

Specification Section XXXXX – Interior Water walls

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.1 SUMMARY

- A. This Section includes the following:
 - 1. Reverse osmosis water purification systems
 - 2. Ultra-violet light water clarifiers
- B. Coordinate with all related sections of the specifications including, but not limited to the following:
 - 1. Division 15: Mechanical and electrical coordination, basic mechanical methods and materials, valves, testing, adjusting, and balancing.
 - 2. Division 16: Electrical requirements, basic materials and methods, electrical boxes and fittings.
- C. Comply with all prevailing local codes and UL standards.

1.2 SUBMITTALS

- A. Product Data: Provide for all components and materials used in fabrication of waterfalls, including finishing materials and methods.
- B. Shop Drawings: Provide detailed fabrication drawings including:
 - 1. Plans, elevations, sections, component details, and attachments to other work. Indicate materials, profiles, finishes, and locations for all waterwall components/accessory items.
- C. Samples: 6" x 6" sample for each material and finish specified:
 - 1. No. 4 brushed satin finish stainless steel.
 - 2. As selected by architect

1.3 QUALITY ASSURANCE

A. Manufacturer Qualifications:

1. Manufacture and installation shall be the responsibility of a single fabricator, who shall own and operate their own plant, and is regularly engaged in work of similar magnitude and scope for a minimum of five years.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Do not deliver product until building is fully enclosed and ready for water feature installation.
- B. All products shall be appropriately and substantially packed for shipment.
- C. All equipment containers shall be clearly marked "fragile", shall indicate the project name, site address, and include complete packing and shipping lists for each container.
- D. All shipping costs to the jobsite are the responsibility of the contractor. The shipping method/company is at the total discretion of the manufacturer as required to meet project schedule.
- E. Acceptance at Site: The general contractor shall receive all products at the jobsite and provide secure storage. Upon delivery products shall be stored under cover in a clean and dry location, off the ground and away from uncured concrete and masonry.

1.5 PROJECT/SITE CONDITIONS

- A. Verify all conditions at the jobsite prior to fabrication. Promptly report any variations or obstructions to the architect/designer. All additions, deviations, or corrections are to be submitted for approval prior to fabrication.
- B. Field measurements shall be taken prior to fabrication to ensure proper fitting of work.
- C. Coordinate fabrication schedule with construction progress to avoid delaying the work.

1.6 WARRANTY

- A. The manufacturer shall warrant all materials and workmanship related to the stainless steel frame and stainless steel upper and lower tanks supplied under the work of this specification section to be free of defects for a period of 25 years. The manufacturer shall guarantee the repair or replacement of all other items, (pumps, bacterial control system and RO) found defective during a period of one year following the date of final acceptance. Ordinary wear and defects resulting from improper care and maintenance are excluded.

PART 2 – PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

- A. Subject to compliance with requirements of this section, pre-approved manufacturers offering products which may be incorporated in the work include, but are not limited to the following:
 - 1. Accents in Water
2627 West Oxford Avenue
Englewood, CO 80110
1-800-622-3440
- B. Other manufacturers who wish to bid must submit qualification information to the Architect and the Designer 45 days prior to time of bid. Proposal must include the following:
 - 1. Statements of financial responsibility for past five years showing assets and liabilities.
 - 2. Names of individuals holding in excess of 33 1/3% of stock in firm, and individuals, partnerships, or corporations with which the firm is affiliated.
 - 3. List of principal officers and design and service engineers.
 - 4. List of personnel who would do project management, product engineering, supervision, and installation should this contract be awarded.
 - 5. Bonding Company Information indicating that manufacturer has bonding capacity for duration of project. Include list of other bonded projects coinciding with this project.

2.2 MATERIALS

- A. T304 stainless steel sheet of gauges specified – cold rolled and stretcher leveled, free from buckle, scale, scratches, and surface imperfections, conforming to ASTM A240, with all exposed surfaces polished to a No. 4 brushed satin finish.
1. Lower water storage basin and removable lid – 14 gauge
 2. Leveling mechanism components - 11 gauge
 3. Tower side posts and upper valance – 16 gauge
 4. Upper water spill reservoir – 14 gauge
 5. Perforated baffles – 18 gauge
- B. Water Wall Components:
1. Submersible Pumps: Provide manufacturers standard, in size and quantity required to provide complete surface coverage of water feature face.
 2. Flow Control Valves: Provide Schedule 80 PVC gate valves in accessible location within lower water storage basin.
 3. 1 ½" stainless steel drain coupling with Schedule 80 PVC stand pipe.
 4. Automatic fill system with electronic liquid level control/float.
 5. Provide manufacturers standard three canister reverse osmosis water purification system.
 6. Provide manufacturers standard Ultra Violet bacteria control system,
 7. Provide a powder coated, antimicrobial coating applied to upper and lower tanks to prevent bacterial growth. The antimicrobial compound shall be inorganic, and shall have ionic silver as its active ingredient, encapsulated in a zeolite matrix that provides continuous, controlled release. Antimicrobial must meet the following NSF and ASTM specifications: NSF 61, NSF Std. 2, ASTM 3363-92A, ASTM 3359-97, ASTM B117-97, ASTM D523-89

Pump	120V	60 Hz.	1.4 AMPS	3 year warranty
20W UV sterilizer	120V	60 Hz.	0.460 AMPS	1 year warranty
40W UV sterilizer	120V	60 Hz.	0.710 AMPS	1 year warranty

2.3 FABRICATION, GENERAL

- A. Form ornamental metal to required shapes and sizes, with true lines and angles. Provide components in gauges indicated, but not less than that needed for secure structural support.
- B. Provided necessary lugs and brackets to assemble units and to attach to other work. Use concealed fasteners.
- C. Fully weld lower water storage basin and upper spill reservoir, grind and polish all exposed surfaces to a No. 4 brushed satin finish.
- D. Fully assemble and test units in factory prior to delivery to project site.

PART 3 – EXECUTION

3.1 INSTALLATION, GENERAL

- A. Provide anchoring devices and fasteners where necessary for securing water features and components to in-place construction.
- B. Set products accurately in location, alignment, and elevation: measured from established lines and levels.
- C. Do not cut or abrade finishes that cannot be completely restored in the field. Return items with such finishes to the factory for required repairs/replacement.
- D. Provide protective coverings for protection during shipment and installation. Replace protective coverings after installation and testing. Remove coverings only when there is no possibility of damage from other trades working in same location.

3.2 INSTRUCTION OF OWNERS PERSONNEL

- A. Instruct owners designated operation and maintenance personnel in the operation, adjustment, and maintenance of water features and accessory components.
- B. Provide operations and maintenance manual.
- C. Provide contact name and phone number for service and parts.

END OF SECTION