SECTION 07 13 26

SELF-ADHERING SHEET WATERPROOFING

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This guide specification has been prepared by Polyguard Products Inc., in printed and electronic media, as an aid to specifiers in preparing written construction documents for self-adhering sheet membranes. Balconyguard™ Membrane is a 60-mil nominal, cold-applied, adhesive waterproofing sheet used specifically on wood deck balcony structures that will be covered with lightweight concrete. Balconyguard Membrane 48-inch wide rolls reduce edge seam occurrence by up to 25% when compared to traditional 36" wide material and thereby reduces the number of seams necessary.

Edit entire master document to suit project requirements. Modify or add items as necessary. Delete items which are not applicable. Words and sentences may contain choices to be made regarding inclusion or exclusion of a particular item or statement. This section may include performance-, proprietary-, and/or descriptive-type specifications. Edit to avoid conflicting requirements. Editor notes to guide the specifier are included between lines of asterisks to assist in choices. Remove these editor notes before final printing of guide specification.

This guide specification is written around the Construction Specifications Institute (CSI) Section Format standards.

For assistance on specific product applications, please contact our offices or any of our local product representatives throughout the country.

Polyguard Products Inc. reserves the right to modify these guide specifications at any time. Updates for this guide specification will be posted on the manufacturer's web site and/or in printed media as they occur. Manufacturer makes no expressed or implied warranties regarding content, errors, or omissions in the information presented.

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PART 1 GENERAL

1.01 SECTION INCLUDES

A. Surface preparation.

B. Application of self-adhering membrane system.

1.02 RELATED SECTIONS

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Specifier Notes: Edit the list of related sections as required for the project. List other sections dealing with work directly related to this section.

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A. Section 07 22 00 - Roof and Deck Insulation.

1.03 REFERENCES

A. ASTM D 412 – Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers Tension.

B. ASTM D 882 (02) – Standard Test Method for Tensile Properties of Thin Plastic Sheeting.

C. ASTM D 903 (98) – Standard Test Method for Peel or Stripping Strength of Adhesive Bonds.

D. ASTM D 1000 (04) – Standard Test Methods for Pressure Sensitive Adhesive Coated Tapes Used for Electrical and Electronic Applications.

E. ASTM D 1970 – Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection.

F. ASTM E 96 (Method B) – Standard Test Methods for Water Vapor Transmission of Materials.

G. ASTM E 154 – 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, use limitations and recommendations.

1.05 QUALITY ASSURANCE

A. Manufacturer Qualifications: Sheet Membrane must be manufactured by a company with a minimum of ten (10) years of experience in the production and sales of membrane waterproofing materials.

B. Applicator Qualifications: A firm having at least three (3) years of experience in applying these types of specified materials and specifically accepted in writing by the membrane system manufacturer.

C. Materials: For each type of material required to complete the work of this section, provide primary materials which are the products of a single manufacturer.

D. Pre-Application Conference: A pre-application conference shall be held to establish procedures and to review conditions, installation procedures, and coordination with other related work. Meeting agenda shall include review of special details and flashing.

E. Manufacturer's Representative: Arrange to have trained representative of the manufacturer on-site periodically to review installation procedures.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.

B. Store materials in a clean, dry area in accordance with manufacturer's instructions.

C. Store adhesives at temperatures of 40° F (5° C) and above to facilitate handling.

D. Store membrane cartons on pallets.

E. Keep away from sparks and flames.

F. Completely cover when stored outside. Protect from rain.

G. Protect materials during handling and application to prevent damage or contamination.

H. Avoid use of products which contain tars, solvents, pitches, polysulfide polymers, or PVC materials that may come into contact with waterproofing membrane system.

1.07 PROJECT CONDITIONS

A. Work should be performed only when existing and forecasted weather conditions are within the limits established by the membrane manufacturer.

B. Warn personnel against breathing of vapors and contact with skin and eyes; wear appropriate protective clothing and respiratory equipment.

C. Keep flammable products away from spark or flame. Post "No Smoking" signs. Do not allow use of spark-producing equipment during application and until all vapors have dissipated.

D. Maintain work area in a neat and workmanlike condition. Remove empty cartons and rubbish from the site daily.

1.08 WARRANTY

A. Manufacturer warrants only that this product is free of defects, since many factors which affect the results obtained from this product are beyond our control; such as weather, workmanship, equipment utilized, and prior condition of the substrate. We will replace, at no charge, proven defective product within twelve (12) months of purchase, provided it has been applied in accordance with our written directions for uses we recommended as suitable for this product. Proof of purchase must be provided. A five (5) year material or system warranty may be available upon request. Contact Polyguard Products, Inc. for further details.

PART 2 PRODUCTS

2.01 MANUFACTURER

A. Polyguard Products Inc. P.O. Box 755 Ennis, TX 75120-0755; Phone: (214) 515-5000
Email: info@polyguard.com

2.02 SYSTEM MATERIALS

A. Self-adhesive Membrane Waterproofing: Shall be Polyguard® Balconyguard™ Membrane, a 60-mil rubberized asphalt membrane consisting of a high-density polyethylene film bonded to a layer of rubberized asphalt meeting or exceeding the following requirements:

PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	TYPICAL VALUE
MEMBRANE THICKNESS	ASTM D 1000	60 mils
TENSILE STRENGTH - MEMBRANE	ASTM D 412 Modified Die C	841 PSI
TENSILE STRENGTH - FILM	ASTM D 882	6300 PSI
ELONGATION	ASTM D 412 Modified Die C	730%
PERMEABILITY	ASTM E 96 Method B	0.017 perms-inch
PEEL ADHESION	ASTM D 903	20.0 lb./in. width
LAP ADHESION	ASTM D 1876	12 lbs.
PUNCTURE RESISTANCE - MEMBRANE	ASTM E 154	61 lbs.
LOW TEMPERATURE FLEXIBILITY (-15°F)	ASTM D 1970 Modified	Pass

2.03 SYSTEM ACCESSORIES

A. Surface Primer Roller-grade Adhesive:

1. Polyguard® 650 LT Liquid Adhesive: A rubber-based, tacky adhesive which is specifically formulated to provide excellent adhesion.

2. Polyguard® California Sealant: A rubber-based sealant which is specifically formulated to provide excellent adhesion. The VOC (Volatile Organic Compound) content meets the South Coast Air Quality Management District regulations established under the February 1, 1991 version of Rule 1168 ©) (2) Adhesion and Sealant Applications. California Sealant is classified as an Architectural Sealant Primer Porous, with VOC of 527 g/L. Current SCAQMD regulations for this type sealant primer are 775 g/L.

B. Liquid Membranes:

1. Polyguard® LM-85 SSL (Semi-Self-Leveling): A two-component, semi-self-leveling, asphalt-modified, urethane material

2. Polyguard® LM-95 Liquid Membrane: A two-component, asphalt-modified, urethane.

C. Detailing Sealant:

1. Polyguard® Detail Sealant PW™: A single-component, STPE, 100% solid moisture-cured, elastomeric sealant. It is an environmentally-friendly, non-isocyanate product that replaces silicone and urethane sealants. It is also a low VOC / HAPS-free, cold-applied, self-adhesive, elastomeric sealant.

D. Drainage Composite:

1. Polyguard® BD Drainage Mat: A sheet molded drainage for balcony decks with less than 3-inches of concrete and foot traffic only. It is manufactured with a geocomposite of a formed impermeable polymeric core covered on one side with a non-woven filter fabric that allows water to flow to designated drainage exits.

2. Polyguard® Polyflow® 18 Drainage Mat: Two-part, prefabricated, geocomposite drain consisting of a formed polymeric core covered on one side with woven mono-filament filter fabric. The fabric allows water to pass into the drain core while restricting the movement of soil particles which might clog the core. The core allows the water to flow to designated drainage exits.

E. Corner Boot:

1. The Polyguard® BG Outside Corner Boot: 60-mil combination of rubberized asphalt bonded to polyethylene. The adhesive surface is covered with a release liner which will be removed prior to application.

F. Flashing:

1. Polyguard® 105 Flashing Membrane is a strong, pliable, 105-mil, self-adhesive sheet consisting of high-density polyethylene film bonded to a layer of rubberized asphalt waterproofing compound with slit release sheet to conform to 90° angles.

PART 3 EXECUTION

3.01 EXAMINATION

A. Examine surfaces to receive self-adhering membrane. Notify the general contractor if surfaces are not acceptable. Do not begin surface preparation or application until unacceptable conditions have been corrected.

3.02 SURFACE PREPARATION

A. Protect adjacent surfaces not designated to receive waterproofing.

B. Prior to starting work, check that all horizontal surfaces to be waterproofed slope towards drainage or refer to balcony details for zero-slope applications. System is not intended for areas designed to retain water indefinitely but can retain casual water.

C. Clean and prepare surfaces to receive waterproofing in accordance with manufacturer's instructions.

D. Do not apply waterproofing to surfaces unacceptable to manufacturer.

E. Bridge gaps between supporting substrates with Polyguard® Detail Sealant PW™ or LM-95 to establish full support of the membrane.

3.03 APPLICATION

A. Priming:

1. Apply materials to substrates that are sound, dry, frost free and that have been primed with one of the listed primers listed in section 2.03 System Accessories.

B. Membrane Installation – Positive-Slope Deck:

1. Install each material as shown in the Polyguard® Balconyguard™ Membrane Data Sheet graphics. Adhere Balconyguard™ Membrane in a shingled manner as the protective release sheet is peeled away.

2. Apply in temperatures of 40° F (5° C) and rising, then roll over the surface of installed membrane materials with a hard surfaced rubber roller to insure intimate contact with the receiving substrate.

3. Adhere overlaps to a wiped clean PET surface.

4. Cover the application within thirty (30) days.

5. Drip edges and T-bars are an important part of the waterproofing assembly as they direct water to and over the face of the exterior finish below the deck. Polyguard® does not manufacture, fabricate or distribute metal drip edges or T-bars. Those represented in the Polyguard® Balconyguard™ Membrane data sheet graphics are representative of ones readily found in the marketplace.

C. Membrane Installation – Zero-Slope Deck:

1. If project has zero-sloped deck, contact manufacturer for project specific details.

D. Protection/Drainage:

1. Apply protection board and/or drainage composite and perimeter drainage composite in accordance with manufacturer's written directions.

END OF SECTION