



WASHINGTON STATE
UNIVERSITY

Addendum No. 4
August 1, 2023

Re-Bid Prosser Hamilton Lab Bldg Roof
Replacement
Washington State University
Prosser, WA

Project No. 1933-2023
Washington State University
Facilities Services, Capital

**Addendum No. 4
August 1, 2023****Re-Bid Prosser Hamilton Lab Bldg Roof Replacement
Washington State University
Prosser, WA****Bid Date: August 3, 2023**

1. This Addendum forms a part of the Contract Documents and modifies the original Bidding Documents dated July 12, 2023, and any prior addenda, as noted below.
2. Please acknowledge receipt of this addendum on the Form of Proposal.

This Addendum consists of six total pages including the following attachments:

Product Data Sheet; GENFLEX AFR EPDM Membrane

Changes to prior Addenda:

None

Changes to Bidding Requirements:

None

Changes to Specifications:

None

Clarifications:

1. New Roof Slopes may fall within 1/8"- 3/8" per foot with a goal of utilizing steeper sloping where applicable.
2. The new R-38 roof insulation value shall be an average rating for the entire roof footprint per each roof section. Contractor shall demonstrate compliance with this requirement in their product submittal.

Approved Substitution Requests:

Drawing or Specification	Item	Acceptable Substitution Manufacturer or Product
07 53 23	EPDM Roofing	GENFLEX AFR EPDM Membrane

Changes to Drawings:

None

END OF ADDENDUM No. 4

GENFLEX AFR EPDM Membrane

Item Description

1 Roll

Item Number

Various

Product Information

Description

GenFlex AFR EPDM Membrane is a non-reinforced, cured, single-ply roofing membrane that can be used in ballasted, fully adhered and mechanically attached systems.

General Application Information:

- Substrates must be clean, dry, smooth, and free of sharp edges, fins, loose or foreign materials, oil, grease, and other materials that may damage the membrane.
- All roughened surfaces that can damage the membrane shall be repaired as specified to offer a smooth substrate.
- All surface voids greater than ¼" (6.3 mm) wide shall be properly filled with an acceptable fill material.
- GenFlex AFR EPDM Membrane must be installed in accordance with current GenFlex specifications, details and workmanship requirements.

Storage

- Store away from sources of punctures and physical damage.
- Assure that structural decking will support the loads incurred by material when stored on rooftop. The deck load limitations should be specified by the project designer.
- Store away from ignition sources as membrane will burn when exposed to open flame.

Packaging Data			
Membrane Thickness	Width	Length	Weight
0.045" (1.14 mm)	7.5' (2.3 m)	100' (30.5 m)	0.29 lb/ft² (1.4 kg/m²)
	10' (3.05 m)		
	16.7' (5.09 m)		
	20' (6.10 m)		
	30' (9.14 m)		
	40' (12.19 m)		
0.060" (1.52 mm)	50' (15.24 m)	100' (30.5 m)	0.39 lb/ft² (1.9 kg/m²)
	7.5' (2.3 m)		
	10' (3.05 m)		
	16.7' (5.09 m)		
	20' (6.10 m)		
	30' (9.14 m)		
0.060" (1.52 mm)	40' (12.19 m)	100' (30.5 m)	0.39 lb/ft² (1.9 kg/m²)
	50' (15.24 m)		
NOTE: Available sizes vary by product. Contact your GenFlex Customer Service Representative for availability and packaging information.			

Precautions

- Take care when moving, transporting, handling, etc. to avoid sources of punctures and physical damage.
- Isolate waste products, such as petroleum products, greases, oils (mineral and vegetable) and animal fats from the EPDM membrane.
- Refer to Safety Data Sheets (SDS) for safety information.

LEED® Information

Post-Consumer Recycled Content: 0%

Post Industrial Recycled Content: 0%

Manufacturing Locations: Prescott, AR

*NOTE: LEED® is a registered trademark of the U.S. Green Building Council.



CCMC 13265-L



CCMC 13266-L

Typical Properties

Physical Test	ASTM Minimum Value	Typical Value 45 mil	Typical Value 60 mil
Thickness (D412)	45 mil: 1.143 mm +0.178 mm/-0.127 mm (0.045" +0.007"/-0.005")	1.092 mm (0.043")	1.37 mm (0.054")
	60 mil: 1.52 mm +0.229 mm/-0.152 mm (0.060" +0.009"/-0.006")		
Tensile Strength (D412, Die C)	9.0 MPa (1305 psi) Minimum	9.03 MPa (1309 psi)	9.09 MPa (1319 psi)
Dynamic Puncture Resistance @ 5J (D5635)	Pass	Pass	Pass
Static Puncture Resistance @ 20 kg (D5602)	Pass	Pass	Pass
Elongation, Ultimate % (D412, Die C)	300% Minimum	445%	480%
Tensile set (D412, Method A, Die C)	10% Maximum	0%	Pass
Tear Resistance (D624, Die C)	26.27 kN/m (150 lbf/in) Minimum	29.60 kN/m (169 lbf/in)	29.25 kN/m (167 lbf/in)
Brittleness point (D2137)	-45 °C (-49 °F) Maximum	-45 °C (-49 °F)	Pass
Ozone resistance, no cracks D1149)	Pass	Pass	Pass
Tensile Strength after Heat Aging*	21.9 kN/m 125 lbf/in Minimum	9.48 MPa (1365 psi)	Pass
Elongation, Ultimate after Heat Aging*	200% Minimum	306%	Pass
Tear Resistance after Heat Aging*	21.9 kN/m 125 lbf/in Minimum	33.1 kN/m (189 lbf/in)	Pass
Linear Dimensional Change after Heat Aging*	± 1%	-1%	Pass
Water Absorption by Mass (D471)	+8%/-2%	+1%	Pass
Visual Inspection after Xenon-Arc Weather Resistance Exposure**	Pass	Pass	Pass
PRFSE, Minimum % after Xenon-Arc Weather Resistance Exposure**	30% Minimum	75%	Pass
Elongation, Ultimate, Minimum % after Xenon-Arc Weather Resistance**	200% Minimum	340%	Pass

* Heat age EPDM membrane for: 166 ± 1.66 hours at 240 ± 4°F (116 ± 2°C), followed by specified physical testing.

** Weather Resistance shall be Practices G151 and G155 Xenon-Arc as follows:

<u>Filter Type:</u>	Daylight
<u>Irradiance:</u>	0.35 to 0.70 W/(m ² ·nm) @ 340 nm [42 to 84 W/(m ² ·nm) @ 300 to 400 nm]
<u>Cycle:</u>	690 minutes ± 15 minutes light, 30 minutes light plus water spray
<u>Un-insulated Black Panel Temp:</u>	176° ± 4°F (80° ± 2°C)
<u>Relative Humidity:</u>	50% ± 5%
<u>Spray Water:</u>	De-ionized
<u>Specimen Rotation:</u>	Every 315 KJ/(m ² ·nm) @ 340 nm [37.8 MJ/(m ² ·nm) @ 300 to 400 nm]
<u>Exposure:</u>	10,080 KJ/(m ² ·nm) @ 340 nm [1209.6 MJ/(m ² ·nm) @ 300 to 400 nm]

1. When system design includes an air barrier, please consult your GenFlex Technical Services Advisor for additional roof system securement enhancements.
2. Consult the Designer / Architect, Code Agency or Authority having Jurisdiction (AHJ) for requirements regarding the selection and use of an appropriate air barrier material, and its installation into the building envelope

Please contact GenFlex Technical Department at 1-800-443-4272 option 1, for further information.

This sheet is meant to highlight GenFlex products and specifications and is subject to change without notice. GenFlex takes responsibility for furnishing quality materials which meet published GenFlex product specifications. Neither GenFlex nor its representatives practice architecture. GenFlex offers no opinion on and expressly disclaims any responsibility for the soundness of any structure. GenFlex accepts no liability for structural failure or resultant damages. Consult a competent structural engineer prior to installation if the structural soundness or structural ability to properly support a planned installation is in question. No GenFlex representative is authorized to vary this disclaimer.

SUBSTITUTION REQUEST

TO _____

PROJECT Prosser Hamilton Lab Building

SPECIFIED ITEM EPDM

SECTION 025323 PAGE 5 PARAGRAPH 201

DESCRIPTION EPDM Roofing Membrane - Fully Adhered

PROPOSED SUBSTITUTION Approved GenFlex EPDM System

Attached data includes product description, specifications, drawings, photographs, performance and test data adequate for evaluation of request including identification of applicable data portions.

Attached data also includes description of changes to Contract Documents and proposed substitution requires for proper installation.

Undersigned certifies following items, unless modified by attachments, are correct:

1. Proposed substitution does not affect dimensions shown on drawings.
2. Undersigned pays for changes to building design, including engineering design, detailing, and construction costs caused by proposed substitution.
3. Proposed substitution has no adverse effect on other trades, construction schedule, or specified warranty requirements.
4. Maintenance and service parts available locally or readily obtainable for proposed substitution.

Undersigned further certifies function, appearance, and quality of proposed substitutions are equivalent or superior to specified item.

Undersigned agrees to terms and conditions for substitutions found in Bidding Documents to this proposed substitution.

Submitted By:

ZAR Kephler
Name (Printed or typed)

Signature

Skoler Building Resources

Firm Name

1101 N Northlake Way

Address

Spokane, WA 99203

City, State, Zip

7/29/2023

Date

206 657 4444

Tel:

General Contractor (if after award of Contract)

For use by A/E

☐ Approved

☒ Approved as noted

☐ Not Approved

☐ Received too late

By

CRAIG BEAUMONT

Date

8/1/23

Remarks

COMPLIANCE WITH WARRANTY REQUIREMENTS MUST BE MET.

The Construction Specifications Institute
Northwest Region

September 1997



Advancement
of Construction
Technology