

This MANU-SPEC® utilizes the Construction Specifications Institute (CSI) *Project Resource Manual* (PRM), including *MasterFormat*™, *SectionFormat*™ and *PageFormat*™. A MANU-SPEC is a manufacturer-specific proprietary product specification using the proprietary method of specifying applicable to project specifications and master guide specifications. Optional text is indicated by brackets []; delete optional text in final copy of specification. Specifier Notes precede specification text; delete notes in final copy of specification. Trade/brand names with appropriate symbols typically are used in Specifier Notes; symbols are not used in specification text. Metric conversion, where used, is soft metric conversion.

This MANU-SPEC specifies roof hatches. These products are manufactured by JL Industries, Inc. Revise MANU-SPEC section number and title below to suit project requirements, specification practices and section content. Refer to CSI *MasterFormat* for other section numbers and titles.

SECTION 07 72 33

ROOF HATCHES

PART 1 GENERAL

1.01 SUMMARY

- A. Section Includes:
 - 1. Roof hatches and their installation.

1.02 RELATED SECTIONS

Specifier Note: Include in this Article only those sections that directly affect the work of this section. Do not include Division 00 or Division 01 sections since it is assumed that all technical sections are related to all project Division 00 and Division 01 sections to some degree.

- A. Section [07 26 00 - Vapor Retarders] [_____].
- B. Section [07 27 00 - Air Barriers] [_____].

Specifier Note: Article below may be omitted when specifying manufacturer's proprietary products and recommended installation. Retain Reference Article when specifying products and installation by an industry reference standard. If retained, list standard(s) referenced in this section. Indicate issuing authority name, acronym, standard designation and title. Establish policy for indicating edition date of standard referenced. Conditions of the Contract or Section 01 42 19 - Reference Standards may establish the edition date of standards. This article does not require compliance with standard, but is merely a listing of references used. Article below should list only those industry standards referenced in this section. Retain only those reference standards to be used within the text of this Section. Add and delete as required for specific project.

1.03 REFERENCES

- A. ASTM International (ASTM):
 - 1. ASTM A653/A653M Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
- B. FM Global (Factory Mutual):
 - 1. FM 4470 Approval Standard for Class 1 Roof Coverings

1.04 PERFORMANCE REQUIREMENTS

Specifier Note: In more northerly latitudes, snow loads may also need to be taken into consideration.

- A. Live Load: [40] [_____] psf ([1.915] [_____] kPa) minimum with maximum deflection of [1/190th] [_____] of span.

Specifier Note: Ensure that wind loads are suitable for project location.

- B. Maximum Negative Load: [50] [_____] psf ([2.394] [_____] kPa) wind uplift, and [110] [_____] mph ([177.027] [_____] kph) wind load when cover is in open position.

Specifier Note: Article below includes the submittal of relevant data to be furnished by Contractor before, during or after construction. Coordinate this article with Architect's and Contractor's duties and responsibilities in Conditions of the Contract and Section 01 33 00 - Submittal Procedures.

1.05 SUBMITTALS

- A. General: Submit listed submittals in accordance with Conditions of the Contract and Section [01 33 00 - Submittal Procedures] [_____].
- B. Shop Drawings: Indicate information on shop drawings as follows:
 - 1. Size and description of components, materials, attachment devices, description of frame and finish and construction details.
- C. Samples: Submit [Duplicate] [_____] × [_____] samples of finish materials.
- D. Product Data: Submit product data, including manufacturer's SPEC-DATA® product sheet, for specified products.
 - 1. Material safety data sheets.
- E. Quality Assurance:
 - 1. Test Reports: Certified test reports showing compliance with specified performance characteristics and physical properties.
 - 2. Certificates: Product certificates signed by manufacturer certifying materials comply with specified performance characteristics, criteria and physical requirements.
 - 3. Manufacturer's Instructions: Manufacturer's installation instructions.
- F. Closeout Submittals:
 - 1. Warranty: Submit warranty documents specified.
 - 2. Operation and Maintenance Data: Submit operation and maintenance data for installed products in accordance with Section [01 78 00 - Closeout Submittals] [_____].
 - a. Include:
 - 1) Manufacturer's instructions covering maintenance requirements.

1.06 QUALITY ASSURANCE

- A. Qualifications:
 - 1. Installer experienced in performing work of this section who has specialized in installation of work similar to that required for this project.

Specifier Note: Paragraph below should list obligations for compliance with specific code requirements particular to this section. General statements to comply with a particular code are typically addressed in Conditions of the Contract and Section 01 41 00 - Regulatory Requirements. Repetitive statements should be avoided. Current data on building code requirements and product compliance may be obtained from manufacturer technical support specialists.

- B. Regulatory Requirements.
 - 1. Factory Mutual Standard 4470.

Specifier Note: Roof hatches must also meet the requirements of building codes and zoning bylaws issued by federal, state and local government authorities having jurisdiction. Ensure that project specification section reflects the need to meet these requirements. Edit paragraph below as applicable.

- 2. [International Building Code (IBC)] [Building Code for the [State] [City] of [_____]].

1.07 DELIVERY, STORAGE & HANDLING

- A. General: Comply with [01 61 00 - Common Product Requirements] [_____].
- B. Ordering: Comply with manufacturer's ordering instructions and lead time requirements to avoid construction delays.
- C. Delivery:
 - 1. Deliver materials in manufacturer's original packaging with identification labels intact.
- D. Storage and Protection:
 - 1. Store materials protected from exposure to harmful weather conditions and at temperature conditions recommended by manufacturer.
- E. Waste Management and Disposal:

Specifier Note: Environment: The disposal of packaging waste into landfill site demonstrates an inefficient use of natural resources and consumes valuable landfill space. Specifying appropriate packaging and construction waste management and disposal procedures may contribute to points required for LEED® construction project certification.

- 1. Separate waste materials for [Reuse] [And] [Recycling] [_____] in accordance with [Section 01 74 19 - Construction Waste Management and Disposal] [_____].
- 2. Remove from site and dispose of packaging materials at appropriate recycling facilities.
- 3. Collect and separate for disposal [Paper] [Plastic] [Polystyrene] [Corrugated cardboard] [_____] packaging material [In appropriate onsite bins] [_____] for recycling.

1.08 SEQUENCING

- A. Sequence With Other Work: Comply with roof hatch manufacturer's written recommendations for sequencing construction operations.

Specifier Note: Coordinate article below with Conditions of the Contract and with [01 78 36 - Warranties] [_____].

1.09 WARRANTY

- A. Project Warranty: Refer to Conditions of the Contract for project warranty provisions.
- B. Manufacturer's Warranty: Submit, for Owner's acceptance, manufacturer's standard warranty document executed by authorized company official. Manufacturer's warranty is in addition to, and not a limitation of, other rights Owner may have under Contract Documents.

Specifier Note: Coordinate article below with manufacturer's warranty requirements.

- C. Warranty: Commencing on date of acceptance by [Owner] [Architect] [Consultant] [_____].

1.010 MAINTENANCE

- A. Repair or replace parts of roof hatches whenever required due to defect and normal wear and tear.
- B. Use only standard product line parts of equipment manufacturer.
- C. Ensure that maintenance personnel register with designated building personnel at time of inspections and maintenance.

PART 2 PRODUCTS

2.01 MANUFACTURER

- A. Ensure manufacturer has minimum [5] [_____] years experience in manufacturing components similar to or exceeding requirements of project.

Specifier Note: Retain article below for proprietary method specification. Add product attributes, performance characteristics, material standards and descriptions as applicable. Use of such phrases as "or equal" or "or approved equal" or similar phrases may cause ambiguity in specifications. Such phrases require verification (procedural, legal and regulatory) and assignment of responsibility for determining "or equal" products.

2.02 PROPRIETARY PRODUCTS/SYSTEMS

- A. Manufacturer: JL Industries, Inc.
 1. Contact: 4450 W 78th St. Cir., Bloomington, MN 55435

2.03 ROOF HATCHES

- A. Curb Opening: [30 × 36] [36 × 36] [48 × 48] [54 × 30] [96 × 30] inches ([762 × 914.4] [914.4 × 914.4] [1219.2 × 1219.2] [1371.6 × 762] [2438.4 × 762] mm).
- B. Roof Hatch: [Commercial quality galvanized steel sheet to ASTM A653, [Z275] [_____] designation zinc coating] [Aluminum sheet with mill finish], heavy gauge automatic hold open arm with [Red] [_____] grip and compression operated shock absorbing cylinder.
 1. Hardware: [Exterior handle with integral padlock hasp] [Interior handle with integral padlock hasp] [_____], heavy duty hinge.
 2. Material: [[14] [_____] gauge ([1.984] [_____] mm) galvanized steel sheet] [[0.090] [_____] inches ([2.286] [_____] mm) thick aluminum sheet] frame with [4] [_____] inch ([101.6] [_____] mm) flange.
 3. Curb: [12] inches ([304.8] [_____] mm) high curb, [1] [_____] inch ([25.4] [_____] mm) fiberboard insulation, [[14] [_____] gauge ([1.984] [_____] mm) galvanized steel sheet] [[0.090] [_____] inches ([2.286] [_____] mm) thick aluminum] exterior, [[22] [_____] gauge ([0.792] [_____] mm) galvanized steel] [[0.040] [_____] inches ([1.016] [_____] mm) thick aluminum sheet] interior liner.
 4. Roof Hatch Cover: [1] [_____] inch ([25.4] [_____] mm) fiberboard insulation, [[14] [_____] gauge ([1.984] [_____] mm) galvanized steel] [[0.090] [_____] ([2.286] [_____] mm) thick aluminum] exterior, [[22] [_____] gauge ([0.792] [_____] mm) galvanized steel] [[0.040] ([1.016] [_____] mm) thick aluminum] interior liner to suit opening size.
 5. Finish: [Bonderite] [_____], pre-treated [Grey] [_____] hammertone powder coat.
 6. Hatch Seal: TPE draft seal gasket door seal.

2.04 FABRICATION

- A. Fabricate components free of twists, bends or visual distortion and insulated. Weld corners and joints.
- B. Assemble roof hatch components as indicated.
- C. Ensure continuity of weathertight seal.
- D. Design [Flashings] [_____] to collect and lead off accumulated condensation.

2.05 ACCEPTABLE MATERIAL

Specifier Note: Use RHG models for galvanized steel roof hatches and RHA for aluminum roof hatches. The numbers 1 - 5 related to the roof hatch models correspond to specific curb opening sizes. Check manufacturer's technical data for model numbers and corresponding curb opening sizes.

- A. Galvanized Steel Roof Hatches: JL Industries, Inc., Model [RHG-1] [RHG-2] [RHG-3] [RHG-4] [RHG-5] [_____].
- B. Aluminum Roof Hatches: JL Industries, Inc., Model [RHA-1] [RHA-2] [RHA-3] [RHA-4] [RHA-5] [_____].

2.06 SOURCE QUALITY CONTROL

- A. Ensure roof hatch components and materials are from single manufacturer.

Specifier Note: Edit Paragraph below to suit project requirements. If substitutions are permitted, edit text below. Add text to refer to Section 01 25 13 - Product Substitution Procedures.

2.07 PRODUCT SUBSTITUTIONS

- A. Substitutions: [In accordance with Section 01 25 13 - Product Substitution Procedures] [_____]] [No substitutions permitted].

PART 3 EXECUTION

3.01 INSTALLERS

- A. Provide experienced and qualified technicians to carry out erection and installation of roof hatches.

3.02 MANUFACTURER'S INSTRUCTIONS

Specifier Note: Article below is an addition to the CSI *SectionFormat* and a supplement to MANU-SPEC. Revise article below to suit project requirements and specifier's practice.

- A. Compliance: Comply with manufacturer's written data, including product technical bulletins, product catalog installation instructions, product carton installation instructions and JL Industries, Inc., SPEC-DATA sheets.

3.03 EXAMINATION

- A. Site Verification of Conditions:
 - 1. Verify that conditions of substrates previously installed under other sections or contracts are acceptable for product installation in accordance with manufacturer's instructions prior to installation of roof hatch.
 - 2. Inform [Owner] [Architect] [Consultant] [_____] of unacceptable conditions immediately upon discovery.
 - 3. Proceed with installation only after unacceptable conditions have been remedied.

3.04 PREPARATION

- A. Ensure surfaces are clean and free of dirt and other foreign matter harmful to performance of roof hatch materials.

3.05 INSTALLATION

Specifier Note: Coordinate installation with the manufacturer's written installation details and instructions.

- A. Arrangement of equipment: Arrange equipment so that removal for repairs or replacement does not require undue dismantling or removing of other equipment components.
- B. Coordinate roof hatch work with work of other trades for proper time and sequence to avoid construction delays.
- C. Erect components plumb and level.
- D. Ensure roof hatch is attached to roof substrate using fasteners in accordance with [Factory Mutual Standard 4470] [_____] for wind uplift and corrosion resistance.
- E. Ensure continuity of building vapor retarder system in accordance with Section [07 26 00 - Vapor Retarders] [_____].
- F. Ensure continuity of building envelope air barrier system in accordance with Section [07 27 00 - Air Barriers] [_____].
- G. Secure prefabricated curb assembly to structure.
- H. Coat aluminum in contact with dissimilar materials with isolation coating.
- I. Secure and seal frame to curb.

3.06 PROTECTION

Specifier Note: Coordinate the following Article with Section 01 76 00 - Protecting Installed Construction.

- A. Protect installed product from damage during construction in accordance with Section [01 76 00 - Protecting Installed Construction] [_____].

END OF SECTION