



DELAWARE STATE UNIVERSITY

OFFICE OF PLANNING & CONSTRUCTION

1200 N. DuPont Highway
Dover, Delaware 19901-2277

Addendum #02

Date: April 11, 2016

Project: Education & Humanities Boiler Room Renovation

Contract: FD-15-098

The work herein shall be considered part of the bid documents for the referenced project and carried out in accordance with the following supplemental instructions issued in accordance with the Contract Documents without change in Contract Sum or Contract Time. Acknowledge receipt of addendum on the bid form as indicated.

Clarifications:

1. None

Changes to Specifications:

1. None

Changes to Drawings:

1. None

General Information:

1. None

Questions and Answers:

1. **Question:** For Alternate #2: Cleaning, de-greasing and epoxy finish on the entire boiler room can you provide a specification for the expoy finish?

Answer: The contractor shall provide de-greasing and apply an epoxy finish to the lower level of the Boiler room only. The Epoxy finish shall be as manufactured by Palma INC "Palmalite UniKrom 125". Final color shall be selected by the owner prior to ordering. Attached is the specification.

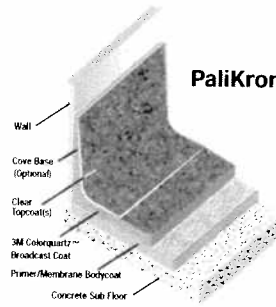
2. **Question:** Is there a schedule for asbestos removal? Will it be complete before the scheduled start date of May 2, 2016?

Answer: Abatement will be coordinated with the schedule submitted with the bid.

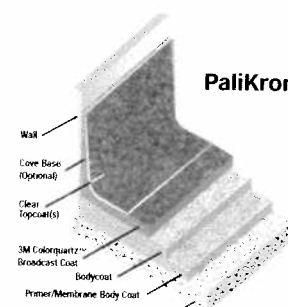
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Architectural Specifications (AIA Section 09671)

PaliKrom 125 / 185



PaliKrom 125



PaliKrom 185

PART 1-GENERAL

1.01 DESCRIPTION OF WORK:

A. Furnish labor and materials to complete application of ~~PalmaLite PaliKrom 125 or PalmaLite PaliKrom 185~~ Resinous Colorquartz Flooring System and related work as shown and specified.

B. Related work specified elsewhere*:

* Concrete: Section CONCRETE. Concrete on grade must meet local conditions to prevent osmosis, hydrostatic, vapor pressure.

Specify following in Concrete Section.

a. Vapor retarder: Moistop by Fortifiber, Los Angeles, Ca. Griffolyn by Reef Industries, Houston, TX. or equal.

b. Concrete, minimum 3,000 psi.

Finish: Light broom finish or float finish with proper pitching to produce a flat granular substrate relatively laitence free.

c. Water cure concrete.

d. Do not apply curing compounds, sealer, hardeners, or other materials to concrete that are not compatible with epoxy. Recommended materials include Horncure WB 309 by Tamms, Con-Spec #21, Bro-Cure by Nox-Crete, or equal.

e. Set drains, cleanouts, trenches, etc. 1/16" above the substrate for 1/16" floor and 1/8" for 1/8" or 3/16" floor.

f. Do not cover or fill expansion, construction or control joints.

g. Do not apply any patching materials to substrate prior to consulting Palma Inc.

*Delete when applying system over existing surfaces.

Plywood: Section CARPENTRY:

Specify following in Carpentry Section:

a. Apply 1/4" to 3/4" interior grade plywood, finish side up.

b. Stagger sheets to avoid four corner meeting.

c. Secure with ring shank or asphalt coated nails 6" on center along panel edges and in the middle of the sheet. Screws are preferred.

d. Be certain that all nails or screws are countersunk and there is no deflection in the wood.

e. Do not butt joints tightly. Allow 1/16".

1.02 QUALITY ASSURANCE:

A. Perform work with qualified supervision by formulator of materials, or by a firm specializing in application of material specified, and acceptable to formulator and owner.

B. Formulator: Palma Inc., Bloomfield, New Jersey

1.03 SUBMITTALS:

A. Formulator's Data: Submit formulator's printed preparation and application instructions for each type and class of material required. Include formulator's certification showing material compliance with specified requirements.

B. Maintenance Instructions: Submit formulator's printed instructions.

C. Samples: Submit samples showing range of selected color and texture variation for approval prior to commencement of work.

D. Guaranty: Submit written warranty, signed by formula-tor and applicator, agreeing to guarantee application against faulty workmanship or materials for 2 years from date of acceptance.

1.04 DELIVERY, STORAGE AND HANDLING:

A. Deliver materials in formulator's unopened containers, with trade name, type, grade and other data. Store materials indoors in clean and dry location with temperature between 60° and 85° Fahrenheit.

B. Damaged containers unsuitable for use will be rejected.

1.05 JOB CONDITIONS:

A. Substrate and air temperature must be between 60° and 85° Fahrenheit before, during and until application has cured.

B. Proper ventilation, permanent lighting, permanent heating and air conditioning must be maintained during application and curing.

C. Provide protective gloves, shoes, goggles, and respirator when mixing during applications.

1.06 SEQUENCING AND SCHEDULING:

A. Coordinate work with other trades.

B. Commence preparation and application after all other trades have completed their work.



Palma Inc.

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Seamfree Resinous Colorquartz Flooring

PART 2 - PRODUCTS

2.01 FORMULATOR: Palma, Inc.

2.02 MATERIALS:

A. Products: PalmaLite PaliKrom 125 (1/8") or ~~PalmaLite PaliKrom 185 (3/16")~~

1. Epoxy: PalmaLite Bodycoat 100% solids.
2. Epoxy: PalmaLite Clear Topcoat 100% solids.
3. Ceramic Colorquartz: 3M Colorquartz for color and texture, Grade 28.
4. Silica sands: 20/40 & 140 mesh.

B. TECHNICAL DATA:

Minimum physical requirements Committee C.03 ASTM C722
Standard Specification for Resinous Monolithic Surfacing
60 mils in thickness or greater.

Test		Physical Requirement
Compressive Strength	ASTM - C-579	6,000 PSI
Tensile Strength	ASTM - C-307	1,500 PSI
Flexural Strength & Rupture	ASTM - C-580	3,400 PSI
Flexural Modulus of Elasticity	ASTM - C-580	500,000 PSI
Water Absorption	ASTM - C-413	1.0% (max)
Thermal Coefficient of Expansion	ASTM - C-531	40x10-6 in./in. deg F

Supplemental Tests

Test		Physical Requirements
Flammability	ASTM - D-635	Self extinguishing
Thermal Shock 5 cycles	ASTM - C-884	No cracking, crazing, warping scaling or flaking
Co-efficient of Friction	ASTM - C-1028	0.5
Shore "D" Hardness	ASTM - D-2240	83-90
Taber Abrasion	ASTM - D-1044	0.05 grams
Waterproof	ASTM - D-4068	No evidence of moisture.
Indentation	MIL - D-3134	Not more than 7%
Resistance to Impact	MIL - D-3134	Not more than 1/16"
Taber Wear	H-22 - Wheel	Abrasive wear index 30
Bond Strength	ACI - 503	175 p.s.i. (100% concrete failure)
Heat Resistance		140°F Continuous, 200°F Non-Continuous
Dielectric Properties		Insulation resistance and dielectric strength tests in excess of 50,000 volts.

E. CHEMICALS AND SOLVENTS: Insert specific reagents
when chemical and solvent resistance are a requirement.
Test in accordance with ASTM D-1308.



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PART 3- EXECUTION**3.01 INSPECTION:**

A. Examine substrate and conditions where epoxy is to be applied. Notify contractor in writing of unsatisfactory conditions. Proceed after conditions are corrected.

3.02 SURFACE PREPARATION:**A. GENERAL: New and Existing Surfaces:**

1. Prepare substrate in compliance with Committee C.03 ASTM C-811 *Standard Practice for Surface Preparation of Concrete for Application of Resin Monolithic Surfacing* and formulator's written instructions for substrate indicated.

B. Surface must be structurally sound and free of contaminants.

C. Clean and fill joints and cracks wider than 1/16" with Palmaflex joint filler and tape over crack or joint with 4" fiberglass tape to prevent reflection. (Tape divider strips over existing terrazzo.)

D. Sawcut and chisel concrete substrate at termination points, keying in to maintain minimum thickness of floor coating.

E. Tape at termination points and adjacent surfaces not to be coated with masking tape before bodycoat(s), cove base, colorquartz coat and topcoat(s).

F. Remove tape before all applications dry.

3.03 APPLICATION: Nominal 1/8"

A. GENERAL: Mix and apply each component of resinous flooring system in compliance with formulator's detailed instructions to produce an uninterrupted, uniform, monolithic surface. Thickness of system to be nominal 1/8".

B. PRIMER/ MEMBRANE BODY COAT: Trowel mixture onto surface, allow to self-level, then broadcast silica aggregate into body coat. Allow to dry. Sweep excess aggregate.

C. COVE BASE: When shown, apply cove base after (B) primer/membrane bodycoat. Apply to height of (4) (6) ("). Follow formulator's detailed application instructions covering taping, mixing, priming, troweling, sanding and topcoating of cove base.

D. COLORQUARTZ COAT: Trowel mixture onto surface, allow to self-level, then broadcast selected color with 3M Colorquartz into wet mixture. Allow to dry.

E. TOPCOAT(S): Remove excess quartz from the surface, then stone. Two clear epoxy topcoats for standard slip resistant finish. One clear epoxy topcoat for coarse slip resistant finish.

3.03: APPLICATION: Nominal 3/16": Mandatory over ceramic tile, quarry tile, terrazzo, plywood, spalled concrete.

A. GENERAL: Mix and apply each component of resinous flooring system in compliance with formulator's detailed instructions to produce an uninterrupted, uniform, monolithic surface. Thickness of system to be nominal 3/16".

B. PRIMER/ MEMBRANE BODY COAT: Trowel mixture onto surface, allow to self-level, then broadcast silica aggregate into body coat.

Allow to dry. Sweep excess aggregate.

C. BODYCOAT: Trowel mixture onto surface, allow to self-level, then broadcast silica aggregate into body coat. Allow to dry. Sweep excess aggregate.

D. COVE BASE: When shown, apply cove base after (C) bodycoat. Apply to height of (4) (6) ("). Follow formulator's detailed application instructions covering taping, mixing, priming, troweling, sanding and topcoating of cove base.

E. COLORQUARTZ COAT: Trowel mixture onto surface, allow to self-level, then broadcast selected color with 3M Colorquartz into wet mixture. Allow to dry.

F. TOPCOAT(S): Remove excess quartz from the surface, then stone. Two clear epoxy topcoats for standard slip resistant finish. One clear epoxy topcoat for coarse slip resistant finish.

3.04 CLEANING:

A. Following completion of application, clean all areas not specified to receive flooring.

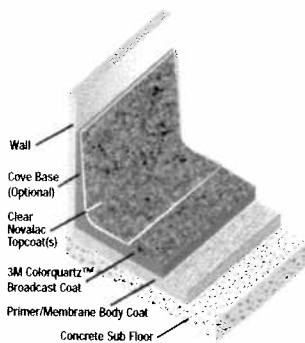
3.05 PROTECTION: (General Conditions)

A. Close area where application is completed to all traffic for 72 hours. After initial cure, finished floor shall be protected by others until final inspection and acceptance by owner.

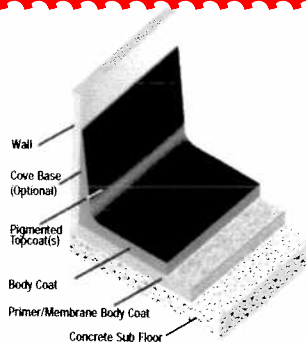
**Palma Inc.***Flooring You Can Stand On
Since 1927*

The Palma Group of Fine Flooring Products

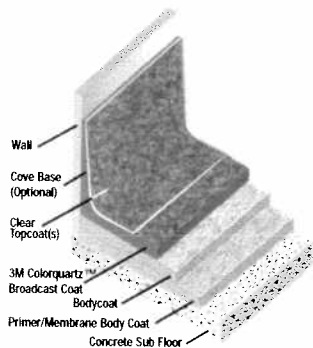
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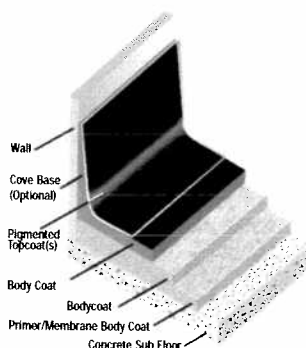
PalmaLite Novolac 125
Heat and Corrosion Resistant
1/8" Colorquartz Epoxy Flooring.



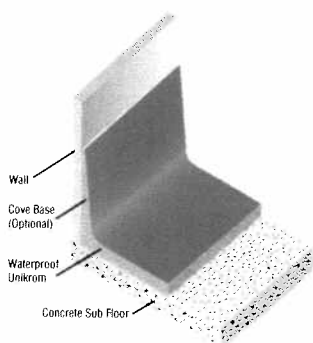
PalmaLite UniKrom 125
General purpose 1/8" Solid Color
Epoxy Flooring



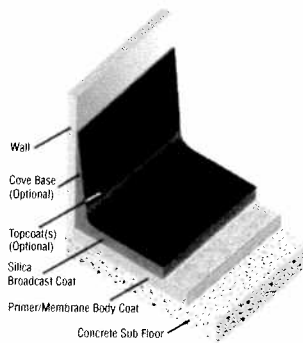
PalmaLite Novolac 185
Heat and Corrosion Resistant 3/16"
Colorquartz Epoxy Flooring. Use over
existing spalled concrete, ceramic tile,
quarry tile, terrazzo, and plywood.



PalmaLite UniKrom 185
General purpose 3/16" Solid Color
Epoxy Flooring. Use over existing
spalled concrete, ceramic tile, quarry
tile, terrazzo and plywood.



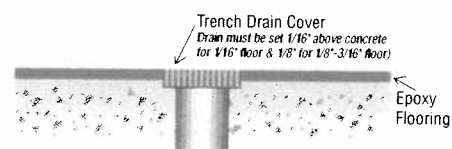
PalmaLite UniKrom 60
Economical 1/16" single-pass
Solid Color Epoxy Flooring.



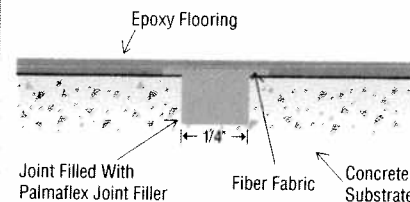
PalmaLite Blackstar 125
Deck and warehouse 1/8" Coal
Tar Epoxy Flooring.



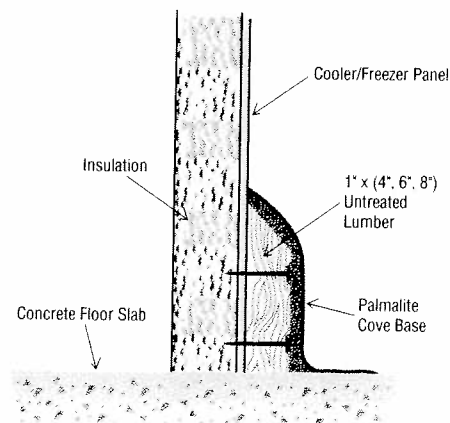
Palma's Exclusive Concrete Design



Trench Cover Detail



Sawcut Joint Detail



**Cove Base Detail for Cooler
& Freezer Walls**



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