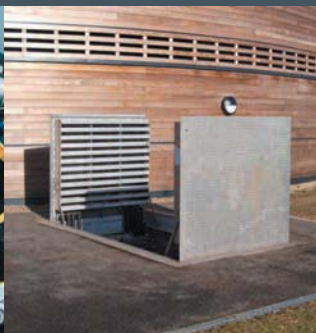




ROOF ACCESS HATCHES



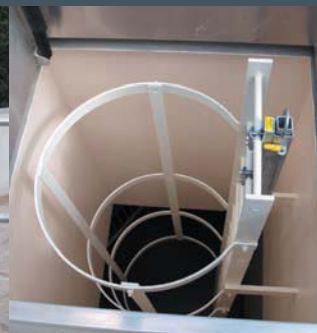
SMOKE VENTS



FLOOR DOORS



SAFETY PRODUCTS



LADDERS

The Worldwide Source for Speciality Access Products



BILCO HISTORY

The Bilco Company was established in America in 1926 and has for many decades designed and supplied access products for construction and engineering industries all over the world. Under the same family ownership the Company has been a pioneer in the development of a unique line of horizontal access products.

In 1989, Bilco UK & Europe was formed and has built a reputation amongst architects, engineers, specifiers, and the construction trades for providing the right access solution.

BILCO TODAY

Based in Suffolk, Bilco can supply the trade with a range of standard roof hatches, smoke vents, and floor doors in various sizes and materials direct from stock, delivered by a nationwide palletline system or dedicated consignment. Standard items are delivered anywhere in the UK in 3-4 working days and best of all, there's no extra charge. If a special product is required, the fast-track shop allows delivery in an industry-leading 4-6 weeks.

Bilco also provides technical assistance for more complex product requirements. The technical department will assist you to develop a creative design solution for your unique applications. Quality access products comply with current Building Regulations & Legislation, and are engineered to provide many years of trouble-free service.

OUR COMMITMENT

Bilco products are designed and fabricated to consistently high quality standards to ensure complete customer satisfaction. As part of its commitment, Bilco has implemented a company-wide quality system, which has achieved ISO 9001 and 14001 accreditation. The Bilco Company is committed to producing access products that are unequalled in quality, design and workmanship.

OUR GUARANTEE

Warranty is for a minimum period of ten years from the date of purchase. Electric motors, special finishes and other special equipment, if applicable, are covered separately.



QR CODES – HOW TO USE AND WHY



Throughout this brochure there are a series of QR codes which you can simply scan with your smart phone and they will take you through to further information on the product, from informative videos to full technical details such as BIM details, CAD drawings and NBS specifications.



Bilco UK, Bury St. Edmunds, Suffolk, England

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ROOF ACCESS SOLUTIONS

Ladder Access,
Types S, E and GS



LADDER ACCESS SOLUTIONS

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Ship Stair,
Type NB



SHIP STAIR ACCESS SOLUTIONS

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Service Stair,
Type L, Type SSY



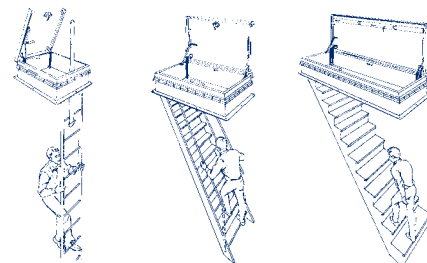
SERVICE STAIR ACCESS SOLUTIONS

Roof Hatches Type L, Type SSY	9	
Bil-Guard® Hatch Rail System	29	
Additional Options	40-41	



Roof Hatches

New enhanced specification
on all roof access hatches



Ladder Access, Ship Stair and Service Stair products
all have optional extras available.

Bilco roof hatches provide safe and convenient roof access by means of an interior ladder, ship stair, or service stair. Larger sized hatches are also available to facilitate the easy movements of equipment to and from a building. Each aluminium hatch comes with a 10 year guarantee. The curb upstand is manufactured with a cap-flashing that includes the Bilclip® flashing system which accepts a variety of felts and membranes. As a result installation time and related costs are greatly reduced and a more effective mechanical termination which does not rely on adhesives alone is provided. Alternatively a metal curb liner can be specified to make site installation easier, ideally suited for hot-works, wet applied waterproofing and standing seam roofs. Customised designs are also available which can feature security options, motorised operation, a range of paint finishes and safety aids.

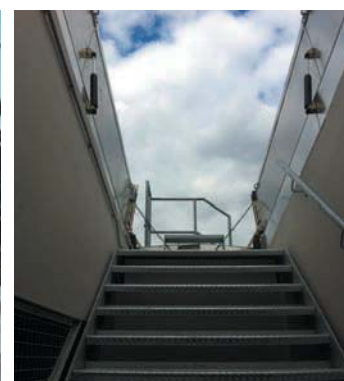


Key Features and Benefits

- Weathertight construction
- Fully insulated and gasketed for energy efficiency
- Lift assistance for smooth, easy, one-hand operation
- Corrosion-resistant hardware
- Bilclip® Flashing System for ease of installation
- Custom sizes and options are readily available
- Meets the requirements of manual handling regulations
- Hatches can be specified with curb liners.

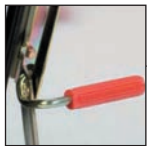
Typical Applications

Banks	Office Buildings
Prisons	Manufacturing Plants
Factories	Schools
Fast Food Restaurants	Shopping Centres
Gymnasiums	Storage Facilities
Hospitals	Distribution Depots
Hotels	Warehouses
High-Rise Housing	

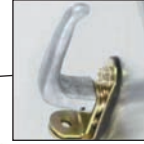




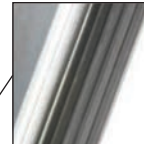
Heavy duty slam latch securely locks cover in the closed position. Interior and exterior hasps provide additional security.



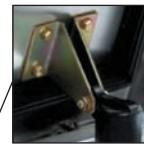
Rugged hold-open arm automatically locks the cover in the open position. Grip handle allows for easy, one-hand release and closing.



Top side latch with turn handle and padlock hasp.



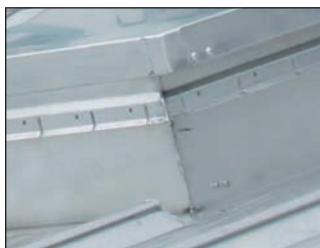
Newly designed closed cell EPDM sponge gasket, helps meet Building Regulations air leakage targets by providing a better seal of the cover to the curb, ensuring complete weather-tightness. Air leakage performance $4.83\text{m}^3/\text{hr}/\text{m}^2$ @ 600 Pa. Tested to BS EN 12207: 2000.



Fully enclosed compression springs counter balance the cover for smooth, easy and controlled operation regardless of cover size or weight. Bilco hatches meet the requirements of Manual Handling Regulations.



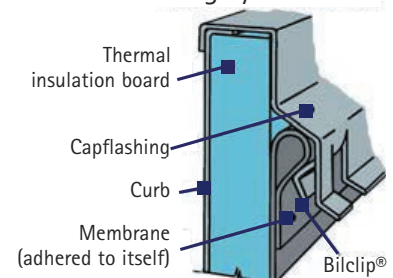
Insulated curb with cap flashing and Bilclip® flashing system. Installation is simply a matter of placing the hatch over the roof opening and securing it to the roof deck through the holes provided in the base flange. The integral cap flashing readily accepts roofing membranes reducing installation time and costs.



Curb Liners - Hatches can be fitted with curb liners to make site installation easier. See suffix CL.

Fully insulated cover and curb. 50mm thick faced rigid polyisocyanurate thermal insulation board. U value of $0.47\text{Wm}^2/\text{K}$.

Bilclip® flashing system



Ladder Access



Type S-50T and Type E-50T. Aluminium

Easy one-handed operation to fully open or closed position provides the user the security of having one hand firmly on the ladder at all times.



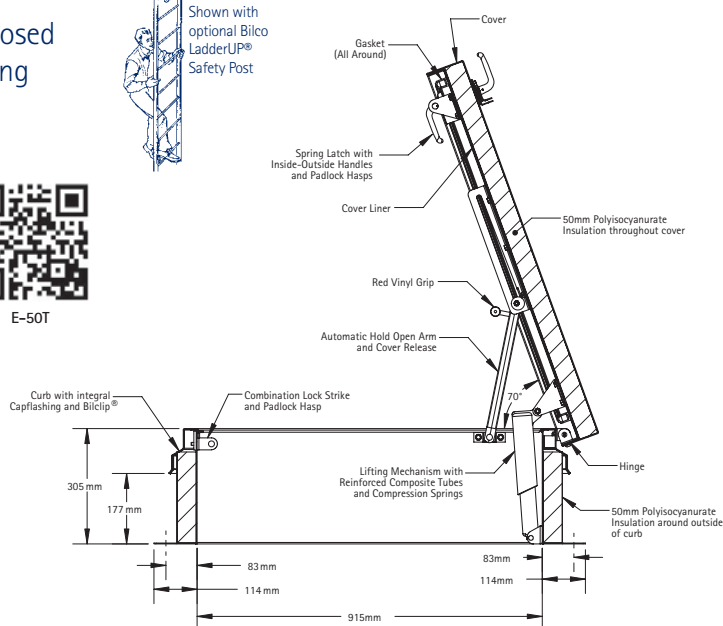
S-50T



E-50T



Shown with optional Bilco LadderUP® Safety Post



SPECIFICATIONS

Furnish and install where indicated on plans metal roof hatch.

Length denotes hinge side. These roof hatches shall be single leaf. The roof hatch shall be pre-assembled from the manufacturer.

Performance characteristics:	Cover shall be reinforced to support a minimum live load of 195kg/m ² with a maximum deflection of 1/150th of the span or 97kg/m ² wind uplift. Operation of the cover shall be smooth and easy with controlled operation throughout the entire arc of opening and closing. Operation of the cover shall not be affected by temperature. Entire hatch shall be weathertight with fully welded corner joints on cover and curb.
Cover:	2.3mm aluminium with a 100mm beaded flange with formed reinforcing members. Cover shall have a heavy extruded EPDM rubber gasket which is bonded to the cover interior to ensure a continuous seal when compressed to the top surface of the curb.
Cover insulation:	Shall be polyisocyanurate of 50mm thickness with a U-value of 0.47W/m ² K. Insulation shall be fully covered and protected by an aluminium liner.
Curb:	Shall be 305mm in height and of 2.3mm aluminium. The curb shall be formed with a 114mm flange with 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, 153mm on centre, to be bent inward to hold single ply roofing membrane securely in place.
Curb insulation:	Shall be polyisocyanurate of 50mm thickness with a U-value of 0.47W/m ² K.

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 that is bolted to the curb assembly.

Hardware:

Heavy pintle hinges shall be provided.

Cover shall be equipped with a spring latch with interior and exterior turn handles.

Shall be equipped with interior and exterior padlock hasps.

The latch strike shall be bolted to the curb assembly.

Cover shall automatically lock in the open position with a rigid hold open arm equipped with a 25mm diameter red vinyl grip handle to permit easy release for closing.

Compression spring tubes shall be an anti-corrosive composite material and all other hardware shall be zinc plated and chromate sealed. Springs shall be manufactured from steel and packaged in grease for corrosion resistance (for installation in highly corrosive environments or when prolonged exposure to hot water or steam is anticipated, specify Type 316 stainless steel hardware).

Cover hardware shall be bolted into heavy gauge channel reinforcing welded to the underside of the cover and concealed within the insulation space.

Finish:

Factory finish shall be mill finish aluminium.

Options:

See pages 40 and 41 and Ladders pages 30-39.

STANDARD SIZES and WEIGHTS

Type	Size – clear internal dimensions	Overall dimensions	Weight
S-50T	915mm x 760mm (H)	1143mm x 988mm	50kg
S-50T CL	915mm x 760mm (H)	1143mm x 988mm	56kg
E-50T	915mm x 915mm	1143mm x 1143mm	53kg
E-50T CL	915mm x 915mm	1143mm x 1143mm	60kg

50 – Aluminium (H) – Hinge Side CL – Curb Liner

Special sizes and materials – galvanized, copper, lead clad and stainless steel, available on request.

PERFORMANCE

BS EN 12207:2000	Air Permeability 4.83m ³ /hour/m ² at 600Pa
BS EN 12208:2000	Water Tightness Class 9A
BS EN 12210:2000	Wind Resistance Class E2400
BS EN 1991-1	Snow Load 1200Pa for 1 hour
BS 8200	Impact Resistance Pass
BS EN ISO 140	Acoustic 25dB
BS EN 1627 – 1630	Security Pass
Wind Speed	With Open Cover 30m/s

NOTE – Copies of Taylor Woodrow Developments test reports for S-50T product available on request.

Tel: 01284 701696 for technical details and drawings: www.bilco.uk.com

Ladder Access

Type GS-50T. Aluminium

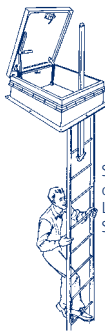
All the security and convenience of the Type S roof hatch with the added benefits of a skylight. GS Roof Hatches feature aluminium construction and virtually indestructible polycarbonate domes.



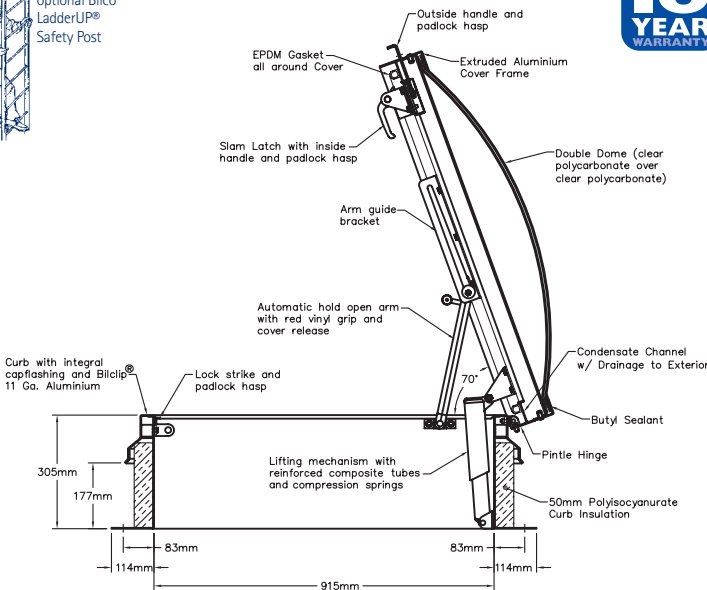
GS-50T



Type GS-50T



Shown with optional Bilco LadderUP® Safety Post



SPECIFICATIONS

Furnish and install where indicated on plans metal roof hatch. Length denotes hinge side. The roof hatch shall be single leaf. The roof hatch shall be pre-assembled from the manufacturer.

Performance characteristics:	Cover shall be reinforced to support a minimum live load of 195kg/m ² . Operation of the cover shall be smooth and easy with controlled operation throughout the entire arc of opening and closing. Operation of the cover shall not be affected by temperature. Entire hatch shall be weathertight with fully welded corner joints on cover and curb.
Cover:	Aluminium extrusion with built in drainage channel and clear polycarbonate double skin dome. Cover shall have a heavy extruded EPDM rubber gasket which is bonded to the cover interior to ensure a continuous seal when compressed to the top surface of the curb.
Curb:	Shall be 305mm in height and of 2.3mm aluminium. The curb shall be formed with a 114mm flange with 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, 153mm on centre, to be bent inward to hold single ply roofing membrane securely in place.
Curb insulation:	Shall be polyisocyanurate of 50mm thickness with a U-value of 0.47W/m ² K.

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 that is bolted to the curb assembly.
Hardware:	Heavy pintle hinges shall be provided. Cover shall be equipped with a spring latch with interior and exterior turn handles. Shall be equipped with interior and exterior padlock hasps. The latch strike shall be bolted to the curb assembly. Cover shall automatically lock in the open position with a rigid hold open arm equipped with a 25mm diameter red vinyl grip handle to permit easy release for closing. Compression spring tubes shall be an anti-corrosive composite material and all other hardware shall be zinc plated and chromate sealed. Springs shall be manufactured from steel and packaged in grease for corrosion resistance (for installation in highly corrosive environments or when prolonged exposure to hot water or steam is anticipated, specify Type 316 stainless steel hardware). Cover hardware shall be bolted into heavy gauge channel reinforcing welded to the underside of the cover and concealed within the insulation space.
Finish:	Factory finish shall be mill finish aluminium.
Options:	See pages 40 and 41 and Ladders pages 30-39.

STANDARD SIZES and WEIGHTS

Type	Size – clear internal dimensions	Overall dimensions	Weight
GS-50T	915mm x 760mm (H)	1143mm x 988mm	52kg
GS-50T CL	915mm x 760mm (H)	1143mm x 988mm	56kg
GSS-50T	Special sizes on request		

50 – Aluminium (H) – Hinge Side CL – Curb Liner
Special sizes available on request.

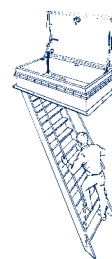




Ship Stair Access

Type NB-50T. Aluminium

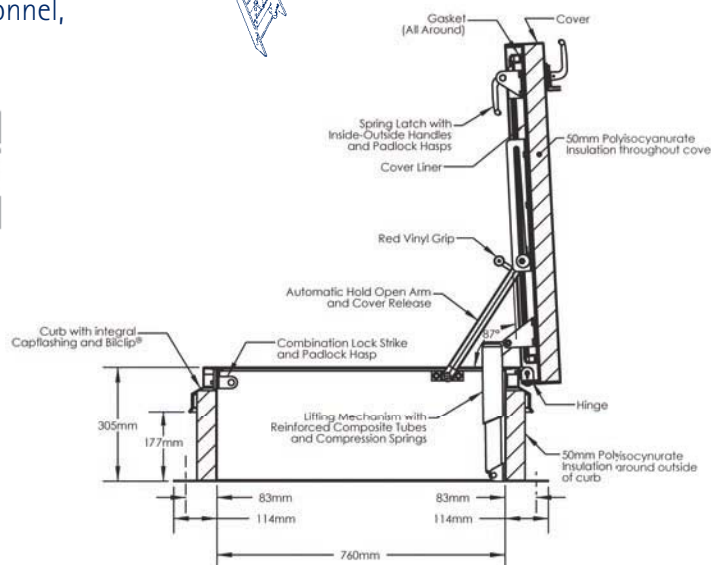
Ideal for installations where frequent use may be expected.
Permits easier movement of maintenance personnel,
tools and equipment.



Type NB-50T



NB-50T



SPECIFICATIONS

Furnish and install where indicated on plans metal roof hatch. Length denotes hinged side. The roof hatch shall be single leaf.
The roof hatch shall be pre-assembled from the manufacturer.

Performance characteristics:	Cover shall be reinforced to support a minimum live load of 195kg/m ² with a maximum deflection of 1/150th of the span or 97kg/m ² wind uplift. Operation of the cover shall be smooth and easy with controlled operation throughout the entire arc of opening and closing. Operation of the cover shall not be affected by temperature. Entire hatch shall be weathertight with fully welded corner joints on cover and curb.
Cover:	2.3mm aluminium with a 100mm beaded flange with formed reinforcing members. Cover shall have a heavy extruded EPDM rubber gasket which is bonded to the cover interior to ensure a continuous seal when compressed to the top surface of the curb.
Cover insulation:	Shall be polyisocyanurate of 50mm thickness with a U-value of 0.47W/m ² K. Insulation shall be fully covered and protected by an aluminium liner.
Curb:	Shall be 305mm in height and of 2.3mm aluminium. The curb shall be formed with a 114mm flange with 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, 153mm on centre, to be bent inward to hold single ply roofing membrane securely in place.
Curb insulation:	Shall be polyisocyanurate of 50mm thickness with a U-value of 0.47W/m ² K.

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 that is bolted to the curb assembly.

Hardware:

Heavy pintle hinges shall be provided.

Cover shall be equipped with a spring latch with interior and exterior turn handles.

Shall be equipped with interior and exterior padlock hasps. The latch strike shall be bolted to the curb assembly.

Cover shall automatically lock in the open position with a rigid hold open arm equipped with a 25mm diameter red vinyl grip handle to permit easy release for closing.

Compression spring tubes shall be an anti-corrosive composite material and all other hardware shall be zinc plated and chromate sealed. Springs shall be manufactured from steel and packaged in grease for corrosion resistance (for installation in highly corrosive environments or when prolonged exposure to hot water or steam is anticipated, specify Type 316 stainless steel hardware).

Cover hardware shall be bolted into heavy gauge channel reinforcing welded to the underside of the cover and concealed within the insulation space.

Finish:

Factory finish shall be mill finish aluminium.

Options:

See pages 40 and 41 and Ladders pages 35-37.

STANDARD SIZES and WEIGHTS

Type	Size – clear internal dimensions	Overall dimensions	Weight
NB-50T	760mm x 1370mm (H)	988mm x 1598mm	63kg
NB-50T CL	760mm x 1370mm (H)	988mm x 1598mm	71kg

50 – Aluminium (H) – Hinge Side CL – Curb Liner

Special sizes and materials – galvanized, copper, lead clad and stainless steel, available on request.

PERFORMANCE

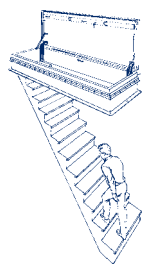
BS EN 12207:2000	Air Permeability 4.83m ³ /hour/m ² at 600Pa
BS EN 12208:2000	Water Tightness Class 9A
BS EN 12210:2000	Wind Resistance Class E2400
BS EN 1991-1	Snow Load 1200Pa for 1 hour
BS 8200	Impact Resistance Pass
BS EN ISO 140	Acoustic 25dB
BS EN 1627 – 1630	Security Pass
Wind Speed	With Open Cover 30m/s

NOTE – Copies of Taylor Woodrow Developments test reports for S-50T product available on request.

Service Stair Access

Type L-50T and SSY-50T. Aluminium

For where frequent use may be expected.
Permits easier movement of maintenance personnel,
tools and equipment from a full size stairway.



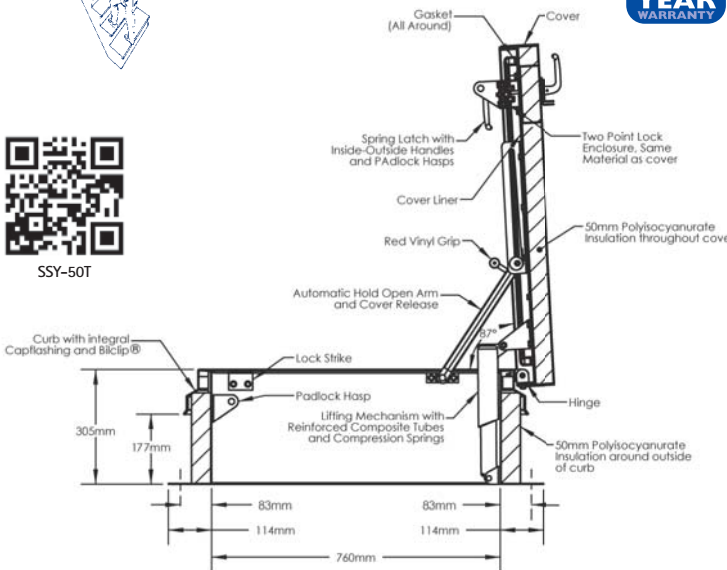
Type L-50T



L-50T



SSY-50T



SPECIFICATIONS

Furnish and install where indicated on plans metal roof hatch. Length denotes hinged side. These roof hatches shall be single leaf.
The roof hatch shall be pre-assembled from the manufacturer.

Performance characteristics:	Cover shall be reinforced to support a minimum live load of 195kg/m ² with a maximum deflection of 1/150th of the span or 97kg/m ² wind uplift. Operation of the cover shall be smooth and easy with controlled operation throughout the entire arc of opening and closing. Operation of the cover shall not be affected by temperature. Entire hatch shall be weathertight with fully welded corner joints on cover and curb.
Cover:	2.3mm aluminium with a 100mm beaded flange with formed reinforcing members. Cover shall have a heavy extruded EPDM rubber gasket which is bonded to the cover interior to ensure a continuous seal when compressed to the top surface of the curb.
Cover insulation:	Shall be polyisocyanurate of 50mm thickness with a U-value of 0.47W/m ² K. Insulation shall be fully covered and protected by an aluminium liner.
Curb:	Shall be 305mm in height and of 2.3mm aluminium. The curb shall be formed with a 114mm flange with 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, 153mm on centre, to be bent inward to hold single ply roofing membrane securely in place.
Curb insulation:	Shall be polyisocyanurate of 50mm thickness with a U-value of 0.47W/m ² K.

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 that is bolted to the curb assembly.
Hardware:	Heavy pintle hinges shall be provided. Cover fitted with enclosed two-point spring latch with interior and exterior turn handles. Shall be equipped with interior and exterior padlock hasps. The latch strike shall be bolted to the curb assembly. Cover shall automatically lock in the open position with a rigid hold open arm equipped with a 25mm diameter red vinyl grip handle to permit easy release for closing. Compression spring tubes shall be an anti-corrosive composite material and all other hardware shall be zinc plated and chromate sealed. Springs shall be manufactured from steel and packaged in grease for corrosion resistance (for installation in highly corrosive environments or when prolonged exposure to hot water or steam is anticipated, specify Type 316 stainless steel hardware). Cover hardware shall be bolted into heavy gauge channel reinforcing welded to the underside of the cover and concealed within the insulation space.
Finish:	Factory finish shall be mill finish aluminium.
Options:	See pages 40 and 41.

STANDARD SIZES and WEIGHTS

Type	Size – clear internal dimensions	Overall dimensions	Weight
L-50T	760mm x 2440mm (H)	988mm x 2668mm	115kg
L-50T CL	760mm x 2440mm (H)	988mm x 2668mm	128kg
SSY-50T	760mm x 3360mm (H)	988mm x 3588mm	142kg
SSY-50T CL	760mm x 3360mm (H)	988mm x 3588mm	158kg

50 – Aluminium (H) – Hinge Side CL – Curb Liner

Special sizes and materials – galvanized, copper, lead clad and stainless steel, available on request.

PERFORMANCE

BS EN 12207:2000	Air Permeability 4.83m ³ /hour/m ² at 600Pa
BS EN 12208:2000	Water Tightness Class 9A
BS EN 12210:2000	Wind Resistance Class E2400
BS EN 1991-1	Snow Load 1200Pa for 1 hour
BS 8200	Impact Resistance Pass
BS EN ISO 140	Acoustic 25dB
BS EN 1627 – 1630	Security Pass
Wind Speed	With Open Cover 30m/s

NOTE – Copies of Taylor Woodrow Developments test reports for S-50T product available on request.



Plant Access

Type F-50T, Type SS-50T and Type D-50T

There are a wide range of options for plant access making it easy to install or remove equipment from a building.



F-50T



D-50T



Type F-50T
standard hatch



D-50T

SPECIFICATIONS

Furnish and install where indicated on plans metal roof hatch.

These roof hatches shall be single leaf and/or double leaf and shall be pre-assembled from the manufacturer.

Performance characteristics: Cover shall be reinforced to support a minimum live load of 195 kg/m² with a maximum deflection of 1/150th of the span or 97 kg/m² wind uplift.

Operation of the cover shall be smooth and easy with controlled operation throughout the entire arc of opening and closing.

Operation of the cover shall not be affected by temperature.

Entire hatch shall be weathertight with fully welded corner joints on cover and curb.

Cover: 2.3mm aluminium with a 100mm beaded flange with formed reinforcing members. Cover shall have a heavy extruded EPDM rubber gasket which is bonded to the cover interior to ensure a continuous seal when compressed to the top surface of the curb.

Cover insulation: Shall be polyisocyanurate of 50mm thickness with a U-value of 0.47 W/m²K. Insulation shall be fully covered and protected by an aluminium liner.

Curb: Shall be 305mm in height and of 5mm aluminium. The curb shall be formed with a 114mm flange with 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.

Curb insulation: Shall be polyisocyanurate of 50mm thickness with a U-value of 0.47 W/m²K.

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 that is bolted to the curb assembly.

Hardware:

Heavy pintle hinges shall be provided.

Cover shall be equipped with a spring latch with interior and exterior turn handles. Double leaf and single leaf covers over 2133mm have a 2-point spring latch system.

Shall be equipped with interior and exterior padlock hasps.

The latch strike shall be bolted to the curb assembly.

Cover shall automatically lock in the open position with a rigid hold open arm equipped with a 25mm diameter red vinyl grip handle to permit easy release for closing. Compression spring tubes shall be an anti-corrosive composite material and all other hardware shall be zinc plated and chromate sealed. Springs shall be manufactured from steel and packaged in grease for corrosion resistance (for installation in highly corrosive environments or when prolonged exposure to hot water or steam is anticipated, specify Type 316 stainless steel hardware).

Cover hardware shall be bolted into heavy gauge channel reinforcing welded to the underside of the cover and concealed within the insulation space.

Finish: Factory finish shall be mill finish aluminium.

Options: See pages 40 and 41 and Ladders pages 30-39.

STANDARD SIZES and WEIGHTS

Type	Size – clear internal dimensions	Overall dimensions	Weight
F-50T	1220mm x 1220mm	1448mm x 1448mm	99 kg
F-50T CL	1220mm x 1220mm	1448mm x 1448mm	109 kg
D-50T	Special sizes on request		
SS-50T	Special sizes on request		

50 – Aluminium CL – Curb Liner

Special sizes available on request.

Type SS – Single Leaf. Type D – Double Leaf.



Refurbishment

Type VersaMount®

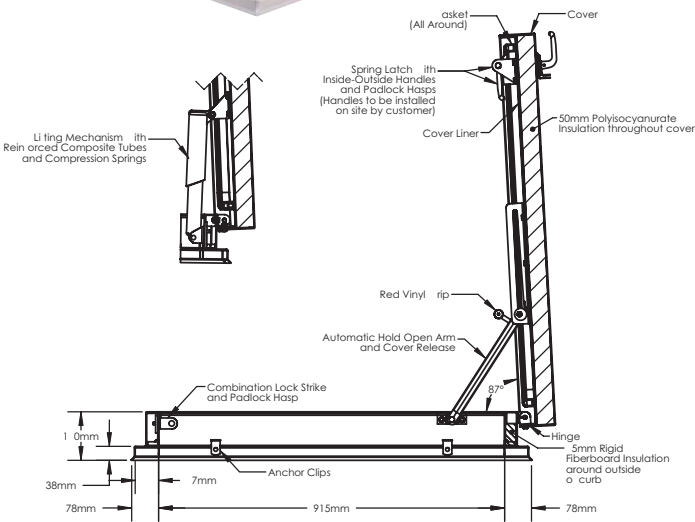
The VersaMount® is ideal for refurbishment projects where a weather proof upstand is existing. Easy to fit the anchor clip system and versatile frame design helps complete the job efficiently.



Type S-50VMT.
Optional anodized
finish shown



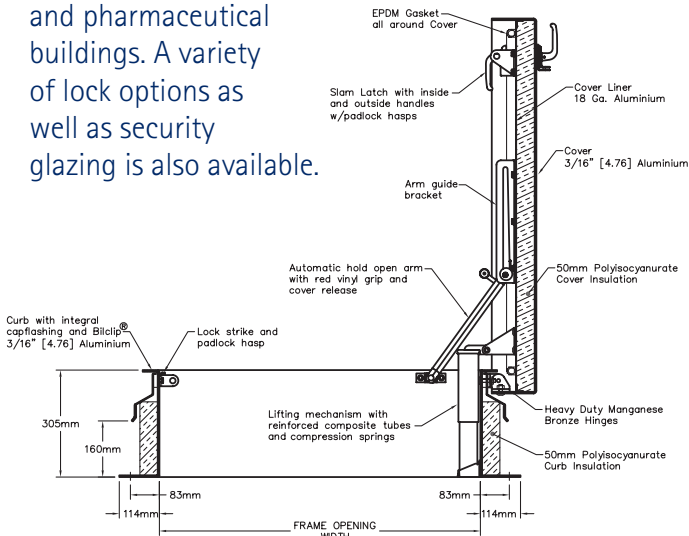
S-50VMT



Security Access

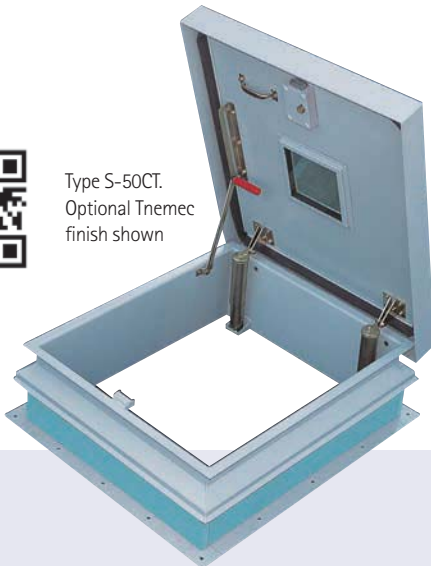
Type Security Series

Constructed of heavier gauge materials for high security applications such as prisons, banks, embassies, and pharmaceutical buildings. A variety of lock options as well as security glazing is also available.



S-50CT

Type S-50CT.
Optional Tnemec
finish shown



SPECIFICATIONS

These roof hatches are single leaf. All other specifications as Plant Access except Curb details listed below.

VERSAMOUNT®

Curb: Shall be 102mm in height and of 2.3mm aluminium. The curb shall be formed with a 67mm flange and a 38mm apron, fully welded at corners. Stainless Steel anchor clips are included. Bilco recommend maximum upstand width is 65mm.

Curb insulation: Shall be polyisocyanurate of 25mm thickness with a U-value of 0.87 W/m²K.

SECURITY ACCESS

Curb: Shall be 305mm in height and of 5mm aluminium. The curb shall be formed with a 114mm flange with 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.

Curb insulation: Shall be polyisocyanurate of 50mm thickness with a U-value of 0.47 W/m²K.

VERSAMOUNT® and SECURITY ACCESS STANDARD SIZES and WEIGHTS

Type	Size – clear internal dimensions	Overall dimensions	Weight	Open angle
S-50VMT*	915mm x 760mm (H)	1071mm x 916mm	46 kg	87°
S-50CT	915mm x 760mm (H)	1143mm x 988mm	68 kg	70°
E-50CT	915mm x 915mm	1143mm x 1143mm	80 kg	70°
NB-50CT	760mm x 1370mm (H)	988mm x 1598mm	95 kg	90°
SS-50CT	Special sizes on request			

50 – Aluminium (H) – Hinge Side CL – Curb Liner

Special sizes and materials – galvanized and stainless steel, available on request.

*Special size not available.

VERSAMOUNT® and SECURITY ACCESS PERFORMANCES

BS EN 12207:2000	Air Permeability 4.83 m³/hour/m² at 600 Pa
BS EN 12208:2000	Water Tightness Class 9A
BS EN 12210:2000	Wind Resistance Class E2400
BS EN 1991-1	Snow Load 1200Pa for 1 hour
BS 8200	Impact Resistance Pass
BS EN ISO 140	Acoustic 25dB
BS EN 1627 – 1630	Security Pass
Wind Speed	With Open Cover 30 m/s

NOTE – Copies of Taylor Woodrow Developments test reports for S-50T product available on request.



Smoke Vents

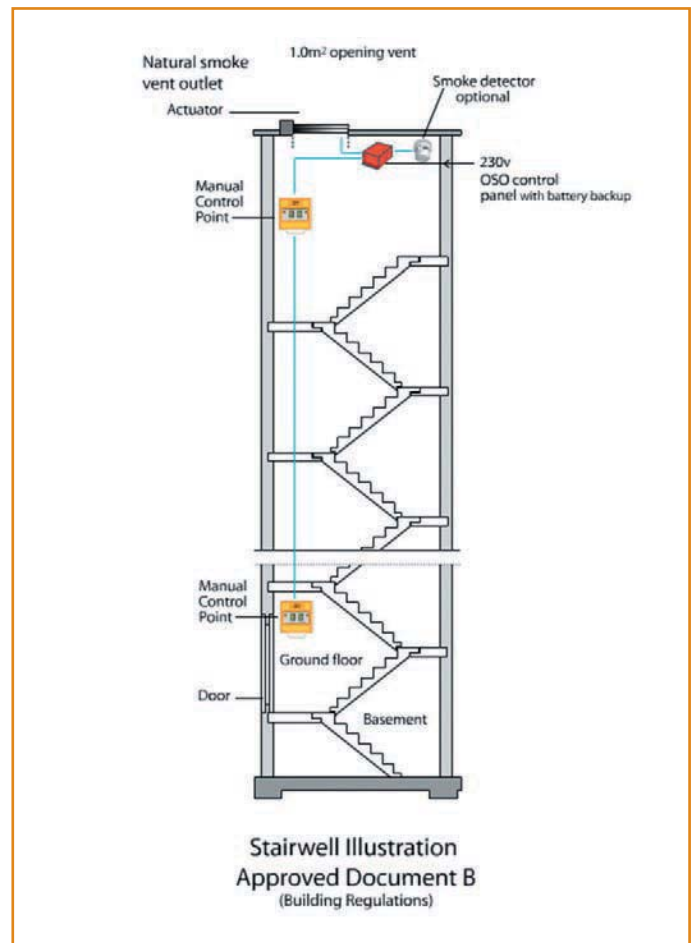
Natural Smoke and Heat Exhaust Ventilators (NSHEV)

Bilco smoke ventilators are fully compliant to the Construction Products Directive 89/106/EEC and EU Regulation No 305/2011. The evaluation is based upon the requirements of EN12101-2 2003-09.

Under the requirements of the Regulation it is mandatory that CE marking is provided with the product and that a Declaration of Conformity is provided by the manufacturer.

EN12101-2 sets out the performance and test methods for natural smoke and heat exhaust ventilators which are intended to be installed as a component of a natural smoke and heat exhaust system. Bilco smoke vents can also be used as dual function vents to provide comfort ventilation to manage the internal temperature within a building. Bilco can also provide control equipment for smoke control systems, comfort ventilation and access.

Both single and double leaf vents manufactured by Bilco offer excellent thermal and air leakage performance and can be manufactured to suit project specific requirements for size, curb options and paint finishes.



Key Features and Benefits

Increased evacuation time and decreased risk of smoke inhalation and damage

Enhanced visibility to allow firefighters to quickly locate the fire

Protection against secondary ignitions and lateral fire spread

Exhausting of noxious and potentially explosive fumes

Structure protection from damaging heat

Reduce damage to building contents

Can be used for access and comfort ventilation.

Typical Applications

High-Rise Housing

Offices and Commercial Buildings

Aircraft Hangars

Auditoria

Concert Halls and Theatres

Convention Centres

Gymnasiums

Manufacturing Plants

Retail Centres

Schools

Hospitals

Distribution Depots

Warehouses





Entire vent shall be weathertight with fully welded corner joints on cover and curb

Newly designed closed cell EPDM sponge gasket, helps meet Building Regulations air leakage targets by providing a better seal of the cover to the curb, ensuring complete weather-tightness



A single linear actuator mounted on a pivoting carriage capable of opening the cover to the fire open position of 140 degrees within 60 seconds



Enclosed hinge assembly

Fully insulated cover and curb. 50mm thick faced rigid polyisocyanurate thermal insulation board. U value of 0.47Wm²/K

Standard product - clear vent areas of 1m² and 1.5m²



Flange with pre-drilled fixing points for easy installation



Wind deflector to protect open vent against wind loads



Curb mounted junction box with terminal block enclosed for power cable connection



Insulated curb with cap flashing and Bilclip® flashing system. Installation is simply a matter of placing the vent over the roof opening and securing it to the roof deck through the holes provided in the base flange. The integral capflashing readily accepts roofing felts reducing installation time and costs.



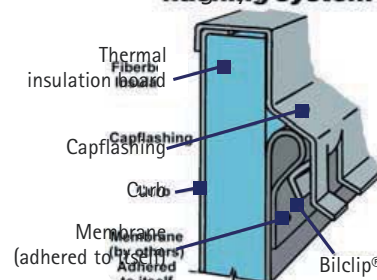
VIDEO



Type ESW-50REM

Typically positioned at the head of a stairwell. The vent will act as a chimney clearing the building of heat and smoke.

Bilclip® flashing system





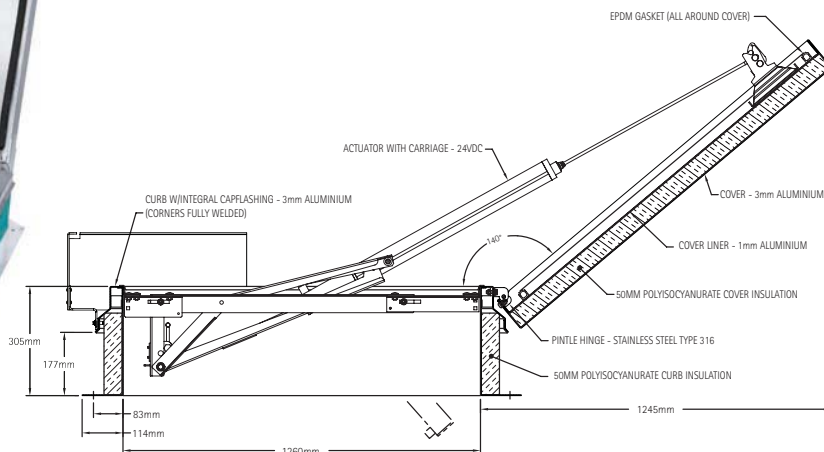
Stairwell (NSHEV)

Type ESW-50REM Smoke Vent – Single Leaf 140°



ESW-50REM

ESW-50REM



SPECIFICATIONS

The smoke vent shall be single leaf and provide 1.0m² clear vent area. The smoke vent shall be pre-assembled from the manufacturer.

Performance characteristics:	<p>Cover shall be reinforced to support a minimum live load of 195 kg/m² with a maximum deflection of 1/150th of the span.</p> <p>Operation of the cover shall be through a 24VDC battery backed control system that will open the cover to the fire open position within 60 seconds and be capable of closing the cover.</p> <p>Operation of the cover shall not be affected by temperature.</p> <p>Entire vent shall be weathertight with fully welded corner joints on cover and curb.</p>
Cover:	<p>Shall be 3mm aluminium with a 100mm beaded flange with formed reinforcing members. Cover shall have a heavy extruded EPDM rubber gasket that is bonded to the cover interior to ensure a continuous seal when compressed to the top surface of the curb.</p>
Cover insulation:	<p>Shall be polyisocyanurate of 50mm thickness with a U-value of 0.47 W/m²K. Insulation shall be fully covered and protected by an aluminium liner.</p>
Curb:	<p>Shall be 305mm in height and of 3mm aluminium. The curb shall be formed with a 114mm flange with 11mm holes provided for securing to the roof deck. The curb shall be equipped with an integral metal capflashing of 2mm aluminium, fully welded at the corners, that features the Bil-Clip® flashing system, including stamped tabs, 153mm on centre, to be bent inward to hold single ply roofing membrane securely in place.</p>

Wind deflectors:	<p>Wind deflectors shall be 4mm aluminium with 3mm EPDM gasket.</p>
Curb insulation:	<p>Shall be polyisocyanurate of 50mm thickness with a U-value of 0.47W/m²K.</p>
Operating mechanism:	<p>A single linear actuator mounted on a pivoting carriage capable of opening the cover to the fire open position of 140° (note – roof obstructions should be considered).</p>
Hardware:	<p>Heavy pintle hinges shall be provided.</p> <p>Curb mounted junction box with a terminal block enclosed for power cable connection.</p>
Finish:	<p>Factory finish shall be mill finish aluminium.</p>
Controls:	<p>See pages 18 and 19.</p>
Options:	<p>See pages 40 and 41.</p>

PERFORMANCE CHARACTERISTICS to EN12101-2

Free Aerodynamic area	1.0m ²
Reliability	RE 1000 (10,000*)
Snow Load	SL 400
Low Ambient Temp	T (-15)
Wind Load	WL 1500
Resistance to Heat	B 300

*10,000 when used as a day to day ventilator.

STANDARD SIZES and WEIGHTS

Type	Size – clear internal dimensions	Overall dimensions	Weight	Clear Vent Area
ESW-50REM	1260mm x 1260mm	1488mm x 1488mm	140 kg	1.0m ²
ESW-50REM CL	1260mm x 1260mm	1488mm x 1488mm	150 kg	1.0m ²

Double Leaf (NSHEV)

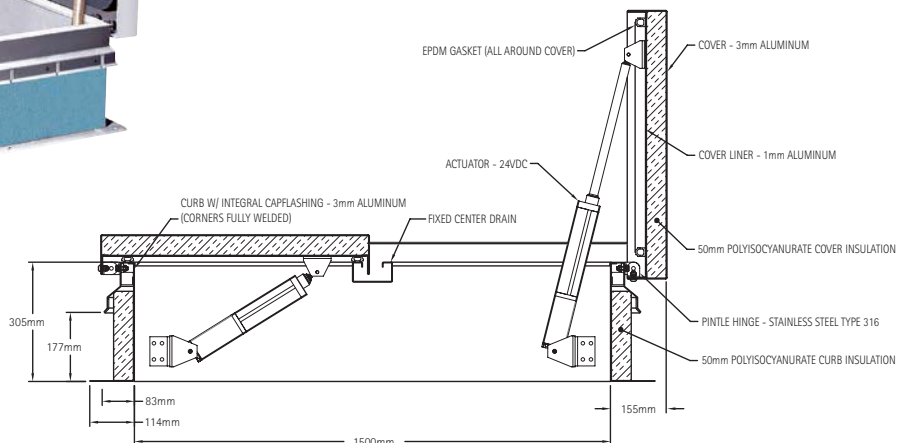
UDF-50REM Smoke Vent – Double Leaf 90°



Type UDF-50REM -
shown without wind deflector



UDF-50REM



SPECIFICATIONS

The smoke vent shall be double leaf and provide 1.5m² clear vent area. The smoke vent shall be pre-assembled from the manufacturer.

Performance characteristics: Covers shall be reinforced to support a minimum live load of 195 kg/m² with a maximum deflection of 1/150th of the span.

Operation of the covers shall be through a 24VDC battery backed control system that will open the covers to the fire open position within 60 seconds and be capable of closing the covers.

Operation of the covers shall not be affected by temperature.

Entire vent shall be weathertight with fully welded corner joints on covers and curb.

Cover: Shall be 3mm aluminium with a 100mm beaded flange with formed reinforcing members. Cover shall have a heavy extruded EPDM rubber gasket that is bonded to the cover interior to ensure a continuous seal when compressed to the top surface of the curb.

Cover insulation: Shall be polyisocyanurate of 50mm thickness with a U-value of 0.47 W/m²K. Insulation shall be fully covered and protected by an aluminium liner.

Curb: Shall be 305mm in height and of 3mm aluminium. The curb shall be formed with a 114mm flange with 11mm holes provided for securing to the roof deck. The curb shall be equipped with an integral metal capflashing of 2mm aluminium, fully welded at the corners, that features the Bil-Clip® flashing system, including stamped tabs, 153mm on centre, to be bent inward to hold single ply roofing membrane securely in place. There shall be a fixed central drip channel through the centre section of the curb.

Wind deflectors: Wind deflectors shall be 4mm aluminium with 3mm EPDM gasket.

Curb insulation: Shall be polyisocyanurate of 50mm thickness with a U-value of 0.47 W/m²K.

Operating mechanism: Two 24VDC linear actuators per cover (four actuators total) capable of opening the cover to the fire open position of 90°.

Hardware: Heavy pintle hinges shall be provided.
Curb mounted junction box (2 no.) with terminal blocks enclosed for power cable connection.

Finish: Factory finish shall be mill finish aluminium.

PERFORMANCE CHARACTERISTICS to EN12101-2

Free Aerodynamic area	1.5m ²
Reliability	RE 1000 (10,000*)
Snow Load	SL 500
Low Ambient Temp	T (-15)
Wind Load	WL 1500
Resistance to Heat	B 300

*10,000 when used as a day to day ventilator.

STANDARD SIZES and WEIGHTS

Type	Size – clear internal dimensions	Overall dimensions	Weight	Clear Vent Area
UDF-50REM	1500mm x 1620mm	1728mm x 1848mm	215 kg	1.5m ²
UDF-50REM CL	1500mm x 1620mm	1728mm x 1848mm	230 kg	1.5m ²



Smoke Vents – Special Size



Type ESS-50REM – Special Size

SPECIFICATIONS

The smoke vent shall be single leaf and provide the specified clear vent area.
The smoke vent shall be pre-assembled from the manufacturer.

Performance characteristics: Cover shall be reinforced to support a minimum live load of 195 kg/m² with a maximum deflection of 1/150th of the span.
Operation of the cover shall be through a 24VDC battery backed control system that will open the cover to the fire open position within 60 seconds and be capable of closing the cover.
Operation of the cover shall not be affected by temperature.
Entire vent shall be weathertight with fully welded corner joints on cover and curb.

Cover: Shall be 3mm aluminium with a 100mm beaded flange with formed reinforcing members. Cover shall have a heavy extruded EPDM rubber gasket that is bonded to the cover interior to ensure a continuous seal when compressed to the top surface of the curb.

Cover insulation: Shall be polyisocyanurate of 50mm thickness with a U-value of 0.47 W/m²K. Insulation shall be fully covered and protected by an aluminium liner.

Curb: Shall be 305mm in height and of 3mm aluminium. The curb shall be formed with a 114mm flange with 11mm holes provided for securing to the roof deck. The curb shall be equipped with an integral metal capflashing of 2mm aluminium, fully welded at the corners, that features the Bil-Clip® flashing system, including stamped tabs, 153mm on centre, to be bent inward to hold single ply roofing membrane securely in place.



Type ESS-50REM - special size

Wind deflectors:	Wind deflectors shall be 4mm aluminium with 3mm EPDM gasket.
Curb insulation:	Shall be polyisocyanurate of 50mm thickness with a U-value of 0.47W/m ² K.
Operating mechanism:	A single linear actuator mounted on a pivoting carriage capable of opening the cover to the fire open position of 140° (note – roof obstructions should be considered). Heavy pintle hinges shall be provided.
Hardware:	Curb mounted junction box with a terminal block enclosed for power cable connection.
Finish:	Factory finish shall be mill finish aluminium.

PERFORMANCE CHARACTERISTICS to EN12101-2

Consult Bilco UK office for details.



Type D-50REM – Special Size



SPECIFICATIONS

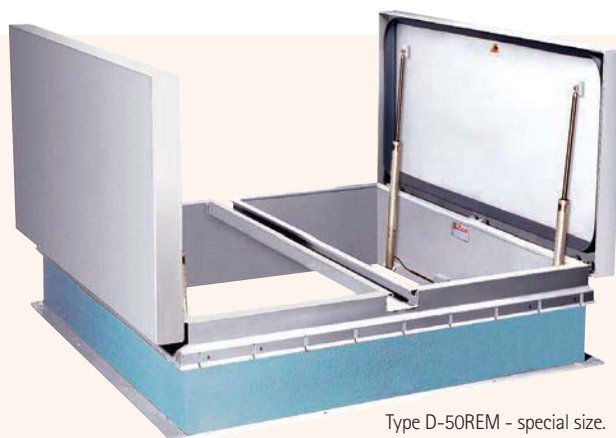
The smoke vent shall be double leaf and provide the specified clear vent area.
The smoke vent shall be pre-assembled from the manufacturer.

Performance characteristics: Covers shall be reinforced to support a minimum live load of 195 kg/m² with a maximum deflection of 1/150th of the span.
Operation of the covers shall be through a 24VDC battery backed control system that will open the covers to the fire open position within 60 seconds and be capable of closing the covers.
Operation of the covers shall not be affected by temperature.
Entire vent shall be weathertight with fully welded corner joints on covers and curb.

Cover: Shall be 3mm aluminium with a 100mm beaded flange with formed reinforcing members. Cover shall have a heavy extruded EPDM rubber gasket that is bonded to the cover interior to ensure a continuous seal when compressed to the top surface of the curb.

Cover insulation: Shall be polyisocyanurate of 50mm thickness with a U-value of 0.47 W/m²K. Insulation shall be fully covered and protected by an aluminium liner.

Curb: Shall be 305mm in height and of 3mm aluminium. The curb shall be formed with a 114mm flange with 11mm holes provided for securing to the roof deck. The curb shall be equipped with an integral metal capflashing of 2mm aluminium, fully welded at the corners, that features the Bil-Clip® flashing system, including stamped tabs, 153mm on centre, to be bent inward to hold single ply roofing membrane securely in place. There shall be a fixed central drip channel through the centre section of the curb.



Type D-50REM - special size.
Shown without wind deflector

Curb insulation:	Shall be polyisocyanurate of 50mm thickness with a U-value of 0.47 W/m ² K.
Operating mechanism:	Two 24VDC linear actuators per cover (four actuators total) capable of opening the cover to the fire open position of 90°.
Hardware:	Heavy pintle hinges shall be provided. Curb mounted junction box (2 no.) with terminal blocks enclosed for power cable connection.
Finishes:	Factory finish shall be mill finish aluminium.

PERFORMANCE CHARACTERISTICS to EN12101-2

Consult Bilco UK office for details.

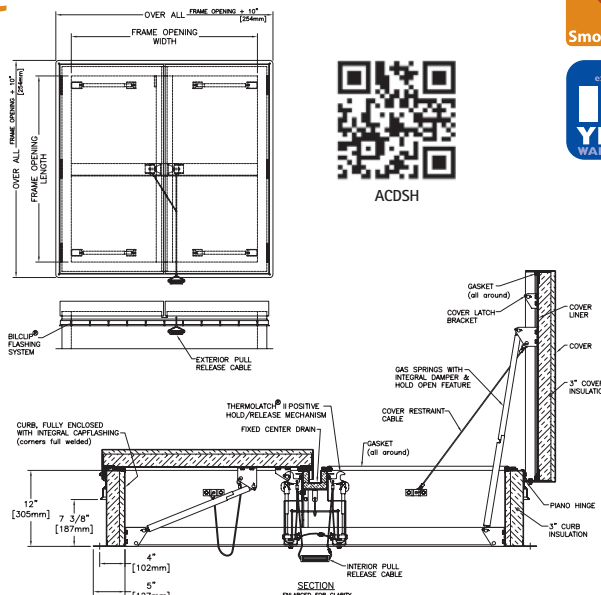
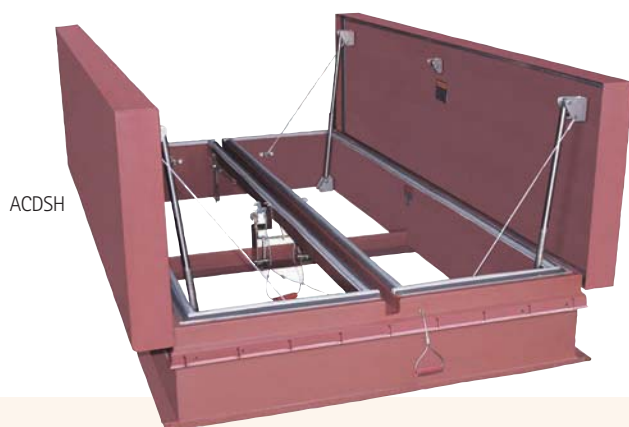
Smoke Vents – Acoustic

Type ACDSH – Double Leaf 90°

Mechanically operated smoke vents. Ideal for concert halls, theatres, casinos, sporting arenas and other applications.



ACDSH



SPECIFICATIONS

Furnish and install where indicated on plans metal fire vent Type ACDSH, size [insert: width () x length ()]. Length denotes hinge side. The roof fire vent shall be double leaf. The roof fire vent shall be pre-assembled from the manufacturer.

Performance: Vent(s) shall be UL listed.

Characteristics: Covers shall be reinforced to support a minimum live load of 40 psf (195 kg/m²) with a maximum deflection of 1/150th of the span or 90 psf (439 kg/m²) wind uplift. Corrosion resistant gas springs shall open the vent covers simultaneously when latch is manually released or when heat breaks the UL listed fusible link. Opening shall be in a controlled manner to avoid damage to surrounding roof surfaces. Entire roof fire vent shall be weathertight with fully welded corner joints on cover and curb. Latch mechanisms shall hold the covers in the closed position without overstressing the fusible link and withstand 90 psf (439 kg/m²) wind uplift forces acting on the cover.

Latch Operation: When heat parts the UL listed fusible link, the latch shall release instantaneously, allowing vent covers to open. The latch shall be designed for easy resetting, after a fire or test, so that the covers cannot be latched closed unless the mechanism has been reset properly. Manufacturer shall provide instructions for resetting the latch with each unit.

Transmission Sound Rating: Vent(s) shall carry STC-46 sound rating.

Covers: 14 gauge (2mm) paint bond G-90 galvanized steel with a 5" (127mm) beaded flange with formed reinforcing members.

Gasket: PVC gaskets shall be permanently adhered to the underside of the covers and on top of the curb.

Cover insulation: Fibreglass of 3" (76mm) in thickness, fully covered and protected by a 14 gauge (2mm) paint bond G-90 galvanized steel liner.

Curb: 12" (305mm) in height and of 14 gauge (2mm) paint bond G-90 galvanized with a fixed centre channel. Curb shall be formed with a 5" (127mm) flange with 7/16" (11mm) holes provided for securing to roof deck. Curb shall be equipped with integral metal capflashing of the same gauge and material as the curb and feature the Bil-Clip® flashing system, including stamped tabs, 6" (153mm) on centre, to be bent inward to hold single-ply roofing membrane securely in place.

Curb insulation: 3" (76mm) fibreglass insulation, fully enclosed by a 14 gauge (2mm) paint bond G-90 galvanized steel liner.

Lifting Mechanisms: Corrosion resistant gas springs open covers automatically against a 10 lb/ft² (49Kg/m²) snow/wind load. Gas springs shall have built in dampers to assure a controlled rate of opening and automatically lock the covers in the full open position. A release mechanism shall be provided to allow the covers to be closed.

Latch Mechanism: Shall be the BILCO Thermolatch® II positive hold/release mechanism with a separate latching point for each cover controlled by a single UL listed 165°F (74°C) fusible link. Fusible link shall be curb mounted on a non-hinged end to allow the latching mechanism to be easily reset from the roof level.

Hardware: Corrosion resistant gas springs and hot dip galvanized steel stop cables. All other hardware is zinc plated/chromate sealed.

Finish: Factory finish shall be alkyl base red oxide primer.

Options: See pages 40 and 41.

STANDARD SIZES and WEIGHTS

Type	Size – clear internal dimensions	Overall dimensions	Weight
ACDSH4848	1220mm x 1220mm	1398mm x 1398mm	363 kg
ACDSH4872	1220mm x 1830mm (H)	1398mm x 2008mm	426 kg
ACDSH4890	1220mm x 2290mm (H)	1398mm x 2468mm	533 kg
ACDSH4896	1220mm x 2440mm (H)	1398mm x 2618mm	558 kg
ACDSH6060	1520mm x 1520mm	1698mm x 1698mm	528 kg
ACDSH6096	1520mm x 2440mm (H)	1698mm x 2618mm	701 kg
ACDSH66144*	1680mm x 3660mm (H)	1858mm x 3838mm	1032 kg
ACDSH7272	1830mm x 1830mm	2008mm x 2008mm	685 kg

(H) – Hinge Side

*This size has four covers.





Control Options

The heart of the system

Bilco controls and accessories are designed to work effectively with the range of natural smoke ventilators and roof hatches.

The OS2 control unit can be a stand-alone management system – in its own right, or it can be integrated into a fully networked fire alarm or BMS system. In the event of a fire, if the mains electrical supply to the building is cut the OS2 offers a failsafe option as it incorporates a backup battery system to ensure the natural smoke vents will still open. Special control units for unique applications can also be manufactured.

Other control accessories are available to independently open and close access equipment in non-emergency situations for example for roof inspection and maintenance, as well as making it easier to utilize the roof space for plant and recreational use.

There are a number of security accessories available and options for comfort ventilation. With the growing demand for buildings to be sustainable, energy efficient and environmentally friendly, a building that can ventilate solar heat gains in the summer and retain heat in the winter is vitally important.

Controls such as thermostats and rain sensors can for example, moderate a building 'over-heating' during the day, as well as providing additional revenue saving benefits in terms of reducing the use of energy hungry H&V equipment.



Dumb Reset Key
1RPREM-23



MCP

Designed to allow the Fire Officer to manually override the smoke control system through a user friendly interface. Design includes an open button and a close/reset button, which are accessed by lifting the clear front door. Dumb Reset Key required to close in accordance with PrEN 12101-9.

1RPREM-02



Typical
smoke vent



JUNCTION BOX

Fitted as standard to all smoke vents ready for wiring. Meets IP55

CONTROL PANEL

The OS2 control unit can be a stand-alone management system or it can be integrated into a fully networked fire alarm or BMS system.

OS2 accepts a supply of 230V AC 50/60 Hz from a 3A fused un-switched spur and has a current rating of 2A. Output is 24V DC 2-Channels. Combined output must not exceed 8A. Intermittent – 6 mins in any 1 hour; 5A continuous. Other options are available.

The backup battery module comprises 2x12V DC which has 2.2Ah sealed lead-acid batteries.

1RPREM-09



CONTROL PANEL KIT

Comprises- control panel, fireman's switch (MCP) and smoke detector.

1RPREM-01



MCP
Tamper-proof MCP
1RPREM-21



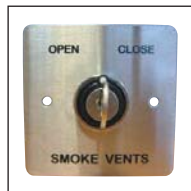
SMOKE DETECTOR
1RPREM-03



OPEN/CLOSE SMOKE VENT SWITCH

Stainless steel face plate, designed to be used as a keyed or paddle switch

1RPREM-08 (keyed)
1RPREM-08A (paddle)



OPEN/CLOSE SWITCH
10 amp durable white plastic retractable switch
1RPREM-10



WEATHERPROOF OPEN/CLOSE SWITCH

Made from steel the keyed switch is sprung to centre and cannot be operated without the security key

1RPREM-11 (keyed)
1RPREM-11A (paddle)



PANIC BUTTON
For use above or below smoke vent for emergency escape
1RPREM-11B



AUTO/MANUAL CONTROL SWITCH

To be used in conjunction with thermostat and/or rain sensor. Stainless steel face plate, designed to be used as a 2 position switch
1RPREM-07



THERMOSTAT
Industry standard 10° to 30°C range
1RPREM-04



WIND SPEED SENSOR
1RPREM-26



RAIN SENSOR
Robust and cost effective
1RPREM-15

BMS
External Connections (eg. alarm and ventilation systems)



Network in

Network out

230V Fused Spur

Volt free contact from fire alarm



Floor Doors

Engineered excellence for horizontal access!

EXTERIOR • INTERIOR • FIRE RATED

Bilco pit and floor doors are available in a wide range of sizes and configurations to meet virtually any floor access situation-exterior and interior in aluminium or steel. They range from small interior floor doors complete with insets for carpets and tiles to reinforced doors for areas of heavy traffic or high security. Customised designs are also available which can feature security options, motorised operation, a range of finishes and safety aids.



DRAINAGE DOORS

Constructed for use in exterior applications or in those situations where there is concern of water or other liquids entering the access opening. These doors are supplied with a threaded drain coupling fully welded to the channel frame for connection to a dry or wet well in the field.

NON-DRAINAGE DOORS

Generally for interior use or exterior applications where water or liquid infiltration is not a concern. Some models are designed to accept a wide variety of flooring materials, allowing them to blend into virtually any building environment.



FIRE DOORS

One and two hour fire rated doors with a choice of diamond pattern cover or 25mm pan for matching floor finishes.

Key Features and Benefits

Engineered lift assistance for smooth, easy door operation, regardless of cover size and weight

Automatic hold-open arm that locks the cover in the open position to ensure safe egress

Even the largest door weighing anything up to 500kg can be easily opened by one person thanks to Bilco's unique counterbalance spring system

Type 316 stainless steel slam lock to prevent unauthorized access

Constructed with corrosion resistant materials and hardware.

Typical Applications

Airports

Distribution Depots

Factories

Hospitals

Manufacturing Facilities

Office Buildings

Ports

Prisons

Retail Centres

Schools

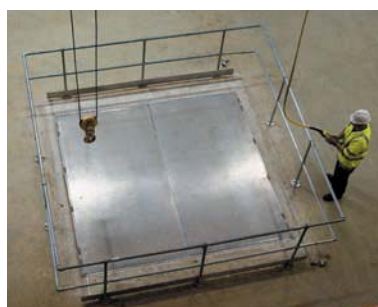
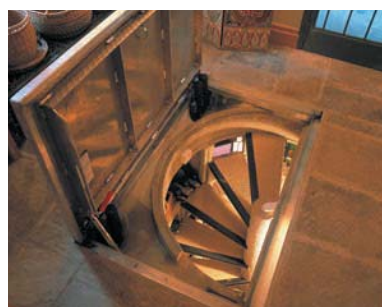
Sewage Treatment Works

Telecommunications Vaults

Utilities

Warehouses

Water/Waste Treatment Works



Type J-AL door shown



Type 316 Stainless steel slam lock

Cover does not protrude into the channel frame



Top-side Removable square key handle

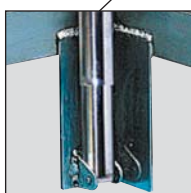


Structurally reinforced cover. Withstands a live load of 1464kg/m² or more



Automatically locks in the vertical/open position

Unique counter opposing spring system means that all Bilco doors meet Manual Handling Regulations



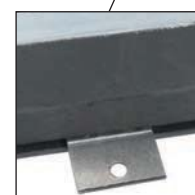
Lift assisted counter-balanced cover. Lifting mechanism comprises reinforced Type 316 stainless steel springs and tubes

All hardware corrosion resistant



Heavy-duty hinges and opening system protected from the elements

Continuous EPDM debris gasket



Versatile Anchor Tabs for added support



Top-side - Water drainage channel with drainage outlet



Underside - 38mm threaded drain coupling for pipe connection



6mm aluminium diamond plate cover





Drainage Doors

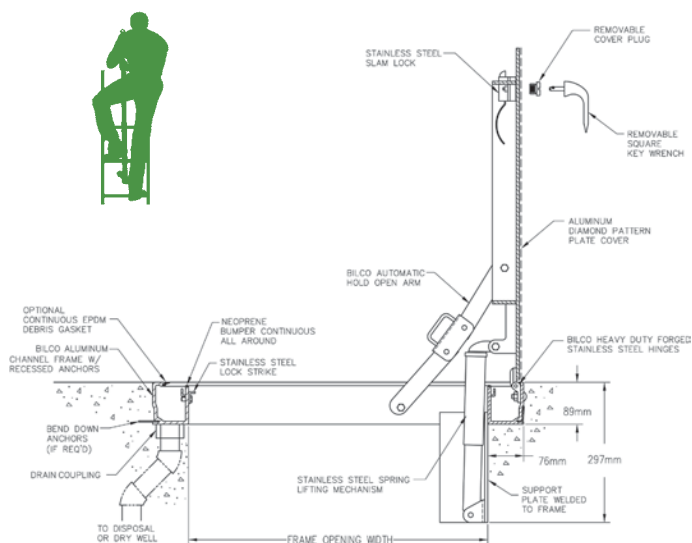
Type J-AL and JD-AL. Aluminium – Single or Double Leaf

Ideal for most corrosive environments. Single or double leaf covers are constructed of 6mm diamond pattern plate and reinforced for a 1464kg/m² live load. Features anti-corrosion hardware, standard debris gasket, and a versatile anchoring system for ease of installation.



J-AL and JD-AL

Type J-AL



SPECIFICATIONS

Material:	Cover and frame are 6.3mm aluminium.
Cover:	Diamond-pattern tread plate reinforced for 1464kg/m ² live load.
Frame:	Extruded aluminium channel frame with bent down anchor tabs around the perimeter. A 38mm drain coupling is welded under the frame for a pipe connection to a dry well or disposal system.
Gasket:	EPDM gasket mechanically attached to the frame reduces the amount of dirt and debris that may enter the channel frame.
Hinges:	Type 316 stainless steel hinges.
Latch:	Type 316 stainless steel slam lock with fixed interior handle and removable exterior turn/lift handle. Latch release is protected by a flush, gasketed, removable screw plug.
Lift Assistance:	Compression spring operators enclosed in telescopic tubes. Automatic hold-open.
Finish:	Mill finish aluminium with a bituminous coating applied to the exterior of the frame.
Hardware:	All hardware stainless steel.
Options:	See pages 40 and 41.

STANDARD SIZES and WEIGHTS

Type	Size – clear internal dimensions	Overall dimensions	Weight
J-1AL	610mm x 610mm	762mm x 762mm	30kg
J-2AL	760mm x 760mm	912mm x 912mm	40kg
J-3AL	915mm x 760mm (H)	1067mm x 912mm	44kg
J-4AL	915mm x 915mm	1067mm x 1067mm	49kg
J-5AL	1065mm x 1065mm	1217mm x 1217mm	61kg
JD-1AL	1220mm x 760mm (H)	1372mm x 912mm	66kg
JD-2AL	1220mm x 1220mm	1372mm x 1372mm	79kg
JD-3AL	1220mm x 1830mm (H)	1372mm x 1982mm	106kg
JD-4AL	1525mm x 1525mm	1677mm x 1677mm	109kg

(H) – Hinge Side

Models with "D" in the Model Type indicate double leaf configuration.

Features on all J/JD aluminium doors include



Debris Gasket



Adjustable Anchor Tabs

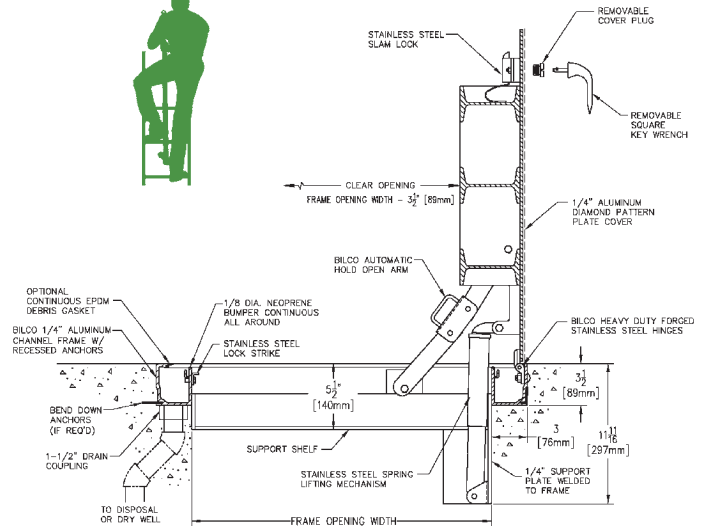


Drainage Doors



Type J-AL H20 and JD-AL H20. Aluminium – Single or Double Leaf

Designed to withstand vehicular traffic in off-street locations. Single or double leaf covers are constructed of 6mm diamond pattern plate and reinforced for AASHTO H-20 wheel loading (14,500kg. axle load). With all the same features as the Type J-AL, this door is also ideal for most corrosive environments.



SPECIFICATIONS

Material:	Cover and frame are 6.3mm aluminium.
Cover:	Diamond-pattern tread plate reinforced for H-20 wheel loading. Designed for installation in off-street locations where the door is not subjected to high density, fast moving traffic. Structural calculations available upon request.
Frame:	Extruded aluminium channel frame with bent down anchor tabs around the perimeter. A 38mm drain coupling is welded under the frame for a pipe connection to a dry well or disposal system.
Gasket:	EPDM gasket mechanically attached to the frame reduces the amount of dirt and debris that may enter the channel frame.
Hinges:	Type 316 stainless steel hinge pins.
Latch:	Type 316 stainless steel slam lock with fixed interior handle and removable exterior turn/lift handle. Latch release is protected by a flush, gasketed, removable screw plug.
Lift Assistance:	Compression spring operators enclosed in telescopic tubes. Automatic hold-open arm.
Finish:	Mill finish aluminium with a bituminous coating applied to the exterior of the frame.
Hardware:	All hardware stainless steel.
Options:	See pages 40 and 41.

STANDARD SIZES and WEIGHTS

Type	Size – clear internal dimensions	Overall dimensions	Weight
J-1AL H20	610mm x 610mm	762mm x 864mm	55kg
J-2AL H20	760mm x 760mm	912mm x 1014mm	64kg
J-3AL H20	915mm x 760mm (H)	1067mm x 1014mm	81kg
J-4AL H20	915mm x 915mm	1067mm x 1169mm	87kg
J-5AL H20	1065mm x 1065mm	1217mm x 1319mm	111kg
JD-1AL H20	1220mm x 760mm (H)	1372mm x 1014mm	91kg
JD-2AL H20	1220mm x 1220mm	1372mm x 1474mm	132kg
JD-3AL H20	1220mm x 1830mm (H)	1372mm x 2084mm	226kg
JD-4AL H20	1525mm x 1525mm	1677mm x 1779mm	207kg

(H) – Hinge Side

Models with "D" in the Model Type indicate double leaf configuration.

Features on all J/JD aluminium doors include



PERFORMANCE

Designed to withstand H-20 wheel loadings suitable for use in off-street locations where not subject to high density traffic.



Non-Drainage Doors

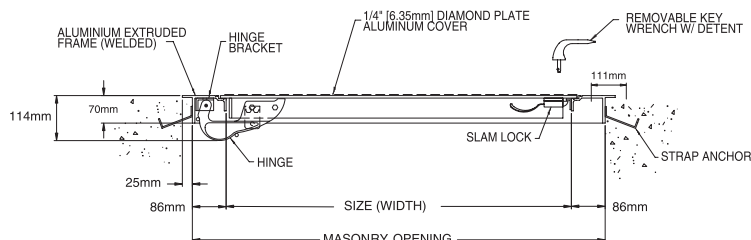


Type K and KD. Aluminium – Single or Double Leaf

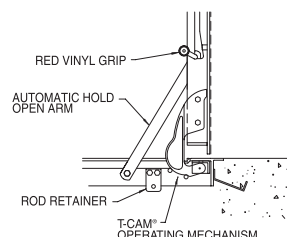
Single or double leaf covers are constructed of 6mm diamond pattern plate and reinforced for a 732kg/m² live load. Features zinc plated and chromate sealed hardware, concealed hinges, and the T-CAM® lifting system for ease of operation.



K and KD



SECTION SHOWING NEOPRENE CUSHION



SPECIFICATIONS

Material:	Cover and frame are 6mm aluminium.
Cover:	Diamond-pattern tread plate reinforced for 732kg/m ² live load.
Frame:	Extruded aluminium angle frame with strap anchors bolted around the perimeter.
Hinges:	Cast steel cam-action hinges that are concealed from the exterior of the door.
Latch:	Type 316 stainless steel slam lock with fixed interior handle and removable exterior turn/lift handle.
Lift Assistance:	Torsion bars that pivot on cam-action hinges. Automatic hold-open arm with grip handle release.
Finish:	Mill finish aluminium with a bituminous coating applied to the exterior of the frame.
Hardware:	Zinc plated/chromate sealed.
Options:	See pages 40 and 41.



STANDARD SIZES and WEIGHTS

Type	Size – clear internal dimensions	Overall dimensions	Weight
K-1	610mm x 610mm	832mm x 832mm	23kg
K-2	760mm x 760mm	982mm x 982mm	30kg
K-3	915mm x 760mm (H)	1137mm x 982mm	35kg
K-4	915mm x 915mm	1137mm x 1137mm	39kg
K-5	1065mm x 1065mm	1287mm x 1287mm	50kg
KD-2	1220mm x 1220mm	1442mm x 1442mm	69kg
KD-3	1220mm x 1830mm (H)	1442mm x 2052mm	97kg
KD-4	1525mm x 1525mm	1747mm x 1747mm	101kg

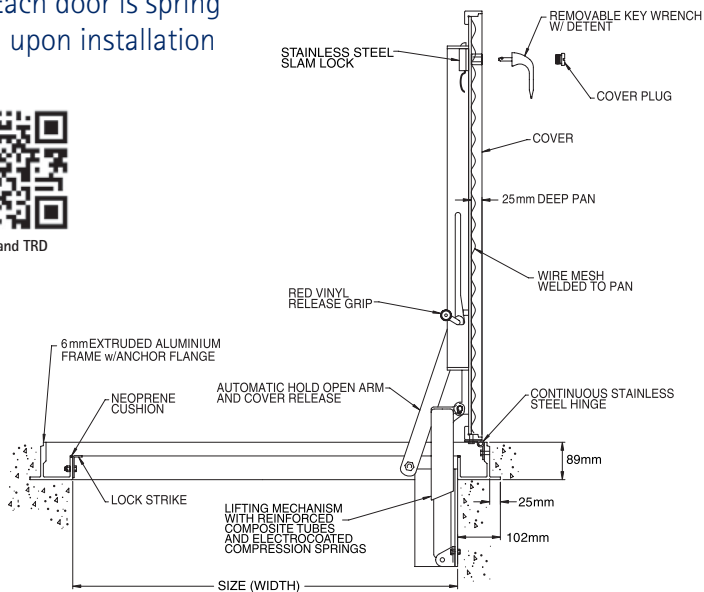
(H) – Hinge Side

Models with "D" in the Model Type indicate double leaf configuration.

Non-Drainage Doors

Type TER and TRD. Aluminium – Single or Double Leaf. Accepts Architectural Flooring Material

These single and double leaf doors are designed with a pan cover to accept a variety of flooring materials up to 25mm in thickness. Each door is spring balanced at the factory to ensure smooth, easy operation upon installation of the specified flooring material in the field.



SPECIFICATIONS

Material:	Cover and frame are 6mm aluminium.
Cover:	Smooth plate reinforced for 732kg/m ² live load. Cover designed with 25mm fillable pan for field installation of architectural flooring material (specify flooring material including type, thickness, and weight).
Frame:	Extruded aluminium frame with built in anchor flange around the perimeter.
Hinges:	Continuous heavy-duty Type 316 stainless steel hinge.
Latch:	Type 316 stainless steel slam lock with fixed interior handle and removable exterior turn/lift handle. Latch release is protected by a flush, gasketed, removable screw plug.
Lift Assistance:	Compression spring operators enclosed in telescopic tubes. Automatic hold-open arm with grip handle release.
Finish:	Mill finish aluminium with a bituminous coating applied to the exterior of the frame.
Hardware:	Engineered composite compression spring tubes. Springs shall be manufactured from steel and packaged in grease for corrosion resistance. Type 316 stainless steel hinges. All other hardware is zinc plated/chromate sealed.
Options:	See pages 40 and 41.

STANDARD SIZES and WEIGHTS

Type	Size – clear internal dimensions	Overall dimensions	Weight
TER-1	610mm x 610mm	814mm x 814mm	45kg
TER-2	760mm x 760mm	964mm x 964mm	50kg
TER-3	915mm x 760mm (H)	1119mm x 964mm	54kg
TER-4	915mm x 915mm	1119mm x 1119mm	59kg
TER-5	1065mm x 1065mm	1269mm x 1269mm	75kg
TRD-2	1220mm x 1220mm	1424mm x 1424mm	91kg
TRD-3	1220mm x 1830mm (H)	1424mm x 2034mm	125kg
TRD-4	1525mm x 1525mm	1729mm x 1729mm	129kg

(H) – Hinge Side

Models with "D" in the Model Type indicate double leaf configuration.

Note: Option available with drain coupling.





Fire Doors



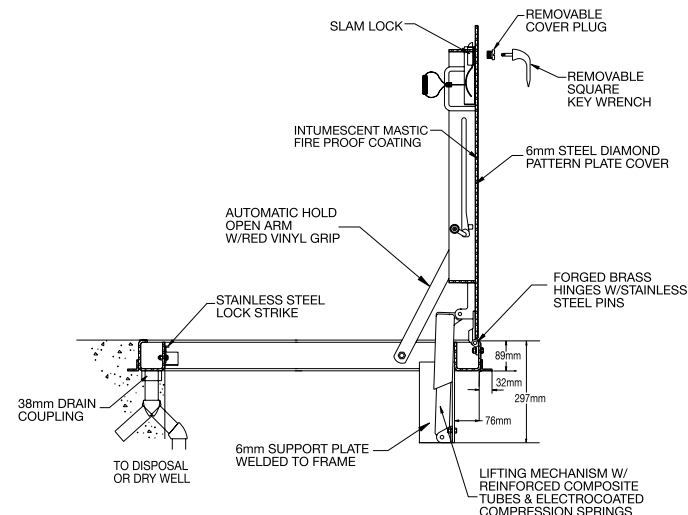
Type JFR. Steel – Single Leaf – One Hour Fire-Rated

Fire-rated floor doors allow you to specify convenient access through a fire-rated floor without jeopardizing fire code compliance. Doors contain flames and limit heat transmission between fire-rated floor/ceiling assemblies, and feature fire-proof coating, balanced cover operation, and are available with a specially designed closing mechanism to ensure the door closes automatically when a fire occurs.



JFR

Type JFR-2



SPECIFICATIONS

Material:	Cover and frame are 6mm steel.
Cover:	Diamond pattern plate reinforced for 1464kg/m ² live load. Note: special sizes are available, but certification only available with a maximum size of 1.14m ² . Intumescent fire coating applied to the underside of the cover.
Frame:	Formed channel frame with anchor angle welded around the perimeter. Intumescent fire coating applied on the interior surfaces of the frame.
Hinges:	Heavy forged brass hinges with 10mm Type 316 stainless steel hinge pins.
Latch:	Type 316 stainless steel slam lock with fixed interior handle and removable exterior turn/lift handle. Note: can be supplied with self-closing mechanism on sizes 762mm in width and greater when specified, see picture on page 27.
Lift Assistance:	Compression spring operators enclosed in telescopic tubes. Automatic hold-open arm with grip handle release. Compression spring operators enclosed in telescopic tubes. Mechanical hold-open system with release button automatically holds the cover in the open position.
Performance Ratings:	Tested in accordance with BS476: Part 22 and approved for a 1-hour fire rating when exposed to fire from the underside.
Finish:	Alkyd base red oxide primer.
Hardware:	Engineered composite compression spring tubes. Springs shall be manufactured from steel and packaged in grease for corrosion resistance. All other hardware is zinc/plated and chromate sealed.
Options:	See pages 40 and 41.



Diamond pattern cover

STANDARD SIZES and WEIGHTS

Type	Size – clear internal dimensions	Overall dimensions	Weight
JFR-1	610mm x 610mm	826mm x 826mm	99kg
JFR-2	760mm x 760mm	976mm x 976mm	132kg
JFR-3	915mm x 760mm (H)	1131mm x 976mm	158kg
JFR-4	915mm x 915mm	1131mm x 1131mm	176kg
JFR-5	1065mm x 1065mm	1281mm x 1281mm	236kg
JFR-6	760mm x 1220mm (H)	976mm x 1436mm	190kg
JFR-7	915mm x 1220mm (H)	1131mm x 1436mm	221kg
JFR-8*	760mm x 1525mm (H)	976mm x 1741mm	227kg
JFR-9*	915mm x 1525mm (H)	1131mm x 1741mm	265kg
JFR-10*	915mm x 1830mm (H)	1131mm x 2046mm	306kg

(H) – Hinge Side

*Models without BS476: Part 22 certification.

PERFORMANCE

BS476: Part 22 for integrity and insulation.
Certified by Chiltern Fire International.

Type FR. Aluminium – Single Leaf – Two Hour Fire-Rated

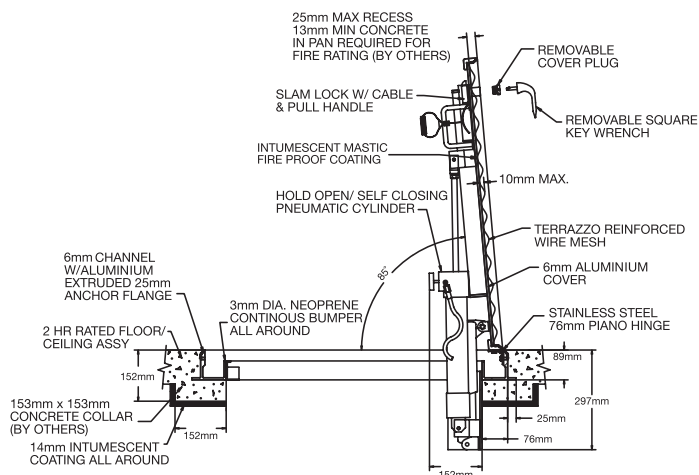
Maintains the fire rating of a 2-hour floor/ceiling assembly where access is required between building floors. Features include an optional UL Listed automatic closing system, intumescent fire resistant coating, and a pan cover designed to accept architectural flooring materials.



FR



Type FR-2



Material:	Cover and frame are 6mm aluminium.
Cover:	Aluminium plate reinforced for 732kg/m ² live load. Intumescent fire coating applied to the underside of the cover. Designed with 25mm fillable pan for field installation of architectural flooring material up to 13mm thickness (specify flooring material including type, thickness, and weight). The remaining depth must be filled with concrete to maintain the fire rating of the door assembly (if finish flooring is not desired, the pan must be filled with 25mm of concrete).
Frame:	Extruded aluminium frame with built in anchor flange around the perimeter. Intumescent fire coating applied on the interior surfaces of the frame.
Hinges:	Continuous heavy-duty Type 316 stainless steel hinge.
Latch:	Pneumatic self closing system that automatically closes the door in the event of a fire when heat parts a UL-listed 74°C fusible link.
Lift	Compression spring operators enclosed in telescopic tubes.
Assistance:	Mechanical hold-open system with release button automatically holds the cover in the open position.
Performance Ratings:	Tested in accordance with BS476: Part 22, and UL-listed (file R15197) as having a 2-hour fire rating when exposed to fire from the underside.
Finish:	Mill finish aluminium with a bituminous coating applied to the exterior of the frame.
Hardware:	Engineered composite compression spring tubes. Springs shall be manufactured from steel and packaged in grease for corrosion resistance. Type 316 stainless steel hinges. All other hardware is zinc plated/chromate sealed.
Options:	See pages 40 and 41.



Top side - ready to accept floor finish

New self-closing mechanism

- Simplified design takes up less frame area
- Requires lower maintenance
- More cost effective
- UL Listed

STANDARD SIZES and WEIGHTS

Type	Size – clear internal dimensions	Overall dimensions	Weight
FR-2	740mm x 600mm (H)	962mm x 962mm	123kg
FR-3	890mm x 600mm (H)	1117mm x 962mm	126kg
FR-4	890mm x 750mm (H)	1117mm x 1117mm	148kg
FR-5	1015mm x 910mm (H)	1267mm x 1267mm	167kg
FR-6	735mm x 1060mm (H)	962mm x 1422mm	149kg

(H) - Hinge Side

Available without self-closing mechanism suffix LC.

PERFORMANCE

BS476: Part 22 for integrity and insulation.
Certified by Chiltern Fire International.



Safety Products

Ideal for safer access and a safer working environment

LadderUp® Safety Post

LadderUp® Safety Posts provide easier, safer ladder access through roof hatches, floor doors, and manholes. This telescopic post permanently mounts to the top two rungs of any fixed ladder, providing a positive hand-hold and enabling the user to enter or exit an opening in an upright and balanced position. Available in four different finishes.



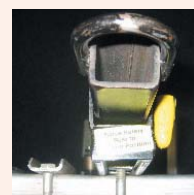
Adjustable mounting



Automatically locks off



Telescopic design



Handy release lever

SPECIFICATIONS

Install on fixed ladder(s) below hatch cover(s), LadderUp® safety post Model as manufactured by The Bilco Company. Device shall be (refer to chart for material/finish* of model specified). It shall be designed with a telescoping tubular section that locks automatically when fully extended. Upward and downward movement shall be controlled by a stainless steel spring balancing mechanism. Unit shall be completely assembled with fasteners for securing to the ladder rungs in accordance with the manufacturer's instructions.

*If installation is to be in corrosive atmosphere, specify Model LU-2, LU-3 or LU-4 as conditions warrant.

STANDARD SIZES and WEIGHTS

Type	Description	Weight
LU-1 BLK	Steel/black enamel	11 kg
LU-2	Steel hot dip galv	11 kg
LU-3	Stainless type 304	11 kg
LU-4	Aluminium mill finish	7 kg

KEY FEATURES and BENEFITS

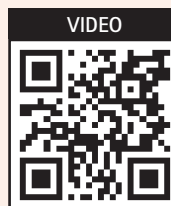
Telescopic design is spring balanced for ease of operation

Adjustable mounting hardware accommodates virtually any ladder rung size or spacing

Automatically locks in the fully raised position to provide the user with a firm and steady hand-hold

Handy release lever allows the post to be easily lowered to its retracted position

Available in four levels of corrosion resistance to provide many years of trouble free, dependable service.



VIDEO

Fall Protection

Bilco's fall protection grating system has been redesigned to offer the same level of protection at a much lower price. New features include a standard powder coat paint finish and a unique pintle hinge design that allows the grating to open to the full 90 degree position, maximizing the area available for access.



The Fall Protection Grating System permanently mounts under access door covers and is available as a factory installed option on the following Bilco models:

- Type J, JD, J-AL, JD-AL-300 PSF (1464 kg/m²) and H20 reinforced Doors
- Available on all standard sizes
- Available for special sizes (contact Bilco for more information)

Retrofit kits are also available for field installation (for door models noted above)

SPECIFICATIONS

Grating panel(s) shall be aluminum with a powder coat paint finish that is safety yellow in colour. Panel shall be designed to meet the requirements of OSHA standard 29 CFR 1910.23 and be equipped with a hold open device to lock the grating panel(s) in the open position. Hold open device and all hardware shall be Type 316 stainless steel. Manufacturer shall provide a twenty-five year warranty against defects in material and workmanship.

KEY FEATURES and BENEFITS

Provides a permanent means of fall protection under access doors

Aluminum grating features a safety-yellow powder coat paint finish for added visibility

Equipped with a stainless steel automatic hold-open device that securely locks the panel in the full open position

Stainless steel hardware for corrosion resistance

Grating panel is supplied with a padlock hasp for added security

Backed by a 25-Year manufacturer's warranty

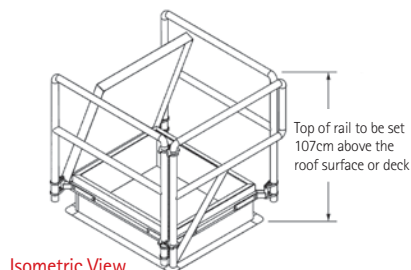
Tel: 01284 701696 for technical details and drawings: www.bilcouk.com

Bil-Guard® Hatch Rail System

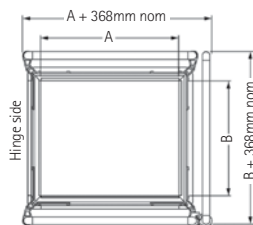


Bil-Guard® is a fixed railing system that provides a permanent means of fall protection for hatch and smoke vent openings. It can also help provide continuous protection especially where mansafe systems have been installed on the roof area.

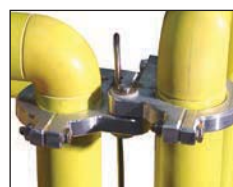
Bil-Guard® features an innovative attachment system that does not penetrate the roofing membrane and on standard hatches pre-drilled holes in the capflashing accept the mounting brackets. Bil-Guard® can be installed quickly and easily using basic tools.



Isometric View
Type RL-S shown on Type S roof hatch



Plan View
Shown without hatch cover
A = hatch opening width
B = hatch opening length



Self-closing gate hinge ensures continuous protection



Pivoting mounting sleeve for installation flexibility



Quick-mount bracket for fast, secure attachment



SPECIFICATIONS

Posts and rails are pultruded from a fire retardant, fibreglass-reinforced polymer (FRP). FRP material has a moulded-in, high visibility, safety yellow colour and is treated with a UV inhibitor. Mounting brackets are fabricated from 6mm thick hot dip galvanized steel. Gate hinges and post guides are constructed of 6063-T5 aluminium and torsion rod is Type 302 stainless steel. All fasteners are Type 316 stainless steel.

Manufacturer shall provide a 25-year warranty against defects in material and workmanship.

STANDARD SIZES and WEIGHTS

Type	Size – clear internal dimensions	Overall dimensions	Weight	Hatch type
RL-S	915mm x 760mm (H)	1285mm x 1130mm	24 kg	S
RL-E	915mm x 915mm	1285mm x 1285mm	24 kg	E
RL-F	1220mm x 1220mm	1590mm x 1590mm	28 kg	F
RL-NB	760mm (H) x 1370mm	1130mm x 1815mm	28 kg	NB
RL-L	760mm (H) x 2440mm	1130mm x 2885mm	35 kg	L
RL-SSY	760mm (H) x 3360mm	988mm x 3588mm	158kg	SSY

(H) – Hinge Side

Special sizes can also be manufactured.

KEY FEATURES and BENEFITS

Corrosion resistant - 25-year warranty
High visibility safety yellow colour
Non-penetrating attachment
Pivoting mounting sleeve for installation flexibility
Standard self-closing and latching gate feature
Available in a variety of sizes
Fits all Bilco roof hatches
Easily installed on new or existing hatches and smoke vents

NOTE – Copies of Taylor Woodrow Developments test reports for S-50T product available on request.



Ladder Products

Ladder access solutions for all your requirements

As a leading manufacturer and supplier of roof access hatches, Bilco UK have now introduced a range of ladders which provide suitable access solutions for most situations. With access hatches being used increasingly frequently to allow safe and regular access to roofs to carry out inspection, maintenance and repairs, and also to allow for a means of escape to/from a roof area, the need for safe and suitable ladders was obvious to Bilco.

The range of ladders available include fixed vertical ladders manufactured in either aluminium or galvanized steel which are ideal for personnel access and these can be provided with a safety cage and also a guardrail if required to meet the relevant British Standards. All of our fixed vertical ladders are manufactured to comply with BS 4211:2005 and A1 2008 and offer a much safer alternative to using movable ladders for access through a roof hatch.

We also offer a companionway ladder (ships stair) which provides a more robust solution when used with our larger hatches (e.g. the NB-50T) and is intended for use in applications where more regular access is required. As with the fixed vertical ladders, the companionway ladder is manufactured to comply with the relevant British Standard (BS 5395: Part 3) and is available in either aluminium or mild steel.

For internal use where space/security may be an issue, we also have a retractable ladder manufactured from die-cast aluminium alloy. This is also available with a laminated wood trapdoor and lining with the option of having a fire rated steel lining and trap to either F30 or F90. The BLZ ladder is an ideal solution for occasions when access is required where floor space is at a premium and the ladder can be folded up into a roof space under the hatch. The BLZ has a number of options available including operation from above and also an electrical operation if this should be required.



Key Features and Benefits

Fixed vertical ladder available in either aluminium or galvanized steel

Complies with BS 4211:2005 + A1 2008

BL-Z and BL-ZBOX manufactured from die-cast aluminium alloy

Manufactured to EN-14975 (DN 4570)

Special sizes available on request

A range of optional extras are available for all ladders.

Typical Applications

Fixed vertical ladders for use in personnel access situations with roof access hatches (S-50T, E-50T, GS-50T)

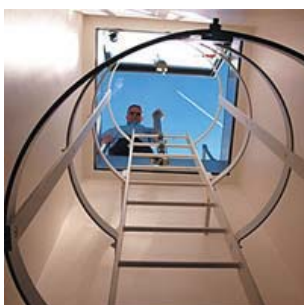
Fixed vertical ladders for exterior or interior use for roof access

Companionway ladder for more frequent access requirements using a larger access hatch (e.g. NB-50T) or where

tools/small plant may have to be taken onto a roof to carry out maintenance

Retractable ladder for use in areas where the floor space must be kept clear in normal circumstances

Used in a variety of situations including schools, hospitals etc. to provide a secondary means of escape or access in the event of fire.



BL



BL-WH



BL-WG



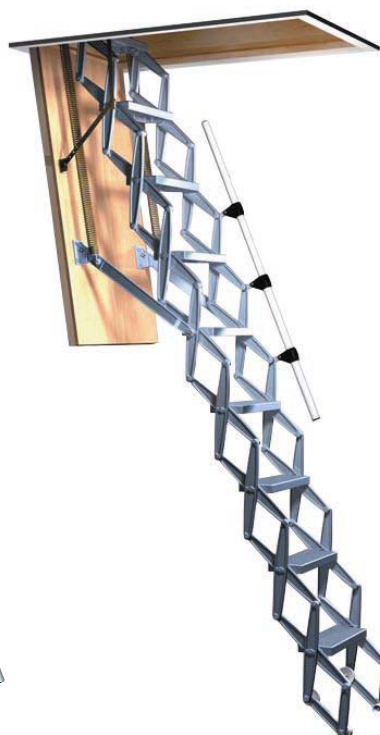
BL-COMP



BL-Z



BL-Z BOX





Fixed Vertical Ladder

Type BL. Without Safety Cage.
To BS 4211:2005 + A1 2008



BL

SPECIFICATIONS - ALUMINIUM

Ladder: Alloy Class 1 Stiles : 73 x 25mm
Class 1 heavy duty rung
Stand off brackets from 50 x 10mm alloy bar
Fixings in stainless steel

Ladder Width: 488mm

Finish: All alloy mill finish

Options: LadderUp® Safety Post

ALUMINIUM VERTICAL LADDER

Type	Size	Approx. Weights
BL-A-1	2.0 -2.8m	12-14kg
BL-A-2	Above 2.8 - 3.6m	14-18kg
BL-A-3	Above 3.6 - 4.4m	18-22kg
BL-A-4	Above 4.4 - 5.2m	22-26kg
BL-A-5	Above 5.2 - 6.0m	26-30kg
BL-A-SS	Special sizes available on request	

SPECIFICATIONS - MILD STEEL

Ladder: Mild Steel
Stand off brackets from 50mm x 10mm flat bar

Stiles: 50mm x 10mm flat bar

Rung: 20mm round bar

Ladder Width: 488mm

Finish: Galvanised

Options: LadderUp® Safety Post

MILD STEEL VERTICAL LADDER

Type	Size	Approx. Weights
BL-S-1	2.0 -2.8m	35-41kg
BL-S-2	Above 2.8 - 3.6m	41-53kg
BL-S-3	Above 3.6 - 4.4m	53-65kg
BL-S-4	Above 4.4 - 5.2m	65-76kg
BL-S-5	Above 5.2 - 6.0m	76-88kg
BL-S-SS	Special sizes available on request	

Don't forget
your LadderUp®
Safety Post



Tel: 01284 701696 for technical details and drawings: www.bilcouk.com

Fixed Vertical Ladder

Type BL-WH. With Safety Cage.

To BS 4211:2005 + A1 2008



BL-WH



SPECIFICATIONS – ALUMINIUM

Ladder: Alloy Class 1 Stiles:
73 x 25mm box section
Class 1 heavy duty rung
Stand off brackets from 50 x 10mm alloy bar
Fixings in stainless steel
Guardrail Height: 1100mm

Ladder Width: 488mm

Finish: All alloy mill finish

Safety Cage: Cages above 2200-3000mm

Strap: 50 x 10mm alloy bar
5 x straps as BS4211: 2005 + A1 2008

Fixings: Dome head bolts

Finish: All alloy mill finish

Options: LadderUp® Safety Post

ALUMINIUM VERTICAL LADDER with SAFETY CAGE

Type	Size	Approx Weights
BL-A-WH1	2.0 -2.8m	15-18kg
BL-A-WH2	Above 2.8 - 3.6m	18-20kg
BL-A-WH3	Above 3.6 - 4.4m	20-26kg
BL-A-WH4	Above 4.4 - 5.2m	26-32kg
BL-A-WH5	Above 5.2 - 6.0m	32-37kg
BL-A-WHSS	Special sizes available on request	

SPECIFICATIONS – MILD STEEL

Ladder: Mild Steel
Stand off brackets from
50mm x 10mm bar
Guardrail Height: 1100mm

Stiles: 50mm x 10mm flat bar

Rung: 20mm round bar

Ladder Width: 488mm

Finish: Galvanised

Safety Cage: Cages above 2200-3000mm

Strap: 50mm x 10mm flat bar
5 x straps as BS4211: 2005 + A1 2008

Fixings: Dome head bolts

Finish: Galvanised

Options: LadderUp® Safety Post

MILD STEEL VERTICAL LADDER with SAFETY CAGE

Type	Size	Approx Weights
BL-S-WH1	2.0 -2.8m	45-53kg
BL-S-WH2	Above 2.8 - 3.6m	53-60kg
BL-S-WH3	Above 3.6 - 4.4m	60-77kg
BL-S-WH4	Above 4.4 - 5.2m	77-94kg
BL-S-WH5	Above 5.2 - 6.0m	94-111kg
BL-S-WHSS	Special sizes available on request	





Fixed Vertical Ladder

Type BL-WG. With Safety Cage and Guardrail.
To BS 4211:2005 + A1 2008



BL-WG

SPECIFICATIONS - ALUMINIUM

Ladder:	Alloy Class 1 Stiles: 73 x 25mm box section Class 1 Heavy Duty Rung Stand off brackets from 50 x 10mm alloy bar Fixings in stainless steel Guardrail height: 1100mm
Ladder Width:	488mm
Finish:	All alloy mill finish
Safety Cage:	Cages above 2200-3000mm
Strap:	50 x 10mm alloy bar 5 x straps as BS4211: 2005 + A1 2008
Fixings:	Dome head bolts
Finish:	All alloy mill finish
Options:	LadderUp® Safety Post

In order to meet the recommendations of BS4211:2005 + A1 2008 where a ladder breaks existing handrail a self-closing gate should be fitted

ALUMINIUM VERTICAL LADDER with SAFETY CAGE and GUARDRAIL

Type	Size	Approx Weights
BL-A-WG1	2.0 -2.8m	36-38kg
BL-A-WG2	Above 2.8 - 3.6m	38-40kg
BL-A-WG3	Above 3.6 - 4.4m	40-46kg
BL-A-WG4	Above 4.4 - 5.2m	46-51kg
BL-A-WG5	Above 5.2 - 6.0m	51-57kg
BL-A-WG-SS	Special sizes available on request	

SPECIFICATIONS - MILD STEEL

Ladder:	Mild Steel Stand off brackets from 50mm x 10mm bar Guardrail Height: 1100mm
Stiles:	50mm x 10mm flat bar
Rung:	20mm solid bar
Ladder Width:	488mm
Finish:	Galvanised
Safety Cage:	Cages above 2200-3000mm
Strap:	50mm x 10mm flat bar 5 x straps as BS4211: 2005 + A1 2008
Fixings:	Dome head bolts
Finish:	Galvanised

In order to meet the recommendations of BS4211:2005 + A1 2008 where a ladder breaks existing handrail a self-closing gate should be fitted

MILD STEEL VERTICAL LADDER with SAFETY CAGE and GUARDRAIL

Type	Size	Approx Weights
BL-S-WG1	2.0 -2.8m	105-112kg
BL-S-WG2	Above 2.8 - 3.6m	112-119kg
BL-S-WG3	Above 3.6 - 4.4m	119-136kg
BL-S-WG4	Above 4.4 - 5.2m	136-153kg
BL-S-WG5	Above 5.2 - 6.0m	153-170kg
BL-S-WGSS	Special sizes available on request	



Companionway Ladder

Type BL-COMP. Complying with the recommendations of BS 5395: Part 3



BL-COMP



SPECIFICATIONS – ALUMINIUM

Stiles: Aluminium

Punched aluminium treads

Brackets from 50 x 10mm alloy bar

Fixings in stainless steel

All alloy in mill finish

Grabrail height: 300mm (nom)

Overall ladder width: 600mm

Ladder angle: 75 degree (nom)

ALUMINIUM COMPANIONWAY LADDER

Type	Size	Approx Weights
BL-COMPA1	Up to 1.5m	Up to 32kg
BL-COMPA2	Above 1.5 - 2.0m	32 - 37kg
BL-COMPA3	Above 2.0 - 2.5m	37 - 41kg
BL-COMPA4	Above 2.5 - 3.0m	41 - 46kg
BL-COMPAS	Special sizes available on request	

SPECIFICATIONS – MILD STEEL

Stiles: Mild steel

Punched mild steel treads

Brackets from 50 x 10mm flat bar

Fixings in stainless steel

Finish: Galvanised

Grabrail height: 300mm (nom)

Overall ladder width: 600mm

Ladder angle: 75 degree (nom)

MILD STEEL COMPANIONWAY LADDER

Type	Size	Approx Weights
BL-COMPS1	Up to 1.5m	Up to 88kg
BL-COMPS2	Above 1.5 - 2.0m	88 - 101kg
BL-COMPS3	Above 2.0 - 2.5m	101 - 114kg
BL-COMPS4	Above 2.5 - 3.0m	114 - 128kg
BL-COMPSS	Special sizes available on request	



Companionway Ladder

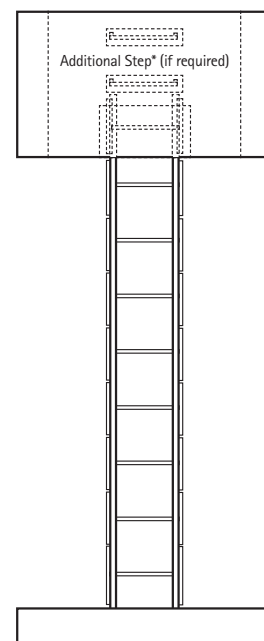
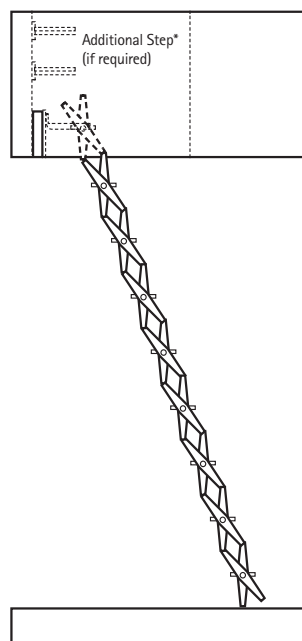


Retractable Ladder

Type BL-Z Retractable Ladder



BL-Z



SPECIFICATIONS

References:	The BL-Z model is manufactured to EN 14975 (DN 4570).
Materials:	The ladders are manufactured from die-cast aluminium alloy. The backboards are made from 18mm block wood.
Load Bearing:	200 kg per tread – overall unit 500kg/m².
Tread Size:	BL-Z-1, 2 & 3 – tread sizes 350 x 140mm. BL-Z-4 – tread sizes 300 x 140mm. Alternative size treads available – contact office. Please note that where 250 mm wide treads are required these do not comply with EN 14975 (DN 4570).

Tread Rise:	Subject to the floor to ceiling height the usual tread rise will be between 277mm to 280mm.
Lift Mechanism:	Two heavy duty counter-balanced springs incorporated into pivot brackets.
Note:	The mounting backboard width of the stairway is 580mm. This should be attached to a structural support, not the internal face of the hatch.
Options:	Telescopic handrail (Please note that this requires a minimum ceiling opening length of 915mm). Grabrail. *Additional Step (if required).

SIZES

Type	Floor to Ceiling Height	No of Treads	Minimum Hatch Length
BL-Z-1	Up to 2500mm	9	620mm
BL-Z-2	2501-2790mm	10	670mm
BL-Z-3	2791-3090mm	11	750mm
BL-Z-4	3091-3390mm	12	870mm



VIDEO

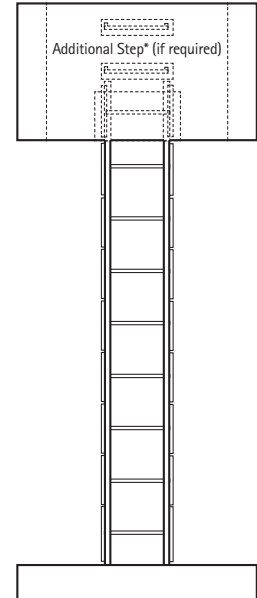
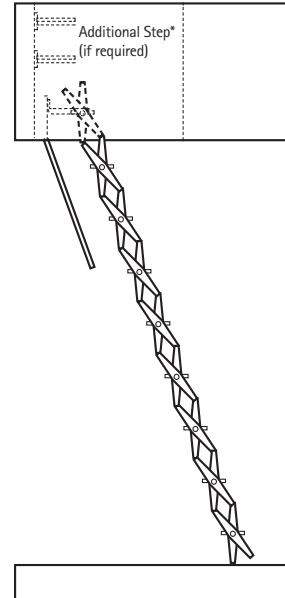


Retractable Ladder

Type BL-Z BOX Retractable Ladder
With laminated wood trapdoor and lining



BL-Z BOX



SPECIFICATIONS

References:	The BL-ZBOX model is manufactured to EN 14975 (DN 4570)
Materials:	The ladders are manufactured from die-cast aluminium alloy. The lining and trapdoor are manufactured from 18mm thick laminated wood (see options for fire rated box construction). Insulation – not insulated as standard – (see options)
Depth of Lining:	500mm (from underside of hatch to bottom of closed trapdoor). Load bearing: 200kg per tread – overall unit 500kg/m ²
Tread Size:	200/250/300/350/380/430/530/580mm wide (the 200 – 380mm wide are 140mm deep and the 430 – 580mm are 160mm)
Tread Rise:	Subject to the floor to ceiling height the usual tread rise will be between 277mm to 280mm
Lift Mechanism:	Two heavy duty counter-balanced springs incorporated into pivot brackets.

Options:

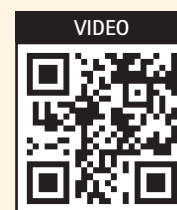
- Telescopic handrail (Please note that this requires minimum ceiling opening length of 915mm)
- Insulated trapdoor and lining – 63mm thick
- Lining depth up to 860mm deep
- Operation from above – cable/ring pull operation
- Electrically operated trapdoor and stair
- Protective varnish coating for trap door and lining
- Grabrail
- *Additional Step (if required)

Fire Rated Options:

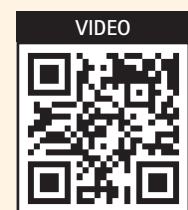
- F30 – steel lining and trap door
- F90 – steel lining and trap door
- 1.5mm thick steel hatchbox with a steel trapdoor. The trapdoor is made from 2 layers of 1.5mm thick sheet steel infilled with 38mm of mineral wool to give a 30 minute fire resistance or 75mm of mineral wool to give a 90 minute fire resistance. There is a 29mm wide lip to the bottom of the lining around the external edge, which is designed to butt up against the ceiling to help prevent flame and smoke ingress. Similarly, there is also a lip to the bottom of the steel trapdoor, which extends to within 15mm of the lip on the lining

SIZES

Type	Floor to Ceiling Height	No of Treads	Minimum Hatch Length
BL-ZBOX-1	Up to 2500mm	9	750mm
BL-ZBOX-2	2501-2790mm	10	800mm
BL-ZBOX-3	2791-3090mm	11	900mm
BL-ZBOX-4	3091-3390mm	12	1000mm
BL-ZBOX-5	3391-3690mm	13	1300mm
BL-ZBOX-SS	Special sizes available on request		



BL-Z BOX



BL-Z BOX WITH ELECTRICALLY OPERATED TRAPDOOR



Ladder Options

RETRACTABLE LADDERS

- Telescopic handrail (Please note that this requires minimum ceiling opening length of 915mm)
- Insulated trapdoor and lining – 63mm thick
- Lining depth up to 860mm deep
- Operation from above – cable/ring pull operation
- Electrically operated trapdoor and stair
- Protective varnish coating for trap door and lining
- Grabrail
- Additional step (if required).

FIXED VERTICAL LADDERS

LadderUp® Safety Post

LadderUp® Safety Posts provide easier, safer ladder access through roof hatches, floor doors, and manholes. This telescopic post permanently mounts to the top two rungs of any fixed ladder, providing a positive hand-hold and enabling the user to enter or exit an opening in an upright and balanced position. Available in four different finishes.

KEY FEATURES and BENEFITS

- Telescopic design is spring balanced for ease of operation
- Adjustable mounting hardware accommodates virtually any ladder rung size or spacing
- Automatically locks in the fully raised position to provide the user with a firm and steady hand-hold
- Handy release lever allows the post to be easily lowered to its retracted position
- Available in four levels of corrosion resistance to provide many years of trouble free, dependable service.

STANDARD SIZES and WEIGHTS

Type	Description	Weight
LU-1 BLK	Steel/black enamel	11 kg
LU-2	Steel hot dip galv	11 kg
LU-3	Stainless type 304	11 kg
LU-4	Aluminium mill finish	7 kg



LadderUp® (LU) with access hatch and fixed vertical ladder

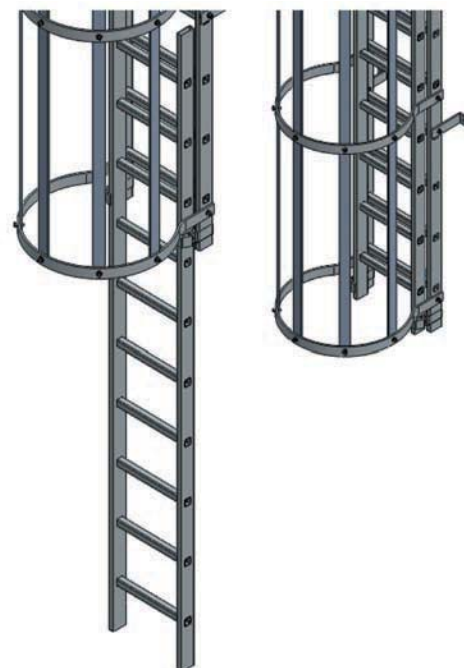
Retractable Section – Fixed Vertical Ladders

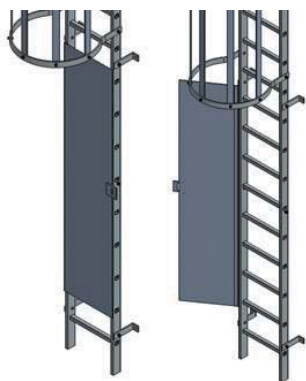
Lower 2.5m (nom) of ladder can be pushed up and will automatically hook into place. Operation can be via a pole or rope and pulley operation.

Retractable Ladder is **ONLY** available on aluminium ladders.

LADDER SPECIFICATIONS

- Alloy Class 1 Stiles
- Class 1 Heavy Duty Rung
- Stand off brackets from 50 x 10mm alloy bar
- Fixings in stainless steel A4 grade
- All alloy in mill finish.

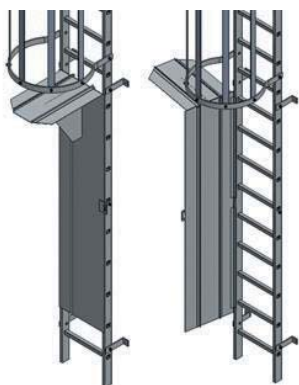




SECURITY GATE OPTIONS

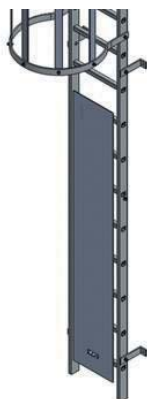
Hinged Gate Type 1

Aluminium 4.5mm plate gate complete with stainless steel hinge. Gate supplied with facility for padlock (padlock not included).



Hinged Gate Type 2

Aluminium 4.5mm plate gate complete with stainless steel hinge and aluminium plate blocking off access to the hoop section. Gate supplied with facility for padlock (padlock not included).



Hook-on Gate

Aluminium 4.5mm plate complete with hooks and removable hasp piece. Please note this gate is a hook-on panel, no hinge is included or required. Gate supplied with facility for padlock (padlock not included).



Magnetic Locking Gate

Available as an option for hinged gate types 1 or 2, gate can be fitted with a magnetic lock to allow operation from above or below, all equipment to allow gate to be unlocked from above or below is supplied, excluded is any wiring required to integrate with the existing electrical supply.

CURB OPTIONS

Curb Liner

Metal insulation liner of the same materials as the curb and capflashing. Ideal for applications where aggressive adhesives or torch applied weather proofing systems are being used.

Fully Enclosed Curb

Insulation liner of the same materials as the curb, which replaces the capflashing. Used with hot applied systems or where the hatch is welded directly to the roofing panel.

Flanged Apron Design

A 'top-hat' design which makes installation very easy and virtually eliminates the problems of water proofing on the roof. Ideal for situations where the roofing material is applied prior to the hatch or vent arriving on-site.

Built-in Louvers

Useful for reducing condensation in buildings or for air displacement in lift shafts.

POWERED ACCESS OPTION – Single leaf

Control kit for powered access hatch (RPREM-D24).

POWERED ACCESS OPTION – Double leaf

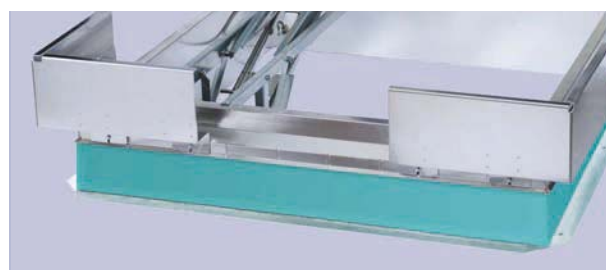
Control kit for powered access hatch.

Control panel with two synchronising units (RPREM-22).

WIND DEFLECTORS

Wind deflector for ESW-50REM (WD1).

Wind deflector for UDF-50REM (WD2).



PAINT FINISHES

Common options include polyester powder coating, anodizing aluminium as well as Tnemec® finishes. Stock items can be polyester powder coated to any standard RAL or BS colour within 2-3 weeks.

SECURITY OPTIONS

Keyed Cylinder Locks

Provide keyed exterior access and are available with either keyed or turn knob interior access. Ideal security enhancement for many applications. For added security and weathertightness, the lock cylinder is accessed from the exterior through a gasketed, threaded deck plate.

Detention Locks

Provide keyed interior and exterior access and are ideal for prisons and other buildings requiring a maximum level of security. For added security and weathertightness, the lock is accessed from the exterior through a gasketed, threaded deckplate. Bilco roof hatches can be prepared for field installation of many leading lock brands.

Emergency Egress

Bilco roof hatches can be supplied with a panic latch for rapid egress in an emergency situation. Available with keyed exterior access.

EXPLOSION RELIEF SMOKE VENTS

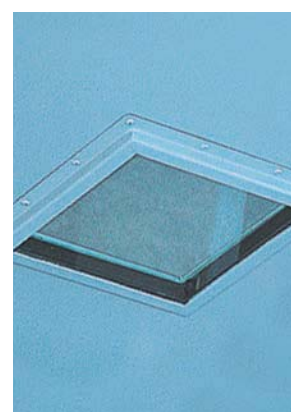
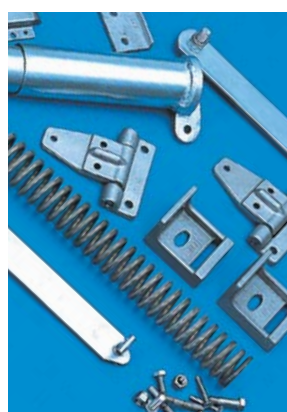
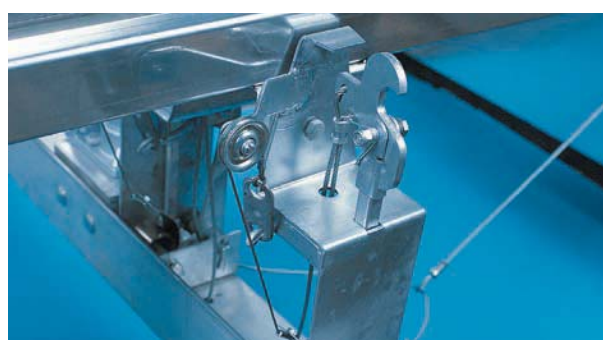
Bilco automatic smoke vents may also be equipped to operate as explosion vents or as combination fire/explosion vents. The explosion release mechanism is preset and factory-tested to release at between 122kg/m² and 146kg/m² of pressure on the underside of the covers.

STAINLESS STEEL HARDWARE

Installation in highly corrosive environments, Type 316 stainless steel hardware, including slam latch and lifting mechanism assemblies; hold-open arms and guides; all brackets, hinges, pins, and fasteners are standard on J-AL, JD-AL, J-ALH20 and JD-ALH20.

SECURITY GLAZING

Allows personnel to visibly scan a secure area before entering or exiting a roof area. Glazing is available in ballistic ratings.





Floor Door Options

Bilco floor doors can include any of the modifications shown below

STAINLESS STEEL

In highly corrosive environments or where there is prolonged exposure to hot water or steam all steel and aluminium doors are available with Type 316 stainless steel hardware. Included are all parts of the latch and lifting mechanism assemblies; hold-open and guide arm and guides; and all brackets, hinges, pins and fasteners.

Note: Standard on J-AL, JD-AL, JAL-H20, JD-ALH20.

PAINT FINISHES

All aluminium doors can be supplied with an anodized finish. Other custom finishes are available when specified.

LOCKS and LATCHES

Four standard lock options are available to add security and prevent unauthorized access. Additional lock options include padlock lugs welded to the exterior door surface, high security detention locks and magnetic locks are available on request.

OTHER OPTIONS

Handrails

Steel or aluminium grating

Slip resistant coatings

Submersible pump guide rail brackets

Metal enclosed insulation

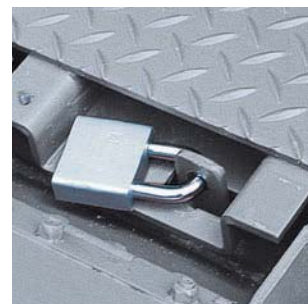
Drop-in installation modifications

Snow and ice melting cables

Electric motor operation.



Cylinder lock with a keyway protected by a threaded cover plug



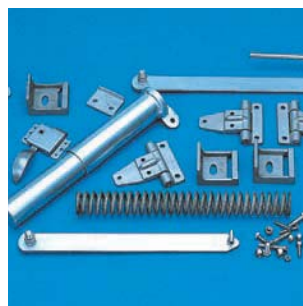
Recessed padlock hasp covered by a flush hinged lid



Security cover McGuard plugs



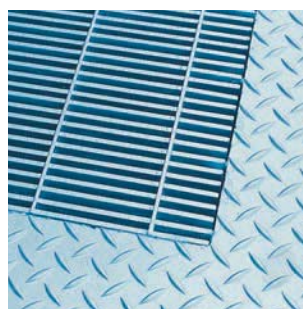
Panic lock



Stainless steel hardware



Special finishes



Grating panel covers



Handrails

Floor Access Covers

Also available from Bilco...

Bilco floor access covers are designed to provide convenient, direct access to underground areas. The covers are designed to accept a wide variety of floor materials allowing them to go virtually unnoticed in the surrounding floor. Covers are designed to be easily removed or operated and are available with reinforcing to satisfy nearly any loading requirement. Common applications include airports, underground railways, warehouses, hospitals, retail outlets and general commercial interior building applications.

Key Features and Benefits

Pans available in four depths: 27mm, 50mm, 66mm and 102mm to accept brick, concrete, tile, paviers, carpeting and more

Models are available with reinforcing for pedestrian, 125kN, 250kN and 400kN loading conditions per EN 124 regulations

Covers are precision manufactured and feature a full EPDM seal that is capable of withstanding up to a 1000mm head of water

Tapered cover design facilitates easy opening and secure closing, allowing the covers to be virtually undetectable when installed

Lift-off models feature the Golden Key Lift-off system. System breaks the cover seal allowing it to be easily removed from the frame

Models are available in 2mm, cold-formed, hot-dip galvanised steel, grade 304 stainless steel or aluminium construction

Manufactured to meet EN 22768-1 tolerance standard for length and corner dimensions

Products are supplied with installation instructions to ensure a trouble-free installation

IBS-certified fire resistant and insulated access covers are available

Available in a hinged design that includes lift assistance for applications that require regular opening with minimal effort.

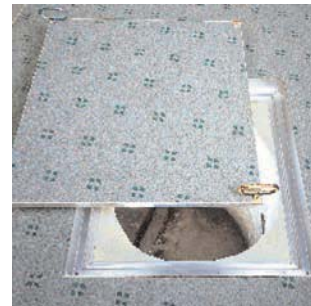
Available in the following types:

- Pan Covers
- Hinged Pan Covers
- Fire Rated and Insulation Covers
- Metal Plate Covers
- Sealed Duct Covers
- Composite Light Aluminium

For full details of Floor Access Solutions see www.bilcok.com or phone 01284 701696



SHALLOW PAN COVER



STANDARD PAN COVERS



SEALED DUCT COVER



HINGED PAN COVER
WITH LIFT ASSIST



Uniclass	EPIC	
L41	D1	
CI/SfB	(37.5)	X
2013		

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