PART 1 - GENERAL

1.1 SUMMARY
A. Includes But Not Limited To:
   1. Furnish and install steeple as described in Contract Documents, including application of sealants.

B. Related Sections:
   1. Section 05 0503: Quality of metal primer.
   2. Section 05 0523: Quality of anchor rods.
   3. Section 05 1223: Quality of metal support angles.
   5. Section 07 9213: Quality of sealants.
   6. Section 26 4100: Lightning protection system from steeple to ground level.

1.2 REFERENCES
A. American Society For Testing And Materials:
   1. ASTM A 36-03a, 'Standard Specification for Carbon Structural Steel.'

1.3 SYSTEM DESCRIPTION
A. Design Requirements: Design and construct steeple to withstand wind force up to 100 mph 161 kph, and built in accordance with UBC Zone 3, NBC Zone 4, IBC Seismic Design Category D seismic requirements minimum unless local code requires greater.

1.4 SUBMITTALS
A. Shop Drawings: If required by local authority, shop drawings shall be stamped by engineer registered in state in which Project is located.

PART 2 - PRODUCTS

2.1 MANUFACTURED UNITS
A. Base:
   1. Welded structural steel angles engineered and sized for steeple size and meeting requirements of ASTM A 36. Paint with two heavy coats of metal primer.
   2. Isolate aluminum framing in contact with steel with material compatible with both aluminum and steel to prevent electrolysis.
   3. Secure structural aluminum framing to steel base with appropriate size stainless steel bolts, with lock nuts and washers.

B. Steeple:
   1. Framing: Fabricate steeple framing above steel base from aluminum extrusions alloy 6061-T6. Fasten aluminum framing together with cold driven rivets, alloy 6061-T6, not loaded in tension and with one inch minimum spacing.
   2. Exterior Covering:
a. Aluminum Cladding: 0.032 inch 0.813 mm thick minimum, alloy 3003-H14 minimum.
b. Finish:
   1) Polyvinylidene Fluoride (PVF2) Resin-base finish (Kynar 500 or Hylar 5000) for coil coating components containing 70 percent minimum PVF2 in resin portion of formula. Thermo-cured two coat system consisting of corrosion inhibiting epoxy primer and top coat factory applied over properly pre-treated metal. Apply by roll coat method and oven bake.
   2) Dip spun or fabricated shapes in caustic etch, coat with etching primer, and finish with exterior vinyl finish.
   3) Finish shall be of such quality that shearing or forming encountered during fabrication will not separate finish from aluminum.
   4) Color: White
c. Use lock seams and conceal exterior fasteners concealed as much as possible.

3. Louvers:
a. Formed from 0.032 inch 0.813 mm thick aluminum skin, weatherproof type.
b. Aluminum insect screen backing, 18x18 mesh, held taut with aluminum strapping.
c. Provide water pan at base of louver with proper weepage.
d. Provide formed supports at back of louver blades for widths exceeding 36 inches 900 mm.

4. Cornices:
a. Form true to dimensions with vertical joints kept to a minimum.
b. Reinforced interior cornice profiles to resist windloading during transit.

5. Finial: Formed aluminum of specified size and tapered to point, with spun aluminum ball.

6. Lightning Protection: Provide clamp on structural member at bottom of tower or pigtail for connection of lightning protection cable provided under Section 26 4100. Isolate dissimilar materials or provide components of compatible materials.

C. Category Four Approved Fabricators. See Section 01 6000 for definitions of Categories.

2.2 FABRICATION

A. Do not use wood or wood products in fabrication of steeple.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Interface With Other Work: Install after installation of permanent underlayment and after inspection to confirm that underlayment is weathertight. If underlayment has been exposed for more than 60 days, apply additional layer of secondary underlayment specified in Section 07 3113.

B. Install in accordance with Steeple Manufacturer's handling and erection directions.

C. Secure steel base to roof framing as described in Contract Documents.

D. Isolate dissimilar metals.

E. Calk seams and bolted connections with specified sealant, applied to clean and dry surfaces.

END OF SECTION