

SECTION 07 33 22.01 SYNTHETIC REED THATCH ROOFING - SUBROOF

PART ONE – GENERAL

1.01 SUMMARY

- A. Section includes synthetic reed thatch roofing over self-adhering sheet underlayment on solid subroof.

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 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. Reed thatch starter panels.
 - 3. Reed thatch eave panels.
 - 4. 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 20 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 starter panels.
 - 3. [4][two percent] of eave panels.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Synthetic Reed 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 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: Starter panels and eave panels shall be 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. Membrane Waterproof Underlayment: ASTM D 5147 and D 6162, Type II, Grade G, elastomeric modified bitumen cap ply composed of fiberglass reinforced SBS self-adhered

sheet, heat resistant, fire resistant, ceramic granule surfaced, 138 mil thickness. Granule color [tan][custom color]. Source Product/Manufacturer: Elastophene Stick HR FR GR by Soprema, Inc.

- 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 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.]
- D. Flexible Flashing: Composite, self-adhesive, sheet flashing of pliable rubberized-asphalt bonded to either high-density polyethylene film, polyolefin fabric, or aluminum foil.
- E. 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 deck is smooth, clean, dry, and without loose knots. Roof surfaces shall be firm and free from loose boards, large cracks, and projecting ends that might damage the underlayment.

3.02 UNDERLAYMENT INSTALLATION

- A. Apply self-adhering membrane over [wood deck] [substrate panels] in accordance with manufacturers recommendations. Provide manufacturer recommended primer enhance adhesion strength of the self-adhesive membrane.

3.03 THATCH INSTALLATION

- A. Eave Panels: Attach horizontal eave panels along entire length of building eave fascia.
- B. Starter Course: Install Starter thatch panel approximately 4 inches from the eave edge. Adjust as needed to align end of eave panel reed with the end of starter panel reed.
- C. 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.
- D. Hips: Cut full panels in half and bend to conform to the hip while allowing 2 hip courses to one field course.
- E. [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.]

- F. Fastening: Fasten each panel with minimum of 3 roofing nails.
- G. [When recommended by thatch manufacturers' representative, install wind netting over entire thatch roof area. Terminate perimeter edges approximately 12 inches from edge of sheathing edge and fasten through thatch material into wood sheathing with screws and glue in accordance with manufacturers written directions. Attach netting to the field of the roof at 12 inches on center each direction.]

END OF SECTION