

# ***Awning Works Inc***

## **Tension Canopy Specification**

### **CSI- Division 10**

#### TENSION FABRIC STRUCTURE

#### SPECIFICATION

##### PART 1 GENERAL

###### 1.01 RELATED DOCUMENTS

A. *The Contractual conditions and General Requirements of Division One when applicable shall apply to all work specified hereunder.*

###### 1.02 WORK INCLUDED

A. This Section covers all labor, materials, and related items necessary to design, furnish, and install a complete tension fabric structure, architectural feature or related product as indicated on drawings, as specified hereunder and defined in the subcontract.

###### 1.03 SUBMITTALS

A. Awning Works Inc. will furnish complete Fabrication / Erection Drawings and manufacturer's data for approval prior to commencement of fabrication.

B. All Shop Drawings shall be signed and sealed by a Florida registered engineer indicating that the tension fabric structure, wire rope, fittings, welded framing and hardware meets or exceeds the requirements herein specified and deflection  $L/175$  where applicable.

##### PART 2 PRODUCT

###### 2.01 TENSION CABLING & FABRIC STRUCTURE

A. All frame components have a minimum strength of 6063-T5 aluminum or equivalent or Steel per ASTM A 36, 50 and 53 as per the shop drawing.

B. Finish: Frames shall be Mill Finish, Power Coat Finished, Anodized or Kynar Field Finished, non-specialty color as specified. Architect shall select the color and provide written direction to Awning Works Inc or the Contractor.

C. Frame Construction: Welding shall be per AWS standards and shall be shop MIG or TIG welded in the manufacturer's facility to the extent determined by Awning Works Inc. to properly transport and / or provide the best quality finished product. Each frame member length and miter cut will provide a reasonably tight clean connection. Awning Works Inc. shall provide written welding procedure specifications on request.

C.1. Whenever possible the frame design shall be constructed in pre-fabricated frame sections and bolted together on-site using brackets, plates and Galvanized, Stainless Steel or other rust resistant hardware as identified on the drawing.

C.2. Concrete columns as designed per section 033000 Cast In Place Concrete will be installed prior to frame and or fabric installation.

D. Covering: The covering product will be as specified on the drawing, specification or sub contract. When matching an existing product, samples will be provided to the Architect for approval. Materials offered for use will be of equal or better quality fabrics distributed under the trade names:

- Synthesis Commercial 95
- Alnet Cooltone
- PolyFab USA, Comtex
- Ferrari Open Weave Soltis 86 & 92
- Or other approved equivalent

Fabric products shall be fire resistant per NFPA 701 and conform to the local building codes.

D.1. Whenever possible all fabric seams are overlapped and high frequency welded, hot air welded or hot wedge welded. All edges are tripled hemmed and reinforced. When sewing is necessary the thread type is GORE™ TENARA® (Limited Lifetime Warranty).

E. The tension cables and fabric covering attachment method utilizes stainless steel or galvanized wire rope with swaged or mechanical end fittings and tensioning hardware that is held in place by internal pockets within the covering or rope and grommet lacing attachment to cabling.

E.1. Covering Attachment: The traditional covering method will be by means of high strength nylon lacing cord and grommet, mechanically screwed or other approved method as specified on the shop drawing.

F. Tension Cabling and Fabric Structure design and construction shall meet F.B.C. 2010 & ASCE-7-05 - Minimum Wind load requirements of 130 M.P.H. W/ 3 Sec. Gust, Exp. C

F.1. Open Enclosure Classification, Bldg Category II, I=1.0 , Open Design Pressures = -27.9  
P.S.F.Fabric Design Per F.B.C. 2010 - Fabric Membrane 75 M.P.H. W/ 3 Sec. Gust of 90  
M.P.H. Importance Factor .77 - Exp. B

G. Accessories: Furnish and install all tensioning hardware, bolts, screws, rivets, connection devices to concrete columns, ties, closures, sealants, and other accessories required for a complete installation and as specified on the shop drawing.

H. Electrical motors and wiring will be in accordance with local codes. Motors will be high efficiency low maintenance aluminum housed and protected from the elements.

I. Only products conforming to all requirements and as manufactured by the following are approved:

**AWNING WORKS INC, CLEARWATER FL**

**TELEPHONE: (727) 524 - 1118**

**TOLL FREE: 1-866-873-2941**

**FAX: (727) 524-3110**

**MAILING ADDRESS:**

**Awning Works Inc. 10820 US Hwy 19 N**

**Clearwater, FL 33764**

**E-MAIL: [awnings@awningworksinc.com](mailto:awnings@awningworksinc.com)**

## PART 3 EXECUTION

### 3.01 INSTALLATION

A. Erection: either the manufacturer or an erector approved by the manufacturer shall perform erection in accordance with the approved drawing. Frames shall be plum and level.

B. Cutting: All cutting of fabric, cabling, accessories or other parts of the assembly and erection, which is necessary in the field, shall be neatly made.

C. Touch-Up: At the completion of the work, all scratched, abraded, or other areas where the finish on the frame, beams, columns, or other parts of the assembly are damaged, shall be touched-up with paint furnished by the manufacturer, which reasonably matches the original finish.

D. Final Cleaning: At the completion of the work performed under this Section, all debris, rubbish, excess material, tools, and equipment shall be removed from the site and the work shall be left in complete, first-class condition. Awning Works Inc.'s installation representative, whenever possible, will secure a preliminary satisfaction of completion from the project supervisor to eliminate or minimize the extent of punch list items.

E. Manufacturer's Responsibility: Work shall be furnished and installed by manufacturer or by installer authorized by manufacturer. Manufacturer shall be responsible for installation and shall supervise all aspects of the work.

### 3.02 WARRANTY

A. All manufacturer's warranties will be passed through to the Owner. Workmanship shall be warranted for a period of one year (1) minimum, from product completion and acceptance unless noted otherwise. This warranty shall extend to normal use (wear and tear only). Contractor shall present written warranty with shop drawings at the time of review.