



SECTION 131200 - CLIMBING WALLS

PART 1 – GENERAL

1.1 SUMMARY

- A. This section includes the following:
 - 1. Rock climbing wall system comprised of a series of modular panels that can be configured to create a variety of free-standing or wall mounted climbing walls.

1.2 SYSTEM DESCRIPTION

- A. Work of this section is the furnishing and/or installation of a modular rock climbing wall system utilizing cast glass fiber reinforced polymer (GFRP) panels simulating natural rock profiles, colors and textures.
- B. The panels are usually mounted to a structure designed and supplied by the manufacturer, but some configurations may be mounted to an existing structural building wall. Climbing wall shall include handhold fastening systems, and specific equipment as defined below.

1.3 QUALITY ASSURANCE

- A. Provide climbing wall systems by a single manufacturer.
- B. Substitutions of climbing wall systems and equipment shall conform to Division 01 requirements for substitutions.
- C. Manufacturer shall have a minimum of five years of experience with the manufacturing and installation of the climbing wall system specified herein.

1.4 SUBMITTALS

- A. General: Submit the following in accordance with Conditions of the Contract and Division 01 Specifications Sections.
- B. Product data including manufacturer's specifications, standard details, details particular to this project, and installation drawings if applicable.
- C. Submit one sample of climbing wall substrate with the applied surface, minimum 12" by 12" showing substrate, handhold fastener density, and color and finish.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Protect products during transit, delivery, storage and handling to prevent damage and maintain integrity of components.
- B. Products shall be stored in accordance with manufacturer's recommendations in an area adjacent to the climbing wall installation.

1.6 WARRANTY



- A. Manufacturer shall warrant to the original purchaser for one year from the date of substantial completion that its products are free from defects in materials and workmanship.

PART 2 – PRODUCTS

2.0 CLIMBING WALL MANUFACTURER

- A. Chameleon™ system by Eldorado Wall Company (303) 447-0512

2.1 CLIMBING SURFACE

- A. The climbing panels shall utilize a 7' tall x 4' wide standard module, and have a variety of panels that allow assembly into towers, half-round towers, and linear climbing walls. Panels shall be composed of glass fiber reinforced polymer (GFRP) panels cast in rock-realistic molds, 1/4" in thickness.
 - 1. Surface coloration to be manufacturer's standard brown coloration with rock-like highlights and staining. Custom coloration chosen by client is optional.
- B. Climbing wall system shall provide modular climbing hold attachment locations compatible with 3/8"-16 thread fasteners for surface mount. Handhold Fasteners shall be securely anchored to the sub-surface with adhesive. Handhold fasteners shall be placed at minimum of 1 per sq ft of climbing wall surface area.

2.2 CLIMBING WALL STRUCTURAL SYSTEM

- A. All structural steel work performed by Climbing Wall Contractor in accordance with approved shop drawings.
- B. The structural frame of the climbing wall is to be a modular steel system in accordance with approved shop drawings. Attachment to the facility walls, floor, and ceilings to conform to specified loading limits of the existing facility.

2.3 CLIMBING WALL FASTENERS

- A. Modular Handhold bolts:
 - 1. Shall be 3/8", 16 TPI socket head cap screws or flat head cap screws of appropriate length as suggested by and provided by the manufacturer of the Climbing Wall and handhold manufacturer.
- B. Handhold fasteners (T-nuts or Flange nuts)
 - 1. Glue-on fastener shall be 3/8" - 16 tpi, 3" wide flange with perforations to increase glue bond.

2.4 CLIMBING PROTECTION / ANCHORS:

- A. Climbing walls may or may not have protection anchors for the anchoring of climbing ropes and/or auto belays, depending on the climbing wall configuration and programming intent. If the climbing wall has protection anchors, they shall be as described below.
- B. Top Rope Anchors



- a. Top rope anchors shall be located at a maximum spacing of 4' along the top edge of the climbing wall. Anchors shall be mounted to the steel superstructure, and shall provide two attachment points for carabineers or other anchor hardware.

2.5 CLIMBING WALL EQUIPMENT [specify quantity or none]

- A. Climbing Ropes: Dynamic ropes, 2 per 8 linear feet of wall in sufficient length for wall height.
 1. Product: Standard with the climbing wall manufacturer.
 2. Manufacturer: Blue Water, Sterling or equal that meets UIAA standards.
- B. Climbing Harnesses: As indicated, or if not indicated, 2 harnesses per 4 linear feet of wall.
 1. Adjustable with double pass through buckles and gear loops.
 2. Manufacturer: Camp USA, Black Diamond, or equal that meets UIAA standards
- C. Belay Devices:
 1. Tube style, manufactured by Camp USA, Trango USA or equal that meets UIAA standards
- D. Locking Carabiners:
 1. Aluminum, large D ring, 25Kn major axis, 7Kn minor axis, manual locking, as manufactured by Petzl William "Lock" carabiners (Manual snap), Black Diamond "airlock 2 Twistlock" or Metolius "Matrix Locker".
- E. Quick Draws: (Where lead routes are specified)
 1. Quicklink: 3/8" Quicklink.
 2. Carabiners: Stainless Steel, wire or bent gate, 23Kn major axis, manufactured by Fixe, USA
 3. Sling: 4" sling as manufactured by Camp USA, Trango USA or equal that meets UIAA standards
- F. Modular Handholds
 1. Composed of polyurethane to minimize breakage.
 - a. Acceptable Manufacturers: Eldo Holds, Egrips, Solll handholds.
 2. Handhold selection shall be made based on strong functionality of the potential user base and shall include:
 - a. Large Holds
 - b. Medium Holds
 - c. Small Holds



- d. Bolt-on Footholds
- 3. To include handhold bolt of appropriate length.
- G. Rental Shoes:
 - 1. All purpose climbing shoes of size range to include most popular size for users.
 - a. evolv
- H. Auto Belay System
 - 1. Auto belay Systems – TRUBLUE™ 1-877-565-6885

2.6 CLIMBING WALL FALL ATTENUATION SYSTEM (FLOORING)

- A. 4" thick vinyl covered pads manufactured to conform to the bottom profile of the climbing wall.

PART 3 – EXECUTION (If installation is included)

3.1 PRE-INSTALLATION INSPECTION

- A. Verify that all surfaces are ready to receive work and are within specified tolerances.
- B. Verify that layout of the materials or equipment will not interfere with installed climbing wall.

3.2 INSTALLATION

- A. Erection of the climbing wall system can be made by manufacturer, approved sub-contractor, or owner.
- B. Complete wall shall comply with specified tolerances and shop drawing requirements.

3.3 CLEAN-UP

- A. Clean area of debris from installation of climbing wall.

3.4 INSPECTION

- A. The completed climbing wall shall undergo a full complete final inspection by a duly trained supervisor of the manufacturer and shall be certified by the manufacturer that the finished product has been built in accordance with the manufacturer's approved installation drawings and these contract documents.
- B. The completed climbing wall shall undergo a full and complete final inspection by the Owner or Owner's representative at the completion of climbing wall installation.

3.5 TRAINING

- A. Climbing Wall Contractor shall provide ½ day training session for the facility operations staff, following the climbing wall installation. Training shall cover the following topics:



1. Climbing wall maintenance and periodic inspections.
2. Route-setting methods and management.
3. Sample handhold installation and removal.
4. Climbing wall operations management.

3.6 PROTECTION

- A. General Contractor to provide final protection in a manner acceptable to the Owner or Owner's representative that insures the climbing wall will be without damage or deterioration at time of substantial completion.

END OF SECTION 131200