

## **SECTION 07 33 21.03 SYNTHETIC PALM THATCH ROOFING - LAYERED**

### **PART ONE – GENERAL**

#### **1.01 SUMMARY**

- A. Section includes synthetic palm thatch roofing over exposed purlin structure.

#### **1.02 SYSTEM DESCRIPTION**

- A. Provide Viro© palm thatch roofing that mimics the look of a Traditional Palapa thatch roof with layered Virothatch© synthetic palm thatch roofing panels that will withstand both cold and hot climates.
- B. Performance Requirements for Exterior Fire-Test Exposure: Provide synthetic thatch and related roofing materials identical to those of assemblies tested for Class A fire resistance according to ASTM E 108 or other testing and inspection agency acceptable to authorities having jurisdiction. Products shall bear markings of the applicable testing agency.

#### **1.03 SUBMITTALS**

- A. Product Data: Submit catalog cuts, illustrations, diagrams, performance charts, instructions and brochures illustrating size, physical appearance and other characteristics of thatch roofing materials.
- B. Shop Drawings: Submit drawings, diagrams and schedules specifically prepared to illustrate extent and details for installation of thatch roofing.
- C. Samples: Submit [one] [2] full size samples of the following:
  - 1. Palm thatch field panels.
  - 2. Palm thatch ridge panel.
- D. Manufacturer’s Instructions: Preprinted material describing installation of the thatch roofing system, including special notices, hazards and safety precautions.
- E. Closeout Submittals: Documentation to record compliance with technical or administrative requirements.

#### **1.04 QUALITY ASSURANCE**

- A. Installer Qualifications: A qualified Installer, approved in writing by the thatch roofing product provider to install the thatch roofing.
- B. Regulatory Requirements: Design and install thatch roofing to resist wind load forces indicated on drawings in accordance with the [Florida Building Code][Uniform Building Code] TAS-107 (Wind test 110 mph for 2 hours) and local amendment requirements for Components and Cladding.

## 1.05 DELIVERY, STORAGE, AND HANDLING

- A. Packing, shipping, Handling, and Unloading: Deliver materials in the manufacturer's unopened boxes and containers bearing the manufacturer's brand name.
- B. Storage and Protection: Keep materials dry, completely covered, and protected from the weather. Store according to manufacturer's written instructions.

## 1.06 WARRANTY

- A. Manufacturer's Limited Warranty: Manufacturer agrees to repair or replace synthetic palm thatch panels that fail within 15 years from date of Substantial Completion.

## 1.07 MAINTENANCE

- A. Extra Materials: Provide extra materials in clean marked containers in addition to any leftover materials for future maintenance:
  - 1. [10][two percent] of field panel.
  - 2. [4][two percent] of ridge panels.

## PART 2 PRODUCTS

### 2.01 MATERIALS

- A. Synthetic Palm Thatch: High-density polyethylene synthetic thatch panels with polyolefin-elastomer edge binder, UV stabilized, [Class A fire retardant,] [chlorine resistant treated,] impervious to rot, decay, aging, or shedding. Thatch palm panels shall be 100 percent recyclable.
  - 1. Panels shall be approximately 30 inches by 18 inches.
  - 2. Color and Texture: [Textured, multicolored tan.][Textured, natural, single color.][Custom colors.]
  - 3. Special Shapes: Ridge and hip panels shop fabricated.
  - 4. Fire Retardant Treatment: Manufacturers system of non-brominated, non-halogenated treatment required to achieve ASTM E108 Class A rating and be toxin free.
  - 5. Materials utilized in thatch formulation shall not contain heavy metal pigments.
- A. Source Product: Viro© Thatch Palm-Subroof system products with [Java][Bali][Custom color][leaf shape] finish provided by **amaZulu Inc.**, 1239 Commons Court, Clermont, FL 34711.
  - 1. Telephone: 352.243.5309.
  - 2. Fax: 352.243.5361.
  - 3. Website: www.amazuluinc.com.

## 2.02 ACCESSORIES

- B. [Bamboo Ridge Trim: Faux bamboo fabricated of pvc pipe with a clear automotive sealer and UV resistant coating, decorated to resemble natural bamboo. Field cut piping in half lengthwise to fabricate half-round ridge cap trim.]
- C. [Wind Netting: Synthetic braided line 4 by 4 inch mesh designed for good UV resistance, good abrasion resistance, and capable of restraining thatch roofing materials during high wind events. Source Product/Manufacturer: Thatchlock Netting by **amaZulu Inc.**, 1239 Commons Court, Clermont, FL 34711.]
- D. Fasteners: Provide corrosion resistant ring-shank nails or screws, [coated steel][aluminum][stainless steel] of the type and size recommended by the manufacturer to meet the performance requirements.

## PART 3 EXECUTION

### 3.01 EXAMINATION

- A. Site Verification of Conditions: Ensure that roof structure is suitable for attachment of thatch roofing panels.

### 3.02 THATCH INSTALLATION

- A. Layered Courses: Install succeeding panels on purlins, maintaining an exposure of 12 inches as work moves up the roof.
- B. Hips: Cut one panel in half and bend it to conform to the hip while allowing 2 hip courses to one field course.
- C. [Bamboo Trim Ridge: Take the last panel and install it at the top of the ridge. On the other side, do the same thing so that the two thatch spines are against each other. Attach a half-round piece of bamboo to cover the spines.]
- D. Thatch Ridge Panels: Install thatch ridge panels at ridges to shed water away from direction of prevailing winds. Fasten with roofing nails of sufficient length to penetrate sheathing.
- E. Fastening: Fasten each panel with minimum of 5 roofing nails.
- F. [When recommended by thatch manufacturers' representative, install wind netting over entire thatch roof area. Terminate perimeter edges at the first purlin and fasten through thatch material to purlins with screws and glue in accordance with manufacturers written directions. Attach netting to the field of the roof by fastening to purlins at 12 inches on center.]

END OF SECTION