READ THIS FIRST

This Project Spec Document may need additional modifications to suit your project. It is recommended that you proofread each section, paying attention to any “Notes” boxes such as this one--you should remove these “Notes” sections as you go. Also, do a search for all bracket characters “ [ ] “ as they are used to show you areas containing options or project specific details (you can use Microsoft Word’s Find feature {Ctrl-F} to jump to an open bracket “ [ “ character quickly). Again, these bracket characters should be removed.

It is important that every paragraph be numbered to allow for easy referencing. If you use the document’s built in styles and formatting your outline should be fine (turn on the formatting toolbar by going to View > Toolbars > Formatting). Most paragraphs will use the style “Numbered Material” and can be promoted (Shift) or demoted (Shift-Tab).

You should not have to manually enter extra spaces, carriage returns or outline characters such as A, B, C, or 1.01, 1.02; the formatting will do this for you. The entire document is 11 pt. Arial. If you paste items in, you may need to reapply the “Numbered Material” format.

1. GENERAL
   1. SUMMARY OF WORK
      1. The extent and location of the “Fixed Ladders” Work is indicated in the Contract Documents.
   2. GOVERNING CODES, STANDARDS, AND REFERENCES
      1. Washington Administrative Code (WAC)
         1. 296-876 – Ladders, Portable and Fixed
      2. American National Standards Institute (ANSI)
         1. A14.3-2018 – American National Standard for Ladders – Fixed – Safety Requirements
      3. International Code Council (ICC)
         1. International Building Code (IBC) as adopted by the [City of Seattle as the Seattle Building Code] [Seattle-Tacoma International Airport Building Department] [Authority Having Jurisdiction] [other] (current edition)
   3. SUBMITTALS
      1. Submit materials data in accordance with Section 01 33 00 - Submittals. Furnish manufacturers’ technical literature, standard details, product specifications, and installation instructions for all products.
      2. Submittals shall include the following:
         1. Shop Drawings
            1. Submit shop drawings to the Engineer.
            2. Submittal Requirements

Detailed drawings showing complete dimensions, materials, mounting attachments, loading criteria, and fabrication details.

Show all welds, both shop and field, by the current symbols of the American Welding Society (AWS).

Sample rung with non-slip application

[Fixed ladders greater than 12ft tall: Provide O&M manual for safety system.]

* + - 1. Operation and Maintenance (O&M) manual for ladder safety system and components

1. MATERIALS

A. If only one product is acceptable (single or sole source product), obtain an approved Competition Waiver and submit to the CPO Construction, Contract Administrator. The language shall read as: “Manufacturer Name, Product # XXXXX, No Equal.” Refer to CPO-6 Competition Waiver Policy for more information.

B. If a Competition Waiver is not approved or more than one product is acceptable, this section must list a minimum of 2 products plus the language “Or Approved Equal,” along with salient characteristics. Refer to CPO Construction’s Salient Characteristics Guidelines for more information.

* 1. PROJECT INFORMATION
  2. PREPARATION FOR MATERIALS
  3. FABRICATION, PRODUCTION, & SUPPLY OF MATERIALS
     1. Design
        1. Fixed ladders construction shall adhere to WAC 296-876, Ladders Portable and Fixed.
        2. Fixed ladders shall conform to minimum design requirements in ANSI A14.3 - American National Standard for Ladders – Fixed – Safety Requirements.
     2. Field Dimensions
        1. Verify the dimensions of supporting structures at the project site and adjust the final shop drawings to reflect the actual field dimensions.
     3. Rungs
        1. Fixed ladder rungs or steps shall include permanent non-slip coating, tape, or paint
     4. Safety Posts
        1. Vertical extending ladder safety posts for ingress and egress shall be provided on all roof access hatch applications
     5. Ladder Safety Systems
        1. Ladder safety systems shall be installed on all fixed ladders greater than 12ft tall.
           1. Ladder safety systems shall include a permanent locking storage box to house ladder safety system devices such as connection shuttles.
     6. Security
        1. Fixed ladders which are public facing and descend to ground level shall include a locking security door.

NOTE ABOUT MATERIALS:

Per Port Aviation Maintenance Manager, 12/20/2024, only ALUMINUM or STEEL ladders are allowed currently. Special circumstances for other material may be considered on a project-by-project basis but are not the standard. If using Aluminum, remove 2.04 subsections A and B for Steel and Welding.

* 1. MATERIAL REQUIREMENTS
     1. Steel
        1. The assembly of steel items shall comply with the requirements of Section 05 12 00 – Structural Steel.
     2. Welding
        1. Welding shall comply with the requirements of Section 05 05 23 – Welding.
        2. Grind exposed welds smooth.
  2. MATERIAL HANDLING, DELIVERY, & STORAGE
     1. Protection: Handle, transport, and store fixed ladders in a manner to prevent damage affecting their structural integrity. Store all items off the ground in a well-drained location protected from the weather and easily accessible for inspection and handling.
  3. DELIVERABLES
  4. QUALITY ASSURANCE

1. EXECUTION
   1. PROJECT INFORMATION
   2. PREPARATION FOR EXECUTION OF WORK
   3. EXECUTION OF WORK
      1. Installation
         1. Set fixed ladders in position according to the manufacturer’s recommended installation instructions.
         2. Where primer is used, touch up marred primer to match the shop primer.
         3. Erect assemblies plumb, true to line and secure.
         4. Permanently weld steel construction where required.
         5. Touch-up, repair or replace damaged products before Substantial Completion.
   4. QUALITY ASSURANCE
      1. Manufacturer
         1. Company specializing in the engineering and manufacturing of metal ladders with not less than [five (5)] years of experience
      2. Warranty
         1. All grating materials shall be warranted for [two (2)] years against defects in materials and workmanship.
2. MEASUREMENT AND PAYMENT
   1. GENERAL
      1. No separate measurement or payment will be made for the Work required by this section. The cost for this portion of the Work will be considered incidental to, and included in the payments made for the applicable bid items in the [Schedule of Unit Prices] [Lump Sum price bid for the Project].

End of Section

Revision History:

1/22/2024 Convert information provided by Port Health and Safety