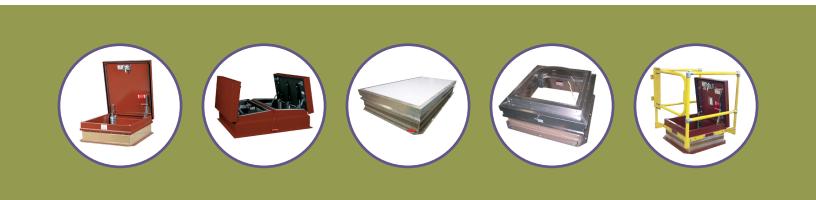
ROOF HATCHES & SMOKE VENTS

September 2013









Always right there.

Babcock-Davis, a trusted name in the commercial construction industry, specializes in providing commercial building products - those specialty items that are not normally of highest priority but are essential components in any building project.

We provide Roof Hatches, Smoke Vents, Access Doors, Floor Doors, Stair Treads and Nosings, Entrance Flooring Systems, and Wall & Door Protection when and where you need them. We build our services around your specified needs.

Contact us, we are Always Right There.



Babcock-Davis' philosophy is one of customer first. As your partner in the construction market, we understand your business and provide solutions to improve your bottom line. We offer direct access to people who take complete care of your needs and full responsibility for the process from beginning to end.

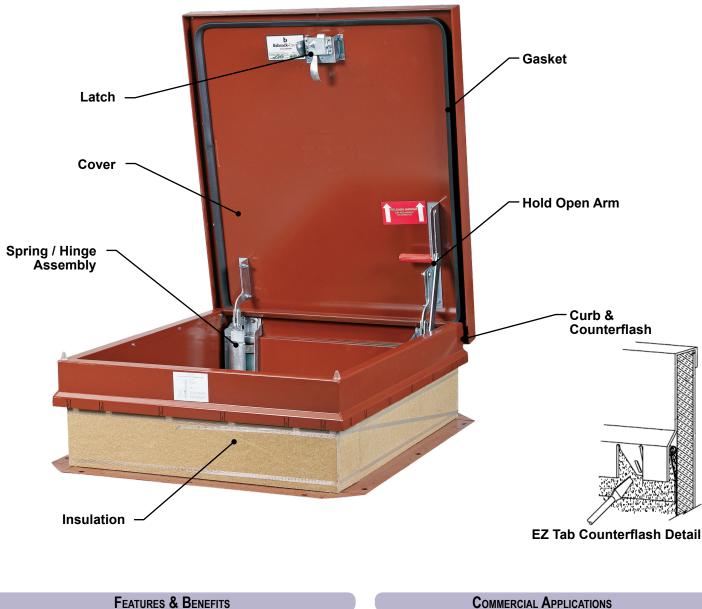




PRODUCT FAMILY HIGH EFFICIENCY PG 5 High efficiency roof hatches are ideal for cool roof applications. They include 1"-2" polyisocyanurate insulation providing superior thermal performance as well as high reflectance white powder coat paint options. HURRICANE HATCH[™] PG 7 The Babcock-Davis Hurricane Hatch™ is Miami-Dade and FL product approved. It exceeds 100psf design pressure performance, the industry's highest. MIAMI-DADE COUNTY PERSONNEL PG 8-9 Personnel roof hatches provide safe, convenient roof access and accommodate fixed vertical ladder, ship stair, and service stair applications. **S**UNLIT[™] PG 10 SunLit roof hatches include a polycarbonate domed cover for natural daylighting benefits. SECURITY PG 11 Security roof hatches include heavier gauge materials with lock options and are ideal for high security applications like banks, correctional facilities, and water treatment plants. EQUIPMENT PG 12 Babcock-Davis is well-known for providing the industry's largest custom sized roof hatches. SAFETY PRODUCTS AND OPTIONS PG 14-15 Safety Railings Safety Posts Safety Nets Meets OSHA Standard Standard and custom colors CFR 29 1910.23 **Curb Options**

PRODUCT FEATURES

Babcock-Davis roof hatches provide safe convenient access to commercial building roof areas using interior ladders and stairs. For ultimate corrosion resistance and outstanding exterior durability, Babcock-Davis provides powder coat finish in a wide range of standard and custom colors.



- Corrosion resistant with powder coat finish
- Weathertight with continuous EPDM seal
- · Energy efficient with fully insulated cover and curb
- Secure latching
- Lift assistance
- · Easy installation with EZ tab counterflash

- COMIMERCIAL APPLICAT
- Schools, auditoriums
- Manufacturers, factories, warehouses
- Hospitals, hotels
- Office buildings, shopping malls
- Embassies
- Correctional facilities
- Water treatment facilities



HIGH EFFICIENCY

BRHP-I: SPECIFICATIONS

Material:

- Aluminum 11 gauge, mill finish
- Steel 14 gauge galvanneal, high reflectance white powder coat **Cover:** Formed metal cover with liner, stiffened to withstand a live load of 40psf

Curb: Single wall curb with EZ tab counterflash and mounting flange with 5/8" and 3/16" holes

- Insulation: Polyisocyanurate in cover and curb
- 1" Thick R-Value 6
- 2" Thick R-Value 12

Gasket: Extruded EPDM adhesive backed gasket seal continuous around cover

Spring / Hinge Assembly: Zinc plated steel tamper-proof hinges contained within spring assembly, includes steel compression

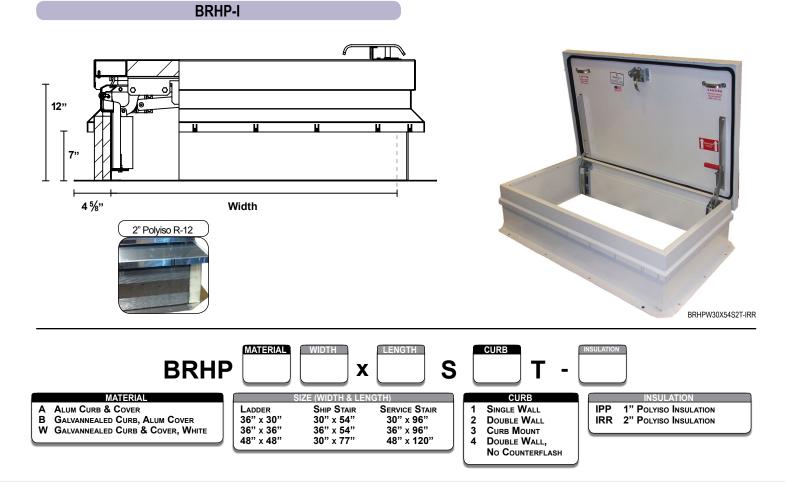
springs

Hold open arm: Zinc plated steel automatic hold open arm locks cover in open position

Latch: Zinc plated steel latch with exterior and interior turn handles and padlock hasps.

Sizes: Industry standard and custom sizes available





HURRICANE HATCH[™]

Babcock-Davis Hurricane Hatch[™] meets all Florida and Miami Dade building code standards. The Hurricane Hatch exceeds **100psf design pressure performance,** the industry's highest.

The Hurricane Hatch[™] is ideal for hurricane-prone regions including U.S. Atlantic Ocean and Gulf of Mexico coasts where basic wind speed is greater than 90mph.

- Miami-Dade product approved
- Florida product approval FL15803
- Meets all Florida & Miami-Dade Standards
 - Independent test lab certified with PE stamp
 - TAS201 Impact test
 - TAS 202 Uniform Static Air Pressure
 - Exceeds 100 PSF
 - Highest certified in the market
 - TAS 203 Cyclic Wind Pressure Loading
 - Forced Entry Test
- High performance patented Rotary Latch
- Available in aluminum and steel
 - Standard sizes: 36"x30", 36"x36", 30"x54"
 - Custom sizes available
 Up to 11.25 ft² max area
 - Superior powder coat finish
 - Standard color red oxide
 - Custom colors available

MIAMI-DADE COUNTY APPROVED NOA# 12-0320.29 Expiration Date July 19, 2017 BRHZG30X54S1T



Hurricane Hatch[™]

BRHZ: SPECIFICATIONS

Material:

- Aluminum 11 gauge, mill finish
- Steel 14 gauge galvanneal, red oxide powder coat

Cover: Formed metal cover with liner, stiffened to withstand a live load of 40psf

Curb: Single wall curb with EZ tab counterflash and mounting flange with 5/8" and 3/16" holes

Insulation: 1" polystyrene in cover, 1" fiberboard R-2 around curb **Gasket:** Extruded EPDM adhesive backed gasket seal continuous around cover

Spring / Hinge Assembly: Zinc plated steel tamper-proof

hinges contained within spring assembly, includes steel compression springs

Hold open arm: Zinc plated steel automatic hold open arm locks cover in open position

Latch: Zinc plated steel latch with exterior and interior turn handles and padlock hasps. Assembly designed to hold cover closed against 100 psf wind uplift

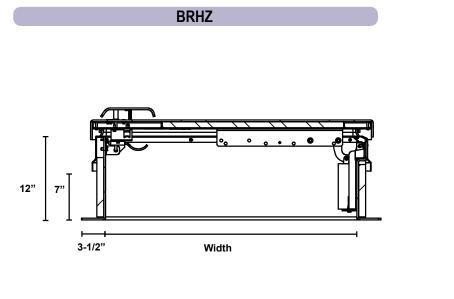
Sizes: Industry standard and custom sizes available

Certification: Florida Product Approval FL15803 and

Miami-Dade County, FLNOA#12-0320.29, Expiration Date July 14, 2017

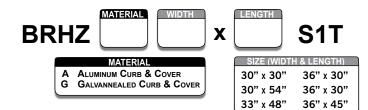


BRHZG30X54S1T





BRHZA36X30S1T



Any Size with Area <11.25 ft



PERSONNEL

BRHP: SPECIFICATIONS

Material:

- Aluminum 11 gauge, mill finish
- Steel 14 gauge galvanneal, red oxide powder coat
- Steel 14 gauge galvanneal, high reflectance white powder coat
- Stainless steel Type 304 14 gauge, 2B finish
- **Cover:** Formed metal cover with liner, stiffened to withstand a live load of 40psf

Curb: Single wall curb with EZ tab counterflash and mounting flange with 5/8" and 3/16" holes

Insulation: 1" polystyrene in cover, 1" fiberboard R-2 around curb **Gasket:** Extruded EPDM adhesive backed gasket seal continuous around cover

Spring / Hinge Assembly: Zinc plated steel tamper-proof hinges contained within spring assembly, includes steel compression springs **Hold open arm:** Zinc plated steel automatic hold open arm locks cover in open position

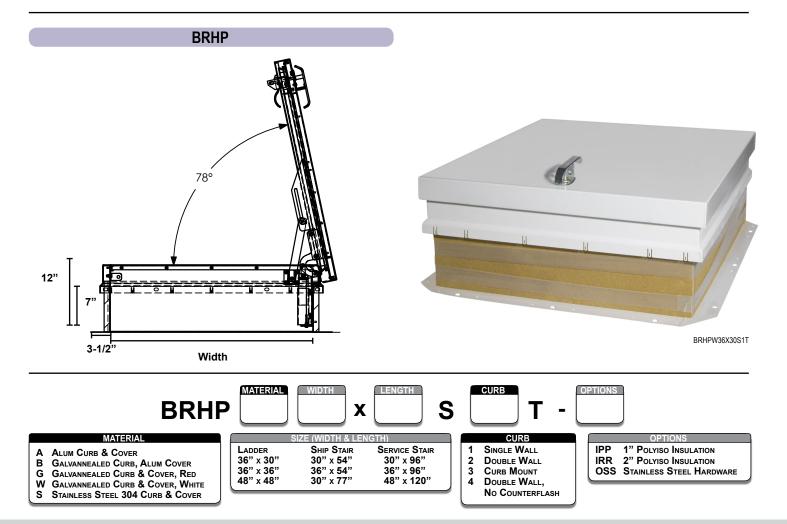
Latch: Zinc plated steel latch with exterior and interior turn handles and padlock hasps

- 20psf wind uplift for lengths ≤60"
- 90psf wind uplift for lengths >60"

Sizes: Industry standard and custom sizes available



Babcock-Davis Corporate Headquarters - Brooklyn Park, MN





PERSONNEL





SunLit™

BRHL: SPECIFICATIONS

Material:

• Aluminum 11 gauge, mill finish

Babcock-Davis[®] Always right there.

Steel 14 gauge galvanneal, red oxide powder coat

Cover: Formed aluminum metal cover with clear polycarbonate, UV coated dome

 $\mbox{Curb:}$ Single wall curb with EZ tab counterflash and mounting flange with 5/8" and 3/16" holes

Insulation: 1" fiberglass in cover, 1" fiberboard R-2 around curb **Gasket:** Extruded EPDM adhesive backed gasket seal continuous around cover

Spring / Hinge Assembly: Zinc plated steel tamper-proof hinges contained within spring assembly, includes steel compression springs

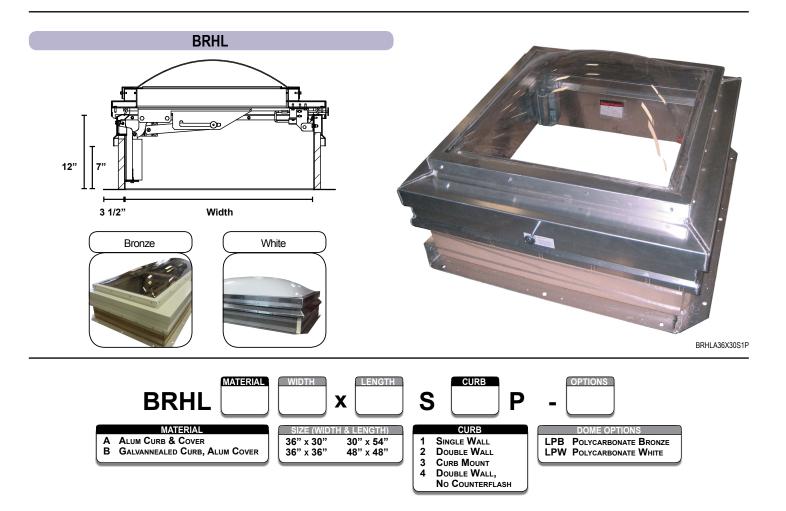
Hold open arm: Zinc plated steel automatic hold open arm locks cover in open position

Latch: Zinc plated steel latch with exterior and interior turn handles and padlock hasps

Sizes: Industry standard and custom sizes available



SunLit Service Stair Application





BRHS: SPECIFICATIONS

Material:

Babcock-Davis® Always right there.

- Aluminum 1/4", mill finish
- Steel 3/16", red oxide powder coat

Cover: Formed metal cover with liner, stiffened to withstand a live load of 40psf

 $\mbox{Curb:}$ Single wall curb with EZ tab counterflash and mounting flange with 5/8" and 3/16" holes

Insulation: 1" polystyrene in cover, 1" fiberboard R-2 around curb **Gasket:** Extruded EPDM adhesive backed gasket seal continuous around cover

Spring / Hinge Assembly: Zinc plated steel tamper-proof

hinges contained within spring assembly, includes steel compression springs

Hold open arm: Zinc plated steel automatic hold open arm locks cover in open position

Latch: Zinc plated steel latch with exterior and interior turn handles and padlock hasps

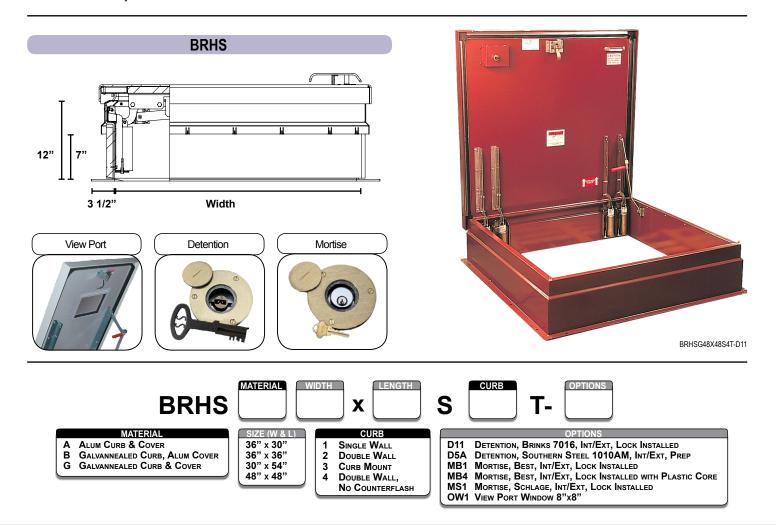
Lock options:

- Detention (Brinks, Southern Folger)
- · Mortise (Schlage, Best, Yale, Sargent)

Sizes: Industry standard and custom sizes available



La Palma Correctional Center - Eloy, AZ





EQUIPMENT

BRHE: SPECIFICATIONS

Material:

- Aluminum 11 gauge, mill finish
- Steel 14 gauge galvanneal, red oxide powder coat
- Stainless steel Type 304 14 gauge, 2B finish

Cover: Formed metal cover with liner, stiffened to withstand a live load of 40psf. Fully opens 85-90° for maximum clear unobstructed opening **Curb:** Single wall curb with EZ tab counterflash and mounting flange with 5/8" and 3/16" holes

Insulation: 1" polystyrene in cover, 1" fiberboard R-2 around curb **Gasket:** Extruded EPDM adhesive backed gasket seal continuous around cover

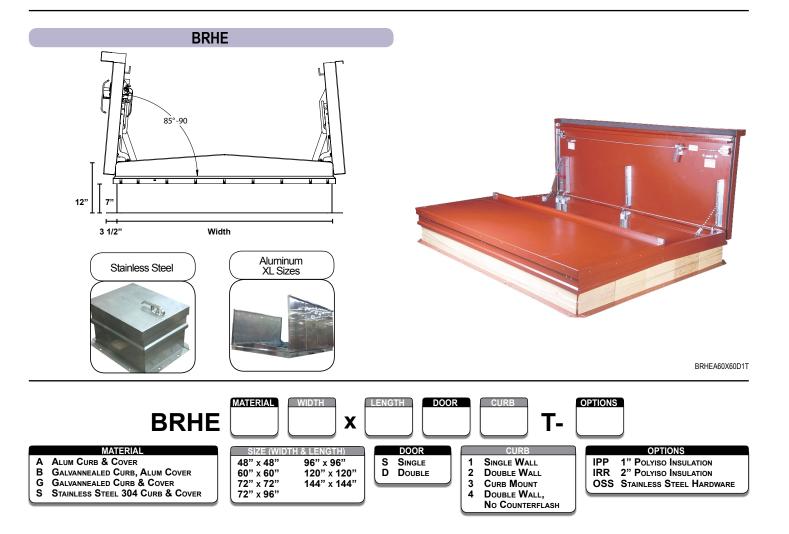
Spring / Hinge Assembly: Zinc plated steel tamper-proof hinges contained within spring assembly, includes steel compression springs **Hold open arm:** Zinc plated steel automatic hold open arm locks cover in open position

Latch: Zinc plated steel latch with exterior and interior turn handles and padlock hasps.

Sizes: Industry standard and custom sizes available



Equipment Installation Application



SAFETY PRODUCTS

SRCG: SAFETY RAILINGS

Babcock-Davis[®] Always right there.

Description: Ideal for new and retrofit applications. Mounts to existing roof hatch curb counterflash without penetrating membrane **Material:** Rails and posts, galvanized steel, 1-1/4" ID Schedule 40 pipe

Fittings: Cast aluminum alloy with set screw hold Mounting Brackets: 3/16" steel, zinc plated, nut backing plate attaches to curb counterflash without penetrating roof or membrane Hardware: Hex head bolts 3/8"-16 x 3/4" zinc plated steel Exit: Must be kept closed when roof hatch door is open

Self closing gate: Galvanized steel 1-1/4" tubulal steel self closing with coil spring

Chain: 3/16" zinc plated steel link chain with spring clip ends

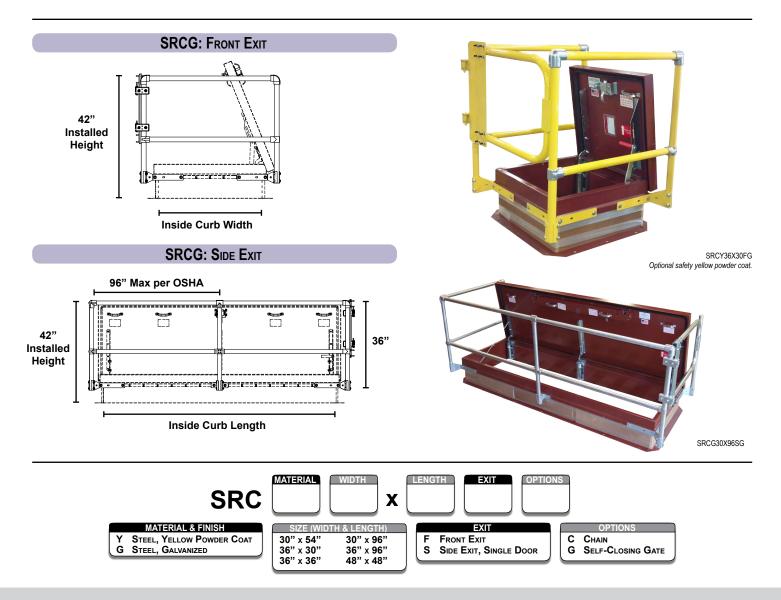
Performance: Exceeds OSHA 29 CFR 1910.23 guarding floor and wall openings and holes

Sizes: Industry standard and custom exact fit sizes available





Babcock-Davis Corporate Headquarters - Brooklyn Park, MN





SAFETY PRODUCTS

BSP: SAFETY POST

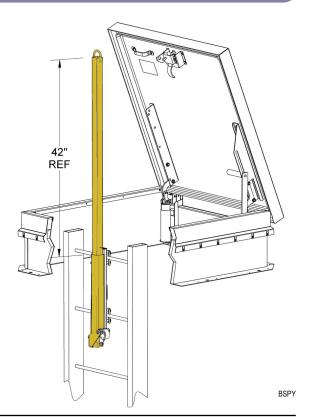
Material: $1-\frac{1}{2}$ " x $1-\frac{1}{2}$ " x $1-\frac{1}{2}$ " x 1/8" high strength square tubing with a pull up loop provided at the upper end to facilitate raising of post

- Steel, yellow powder coat paint
- Steel, hot dip galvanized
- Stainless steel Type 304, mill finish
- · Aluminum, mill

Balancing Spring: Stainless steel constant force spring provides controlled operation

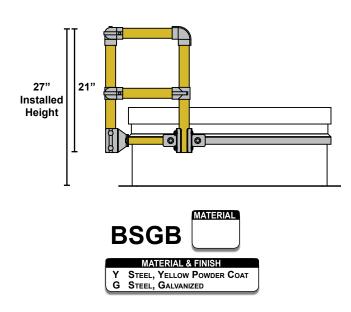
Hardware: Type 316 stainless steel mounting hardware attaches to top two rungs of fixed vertical ladder

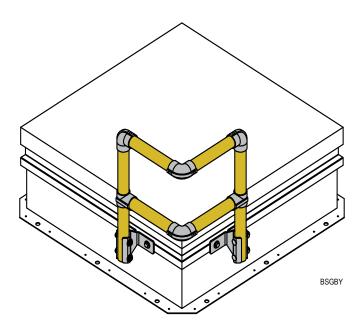




SGB: SAFETY GRAB BAR

Material: Rails and posts, galvanized steel, 1-1/4" ID Schedule 40 pipe **Fittings:** Cast aluminum alloy with set screw hold **Mounting Brackets:** 3/16" steel, zinc plated with nut backing plate **Hardware:** Hex head bolts 3/8"-16 x 3/4" zinc plated steel







ROOF HATCHES & SMOKE VENTS

ROOF HATCH & SMOKE VENT OPTIONS



Color matching and paint samples available upon request.

Curb Types



Single Wall (1)



Pitch Corrected Curbs



Double Wall (2)



Double Wall No Counterflash (4)



Double wall curb (-P4C)

(-IRR)

Single Wall Curb (-P4A)

Curb & Cover Insulation



2" Polyisocyanurate R-12

1" Polyisocyanurate R-6 (-IPP)

Curb Heights



Standard 12" High Curb



24" High Curb (-H24)







PRODUCT FAMILY

PG 15



SafeMAX[™] smoke vents are available in steel or aluminum metal construction. These UL 793 listed smoke vents provide ultimate fire and life safety. Single, double, and quad door sizes are ideal to meet all smoke venting applications.





LightMAX[™] smoke vents are rooftop venting systems with the added benefit of natural daylighting. These UL 793 listed vents are ideal for manufacturing factories, warehousing, and big box retail.



Acoustic smoke vents are acoustically rated to STC 45 & OITC 37 and have UL 793 & FM 4430 labels with energy efficient R-13 insulation for optimal envelope performance.



SMOKE VENT OPTIONS

- Safety Railings
- Burglar Bars & Fall Protection
- Smoke Vent Opening & Closing Options
- Standard and custom colors
- Curb Options



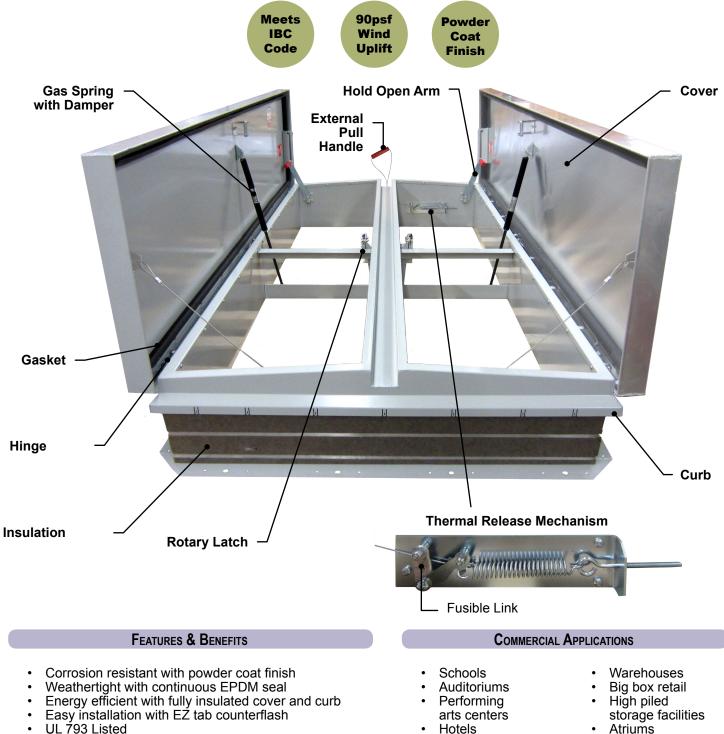






PRODUCT FEATURES

Babcock-Davis' smoke vents are designed to open automatically providing emergency smoke, heat, and gas ventilation from a building. Smoke vents are part of a fire protection system within a building and are required by International Building Code® (IBC). Reference IBC 910 for factory and storage occupancies and IBC 410 for auditoriums and performing arts centers.



- UL 793 Listed
- Manual opening inside and outside of vent
- Automatic opening

- Atriums
- Elevator shafts
- Hoistways



SAFE**MAX**[™]

BSVS: SPECIFICATIONS

Material:

• Aluminum 11 gauge, mill finish

Babcock-Davis[®] Always right there.

 Steel 14 gauge galvanneal, high reflectance white powder coat
 Cover: Formed metal cover with liner internally stiffened to withstand a live load of 40psf

Curb: Single wall curb with EZ tab counterflash and 3-1/2" mounting flange with 5/8" bolt holes

Insulation: 1" polyisocyanurate R-6 in cover and around curb **Gasket:** Extruded EPDM adhesive backed gasket seal, continuous around cover

Hinge: Heavy duty pintle hinge with stainless steel hinge pins **Springs:** Gas spring with damper opens cover against 10psf snow load in not less than 2 seconds

Hold open arm: Zinc plated steel automatic hold open arm locks cover in open position

Latch: Zinc plated steel rotary latch designed to hold covers closed against 30psf wind uplift for single doors & 90psf for double/quad doors. Opens manually by external and internal pull cables. Opens automatically with a fusible link at standard temperature 165 °F Certifications: UL 793 Listed

Sizes: Industry standard and custom sizes available



Hoistway Venting

INDUSTRY LEADING SMOKE VENTS

Innovative single door 4'x8' UL793 listed smoke vent provides more effective vent area than traditional double door



BSVSA48X96S3N165R



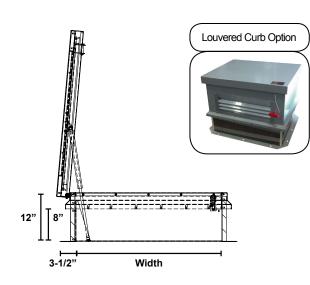
Curb Mounted Retrofit - Bloomington, MN BSVSA60X96D3L165R

BSVS		X	LENGTH	DOOR			
MATERIAL A Alum Curb & Cover B Galvannealed Curb & Alum Cover W Galvannealed Curb & Cover	SIZE SINGLE 36" × 30" 36" × 36" 48" × 48" 48" × 96"	(WIDTH & LEN Double 48" x 96" 60" x 60" 72" x 96" 60" x 120"	GTH) QUAD 66" x 120" 66" x 144" 72" x 120" 72" x 144"	Q QUAD DOOR	CURB 1 SINGLE WALL 2 DOUBLE WALL 3 CURB MOUNT	ELECTRICAL N No Electrical L 24VDC / 24VAC H 110VAC / 240 VAC	TEMP 'F 165 350 212 360 280 450



SAFE**MAX**[™]

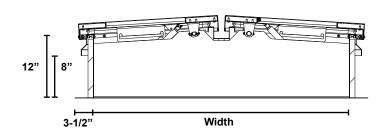
BSVS: SINGLE DOOR



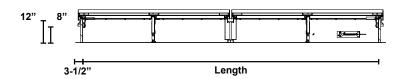


BSVSW36X30S1N165R

BSVS: DOUBLE DOOR



BSVS: QUAD DOOR







BSVSW66x144Q1N165R

LIGHT**MAX**[™]

BSVL: SPECIFICATIONS

Material:

• Aluminum 11 gauge, mill finish

Babcock-Davis® Always right there.

 Steel 14 gauge galvanneal, high reflectance white powder coat
 Cover: Extruded cover with 5/8" structural multiwall white polycarbonate. Cover stiffened to withstand a live load of 40psf
 Curb: Single wall curb with EZ tab counterflash and 3-1/2" mounting flange with 5/8" bolt holes

Insulation: 1" polyisocyanurate R-6 in cover frame edge and around curb

Gasket: Extruded EPDM adhesive backed gasket seal, continuous around cover

Hinge: Heavy duty pintle hinge with stainless steel hinge pins **Springs:** Gas spring with damper opens cover against 10psf snow load in not less than 2 seconds

Hold open arm: Zinc plated steel automatic hold open arm locks cover in open position

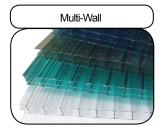
Latch: Zinc plated steel rotary latch designed to hold covers closed against 30psf wind uplift for single doors and 90psf for double and quad doors. Opens manually by external and internal pull cables. Opens automatically with a fusible link at standard temperature 165 °F Certifications: UL 793 Listed

Sizes: Industry standard and custom sizes available

MULTI-WALL PANEL OPTIONS

Coextruded polycarbonate sheet, 3-Wall 5/8" thick, UV protection. R-factor 2.5, U-factor 0.40

	White	Clear	Bronze	Blue	Green
Light Transmision %: Solar Factor %: Shading Coefficient %:	52% 63% .72	74% 75% .86	37% 57% .65	45% 65% .74	42% 60% .69





BSVLA48X96S1N165R



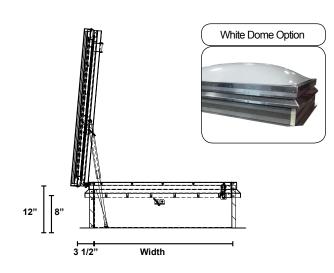
Babcock-Davis Corporate Headquarters - Minneapolis, MN BSVLA60X60D3N165R

	WIDTH X LENGTH DOOR	CURB ELEC. TEMP	R - OPTIONS
MATERIAL A Alum Curb & Cover B Galvannealed Curb & Alum Cover	SIZE (WIDTH & LENGTH) Single Double Quad 36" x 30" 48" x 96" 66" x 120" 36" x 36" 60" x 60" 66" x 144" 48" x 48" 72" x 96" 72" x 144" 48" x 96" 60" x 120" 72" x 144"	DOOR S SINGLE DOOR D DOUBLE DOOR Q QUAD DOOR CURB 1 SINGLE WALL 2 DOUBLE WALL 3 CURB MOUNT	ELECTRICAL TEMP F N No ELECTRICAL 165 350 L 24VDC / 24VAC 212 360 H 110VAC / 240 VAC 280 450
		LPW DOME, POLYCAF LPC DOME, POLYCAF LMC MULTIWALL, CLE	RB CLEAR LMB MULTIWALL, BLUE



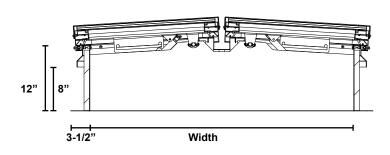
LIGHT**MAX**™

BSVL: SINGLE DOOR



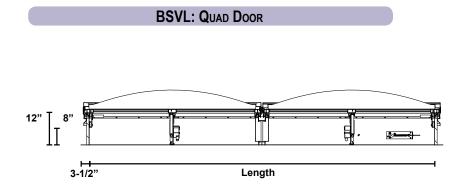


BSVL: DOUBLE DOOR





BSVLB72X96D1N165R





BSVLA66X144Q3N165R-LPW



ACOUSTICAL

BSVG_X: SPECIFICATIONS

Material: Steel 14 gauge galvanneal with 12 gauge liners, red oxide powder coat finish

Cover: Formed metal cover with liner internally stiffened to withstand a live load of 40psf

Curb: 13" high double wall curb with mounting flange with 1/2" bolt holes

Insulation: 3-1/2" R-13 fiberglass in cover and curb

Gasket: Extruded EPDM gasket seals on curb and cover

Hinge / Springs: High pressure gas springs designed to open vent covers automatically against 10psf snow load

Shock absorber: Steel, red powder paint, controls rate of opening **Hold open arm:** Zinc plated steel automatic hold open arm locks cover in open position

Latch: Dual zinc plated steel pyrolatches holds covers closed against 90psf wind uplift. Opens manually by external and internal pull cables. Opens automatically with a fusible link at standard temperature 165 °F Optional electrical opening; specify 24VDC or 110VAC

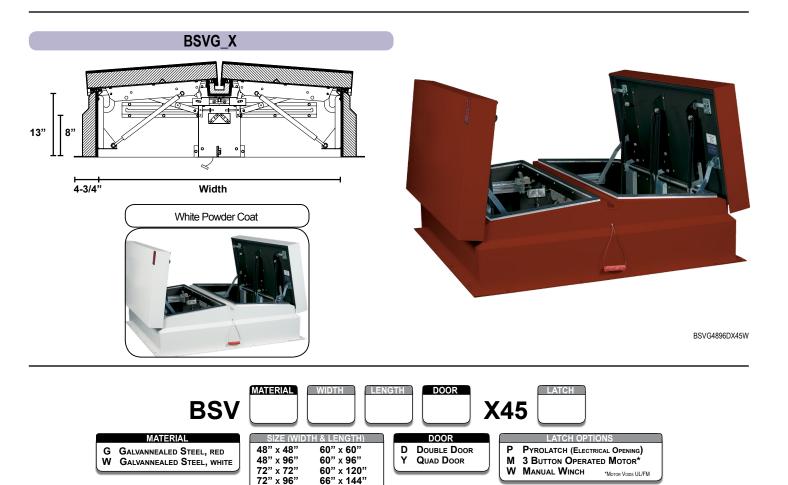
Performance: STC-45 per ASTM E90, OITC 37 per ASTM E1332 Certification: UL793 Listed and FM4430 Approved Sizes: Industry standard and custom sizes available







Planet Hollywood Resort and Casino - Las Vegas, NV



SAFETY PRODUCTS

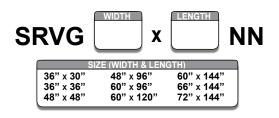
SRVG: SAFETY RAILINGS

Material: Rails and posts, galvanized steel, 1-1/4" ID schedule 40 pipe

Fittings: Cast aluminum alloy with set screw hold

Babcock-Davis® Always right there.

> **Mounting Brackets:** 3/16" steel, zinc plated, nut backing plate attaches to curb counterflash without penetrating roof membrane **Hardware:** Hex head bolts 3/8"-16 x 3/4" zinc plated steel **Performance:** Exceeds OSHA 29 CFR 1910.23 guarding floor and wall openings and holes





SRVG48X96NN

SMOKE VENT OPTIONS

Bars 6" x 12"

Screen 4" x 4"

BURGLAR BARS

Burglar bars for security and safety, prevent unauthorized entry • 1/2", or 3/4" diameter steel rod

• 6" x 6", 6" x 12" spacing

FALL PROTECTION SCREEN

Fall protection screen

- 3/16" diameter steel rod
- 4" x 4" spacing

OPENING OPTIONS

Manual: Manual pull release on the exterior and interior of vent

Temperature: Fusible link temperatures for sprinkler coordination 165°F, 212°F, 280°F, 350°F, 360°F, 370°F, 386°F, 450°F

Electrical: Electrical release to tie into a fire alarm or smoke detector; 24VDC, 110VAC / 220VAC



Belimo Acutuator

• (

Fusible Link



1/2" diameter, 6" x 6" spacing

CLOSING OPTIONS

Manual: Manually close from the exterior of the vent at rooftop level

Manual Winch: Close vent doors from remote floor location- rigging is required

Motor: 3 button operated motor provides (Open, Close, Stop) capability using 110VAC, 1/2 HP motor. Voids UL/FM



Manual Winch



3-Button Controller

Copyright © BabcockDavis 2013

ROOF HATCHES & SMOKE VENTS



