BUILDING TRUST

SIKABIT® – SPECIFICATIONS

SUGGESTED MASTER SPECIFICATION
SECTION 07 13 26 SELF-ADHERING SHEET WATERPROOFING

PART 1 GENERAL

1.01 SECTION INCLUDES:

1. All of the Contract Documents, including General and Supplementary Conditions and Division 01 Specification Sections, apply to the work of this section.

1.02 SUMMARY

A. The Work of this Section includes, but is not limited to, the following:

1. Rubberized asphalt sheet membrane waterproofing system.
2. Prefabricated drainage composite.
3. Protection board.

B. Related Sections: Other specification sections which directly relate to the work of this section include, but are not limited to, the following:

1. Section 033000 – Cast-In-Place Concrete
2. Section 042000 – Unit Masonry
3. Section 071100 – Dampproofing
4. Section 076000 – Flashing and Sheet Metal
5. Section 079200 – Joint Sealants
6. Section 079500 – Expansion Control
7. Section 334600 – Subdrainage

1.03 REFERENCES

A. The following standards and publications are applicable to the extent referenced in the text.

B. American Society for Testing and Materials International (ASTM)

1. ASTM C836 Standard Specification for High Solids Content, Cold Liquid Applied Elastomeric Waterproofing Membrane for Use with Separate Wearing Course
2. ASTM D412 Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers - Tension
3. ASTM D570 Standard Test Method for Water Absorption of Plastics
4. ASTM D882 Standard Test Methods for Tensile Properties of Thin Plastic Sheeting
5. ASTM D903 Standard Test Method for Peel or Stripping Strength of Adhesive Bonds
6. ASTM D1876 Standard Test Method for Peel Release of Adhesives (T-Peel)
7. ASTM D1970 Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection
8. ASTM D3767 Standard Practice for Rubber - Measurement of Dimensions
9. ASTM D5385 Standard Test Method for Hydrostatic Pressure Resistance of Waterproofing Membranes
10. ASTM E96 Standard Test Method for Water Vapor Transmission of Materials
11. ASTM E154 Standard Test Methods for Water Vapor Retarders Used in Contact with Earth Under Concrete Slabs, on Walls, or as Ground Cover

1.04 SUBMITTALS

A. Product Data: Submit manufacturer's product data, installation instructions for waterproofing membrane system and recommendations.

B. LEED Submittals – Provide LEED submittal information as required.

C. Samples: Submit representative samples of the following for approval:
   1. Sheet membrane
   2. Protection Board
   3. Prefabricated drainage composite

1.05 QUALITY ASSURANCE

A. Manufacturer's Qualifications: Sheet membrane waterproofing system manufacturer shall be ISO 9001 certified and demonstrate a minimum of fifteen (15) years continuous, successful experience in production of waterproofing membranes.

B. Installer Qualifications: Sheet membrane waterproofing system installation shall be performed by one Contractor, approved by the waterproofing manufacturer, and shall have at least three (3) years experience in work of the type required by this Section.

C. Manufacturer Technical Representatives: Membrane manufacturer shall provide trained direct company personnel to attend necessary job meetings, perform periodic inspections as necessary, and conduct a final inspection upon successful completion of the installation.

D. Pre-Installation Conference: A pre-installation conference shall be held prior to commencement of field operations to establish procedures to maintain optimum working conditions, to coordinated this work with related and adjacent work, and to review special details.

E. Give a mimimum of five (5) days notice to the Owner and manufacturer prior to commencing any work and notify both parties on a daily basis of any change in work schedule.

F. Contractor shall attend necessary job meetings and furnish competent and full time supervision, experienced mechanics, all materials, tools, and equipment necessary to complete, in an acceptable manner, the membrane installation in accordance with this specification.

G. Materials: Obtain primary sheet membrane waterproofing and all joint sealing and waterstop materials of each type required from a single manufacturer. Manufacturer to provide waterproofing shop drawings.

H. Backup Preparation: The Contractor shall prepare the backup surfaces to accept the approved waterproofing system in the manner necessary to comply with all requirements of the membrane manufacturer and architect. Backup preparation shall be guided by the following:

   1. Mock-up areas shall be used to determine required methods and tools to obtain degree of backup preparation required by the membrane manufacturer. Prepare and clean a three (3) foot by three (3) foot areas of each substrate material type.

I. Schedule Coordination: Schedule work such that the membrane will not be left exposed to jobsite conditions for longer than that recommended by the manufacturer. Manufacturer or manufacturer's representative to be on site during waterproofing installation.

1.06 DELIVERY, STORAGE AND HANDLING

A. Deliver materials in manufacturer's original and unopened labeled packages. Store and handle in strict compliance with manufacturer's instructions. Protect from damage from weather, excessive

temperature, and construction operations. Remove and dispose of damaged material in accordance with applicable regulations.

1.07 CODE REQUIREMENTS

A. Work shall be performed in accordance with the more stringent requirements of these specifications, the Local Building Code, OSHA, or other governmental authorities including Federal, State, and Local, having jurisdiction.

1.01 FIELD CONDITIONS

A. Perform work only when weather conditions as well as ambient and substrate temperatures are within the limits established by the manufacturer of the sheet membrane waterproofing system. Do not apply waterproofing in snow, rain, or mist.

B. Proceed with installation only when the substrate construction and preparation work is complete and is suitable to support sheet membrane waterproofing.

PART 2 PART

2.01 MANUFACTURER

A. **Sika (St. Louis Sales Office)**, 3400 Tree Court Industrial Boulevard, St. Louis, MO 63122; Phone: 800-325-9504; Fax: 800-551-5145; Email: info@greenstreak.com; usa.sika.com

B. Proceed with installation only when the substrate construction and preparation work is complete and is suitable to support sheet membrane waterproofing.

2.02 MATERIALS

A. Sheet Membrane Waterproofing System: SikaBit® S-60 System Membrane by SIKA Corporation; provides high strength adhesion and high temperature stability. Provide a cross laminated film, requires no heat or special equipment to properly install.

B. Provide membrane with the following physical properties:

Property	Test Method	Result
Color		Dark gray-black
Thickness (nominal)	ASTM D 3767	1.5mm (0.06 in.)
Crack Cycling	ASTM C 836	Pass at -32°C (-25°F)
Resistance to Hydrostatic Head	ASTM D 5385	60m (200 ft.) min.
Low Temperature Flexibility	ASTM D 1970	Pass at -32°C (-25°F)
Tensile Strength - Membrane	ASTM D 412 modified	325 psi min. (2240 kPa)
Tensile Strength - Film	ASTM D 882 modified	5,000 psi min. (34.5 MPa)
Elongation	ASTM D 412 modified	340% min.
Water Absorption	ASTM D 570	0.1% max.
Permeance	ASTM E 96 Method B	0.045 perms max.
Puncture Resistance	ASTM E 154	50 lbs (222 N) min.
Peel Strength	ASTM D 903 modified	9 lbs/in. (1576 N/m) min.
Lap Adhesion @ Min. Temp.	ASTM D 1876 modified	4 lbs/in. (700 N/m) min.

C. Prefabricated Drainage Mat: Sika Drainage Mat 420 by SIKA Corporation. Drainage composite shall be designed to promote positive drainage while serving as a protection course.

D. Protection Board: 5mm Protection Board by SIKA Corporation. Extruded polypropylene protection layer.

E. Waterstop: Sika Greenstreak waterstops as required by Section 03 15 13.

F. Miscellaneous Materials: Accessories specified or acceptable to manufacturer of sheet membrane waterproofing.

PART 3 EXECUTION

3.01 GENERAL

A. The Installer shall examine conditions of substrates and other conditions under which this work is to be performed and notify the Contractor, in writing, of circumstances detrimental to the proper completion of the work. Do not proceed with work until unsatisfactory conditions are corrected.

3.02 PREPARATION OF SUBSTRATES

A. Refer to manufacturer's literature for requirements for preparation of substrates. Surfaces shall be structurally sound and free of voids, spalled areas, loose aggregate and sharp protrusions. Remove contaminants such as grease, oil and wax from exposed surfaces. Remove dust, dirt, loose stone and debris. Use repair materials and methods which are acceptable to manufacturer of sheet membrane waterproofing.

B. Cast-In-Place Concrete Substrates:

1. Do not proceed with installation until concrete has properly cured and dried (minimum 7 days for normal structural concrete and minimum 14 days for lightweight structural concrete).
2. Fill form tie rod holes with concrete and finish flush with surrounding surface.
3. Repair bugholes over 13 mm (0.5 in.) in length and 6 mm (0.25 in.) deep and finish flush with surrounding surface.
4. Remove scaling to sound, unaffected concrete and repair exposed area.
5. Grind irregular construction joints to suitable flush surface.

C. Masonry Substrates: Apply waterproofing over concrete block and brick with smooth trowel-cut mortar joints or parge coat.

D. Wood Substrates: Apply waterproofing membrane over securely fastened sound surface. All joints and fasteners shall be flush to create a smooth surface.

E. Related Materials: Treat joints and install flashing as recommended by waterproofing manufacturer.

3.03 INSTALLATION

Refer to manufacturer's literature for recommendations on installation, including but not limited to, the following:

1. Apply primer at rate recommended by manufacturer. Recoat areas not waterproofed if contaminated by dust. Mask and protect adjoining exposed finish surfaces to protect those surfaces from excessive application of surface conditioner.
2. Delay application of membrane until primer is dry. Dry time will vary with weather conditions.

3. Seal daily terminations with troweled bead of mastic.
4. Apply protection board and related materials in accordance with manufacturer's recommendations.

3.04 CLEANING AND PROTECTION

A. Remove any masking materials after installation. Clean any stains on materials which would be exposed in the completed work.
B. Protect completed membrane waterproofing from subsequent construction activities as recommended by manufacturer.

END OF SECTION

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