PART 1 GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. This Section includes custom fabricated stainless steel column cladding, complete with accessories.

B. Related Sections:
1. Division 1 Section “Sustainable Design Requirements” for additional LEED requirements.
2. Division 7 Section “Formed Metal Wall Panels”.

1.3 QUALITY ASSURANCE

A. The work of this section shall be performed by a company which specializes in the type of column cladding work required for this Project, with a minimum of 5 years of documented successful experience and shall be performed by skilled workmen thoroughly experienced in the necessary crafts.
1. Work shall be performed in compliance with Owner's insurance underwriters' requirements.

B. Manufacturer shall specialize in manufacturing the type of column cladding specified in this section, with a minimum of 10 years of documented successful experience, and have the facilities capable of meeting all requirements of Contract Documents as a single-source responsibility and warranty.

C. Manufacturer’s identification tags or marks are not acceptable on surfaces which will remain exposed to view after installation.
1. Evidence of “patching” after removal of tags or marks is not acceptable.

1.4 SUBMITTALS

A. Submit the following according to Conditions of the Construction Contract and Division 1 Specification Sections.

B. Shop Drawings: Before submitting to Architect, shop drawings shall be reviewed, sealed and signed by a professional structural engineer registered in the state in which this Project is located, and shall clearly indicate but not be limited to:
1. Plans, elevations, sections, full size details of column cladding units and components, complete with references to detail numbers on architectural drawings and references to specification section and paragraph numbers to identify material types and finishes.
2. Types, sizes, shapes and quality of all components required to complete the cladding work.
3. Method of anchorage to structure, joints and connections, method of assembling sections, details of cladding components joining with work of other trades.
4. Layout of anchorage devices.
5. Fabrication and erection tolerances for cladding work and adjoining work.
6. Locations of thermal expansion joints.
7. Maximum joint gaps.
8. Type of finish for concealed accessories and components.
9. Type and mil thickness of finish for exposed aluminum surfaces of column cladding system.
10. Provide drawings showing locations of all electrical, security and fire control devices that may be indicated to be mounted on column covers.

C. Structural Calculations:
1. Shall be prepared, sealed and signed by a professional structural engineer registered in the state in which this Project is located, to include but not be limited to computations and type of structural connections to building structure for the complete performance of column cladding in compliance with applicable building code, and Contract Documents.
2. Shall be cross-referenced to applicable shop-drawing details.
3. Shall be submitted with each set of shop drawings.
4. Review of structural calculations shall not relieve Contractor from responsibilities and requirements of this section and Contract Documents.

D. Product Data: Shall be clearly marked to indicate all technical information which specifies full compliance with requirements of this section and Contract Documents, including manufacturer's published installation recommendations.

E. Samples:

Item No.	Quantity	Size	Description
S1	5	8"x8"	Samples of No. 4 Stainless Steel 304.
S2	1	3' high x full size & diameter required	Fabricated of specified materials to show how cladding components are attached together to form column configuration including attachment to floor.

F. Qualification Certificates: Required from cladding manufacturer and installer indicating compliance as specified in this section under "Quality Assurance".

G. Maintenance Data: Shall clearly indicate materials and methods from column cladding manufacturer for periodic cleaning.

H. LEED Submittals
1. Credit MR 4.1 and 4.2: List of proposed materials with recycled content.
   a. Indicate projected materials cost, projected post-industrial (pre-consumer) recycled content, and projected post-consumer recycled content for each product projected to have recycled content.

I. Hazardous Materials Notification: In the event no product or material is available that does not contain asbestos, PCB or other hazardous materials as determined by the Owner, a "Material Safety Data Sheet" (MSDS) equivalent to OSHA Form 20 shall be submitted for that proposed product or material prior to installation.

J. Asbestos and PCB Certification: After completion of installation, but prior to Substantial Completion, Contractor shall certify in writing that products and materials installed, and processes used, do not contain asbestos or polychlorinated biphenyls (PCB), using format in Article 3 of General Conditions.

1.5 DELIVERY, HANDLING, STORAGE

A. Comply with General Conditions and Division 1 Section “Product Requirements”, including the following:
1. Factory-finishes shall be protected from abrasion and other damages.
2. Stacking and storing of components in shop, in transit and at Project site shall be done using softeners and timbers to keep individual members free from contact with the ground, and with each other.
3. Store materials at Project site under cover in a dry, protected and clean location, off the ground.
4. Protect components from soiling by adjacent fabrication or construction operations.
5. Materials which are delivered to Project site disfigured, cracked, chipped, or scratched, or otherwise not suitable for installation shall be removed from Project site and replaced with new materials at no cost to Owner.

1.6 WARRANTY

A. Comply with General Conditions except extend to 10 years, agreeing to repair or replace specified materials or Work that has failed within the warranty period. Failures include but are not limited to the following:
1. Abnormal deterioration, aging or weathering of the Work.
2. Failure of anchorage components due to oxidation, electrolytic damage and deterioration of protective coatings.
3. Loose or missing parts.
4. Failure to conform to profiles, locations, and arrangements shown on drawings.
5. Failure to conform to manufacturer's recommendations and industry standards as required for compliance with cladding component requirements.
6. Staining of exposed cladding surfaces caused by incompatibility of adjacent materials.
7. Objectionable appearance or performance resulting from defective or nonconforming materials or workmanship.

PART 2 PRODUCTS

2.1 UNAUTHORIZED MATERIALS

A. Materials and products required for work of this section shall not contain asbestos, polychlorinated biphenyls (PCB) or other hazardous materials identified by the Owner.

2.2 ACCEPTABLE MANUFACTURERS

A. General: Products specified in this section establish the minimum functional, aesthetic and quality standards required for work of this section:

B. Substitutions: Comply with General Conditions using form in Division 1 Section “Substitution Request Form”.

2.3 STAINLESS STEEL COLUMN CLADDING

A. General: Column cladding units shall be designed and fabricated of metals of quality required to meet all requirements of this section, in accordance with structural calculations, approved shop drawings and Contract Documents, including but not limited to the use of the following materials:
   1. Stainless Steel Sheets: 12 gauge 304 stainless steel alloy.

B. Recycled Content: For materials containing post-industrial (pre-consumer) and/or post-consumer recycled content, contractor shall document the cost and percentage (by weight) of each material broken out by post-industrial (pre-consumer) and post-consumer content.

C. Minimum Design Requirements:
   1. Wind Loads:
      a. Design Wind Pressure: Shall be in accordance with applicable building codes, and wind tunnel tests.
      b. Design, fabricate, and install component parts so completed column cladding work, will withstand inward and outward design wind loads

D. Fabrication:
   1. Joints: Neatly fitted and properly secured.
   2. Thermal Expansion/Contraction: Required for each column cladding.
   3. Exposed Welded Connections: Smooth and flush with adjacent surfaces.
   4. Exposed Mechanical Attachments: Flush countersunk type located where not visible in column design.

2.4 ARCHITECTURAL METAL FINISH

A. Cladding Material:
   1. Stainless Steel Sheet with vertical and horizontal hairline joints.

B. Brushed Stainless Steel Finish No. 4:
   1. Type: General purpose bright mechanically polished "Brushed Finish", No. 4 (SST-1), obtained by finishing with a 120-150 mesh abrasive, following initial grinding with coarser abrasive, complete with protective coating, in accordance with quality standards and methods established by NAAMM to match "control sample" approved by Architect.
   2. Grain orientation to be determined.
   3. Protective Coating: Temporary strippable type factory-applied coating for protection of exposed finish.

PART 3 EXECUTION

3.1 INSTALLATION

A. Perform column cladding work in accordance with approved shop drawings, manufacturer's published instructions and Contract Documents.

B. The completed column cladding work shall be plumb and level to required lines and profiles, free of defects, and with joints smooth and even.

3.2 CLEANING AND PROTECTION

A. Thoroughly clean all column claddings using methods and materials recommended by cladding manufacturer.
   1. Do not use acid solution, steel wool or other harsh abrasive materials.

B. Protect the completed column cladding from damage during construction activities and as recommended by cladding manufacturer.

END OF SECTION