

ADDENDUM 1

SECTION 07721

TYPE E ROOF HATCH SPECIFICATION

I. PART ONE - GENERAL

1.01 SUMMARY

- A. Work included: Furnishing and installing factory fabricated roof hatches
- B. Related Work:

1.02 REFERENCES

- A. American Society for Testing and Materials (ASTM), 100 Bar Harbor Drive, West Conshocken, PA 19428-2959; (610) 832-9585, fax (610) 832-9555
 - 1. ASTM A 36-93a: Standard Specification for Structural Steel

1.03 SUBMITTALS

- A. Product Data: Provide manufacturer's product data for all materials in this specification.
- B. Shop Drawings: Show profiles, accessories, location, and dimensions.
- C. Samples: Manufacturer to provide upon request; sized to represent material adequately.
- D. Contract Closeout: Roof hatch manufacturer shall provide the manufacturer's Warranty prior to the contract closeout.

1.04 PRODUCT HANDLING

- A. All materials shall be delivered in manufacturer's original packaging.
- B. Store materials in a dry, protected, well-vented area. The contractor shall thoroughly inspect product upon receipt and report damaged material immediately to delivering carrier and note such damage on the carrier's freight bill of lading.
- C. Do not remove protective wrapping until directed by the GR/RS/Sw.CO – J.P.W.B.

1.05 SUBSTITUTIONS

- A. 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.

1.06 JOB CONDITIONS

- A. Verify that other trades with related work are complete before installing roof hatch(s).

- B. Mounting surfaces shall be straight and secure; substrates shall be of proper width.
- C. Refer to the construction documents, shop drawings, and manufacturer's installation instructions.
- D. Coordinate installation with roof membrane and roof insulation manufacturer's instructions before starting.
- E. Observe all appropriate OSHA safety guidelines for this work.

1.07 WARRANTY/GUARANTEE

- A. Manufacturer's standard warranty: Materials shall be free of defects in material and workmanship for a period of five years from the date of purchase. Should a part fail to function in normal use within this period, manufacturer shall furnish a new part and the contractor shall install at no charge to the GR/RS/Sw.CO – J.P.W.B.

II. PART TWO – PRODUCTS

2.01 MANUFACTURER

- A. The BILCO Company, P.O. Box 1203, New Haven, CT 06505,
1-203-934-6363, Fax: 1-203-933-8478, Web: www.bilco.com

2.02 ROOF HATCH

- A. Furnish and install where indicated on plans metal roof hatch Type E, size width: 3' 0" (914mm) x length: 3' 0" (914mm). Length denotes hinge side. The roof hatch shall be single leaf. The roof hatch shall be pre-assembled from the manufacturer.
- B. Performance characteristics:
 - 1. Cover shall be reinforced to support a minimum live load of 40 psf (195kg/m²) with Maximum deflection of 1/150th of the span or 20 psf (97 kg/m²) wind uplift.
 - 2. Operation of the cover shall be smooth and easy with controlled operation throughout the entire arc of opening and closing.
 - 3. Opened angle of the cover shall be 90-degrees.
 - 4. Operation of the cover shall not be affected by temperature.
 - 5. Entire hatch shall be weather tight with fully welded corner joints on cover and curb.
- C. Cover: Shall be 11 gauge aluminum with a 3" (76mm) beaded flange with formed reinforcing members. Cover shall have a heavy extruded EPDM rubber gasket that is bonded to the cover interior to assure a continuous seal when compressed to the top surface of the curb.
- D. Cover insulation: Shall be fiberglass of 1" (25.4mm) thickness, fully covered and protected by a metal liner of 18 gauge aluminum.

- E. Curb: Shall be 16” (406mm) in height and of 11 gauge aluminum. The curb shall be formed with a 3-1/2” (89mm) flange with 7/16” (11.1mm) holes provided for securing to the roof deck. The curb shall be fully enclosed.
- F. Curb insulation: Shall be rigid, high-density fiberboard of 1” (25.4mm) thickness on outside of curb.
- G. Lifting mechanisms: Manufacturer shall provide compression spring operators enclosed in telescopic tubes to provide, smooth, easy, and controlled cover operation throughout the entire arc of opening and closing. The upper tube shall be the outer tube to prevent accumulation of moisture, grit, and debris inside the lower tube assembly. The lower tube shall interlock with a flanged support shoe welded to the curb assembly.
- H. Hardware
 1. Heavy pintle hinges shall be provided
 2. Cover shall be equipped with a spring latch with interior and exterior turn handles
 3. Roof hatch shall be equipped with interior and exterior padlock hasps.
 4. The latch strike shall be a stamped component bolted to the curb assembly.
 5. Cover shall automatically lock in the open position with a rigid hold open arm equipped with a 1” (25.4mm) diameter red vinyl grip handle to permit easy release for closing.
 6. Compression spring tubes shall be an anti-corrosive composite material and all other hardware shall be Type 316 stainless steel including latch assembly, interior and exterior padlock hasps, guide arm bracket, lifting mechanism bracket, hinges, hinge pins, hold open arm, lock strike, springs, spring tubes, lifting mechanism support shoes, and all fasteners.
 7. Cover hardware shall be bolted into heavy gauge channel reinforcing welded to the underside of the cover and concealed within the insulation space.
- I. Finishes: Factory finish shall be mill finish aluminum.

III. PART THREE - EXECUTION

3.01 INSPECTION

- A. Verify that roof hatch installation will not disrupt other trades. Verify that the substrate is dry, clean, and free of foreign matter. Report and correct defects prior to any installation.

3.02 INSTALLATION

- A. Submit product design drawings for review and approval to the architect or specifier before fabrication.
- B. The installer shall check as-built conditions and verify the manufacturer’s roof hatch details for accuracy to fit the application prior to fabrication. The installer shall comply with the roof hatch Manufacturer's installation instructions.
- C. Install 3/16” x 3½” medium density neoprene blend, closed cell sponge gasket material/stripped weather stripping between Bilco roof-hatch base flange and existing door

frame as manufactured by Phelps Industrial Products, Inc., 6300 Washington Blvd., Elkridge, MD, 800-348-9784, www.phelpsweb.com or an equivalent.

D. Installation fasteners shall be KB3 304SS 3/8" x 2¼" mechanical anchors (Item # 00282542) as manufactured by Hilt, Inc., 5400 South 122nd East Ave., Tulsa, OK 74146, (800) 879-8000, www.us.hilti.com and a 3/8" stainless steel washer.

E. Remove the existing cover plate as directed by the GR/RS/Sw.CO – J.P.W.B.

3.03 PROTECTION

A. For the North Clearwell, do not allow any foreign materials, contaminants or liquids to enter the clearwell during the installation of the new Bilco roof hatch or during removal of the existing cover plate. The contractor shall coordinate all work in and around the access door for the North Clearwell with GR/RS/Sw.CO – J.P.W.B. and take the necessary precautions to prevent any foreign materials, contaminants or liquids from entering the clearwell. The contractor shall be held liable for all corrective actions and costs associated with contaminating the North Clearwell.

END OF SECTION 07721