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| This guide specification was prepared utilizing 3-part format recommended by the Construction Specifications Institute (CSI), and generally incorporates recommendations from their SectionFormat™/Page Format™, and MasterFormat™, latest Editions, insofar as practicable.Carefully review and edit the text to meet the Project requirements and coordinate this Section with the remainder of the Specifications and the Drawings. Where bracketed text is indicated, e.g. [text], make appropriate selection and delete the remainder of text within additional brackets, highlighting, and bold face type, if any.Consult the manufacturer for assistance in editing this guide specification for specific Project applications where necessary.This Specification was current at the time of publication but is subject to change. Please confirm the accuracy of these specifications with the manufacturer prior to use. Shape  Description automatically generated with medium confidence |

SECTION 12 48 16

ENTRANCE FLOOR GRILLES

PART ONE - GENERAL

1. SUMMARY
2. Section Includes
	1. Entrance floor grilles and frame assemblies.
3. Related Sections
	1. Section 03300 – Cast-In-Place Concrete: For concrete floor slab recess, and grouting frames into recess.
	2. Section 036000 “Grouting”: For concrete floor slab recess, and grouting frames into recess.
	3. Section 07110 - Damp-proofing.
4. REFERENCES
5. American Society for Testing and Materials (ASTM)
	1. ASTM B 221-93 Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Shapes, and Tubes
	2. ASTM A 276-92 Standard Specification for Stainless and Heat-Resisting Steel Bars and Shapes.
6. American Architectural Manufacturers Association (AAMA)
	1. AAMA 606.1 Voluntary Guide Specifications and Inspection Methods for Integral Color Anodic Finishes for Architectural Aluminum
	2. AAMA 607.1 Voluntary Guide Specifications and Inspection Methods for Clear Anodic Finishes for Architectural Aluminum.
7. SUBMITTALS
8. Product Data: Manufacturers product specifications, installation and maintenance instructions.
9. Shop Drawings: Show layout and types of grates and frames not less than half-scale sections of typical installations, details of patterns or designs, anchors, and accessories, and field measurements of slab recess to receive frames grates (if applicable).
10. Samples for Selection Purposes: Actual sections of grate and frame material in a convenient but representative size showing full range of colors, textures, finishes and patterns available for each type of floor grate and frame specified.
11. Samples for Verification Purposes: Not less than 6 inch square sections of grate material and 6 inch (152 mm) length of frame material in selected colors and finishes for each type of grate and frame specified.
12. Installation, Operations and Maintenance data.
13. QUALITY ASSURANCE
14. Single Source Responsibility: Obtain floor grates and frames from one source and from a single manufacturer.
15. Rolling Load: 1000 lbs. (453.6 kg) per wheel.
16. SUBSTITUTIONS
17. Proposals for substitution products shall be accepted only from bidding contractors and not less than (10) working days before bid due date. Contractor guarantees that proposed substitution shall meet the performance and quality standards of this specification.
18. PROJECT CONDITIONS
19. If product is to be recessed, coordinate with concrete work so that products are available for placing integrally with floor slabs.
20. WARRANTY
21. Floor mats and frames shall be fabricated free of defects in materials and workmanship in accordance with the General Conditions, and the manufacturer shall offer a 5 year warranty against defects in materials and workmanship. Manufacturer’s warranty applies in all cases.

PART TWO – PRODUCTS

Acceptable manufacturers

JL industries – a Division of Activar Construction Products Group

9702 Newton Ave. S.

Bloomington, MN 55431

(800) 554-6077

Www.activarcpg.com

Sales@activarcpg.com

Substitutions: Manufacturers seeking approval of their products are required to comply with the Owner's Instructions to Bidders, generally contained in the Project Manual.

1. MATERIALS
2. ENTRANCE FLOOR GRILLE EG500 SERIES
	1. Grille Material and Description: Stainless Steel Grilles. Type 304 or 316 stainless steel per ASTM A 276 available in depths of [7/16” (11.1 mm) EG503], [ 5/8” (15.9 mm) EG508], [1 1/8” (28.6 mm) EG509]. (Specifier to select one depth and delete others)
		1. Material: Surface Wires: .093" (2.4mm) by 0.156" (4mm) wire with 0.070" (1.8mm) support bars spaced 1" (24mm) O.C. Spacing between wires shall be 0.233" (5.9mm) O.C.
		2. Lockdowns: Activ-GrilleTM EG508 and EG509 models utilize pre-assembled hidden lockdown consisting of a stainless steel keyhole clip complete with a screw retaining strip, #10 bolt retainer, 10-24 x 1-1/4” stainless steel machine screw and 10-24 threaded lead anchor. Activ-GrilleTM EG503 model lockdown is a 15/16” x 15/16” x 3/16” type 304 stainless steel hold down plate. The plate is pre-welded flush to the surface of the grille panel and is pre-drilled and countersunk to receive a stainless steel ¼ -20 x 1” flathead Phillips machine screw and ¼ -20 threaded lead anchor.
		3. Tread wires shall be resistance welded at each joint.
		4. Fasteners: Non-corrosive screws and anchors for securing frames together and to floors.
		5. Rail finish shall be #4 Satin.
		6. Unit must meet rolling load of 1000 lbs. (453 kg) per wheel.
	2. ENTRANCE FLOOR GRILLE FRAME (Specifier to select one below and delete others)
		1. Model EFRA53 for EG503: Recessed angle stainless steel frame, Type 304 stainless steel; 1/8” (3.2 mm) profile: 3/8” (9.52 mm) depth. Finish: #4 Satin.
		2. Model EFRA58 for EG508: Recessed angle stainless steel frame, Type 304 stainless steel; 1/8” (3.2 mm) profile; 5/8” (15.9 mm) depth. Finish: #4 Satin
		3. Model EFRA59 for EG509: Recessed angle stainless steel frame, Type 304 stainless steel; 1/8” (3.2 mm) profile; 9/8” (28.6 mm) depth. Finish: #4 Satin.
3. LEED v4
4. MR Credit 4: Activ-GrilleTM stainless steel grille is manufactured from stainless steel comprised of 80% post-consumer recycled content and 20% pre-consumer cycled content.
5. IEQ Credit 5: Activ-GrilleTM stainless steel grilles are a permanently installed entrance system and will fulfill the requirement if the product is provided with a minimum 10’ in the walking direction and maintained with a regular cleaning schedule.

PART 3 - EXECUTION

1. EXAMINATION
2. Products must be placed on a flat and level substrate. Substrate shall meet tolerance of 1/8" (3.2mm) over 10 feet (3.28M) in accordance with ACI 302.
3. Examine the substrates and conditions under which the work is to be performed and notify the Contractor in writing of conditions detrimental to the proper and timely completion of the work. Do not proceed with the installation until unsatisfactory conditions have been corrected.
4. INSTALLATION
5. Install products in accordance with manufacturer’s instructions, at locations shown and with top of products level with adjoining finished flooring where applicable.
6. Coordinate top of product surfaces with swinging doors to provide under-door clearance.
	1. Provide necessary shims, spacers, and anchorages for proper location and secure attachment of frames to concrete.
	2. For installation in terrazzo flooring, contact manufacturer.
7. PROTECTION
8. Upon completion of frame installations, provide temporary filler of plywood or fiberboard in grate recesses, and cover frames with plywood protective flooring. Maintain protection until construction traffic has ended and Project is near time of Substantial Completion.
9. Install product when no further wheeled construction traffic will occur and wet type operations including painting and decorating are complete.