

BILCO Type D double leaf roof hatches provide a convenient way to install or remove large pieces of equipment from a building. Equipment access roof hatches are available in steel, aluminum, and stainless steel construction. Hatches are custom fabricated to meet your size requirements (Note: larger sizes may require aluminum construction for proper operation). For more information, please visit our website www.accessdoorsandpanels.com or call 1-800-609-2917

SECTION 077233

ROOF HATCHES

(BILCO TYPE D)

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 in-house 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.

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PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. Basis-of-Design Manufacturer: Type D 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 D, size [insert width (_____) x length (_____)]. Length denotes hinge side. The roof hatch shall be double leaf. The roof hatch shall be pre-assembled from the manufacturer.
- B. Performance characteristics:
1. Covers 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 (97 kg/m²) wind uplift.
 2. Operation of the covers shall be smooth and easy with controlled operation throughout the entire arc of opening and closing.
 3. Operation of the covers shall not be affected by temperature.
 4. Entire hatch shall be weather tight with fully welded corner joints on covers and curb
- C. Covers: Shall be [select: 14 gauge (1.9 mm) paint bond G-90 galvanized steel or 11 gauge (2.3mm) aluminum] with a 3" (76mm) beaded flange with formed reinforcing members. Covers 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" (25mm) thickness, fully covered and protected by a metal liner [select: 22 gauge (.8mm) paint bond G-90 galvanized steel or 18 gauge (1mm) aluminum].
- E. Curb: Shall be 12" (305mm) in height and of [select: 14 gauge paint (1.9 mm) bond G-90 galvanized steel or 11 gauge (2.3mm) aluminum]. The curb shall be formed with a 3-1/2" (89mm) 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 rigid, high-density fiberboard of 1" (25mm) 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 [for aluminum construction: welded to the curb assembly; for steel construction: through bolted to the curb assembly].
- H. Hardware
1. Heavy pintle hinges shall be provided
 2. Covers shall be equipped with an enclosed two point spring latch with interior and exterior turn handles

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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. Covers 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 [select: alkyd based red oxide primed steel or 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

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Standard Sizes and Shipping Weights

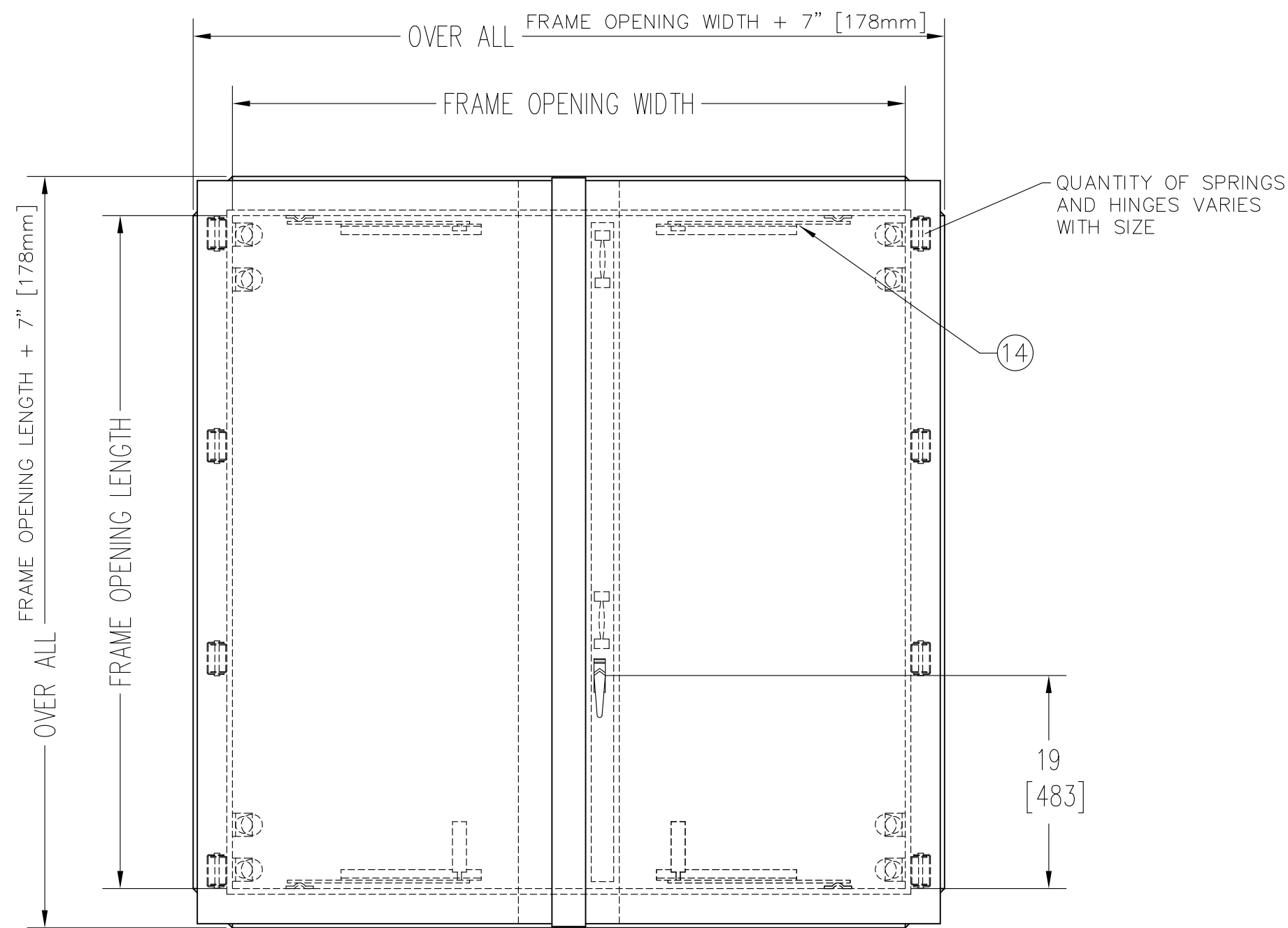
Roof Access Hatches

APPLICATION	SIZE		STEEL			STEEL CURB & ALUMINUM COVER			ALUMINUM			STAINLESS STEEL		
	(width x length)		Model#	Weight		Model#	Weight		Model#	Weight		Model#	Weight	
	inches	mm		lbs.	kg.		lbs.	kg.		lbs.	kg.		lbs.	kg.
Ladder Access Type S is approved by Miami-Dade County	36 X 30	914 X 762	S-20	183	83	S-40	150	68	S-50	110	50	S-90	183	83
	36 X 36	914 X 914	E-20	207	94	E-40	184	83	E-50	112	51	E-90	207	94
		900 X 900	EY-20	192	87	EY-40	170	77	EY-50	102	46	Consult Factory		
Ladder Access with Dome Cover for natural daylight	36 X 30	914 X 762	Not Available			Consult Factory			GS-50	115	52	Not Available		
Ship Stair Access HZ = Miami-Dade Approved	30 X 54	762 X 1372	NB-20	239	108	NB-40	190	86	NB-50	139	63	NB-90	239	108
	30 X 54	762 X 1372	NB-20HZ	239	108	Consult Factory			NB-50HZ	139	63	Consult Factory		
Service Stair Access	30 X 96	762 X 2438	L-20	434	197	L-40	295	134	L-50	253	115	L-90	434	197
VersaMount Design Specify for installation on existing curbs	36 X 30	914 X 762	S-20VM	152	69	Consult Factory			S-50VM	86	39	S-90VM	152	69
	30 X 54	762 X 1372	NB-20VM	180	82	Consult Factory			NB-50VM	100	45	NB-90VM	180	82
	30 X 96	762 X 2438	L-20VM	320	145	Consult Factory			L-50VM	178	81	L-90VM	320	145
		1000 X 1000	EW-20VM	170	77	Consult Factory			EW-50VM	90	41	EW-90VM	170	77
Equipment Access*	48 X 48	1219 X 1219	Consult Factory			F-40	275	125	F-50	218	99	Consult Factory		
		1200 X 1200	Consult Factory			FY-40	262	119	FY-50	205	93	Consult Factory		
High Security	36 X 30	914 X 762	S-20C	386	175	Consult Factory			S-50C	150	68	Consult Factory		
	36 X 36	914 X 914	E-20C	400	181	Consult Factory			E-50C	176	80	Consult Factory		
	30 X 54	762 X 1372	NB-20C	475	215	Consult Factory			NB-50C	210	95	Consult Factory		

* Double leaf hatches can be fabricated in large custom sizes for oversized equipment. Contact Bilco with your access requirements.



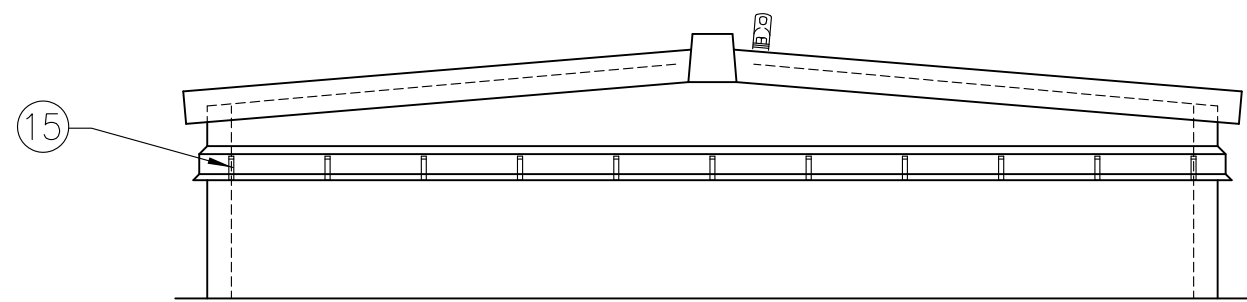
In addition to the standard sizes shown, Bilco can custom fabricate products with your to meet your special size requirements. Contact Bilco or your local sales representative.



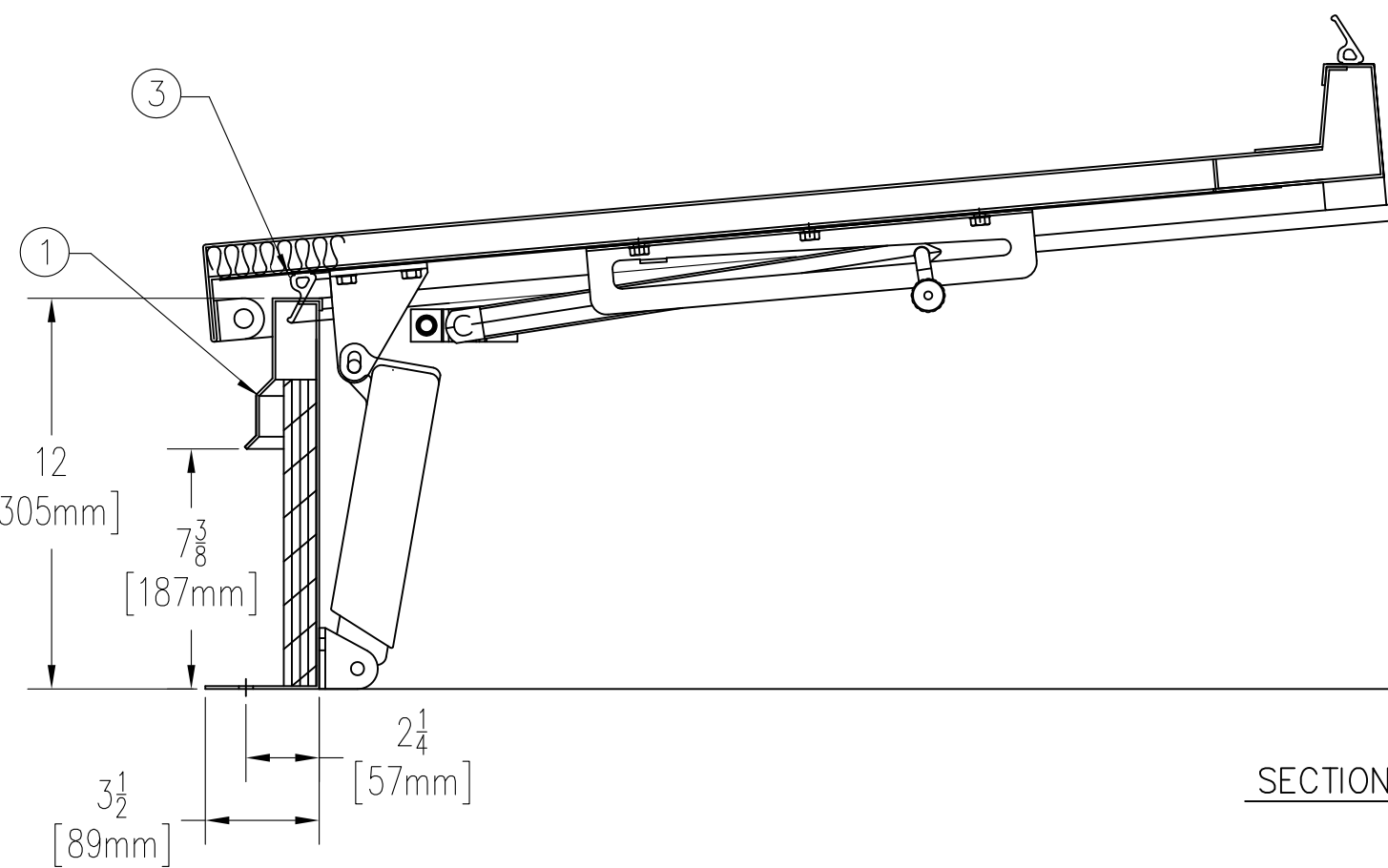
QUANTITY OF SPRINGS AND HINGES VARIES WITH SIZE

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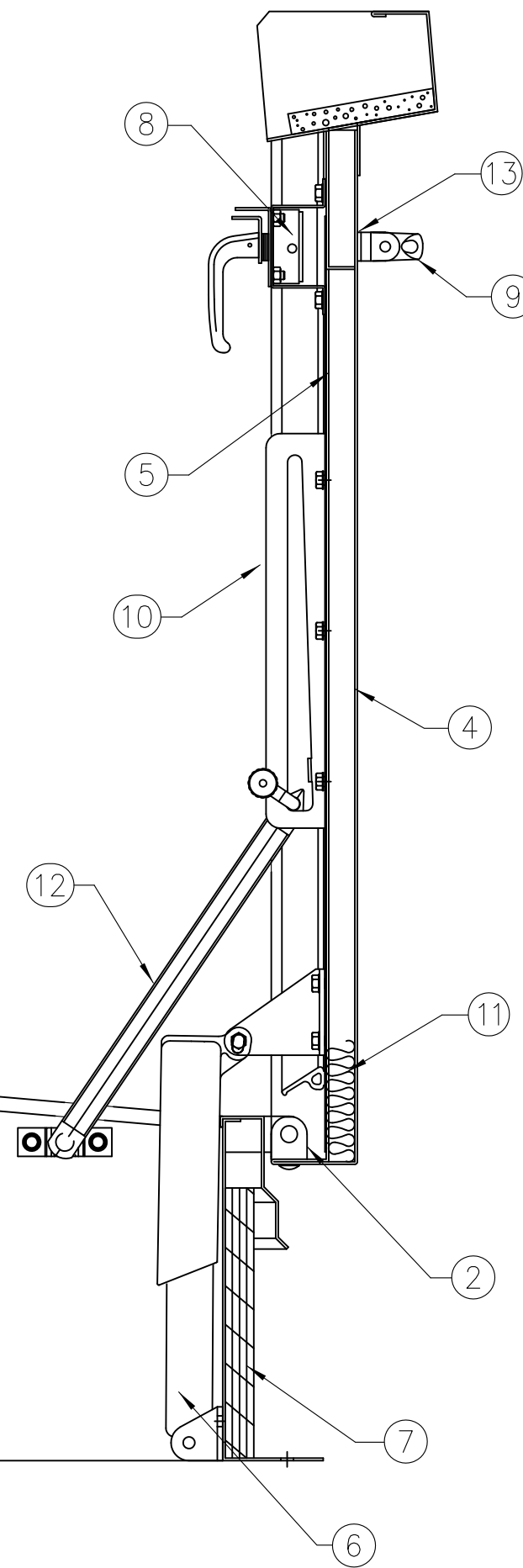
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SECTION



SPECIFICATIONS

1. FRAME W/ CAPFLASHING (CORNERS FULL WELDED)
 - D-20 - 14 GAUGE P.B. GALV. STEEL
 - D-40 - 14 GAUGE P.B. GALV. STEEL
 - D-50 - 11 GAUGE ALUMINUM
2. PINTLE HINGE
3. GASKET (ALL AROUND COVER)
4. COVER GAUGE
 - D-20 - 14 GAUGE P.B. GALV. STEEL
 - D-40 - 11 GAUGE ALUMINUM
 - D-50 - 11 GAUGE ALUMINUM
5. COVER LINER
 - D-20 - 22 GAUGE P.B. GALV. STEEL
 - D-40 - 18 GAUGE ALUMINUM
 - D-50 - 18 GAUGE ALUMINUM
6. LIFTING MECHANISM WITH REINFORCED COMPOSITE TUBES AND COMPRESSION SPRINGS
7. 1" RIGID FIBERBOARD INSULATION
8. SLAM LATCH (2 POINT)
9. INSIDE AND OUTSIDE HANDLES W/ PADLOCK HASPS
10. ARM GUIDE BRACKET
11. 1" THICK FIBERGLASS COVER INSULATION
12. HOLD OPEN ARM W/ RED VINYL GRIP
13. NEOPRENE GASKET
14. GUIDE ARM
15. BILCLIP® FLASHING SYSTEM

SHOP FINISH:
 STEEL: RED OXIDE PRIMER
 ALUMINUM: MILL FINISH
 HARDWARE: ZINC PLATED & CHROMATE SEALED
 (UNLESS OTHERWISE SPECIFIED)

THIS PRODUCT MAY BE INSTALLED ON EITHER A FLAT OR SLOPING ROOF. WHEN INSTALLED ON A SLOPE, THE HINGE SIDE MUST RUN PARALLEL WITH THE SLOPE. IF SLOPE EXCEEDS 30°, ADVISE FACTORY FOR MODIFICATION.

CUSTOMER:

P.O. N°

JOB:

SALES REP:

Manufacturers of Doors for Special Services
Bilco® THE BILCO COMPANY
 New Haven, Connecticut 06505

DOUBLE LEAF ROOF SCUTTLE
TYPE D SIZE _____ x _____

QTY	TYPE	METAL
<input type="checkbox"/>	D-20	STEEL COVER/STEEL FRAME
<input type="checkbox"/>	D-40	ALUM. COVER/STEEL FRAME
<input type="checkbox"/>	D-50	ALUM. COVER/ALUM. FRAME

FOR SIZE LIMITATIONS ON THIS UNIT, CONSULT FACTORY

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