# Roof Improvement Project Addendum #1

# 1. Timeline

The roof improvement project can begin on May 27, 2025 with completion by August 8, 2025.

# 2. Installation of a white TPO roofing system with new flashing:

TPO roof to be mechanically fastened

All new fascia, flashings, gutters, and downspouts to match gauge and profile of the existing. Final color to be determined from the manufacturers' standard colors by Owner.

Any existing parapet cap damaged due to removal will be replaced with new parapet cap of same gauge and profile at contractor's expense.

## 3. Alternate #1

Remove all existing parapet cap and replace with new of same gauge and profile. Final color to be determined from manufacturers' standard colors by owner.

## 4. Alternate #2

Remove existing air handling unit, wood blocking, and curb and haul off premises, and repair roof decking. Remove ductwork as required for roof deck repair.

## 5. Alternate #3

Install new 36" x 36" thermally broke Bilco Roof Hatch (or equivalent) with 12" curb safety railing in location provided by owner, to include all supplemental steel required to support roof hatch. See included specifications.

BILCO Type E-50TB thermally broken roof hatches, 36" x 36" (914mm x 914mm) provide roof top access by means of a fixed interior ladder. Roof hatches feature a frame and cover design that minimizes heat transfer between interior and exterior metal surfaces. The result is a product that resists harmful condensation and provides superior energy efficiency. The easy, one-hand operation, to the fully open or closed position, provides the user the security of having one hand firmly on the ladder at all times. Roof hatches are available in aluminum construction. For more information, please visit our website www.bilco.com or call 1-800-366-6530.

### **SECTION 077233**

#### **ROOF HATCHES**

(BILCO TYPE E-50TB)

### PART 1 - GENERAL

### 1.1 SUMMARY

A. Work Included: Provide factory-fabricated roof hatches for ladder access.

#### 1.2 SUBMITTALS

- A. Product Data: Submit manufacturer's product data.
- B. Shop Drawings: Submit shop drawings including profiles, accessories, location, adjacent construction interface, and dimensions.
- C. Warranty: Submit executed copy of manufacturer's standard warranty.

# 1.3 QUALITY ASSURANCE

- A. Manufacturer: A minimum of 5 years experience manufacturing similar products.
- B. Installer: A minimum of 2 years experience installing similar products.
- C. Manufacturer's Quality System: Registered to ISO 9001:2008 Quality Standards including inhouse engineering for product design activities.

# 1.4 DELIVERY, STORAGE AND HANDLING

A. Deliver products in manufacturer's original packaging. Store materials in a dry, protected, well-vented area. Inspect product upon receipt and report damaged material immediately to delivering carrier and note such damage on the carrier's freight bill of lading.

### 1.5 WARRANTY

A. Manufacturer's Warranty: Provide 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 at no charge.

#### PART 2 - PRODUCTS

#### 2.1 MANUFACTURER

A. Basis-of-Design Manufacturer: Type E-50TB Roof Hatch by The BILCO Company, P.O. Box 1203, New Haven, CT 06505, 1-800-366-6530, Fax: 1-203-535-1582, Web: www.bilco.com.

## 2.2 ROOF HATCH

A. Furnish and install where indicated on plans metal roof hatch Type S-50TB, size width: 36" (914mm) x length: 36" (914mm). The roof hatch shall be single leaf. The roof hatch shall be preassembled from the manufacturer.

## B. Performance characteristics:

- 1. Cover and curb shall be thermally broken to prevent heat transfer between interior and exterior surfaces.
- 2. Cover shall be reinforced to support a minimum live load of 40 psf (195kg/m²) with a maximum deflection of 1/150th of the span or 20 psf (97kg/m²) wind uplift.
- 3. Operation of the cover shall be smooth and easy with controlled operation throughout the entire arc of opening and closing.
- 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 (2.3mm) aluminum with a 5" (127mm) beaded flange with formed reinforcing members. Interior and exterior surfaces shall be thermally broken to minimize heat transfer and to resist condensation. Cover shall have a heavy extruded EPDM rubber gasket bonded to the cover interior to assure a continuous seal when compressed to the top surface of the curb.
- D. Cover insulation: Shall be 3" (75mm) thick polyisocyanurate with an R-value = 20.3 (U=0.279 W/m<sup>2</sup>K), fully covered and protected by an 18 gauge (1mm) aluminum liner.
- E. Curb: Shall be 12" (305mm) in height and of 11 gauge (2.3mm) aluminum. Interior and exterior surfaces shall be thermally broken to minimize heat transfer and to resist condensation. The curb shall be formed with a 5-1/2" (140mm) flange with 7/16" (11mm) holes provided for securing to the roof deck. The curb shall be equipped with an integral metal capflashing of the same gauge and material as the curb, fully welded at the corners, that features the Bil-Clip® flashing system, including stamped tabs, 6" (153mm) on center, to be bent inward to hold single ply roofing membrane securely in place.
- F. Curb insulation: Shall be 3" (75mm) thick polyisocyanurate with an R-value = 20.3 (U=0.279 W/m<sup>2</sup>K).
- 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 stainless steel 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" (25mm) 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 zinc plated and chromate sealed. [For installation in highly corrosive environments or when prolonged exposure to hot water or steam is anticipated, specify Type 316 stainless steel hardware].
- 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.

### PART 3 - EXECUTION

### 3.1 EXAMINATION

A. Examine substrates and openings for compliance with requirements for installation tolerances and other conditions affecting performance. Proceed with installation only after unsatisfactory conditions have been corrected.

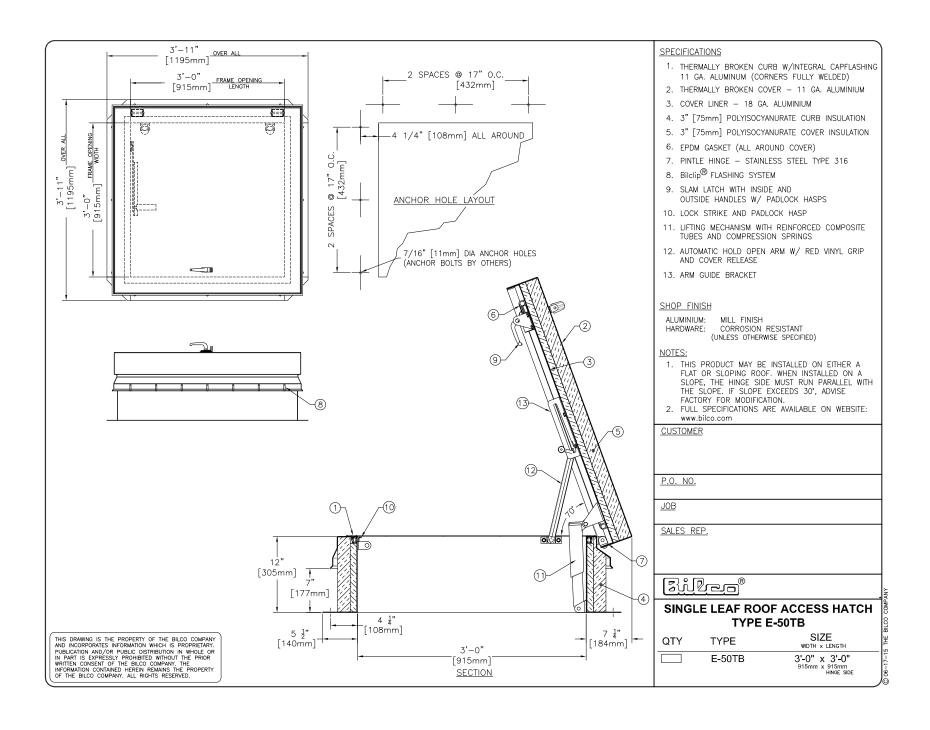
### 3.2 INSTALLATION

- A. Install products in strict accordance with manufacturer's instructions and approved submittals. Locate units level, plumb, and in proper alignment with adjacent work.
  - 1. Test units for proper function and adjust until proper operation is achieved.
  - 2. Repair finishes damaged during installation.
  - 3. Restore finishes so no evidence remains of corrective work.

#### 3.3 ADJUSTING AND CLEANING

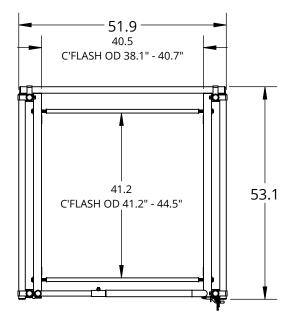
A. Clean exposed surfaces using methods acceptable to the manufacturer which will not damage finish.

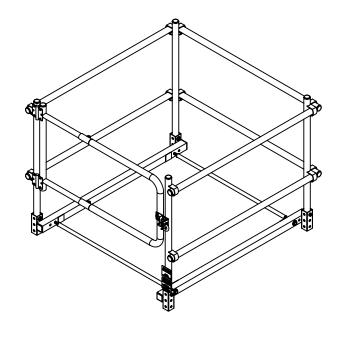
**END OF SECTION** 

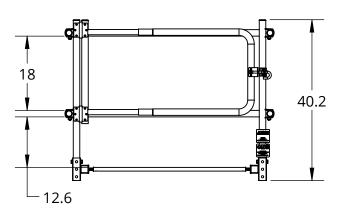


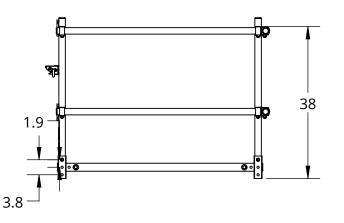
## **ROOF ACCESSORIES - SAFETY RAILING, COMPRESSION SERIES - RSHWC**

The OSHA compliant, patented compression series safety railing is ideal for existing roof hatches. It's designed to mount on the curb counterflashing with adjustable width and length to accommodate other manufacturer's designs. In addition, the overall height is adjustable to ensure code compliance.









**Specifications:** 

Material: 1-5/8" x .065" (16 gauge) galvanized

steel tubing

Bracket Material: 2x2x.048" (18 gauge)

square galvanized steel tubing **Finish:** Yellow powder coat

**Hinges:** Steel, adjustable spring hinges **Latch:** Steel, black powder coat pin hooks

around gravity latch catch

**Hardware:** Black Plastic Tubing caps and zinc

plated steel hardware

**Size:** Fits 36" x 36"(WxL) Roof Hatch, where L is hinged side. Gate exits on the Length

**Performance:** 200LBS with max 3" deflection per OSHA 1910.29. ANSI 1264.4

50 PLF (pounds per linear foot) per 2024 IBC 1607.9 (ASCE 7)

#### Notes:

The compression series can be mounted under the counterflashing.

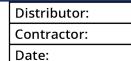
Install the corner posts using one of the three vertical bolt holes so the top rail is 42" above the walking surface, as required by OSHA 1910.29(b)(1) and 2024 IBC 1015.3.

MODEL #: RSHWC-4LY









Scale:

Approved By:
Architect:

Project:

1:24 Pages: 1 OF 2 Drawi

Architect:

Drawing #: RSHWC-4LY-SUBMITTAL

2 3 4	PART NUMBER 42845 42849 42852	DESCRIPTION  POST, 4 LOOP ASSEMBLY	QTY.			_	
2 3 4	42849				(10)	6 <sup>9</sup> 2	
3 4		POST, 2 LOOP ASSEMBLY HINGE SIDE	1		(10)		10
4	<del></del>	POST, 2 LOOP ASSEMBLY LATCH SIDE	1				10)
	42863	HINGE, SPRING LOADED, 3-1/2"	2		\//		
5	42864	LATCH PIN, BENT, RIGHT HAND REVERSE	1		///		(19
	42865	BRACKET, GATE LATCH	1			$\widehat{20}$ $  $ $(1)$	
	43270	GATE, HINGE SIDE ASSEMBLY, SIZE 30"-48"	1		$\sim / (7)$	20)	
8	42860	GATE, LATCH SIDE ASSEMBLY	1	A			)\$\dag{\approx}
9	42866	LATCH CATCH	1			(8)	
10	RS-PSX51	RAILING, 51"	6				
11	1FNE-XHFH-0C13	FLANGE NUT, 1/2"-13	4				
12	1FSSE-XHH-0C1302C-PT	BOLT, 1/2"-13 X 2-1/2", PARTIAL THRD	4	(2)			
13	1FSE-XHH-0C1304	SCREW, 1/2-13 X 4, HEX HEAD	4			X//	
14	1WZ050	WASHER, 1/2"	4				
15	RS-CMA-51A	SQUARE TUBE ASSEMBLY, 51", COMPRESSION	2				
16	RS-CME-38A	TUBE, 38", COMPRESSION	2			(3)	
	12P200	2.00" PLASTIC SQUARE INSERT	4				
18	42871	BLACK GRIP TAPE	4				
19	11P162	1-5/8" PLASTIC ROUND INSERT	17				<u>    ( 15 )                                   </u>
	1FSS8-HZ-0C130D	SET SCREW, 1/2"-13	14		(16)		
		SCREW ROUND HEAD TORX 1/4-20X3/4 STEEL	+				
	JLMXDR-DECAL LA-1017	DECAL "JL / MAXAM / DUR-RED" FOR ALL DECAL, ACPG PATENTED LABEL	1		/		23)
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DUR			Distributor:		Project:		
			Contractor:		Approved By:		
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