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1-25-2013

055000 - Metal Fabrications

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Recommended Citation

Weatherbee, Stephanie, "055000 - Metal Fabrications" (2013). *Division 05 – Metals*. 3.
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SECTION 05 5000 - METAL FABRICATIONS

1.1 SUMMARY

A. Section Includes:

1. Steel framing and supports for ceiling-hung toilet compartments.
2. Steel framing and supports for operable partitions.
3. Steel framing and supports for overhead doors and grilles.
4. Steel framing and supports for countertops.
5. Steel framing and supports for mechanical and electrical equipment.
6. Steel framing and supports for applications where framing and supports are not specified in other Sections.
7. Steel framing and supports (outriggers) for window-washing equipment including mounting brackets and anchorages.
8. Mounting brackets and anchorages for window-washing equipment.
9. Elevator machine beams, hoist beams, and divider beams.
10. Steel shapes for supporting elevator door sills.
11. Steel girders for supporting wood frame construction.
12. Steel pipe columns for supporting wood frame construction.
13. Prefabricated building columns.
14. Shelf angles.
15. Metal ladders.
16. Ladder safety cages.
17. Alternating tread devices.
18. Metal ships' ladders and pipe crossovers.
19. Metal floor plate and supports.
20. Miscellaneous steel trim including loading-dock edge angles.
21. Metal bollards.
22. Pipe and downspout guards.
23. Abrasive metal nosings, treads and thresholds.
24. Cast-iron wheel guards.
25. Metal downspout boots.
26. Loose bearing and leveling plates for applications where they are not specified in other Sections.

1.2 PERFORMANCE REQUIREMENTS

- A. Delegated Design: Design ladders and alternating tread devices, including comprehensive engineering analysis by a qualified professional engineer, using performance requirements and design criteria indicated.
- B. Structural Performance of Aluminum Ladders: Aluminum ladders, including landings, shall withstand the effects of loads and stresses within limits and under conditions specified in ANSI A14.3.

- C. Structural Performance of Alternating Tread Devices: Alternating tread devices shall withstand the effects of loads and stresses within limits and under conditions specified in ICC's International Building Code.
- D. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes acting on exterior metal fabrications by preventing buckling, opening of joints, overstressing of components, failure of connections, and other detrimental effects.
 - 1. Temperature Change: 120 deg F (67 deg C), ambient; 180 deg F (100 deg C), material surfaces.

1.3 SUBMITTALS

- A. LEED Submittals:
 - 1. Product Data for Credit MR 4.1 and Credit MR 4.2: Indicating percentages by weight of postconsumer and preconsumer recycled content for products having recycled content. Include statement indicating costs for each product having recycled content.

1.4 PROJECT CONDITIONS

- A. Field Measurements: Verify actual locations of walls and other construction contiguous with metal fabrications by field measurements before fabrication.

1.5 FERROUS METALS

- A. Recycled Content of Steel Products: Provide products with average recycled content of steel products so postconsumer recycled content plus one-half of preconsumer recycled content is not less than 25 percent.

1.6 METAL LADDERS

- A. General:
 - 1. Comply with ANSI A14.3 unless otherwise indicated.
 - 2. For elevator pit ladders, comply with ASME A17.1.

END OF SECTION 05 5000