SECTION 07 13 26

ISOLATION JOINT WITH SELF-ADHERING WATERPROOFING AND NON-CHEMICAL TERMITE BARRIER

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This section includes editing notes to assist the user in editing the section to suit project requirements. These notes are included as hidden text, and can be revealed or hidden by one of the following methods:

Microsoft Word 2016, 2013, and 2010: Display the FILE tab on the ribbon, click OPTIONS, then select DISPLAY. Select or deselect HIDDEN TEXT.

Corel WordPerfect: From the pull-down menus select VIEW, then select or deselect the HIDDEN TEXT option.

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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 termite barrier and waterproofing membrane systems.

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

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

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

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PART 1 GENERAL

1.01 SECTION INCLUDES

A. Surface preparation.

B. Application of isolation joint with waterproofing and non-chemical termite barrier

C. Accessory Products

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 03 30 00 - Cast-in-Place Concrete.

1.03 REFERENCES

A. International Code Council (ICC)

1. AC 380 - Acceptance Criteria for Termite Physical Barriers:
2. https://icc-es.org/search-wpsolr/?q=ac380

B. ASTM D412 - Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers-Tension.

C. ASTM D570 - Standard Test Method for Water Absorption of Plastics.

D. ASTM E96 (Method B) - Standard Test Methods for Water Vapor Transmission of Materials.

E. ASTM E154- Standard Test Methods for Water Vapor Retarders Used in Contact with Earth Under Concrete Slabs, on Walls, or as Ground Cover.

F. ASTM F2130 - 01 Standard Test Method for Measuring Repellency, Retention, and Penetration of Liquid Pesticide Formulation Through Protective Clothing Materials

G. ASTM D1970 – 01 Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection

H. ASTM D1000 –10 Standard Test Methods for Pressure-Sensitive Adhesive-Coated Tapes Used for Electrical and Electronic Applications

1.04 SUBMITTALS

A. Proof of long -term termite resistance. Submit a copy of ICC ESR Evaluation Report showing compliance with ICC AC 380 – International Code Council - Acceptance Criteria for Termite Physical Barriers.

B. Product Data: Submit manufacturer's product data, installation instructions, use limitations and recommendations. Include certification of data indicating VOC (Volatile Organic Compound) content of all components of waterproofing system.

C. Samples: Submit representative samples of the following for approval:
1. Isolation Joint Barrier and Accessories.

D. Proof of long-term termite resistance. Submit a copy of ICC ESR Evaluation Report showing compliance with ICC AC 380 – International Code Council - Acceptance Criteria for Termite Physical Barriers.

E. Sustainable Design Submittals: LEED v4

1. EA perquisite and credit – Energy Performance
   a. Indicate how this material can improve energy conservation

2. MR credit - Regional Materials and Recycling content:
   a. Indicate percentage of materials recycled pre-consumer
   b. Indicate percentage of materials recycled post-consumer
   c. Indicate percentage of materials sourced within 100 miles of the manufacturing facility

3. MR credit – Building Product Disclosure and Optimization
   a. Indicate whether the building product(s) have published a complete Health Product Declaration (HPD) with full disclosure of known hazards to at least 0.1% (1000 ppm) in compliance with the Health Product Declaration Open Standard addressing all components of the system

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4. EA perquisite and credit – Energy Performance
   a. Indicate how this material can improve energy conservation.

5. MR credit: Construction and Demolition Waste Management
   a. Indicate what portion of the building product is recyclable in areas where there is a facility to recycle.
   b. For each recyclable material listed in 5.a above, list its weight.

6. EQ credit – Low Emitting Materials:
   a. For each building product material used on the <u>interior</u> of the structure, and applied on site, list the VOC content and where the material is applied.
   b. For each building product material used on the <u>exterior</u> of the structure, and applied on site, list the VOC content and where the material is applied.

7. IN credit - Innovation – Interior Wellness and Comfort
   a. Provide test results documenting ability of product to physically block termite access into structure, thus reducing the usage of pesticides.
   b. Provide details of why the product can increase long term comfort or interior wellness of the building occupants.

8. IN credit – Innovation - Indoor Integrated Pest Management:
   a. LEED v4 standards call out the implementation of IPM (Integrated Pest Management). Typical LEED wording in IPM guidelines is *"Nonchemical pest preventive measures, either designed into the structure* or implemented as part of pest management activities. Describe the area(s) of the building envelope where this building product will provide protection against entry of insects.

9. LEED v4 for Homes – SS credit - Nontoxic Pest Control - Pest Control Alternatives:
   a. Provide documentation of the ability of product to physically block termite or other pest access into structure

10. LEED v4 for Homes – EA credit – Air Infiltration
   a. Provide details of how the product will reduce air infiltration to the structure

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1.05 QUALITY ASSURANCE

A. Manufacturer Qualifications: Barrier System must be manufactured by a company with a minimum of 10 years of experience in the production and sales of membrane waterproofing materials, as well as technical and sales personnel with backgrounds in entomology and/or pest control.

B. Applicator Qualifications: A firm 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.

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

D. Store membrane cartons on pallets.

E. Do not store at temperatures above 90°F (32°C) for extended periods.

F. Keep away from sparks and flames.

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

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

I. Avoid use of products which contain tars, solvents, pitches, polysulfide polymers, or PVC materials that may contact waterproofing system.

1.07 PROJECT CONDITIONS

A. Work should be performed only when existing and forecasted weather conditions are within the limits established by the isolation joint manufacturer. Isolation joint should only be installed when temperature is 40°F (4.44°C) and rising. Consult manufacturer for information concerning cooler temperatures.

B. Proceed with installation only when substrate is clean, smooth, and dry.. Isolation joint should be installed immediately prior to the slab pour.

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

1.08 WARRANTY

A. Provide a written 5-year material warranty from the manufacturer upon completion and acceptance of the installation.

PART 2 PRODUCTS

2.01 MANUFACTURER

A. Polyguard Products Inc. P.O. Box 755 Ennis, TX 75120-0755; Phone: 214-515-5000 Fax: 972-875-9425 Email: info@polyguardbarriers.com

2.02 SYSTEM MATERIALS

A. High Strength Insect Barrier and Waterproofing: Shall be Polyguard TERM® Isolation Joint Barrier, a 0.5" composite barrier consisting of double-sided adhesive membrane, an integrated layer of termite barrier sealant, and an integrated stainless-steel mesh screen with termite sized apertures.

PHYSICAL PROPERTIES OF BARRIER

Property	Test Method	English	Metric
Color	--	Black	*Black*
Barrier Thickness	ASTM D 1000 inch *(mm)*	0.5	*12.7*
Long Term Resistance to Termite Penetration	ICC AC 380 - Acceptance Criteria for Termite Physical Barriers	Furnish ICC ESR Evaluation showing compliance	*Furnish ICC ESR Evaluation showing compliance*
Elongation of Barrier Sealant – % Stretch Before Failure	ASTM D 412	> 500%	*> 500%*
Permeance to Moisture and Water Vapor	ASTM E 96-B perms	.05	*.05*
Water Absorption	ASTM D 570	0.1%	*0.1%*
Peel Adhesion	ASTM D 1000 lb./in width / *(N/mm)*	10.0	*1.75*
Low Temperature Flexibility	ASTM D 1970 180◦ bend over 1" mandrel at -20◦F*(-29◦C)*	No cracking or delamination	No cracking or delamination
Barrier Puncture Resistance	ASTM E 154 (Blunt Instrument) lb. / (*N)*	150	*546*
Aperture Size of Encapsulated Stainless-Steel Screen	ASTM D 1000 inch *(mm)*	0.018"	*.457*

2.03 SYSTEM ACCESSORIES

A. Primer Adhesive:

1. Polyguard® 343 Spray Adhesive

B. Sealant Barrier:

1. Polyguard TERM® Water Termite Sealant Barrier: A gunnable or trowelable sealant with termite barrier properties.

PART 3 EXECUTION

3.01 EXAMINATION

A. Notify General Contractor if surfaces are not acceptable. Do not begin application until unacceptable conditions have been corrected.

3.02 SURFACE PREPARATION

A. Protect adjacent surfaces not designated to receive waterproofing and termite barrier.

B. Prepare surfaces to receive waterproofing and termite barrier in accordance with manufacturer's instructions.

3.03 APPLICATION

A. Make sure the surface is clean, dust free, smooth, and dry.

B. *Isolation Joint Barrier* is installed horizontally on the face of the existing slab. The top of the *Isolation Joint Barrier* should be adhered on the vertical side of the existing slab surface in the area where the new slab will be poured, extending just past where the concrete forming for the new slab will extend. See the *Isolation Joint Barrier* detail.

1. After determining the required length of the *Isolation Joint Barrier c*ut pieces of barrier to length.

2. Prime the area of the vertical side of the existing slab with Polyguard 343 spray adhesive where the isolation joint barrier will be installed.

3. Apply isolation joint barrier to the vertical side of the existing slab.

4. Roll the entire length of the barrier with a hard surface roller after installation. This will ensure 100% adhesion to the concrete surface.

5. Terminate all top horizontal edges with sealant barrier as recommended by manufacturer.

C. Leave the stainless-steel wire folded back against the Isolation Joint Barrier until just before the new slab is placed. At that time fold the wire out horizontal at a 90-degree angle to the vertical side of the slab where it is installed. This will enable the wire mesh to be embedded in the new slab..

END OF SECTION