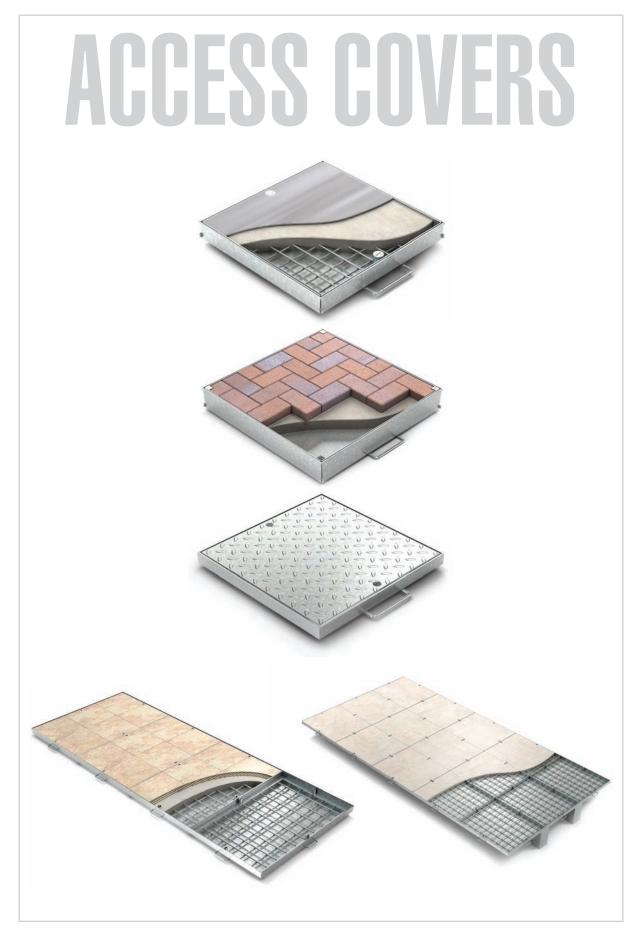
Elkington



Durable, Versatile, Economical

Elkington GmbH

Established in 1961, Elkington GmbH has been supplying access covers for over 50 years. During this time the Elkington brand name has become associated with quality, performance and reliability. Elkington has a proven track record with an established and reputable brand.



Elkington GmbH supplies access covers to clients and projects worldwide

The company head office is located in Switzerland with modern production facilities in Europe and has an experienced team that provides comprehensive sales, technical and logistical assistance to customers located around the world. An extensive global distribution network provides close support in the local market.

Stocks of finished product are maintained at the European production facility providing rapid turnaround following order placement. The production lead-time for large quantities and/or non-stock items is only two weeks.

Customer Focus

Over 50 years of experience brings a deep understanding regarding the requirements of our customers. We appreciate that the client, specifier, contractor and end-user may all have different perspectives when selecting their ideal product. However, all parties look for the same basic requirements. Simple operation, durability, aesthetics, ready availability and cost-effectiveness regarding initial purchase and long-term maintenance are common for all. The Elkington access cover range meets all these requirements and more.

Innovation and product development is on-going and customer-driven. Standard products and their features have been developed and have evolved as solutions to specific problems from past customers. We aim to make your work quick, simple and cost-effective.

Product Range

Innovative in design and manufacture, Elkington GmbH provides fabricated metal access covers where technology, aesthetics, performance and economics combine to satisfy all project requirements.

Elkington access covers protect and provide quick, safe and cost-effective access to underground equipment and services and are ideal for a wide variety of project applications (both internal and external).

Elkington access covers are suitable for discreet installation in a variety of hard-floor finishes including concrete, decorative paving (stone, marble, granite etc), tiles (ceramic, terrazzo etc), resin flooring and other surfaces.

Access covers are designed for A15 – D400 load applications.

The Elkington product family includes a variety of access cover designs; available in standard sizes and custom-made for special features and dimensions.



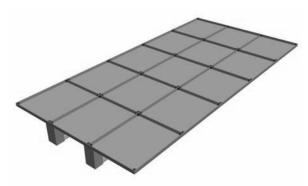
Cover Options

Access covers by Elkington GmbH are durable, versatile and economical.

Durable

Covers are available in variety of metals to suit specific markets and project applications;

- Hot-dipped galvanised steel for a durable and economic installation.
- High quality stainless steel for improved aesthetics and corrosion resistance.
- High-grade aluminium for a light-weight and aesthetic alternative.



MULTI-SPAN Cover with special locking configuration

Versatile

The same range of covers can be provided in any practical dimensions as single units (Standard Single & Special Single), in continuous runs (Duct/ Trench Covers) or installed over large chambers (Multi-Span Covers).



Standard XPAVE D400 Cover

Economical

Customers can choose from a standard range of access covers or bespoke covers custommanufactured to suit special requirements.

- Covers with 'Standard Features' and 'Special (Bespoke) Dimensions' can be supplied; these have a minimum order quantity of only one unit.
- Covers with 'Special Features' (to suit specific customer requirements) and 'Special (Bespoke)
 Dimensions' can be custom-manufactured; these have a minimum order quantity of only twenty units.

Special

'Special features' could include a specific key-way design and location, key-way plastic inserts, alternative cover/frame depth, 'anti-theft' security locking devices, security grids, levelling screws, thermal insulation or other design feature required by the client.

Elkington 'SOLID' access covers can also be supplied with an 'assist-lift' opening mechanism. Advice can be provided by the technical team regarding alternative mechanical lifting methods and products.

Projects

Elkington GmbH access covers are ideal for a wide variety of project applications (both internal and external).



Ericsson Globe Arena, Stockholm, Sweden



Arlanda Airport Control Tower, Stockholm, Sweden



City Rail Project, Stockholm, Sweden

These could include the following and more:

- Residential Housing
- Gardens, Courtyards & Conservatories
- Public Housing Projects
- Landscape & Pedestrian Areas
- Terminal Buildings
- Transportation Facilities
- Car Parks
- Retail Parks & Shopping Centres
- Municipal & Government Buildings
- Commercial Buildings & Office Blocks
- Hotels & Accommodation Blocks
- · Factories & Industrial Buildings
- Sports & Leisure Facilities
- Petrol Filling Station Forecourts
- Schools, Colleges & Universities
- Hospitals & Medical Facilities

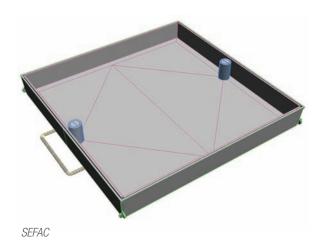
An updated 'Project Reference List' is available from Elkington GmbH; either as a download from the website or on request.

System Features

The Elkington range of access covers includes the following general features:

- Recessed and solid cover options available.
- Extensive range of opening sizes and configurations are possible.
- Manufactured from 3mm gauge steel (or 6mm for D400 covers); Elkington covers are more rigid, strong and durable compared to alternative brands (often manufactured from 2mm gauge steel and less).
- Available in 'hot-dipped' galvanised steel, highquality stainless steel or high-grade aluminium.
- Access cover components are laser-cut and/or cold-formed to precise tolerances. Covers and associated frames are then jig-welded to ensure a precise fit.
- All covers are supplied with a solid base plate integral to the design of the cover.
- The covers are tapered in design to achieve quick, simple and practical removal from the frame.
- A single neoprene seal provides a water-tight cover under normal rainwater conditions. SEFAC covers are also available with double seal.
- Units are available with the option of additional concrete keys welded to the frame.

- All covers are supplied with T-Bar Lifting Keys and detailed Installation Instructions. Refer to Technical Section.
- Frames and covers have a plain edge detail for improved aesthetics. The use of 3mm (A15 – C250) and 6mm (D400) gauge steel provides added strength and rigidity to the edge.
- Multi-Span covers (and sometimes Duct covers)
 are supplied with a practical cross-beam system
 (with rigid I-Beam design profile), which provides
 structural integrity and can be easily removed
 to allow access to the total chamber area. The
 removable support beams are ribbed to provide
 added strength, to suit the specified loading.
- The removable beams used in Multi-Span units are supported within Beam Housing Boxes which are installed flush with the chamber side wall, leaving an unrestricted opening when the covers and support beams are removed.



System Benefits

Why Use Elkington GmbH Access Covers?

With over 50 years of experience regarding the supply of access covers, the Elkington name is associated with quality, performance and reliability.

Modern production facilities and automated processes allow our customers to benefit in many ways.

Customers are assured of:

- Precise quality.
- Competitive price levels.
- Shorter lead-times for rapid delivery.
- Consistent and reliable supply.

Customers can choose from a standard range of access covers or bespoke covers custommanufactured to suit special requirements.

Custom-made products can be manufactured as quickly and easily as standard products, *without any time or cost penalties for the client. Quick delivery will reduce on-site installation times.*

Special features according to the clients specific requirements can be added to the access cover design, even if small quantities are required.

Duct (Trench) and Multi-Span access covers can be manufactured to suit any size or configuration of underground chamber.

Elkington can supply small consignments (a single unit, one pallet of covers) through to large volumes of product transported by truck or within 40 foot containers; whilst still maintaining very competitive price levels for all quantities. Transport costs can be provided on request.

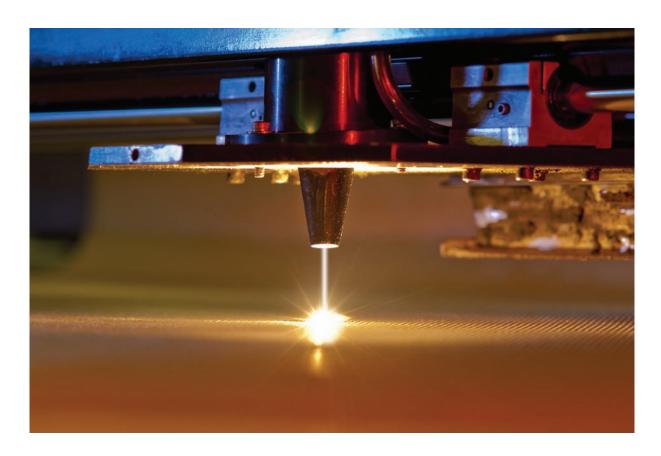
Please refer to the Benefits Datasheet available from Elkington GmbH for more reasons why you should use Elkington access covers.



Quality Assurance

Elkington GmbH works hard to ensure that both the product and customer service is of the highest quality:

- Access cover components are laser-cut (on an automated production line) to precise tolerances.
- High-grade steel is used in product manufacture;
 3mm gauge with the specification S235 JRG2 in accordance with EN 10025 (available with Certificate 2.2 according to EN 10204). Steel gauge is 6mm for D400 access covers.
- Fabricated steel units are hot-dipped galvanised in accordance with EN ISO 1461.
- Cover types have been load tested in accordance with the European Standard EN 124 by recognised institutions.
- Stainless steel covers can be supplied in grades
 AISI 304, 316 and 316L according to project and environmental requirements.
- Covers are also available in high-grade AlMg3 aluminium.



Loading

Elkington GmbH access covers have been designed and manufactured to suit a variety of project applications and load requirements (currently A15kN up to D400kN).

Elkington access covers are organised according to the EN 124 classifications. Please see the load information below. Information within the EN 124 standard includes reference to gully tops and manhole tops for vehicular and pedestrian areas, design requirements, type testing, marking and quality control. The EN 124 standard relates to access covers that have a diameter of one metre wide or less; this standard does not relate to multispan cover systems greater than one metre wide.

In accordance with EN 124, the test load is delivered through a 250mm test block positioned at the centre of the cover. The access covers are designed to withstand test load, deflection and deformation criteria specified in EN 124 for each loading category. Tests are undertaken and/or witnessed by independent and reputable institutions. *Test load certificates are available on request.*

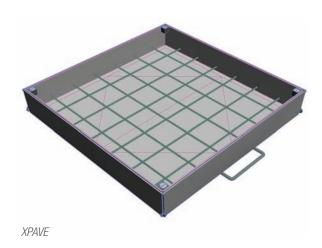
EN 124:1994 classifies access covers into six groups, in relation to their place of installation: A15, B125, C250, D400, E600 and F900. Elkington currently supplies access covers for A15 to D400 load environments.

Load tests have been undertaken on covers up to 900 x 900 mm clear opening. For covers with special dimensions, load tests can be arranged on request.

Loading Examples

For greater clarity regarding load classes and applications, Elkington has included some examples of typical installations that relate to specific load classes. If there is any doubt regarding the suitability of Elkington access covers regarding a load class and/or application, *please refer to Elkington GmbH*.

NB. Always specify a stronger load class if the project application could fall between two loading groups.



Elkington

A15kN

1.5 Tonne Wheel Load; 15kN Test Load

Application Examples: Internal floors and external pavements, lightly used pathways, light-duty pedestrian use, cycle tracks, domestic driveways, none-trafficked locations (against walls and building facades).



3 Tonne Wheel Load; 125kN Test Load

Application Examples: Internal floors and external pavements, pathways, pedestrian areas & precincts, forecourts, domestic driveways, small pallet trucks.



5 Tonne Wheel Load: 250kN Test Load

Application Examples: Any location subject to heavy-duty pedestrian use, precincts and shopping centres, commercial parking areas (subject to occasional use by domestic and light-commercial vehicles), yards, locations subject to slow moving light and medium-duty traffic, factories and industrial areas (non-E600 or non-F900 heavy-duty traffic), pallet trucks and small fork-lifts (pneumatic tyres).



11.5 Tonne Wheel Load; 400kN Test Load

Application Examples: Public parking and pedestrian areas, commercial, civil, leisure and industrial projects, slow moving medium-duty traffic (traffic speeds no greater than 20mph).

NB. Elkington access covers are not suitable for highways and carriageways where covers will be trafficked by fast-moving and/or heavy-duty vehicles (E600/F900).

Loading – Important Notes

Elkington GmbH covers are load tested when completely filled with concrete (C45/55); most manufacturers of fabricated recessed access covers undertake load tests using the same methods.

In some projects there may be a need to include a surface finish material such as a ceramic tile or deeper paving unit. In such cases, the load capacity will be marginally reduced compared to a cover completely filled with concrete.

For SEFAC covers, the thickness of the floor finish material should not exceed 20mm.

For XPAVE covers, the thickness of the paving unit should not exceed 50mm. The paving units should also be bedded into the concrete infill when this is still wet (not yet cured, green).

Elkington





Durable, Versatile, Economical

SEFAC

SEFAC is a general purpose and versatile recessed access cover system designed to be used with a variety of 'in-fill' surface finishes (no greater than 20mm thick) and for a wide range of project applications.



As with other Elkington GmbH systems, SEFAC provides quick and safe access to underground chambers and ducts. Configurations include Standard Single, Special Single, Duct (Trench) and Multi-Span access cover systems. Components are laser-cut and assembled on a mechanised production line, to ensure precise tolerances and a high-quality finish.

The neat plain-edge detail of the cover and frame achieves a discreet and unobtrusive installation within a hard surface. SEFAC provides a simple and cost-effective option.

Load Class

SEFAC covers are available to suit the load classifications A15, B125 and C250. Please refer to the loading table within the technical section.

SEFAC has been load tested in accordance with the European Standard EN 124 by recognised institutions. Testing is undertaken with a full concrete infill. Load test certificates are available on request.

In order to meet loading requirements, SEFAC covers should be filled with concrete (specification C45/55). Surface finish material installed on top of the SEFAC cover should be no greater than 20mm deep.



Applications

SEFAC covers can be used for both internal and external applications. Stainless steel or aluminium units are often selected for internal use for improved aesthetics.

SEFAC covers have been designed to accommodate a thinner surface material (no greater than 20mm; including bedding mortar). For deeper paving units, please consider XPAVE.

SEFAC covers can be custom-made to accommodate deeper surface finish material; however it may be more cost-effective to use a standard cover wherever possible.

A wide range of surface finishes can be considered, including concrete (for industrial applications), tiles, wooden or laminated flooring, resin flooring, other flexible flooring.

Due to the plain edge detail of cover and frame, SEFAC can be used in any aesthetic location where the cover is required to blend with a decorative hard-surface material.

Material

SEFAC is available in the following materials:

Galvanised steel (EN 1461)

- Please specify GS

Aluminium grade AlMg3

- Please specify AL

Stainless steel grades AISI 304, 316 and 316L

- Please specify either SS304, SS316 or SS316L

If the environment in which covers are to be installed is corrosive please refer to Elkington GmbH with details of the aggressive chemicals apparent.

System Features

SEFAC is manufactured from 3mm gauge high-quality steel (for A15 – C250 covers) with the specification S235 JRG2 in accordance with EN 10025 (available with Certificate 2.2 according to EN 10204). In order to comply with the European Standard EN 124, steel gauges used for cover and frame manufacture should be greater than 2.75mm gauge.

Access cover components are laser-cut and/or cold-formed to precise tolerances. Covers and associated frames are then jig-welded to ensure a precise fit.

The covers are tapered in design to achieve quick, simple and practical removal from the frame.

Cover base plates are supplied as standard (integral in the cover design) and can be stiffened with steel ribs to provide added rigidity; to meet specified load classes.

Units are available with the option of additional concrete keys welded to the frame.

Fabricated steel units are hot-dipped galvanised in accordance with EN ISO 1461.

SEFAC frames and covers have a plain edge detail for improved aesthetics. The frame and cover assembly is unobtrusive when installed in a paved surface. The use of 3mm gauge steel (for A15 – C250) provides added strength and rigidity to the edge.

All SEFAC covers have a single neoprene seal. Covers can be considered water-tight (in normal rainwater conditions) and are also gas and airtight. SEFAC units can be supplied with a double neoprene seal if required and specified.

All SEFAC covers are supplied with locking screws as standard for added safety and security. Covers up to 600mm clear opening have two locking positions. Covers over 700mm clear opening have four locking positions. Locking screws have a heel-safe top detail. Security locking can also be incorporated if required and specified.

All SEFAC covers are supplied with T-Bar Lifting Keys and detailed Installation Instructions.



SEFAC, City Rail Project, Stockholm

Additional Features

SEFAC covers can be custom-made to accommodate deeper surface materials when required.

Named service plaques (eg utilities, local authority name etc) can be included to the cover design.

Security locking screws can be incorporated on request.

Design and location of lifting blocks can be altered according to specification.

Frame levelling bolts can be incorporated for adjustment during installation.

Other special features can be considered.

For any special features to be added to SEFAC covers, please refer directly to Elkington GmbH.

Duct & Multi-Span Cover Options

SEFAC can be manufactured as a 'Duct (Trench) Cover' or 'Multi-Span Cover'; please refer to the Duct & Multi-Span section.

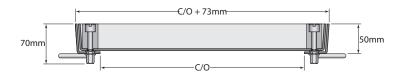
SEFAC Single Access Cover

Standard Sizes & Configurations

SEFAC 50 (A15kN Loading) - Dimensions & Weights: Galvanised Steel



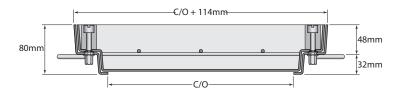
Cover & Frame: 3mm gauge steel			
Product Reference	Clear Opening Size (mm)	Outside Dimension (mm)	Weight (unfilled) (Kgs)
SF50GS2020	200 x 200	273 x 273 x 50	7
SF50GS3030	300 x 300	373 x 373 x 50	10
SF50GS4040	400 x 400	473 x 473 x 50	13
SF50GS5050	500 x 500	573 x 573 x 50	15
SF50GS6060	600 x 600	673 x 673 x 50	20
SF50GS7070	700 x 700	773 x 773 x 50	25
SF50GS8080	800 x 800	873 x 873 x 50	30
SF50GS9090	900 x 900	973 x 973 x 50	35



 $\ensuremath{\mathsf{SEFAC}}$ 80 (B125kN Loading) - Dimensions & Weights: Galvanised Steel



Cover & Frame: 3mm gauge steel			
Product Reference	Clear Opening Size (mm)	Outside Dimension (mm)	Weight (unfilled) (Kgs)
SF80GS2020	200 x 200	314 x 314 x 80	11
SF80GS3030	300 x 300	414 x 414 x 80	16
SF80GS4040	400 x 400	514 x 514 x 80	20
SF80GS5050	500 x 500	614 x 614 x 80	25
SF80GS6060	600 x 600	714 x 714 x 80	30
SF80GS7070	700 x 700	814 x 814 x 80	35
SF80GS8080	800 x 800	914 x 914 x 80	40
SF80GS9090	900 x 900	1014 x 1014 x 80	45



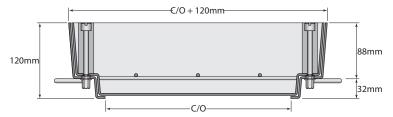
SEFAC Single Access Cover

Standard Sizes & Configurations

SEFAC 120 (C250kN Loading) - Dimensions & Weights: Galvanised Steel



Cover & Frame: 3mm gauge steel			
Product Reference	Clear Opening Size (mm)	Outside Dimension (mm)	Weight (unfilled) (Kgs)
SF120GS2020	200 x 200	320 x 320 x 120	14
SF120GS3030	300 x 300	420 x 420 x 120	20
SF120GS4040	400 x 400	520 x 520 x 120	25
SF120GS5050	500 x 500	620 x 620 x 120	31
SF120GS6060	600 x 600	720 x 720 x 120	36
SF120GS7070	700 x 700	820 x 820 x 120	42
SF120GS8080	800 x 800	920 x 920 x 120	48
SF120GS9090	900 x 900	1020 x 1020 x 120	54



SEFAC - Specification & Ordering - Important Information

Standard Access Cover

The product references above relate to *Standard* SEFAC access covers in hot-dipped galvanised steel.

For SEFAC covers in Aluminium and Stainless Steel, use the same product reference codes but replace with AL or SS.

Examples:

SF50AL2020 or SF120SS2020

Weights (Kgs) for covers with in-filled material can be provided on request.

Frame dimensions for access covers in different materials may differ. For SEFAC 50, SEFAC 80 and SEFAC 120 in Aluminium and Stainless Steel, *please refer to Elkington GmbH or download the appropriate datasheets from the website.*

Special Sizes & Configurations

SEFAC single access covers can also be supplied in *special sizes* according to customer requirements.

Modern machinery and processes ensure that custom-made products can be manufactured as quickly and easily as standard products; even if small quantities are required, without any time or cost penalties for the client.

If requiring a special size of access cover, please refer to Elkington GmbH for product information.

Cover Type (SF) + Frame Depth (50, 80 or 120) + Material (GS, AL, SS304, SS316 or SS316L) + Clear Opening Length (in MM's) x Clear Opening Width (in MM's)

Examples:

SF50-GS-1000-1000 or SF80-SS304-650-750

Overall Weights & Dimensions - Special Sizes

As the frame sizes will vary according to the material used, these can be provided on request.

For access covers in special sizes and configurations, unit weights and overall dimensions can be provided on request.

Elkington





Durable, Versatile, Economical

XPAVE

The XPAVE recessed access cover system has been designed to provide quick and safe access to underground chambers and ducts where aesthetics are required to be maintained in a deeper block-paved surface.







The XPAVE cover has a deeper recess to accommodate thicker paving units. Access cover components are laser-cut and assembled on a mechanised production line, to ensure precise tolerances and a high-quality finish. The neat plain-edge detail of the cover and frame achieves a discreet and unobtrusive installation within a paved surface. XPAVE provides a simple, aesthetic and cost-effective option for use on a wide range of projects.

Load Class

XPAVE covers are available to suit the load classifications A15 to C250 (XPAVE 95) and D400 (XPAVE 150). Please refer to the loading table within the technical section.

XPAVE has been load tested in accordance with the European Standard EN 124 by recognised institutions. Testing is undertaken with a concrete infill. Load test certificates are available on request.

In order to meet loading requirements, XPAVE covers should be filled with a minimum 50mm layer of C45/55 grade concrete. Refer to installation details provided by Elkington. The infill material should be no greater than 50mm and paving blocks should be bedded on wet concrete immediately after this has been poured within the recessed cover.

XPAVE

Applications

XPAVE covers are generally selected for external applications, but can also be used internally (usually stainless steel or aluminium units are selected for internal use; for improved aesthetics).

XPAVE covers are specifically designed for paving units (greater than 20mm deep). Paving units may have to be trimmed to fit within the frame depth of standard units. XPAVE covers can be custom-made to accommodate deeper paving units; however it may be more cost-effective to use a standard cover wherever possible

A wide range of deeper paving units can be used, including paving slabs (concrete, granite, other), stone sets, marble flooring tiles and other. For thinner and more flexible floor surface materials please also consider the SEFAC range of access covers (concrete infill, tiles, resin).

XPAVE can be used in any aesthetic external location where the cover is required to blend with a decorative hard-surface material.

Material

XPAVE is available in the following materials:

Galvanised steel (EN 1461)

Please specify GS

Aluminium grade AlMg3

- Please specify AL

Stainless steel grades AISI 304, 316 and 316L

- Please specify either SS304, SS316 or SS316L

If the environment in which covers are to be installed is corrosive *please refer to Elkington GmbH with details of the aggressive chemicals apparent.*

Please note that XPAVE 150 (D400 Loading) is only available in Galvanised Steel and Stainless Steel.

System Features

XPAVE is manufactured from 3mm gauge high-quality steel (XPAVE 95 covers for A15 – C250 loading) and 6mm gauge high quality steel (XPAVE 150 covers for D400 loading), with the specification S235 JRG2 in accordance with EN 10025 (available with Certificate 2.2 according to EN 10204). In order to comply with the European Standard EN 124, steel gauges used for cover and frame manufacture should be greater than 2.75mm gauge.

Access cover components are laser-cut and/or cold-formed to precise tolerances. Covers and associated frames are then jig-welded to ensure a precise fit.

The covers are tapered in design to achieve quick, simple and practical removal from the frame.

Cover base plates are supplied as standard (integral in the cover design) and can be stiffened with steel ribs to provide added rigidity; to meet specified load classes.

Units are available with the option of additional concrete keys welded to the frame.

Fabricated steel units are hot-dipped galvanised in accordance with EN ISO 1461.

XPAVE frames and covers have a plain edge detail for improved aesthetics. The frame and cover assembly is unobtrusive when installed in a block paved surface. The use of 3mm gauge steel (for XPAVE 95: A15 – C250) and 6mm gauge steel (for XPAVE 150: D400) provides added strength and rigidity to the edge.

All XPAVE covers have a single neoprene seal. Please refer to our technical information for more details regarding water-tightness.

XPAVE standard covers are not supplied with locking bolts.

All XPAVE covers are supplied with T-Bar Lifting Keys and detailed installation instructions. *Refer to the technical information available.*



XPAVE, Busselton City Centre Upgrade, Australia

Additional Features

XPAVE covers can be custom-made to accommodate deeper paving units.

Named service plaques (eg utilities, local authority name etc) can be included to the cover design.

Plated locking screws can be incorporated on request.

Design and location of lifting blocks can be altered according to specification.

Frame levelling bolts can be incorporated for adjustment during installation.

Other special features can be considered.

For any special features to be added to SEFAC covers, please refer directly to Elkington GmbH.

Duct & Multi-Span Cover Options

XPAVE can be manufactured as a 'Duct (Trench) Cover' or 'Multi-Span Cover'; please refer to the Duct & Multi-Span section.

XPAVI

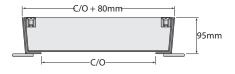
XPAVE Single Access Cover

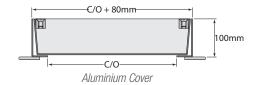
Standard Sizes & Configurations

XPAVE 95 (C250kN Loading) - Dimensions & Weights: Galvanised Steel



Cover & Frame: 3mm gauge steel			
Product Reference	Clear Opening Size (mm)	Outside Dimension (mm)	Weight (unfilled) (Kgs)
XP95GS2020	200 x 200	280 x 280 x 95	8
XP95GS3030	300 x 300	380 x 380 x 95	11
XP95GS4040	400 x 400	480 x 480 x 95	15
XP95GS5050	500 x 500	580 x 580 x 95	19
XP95GS6060	600 x 600	680 x 680 x 95	24
XP95GS7070	700 x 700	780 x 780 x 95	30
XP95GS8080	800 x 800	880 x 880 x 95	36
XP95GS9090	900 x 900	980 x 980 x 95	42

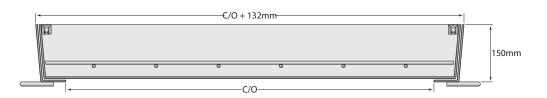




XPAVE 150 (D400kN Loading) - Dimensions & Weights: Galvanised Steel



Cover & Frame: 6mm gauge steel			
Product Reference	Clear Opening Size (mm)	Outside Dimension (mm)	Weight (unfilled) (Kgs)
XP150GS2020	200 x 200	332 x 332 x 150	28
XP150GS3030	300 x 300	432 x 432 x 150	37
XP150GS4040	400 x 400	532 x 532 x 150	48
XP150GS5050	500 x 500	632 x 632 x 150	59
XP150GS6060	600 x 600	732 x 732 x 150	72
XP150GS7070	700 x 700	832 x 832 x 150	85
XP150GS8080	800 x 800	932 x 932 x 150	99
XP150GS9090	900 x 900	1032 x 1032 x 150	115





XPAVE SINGLE ACCESS COVER

XPAVE - Specification & Ordering - Important Information

Standard Access Cover

The product references over relate to *Standard* XPAVE access covers in hot-dipped galvanised steel.

For XPAVE covers in Aluminium and Stainless Steel, use the same product reference codes but replace with AL or SS.

Examples:

XP95AL2020 or XP150SS2020

Please note that XPAVE 150 (D400 Loading) is only available in Galvanised Steel and Stainless Steel.

Weights for covers with in-filled material can be provided on request.

Frame dimensions for access covers in different materials may differ. For XPAVE 95 in Aluminium and Stainless Steel; and XPAVE 150 in Stainless Steel, please refer to Elkington GmbH or download the appropriate datasheets from the website.

Special Sizes & Configurations

XPAVE Single access covers can also be supplied in *special sizes* according to customer requirements.

Modern machinery and processes ensure that custom-made products can be manufactured as quickly and easily as standard products; even if small quantities are required, without any time or cost penalties for the client.

If requiring a special size of access cover, please refer to Elkington GmbH for product information.

Cover Type (XP) + Frame Depth (95 or 150) + Material (GS, AL, SS304, SS316 or SS316L) + Clear Opening Length (in MM's) x Clear Opening Width (in MM's).

Examples:

XP95-GS-1000-1000 or XP150-SS304-650-750

Overall Weights & Dimensions - Special Sizes

As the frame sizes will vary according to the material used, these can be provided on request.

For access covers in special sizes and configurations, unit weights and overall dimensions can be provided on request.



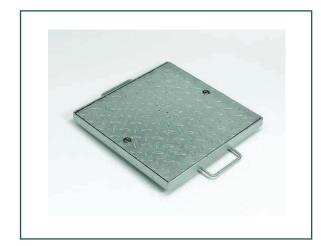


Durable, Versatile, Economical



SOLID

SOLID is a 'solid cover' access system designed to provide a basic covering to an underground chamber or duct (trench).





SOLID provides a simple, safe and cost-effective access cover solution.

SOLID covers have a single neoprene seal which provides a gas and air-tight unit. This system is also available with 'assist-lift' opening mechanisms to special order. Configurations include Standard Single, Special Single, Duct (Trench) and Multi-Span access cover systems. Components are laser-cut and assembled on a mechanised production line, to ensure precise tolerances and a high-quality finish.

Load Class

SOLID standard covers are available to suit A15 load environments.

SOLID special cover designs can be supplied for loading environments up to D400. Should you have a need for a SOLID cover for use in a higher load class application, please refer to Elkington GmbH.

Applications

SOLID covers can be used for both internal and external applications where a simple access cover is required; where there is no need for the cover surface to match with the surrounding floor finish (when aesthetics may not be the first consideration). Stainless steel or aluminium units are often selected for internal use; for improved aesthetics.

Material

SOLID is available in the following materials:

Galvanised steel (EN 1461)

- Please specify GS

Aluminium grade AlMg3

- Please specify AL

Stainless steel grades AISI 304, 316 and 316L

- Please specify either SS304, SS316 or SS316L.

If the environment in which covers are to be installed is corrosive please refer to Elkington GmbH with details of the aggressive chemicals apparent.

System Features

SOLID is manufactured from 3mm gauge (A15 loading) high-quality steel with the specification S235 JRG2 in accordance with EN 10025 (available with Certificate 2.2 according to EN 10204). In order to comply with the European Standard EN 124, steel gauges used for cover and frame manufacture should be greater than 2.75mm gauge.

Access cover components are laser-cut and/or cold-formed to precise tolerances. Covers and associated frames are then jig-welded to ensure a precise fit.

Covers have a simple 'in-set' design to achieve quick, simple and practical removal from the frame.

Units are available with the option of concrete keys welded to the frame.

Fabricated steel units are hot-dipped galvanised in accordance with EN ISO 1461.

All SOLID covers have a single neoprene seal. Covers can be considered water-tight (in normal rainwater conditions) and are also gas and air-tight.

All SOLID covers are supplied with locking screws as standard for added safety and security. Locking screws have a heel-safe top detail.

All SOLID covers are supplied with T-Bar Lifting Keys and detailed installation instructions. Refer to the technical section.

Additional Features

Named service plaques (eg utilities, local authority name etc) can be included to the cover design.

Security locking screws can be incorporated on request.

Other special features can be considered.

For any special features to be added to SOLID covers, please refer directly to Elkington GmbH.

Duct & Multi-Span Cover Options

SOLID can be manufactured as a 'Duct (Trench) Cover' or 'Multi-Span Cover'; please refer to the Duct & Multi-Span section.



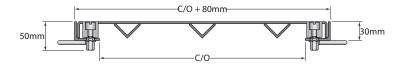
SOLID Single Access Cover

Standard Sizes & Configurations

SOLID 30 (A15kN Loading) - Dimensions & Weights: Galvanised Steel



Cover & Frame: 3mm gauge steel			
Product Reference	Clear Opening Size (mm)	Outside Dimension (mm)	Weight (unfilled) (Kgs)
S030GS2020	200 x 200	280 x 280 x 30	4
S030GS3030	300 x 300	380 x 380 x 30	7
S030GS4040	400 x 400	480 x 480 x 30	10
S030GS5050	500 x 500	580 x 580 x 30	15
S030GS6060	600 x 600	680 x 680 x 30	18
S030GS7070	700 x 700	780 x 780 x 30	23
S030GS8080	800 x 800	880 x 880 x 30	28
S030GS9090	900 x 900	980 x 980 x 30	34
S030GS11	1000 x 1000	1080 x 1080 x 30	40



SOLID - Specification & Ordering - Important Information

Standard Access Cover

The product references over relate to *Standard* SOLID access covers in hot-dipped galvanised steel.

For SOLID covers in Aluminium and Stainless Steel, use the same product reference codes but replace with AL or SS.

Examples:

S030AL2020 or S030SS2020

Frame dimensions for access covers in different materials may differ. For SOLID 30 in Aluminium and Stainless Steel please refer to Elkington GmbH or download the appropriate datasheets from the website.

Special Sizes & Configurations

The SOLID range of access covers are also available in different load ratings; as special units. *Please refer to Elkington for further information*.

SOLID Single access covers can also be supplied in *special sizes* according to customer requirements.

Modern machinery and processes ensure that custom-made products can be manufactured as quickly and easily as standard products; even if small quantities are required, without any time or cost penalties for the client.

If requiring a special size of access cover, please refer to Elkington GmbH for product information.

Cover Type (SO) + Frame Depth (30) + Material (GS, AL, SS304, SS316 or SS316L) + Clear Opening Length (in MM's) x Clear Opening Width (in MM's)

Examples:

S030-GS-1050-1050 or S030-SS304-650-750

Overall Weights & Dimensions – Special Sizes

As the frame sizes will vary according to the material used, these can be provided on request.

For access covers in special sizes and configurations, unit weights and overall dimensions can be provided on request.

SOLID Assist-Lift Covers

SOLID access covers can also be supplied with Gas-Spring 'Assist-Lift' opening mechanisms if required.

These are ideal for use both internally and externally where an 'assist-lift' cover is required for a light-duty A15 load application.

Covers and frames are available in hot-dipped galvanised steel, stainless steel and aluminium. The SOLID 'assist-lift' cover top has a flush-cover design and an 'anti-slip' top surface.

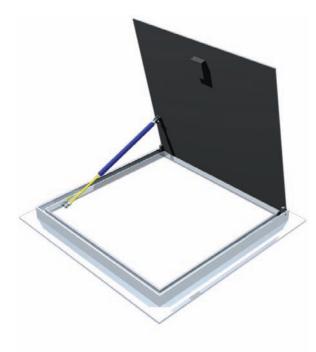
Units are hinged and incorporate a single seal.

Product information, specifications and drawings for this cover option are provided on a project-by-project basis.

Please refer to the technical team at Elkington GmbH with details of project requirements.

NB. If 'assist-lift' access covers are selected, we would recommend that the installer uses a flexible silicone grout between the access cover frame and the adjacent surface material.

'Assist-lift' cover options are supplied in standard clear-opening sizes only.



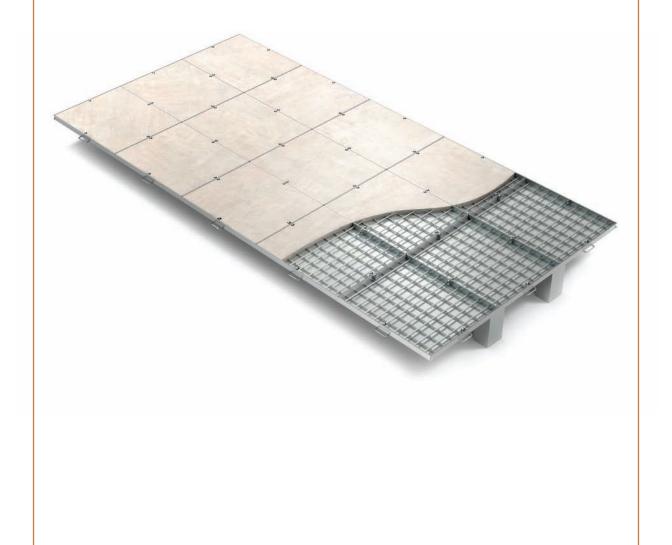




DUCT and MULTI-SPAN access covers by Elkington GmbH have been installed at the Government building complex in Stockholm.

DUGT & MULTI-SPAN

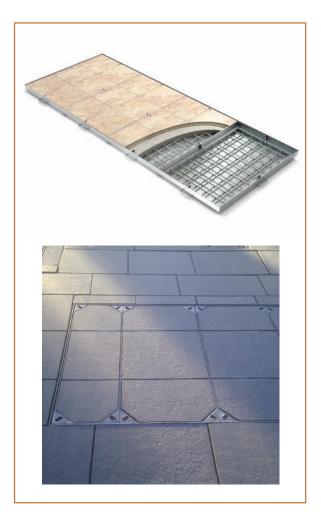
ACCESS COVERS



Durable, Versatile, Economical

DUCT & MULTI-SPAN

On projects there is often a need to provide safe, secure, practical and cost-effective access systems to cover continuous ducting (trenches) or large-span chambers that may also have branches, tees and other odd-shaped configurations.





Elkington GmbH can supply both 'Duct (Trench) Covers' and 'Multi-Span Covers' in standard arrangements or to suit special layouts and configurations. These are available as SEFAC, XPAVE or SOLID cover designs and for a variety of load applications.

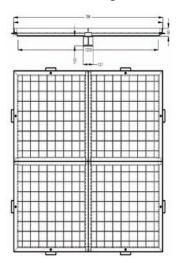
It may be helpful to consult with Elkington at an early stage regarding more complex Duct (Trench) and Multi-Span configurations, to ensure the most practical and cost-effective design.

Enquiries & Orders

The quickest and most effective method to provide a quotation, specification and drawings for Duct (Trench) and Multi-Span covers is on a project-byproject basis.

Please provide a plan-view drawing showing the configuration of the Duct (Trench) or Chamber that you wish to cover; along with clear-opening dimensions, loading information (EN 124) and the surface finish material required. Elkington can then issue a detailed quotation, specification information and a drawing (in CAD or PDF format).

Further details highlighting the configurations possible are shown in the diagrams below.

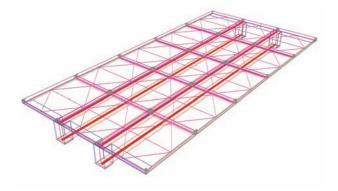


Structural Integrity

Multi-Span covers (and sometimes Duct covers) are supplied with a practical cross-beam system (with rigid I-Beam design profile), which provides structural integrity and can be easily removed to allow access to the total chamber area. The removable support beams are ribbed to provide added strength, to suit the specified loading.

The removable beams used in Multi-Span units are supported within Beam Housing Boxes which are installed flush with the chamber side wall, leaving an unrestricted opening when the covers and support beams are removed.

If special covers are fixed to frames with locking screws, this achieves a monolithic structure which is rigid when trafficked.



For special layouts and configurations, please contact the Elkington GmbH technical department to discuss your specific requirement.

The technical department at Elkington can also provide advice regarding loading and design.

Detailed CAD drawings of the Duct (Trench) or Multi-Span cover can be provided, for incorporation into project drawings and specifications.

Technical Support

Elkington GmbH understands the importance and need for comprehensive technical information and support, so provides a complete service to specifiers and contractors.

Helpful information and advice regarding the installation of Elkington access covers ensures a quick and hassle-free procedure, avoids any problems on site and achieves a high-quality and durable installation; for a happy client.

Comprehensive support includes a computer-aided design facility, product and installation drawings (in AutoCAD and pdf formats) and detailed installation information.

Installation drawings in AutoCAD and pdf formats are available for download from the Elkington website or on request from Elkington GmbH.

Information regarding Duct (Trench) & Multi-Span units is available on a project-by-project basis according to customer requirements.

Additional technical information is available for download from the Elkington website (www.elkington.eu). This includes the following:

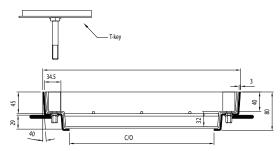
- Access Cover Installation Guides
- Product Specification Clauses
- SEFAC Standard Drawings (AutoCAD & PDF)
- XPAVE Standard Drawings (AutoCAD & PDF)
- SOLID Standard Drawings (AutoCAD & PDF)



Lifting Keys

All Elkington access covers are supplied with a set of T-Bar Lifting Keys placed within the cover during delivery. Access covers have Lifting Blocks incorporated into the inner frame of the cover (two or four depending on the size and loading of the cover). In order to lift and remove the covers, bolts should be removed from Lifting Blocks and the T-Bar Lifting Key should then be screwed into the threaded insert within the Lifting Block until securely fitted. Mechanical lifting devices should be used if the weight of the cover exceeds that specified in Health & Safety guidelines. For additional information please refer to the Manual Handling Operations Regulations 1992 (European Directive 90/269/EEC).

Care should be taken when removing covers to ensure that dirt and debris does not enter the threaded area of the lifting blocks and/ or locking screws.



Security Grids

Elkington access covers can be supplied with hinged or lift-out security grids. These fit within the chamber opening to help avoid accidents when the cover is open. A padlock facility can also be included for added security. *Please refer to Elkington GmbH for more information.*

Market Support

Elkington GmbH supplies access covers to clients and projects worldwide. An extensive global distribution network provides close support in the local market.



Elkington GmbH is continually looking for reputable trade partners in new markets.

Specification Clauses

The following specifications can be used in project design information. This document is for guidance only.

SEFAC

Type SEFAC (select 50, 80 or 120) access cover by Elkington GmbH; Switzerland (www.elkington.eu).

The access cover should be manufactured to suit a chamber clear-opening dimension of ----mm Long (L) x ----mm Span/ Width (S). Special sizes should be detailed on project/ contract drawings.

The access cover should suit load class (select A15kN, B125kN or C250kN) in accordance with EN 124. The manufacturer should supply load test certificates.

Access cover to be fabricated from 3mm gauge metal to comply with EN 124.

Access cover material should be (insert/ delete appropriate item from the list below):

- Hot-dipped galvanised steel in accordance with EN 1461.
- Stainless steel grade AISI 304, AISI 316 or AISI 316L.
- Aluminium grade AlMg3.
- Frame and access cover to have a plain edge detail.
- Covers to be fitted with locking screws.
- Steel units to be fabricated to the specification S235
 JRG2 in accordance with EN 10025.
- The access cover should be fitted with a single (or double) neoprene seal.
- The recessed cover should be suitable for infill with (specify material finish). The depth of surface material and concrete infill to follow manufacturer's recommendations.
- Installation should be in accordance with manufacturer's guidelines.
- Covers should be supplied with one set of T-Bar Lifting Keys.

XPAVE

Type XPAVE (select 95 or 150) access cover by Elkington GmbH; Switzerland (www.elkington.eu).

The access cover should be manufactured to suit a chamber clear-opening dimension of ----mm Long (L) x ----mm Span Width (W). Special sizes should be detailed on project/ contract drawings.

The access cover should suit load class (select A15kN, B125kN, C250kN or D400kN) in accordance with EN 124. The manufacturer should supply load test certificates.

Access cover to be fabricated from 3mm (6mm for XPAVE 150) gauge metal to comply with EN 124.

Access cover material should be (insert/ delete appropriate item from the list below):

- Hot-dipped galvanised steel in accordance with EN 1461.
- Stainless steel grade AISI 304, AISI 316 or AISI 316L.
- Aluminium grade AlMg3.
- Frame and access cover to have a plain edge detail.
- Covers to be fitted with lifting blocks.
- Steel units to be fabricated to the specification S235. JRG2 in accordance with EN 10025.
- The access cover should be fitted with a single neoprene seal.
- The recessed cover should be suitable for infill with paving units (specify material finish). The depth of surface material and concrete infill to follow manufacturer's recommendations.
- Installation should be in accordance with manufacturer's guidelines.
- Covers should be supplied with one set of T-Bar Lifting Keys.

Specification Clauses

SOLID

Type SOLID 30 access cover by Elkington GmbH; Switzerland (www.elkington.eu).

The access cover should be manufactured to suit a chamber clear-opening dimension of ----mm Long (L) x ----mm Span Width (W). Special sizes should be detailed on project/ contract drawings.

The access cover should suit load class A15kN (select B125kN, C250kN or D400kN for special units) in accordance with EN 124.

Access cover to be fabricated from 3mm gauge metal to comply with EN 124.

Access cover material should be (insert/ delete appropriate item from the list below):

- Hot-dipped galvanised steel in accordance with EN 1461.
- Stainless steel grade AISI 304, AISI 316 or AISI 316L.
- Aluminium grade AlMg3.
- Frame to have a plain edge detail.
- Covers to be fitted with locking screws.
- Steel units to be fabricated to the specification S235
 JRG2 in accordance with EN 10025.
- The access cover should be fitted with a single neoprene seal.
- The solid cover should be a chequer plate design with a gauge suitable to withstand the load class.
- Installation should be in accordance with manufacturer's guidelines.
- Covers should be supplied with one set of T-Bar Lifting Keys.

Duct (Trench) & Multi-Span Covers

Duct (Trench) or Multi-Span access cover design should be based on the SEFAC (50, 80 or 120), XPAVE (95 or 150) or SOLID 30 (or other load class) range by Elkington GmbH; Switzerland (www.elkington.eu). Delete where appropriate.

Chamber/ pit opening sizes and configurations should be detailed on project/ contract drawings.

The Duct (Trench) or Multi-Span assembly should be fitted with (quantity) number of covers.

The Duct (Trench) or Mutli-Span assembly should be suitable for (A15, B125, C250 or D400) loading group.

Access cover material should be (insert/ delete appropriate item from the list below):

- Hot-dipped galvanised steel in accordance with EN 1461.
- Stainless steel grade AISI 304, AISI 316 or AISI 316L.
- Aluminium grade AlMg3.
- Frame to have a plain edge detail.
- Covers to be fitted with locking screws.
- Steel units to be fabricated to the specification S235
 JRG2 in accordance with EN 10025.
- The access cover should be fitted with a single neoprene seal.
- The solid cover should be a chequer plate design with a gauge suitable to withstand the load class.
- Installation should be in accordance with manufacturer's guidelines.
- Covers should be supplied with one set of T-Bar Lifting Keys.



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Date: October 2013

Elkington GmbH has taken reasonable care in compiling the information contained in this document. Any recommendation, suggestion, guidance or advice provided regarding the use and installation of Elkington access covers is given without guarantee, as the conditions of using the system are beyond the control of the company. The customer has the responsibility to ensure that the system is 'fit for purpose' regarding its use and that the conditions of use are relevant and suitable.

Elkington reserves the right to make design changes without notice.