IOWA | Department of Administrative Services

ADDENDUM #2

Project Name: DOC ICIW Building 9 Roof Replacement
DAS#9454.00
RFB945400-01
Addendum #2
Dated: March 7, 2025

This Addendum forms a part of the Request For Bid documents. This Addendum supersedes and supplements all portions of the original Request For Bid dated February 5, 2025, with which it conflicts.

ACKNOWLEDGE RECEIPT OF THIS ADDENDUM IN THE REQUEST FOR BID. FAILURE TO DO SO MAY SUBJECT TO DISQUALIFICATION.

1. **Questions:**
    a. What times will the facility have lockdowns?
        1. *12:45pm; lockdowns will last approximately 30-45 minutes.*
    b. Where will the staging area for equipment be located?
        1. *The laydown site will be at the maintenance facility on the north side of the parking lot. All equipment and materials movement in/out of the facility will be coordinated with the Plant Operations team.*
    c. Will there be access for crane operations?
        1. *Yes, this must be coordinated with the Plant Operations team.*

2. **Clarifications:**
    a. N/A

3. **Attachments:**
    a. Substitution Request – TPO Roofing Assembly
    b. Substitution Request – Duro Last Substitution
    c. Photos of the Roof; interior and exterior
    d. RFB Pre-Bid Sign In Sheet from February 26, 2025
    e. RFB Pre-Bid Meeting Minutes from February 26, 2025

END OF ADDENDUM

SUBSTITUTION REQUEST FORM

Project: ICIW Building 9 Roof Replacement
Substitution Request Number:

From: Matthew Hartman

To: Horizon Architecture Michael Nolan
Date: 02-24-25

Samuels Group- Kyle Davis
A/E Project Number: 9454

Re: Substitution- TPO Roofing System

Specification Title: Thermoplastic Membrane Roofing
Description: TPO Roofing System

Section: 075400 Page: 2
Article/Paragraph: 2.2 A

Proposed Substitution: Versico VersiWeld TPO Roofing System

Manufacturer: Versico Address: 1285 Ritner Hwy Carlisle PA Phone: 800-992-7663

Trade Name: VersiWeld TPO
Model No.:

History: ☐ New product ☐ 2-5 years old ☐ 5-10 yrs old ☑ More than 10 years old

Differences between proposed substitution and specified product: Same product produced by Carlisle Construction Materials, Carlisle Syntec and Versico are sister companies. Difference is we have different certified contractors then Carlisle Syntec. Same traning program though.

☑ Point-by-point comparative data prepared by contractor and attached - REQUIRED BY A/E

Reason for not providing specified item:
Comparable product for bidding and installation

Similar Installation:

Project: Zoetis Building 6200
Architect: Michael Lensing- Zoetis

Address: 2000 Rockford Rd
Owner: Zoetis

Charles City IA 50616
Date Installed: 08-24-2023

Proposed substitution affects other parts of Work: ☑ No ☐ Yes; explain

Supporting Data Attached: ☐ Drawings ☑ Product Data ☐ Samples ☐ Tests ☐ Reports ☐

SUBSTITUTION REQUEST FORM

(Continued)

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Cost data as stated above is complete. Claims for additional costs related to accepted substitution which may subsequently become apparent are to be waived.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.
- Coordination, installation, and changes in the Work as necessary for accepted substitution will be complete in all respects.

Submitted by: Matthew Hartman

Signed by: Matthew Hartman

Firm: Roofing Representatives

Address: 900 Kacena Rd Hiawatha IA 52233

Telephone: 319-321-3272

Attachments: Product Data Sheets

A/E's REVIEW AND ACTION

☐ Substitution approved - Make submittals in accordance with Specification Section 01 3300.
☐ Substitution approved as noted - Make submittals in accordance with Specification Section 01 3300.
☐ Substitution rejected - Use specified materials.
☐ Substitution Request received too late - Use specified materials.

Signed by: Date:

Additional Comments: ☐ Contractor ☐ Subcontractor ☐ Supplier ☑ Manufacturer ☐ A/E ☐ _____

Manufacturer Agent for Versico Roofing Systems

January 1, 2024

Re: Versico Roofing Systems & Carlisle Construction Materials (CCM)

To Whom It May Concern,

Please accept this letter as a clarification of the relationship between Versico Roofing Systems and Carlisle Construction Materials (CCM). I am writing so that you might be able to make an informed decision on your roofing needs. In my capacity at Carlisle Construction Materials, I am responsible for the sales of both of CCM's roofing brands, Carlisle SynTec Systems and Versico Roofing Systems.

Versico is a division of Carlisle Construction Materials, LLC (CCM). As such, its roofing systems are inspected by CCM employees, and its warranties are backed by CCM. Carlisle Construction Materials does not back the roofing system warranties of any systems other than those marketed under the Carlisle SynTec or Versico names. Versico's materials are manufactured by CCM and meet the same technical specifications as Carlisle SynTec's materials.

CCM elects to market two brands through separate representative channels in order to reach a wider segment of the commercial roofing market. From a product and installation quality perspective, the Carlisle SynTec and Versico brands can be considered as equals.

I trust that this will clarify any questions you might have. If not, please feel free to call me at (800) 479-6832.

Sincerely,

Joe Stassi
Executive Vice President, Commercial Roofing
Carlisle Construction Materials

White 60mil TPO: Carlisle vs. Versico Comparison

TYPICAL PHYSICAL PROPERTY COMPARISON CHART – 60MIL TPO – ASTM D6878 Requirements

Physical Property	ASTM & Requirement	Versico Versiweld TPO	Carlisle Sure-Weld TPO
Thickness	D751, +15/-10	+/- 10%	+/- 10%
Thickness Over Scrim	D7635, .015 min.	.024 typical	.024 typical
Breaking Strength	D751, 220 lbf min.	360 typical	360 typical
Elongation @ Break	D751, 15% min.	25 typical	25 typical
Tearing Strength	D751, 55 lbf Min.	130 typical	130 typical
Brittleness Point	D2137, -40°F max	-50°F typical	-50°F typical
Linear Dimension Change	D1204, +/- 1% max	-0.2% typical	-0.2% typical
Ozone Resistance	D1149, No Cracks	Pass	Pass
Water Absorption Resistance	D471, +/- 3% max	0.9% typical	0.9% typical
Factory Seam Strength	D751, 66 lbf min	66 lbf min	66 lbf min
Properties after Heat Aging	D573, no cracking	No Cracking	No Cracking
	D573, 1.5% max weight change	.29% Typical	.29% Typical

TYPICAL RADIATIVE PROPERTIES COMPARISON CHART – White 60MIL TPO – ENERGY STAR & LEED REQUIREMENTS

Physical Property	Program, ASTM, & Requirement (if any)	Versico Versiweld TPO	Carlisle Sure-Weld TPO
Initial Solar Reflectance	Energy Star, C1549, 0.65 min	.79	.79
Solar Reflectance – 3yr	Energy Star, C1549, 0.50 min	.70	.70
Initial Solar Reflectance	CRRC, C1549	.79	.79
Solar Reflectance – 3yr	CRRC, C1549 Uncleaned	.70	.70
Initial Thermal Emittance	CRRC, C1371	.90	.90
Thermal Emittance – 3yr	CRRC, C1371 Uncleaned	.86	.86
Thermal Emittance	LEED, E408	.90	.90
SRI (Solar Reflectance Index)	LEED, E1980, Min 82	99	99
SRI (Solar Reflectance Index) – 3yr	LEED, E1980, Min 64	85	85

Carlisle Construction Material Companies Include: Versico Roofing Systems, Carlisle SynTec Systems, Hunter Panels, Insulfoam, Accella, Carlisle Coatings & Waterproofing, Hardcast Products, Carlisle WIP, Weatherbond, Drexel Metals, and Peterson Aluminum (Pending)

VersiWeld® TPO Reinforced Membrane

Overview

Versico's VersiWeld TPO reinforced membrane is a premium, heat-weldable, single-ply thermoplastic polyolefin (TPO) sheet designed for new roof construction and re-roofing applications. VersiWeld High Slope (HS) membrane is formulated with additional flame retardant for higher-slope fire code approvals. VersiWeld Plus is 80 mils (2.03 mm) thick for significantly higher strength and weatherability.

VersiWeld TPO membranes use advanced polymerization technology that combines the flexibility of ethylene-propylene (EP) rubber with the heat weldability of polypropylene. All VersiWeld TPO membranes include OctaGuard XT™, an industry-leading, state-of-the-art weathering package. OctaGuard XT technology enables VersiWeld TPO to withstand the extreme weatherability testing that is intended to simulate exposure to severe climates.

Physical properties of the membrane are enhanced by a strong polyester fabric that is encapsulated between the TPO-based top and bottom plies. The combination of the fabric and TPO plies provides high breaking and tearing strength, as well as excellent puncture resistance. The relatively smooth surface of the membrane produces a total surface fusion weld that results in a consistent, watertight, monolithic roof assembly. The membrane is environmentally friendly and safe to install.

Features and Benefits

- Living Building Challenge "Red List Free" – Declare Label
- VersiWeld TPO is available in 4-, and 6-ft (121.92 cm and 182.88 cm) perimeter sheets and 8-, 10-, 12-, and 16-ft (243.84 cm, 304.80 cm, 365.76 cm, and 487.68 cm) VersiWeld field sheets*
- Outstanding puncture resistance and excellent fire resistant assemblies
- Environmentally friendly and stable formulation
- Excellent resistance to impact and low temperatures
- Excellent chemical resistance to acids, bases and restaurant exhaust emissions
- UL 2218 Class 4 hail rating
- Manufactured with non-halogenated flame retardants
- Exceptional resistance to heat, solar UV, ozone and oxidation
- Manufactured using a hot-melt extrusion process for complete scrim encapsulation
- Enhanced with the OctaGuard XT weathering package

OCTAGUARD XT WEATHERING PACKAGE

- Standard Colors:

White Gray Tan

- Special Colors:

Slate Gray Med Bronze Terra Cotta Patina Green Rock Brown

* VersiWeld HS Special Color TPO membranes are available in limited sizes. Refer to Versico's VersiWeld TPO Color Palette Sell Sheet for details.

Sustainable Attributes

Versico Roofing Systems' focus has always been innovation – Innovation to solve problems, improve performance, reduce labor, and above all, improve sustainability. Versico is committed to driving sustainable and efficient processes in the design and manufacturing of our products.

- Up to 10% pre-consumer recycled content
- Fully recyclable when used in mechanically attached systems
- 3rd-party verified Environmental Product Declaration available
- NSF P151 certification for rainwater catchment**
- California Title 24 compliant***
- Free of Living Building Challenge red list chemicals

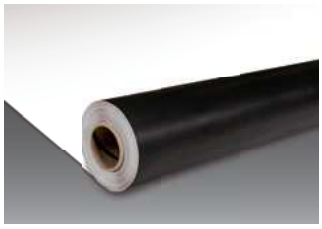
** White only, produced in Tooele, UT
*** White and Tan only

VERSICO ROOFING SYSTEMS

VersiWeld TPO Reinforced Membrane

Wider is Better

Versico's 16-foot VersiWeld TPO delivers a leap in productivity on adhered and induction welded roofs by cutting down on the number of rolls needed and dramatically reducing the number of seams on the roof.



With fewer rolls to load, stage, and kick out, and fewer seams to weld, contractors can save significant time on each project, moving on to the next one sooner.

16-Foot TPO Benefits

- Fewer rolls to load and stage on a job saves crane time and labor at the beginning of each project
- Fewer rolls to position, kick-out, and align during installation saves labor
- Up to 60% fewer seams vs. 10-foot TPO
- Fewer seams to weld, probe, and inspect, saving considerable time during installation
- Fewer T-joint patches to install on each roof
- Less waste and trash from packaging
- Less time spent on each project, allowing contractors to complete more roofs and grow their business

Installation

VersiWeld TPO roofing systems are quick to install, as minimal labor and few components are required. TPO systems are installed using an Automatic Heat Welder, making sheet welding fast, clean, consistent, and easy to learn, while reducing strain on the roofing technician.

Fully-Adhered – membrane is adhered to a suitable substrate utilizing an appropriate bonding adhesive

Mechanically Attached – membrane is attached to the roof deck over a suitable substrate utilizing plates and fasteners which are overlapped with membrane

Induction-Welded – membrane is attached over a suitable substrate via an induction welding tool being placed over the membrane where a fastened TPO induction welding plate is located to weld the two components together

REVIEW CURRENT VERSICO SPECIFICATIONS AND DETAILS FOR SPECIFIC INSTALLATION REQUIREMENTS.

Precautions

- Sunglasses that filter out ultraviolet light are strongly recommended, as tan and white surfaces are highly reflective. Roofing technicians should dress appropriately and wear sunscreen.
- Surfaces may become slippery due to frost and ice buildup. Exercise caution during cold conditions to prevent falls. Exercise caution when walking on wet membrane. Membranes may be slippery when wet.
- Care must be exercised when working close to a roof edge when the surrounding area is snow-covered, as the roof edge may not be clearly visible.
- Use proper stacking procedures to ensure sufficient stability of the rolls.
- Store membrane in the original undisturbed plastic wrap in a cool, shaded area and cover with light-colored, breathable, waterproof tarpaulins. Membrane that has been exposed to the weather must be prepared with Weathered Membrane Cleaner prior to hot-air welding.
- Take care not to stand or place heavy objects on the edge of folded-over membrane, as this could cause a hard crease in the membrane.
- Maximum sustained temperature not to exceed 160°F (71°C) for TPO membrane.
- Do not use razor blades or other sharp tools to cut the APEEL Protective Film while it is still adhered to the TPO membrane as damage to the underlying membrane may occur. Pull the protective film away from the membrane prior to cutting.
- Remove APEEL Protective Film by pulling towards the center of the roof. Do not remove the film by pulling towards the roof edge.
- A static electric charge may develop when removing APEEL Protective Film from the surface of the membrane sheet. To avoid the possibility of ignition, lids must be closed on any flammable products and a fire extinguisher should be readily available.
- Color membranes will 'fade' over time mainly due to the ultraviolet portion of sunlight. Since most roof surfaces are exposed to variable sunlight, some areas will be more susceptible to color changes caused by UV fading. Warranties for color membranes do not cover fading of colors.

Extreme Testing for Severe Climates

ASTM Standard D6878 is the material specification for Thermoplastic Polyolefin-Based Sheet Roofing. It covers material property requirements for TPO roof sheeting and includes initial and aged properties after heat and xenon-arc exposure. As stated in the scope of the standard, "the tests and property limits used to characterize the sheet are values intended to ensure minimum quality for the intended purpose." Versico's goal is to produce TPO that delivers maximum performance for the intended purpose of roofing

VERSICO
ROOFING SYSTEMS

VersiWeld TPO Reinforced Membrane

membranes. Maximum performance requires the membrane to far exceed the requirements of ASTM D6878.

Heat Aging accelerates the oxidation rate that roughly doubles for each 18°F (10°C) increase in roof membrane temperature. Oxidation (reaction with oxygen) is one of the primary chemical degradation mechanisms of roofing materials.

Versico Testing – Heat Aging

	ASTM Requirement	VersiWeld Requirement
ASTM Test 240°F	32 weeks**	>128 weeks

** Heat exposure comparable to 3,120 weeks (60 years) at 185°F for 8 hours/day.

- Test specimen is a 2" by 6" (50.8 mm by 152.4 mm) piece of 45-mil (1.14 mm) membrane unbacked, placed in circulating hot-air oven.
- Criterion – no visible cracks after bending aged test specimen around 3" (76.2 mm)-diameter mandrel.

Q-Trac testing combines accelerated weathering with real-world conditions using an array of ten mirrors to reflect and concentrate full spectrum sunlight onto membrane test specimens. The Q-Trac device automatically tracks the sun's path from morning to night. Also, it adjusts to compensate for seasonal changes in the sun's altitude. Eight years in Q-Trac testing is equal to 40 years of real-world exposure. Versico requires its VersiWeld TPO membranes to pass the equivalent of 40 years of exposure in the Q-Trac.

Versico Testing – Q-TRAC

	ASTM D6878 Requirement	VersiWeld Requirements
ASTM Test N/A	N/A	Equivalent of 40 years of exposure

Environmental Cycling subjects the membrane to repeated cycles of heat aging, hot-water immersion, and xenon-arc exposure.

- ASTM requirement – none
- Versico Extreme test*:
  - 10 days heat aging at 240°F (116°C) followed by
  - 5 days water immersion at 158°F (70°C) followed by
  - 5,040 kJ/m² (2000 hours at 0.70 W/m² irradiance) xenon-arc exposure

* Test specimen is 2.75" (69.85 mm by 140 mm) by 5.5" piece of membrane with edges sealed.

* Criterion – after 3 complete cycles, test specimens shall remain flexible and not have any cracking under 10x magnification while wrapped around a 3" (76.2 mm)-diameter mandrel.

Supplemental Approvals, Statements and Characteristics:

1. VersiWeld TPO meets or exceeds the requirements of ASTM D6878 Standard Specification for Thermoplastic Polyolefin-Based Sheet Roofing.
2. VersiWeld TPO membranes conform to requirements of the US E.P.A. Toxic Leachate Test (40 CFR part 136) performed by an independent analytical laboratory.
3. VersiWeld TPO was tested for dynamic puncture resistance per ASTM D5635-04 using the most recently modified impact head. 45-mil (1.14 mm) was watertight after an impact energy of 12.5 J (9.2 ft-lbf) and 60-mil (1.52 mm) was watertight after 22.5 J (16.6 ft-lbf). 80-mil (2.03 mm) Plus was watertight after an impact energy of 30.0 J (22.1 ft-lbf).
4. All FM approved assemblies have been tested to pass FM 4470 for foot traffic resistance.

Optional APEEL™ Protective Film:

Shield Versico's VersiWeld TPO membrane from dirt and scuffs during installation with APEEL Protective Film. Durable and easy to remove, APEEL eliminates the need for rooftop cleaning upon project completion.

APEEL PROTECTIVE FILM

- Ideal for re-roofing, re-cover, and new construction projects
- Simple and easy to remove
- Saves time and money when compared to pressure washing
- Protecting from dirt maintains maximum membrane reflectivity and long-term performance

Installation

Simply order membrane with APEEL, install, and remove the film to reveal a clean, new roof.

- APEEL Protective Film should be removed from within areas that are to be heat-welded together. In areas that do not require heat-welding, the APEEL Protective Film can be left in place for up to 90 days without degrading due to its excellent heat- and UV-resistance .
- When the installation of the entire TPO roofing system is complete, remove and discard the APEEL Protective Film.

VERSICO ROOFING SYSTEMS

VersiWeld TPO Reinforced Membrane

Typical Properties and Characteristics

Physical Property	ASTM D6878 Requirement	45-mil (1.14 mm)	60-mil (1.52 mm)	80-mil Plus (2.03 mm)
Tolerance on Nominal Thickness, % ASTM D751 test method	+15, -10	± 10	± 10	± 10
Thickness Over Scrim, in. (mm) ASTM D7635 optical method, average of 3 areas	0.015 min (0.380)	0.018 typical (0.457)	0.024 typical (0.610)	0.034 typical (0.864)
Breaking Strength, lbf (kN) ASTM D751 grab	220 (976 N) min	225 (1.0) min 320 (1.4) typical	250 (1.1) min 360 (1.6) typical	350 (1.6) min 425 (1.9) typical
Elongation Break of Reinforcement, % ASTM D751 grab method	15 min	15 min 25 typical	15 min 25 typical	15 min 25 typical
Tearing Strength, lbf (N) ASTM D751 proc. B 8 in. x 8 in.	55 (245) min	55 (245) min 130 (578) typical	55 (245) min 130 (578) typical	55 (245) min 130 (578) typical
Brittleness Point, °F (°C) ASTM D2137	-40 (-40) max	-40 (-40) max -50 (-46) typical	-40 (-40) max -50 (-46) typical	-40 (-40) max -50 (-46) typical
Linear Dimensional Change, % ASTM D1204, 6 hours at 158°F	± 1 max	± 1 max -0.2 typical	± 1 max -0.2 typical	± 1 max -0.2 typical
Ozone Resistance, no cracks 7X ASTM D1149, 100 pphm, 168 hrs	PASS	PASS	PASS	PASS
UV Exposure (Xenon Arc), no cracks 7X ASTM G155, min. exposure 10,080 kJ/m^2 (4,000 hrs - 0.70 W/m^2)	PASS	PASS	PASS	PASS
Water Absorption Resistance, mass % ASTM D471 top surface only 166 hours at 158°F water	± 3.0 max	± 3.0 max 0.90 typical	± 3.0 max 0.90 typical	± 3.0 max 0.90 typical
Factory Seam Strength, lbf (N) ASTM D751 grab method	66 (290) min	66 (290) min	66 (290) min	66 (290) min
Field Seam Strength, lbf/in (kN/m) ASTM D1876 tested in peel	No requirement	25 (4.4) min 50 (8.8) typical	25 (4.4) min 60 (10.5) typical	40 (7.0) min 70 (12.3) typical
Water Vapor Permeance, Perms ASTM E96 proc. B	No requirement	0.10 max 0.05 typical	0.10 max 0.05 typical	0.10 max 0.05 typical
Puncture Resistance, lbf (kN) FTM 101C, method 2031 (see supplemental section)	No requirement	250 (1.1) min 325 (1.4) typical	300 (1.3) min 350 (1.6) typical	400 (1.8) min 450 (2.0) typical
Properties After Heat Aging ASTM D573, 32 weeks @ 240°F or 8 weeks @ 275°F No cracking when bent around 3" diameter mandrel Weight Change, %	PASS No cracking ± 1.5 max	PASS No cracking 1.0 max	PASS No cracking 1.0 max	PASS No cracking 1.0 max
Typical Weights lb/ft^2 (kg/m^2)		0.25	0.33	0.45

Typical properties and characteristics are based on samples tested and are not guaranteed for all samples of this product. This data and information is intended as a guide and does not reflect the specification range for any particular property of this product.

VERSICO ROOFING SYSTEMS

VersiWeld TPO Reinforced Membrane

LEED® Information

Pre-consumer Recycled Content	10%
Post-consumer Recycled Content	0%
Manufacturing Location	Senatobia, MS Tooele, UT Carlisle, PA
Solar Reflective Index (SRI)	99 (white) 86 (tan)

Radiative Properties for Cool Roof Rating Council (CRRC) and LEED

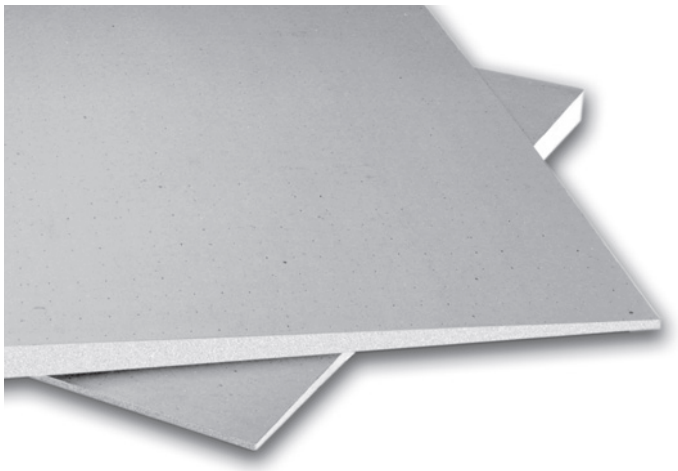
	Test Method	White TPO	Tan TPO	Gray TPO
CRRC – Initial solar reflectance	ASTM C1549	0.79	0.71	0.46
CRRC – Solar reflectance after 3 years	ASTM C1549 (uncleaned)	0.70	0.64	0.43
CRRC – Initial thermal emittance	ASTM C1371	0.90	0.86	0.89
CRRC – Thermal emittance after 3 years	ASTM C1371 (uncleaned)	0.86	0.87	0.88
LEED – Thermal emittance	ASTM E408	0.9	0.86	0.85
SRI – Inital (Solar Reflectance Index)	ASTM E1980	99	86	52
SRI – 3 year aged (Solar Reflectance Index)		85	77	49

Radiative Properties (Initial) for Special Colors

	Reflectance	Emittance	SRI
Medium Bronze	0.28	0.86	29
Rock Brown	0.25	0.87	26
Slate Gray	0.38	0.87	42
Terra Cotta	0.25	0.86	25
Patina Green	0.25	0.88	25

Solar Reflectance Index (SRI) is calculated per ASTM E1980. The SRI is a measure of the roof's ability to reject solar heat, as shown by a small temperature rise. It is defined so that a standard black (reflectance 0.05, emittance 0.90) is 0 and a standard white (reflectance 0.80, emittance 0.90) is 100. Materials with the highest SRI values are the coolest choices for roofing. Due to the way SRI is defined, particularly hot materials can even take slightly negative values and particularly cool materials can even exceed 100.

VersiCore® Tapered Polyiso



Overview

VersiCore Tapered is a sloped rigid roof insulation panel composed of a closed cell polyisocyanurate foam core bonded to glass reinforced felt (GRF) facers.

Features and Benefits

- VersiCore Tapered polyiso insulation provides the highest R-value per inch of commercially available insulation products
- Environmentally friendly construction with 0% ozone depleting components and CFC free
- Approved for direct application to steel decks

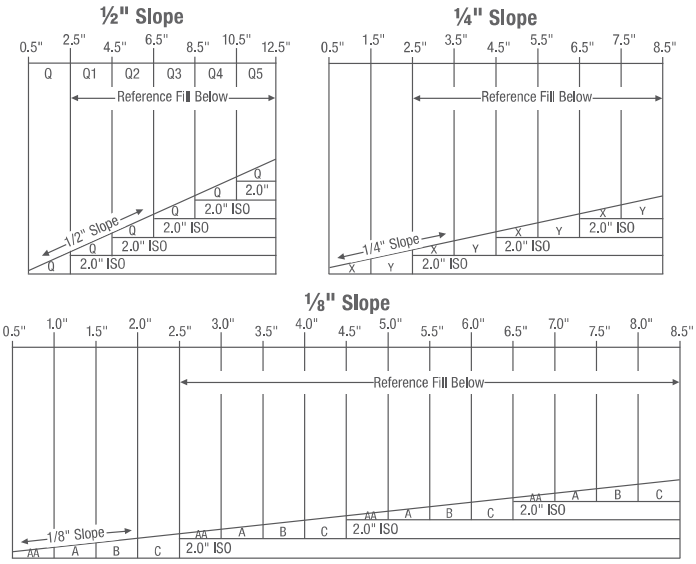
Panel Characteristics

- Available in 4' x 4' (1220 mm x 1220 mm) in thickness of ½" (12 mm) minimum to 4.5" (115 mm) maximum
- Available slopes (per foot):
  - ⅛" (3 mm)
  - ¼" (6 mm)
  - ⅜" (10 mm)
  - ½" (12 mm)

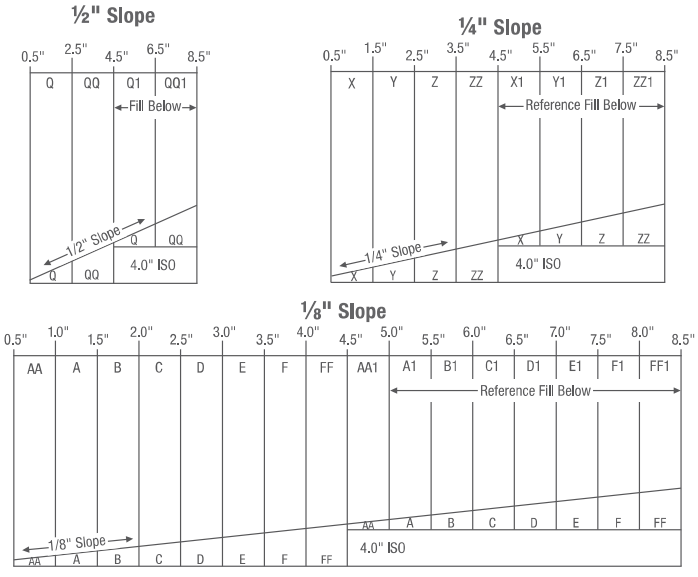
Applications

Single-Ply Roof Systems (Ballasted, Mechanically Attached, Fully Adhered)

Standard Panel Profiles



Extended Panel Profiles



VERSICO ROOFING SYSTEMS

VersiCore Tapered Polyiso

Installation

Ballasted Single-Ply Systems
Each VersiCore Tapered panel is loosely laid on the roof deck. Butt edges and stagger joints of adjacent panels. Install the roof membrane according to Versico's specifications.

Mechanically Attached & Fully Adhered Single-Ply Systems
Secure each VersiCore Tapered panel to the roof deck with Versico's Flexible DASH™ adhesive or the appropriate plate and fastener. Butt edges and stagger joints of adjacent panels. Install the roof membrane according to Versico's specifications.

REVIEW CURRENT VERSICO SPECIFICATIONS AND DETAILS FOR SPECIFIC INSTALLATION REQUIREMENTS.

Codes and Approvals

- ASTM C1289, Type II, Class 1, Grade 2 (20 psi), Grade 3 (25 psi)
- International Building Code (IBC) Section 2603
- UL Standard 790, 263 and 1256: Component of Class A Roof Systems (refer to UL Roof Materials' system directory)
- CAN/ULC S704, Type 2 & 3, Class 2
- Third-party certification with the PIMA QualityMark℠ for Long-Term Thermal Resistance (LTTR) values
- FM® Standards 4450/4470: Class 1 approval for steel roof-deck constructions (refer to FM RoofNav)
- FLORIDA BUILDING CODE APPROVAL FL#1296
- MIAMI-DADE COUNTY, FLORIDA NOA NO: 04-1018.01

Sustainable Attributes

Versico's focus has always been innovation - Innovation to solve problems, improve performance, reduce labor, and above all, improve sustainability. Versico is committed to driving sustainable and efficient processes in the design and manufacturing of our products.

- Highest R-value per inch providing maximum energy savings and CO2 emissions avoidance
- PIMA QualityMark℠ Certification Program participant for Long-Term Thermal R-values (LTTR)
- CDPH Compliant for maximum allowable concentrations of target VOCs
- Versico Polyiso Roof Insulation and HD Cover Board EPDs available
- Contributes to LEED and Green Globes certification requirements
- End-of-life jobsite disposal options are available for re-use/re-purposing
- Zero ozone-depleting components, HFC- and HCFC-free formulation

Precautions

Insulation must be protected from open flame and kept dry at all times. Install only as much insulation as can be covered the same day by completed roof-covering material. Versico will not be responsible for specific building and roof design by others, for deficiencies in construction or workmanship, for dangerous conditions on the jobsite or for improper storage and handling. Technical specifications shown in this literature are intended to be used as general guidelines only and are subject to change without notice. Call Versico for more specific details, or refer to PIMA Technical Bulletin No. 109: Storage & Handling Recommendations for Polyiso Roof Insulation.

Typical Properties and Characteristics

Property	Test Method	Value
Compressive Strength	ASTM D1621 ASTM 1289	20 psi minimum (138 kPa, Grade 2)
Dimensional Stability	ASTM D2126	2% linear change (7 days)
Moisture Vapor Transmission	ASTM E96 12.10	<1 perm (57.5ng/(Pa•s•m²))
Water Absorption	ASTM C209	<1% volume
Service Temperature		-100° to 250°F (-73°C to 122°C)

Typical properties and characteristics are based on samples tested and are not guaranteed for all samples of this product. This data and information is intended as a guide and does not reflect the specification range for any particular property of this product.

CLASSIFIED C UL US

Foamed plastic as roof deck construction material with resistance to an internal fire exposure only for use in construction no.(s) 120 and 123. See UL Directory of Products Certified for Canada and UL Roofing Materials and Systems Directory. 99DL.

PIMA QualityMark℠
Independent | Certified | LTTR +

VERSICO ROOFING SYSTEMS

A SINGLE SOURCE FOR SINGLE-PLY ROOFING

800.992.7663 • www.versico.com

VE-7830 - "Versico Tapered Polyiso Technical Data Bulletin" - 10.11.23

VersiCore® Polyiso

Overview

VersiCore is a rigid-roof insulation panel composed of a closed-cell polyisocyanurate foam core bonded on each side to glass-reinforced felt (GRF). ReadyFlash® Technology is a standard feature of VersiCore Polyiso that allows the contractor to manipulate flash-off times by choosing which side of the insulation board to apply membrane adhesives. ReadyFlash features a dark glass-reinforced felt (GRF) on one side of the insulation board and a light glass-reinforced felt on the other.

- Increases surface temperature of the dark facer up to 25☒F above ambient temperature and provides up to 30% faster adhesive flash-off.
- Decreases surface temperature of the light facer up to 5☒F below ambient temperature.

Features and Benefits

- VersiCore polyiso insulation provides the highest R-value per inch of commercially available insulation products
- Zero ozone-depleting components, HFC- and HCFC-free formulation
- Approved for direct application to steel decks

Panel Characteristics

- Available in 4' x 4' (1220 mm x 1220 mm) and 4' x 8' (1220 mm x 2440 mm) panels in thickness of ½" (13 mm) to 4.5" (115 mm)
- Available in 4' x 12' (1220 mm x 3660 mm) panels in the following thickness: 1.5", 1.75", 2.0", 2.2", 2.5", 2.6", 3.0", 3.3", and 3.5"

Applications

- Single-Ply Roof Systems (Ballasted, Mechanically Attached, Fully Adhered)

Sustainable Attributes

Versico Roofing Systems' focus has always been innovation – Innovation to solve problems, improve performance, reduce labor, and above all, improve sustainability. Versico is committed to driving sustainable and efficient processes in the design and manufacturing of our products.

- Zero ozone-depleting components, HFC- and HCFC-free formulation
- CDPH Compliant for maximum allowable concentrations of target VOCs
- Up to 56.2% recycled content by weight (36.6% post-consumer/20.3% pre-consumer)
- Contributes to LEED® and Green Globes certification requirements
- End-of-life jobsite disposal options available for re-use/re-purposing
- Versico Polyiso Roof Insulation and HD Cover Board EPDs available
- PIMA Quality Mark℠ Certification Program participant for Long-Term Thermal R-values (LTTR)
- Highest R-value per inch providing maximum energy savings and CO_2 emissions avoidance

Polyiso Eco Ready (Optional)

- 5% bio-content option available (for 2.0" and 2.6" thicknesses)
- Contributes to carbon reduction initiatives via mass balance approach under ISCC PLUS compliance

Installation

Ballasted Single-Ply Systems

Each VersiCore panel is loosely laid on the roof deck. Butt edges and stagger joints of adjacent panels. Install the roof membrane according to Versico's specifications.

Mechanically Attached Single-Ply Systems

VersiCore panels must be secured to the roof deck with fasteners and plates (appropriate to the deck type). Butt edges and stagger joints of adjacent panels. Install the roof membrane according to Versico's specifications.

Fully Adhered Single-Ply Systems

VersiCore panels must be secured to the roof deck with fasteners and plates (appropriate to deck type). Butt edges and stagger joints of adjacent panels. Install the roof membrane according to Versico's specifications.

VersiCore 4' x 8' and 4' x 12' panels can be secured to the roof deck with Versico's Flexible DASH™ Adhesive, either full coverage or bead spacing.

VersiCore 4' x 4' panels may be adhered to prepared concrete deck with a full mopping of Type III or IV asphalt.

REVIEW CURRENT VERSICO SPECIFICATIONS AND DETAILS FOR SPECIFIC INSTALLATION REQUIREMENTS.

VERSICO ROOFING SYSTEMS

VersiCore Polyiso

Codes and Compliances

- ASTM C1289, Type II, Class 1, Grade 2 (20 psi), Grade 3 (25 psi)
- International Building Code (IBC) Section 2603
- UL Standard 790, 263 and 1256: Component of Class A Roof Systems (refer to UL Roof Materials' system directory)
- FM® Standards 4450/4470: Class 1 approval for steel roof-deck constructions (refer to FM RoofNav℠)
- California Code of Regulations, Title 24, Insulation Quality Standard License #TI-1418
- Third-party certification with the PIMA QualityMark℠ for Long-Term Thermal Resistance (LTTR) values
- CAN/ULC S704, Type 2, Class 3 (20 psi), Type 3, Class 3 (25 psi)
- Florida Building Code Approval
- CDPH compliant for maximum allowable concentrations of target VOCs

Precautions

Insulation must be protected from open flame and kept dry at all times. Install only as much insulation as can be covered the same day by completed roof-covering material. Protect installed product from excessive foot traffic. Versico will not be responsible for specific building and roof design by others, for deficiencies in construction or workmanship, for dangerous conditions on the job site or for improper storage and handling. Technical specifications shown in this literature are intended to be used as general guidelines only and are subject to change without notice. Call Versico for more specific details, or refer to PIMA Technical Bulletin No. 109: Storage & Handling Recommendations for Polyiso Roof Insulation.

Typical Properties and Characteristics

Physical Property	Test Method	Value
Compressive Strength	ASTM D1621	20 psi* minimum (138 kPa, Grade 2)
Dimensional Stability	ASTM D2126	2% linear change (7 days)
Moisture Vapor Permeance	ASTM E96	<1 perm (57.5 ng/(Pa•s•m²))
Water Absorption	C1763	<1% volume

Typical properties and characteristics are based on samples tested and are not guaranteed for all samples of this product. This data and information is intended as a guide and does not reflect the specification range for any particular property of this product.

*Also available in 25 psi minimum, Grade 3

VersiCore Polyiso Thermal Values

Thickness (inches)	LTTR R-value	Thickness (inches)	LTTR R-value
0.5	2.8	2.75	15.9
0.75	4.2	2.8	16.2
1	5.7	2.9	16.8
1.1	6.3	*3	17.4
1.2	6.8	3.1	18
1.25	7.1	3.2	18.6
1.3	7.4	3.25	18.9
1.4	8	*3.3	19.2
*1.5	8.6	3.4	19.9
1.6	9.1	*3.5	20.5
1.7	9.7	3.6	21.1
*1.75	10	3.7	21.7
1.8	10.3	3.75	22
1.9	10.8	3.8	22.3
*2	11.4	3.9	23
2.1	12	4	23.6
*2.2	12.6	4.1	24.2
2.25	12.9	4.2	24.9
2.3	13.2	4.25	25.2
2.4	13.8	4.3	25.5
*2.5	14.4	4.4	26.1
*2.6	15	4.5	26.8
2.7	15.6	–	–

Flute Spanability is 2⅝" for 1.4" or thickness or smaller. Flute Spanability is 4⅜" for 1.5" thickness or greater.

*4' x 12' offering is available in this thickness.

CLASSIFIED C UL US

Foamed plastic as roof deck construction material with resistance to an internal fire exposure only for use in construction no.(s) 120 and 123. See UL Directory of Products Certified for Canada and UL Roofing Materials and Systems Directory. 99DL.

ISCC International Sustainability & Carbon Certification

U.S. Green Building Council

PIMA QualityMark℠ Independent / Certified / LTTR +

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TerminEdge & TerminEdge One Fascia

Hickman Edge Systems continues our tradition of innovatively designed rigorously tested roof edge systems with this versatile roof edge fascia system. TerminEdge and TerminEdge One Fascia Systems provide superior protection from wind and water penetration with economical pricing to maximize your profits. Our fast lead times and easy installation translate directly into decreased labor costs and enable you to move on to other projects more quickly.

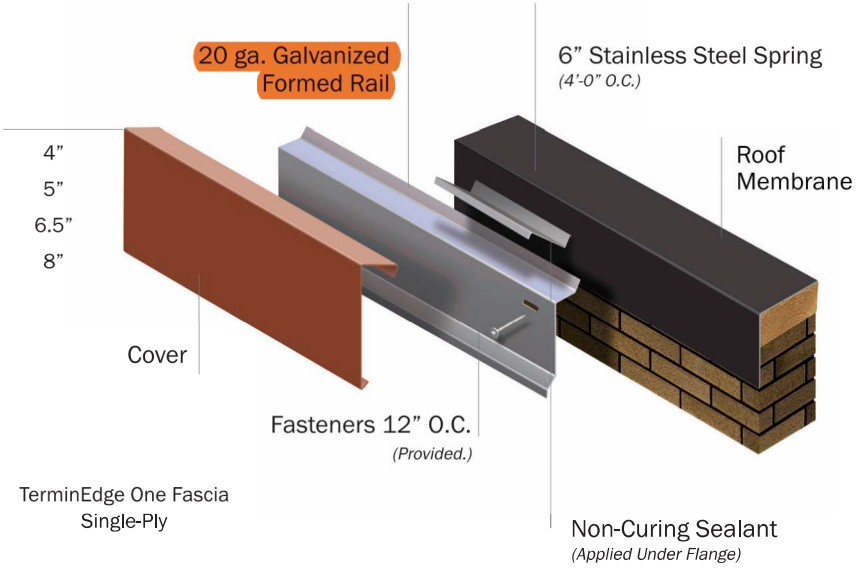
TerminEdge Fascia
Single-Ply

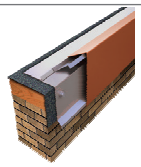
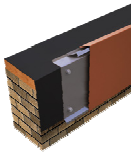
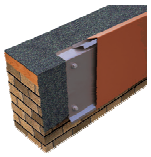
TerminEdge One Fascia
Single-Ply

TerminEdge One Extended MB Fascia
Built-up or Modified

TerminEdge At-A-Glance

- **20 Year, 120 MPH Wind Warranty**
- **ANSI/SPRI/FM 4435/ES-1 Tested**
- **FM Approved for Wind Uplift Protection**
- **Miami-Dade County Approved**
- **Variety of Colors, Sizes & Materials**
- **Easy Install = Decreased Labor Costs**



PRODUCT NAME	APPLICATION	DESIGN FEATURES	WIND WARRANTY	STANDARD SIZES	COVER MATERIALS	ANSI/SPRI/FM 4435/ ES-1 TESTED	FM APPROVED	MIAMI-DADE COUNTY APPROVED
 TERMINEDGE FASCIA	Fully Adhered or Mechanically Attached Single-Ply	Snap-on Cover 20 ga. Cleat	20 Year, 120 MPH	3.5" 4.75" 6.25" 7.75" 9.25" 10.75" 12.25"	24 ga. 22 ga. .040" .050" .063"	X*	X*	X*
 TERMINEDGE ONE FASCIA	Fully Adhered or Mechanically Attached Single-Ply	Snap-on Cover 20 ga. Cleat Spring Clips	20 Year, 120 MPH	4" 5" 6.5" 8"	24 ga. 22 ga. .040" .050" .063"	X	X	X
 TERMINEDGE ONE MB FASCIA	Built-up or Modified	Snap-on Cover 20 ga. Cleat Spring Clips	20 Year, 120 MPH	5" 6.5" 8	24 ga. 22 ga. .040" .050" .063"	X	X	X
 TERMINEDGE ONE EXTENDED FASCIA	Fully Adhered or Mechanically Attached Single-Ply	Snap-on Cover 20 ga. Cleat Spring Clips	20 Year, 120 MPH	9.5" 11" 12.5"	. 22 ga. .050" .063"	X	X	X
 TERMINEDGE ONE EXTENDED MB FASCIA	Built-up or Modified	Snap-on Cover 20 ga. Cleat Spring Clips	20 Year, 120 MPH	9.5" 11" 12.5"	22 ga. .050" .063"	X	X	X

*MAX TESTED 9.25" FACE HEIGHT

10 Express Colors for Quick Shippi Express, standard, and premium colors and finishes are available to meet your job requirements and includes a 30-year Kynar 500® finish warranty on coil-coated standard colors. Custom colors are also available. For the most accurate color representation, contact us to request a paint chip.

Almond | Bone White | Cityscape | Clear Anodized | Dark Bronze | Medium Bronze | Sandstone | Sierra Tan | Slate Gray | Stone White

Available in Mill Finish.

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HES-0106 Rev. 112023

Advancement of Construction Technology

SUBSTITUTION REQUEST
(During the Bidding Phase)

Project: CIW Building 9 Roof Replacement

Substitution Request Number:

From: Hunter Leddy

To: Michael Nolan

Date: 2/20/2025

A/E Project Number: G24-036

Re:

Contract For: Horizon Architecture

Specification Title: Thermoplastic Membrane Roofing

Description:

Section: 075400 **Page:** 135-137

Article/Paragraph: Products/Manufacturers

Proposed Substitution: Duro-Tech TPO 60-MIL Membrane

Manufacturer: Duro-Last **Address:** 525 W Morley Dr **Phone:** (800) 248-0280

Trade Name: **Model No.:**

Attached data includes product description, specifications, drawings, photographs, and performance and test data adequate for evaluation of the request; applicable portions of the data are clearly identified.

Attached data also includes a description of changes to the Contract Documents that the proposed substitution will require for its proper installation.

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.

Submitted by: Hunter Leddy
Signed by:
Firm: Duro-Last
Address: 525 W Morley Dr

Telephone: (800) 248-0280 Ext. 2217

A/E's REVIEW AND ACTION

- [x] Substitution approved - Make submittals in accordance with Specification Section 01330.
- [ ] Substitution approved as noted - Make submittals in accordance with Specification Section 01330.
- [ ] Substitution rejected - Use specified materials.
- [ ] Substitution Request received too late - Use specified materials.

Signed by: Michael Nolan, AIA
Horizon Architecture

Date: 03/03/2025

Supporting Data Attached: [ ] Drawings [x] Product Data [ ] Samples [ ] Tests [ ] Reports [x] Comp. Chart

Samuels Group
Design
Construct
Furnish

PROJECT NAME: 9454 ICIW BLDG 9 ROOF REPLACEMENT
MEETING LOCATION: 420 MILL ST. SW, MITCHELLVILLE, IA 50169
MEETING TYPE: RFB PRE-BID MEETING
DATE AND TIME: FEBRUARY 26, 2025 @ 11 AM

Contact Person	Company Name	Phone Number	Email Address
Brandon Adams	DAS	515-201-2197	brandon.adams@iowa.gov
Nels Westrold	ICIW	515-725-5029	nels.westrold@iowa.gov
Adam Owen	ICIW	515-725-5013	adam.owen@iowa.gov
Tom Ridgway	TFK Roofing	(319)899-6298	Tridgway@TFKRoofing.com
CHRIS CLARK	FORSHEE ROOFING	515-322-2520	CCLARK@FORSHEEROOFING.COM
MICHAEL NOLAN	NORTHSTAR ARCHITECTURE	(563)506-4965	MICHAEL.NOLAN@NORTHSTARARCHITECTURE.COM
ANDREW	ABSOLUTE ROOF		
KYLE DAVIS	TSC	515-822-6628	KDAVIS@SAMUELSGROUP.NET

State of Iowa - Department of Administrative Services
109 SE 13th St.
Des Moines, Iowa 50319
P: (515) 281-7260

Project: 9454.00 DOC ICIW Building 9 Roof Replacement
420 Mill St. SW
Mitchellville, Iowa 50169

RFB Pre-Bid Minutes: Meeting #1

Meeting Date	Feb 26, 2025	**Meeting Time**	11:00 AM - 12:00 PM Central Time (US & Canada)
Meeting Location	420 Mill St SW, Mitchellville, IA 50169		
Overview	Meeting to allow prospective bidders to visit the site, when possible, and learn more about the project.		
Notes			
Attachments			

Scheduled Attendees

Name	Company	Phone Number	Email	Attendance
Scott McDonough	Horizon Architecture	P: (563) 506-4965	scott@horizon-architecture.com	
Lena Michalek	Horizon Architecture		lena@horizon-architecture.com	
Michael Nolan	Horizon Architecture		michael@horizon-architecture.com	Present
Adam Owen	Iowa Correctional Institution for Women	P: (515) 725-5042	adam.owen@iowa.gov	Present
Nels Westvold	Iowa Correctional Institution for Women	P: (515) 725-5050	nels.westvold@iowa.gov	Present
Jeff Curtis	Samuels Group, Inc.	P: (515) 288-0467	jcurtis@samuelsgroup.net	Present
Kyle Davis	Samuels Group, Inc.	P: (515) 288-0487	kdavis@samuelsgroup.net	Present
Mac McKeever	Samuels Group, Inc.		mmckeever@samuelsgroup.net	
Bill Reynolds	Samuels Group, Inc.	P: (515) 288-0467	breynolds@samuelsgroup.net	Present
Chitrangi Shastri	Samuels Group, Inc.		cshastri@samuelsgroup.net	
Brandon Adams	State of Iowa - Department of Administrative Services		brandon.adams@iowa.gov	Present

Introduction

No.	Mtg Origin	Title	Assignment	Due Date	Priority	Status
1.1	1	Introductions				Open
	Description Attendees					

Project Overview

No.	Mtg Origin	Title	Assignment	Due Date	Priority	Status
2.1	1	Project Description				Open

Description
This project includes demolition and disposal of existing coping, roof membrane and coverboard and miscellaneous flashings. Rooftop mechanical equipment and penetrations are to remain and will need to be disconnected and reconnected as required to accommodate new roof installation and flashings. New work includes addition of 2” mechanically fastened rigid insulation, adhered high density polyisocyanurate coverboard and adhered TPO roof membrane. New boot flashing, copings, wall termination and counterflashing and coping to sidewall flashing and transition work will be required to complete tie-in of new roof to existing siding to remain. No adjustment of parapet height or roof curbs is anticipated. Existing drains to be retained and reused.

- Base bid
  - BP 01 - Roof Replacement
- Alternates
  - None
- Unit prices
  - Polyiso insulation, 4x8 sheet, 2"

No.	Mtg Origin	Title	Assignment	Due Date	Priority	Status
2.2	1	Project Schedule				Open

Description

- Contract(s) Issued: **March 31, 2025**
- Submittals: **April 2025**
- Construction: **April 28, 2025**
- Closeout: **July 2025**

Samuels Group and awarded contractor will coordinate to finalize the construction schedule.

State Holidays: New Year's Day, Martin Luther King Day, Memorial Day, 4th of July, Labor Day, Veterans Day, Thanksgiving and day after Thanksgiving, Christmas Day

No.	Mtg Origin	Title	Assignment	Due Date	Priority	Status
2.3	1	Site Rules				Open

Description

- Onsite supervision by Prime Contractor is required at all times when work by that contractor or their subcontractors/suppliers is taking place.
- Contractors shall provide daily logs for each day they are on site.
- Construction progress meeting will be established once construction starts.
- It is of the utmost importance to show respect and courtesy to all staff at all times.
- Clean all debris, materials, and bring all finishes back to existing conditions in the area they were working in prior to moving to the next area.
- No smoking, vaping or smokeless tobacco use onsite.

Nels to address site specific rules:

- Temporary facilities
- Demolished equipment
- Tool control

- Cell phones
- Background checks
- Work hours
    - M-F; 7am - 5pm
- View Specification 01 1200 - Contract Summary for more information.

RFB Overview

No.	Mtg Origin	Title	Assignment	Due Date	Priority	Status
3.1	1	Bid Submission				Open

Description

- Bids are due **March 13, 2025 @ 2pm**
- The Bid shall be submitted to the Issuing Officer through the IMPACS Electronic Procurement System.
    - Link and information is in the project manual
    - Contractors will need to register prior to bidding
    - Bidders will need to register regardless of whether it has already done business with the State of Iowa.
    - Bidders should complete the registration process and ensure the ability to log in as soon as possible to ensure Bids can be submitted on the due date.
    - Please make sure the electronic documents submitted contain any required signatures. Digital signatures will be accepted.
- Bid Opening will be held via conference call on **March 13, 2025 @ 3pm**
- Contractor shall reference section 00 0116 for the bid submittal checklist
    - Bid Proposal Information
    - Non Discrimination Clause Information
    - Contractor Targeted Small Business Enterprise Pre-Bid Contract Information
    - Bid Security – 5% of total Bid amount
- Apparent low bidder will be required to submit subcontractor/supplier list 48hrs after the bid opening

No.	Mtg Origin	Title	Assignment	Due Date	Priority	Status
3.2	1	Bid Schedule				Open

Description

- Questions/Substitutions Due in Writing to Construction.Procurement@iowa.gov: **March 5, 2025 @ 2pm**
- Addendum Issued: **March 7, 2025**
- Bids Due: **March 13, 2025 @ 2pm**
- Tentative NOI Issued: **March 14, 2025**

No.	Mtg Origin	Title	Assignment	Due Date	Priority	Status
3.3	1	Administrative Details				Open

Description

- Contractors will sign a modified ConsensusDocs 802. Example in the project manual.
- Project-specific Certificate of Insurance must be provided prior to contract execution. Follow example in the project manual and limits in the 802.
- Project-specific P&P bonds must be provided prior to contract execution.
- Successful contractor must turn in their list of subcontractors and suppliers within 48 hours of the bid.
- DAS will provide tax exempt certificates upon request.

- Procore will be used for all project management, at no cost to the trade contractor.
  - Submittals, Invoicing, RFIs, ASIs, PRs, RFQs
  - Contracts, Change Orders and Certificates of Substantial and Final Completion will also use Docusign
- Contractor Schedule of Values shall be broken out as specified in the project manual.
  - SOV must contain a closeout line item for at least 1% of the total contract value.
  - This line item can only be invoiced once the certificate of final completion has been signed by all parties.

No.	Mtg Origin	Title	Assignment	Due Date	Priority	Status
3.4	1	Pre-Bid Site Visits				Open
	Description ***Coordinate any additional visits with Samuels Group. SG will then coordinate with the facility.***					

Questions

No.	Mtg Origin	Title	Assignment	Due Date	Priority	Status
4.1	1	Questions				Open
	Description Submit all questions in writing to construction.procurement@iowa.gov.					
	Official Documented Meeting Minutes Staging area: Entry and access Laydown site will be at maintenance shed Movement will be coordinated with facility Tool control: In/out each day Crane accessibilty Lock down times? 12:45 (30-45 minutes) Add Photos to Addendum Safety plan to include lift operations					