## Canopy Parameters

The Kohn Hall Canopy Replaced Project will remove a fixed and retractable fabric awning system and replace with a fixed and stacking awning system above the courtyard of Kohn Hall at the University of California at Santa Barbara, UCSB. The enclosed courtyard is used 24/7 for events including but not limited to catered functions, exhibits, program lectures, group and individual study and conversation. The awning design shall include, at a minimum, 22 movable/ stacking panels in 11 bays, two per bay, and fixed panels at the high point of the structure, in 4 irregular shaped bays and over the existing steel beams to funnel water to the gutter system. The system shall incorporate the existing structural steel beams and trusses, gutter and downspout drainage, electrical system consisting of power switches (Minarik C1RGD Series), motors (Minarik Series 100, in line shaft, DC, reversible motors), and wire in conduit into the design and construction providing for modifications as required to provide a fully functional system. All other components of the existing awning system shall be removed and disposed of off campus. The moveable/ stacking panels and the 4 fixed irregular panels shall be mounted in the webs of the existing steel beam system with the movable panels stacking upon themselves at the high point of the structure when the system is open to the sky. The fixed system of panels at the high point of the structure and over the existing beams shall attach above or on top of the existing steel structure and funnel water to the gutter system. The moveable panels shall be such that they can be fully opened, fully closed or anywhere between opened and closed. The system shall be waterproof when closed to the sky funneling all water to the existing gutter system creating a dry environment in the courtyard below. Contractor shall modify existing gutter system as needed to accept water. The system shall not pond water at any time and be able to resist a 70 mph wind at any point without damage. Calculations shall be provided for the system and stamped by a registered civil or structural engineer. The framework and all appurtenances of the canopy system shall be hidden from view from below unless approved by the University. The movable panels shall not bind and shall be spring loaded to resist movement when the motors are not in operation and/or in the off position. The location of the canopy is approximately 100 feet from the ocean thus all materials must be proven to be resistant to the salt water environment. All work must be self performed with the manufacturer and installer being the same entity. Materials and project requirements shall be equal to or greater than the following:

- Vinyl coated Polyester Ferrari 502 fabric or equal. Material shall be translucent providing maximum natural light in the space below. Color to be selected by the University. Fabric shall be flame retardant, mildew resistant and resistant to ultraviolet light.
- 2. Frames powder coated galvanized Gatorshield or powder coated 316 stainless steel or equal. Color to match selected fabric.
- 3. Any and all sheet metal shall be galvanized, primed and powder coated or primed and coated with a two part Tnemec coating system or equal per manufacturer's specifications with color to match existing structure, new vinyl or as approved by the University. Painting and coating shall comply fully with manufacturer's specifications.
- 4. All other components shall be marine grade 316 stainless steel.
- System shall be completely balanced so that no binding or tweaking occurs during movement.
- Contractor will not be asked to warranty the existing electrical system inclusive of the motor, switches and wiring but shall modify all as needed and test system to validate that all is in working order. Contractor may need to make modifications to the motors to accommodate the new system. Contractor shall warranty all modifications.
- Intent of design is to hide most if not all members of the awning system from the courtyard below and provide a water tight system that shall withstand the corrosive elements.
- 8. Contractor shall remove existing canvas structure inclusive but not limited to railing brakes, brackets, bolts, beam covers, etc. and replace with the new system. All holes in the steel structural members that are not used shall be coated, not painted, to match existing to resist rust from the salt water environment.
- Complete shop drawings and product submittals will be required for review and approval.
- 10. Motorized system shall allow for approx. 66 % of the square footage to be open to the sky.
- 11. Contractor shall provide all labor and material to access site and structure for dimensioning and installation. All dimensions shown and indicated are approximate and must be field measured. Access my include removal of existing doors and frames. All equipment shall utilize scratch or scuff proof wheels so not to damage existing pavement.
- 12. The existing building s will be occupied during construction.
- 13. No additional holes shall be placed through the existing "I" beams without approval by the
- Contractor shall have produced and installed at least 10 similar systems within the last 10 years. Provide evidence of such with the bid. Bid will be disqualified if submitted systems are not similar and are not in good working condition as determined by the University.
- 15. System shall be automated to open and close completely or partially.
- 16. Verify all dimensions in the field prior to producing shop drawings. Dimensions on plans are a close approximation to actual dimensions and no additional compensation will be made for any variances in dimensioning or existing components.
- 17. Contractor shall protect existing roof from damage and replace all roof tiles damaged by
- 18. Contractor to produce and submit a photo log clearing identifying existing conditions to serve a basis to identify existing conditions.

Shop Drawings – submit for review and approval indicating awning profiles, sizes, connection attachments, anchorage, size and type of fasteners and all accessories. Provide 12"x12" material samples representing color and stitching.

Operation and Maintenance – submit operation, cleaning and maintenance manuals.

Training – provide 4 hours of training on operation and maintenance of the system.

Warranty- 5 year on entire system.

## **Kohn Hall Canopy Replacement**

UCSB Drawing #: 567-105

UCSB Project #: FM120201S/981340



University of California Santa Barbara