

Part 1 General

1.01 RELATED SECTIONS

- .1 Section 03 30 00 - Cast-In-Place Concrete.

1.02 REFERENCES

- .1 American Society for Testing and Materials (ASTM).
 - .1 ASTM B117-16. Standard Practice for Operating Salt Spray (Fog) Apparatus.
 - .2 ASTM C1028-07. Standard Test Method for Determining the Static Coefficient of Friction of Ceramic Tile and Other Like Surfaces by the Horizontal Dynamometer Pull-Meter Method.

1.03 SUBMITTALS

- .1 Provide Submittals as specified in Section 01 33 00 - Submittal Procedures.
- .2 Submit Manufacturer's Product Data. Include material descriptions, component details, construction details, finishes and accessories. Include manufacturer's specification sheet.
- .3 Submit Shop Drawings. Show layout, location and extent of grilles. Include plans, sections, details, attachments to other construction and accessories. Indicate dimensions of recesses, framed openings. Indicate required installation clearances. Indicate profiles, sizes and description of components, base material, surface finish, hardware, description of rough-in-frame. Include details for anchorage.
- .4 Submit installation details and recommendations for substrate preparation. Submit setting drawings. Indicate imbedded items and cutouts required in other work.
- .5 Submit duplicate 300 x 300 mm samples of grilles in finish selected. Submit 300 mm long section of perimeter frame.
- .6 Provide data for incorporation into manual specified in Section 01 78 00 - Closeout Submittals. Submit cleaning and maintenance instructions. Include methods for maintaining products and precautions against cleaning materials and methods detrimental to finishes.

1.04 DELIVERY STORAGE AND HANDLING

- .1 Deliver materials in Manufacturer's original, unopened, undamaged packaging. Protect components in accordance with manufacturer's recommendations.

1.05 WASTE MANAGEMENT AND DISPOSAL

- .1 Separate and recycle waste materials in accordance with Waste Management And Disposal Plan.
 - .1 Remove from site and dispose of all packaging materials at appropriate recycling facilities.
 - .2 Collect and separate for disposal paper, plastic, polystyrene and corrugated cardboard packaging material in appropriate on-site bins for recycling.
 - .3 Divert unused wood from landfill to recycling facility.
 - .4 Fold up metal banding, flatten and place in designated area for recycling.

Part 2 Products

2.01 FLOOR GRILLE

- .1 Recessed aluminum entrance floor grille system. Sizes as indicated in the drawings. Deep recessed system, linear rails with bolted cross support construction. Drop through construction provides maintenance free surface. ADA compliant anti slip surface.
- .2 Acceptable Materials: Ultra Track Series by Mats Inc.
- .3 Performance characteristics as follows:
 - .1 Slip resistance: static coefficient of friction SCOF: to ASTM C1028. 0.75 wet.
 - .2 Corrosion resistance: to ASTM B117. Withstands 1000 hours of salt fog without any noticeable changes.
 - .3 Rolling load capacity: 3831 lbs per 2 foot span.
 - .4 Live load deflection: minimum uniform load of 1760 Newtons over a 4 inch square. Maximum 1/180 inch deflection over a 4 foot square span.
- .4 Components:
 - .1 Pan: 20 gauge sheet aluminum. Recessed type.
 - .2 Grille: linear rails with bolted cross supports. Bolt thru design with individual aluminum spacers. Material: heavy gauge extruded aluminum alloy type 6061-T6. Blades: T-Shaped blades, 3/16 x 1/8 x 1 inch high. Spacing between blades: maximum 3/16 inch. Grille depth with frame: 1 1/8 inch. Provide in maximum panel size 48 inches (front to back) x 42 inches (left to right). Finish: manufacturers standard mill finish.
 - .3 Frames: pre fabricated, factory assembled. Recessed frame for casting into Concrete floor slab. Inverted "T" shape designed for rigid anchorage into the concrete. Welded corners. Incorporate an invisible section divider integrated and welded within the frame for each grille section. Provide a mechanical joint for sections larger than 6 x 8 feet. Provide optional sound gasket.
 - .1 Acceptable Material: Series VV embedded frame by Mats Inc.
- .5 Accessories:
 - .1 Hinges: manufacturers optional stainless steel hinges.
 - .2 Lock down: galvanized steel keyless lock downs attached to each grid section.

2.02 FABRICATION

- .1 Verify field measurement before shop fabrication.
- .2 Shop fabricate units to maximum extent possible in sizes as indicated. Provide single unit for each location. Do not exceed manufacturer's maximum size recommendation. Where joints are necessary, space symmetrically and away from normal traffic lanes.
- .3 Miter corner joints in frames with hairline joints or provide prefabricated corner units without joints.

Part 3 Execution

3.01 PREPARATION

- .1 Prepare the recess in the floor as recommended by the manufacturer to obtain tolerances for plumbness, squareness and level. Provide recess a minimum of 25 mm deeper than the total height of foot grille, frame and pan.

- .2 Examine substrates and conditions where foot grille will be installed. Do not proceed with installation until unsatisfactory conditions are corrected. Ensure subfloor is clean and dry and within acceptable tolerances.

3.02 INSTALLATION

- .1 Comply with manufacturer's installation instructions and recommendations. Coordinate installation with adjacent work to ensure proper clearances.
- .2 Install and secure floor grill rigidly in place as follows:
 - .1 Secure pan in position prior to pouring concrete floor slab. Allow pan to bond to cured concrete. Ensure top of floor grille is at same elevation as finished flooring.
 - .2 Install grille into pan once slab-on-grade has cured. Install grille perpendicular to adjacent door thresholds.

3.03 CLEANING AND PROTECTION

- .1 Clean surfaces upon completing installation to remove dust, dirt, adhesives, and other foreign materials according to manufacturer's written instructions
- .2 Protect from damage in accordance with manufacturer's recommendations.
- .3 Refer to manufacturer's cleaning and maintenance instructions.
- .4 Instruct Owner's personnel in proper maintenance procedures.
- .5 Protect installed product and finish surfaces from damage during ongoing construction operations.

END OF SECTION