SECTION 10 73 00 – ALUMINUM WALKWAY COVERS

PART 1 GENERAL

1.01 SUMMARY

A. SECTION INCLUDES: DESIGN, FABRICATION, AND INSTALLATION OF WELDED EXTRUDED ALUMINUM WALKWAY COVER SYSTEMS.

1.02 REFERENCES

A. THE ALUMINUM ASSOCIATION (AA):
   1. THE ALUMINUM DESIGN MANUAL 2000, SPECIFICATIONS & GUIDELINES FOR ALUMINUM STRUCTURES.

B. AMERICAN ARCHITECTURAL MANUFACTURERS ASSOCIATION (AAMA):
   1. AAMA 611, VOLUNTARY SPECIFICATION FOR ANODIZED ARCHITECTURAL ALUMINUM.
   2. AAMA 2603, VOLUNTARY SPECIFICATION, PERFORMANCE REQUIREMENTS AND TEST PROCEDURES FOR PIGMENTED ORGANIC COATINGS ON ALUMINUM EXTRUSIONS AND PANELS.
   3. AAMA 2604, VOLUNTARY SPECIFICATION, PERFORMANCE REQUIREMENTS AND TEST PROCEDURES FOR HIGH PERFORMING ORGANIC COATINGS ON ALUMINUM EXTRUSIONS AND PANELS.
   4. AAMA 2605, VOLUNTARY SPECIFICATION, PERFORMANCE REQUIREMENTS AND TEST PROCEDURES FOR SUPERIOR PERFORMING ORGANIC COATINGS ON ALUMINUM EXTRUSIONS AND PANELS.

C. AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE):
   1. ASCE 7, MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES.

D. AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM):
   1. ASTM B 209, SPECIFICATION FOR ALUMINUM AND ALUMINUM– ALLOY SHEET AND PLATE.
   2. ASTM B 221, SPECIFICATION FOR ALUMINUM AND ALUMINUM– ALLOY EXTRUDED BARS, RODS, WIRE, PROFILES, AND TUBES.
   3. ASTM C 150, SPECIFICATION FOR PORTLAND CEMENT.
   4. ASTM C 404, SPECIFICATION FOR AGGREGATES FOR MASONRY GROUT.

E. AMERICAN WELDING SOCIETY (AWS):
   1. ANSI/AWS D1.2, STRUCTURAL WELDING CODE – ALUMINUM.

1.03 SYSTEM DESCRIPTION

A. DESIGN REQUIREMENTS:
   1. DESIGN WALKWAYS IN ACCORDANCE WITH THE ALUMINUM DESIGN MANUAL 2000.
   2. COMPLY WITH THE WIND REQUIREMENTS OF ASCE 7.
   3. PROVIDE AN ALL WELDED EXTRUDED ALUMINUM SYSTEM COMPLETE WITH INTERNAL DRAINAGE. NON-WELDED SYSTEMS ARE NOT ACCEPTABLE.
   4. PROVIDE EXPANSION JOINTS TO ACCOMMODATE TEMPERATURE CHANGES OF 120 DEGREES F. PROVIDE EXPANSION JOINTS WITH NO METAL TO METAL CONTACT.

B. PERFORMANCE REQUIREMENTS:
   1. GROUT: COMPRESSIVE STRENGTH OF 2000 PSI, MINIMUM.

1.04 SUBMITTALS

A. PRODUCT DATA: MANUFACTURER'S PRODUCT INFORMATION, SPECIFICATIONS, AND INSTALLATION INSTRUCTIONS FOR WALKWAY COVER COMPONENTS AND ACCESSORIES.

B. SHOP DRAWINGS: INCLUDE PLAN DIMENSIONS, ELEVATIONS, AND DETAILS.

C. SAMPLES:
   1. SELECTION: MANUFACTURER'S FULL RANGE OF COLORS FOR THE FINISHES SELECTED.
   2. VERIFICATION: 3–INCH–SQUARE SAMPLES OF EACH FINISH SELECTED ON THE SUBSTRATE SPECIFIED.

D. DESIGN DATA: DESIGN CALCULATIONS BEARING THE SEAL OF A REGISTERED PROFESSIONAL ENGINEER, LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED. DESIGN CALCULATIONS SHALL STATE THAT THE WALKWAY COVER SYSTEM DESIGN COMPLIES WITH THE WIND REQUIREMENTS OF ASCE 7, THE STABILITY CRITERIA OF APPLICABLE BUILDING CODE, AND ALL OTHER GOVERNING CRITERIA.

1.05 QUALITY ASSURANCE

A. MANUFACTURER QUALIFICATIONS: AT LEAST TEN YEARS EXPERIENCE IN THE DESIGN, FABRICATION, AND ERECTION OF EXTRUDED ALUMINUM WALKWAY COVER SYSTEMS.

B. INSTALLER QUALIFICATIONS: HAVE WALKWAY COVERS INSTALLED BY MANUFACTURER, THIRD PARTY INSTALLATION IS NOT ACCEPTABLE.

PART 2 PRODUCT

2.01 MANUFACTURERS

A. THE DESIGN IS BASED ON PRODUCTS FABRICATED BY: PEACHTREE PROTECTIVE COVERS, INC., 1477 ROSEDALE DRIVE, HIRAM, GA 30141, 770–439–2120, FAX 770–439–2122.
   1. COMPARABLE PRODUCTS BY THE FOLLOWING MANUFACTURERS ALSO WILL BE ACCEPTABLE:
      a. DITTMER ARCHITECTURAL ALUMINUM.
      b. E.L. BURNS COMPANY.
   2. SUBSTITUTIONS: COMPARABLE PRODUCTS OF OTHER MANUFACTURERS WILL BE CONSIDERED UNDER STANDARD SUBSTITUTION PROCEDURES.

2.02 MATERIALS

A. ALUMINUM MEMBERS: EXTRUDED ALUMINUM, ASTM B 221, 6063 ALLOY, T6 TEMPER.

B. FASTENERS: ALUMINUM, 18–8 STAINLESS STEEL, OR 300 SERIES STAINLESS STEEL.

C. PROTECTIVE COATING FOR ALUMINUM COLUMNS EMBEDDED IN CONCRETE: CLEAR ACRYLIC.

D. GROUT:
   1. PORTLAND CEMENT: ASTM C 150, TYPE I.
   2. SAND: ASTM C 404.
   3. WATER: POTABLE.

E. GASKETS: DRY SEAL SANTOPRENE PRESSURE TYPE.

F. ALUMINUM FLASHING: ASTM B 209, TYPE 3003 H14, 0.040 INCH, MINIMUM.

2.03 MIXES

A. GROUT: 1 PART PORTLAND CEMENT TO 3 PARTS SAND, ADD WATER TO PRODUCE A POURING CONSISTENCY.

2.04 FABRICATION

A. GENERAL:
   1. SHOP ASSEMBLY: ASSEMBLE COMPONENTS IN SHOP TO GREATEST EXTENT POSSIBLE TO MINIMIZE FIELD ASSEMBLY.
   2. WELDING: IN ACCORDANCE WITH ANSI/AWS D1.2.
   3. BENT CONSTRUCTION: FACTORY WELD BEAMS TO COLUMNS WITH NEATLY MITERED CORNERS TO FORM ONE–PIECE RIGID BENTS. MAKE WELDS SMOOTH AND UNIFORM USING AN INERT GAS SHIELDED ARC. PERFORM SUITABLE EDGE PREPARATION TO ASSURE 100% PENETRATION. GRIND WELDS ONLY WHERE INTERFERING WITH ADJOINING STRUCTURE TO ALLOW FOR FLUSH CONNECTION. FIELD WELDING IS NOT PERMITTED. RIGID MECHANICAL JOINTS MAY BE USED ONLY IF FULLY WELDED BENTS CANNOT BE SHIPPED ON LOCAL, STATE, OR FEDERAL HIGHWAYS WITHOUT A SPECIAL PERMIT FROM THE DEPARTMENT OF TRANSPORTATION.
   4. DECK CONSTRUCTION: FABRICATE FROM EXTRUDED MODULES THAT INTERLOCK IN A SELF–FLASHING MANNER. POSITIVELY FASTEN INTERLOCKING JOINTS AT 8 INCHES ON CENTER CREATING A MONOLITHIC STRUCTURAL UNIT CAPABLE OF DEVELOPING THE FULL STRENGTH OF THE SECTIONS. THE FASTENINGS MUST HAVE MINIMUM SHEAR STRENGTH OF 350 POUNDS EACH. ASSEMBLE DECK WITH SUFFICIENT CAMBER TO OFFSET DEAD LOAD DEFLECTION.

B. COLUMNS: PROVIDE RADIUS–CORNERED TUBULAR EXTRUSIONS WITH CUTOUT AND INTERNAL DIVERTER FOR DRAINAGE WHERE INDICATED. CIRCULAR DOWNSPOUT OPENING IN COLUMN NOT ACCEPTABLE.

C. BEAMS: PROVIDE OPEN–TOP TUBULAR EXTRUSION, TOP EDGES THICKENED FOR STRENGTH AND DESIGNED TO RECEIVE DECK MEMBERS IN SELF–FLASHING MANNER. PROVIDE STRUCTURAL TIES IN TOPS OF ALL BEAMS.

D. DECK: EXTRUDED SELF–FLASHING SECTIONS INTERLOCKING INTO A COMPOSITE UNIT. PROVIDE WELDED PLATE CLOSURES AT DECK ENDS.

E. FASCIA: MANUFACTURER'S STANDARD SHAPE. PROVIDE FASCIA SPLICES WHERE CONTINUOUS RUNS OF FASCIA ARE JOINTED. LOCATE SPLICES TO BE IN LINE WITH BENTS AND FASTEN IN PLACE ON HIDDEN OR NON–VERTICAL SURFACES.

THE EQUIVALENT ALCOA NUMBER FOR BELOW IS 204 R1.

1. CLASS II, CLEAR ANODIC FINISH: AA–M12C22A31 (MECHANICAL FINISH: NONSPECULAR AS FABRICATED; CHEMICAL FINISH: ETCHED, MEDIUM MATTE; ANODIC COATING: ARCHITECTURAL CLASS II, CLEAR COATING 0.4 MILS TO 0.7 MILS THICK),COMPLYING WITH AAMA 611.

PART 3 EXECUTION

3.01 EXAMINATION

A. VERIFICATION OF CONDITIONS: VERIFY THAT ALL CONCRETE, MASONRY, AND ROOFING WORK IN THE VICINITY IS COMPLETE AND CLEANED.

3.02 ERECTION

A. ERECT PROTECTIVE COVER TRUE TO LINE, LEVEL, AND PLUMB. PROTECT ALUMINUM COLUMNS EMBEDDED IN CONCRETE WITH CLEAR ACRYLIC. FILL DOWNSPOUT COLUMNS WITH GROUT TO THE DISCHARGE LEVEL TO PREVENT STANDING WATER. INSTALL WEEP HOLES AT TOP OF CONCRETE IN NON–DRAINING COLUMNS TO REMOVE CONDENSATION.
B. PROVIDE HAIRLINE MITERS AND FITTED JOINTS.

3.03 CLEANING

A. CLEAN ALL PROTECTIVE COVER COMPONENTS PROMPTLY AFTER INSTALLATION.

3.04 PROTECTION
A. PROTECT MATERIALS DURING AND AFTER INSTALLATION.

END OF SECTION 10 73 00

GENERAL SHEET NOTES

A. PRE–ENGINEERED METAL CANOPY PLAN IS A BASIS OF DESIGN AND REQUIRES COORDINATION WITH PRE–ENGINEERED METAL CANOPY MANUFACTURER. MANUFACTURER MAY REQUIRE ADDITIONAL COLUMNS, BEAMS, OR VARYING CONFIGURATION TO COMPLY WITH MANUFACTURER DESIGN AND STANDARDS. CONTRACTOR SHALL COORDINATE PROPOSED PLAN WITH MANUFACTURER FOR ANY ADDITIONAL REQUIREMENT BID PRICING.

100% SUBMITTAL

REVISION NO.	REVISION DESCRIPTION	By	Date

Revisions

Department of Veterans Affairs
Medical Center
1826 Veterans Blvd.
Dublin, Ga. 31021

SEAL

Architect/Engineer Address

Harrell, Saltrick & Hopper

Design & Management Solutions for the Built Environment

151 LOCUST STREET, SUITE #1
AVONDALE ESTATES, GA 30002
P 704.814.1325
F 704.321.0833

WWW.HSHPC.COM

COPYRIGHT © 2011 HARRELL SALTRICK & HOPPER, PC

HSH PROJECT # 10004

Recommended Approvals:	
1. MEDICAL DIRECTOR	6. OPERATIONS SERVICE LINE MANAGER
2. ASSOCIATE DIRECTOR	7. INFECTION CONTROL SAFETY MANAGER
3. CHIEF OF STAFF	8. SAFETY MANAGER
4. ASSOC. DIRECTOR	9. GENERAL ENGINEER
5. SERVICE LINE MGRS.	10. COTR

Drawing Title: PRE-ENGINEERED METAL CANOPY SPECIFICATION

FULLY SPRINKLERED

Project Title: RENOVATE 13A FOR ENDOSCOPY SUITE

Date: June 10, 2011

Project Number: 557-10-108

Drawn	Building Number	AutoCAD File Name
MJF		
Checked	Reviewed	Const. Contract No.

DRAWING No. A-604

Veterans Affairs