

## 1 ASSEMBLY - GENERAL

- 1.1 The work of this section includes the provision of all design, labour, materials, equipment and services required to fabricate and install roof openings as required for a complete project. The work includes, but is not necessarily limited to, the items referenced herein:
  - 1.1.1 Roof Curbs
  - 1.1.2 Roof Hatches
- 1.2 Reference Standards: CRCA - Roofing Specifications Manual

## 2 ASSEMBLY DESIGN CRITERIA

- 2.1 Compatibility between roof opening components and roofing system is essential. Provide written declaration to Owner stating that materials and components, as assembled, meet this requirement.
- 2.2 Maintain continuity of thermal vapour, and air barriers. Use a purpose made flexible air barrier membrane between elements. Minimize thermal bridging.
- 2.3 Roof Curbs: Provide preformed metal curb: 400 mm high (or as required) insulated sandwich construction RSI 3.5 min. with deck flange attachment for all roof openings including openings for roof top equipment.

## 3 ASSEMBLY COMPONENTS

- 3.1 Roof Hatches
  - 3.1.1 **General**
    - 3.1.1.1 Submittals: Submit shop drawings in accordance with Section 01340 - Shop Drawings, Product Data, Samples and Mock-ups. Indicate size and description of components, materials, attachment devices, description of frame and finish, and construction details.
    - 3.1.1.2 Warranties: the *[Design Builder]* hereby warrants all roof hatches for *[five (5)]* years.
    - 3.1.1.3 Provide maintenance data for hardware complete with pertinent details, spare parts lists and warnings against harmful maintenance materials and practices for incorporation into manual specified in Section 01730 - Operation and Maintenance Manual.
  - 3.1.2 **Design**
    - 3.1.2.1 Roof hatches to withstand snow load and temperature range without damage to unit or permanent deformation to seals.
  - 3.1.3 **Materials / Finishes**

- 3.1.3.1 Acceptable material: *[Roof scuttle Type NB as manufactured by The Bilco Company, New Haven, Connecticut.]*
- 3.1.3.2 Steel sheet: regular quality alloy steel to *[ASTM A506-73 (1980)]*.
- 3.1.3.3 Galvanizing: *[ASTM A525-80]*, Z275 designation zinc coating.
- 3.1.3.4 Cover: 14 ga. galvanized sheet steel with 3" beaded flange, neatly welded.
- 3.1.3.5 Insulation: 25mm thick glass fibre, fully covered and protected by a 22 ga. galvanized sheet steel liner with a 90mm flange and holes provided for securing to the roof deck.
- 3.1.3.6 Curb shall be equipped with integral metal cap flashing of the same gauge and material as the curb, full-welded at the corners for absolute weather tightness. Insulation on the exterior of the curb: 25mm rigid fibreboard.
- 3.1.3.7 Hardware: scuttle shall be completely assembled with heavy pintle hinges, compression ring operators enclosed in telescopic tubes, positive snap latch with turn handles and padlock hasps inside and outside and neoprene draft seal.
- 3.1.3.8 Handle and arm: cover shall be equipped with automatic hold-open arm c/w vinyl grip handle to permit easy one-hand release.
- 3.1.3.9 Gaskets: extruded resilient vinyl with full recovery after 50% compression. Gasket/seal to inner face of lid in contact with hatch lid support frame.
- 3.1.3.10 Finishes: all hardware shall be zinc-plated and factory finish shall be red oxide primer to *[CGSB 1-GP-105M]*.
- 3.1.3.11 Prime paint for steel: to *[CGSB 1-GP-105M]*.
- 3.1.3.12 Isolation coating: alkali resistant bituminous paint or epoxy solution.
- 3.1.4 **Fabrication / Installation**
- 3.1.4.1 Fabricate components free of twists, bends, or visual distortion and insulated. Weld corners and joints.
- 3.1.4.2 Assemble roof hatch components as required.
- 3.1.4.3 Ensure continuity of weather-tight seal.
- 3.1.4.4 Design flashings to collect and lead off condensation accumulated.
- 3.1.4.5 Zinc plate hardware and attachments and shop prime ready for field painting.
- 3.1.4.6 Erect components plumb, level and in proper alignment.

- 3.1.4.7 Adjust and seal assembly with provision for expansion and contraction of components.

***End of Section***