical damage, deterioration by sunlight, excessive moisture, or other potentially damaging conditions.
         3. Store liquid materials in their original undamaged containers in a clean, dry, protected location; away from direct sunlight; within the temperature range noted on the product data sheet.
         4. Handle and store roofing materials and equipment in a manner to avoid permanent deflection of deck.
      2. FIELD CONDITIONS
         1. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit roofing system to be installed according to manufacturer's most current requirements and warranty requirements.
         2. Material Compatibility: Roofing materials shall be compatible with one another and adjacent materials under conditions of service and application required and confirmed by roofing manufacturer.
      3. WARRANTY
         1. Sika Corporation - Roofing Warranty: Sika warrants to the owner the specified warranty for the specified warranty period as long as the roofing is installed according to Sika’s Technical instructions by a Sika Authorized Roofing Applicator. The warranty must be non-prorated and must not exclude coverage due to ponding water.

(\_\_\_\_) Warranty: **[MEMBRANE or SYSTEM]**

(\_\_\_\_) Warranty Period: **[5] [10] [15] [20] [25\*] [30\*]** Number of years from date of substantial completion.

[\* 25 or 30 year warranty periods require additional enhancements, consult Sika Corporation - Roofing.]

* + - * 1. Applicator’s Warranty: Signed by installing applicator, covering the work of a System Warranty, including all components of roofing system installation such as membrane roofing, base flashing, roof insulation, fasteners, cover boards, vapor retarders, expansion joints, and walkway products, for the following warranty period:

(\_\_\_\_) Warranty Period: **[2\*] [5]** Number of years from date of substantial completion.

[\* 2 year applicator warranty periods are only allowed for 5 or 10 year system warranties.]

1. PRODUCTS
   * + 1. PERFORMANCE / DESIGN CRITERIA

ASTM D4434: Type II

NSF/ANSI Standard 347: Platinum

Guarantee membrane thickness meets or exceeds specified thickness when tested according to ASTM D751

* + - 1. SIKA CORPORATION – ROOFING MATERIALS

**[CHOOSE the product/s from the following sections. For further information about individual products or with help in choosing the correct product for the specified system, please refer to the product data sheets and/or product selection guides.]**

* + - * 1. PVC Sheet:

Thermoplastic membrane, fiberglass scrim reinforcement, with lacquer coating

Thermoplastic membrane, fiberglass scrim reinforcement, with lacquer coating and factory applied 9 oz. felt backing

* + - * 1. PVC Sheet Thickness:

Sarnafil G 410, 60 mil (1.5 mm)

Sarnafil G 410, 72 mil (1.8 mm)

Sarnafil G 410, 80 mil (2.0 mm)

Sarnafil G 410, Other

* + - * 1. PVC Sheet Exposed Face Color:

EnergySmart White, initial solar reflectance of 0.85, emittance of 0.86, and solar reflective index (SRI) of 107.

EnergySmart Tan, initial solar reflectance of 0.73, emittance of 0.85, and solar reflective index (SRI) of 89.

EnergySmart Reflective Gray, initial solar reflectance of 0.73, emittance of 0.89, and solar reflective index (SRI) of 90.

EnergySmart Patina Green, initial solar reflectance of 0.55, emittance of 0.86, and solar reflective index (SRI) of 64.

Copper Brown

Evergreen

Lead Gray

Other

* + - * 1. Membrane Attachment Component:

Sarnacol 2121 (water based adhesive)

Sarnacol 2121 VC (water based adhesive)

Sarnacol 2170 (solvent based adhesive)

Sarnacol 2170 VC (solvent based adhesive)

Sarnacol 2175 (solvent based adhesive for bare back membrane only)

Sarnacol AD Feltback Membrane (urethane based adhesive)

Sarnacol OM Feltback Membrane (urethane based adhesive)

* + - * 1. Roof Board or Insulation Attachment Components:

**[CHOOSE one Sarnaplate and one Sarnafastener/Fastener OR one Sarnacol/urethane based adhesive]**

Sarnaplate

Sarnaplate-Low Profile

Sarnaplate-LiteDeck (gypsum/cwf decks)

Sarnaplate-Gyptec 3 inch (gypsum/cwf decks)

Sarnafastener #12 (steel / wood decks)

Sarnafastener #14 (wood / concrete decks)

Sarnafastener-XP #15 (wood / steel decks)

Sarnafastener MAXLoad (wood / steel decks)

Fastener RetroDriller (structural steel purlins) [Metal Retrofit]

Fastener CD-10 (concrete decks)

Fastener Lite-Deck (gypsum / cwf decks)

Fastener Polymer Gyptec (gypsum / cwf decks)

Sarnacol 2163 (urethane based adhesive)

Sarnacol AD Board Adhesive (urethane based adhesive)

Sarnacol OM Board Adhesive (urethane based adhesive)

Sarnacol OM Board Adhesive WG (urethane based adhesive)

Polyset CR-20 (urethane based adhesive)

Hot Asphalt

* + - * 1. Roof Board:

Sarnatherm Roof Board-A III

Sarnatherm Roof Board-A FR

Sarnatherm Roof Board-H

Sarnatherm Roof Board-M

Sarnatherm Roof Board-R

DensDeck

DensDeck Prime

Securock Ultralight Glass-Mat Roof Board

Securock Ultralight Coated Glass-Mat Roof Board

DensDeck StormX Prime Roof Board

* + - * 1. Insulation:

Sarnatherm ISO (fiber reinforced felt facer)

Sarnatherm ISO CG (coated glass facer)

Sarnatherm EPS [roof board required, not allowed with solvent based adhesive]

Sarnatherm XPS [roof board required, not allowed with solvent based adhesive]

* + - * 1. Vapor Retarder: **[DELETE section if not required]**

Vapor Retarder PE 10

Vapor Retarder SA 31

Vapor Retarder SA 106

Ply Sheet TA 87

Vapor Retarder TA 138

Ply Sheet HA 87

Ply Sheet HA 118

* + - * 1. Deck Primer: **[DELETE section if not required, required for all decks except steel for Vapor Retarder SA 31 or Vapor Retarder SA 106]**

Vapor Retarder Primer SB (solvent based)

Vapor Retarder Primer VC (low VOC compliant)

Vapor Retarder Primer WB (water based)

Vapor Retarder Primer TA (solvent based)

Vapor Retarder Primer BE (water based)

* + - * 1. Flashing Materials:

Wall/Curb Flashing:

Sarnafil G 410 Membrane

Sarnafil G 410 SA Flashing Membrane

G 459 Flashing Membrane

Detail Membrane

Sarnaclad (PVC coated sheet metal)

Sarnacol 2170 Adhesive

Sarnacol 2170 VC Adhesive

Sarnacol 2175 Adhesive

Sarnafelt

Expansion Joint: **[DELETE section if not required]**

Emseal RoofJoint expansion joint system

Perimeter Edge Flashing:

Sarnaclad (PVC-coated sheet metal)

Metal-Era Anchor-Tite Standard Fascia / Hickman TerminEdge EX Fascia

Metal-Era One Edge / Hickman TerminEdge EX Fascia

Metal-Era One Drip Edge / Hickman Drip Edge Fascia

Metal-Era One Skirted Drip Edge / Hickman Skirted Drip Edge Fascia

Metal-Era Perma-Tite 200 / Hickman EconoSnap / EconoCrimp

Metal-Era Perma-Tite Coping / Hickman PermaSnap Premier Coping

Metal-Era Perma-Tite Gold Coping / Hickman PermaSnap Premier Plus Coping

Misc. Flashing Accessories:

Sarnacircles

Sarnacorners Inside

Sarnacorners Outside

Sarnastack Universal

Sarnastack Split A, B, C

Sarnareglet

Sarnadrain U-Flow

Liquid Flashing Primer

Liquid Flashing Fleece

Liquid Flashing Catalyst

Liquid Flashing SW (summer-grade white)

Liquid Flashing WW (winter-grade white)

Sikalastic EP Primer/Sealer

Sikalastic 641 Lo-VOC

Sika Fleece 140

Sika Reemat Premium

Sika Joint Tape SA

* + - * 1. Miscellaneous Materials:

Accessories:

Aluminum Tape

SikaLastomer-65

Perimeter Warning Tape

Perimeter Warning Membrane

SarnaRoof Membrane Cleaner 100

Sarnacol 2175 Cleaner

Sarnadisc

Sarnastop

Sarnabar

Sarnacord

Sealants and Pitch Pocket Fillers:

Sikaflex-1a

Sikasil SG-10

Sarnafiller

Mastic [specify only with SBS vapor retarder]

Temporary Overnight Tie-ins (must be removed prior to start of next day’s roofing):

Type III hot asphalt conforming to ASTM D312

Sarnafiller

Multiple layers of roofing cement and felt

Spray-applied, water-resistant urethane foam

Mechanical attachment with rigid bars and compressed sealant

PVC Welding Equipment:

Approved Automatic Welder

Hand Welder

* + - * 1. Walkway Protection:

Sarnatred-V

Sikaplan Walkway-20

Crossgrip XTRA

Concrete Pavers [protection layer required]

* + - * 1. Nailers and Blocking:

Wood, #2 quality or better, Wolmanized or Osmose treated for fire and rot resistance.

Plywood, minimum 1/2 inch CDX (C side out).

1. EXECUTION

**[DELETE non-required component installations from Sections 3.4 – 3.9]**

* + - 1. EXAMINATION
         1. Applicator shall verify that the work done under related sections meets the following conditions:

Roof drains and scuppers have been installed properly, or reconditioned, or replaced.

Roof curbs, nailers, equipment supports, vents and other roof penetrations are properly secured and prepared to receive new roofing materials.

All surfaces are smooth and free of dirt, debris and incompatible materials.

For concrete deck, verify that concrete substrate is dry and free of moisture. Verify that concrete curing compounds that will impair adhesion of roofing components to roof deck have been removed.

All roof surfaces shall be free of water, ice and snow.

* + - * 1. Proceed with installation only after unsatisfactory conditions have been corrected.
      1. PREPARATION
         1. Clean substrate of dust, debris, moisture, and other substances detrimental to roofing installation according to roofing system manufacturer's most current requirements. Remove sharp projections.
         2. Prevent materials from entering and clogging roof drains and flashings and from spilling or migrating onto surfaces of other construction.
      2. ROOFING INSTALLATION, GENERAL
         1. Install roofing system according to product manufacturer's most current requirements including but not limited to roofing applicator handbook, product data sheets, specifications, and or relevant technical bulletins.
         2. Complete terminations and base flashings and provide temporary seals to prevent water from entering completed sections of roofing system at end of each workday. Remove and discard temporary seals before beginning work on adjoining roofing.
         3. For tie-in with existing roofing, install roofing and auxiliary materials to maintain weather tightness of transitions.
      3. VAPOR RETARDER INSTALLATION
         1. Vapor-Retarder: **[CHOOSE the same product from Section 2.2, H]**

1. Vapor Retarder PE 10: Loosely lay polyethylene sheet in a single layer, side and end lap each sheet a minimum of 4 inches and seal with SikaLastomer-65 tape. Seal to all roof penetrations and at perimeter area.
2. Vapor Retarder SA 31: Prime substrate unless over steel. Peel back release liner and adhere to substrate, side and end lap each sheet a minimum of 3 inches and 6 inches respectively. Stagger each sheet at least 12 inches. Apply Mastic to seal all roof penetrations and at perimeter area.
3. Vapor Retarder SA 106: Prime substrate unless over steel. Peel back release liner and adhere to substrate, side and end lap each sheet a minimum of 3 inches and 6 inches respectively. Stagger each sheet at least 12 inches. Peel back release liner to adhere side laps, end laps are to be hot air welded. Apply Mastic to seal all roof penetrations and at perimeter area.
4. Ply Sheet TA 87: Prime concrete substrate with Vapor Retarder Primer TA or Vapor Retarder Primer BE. Torch down to concrete substrate, side and end lap each sheet a minimum of 3 inches and 6 inches, respectively. Stagger each sheet at least 12 inches Torched laps must have approximately ½ inch bleed out. Apply Mastic to seal all roof penetrations and at perimeter area.
5. Ply Sheet HA 87: Prime substrate with Vapor Retarder Primer TA or Vapor Retarder Primer BE. Place Ply Sheet HA 87 in desired position and back roll the product. Apply a full mopping of Type III or Type IV asphalt, side and end lap each sheet a minimum of 3 inches and 6 inches, respectively. Ply Sheet HA 87 can be installed with Sika’s cold applied vapor retarder adhesives.
6. Vapor Retarder TA 138: Prime concrete substrate with Vapor Retarder Primer TA or Vapor Retarder Primer BE. Torch down to concrete substrate, side and end lap each sheet a minimum of 3 inches and 6 inches, respectively. Stagger each sheet at least 12 inches Torched laps must have a approximately ½ inch bleed out. Apply Mastic to seal all roof penetrations and at perimeter area.
7. Ply Sheet HA 118: Prime substrate with Vapor Retarder Primer TA or Vapor Retarder Primer BE. Place Ply Sheet HA 118 in desired position and back roll the product. Apply a full mopping of Type III or Type IV asphalt, side and end lap each sheet a minimum of 3 inches and 6 inches, respectively. Ply Sheet HA 118 can be installed with Sika’s cold applied vapor retarder adhesives.
   * + - 1. Completely seal vapor retarder at parapet terminations, obstructions, and penetrations to prevent air movement into roofing system.
       1. SARNATHERM INSULATION / ROOF BOARD INSTALLATION
          1. Coordinate installing roofing system components so insulation or roof boards are not exposed to precipitation or other sources of moisture.
          2. Comply with product manufacturer's most current requirements for installing insulation or roof boards.
          3. Install tapered insulation to conform to slopes indicated.
          4. Install insulation to achieve required thickness. Use at least 2 layers of insulation when the total insulation thickness exceeds 2.7 inches. Stagger joints in both directions at least 12 inches between layers.

Where installing composite and non-composite insulation in two or more layers, install non-composite board insulation for bottom layer and intermediate layers, if applicable, and install composite board insulation for top layer.

* + - * 1. Trim insulation where necessary at roof drains so completed surface is smooth and does not restrict flow of water.
        2. Drains shall be properly sumped to allow membrane to sit flat without stretching or wrinkling.
        3. Fill gaps exceeding 1/4 inch with insulation. Cut and fit insulation within 1/4 inch of nailers, projections, and penetrations.
        4. Installation Method: **[CHOOSE method/s required]**

Mechanically Fastened: Install layer/s of insulation or roof board and secure to deck using Sarnaplates and Sarnafasteners at the spacing rate according to Sika and Owner’s Representative/Designer. Fasteners shall not penetrate bottom flute on steel decks.

Urethane Adhered: Install layer/s of insulation or roof board and secure by adhering to substrate by using Sarnacol urethane board adhesive at the spacing rate and application method according to Sika and Owner’s Representative/Designer.

* + - 1. SIKA ROOFING MEMBRANE INSTALLATION
         1. The surface of the insulation or substrate shall be inspected prior to installation of the Sarnafil roof membrane. The substrate shall be clean, dry, free from debris and smooth with no surface roughness or contamination. Broken, delaminated, wet or damaged insulation boards shall be removed and replaced.
         2. Accurately align roofing and maintain uniform side and end laps of minimum dimensions required by manufacturer.
         3. Apply roofing with side laps shingled with slope of roof deck where possible.
         4. Make sure seam areas are free of debris, dirt, and dust, overlap membrane sheets, and hot-air weld side and end laps of roofing and sheet flashings according to manufacturer's most current requirements to ensure a watertight seam installation.

Verify in-field weld strength of seams a minimum of twice daily, repair seam sample areas.

Test lap edges with probe to verify seam weld continuity.

If any tears or voids in lapped seams are found repair using appropriate approved technique.

* + - * 1. Adhered System: **[CHOOSE the same applicable system from Section 1.1, A]**

Water Based Adhesive (Bareback or Feltback): **[CHOOSE method A or method B]**

Roller apply Sarnacol 2121/2121 VC adhesive to the substrate with medium nap rollers. Place membrane into wet adhesive and immediately broom and roll with minimum 75 lb steel membrane roller. Adhesive shall not be used if temperatures below 40°F are expected during application or subsequent drying time.

Spray apply Sarnacol 2121/2121 VC adhesive to the substrate with an airless spray rig. Place membrane into wet adhesive and immediately broom and roll with minimum 75 lb steel membrane roller. Adhesive shall not be used if temperatures below 40°F are expected during application or subsequent drying time.

Solvent Based Adhesive (Bareback):

Roller apply Sarnacol 2170/2170 VC adhesive to the substrate with solvent-resistant rollers. Only the substrate area which can be completely covered with membrane in the same day's operations shall be coated with adhesive. Allow adhesive to dry completely.

Coat underside of membrane and allow to dry slightly to produce strings when touched with a dry finger, the coated membrane shall be rolled onto the previously-coated substrate. **Do not allow adhesive on the underside of the membrane to dry completely**. The bonded sheet shall be pressed firmly in place with a minimum 75 lb steel membrane roller.

Solvent Based Adhesive (Bareback):

Spray Sarnacol 2175 adhesive onto the substrate in a continuous, uniform pattern with 50% overlap avoiding any globs and puddles. Orient membrane spray pattern so it is perpendicular (90 degrees) to the substrate spray pattern. Set the membrane to the substrate as soon as the adhesive is dry but do not exceed 30 minutes after adhesive is applied. The bonded sheet shall be pressed firmly in place with a minimum 75 lb steel membrane roller.

Solvent Based Adhesive (Feltback):

Roller apply Sarnacol 2170/2170 VC adhesive to the substrate with solvent-resistant rollers. Only the substrate area which can be completely covered with membrane in the same day's operations shall be coated with adhesive. Allow adhesive to dry completely.

Coat the substrate again with adhesive and allow to produce strings when touched with a dry finger. Unroll feltback membrane onto the 2nd coated substrate. **Do not allow 2nd application of adhesive on the substrate to dry completely**. The bonded sheet shall be pressed firmly in place with a minimum 75 lb steel membrane roller.

Urethane Based Adhesive (Feltback):

1. Dispense Sarnacol AD/OM Feltback Membrane Adhesive onto approved substrate at spacing rate and application method according to Sika and Owner’s Representative/Designer. Unroll feltback membrane into raised adhesive. Do not allow adhesive to dry. Membrane sheet shall be pressed firmly in place with a minimum 75 lb steel membrane roller.
   * + 1. BASE / FIELD FLASHING INSTALLATION
          1. Install all membrane and preformed flashings according to roofing system manufacturer's most current requirements.
          2. Install membrane base flashing by applying bonding adhesive to substrate and underside of membrane flashing at required rate. Do not apply to seam area of flashing.
          3. Flash field penetrations and inside/outside corners with appropriate prefab flashing components or by approved custom in-field fabrication technique.
          4. Firmly roll membrane flashing into the adhesive. Hot-air weld side and end laps to ensure a watertight seam installation.
          5. Terminate and seal top of membrane flashings and mechanically anchor to substrate by approved Sika Corporation - Roofing detail.
          6. Spread continuous sealant bead leaving no gaps over deck drain flange at roof drains, and securely seal roofing in place with clamping ring.
       2. LIQUID APPLIED FLASHING INSTALLATION
          1. Prepare the surface to be flashed by cleaning the area to like-new condition. Steel shall be prepped to near white metal.
          2. Pre-cut vertical and horizontal liquid flashing reinforcement to fit around the penetration and onto the roof membrane surface allowing for the required overlaps.
          3. Once the edges of the reinforcement are determined, mark a line ¼” – ½” (6 mm – 13 mm) beyond the edge of the reinforcement and apply painter’s tape to provide a clean edge.
          4. Prime the surface if required at the recommended rate. Pull the painter’s tape while wet to achieve a clean edge. Allow the primer to cure and re-mask the area before applying resin.
          5. Thoroughly mix the resin if required and apply to the surface at the required thickness.
          6. Embed the reinforcement into the wet resin. Apply additional resin to completely saturate the reinforcement as required. Pull painter’s tape while wet to achieve a clean edge.
   1. ROOFJOINT EXPANSION JOINT **[DELETE section if not required]**
2. Install RoofJoint expansion joint and accessories according to joint system manufacturer's most current requirements.

Secure roofing membrane up to expansion joint opening.

Lower RoofJoint into expansion joint gap so that it achieves a level and firm fit with the rooftop surface.

Hot-air weld lower RoofJoint flange to installed roofing membrane surface.

Place termination bar on top of lower RoofJoint flange. Install provided fasteners through pre-drilled holes in termination bar. Tighten until termination bar is snug with lower flange. Do not overtighten.

Lap upper RoofJoint flange over termination bar and hot-air weld to roofing membrane surface.

Verify and document weld strength of seams minimum once daily via mockup vs in-field destructive testing.

Test lap edges with probe to verify seam weld continuity.

If any tears or voids in lapped seams are found repair using appropriate approved technique.

* + - 1. WALKWAY INSTALLATION **[CHOOSE the same product from 2.2, L]**
         1. Sarnatred-V: Probe all existing deck membrane seems which are to be covered by Sarnatred-V. Install walkway in straight lines by adhering and welding to the field membrane.
         2. Sikaplan Walkway-20: Probe all existing deck membrane seams which are to be covered by Sikaplan Walkway-20. Install walkway in straight lines by adhering and welding to the field membrane.
         3. Crossgrip XTRA: Probe all existing membrane seams which are to be covered by Crossgrip XTRA. Crossgrip XTRA is installed loose laid. Connecting clips are available for attaching roll ends together.
         4. Concrete Pavers: Probe all existing membrane seams which are to be covered by concrete pavers. Install layer of Sarnafil membrane over roof membrane to provide protection layer in locations where concrete paver walkway is indicated, welding edges is optional. Loose lay concrete pavers on top of spacers over protection layer. In areas of high wind exposure, the pavers shall be strapped together with stainless steel metal straps that are flush with the paver surface as applicable.
      2. FIELD QUALITY CONTROL
         1. Arrange for roofing system manufacturer's technical personnel to inspect roofing installation upon completion.
         2. Repair or remove and replace components of roofing system that do not comply with specified requirements.
         3. Correct deficiencies in or remove roofing system that does not comply with requirements, repair substrates, and repair or reinstall roofing system to a condition free of damage and deterioration at time of Substantial Completion and according to warranty requirements.
         4. Additional testing and inspecting, at Contractor's expense, will be performed to determine if replaced or additional work complies with specified requirements.
      3. PROTECTION
         1. Protect new roofing system from damage and wear during construction period. Inspect new roofing for damage if used during construction

END OF SECTION

**DISCLAIMER**

All information provided by Sika Corporation (“Sika”) concerning Sika products, including but not limited to, any recommendations and advice relating to the application and use of Sika products, 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. In practice, the differences in materials, substrates, storage and handling conditions, actual site conditions and other factors outside of Sika’s control are such that Sika assumes no liability for the provision of such information, advice, recommendations or instructions related to its products, nor shall any legal relationship be created by or arise from the provision of such information, advice, recommendations or instructions related to its products. The user of the Sika product(s) must test the product(s) for suitability for the intended application and purpose before proceeding with the full application of the product(s). Sika reserves the right to change the properties of its products without notice. All sales of Sika product(s) are subject to its current terms and conditions of sale which are available at [usa.sarnafil.sika.com](https://usa.sarnafil.sika.com/) or by calling 800-451-2504.

**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 Product Data Sheet, product label and Safety Data Sheet which are available online at** [usa.sarnafil.sika.com](https://usa.sarnafil.sika.com/) **or by calling Sika's Technical Service Department at 800-451-2504. Nothing contained in any Sika materials relieves the user of the obligation to read and follow the warnings and instruction for each Sika product as set forth in the current Product Data Sheet, product label and Safety Data Sheet prior to product use.**

Sika warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within shelf life. User determines suitability of product for intended use and assumes all risks. Buyer’s sole remedy shall be limited to the purchase price or replacement of product exclusive of labor or cost of labor.

**NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.**