



Mastics, Coatings, Adhesives, Sealants

VI-CRYL®

CP-10 (Trowel Grade)

CP-11 (Spray/Brush)

Weather Barrier Coatings

DURABLE WATER BASED VINYL-ACRYLIC MASTIC COATING FOR THERMAL INSULATIONS

DESCRIPTION

VI-CRYL® CP-10/11 weather barrier coating is a tough, durable, and fire-resistive water based mastic for most types of thermal insulation and finishing and insulating cements. It is very thixotropic - it looks heavy but spreads easily. It is available in a variety of standard and special fade-resistant colors. It is outdoor rated and U.V. resistant.

USES

VI-CRYL CP-10/11 weather barrier coating is unsurpassed for the mechanical protection and weatherproofing of thermal insulations both outdoors and indoors, in hot, cold, and dual-temperature service. However, since it is a 'breathing' coating (vapors under pressure will pass through it) it should only be used over insulations in low-temperature, or dual-temperature service when the insulations themselves are vapor barriers. VI-CRYL CP-10/11 has also found use throughout the thermal insulation industry as a coating used over closed cell polyethylene and polyurethane foam insulations. Industry experience has demonstrated that all weather barrier coatings may blister when applied over polystyrene board. This effect may be limited by the use of white colored coatings. VI-CRYL CP-10/11 weather barrier coating in its Metallic Gray color is the ideal companion product to Aluminum and Stainless Steel Jacketing.

APPLICATION

VI-CRYL CP-10/11 weather barrier coating is easy to apply by Trowel, Brush or Heavy-Duty Airless Spray. Its thixotropic consistency yields a smooth, attractive finish even over rough substrates; it readily fills gaps and imperfections. VI-CRYL CP-10/11 coating should be applied with glass fiber reinforcing mesh.

ADVANTAGES

- In the wet state, VI-CRYL CP-10/11 weather barrier coatings is non-flammable. It contains no solvents that will attack insulations or facings.
- The cured film is tough, flexible, and resists most common chemicals and many solvents.
- It is fire-resistive: its flame spread index being within the range of acceptance of government and industrial agencies.

CERTIFIED

- Meets NFPA Standard 90-A and 90-B 25/50 requirements.
- This product has been tested according to ASTM E-84 (Surface Burning Characteristics of Building Materials).
- Meets requirements for LEED® IEQ 4.2 Low-Emitting Materials, Paints and Coatings. CP-10 VOC: 45 g/l, less water and exempt solvents, CP-11 VOC: 20 g/l, less water and exempt solvents.

CP-10/11 contains no asbestos, lead, mercury, or mercury compounds.

See other side for specification and application information.

Visit us on the web at www.fosterproducts.com

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COLORS

	TROWEL	SPRAY/BRUSH
White	10	11
Metallic Gray	10-1	11-1
Black	10-2	11-2

(Other colors are available on special order)

WET WEIGHT

11.3 lbs./U.S. gal. (1.35 kg/liter)

AVERAGE NON-VOLATILE

51% by volume (64% by weight)

SERVICE TEMPERATURE RANGE

(Temperature to which dry coating is subjected.)

-40°F to 180°F

(-40°C to 83°C)

APPLICATION TEMPERATURE RANGE

40°F to 100°F

(4°C to 38°C)

DRYING TIME

Touch - 2-4 hours

Through - 24-36 hours

(Drying time will vary depending upon film thickness, temperature and humidity.)

COVERAGE

6 U.S. gal./100 sq. ft. (2.4 l/sq.m)

(Varies with substrate and membrane.)

CLEAN-UP

Warm, soapy water (wet) xylol (dry)

WATER VAPOR PERMEANCE ASTM E-96

Greater than 1.0 perm for 1/16 inch (0.16cm) dry film. (Procedure B)



GENERAL PURPOSE COATING SURFACE BURNING CHARACTERISTICS 282U

Applied to ¼" Inorganic Reinforced Cement Board

Flame Spread: 10

Smoke Developed: 40

Rate per Coat (Sq.ft/gallon): 16.7

Number of Coats: 1

Flash point of liquid coating (closed cup): No flash to boiling
R3593

H.B. Fuller Construction Products Inc.

Customer Service
800-832-9002

1105 South Frontenac Street
Aurora, IL 60504

Fax
800-952-2368

MASTIC FINISH over insulation shall be VI-CRYL CP-10/11 weather barrier coating. It shall be applied in two coats. A tack coat is to be applied at a rate of two gallons per 100 sq. ft. (.81 l/sq. m.). While the tack coat is still wet, a layer of CHIL-GLAS #10 open weave glass fiber reinforcing mesh shall be embedded with all fabric seams overlapped a minimum of 2" (5.08cm). A finish coat at a coverage of four gallons per 100 sq. ft. (1.6 l/sq. m) shall be applied, fully covering the glass fiber reinforcing mesh, so that the minimum dry film thickness is 1/16" (.063") (.16 cm). There shall be no voids or holidays and the mastic shall be trowelled, sprayed or wet-brushed to a smooth even finish.

All adjoining insulated or un-insulated surfaces must be completely waterproofed and flashed. To effectively seal those locations where the VI-CRYL CP-10/11 coating meets adjoining insulated or uninsulated surfaces, or dissimilar weather proofing materials, CP-76 sealant shall be applied as the sealing/flashing material. CP-76 shall be trowelled at 1/8" thickness a minimum of 1" in both directions back onto and over the complete joint interface of the VI-CRYL CP-10/11 coating and the adjoining surface. CHIL-GLAS #10 glass fiber reinforcing mesh is recommended to provide thickness control and strength at the joint interface.

NOTES TO SPECIFYING ENGINEER

1. Synthetic fabrics may be substituted for #10 open weave glass cloth without affecting the application.
2. If Chicken Wire, Hardware Cloth, or other metal reinforcements are to be used in lieu of fabric membranes, contact your representative for suggested procedures.
3. The above specification is for weather proofing and protection of insulation in HOT SERVICE: or for COLD or DUAL TEMPERATURE SERVICE where the insulation and/or the insulation system forms an adequate vapor barrier prior to the application of the VI-CRYL CP-10/11 coating.

Application Guide and Suggested Procedures

1. USE OF MATERIAL

VI-CRYL CP-10/11 weather barrier coating looks much heavier than it is. It is thixotropic. DO NOT THIN. Protect from freezing until dry. Keep stored over long periods of time in a heated area. For spray application VI-CRYL CP-10/11 coating must be kept at a minimum of 50°F (10°C) just prior to spraying to achieve optimum results.

2. THE CONDITION OF THE INSULATION TO BE COATED

VI-CRYL CP-10/11 is a "breathing coating", which means that it will allow reasonable amounts of water (in the form of vapor - a gas) to pass through it in a reasonable period of time. However, excessively wet insulation on equipment operating at elevated temperatures will cause excessive water vapor pressure, and therefore blistering of the finish. Make certain the insulation is dry prior to the application of any coating. **To obtain proper bonding, dusty surfaces shall first be primed with Chil-Seal CP-50A MV1 diluted 50% with water.**

When applying VI-CRYL CP-10/11 coating over hygroscopic alkaline cements, first prime the surface of the cement with Chil-Seal CP-50A MV1 diluted 50% with water and allow to dry completely before applying the finish coat.

The presence of moisture in systems operating in Cold Service can completely destroy the effectiveness of not only the finish, but the entire insulation system. They MUST BE DRY.

All exterior horizontal surfaces must be sloped at least 1/2 inch per foot (4cm/m) to prevent ponding water.

3. HAND APPLICATION

Large flat areas are best covered by application with trowel or stiff brush. Smaller, irregular surfaces such as fittings are more readily covered by brushing. Airless spray may also be used.

4. SPRAY APPLICATION

VI-CRYL CP-11 coating may be sprayed with many types of equipment, including airless spray. It may also be sprayed with conventional Mastic spray equipment using an external atomizing spray gun. Many manufacturers of spray equipment can make detailed recommendations for any number of types of equipment. The spray equipment and techniques would be similar to those used for applying block fillers. For best results, we suggest the following airless spray equipment.

PUMP	Graco Bulldog Hydramastic, 40:1 ratio (model 204-925) air regulator with inductor plate (207-039).
COMPRESSOR	Capable of 75 CFM and maintaining 100 PSIG.
FLUID HOSE	High pressure capable of 4,000 PSI One inch up to 150 feet. 3/4 inch after the first 150 feet. Use 8' (2.4 m) 1/2" I.D. hose for coupling to the gun.
GUN	Graco Hydra-Mastic #207-300 with Reverse-A-Clean 205-614.
TIP SIZES	635 to 655.

5. DRYING AND RECOATING

A finish coat of VI-CRYL CP-10/11 weather barrier coating should be applied immediately after the tack coat and membrane application for maximum bond.



CUSTOMER SERVICE: 800-832-9002

IMPORTANT: H.B. Fuller Construction Products Inc. warrants that each of its products will be manufactured in accordance with the specifications in effect on the date of manufacture. WE MAKE NO OTHER WARRANTIES AND EXPRESSLY DISCLAIM ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. If a product fails to meet this limited warranty, purchaser's sole and exclusive remedy is replacement of the product or, at our option, refund of the purchase price. OUR ACCEPTANCE OF ANY ORDERS FOR THE PRODUCT IS EXPRESSLY CONDITIONAL UPON PURCHASER'S ASSENT TO THE TERMS ON THE APPLICABLE INVOICE.

ADEQUATE TESTS: The information contained herein we believe is correct to the best of our knowledge and tests. The recommendations and suggestions herein are made without guarantee or representation as to results. We recommend that adequate tests be performed by you to determine if this product meets all of your requirements. The warranted shelf life of our products is six months from date of shipment to the original purchaser.

**For professional use only. Keep out of reach of children.
Consult Material Safety Data Sheet and container label for further information.**

Shop Drawing Submittal Review

Transmitted To: Cannon Design

Date: February 7, 2017

Attention: stl-cac@cannondesign.com

Contact Person / WTA Field Inspector:
Patrick Garner

Project Name: Webster University-**ISB**

Reviewed by: Mike Nolte

Project No. WT 14127.01

☐

UPS

☐

Courier

☒

Email

Copies	No.	Description
1 PDF	232500M01	(Submittal No.'s:) (R&B CxSRC)
		(Cannon #232500-001) - (Paric #15051-0453) - (WES #607)
		➤ Mechanical Insulation Product Data

***Remarks: See Review Comments on PAGE 2.**

c: Kelvin Patel
Kpatel@cannondesign.com

☐ Furnish as Submitted

☒ ***Furnish as Noted**

☐ Rejected

☐ Revise & Resubmit

☐ Reviewed

☐

Corrections or comments made on shop drawings during this review do not relieve contractor from compliance with requirements of drawings and specifications. This check is only for review of general conformance with the design concept of project and general compliance with information given in contract documents. Contractor is responsible for: confirming and correlating all quantities and dimensions; selecting fabrication processes and techniques of construction; coordinating his work with that of all other trades; and performing his work in a safe and satisfactory manner.

Shop Drawing Submittal Review

***Submittal Review Comments**

1. Contractor responsible to verify that all adhesives, sealants and sealant primers meet the requirements of LEED Credit IEQ 4.1. Provide Product Data for Credit IEQ 4.1 for all adhesives, sealants and sealant primers, including printed statement of VOC content. The submittal does not appear to contain this information for all sealants submitted.
2. Provide aluminum jacketing on all exterior piping per Specification 232500-2.2-D-5: For insulation installed outdoors and insulation subject to water damage, provide an additional **0.016 inch** aluminum jacket with lock seam, longitudinal joint and gasketed bands for butted joints as required for a watertight installation. Jacket shall be complete with waterproof, laminated paper lining and shall be manufactured by ITW Insulation System or RPR Products.

14127.01 - 232500 M01
MTN TO REVIEW -
01/18/17

From: STL-CAC <STL-CAC@CANNONDESIGN.COM>
To: 'Patrick Garner' <pgarner@wmtao.com>, "WTASHOP (WTASHOP@wmtao.com)"
<WTA...
CC: "Patel, Kelvin" <kpatel@CANNONDESIGN.COM>
Date: 1/18/2017 3:01 PM
Subject: Webster ISB - 23 2500-001
Attachments: 232500-001 Mechanical Insulation Product Data.pdf

Attached for review.

Melissa Pirtle

[cid:image001.png@01D2719B.8CD710A0]
1100 Clark Ave
St. Louis, Missouri 63102
T 314.425.8797
cannondesign.com

SUBMITTAL IDENTIFICATION SHEET

To be completed by Contractor/CM

PROJECT NAME	
ADDRESS	
NUMBER	
OWNER	
ARCHITECT / ENGINEER	
SUBMITTED BY	
CONTRACTOR / CM SUBMITTAL NO.	CANNON DESIGN SUBMITTAL NO.
DRAWING / DETAIL REFERENCE	SPECIFICATION SECTION / PARAGRAPH
MANUFACTURER / SUPPLIER	ITEM / PRODUCT ID
REQUIRED DATE	PRIORITY
CRITICAL	☐

To be completed by Reviewer

CANNON DESIGN SUBMITTAL NUMBER
RECEIVED DATE

- ☐ **A. No Exceptions Taken**
No further review of submittal is required.
- ☐ **B. Make Corrections Noted**
Incorporate corrections in work;
resubmission is not required.
- ☐ **C. Revise and Resubmit**
Revise as noted, and resubmit for review.
- ☐ **D. Rejected**
Submittal is not in compliance with Contract Documents;
provide new submittal.
- ☐ **E. For Record / Information Only**
Submittal was reviewed for Record / Information
purposes only.
- ☐ **F. Not Required for Review**
Submittal is not required by Contract Documents
and has not been reviewed.

Review is for conformance with the design concept of this project and for general compliance with contract documents. Contractor is responsible for quantities, dimensions and compliance with contract documents and for information that pertains to fabrication processes, construction techniques and coordination of this work with all trades which will be affected thereby. This review is null and void if submittal deviates from contract documents and does not indicate or note deviations.

ITEM BEING SUBMITTED (check only one)

- ☐ Shop Drawings ☐ Certification / Qualifications ☐ Coordination Drawing
☐ Samples ☐ Record Documents ☐ Calculations
 (_____ copies) ☐ Product Data ☐ Schedules
☐ LEED Submittal ☐ O&M Manuals
☐ Other

ITEM BEING SUBMITTED FOR (check only one)

- ☐ Action ☐ Information Only ☐ Record

REMARKS OR DEVIATIONS

CONTRACTOR / CM CERTIFICATION
(SUBMITTALS NOT CERTIFIED WILL BE RETURNED WITHOUT REVIEW)



PARIC CORPORATION
SUBMITTAL STAMP

THIS SHOP DRAWING HAS BEEN REVIEWED BY PARIC CORPORATION

Subcontractor remains responsible for dimensions, quantities, coordination with other trades and compliance with contract documents.

Ry:

By:
Devin D. Gates

REVIEWED BY	DATE

A/E COMMENTS

- ☐
- See attached sheet(s) for additional comments

REVIEWED BY	DATE



77 Westport Plaza
Suite 250
St. Louis, MO 63146

TRANSMITTAL

No. 15051-0453

Paric Corporation

PROJECT: 15051-Webster University Interdisciplinary Science Building

DATE: 01/17/2017

TO: Cannon Design
1100 Clark Ave
St Louis MO 63102

Fax;
314-241-2203

RE: Mechanical insulation product data

ATTN: Kelvin Patel

JOB: 15051

WE ARE SENDING:	SUBMITTED FOR:	ACTION TAKEN:
☐ Shop Drawings	☒ Approval	☐ Approved as Submitted
☐ Letter	☐ Your Use	☐ Approved as Noted
☐ Prints	☐ As Requested	☐ Returned After Loan
☐ Change Order	☐ Review and Comment	☐ Resubmit
☐ Plans		☐ Submit
☐ Samples	SENT VIA:	☐ Returned
☐ Specifications	☐ Attached	☐ Returned for Corrections
☒ Other: Product Data	☐ Separate Cover Via:	☒ Due Date: 08/26/2016

Item	Package	Code	Rev.	Copies	Date	Description	Status
Submittal		232500-001	1		01/17/2017	Mechanical insulation product data	Submitted

NOTES:

CC:

Signed: _____
Devin Gates



Mechanical

LETTER OF TRANSMITTAL

TO: Paric Corporation

77 West Port Plaza #250

St. Louis, MO 63146

ATTN: Jason Szachnieski, Devin Gates

DATE: 1/16/17

JOB #: 5768

RE: Webster ISB

We are sending you

☒

Shop drawings

☐ Attached

☐ Prints

☐ Under separate cover

☐ Plans

☐ Samples

☐ Specifications

☐ Copy of letter

☐ Change order

☐ Other

COPIES	DATE	NO.	DESCRIPTION
1	1/16/17	232500	Mechanical Insulation

These are transmitted as checked below:

☐ For signature

☐ For your use

☐ As requested

☐ For bids due

☒

For review and comment

☐ Approved as submitted

☐ Approved as noted

☐ Returned for corrections

☐ Prints returned after loan to us

☐ Other

☐ Resubmit

☒

Submit

☐ Return

☐ copies for approval

☐ copies for distribution

☐ corrected prints

Remarks: Please return by 1/24/17

COPY TO: file

SIGNED:

Alex Chambers



Mechanical

Webster University ISB Webster Groves, MO

Submittal #:

232500

Submittal Description:

Mechanical Insulation

Return By:

1/24/17

Please Note: To avoid scheduling delays and equipment release delays, please submit by the "Return By" date.

CHECKED BY:			
DESIGNER:		ENGINEER: ☒	
☒	NO EXCEPTION TAKEN	☐	MAKE CORRECTIONS NOTED
☐	SUBMIT SPECIFIED ITEM	☐	REVISE AND RESUBMIT
☐	REJECTED	☐	
Checking is only for general conformance with the design concept of the project and general compliance with the information given in the contract documents. Any action shown is subject to the requirements of the plans and specifications. Equipment supplier is responsible for: dimensions which shall be confirmed and correlated at the job site; fabrication processes and techniques of construction; coordination of his work with that of all other trades; and satisfactory performance of his work.			
		Job #:	5768
		Date:	1/16/17
		By:	ARC



TDK Mechanical Services

745 Merus Ct.
Fenton, Missouri 63026
636-600-1662 phone / fax

SUBMITTAL TRANSMITTAL

DATE: December 21, 2016

COMPANY: Trenholm Mechanical Insulation
ATTENTION TO: Audra Trenholm
EMAIL: audra@trenholm-insulation.com

FROM: Dan Esker
PHONE: (636) 290-3733 cell / (636) 600-1662 office
EMAIL: dan@tdkmechanical.com

PROJECT: Webster University Interdisciplinary Science E
St. Louis, MO
DESCRIPTION: _____

Mechanical System	Insulation	Thickness	Occurs at
Heating Hot Water	Fiberglass ASJ Pipe Covering	1"	Indoors - Pipe Sizes Under 4"
Heating Hot Water	Fiberglass ASJ Pipe Covering	1-1/2"	Indoors - Pipe Sizes 4" & Over
Chilled Water	PolyISO Pipe Covering	1"	Indoors - All Pipe Sizes
Chilled Water Equipment	Elastomeric Sheet Rubber	1"	Indoors - Mechanical Room
PCS/PCR	PolyISO Pipe Covering	1"	Indoors - All Pipe Sizes
Glycol Piping	Elastomeric Pipe Covering	1"	Indoors - All Pipe Sizes
Refrigeration Piping	Elastomeric Pipe Covering	1"	Indoors - All Pipe Sizes
Medium Pressure Supply Air Duct	FSK Fiberglass Duct Wrap	1-1/2" / 0.75#	Indoors - Concealed
Fume Exhaust Duct	Unifrax Fyre Wrap	(1) layer of 1-1/2"	Indoors - Concealed
Kitchen Exhaust Hood Duct	Unifrax Fyre Wrap	(2) layers of 1-1/2"	Indoors - Concealed
Outside Air Duct	FSK Fiberglass Duct Board	1-1/2" / 3#	Indoors - Concealed
All Duct Work Systems	Foil Tape	4"	Indoors - Concealed
PVC Fittings	Proto PVC Fittings	N/A	At Fiberglass & PolyISO Pipe Covering Fittings
Vimasco Adhesive	WC-5	N/A	At Fiberglass Pipe Covering
Armaflex Adhesive	Armaflex 520 Adhesive	N/A	At Elastomeric Pipe Covering
PolyISO Adhesive	Childer's CP-10	N/A	At PolyISO Pipe Covering

NOTES/CLARIFICATIONS:

Low Pressure Round Supply Air Duct. FSK Fiberglass Duct Wrap. 1-1/2" / 0.75#. Indoors - Concealed