SECTION 07 33 22.03 SYNTHETIC REED THATCH ROOFING - LAYERED

PART ONE - GENERAL

1.01 SUMMARY

A. Section includes synthetic reed thatch roofing over exposed purlin structure.

1.02 SYSTEM DESCRIPTION

- A. Provide Viro© reed thatch roofing that mimics Traditional European or African reed roofs that date back to the Middle Ages using layered Virothatch© Reed thatch roofing panels that will withstand both cold and hot climates.
- B. Performance Requirements for Exterior Fire-Test Exposure: Provide synthetic reed 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 reed thatch roofing materials and underlayment.
- B. Shop Drawings: Submit drawings, diagrams and schedules specifically prepared to illustrate extent and details for installation of reed thatch roofing.
- C. Samples: Submit [one] [2] full size samples of the following:
 - 1. Reed thatch field panels.
 - 2. Bamboo ridge trim (24 inch).
- D. Manufacturer's Instructions: Preprinted material describing installation of the thatch roofing system, including special notices and (MSDS) concerning impedances, 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 reed 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 reed 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.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Synthetic Reed Thatch: High-density polyethylene synthetic thatch panels with polyolefinelastomer edge binder, UV stabilized, [Class A fire retardant,] [chlorine resistant treated,] impervious to rot, decay, aging, or shedding. Thatch reed panels shall be 100 percent recyclable.
 - 1. Panels shall be approximately 30 inches by 18 inches.
 - 2. Color and Texture: Textured, natural, multi-color.
 - 3. Special Shapes: Thatch starter 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.
- B. Source Product: Viroreed© Thatch Subroof system products 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

- A. [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.]
- B. [Wind Netting: Synthetic polyester 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.]
- C. Fasteners: Provide corrosion resistant ring-shank nails, [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. Starter Course: Install Starter thatch panel 4 inches from the eave edge.
- B. Layered Courses: Install the second panel 4 inches above the first panel. Stair-step panels diagonally across the roof, maintaining an exposure of 8 inches.
- C. Hips: Cut full panels in half and bend to conform to the hip while allowing 2 hip courses to one field course.
- D. [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.]
- 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