ALACO LADDER

SECTION 05511
FIXED METAL LADDER
MODEL 564HD-C

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Heavy duty fixed aluminum wall ladders, roof or mezzanine access with parapet crossover platform and return to roof.

B. Crossover platforms are required when steps across distances exceed 12 inches (305 mm).

C. Cages are good for ladders exceeding 20'-0" (6100mm) heights and in high or hazardous areas.

1.2 RELATED SECTIONS

A. Section 05500 - Metal Fabrications.

B. Section 06100 - Rough Carpentry: Blocking in metal wall studs and partitions for anchorage of access ladders.

1.3 REFERENCES

A. AA – The Aluminum Association Inc.

B. ANSI A14.3 - American National Standard for Ladders -- Fixed -- Safety Requirements; 2002.

C. ASTM B 209 - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate; 2001.

D. ASTM B 209M - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate (Metric); 2001.

E. ASTM B 210 - Standard Specification for Aluminum and Aluminum-Alloy Drawn Seamless Tubes; 2002.

F. ASTM B 221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes; 2000.

G. ASTM B 221M - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes (Metric); 2000.

H. ASTM B 308 - Standard Specification for Aluminum - Alloy T6061-T6 Standard Structural; 2002

I. ASTM B 308M - Standard Specification for Aluminum - Alloy T6061-T6 Standard Structural; 2002

J. OSHA 29 CFR Standard 1910.27 - Fixed ladders; Occupational Safety and Health Standards; current edition

1.4 SUBMITTALS

A. Submit under provisions of Section 01300.

B. Product Data: Manufacturer's data sheets on each product to be used, including:
1. Preparation instructions and recommendations.
2. Storage and handling requirements and recommendations.
3. Installation methods.

C. Shop Drawings: Detailed drawings showing complete dimensions, all materials, mounting attachments, and fabrication details.

1.5 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in the engineering and manufacturing of metal ladders, with not less than fifty years of experience.

B. Professional engineering competence in design and structural analysis to fabricate ladders in compliance with industry standards and local codes.

1.6 WARRANTY

A. See Section 01780 - Closeout Submittals, for additional warranty requirements.

B. Provide manufacturer's standard limited five-year warranty against defects in materials and workmanship.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Acceptable Manufacturer: ALACO Ladder Co., which is located at: 5167 G St.; Chino, CA 91710-5143; Toll Free Tel: 888-310-7040; Tel: 909-591-7561; Email: request info: (sales@alacoladder.com); Web: www.alacoladder.com

B. Substitutions: Not Permitted.

C. Requests for substitutions will be considered in accordance with provisions of Section 01600.

2.2 MATERIALS

A. Extruded Aluminum Profiles: ASTM B 221/B 221M, ASTM B 210, ASTM B 308/B 308M, Alloy 6061-T6; standard mill finish.

B. Aluminum Sheet and Plate: ÅSTM B 209/B 209M, Alloy 6061-T6; standard mill finish.

C. Fasteners: Aluminum solid aircraft rivets rated at 300 lbs (1335 N) shear strength.

D. Cast fittings and connectors: Cast Aluminum alloy 356

2.3 FABRICATION

A. Model 564HD-C heavy duty aluminum ladder with cage as manufactured by Alaco Ladder Company

B. Ladders - General: Comply with ANSI A14.3 and OSHA regulations.

C. Fixed Wall Ladder: 28 inches (711 mm) wide.

D. Total Ladder Capacity: 2 X 250 lbs (2 X 114 kg).

E. Mounting brackets: Furnish ladder with brackets for wall mounting. Maintain 7 inch (178 mm) minimum clearance from rung centerline to wall or obstruction, not to exceed 72 inch (1830 mm) spacing.

F. Rung Capacity: 1500 lbs (680 kg) each.

1. Extruded solid aluminum deeply serrated square rungs 1-1/4 inches (32 mm), welded to tubular side rails. Rated for 1500 lbs (680 kg) each.
2. Serrated aluminum rungs mounted on 12 inches (305 mm) centers to tubular aluminum side rails.
3. Weld each rung to tubular side rails solidly with a continuous weld all around.
4. First rung shall start no more than 14 inch (356 mm) from finished floor.

G. Walk-Through and Cross over Platform: Aluminum extrusions, extending 42 inches (1065 mm) above landing, 24 inches (610 mm) between side rails at step through and cross over platform to roof.

H. Cross over Platforms: Aluminum Grip Strut grating and aluminum toe boards 1/4 inch (6 mm) thick by 4 inches (102 mm) wide.

I. Aluminum security doors are offered. These doors are fabricated from 3/16 inches (4.8mm) aluminum sheets with hasps.

J. Rest platforms are offered. These platforms consist of grip strut floors, high toe boards, round serrated tube guard railings and cast aluminum railing fittings. (Required for an offset ladder over 30’-0”)

K. Fall protection system is required for ladders 24’-0” and higher.

L. Cages consist of aluminum hoops 1/4 x 2 inches (6 x 51 mm) spaced no more than 48 inches (1220 mm) apart with seven vertical bars 3/16 x 1-1/2 inches (5 x 38 mm) riveted solidly together. Cage hoops ate to be solidly welded to tubular ladder side rails. Cage shall start no less than 84 inches (2135 mm), nor more than 96 inches (2440 mm) from the finished floor.

2.4 FINISHES

A. Mill finish standard on aluminum ladders

B. Factory applied powder coating and chem-film treatment for field applied primers are available upon request.

C. Custom coatings and surface treatments are also offered.

PART 3 EXECUTION

3.1 EXAMINATION

A. Do not begin installation until substrates have been properly prepared.

B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2 INSTALLATION

A. Install in accordance with manufacturer's instructions and approved shop drawings, and in compliance with ANSI A14.3 and OSHA 1910.27.

3.3 PROTECTION

A. Protect installed products until completion of project.

B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION