

Part 1 General

1.1 SUBMITTALS

- .1 In accordance with Section 01 33 00 – Submittal Procedures.
- .2 Indicate size and description of components, base material, surface finish inside and out, hardware, attachment devices, description of rough-in-frame.

1.2 CLOSEOUT SUBMITTALS

- .1 Provide maintenance data for gymnasium equipment for incorporation into maintenance manual specified in Section 01 78 00 - Closeout Submittals.

Part 2 Products

2.1 ACCEPTABLE PRODUCTS

- .1 Roller Hose Guide Assembly
 - .1 Acceptable Manufacturer:
 - .1 Reelcraft Industries, Inc. 2842 E. Business HWY 30, Columbia City, Indiana, USA, 46725, Telephone 1-800-444-3134
 - .2 Acceptable Product:
 - .1 Item # S270109, Roller Hose Guide Assembly
 - .1 Four way roller guide assembly complete with nylon rollers mounted on an 11 gauge steel frame with pre-drilled mounting holes.
 - .2 Dimensions: 305 mm W x 204 mm H
 - .3 Locate in Mechanical – Room 110 as shown on drawings.
 - .4 Quantity: 1

Part 3 Execution

3.1 MANUFACTURER'S INSTRUCTIONS

- .1 Compliance: comply with manufacturer's written data, including product technical bulletins, product catalogue installation instructions, product carton installation instructions, and data sheets.

3.2 INSTALLATION

- .1 Install component in accordance with manufacturer's instructions.
- .2 Train user staff in operation and maintenance of above equipment.

END OF SECTION

Part 1 General

1.1 REFERENCES

- .1 American Society for Testing and Materials International, (ASTM).
 - .1 ASTM A167-[99], Specification for Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet, and Strip.
 - .2 ASTM A500-[03], Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes.
- .2 Canadian Standards Association (CSA International).
 - .1 CAN/CSA-Z91-02 (Safety Code for Window Cleaning Operations).
 - .2 CAN/CSA- Z271-98 (Safety Code for Suspended Elevating Platforms).
 - .3 CSA G40.21-M1987, M350W and M300W (Structural Quality Steels).
 - .4 CAN/CSA-G40.20/G40.21-[98], General Requirements for Rolled or Welded Structural Quality Steel/Structural Quality Steel.
 - .5 CAN/CSA-G164-[M92(R1998)], Hot Dip Galvanizing of Irregularly Shaped Articles.
 - .6 CSA-W47.1-[92(R2001)], Certification of Companies for Fusion Welding of Steel Structures.
 - .7 CSA-W55.3-[65(R1998)], Resistance Welding Qualification Code for Fabricators of Structural Members Used in Buildings.
- .3 Master Painters Institute (MPI).
 - .1 Architectural Painting Specification Manual.
- .4 The Society for Protective Coatings (SSPC).
 - .1 SP -2, Hand-Tool Cleaning.

1.2 SUBMITTALS

- .1 Submit control submittals in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Submit shop drawings & data sheets indicating materials, products, shapes, thickness, finishes, fabrication details, anchors, connections and relation to adjacent work.
- .3 Provide professional sealed documents and certifications for the system that shall be designed by a qualified and experienced Professional Engineer. Drawings are provided only as a diagrammatic aid for the general definition of the scope of work.
- .4 Submit Test Reports and substantiating engineering data and test results of previous tests which purport to meet performance criteria, and other supportive data.

1.3 QUALITY ASSURANCE

- .1 Manufacturer Qualifications: company specializing in manufacturing products specified in this section with an expected minimum five years documented experience.
- .2 Pre-Installation Meetings: conduct pre-installation meeting to verify project requirements, manufacturer's installation instructions and manufacturer's warranty requirements
- .3 Coordinate design with all applicable codes.

- .4 Design structural support framing components and site inspect the installation under direct supervision of a Professional Structural Engineer experienced in design of this Work and licensed in the Province of Manitoba.
- .5 Pre-Installation Meetings: conduct pre-installation meeting to verify project requirements, manufacturer's installation instructions and manufacturer's warranty requirements.
- .6 Co-ordinate the Work with installation of roofing assembly and sheet metal work.

1.4 WELDERS' QUALIFICATIONS

- .1 Welding qualifications to be in accordance with CSA B51.
- .2 Employ qualified and licensed welders possessing certificates for each procedure to be performed from authority having jurisdiction.
- .3 Each welder to possess identification symbol issued by authority having jurisdiction.
- .4 Certification of companies for fusion welding of steel structures to be in accordance with CSA-W47.1.
- .5 Manufacturer Qualifications: company specializing in manufacturing Products specified in this section with minimum three [3] years' experience.

1.5 WASTE MANAGEMENT AND DISPOSAL

- .1 Separate and recycle waste materials in accordance with Section 01 74 00 – Cleaning and Waste Management.
- .2 Place materials defined as hazardous or toxic waste in designated containers.

1.6 SITE CONDITIONS

- .1 Prior to start of work verify existing site conditions.
- .2 Verify dimensions, tolerances, and method of attachment with other work.

1.7 WARRANTY

- .1 20 year warranty (lifetime on all stainless steel) against leaks, condensation and defects in materials and/or manufacture when installed in accordance with Manufacturer's installation instructions.

Part 2 Products

2.1 ACCEPTABLE MANUFACTURERS AND PRODUCTS

- .1 Fall Arrest Roof Anchors
 - .1 Acceptable Manufacturer
 - .1 Thaler Metal Industries Ltd, 3857 Nashua Drive, Mississauga, Ontario L4V 1R3, Tel: 1-800-387-7217
 - .2 Acceptable Product

- .1 Thaler FARA-6NS with galvanized forged 1018 steel eye roof anchor to CSA Z91-M90 with:
 - .1 with: urethane insulated, hollow, hot dipped galvanized ASTM 500C steel post (HSS) 1/4" (6 mm) wall thickness x 4-1/2" (114 mm) dia. x 26" (660 mm) high welded to 3/4" x 8" x 8" (19 mm x 203 mm x 203 mm) 44W base plate; 3/4" x 8" x 8" (19 mm x 203 mm x 203 mm) under-joist plate and 1/4" x 4" x 4" (6 mm x 102 mm x 102 mm) HSS crosstube assembly; four 3/4" (19 mm) Type 304 s.s. bolts with lock washers and nuts;
 - .2 SJ-37, 7" (178 mm) high New- Standard STACKJACK flashing of .064" (1.6 mm) mill finish 1100-0T alloy aluminum to CSA B272-93, with EPDM Triple Pressure Grommet Seal and EPDM Base Seal and PVC coated deck flange.

2.2 SUBSTITUTIONS:

- .1 Refer to Section 01 33 00 – Submittal Procedure, subsection 2.2.

Part 3 Execution

3.1 EXAMINATION

- .1 Report to the Contractor in writing, defects of work prepared by other trades and other unsatisfactory site conditions. Verify site dimensions, tolerances, and method of attachment with other work.
- .2 Commencement of work will imply acceptance of prepared work.
- .3 For roofs employing tapered insulation systems, height adjustments may be necessary i.e. ensure anchor eye is minimum 9" (229 mm) above roof surface.

3.2 PREPARATION

- .1 Supply and install steel items required to be attached to steel framing as clean uncoated metal, with setting templates to appropriate sections.

3.3 FIELD QUALITY CONTROL

- .1 Comply with the requirements of Section 01 45 00 - Quality Control.
- .2 All anchor work to be inspected by a Professional Engineer upon completion of work.
- .3 Compliance: comply with manufacturer's written data, including product technical bulletins, product catalogue installation instructions, product carton installation instructions, and data sheets.

3.4 INSTALLATION

- .1 Comply with manufacturer's written data, including product technical bulletins, product catalogue installation instructions, product carton installation instructions, and data sheets.
- .2 For Modified Bituminous membrane roofing:

- .1 Torch membrane until bitumen is fluid and set flashing flange into fluid. Flash in flange with two overlapping layers of Mod-Bit and seal with asphalt sealer. Do not overheat (melt) EPDM base seal.

.3 Precautions:

- .1 Apply an asphaltic or other type protective coating to aluminum STACKJACK Flashing to a height of 2" (51 mm) above a limestone ballast to avoid corrosive reaction. Also, if coating deck flange with bituminous paint on site, allow 24 hours for drying before applying roof membrane.

3.5 ERECTION TOLERANCES

- .1 Maximum Variation from Level: 3 mm.

3.6 ADJUSTING AND FINAL INSPECTION

- .1 Verify that all manufactured units have been installed in accordance with specifications and details, and will function as intended. Adjust any items where necessary to ensure proper operation.
- .2 Provide necessary documentation certifying system is acceptable for service (Engineer's Certificate of Acceptance).

3.7 PROTECTION AND CLEANING

- .1 Protect finished Work from damage.
- .2 Clean manufactured units using materials and methods approved by manufacturer. Do not use cleaners or techniques which could impair performance of the roofing system.

END OF SECTION

Part 1 General

1.1 SUBMITTALS

- .1 Submit manufacturer's printed product literature, specifications and data sheet in accordance with Section 01 33 00 – Submittal Procedures.

1.2 DELIVERY, STORAGE AND HANDLING

- .1 Deliver handle, store and protect equipment in accordance with Section 01 61 00 - Common Product Requirements.
- .2 Deliver equipment only after interior finishes are complete.

1.3 WARRANTY

- .1 Provide manufacturers standard warranty for all appliances listed.

Part 2 Products

2.1 ACCEPTABLE MANUFACTURER'S AND PRODUCTS

- .1 Refrigerator:
 - .1 Frigidaire 21 cu. Ft. top freezer refrigerator
 - .1 Model# FGHT2134KW
 - .2 Colour: White
 - .3 Size: 30 W x 69.38" H x 32" D (756mm W x 1762mm H x 813mm H)
 - .2 Convection Range:
 - .1 Frigidaire 30" slide-in electric range
 - .1 Model# CFES3025LW
 - .2 Colour: White
 - .3 Size: 30 W x 36.63" H x 28.31" D (756mm W x 981mm H x 719mm H)
 - .3 Microwave:
 - .1 Panasonic 2.2 cu. Ft. microwave.
 - .1 Model# NNSN968W
 - .2 Colour: White
 - .3 Power: 1200W output
 - .4 Size: 23.88" W x 14" H x 19.44" D (607mm W x 356mm H x 494mm H)
 - .4 Range Hood:
 - .1 Broan Allure 2 - 250 CFM range hood
 - .1 Model# QS230WWN
 - .2 Colour: White
 - .3 Control: 3 speed electronic control
 - .4 Size: 30" W x 7" H x 20" D (756mm W x 178mm H x 508mm H)

- .5 Dishwasher:
 - .1 Moyer Diebel undercounter high temperature overflow type dishwashing machine with built-in booster heater
 - .1 Model# 351HT
 - .2 Colour: Stainless Steel
 - .3 Size: 24" W x 33 1/2" H x 25" D (610mm W x 851mm H x 635mm H)

Part 3 Execution

3.1 INSTALLATION

- .1 Install appliances in correct locations as per manufacturer's instructions and make connections.
- .2 Check appliance to ensure proper operation.
- .3 Appliances having any damage or scratches will not be accepted.

END OF SECTION

Part 1 General

1.1 SUBMITTALS

- .1 Submit in accordance with Section 01 33 00 – Submittal Procedures.
- .2 Indicate size and description of components, base material, surface finish inside and out, hardware, attachment devices, description of rough-in-frame.

1.2 CLOSEOUT SUBMITTALS

- .1 Provide maintenance data for gymnasium equipment for incorporation into maintenance manual specified in Section 01 78 00 - Closeout Submittals.

Part 2 Products

2.1 ACCEPTABLE PRODUCTS

- .1 Side Folding Basketball Backstop
 - .1 RS 119 HD Backstop, as supplied by Royal Stewart Ltd.
 - .1 Frame shall be made of 2" (51 mm) square tubing and mounted to the wall by means of ¼" x 4" (6 mm x 102 mm) steel plates 35" (889 mm) on center.
 - .2 Stabilizing bars shall be made using 2" (50 mm) tubing and run from the front of the backstop frame up to the wall in a 30-degree angle.
 - .3 Stabilizers shall be hinge mounted to allow for minor adjustment. Cable bracing shall not be permitted.
 - .4 Backstop shall have a built-in spring-loaded locking bar. Release handle shall be supplied.
 - .5 Backstop shall be painted flat black.
 - .6 Wall bolts shall be supplied as indicated on the shop drawing for installation by others.
 - .7 Accessories to be supplied:
 - .1 Manual Adjust-a-Goal
 - .8 Locate as shown on drawings.
 - .9 Quantity: 2
- .2 Front Mount Goal
 - .1 RS F/M – Front Mount Goal, as supplied by Royal Stewart Ltd.
 - .1 The RS F/M front mount goal shall be constructed with an official sized 18" ring of 5/8" diameter with continuous no-tie net attachment.
 - .2 Universal back plate shall be of 7-gauge thickness and 6 1/2" wide.
 - .3 Goal shall have a durable orange powder coated finish and come complete with nylon net and hardware.
 - .4 Locate as shown on drawings.

- .5 Quantity: 2
- .3 Steel Fan Backboard
 - .1 RS 97 – Steel Fan Backboard, as supplied by Royal Stewart Ltd.
 - .1 35" (889 mm) x 54" (1372 mm) steel backboard with baked on powder coat finish.
 - .2 Locate as shown on drawings.
 - .3 Quantity: 2
 - .4 Portable Ball Locker
 - .1 Approx. dimensions: 1067 mm L x 610 mm D x 915 mm H
 - .2 All steel construction
 - .3 4 non-marring castors
 - .4 Lockable
 - .5 Finish and colour to be approved by Contract Administrator
 - .6 Quantity: 1
- .5 Storage Bins
 - .1 Manufacturer:
 - .1 Rubbermaid
 - .2 Product:
 - .1 Roughneck Storage Box - 18 gal: (#2215)
 - .2 Size: 23.9" L x 15.9" W x 16.5" H
 - .3 Colour: to be determined by Contract Administrator
 - .4 Quantity: 8
 - .5 Location: Storage – Room 109

2.2 SUBSTITUTIONS:

- .1 Refer to Section 01 33 00 – Submittal Procedure, subsection 2.2.

Part 3 Execution

3.1 MANUFACTURER'S INSTRUCTIONS

- .1 Compliance: comply with manufacturer's written data, including product technical bulletins, product catalogue installation instructions, product carton installation instructions, and data sheets.

3.2 INSTALLATION

- .1 Install component in accordance with manufacturer's instructions.
- .2 Train user staff in operation and maintenance of above equipment.

END OF SECTION