



Iron

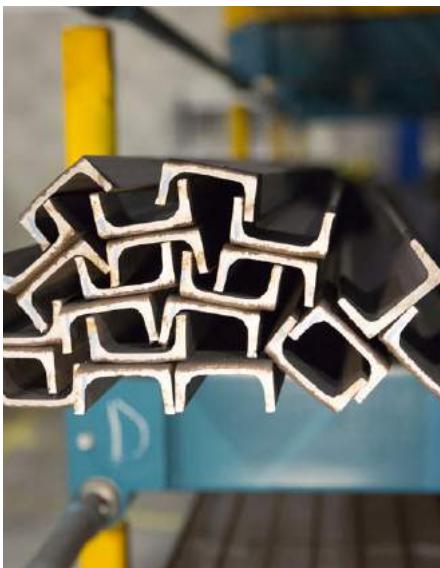
Access Covers, Gully Gratings & Surface Boxes



EJ, since 1883 we have been providing expertise to service your needs

By adopting a strategy of continuous investment in our production sites, we confirm our commitment to remain a world leader in infrastructure access solutions.

Access solutions to underground networks and asset security specialist, EJ is able to offer you the most appropriate solutions with the most relevant material to suit your needs.



High-performance, resistant and elastic ductile iron for all your projects

Galvanized steel and **aluminium**, two high performance materials, suitable for your special projects

The **composite material**, innovative, lightweight, corrosion resistant, for your specific applications

Table of Contents

EN 124 Specification	8-9
CD534:2022	9
4L Raised Pattern	10
Installation Instructions	56-57

Product	Description	Page
Access Covers		
F900 WHITTLE	12	
E600 STEVENSON	12	
D400 HA ² AXIS Hinged	13	
D400 AXIS Hinged	14	
DT Range Hinged	15	
TI Range Hinged	16	
HINGED HATCH	17	
D400 HA ³ BRUNEL	18	
D400 HA ² BRUNEL	19	
D400 ULTRA	20	
D400 INTEGRITY	21	
C250 WORTHINGTON	22	
B125 MACADAM Single Seal	23	
B125 MACADAM Slide-out	24	
A15 WREN	25	
PPIC	26	
RECESSED	27	
ERMATIC Modular	28-34	
Drainage Gratings		
F900 MEDWAY	36	
E600 CALDER	36	
D400 PHOENIX	37	
D400 V-MAX Profiled	38	
D400 SEVERN Hinged	39	
D400 AVON Double Tri	40	
D400 HUMBER Double Tri	40	
D400 TWEED Hinged	41	
C250 MERSEY	42	
C250 TEES	42	
KERB WEAR	43	
KERB USK	43	
PROPRIETARY	44	
LINEAR TRENCH	45	
AQUERA [®] Modular	46	
Surface Boxes		
GRADE A DERWENT	48	
GRADE B RUTLAND	48	
PEDESTRIAN DRAYCOTE	49	
Technical File & Extras		
Optional Accessories	51-57	

Ensure the well-being and safety of your fellow citizens

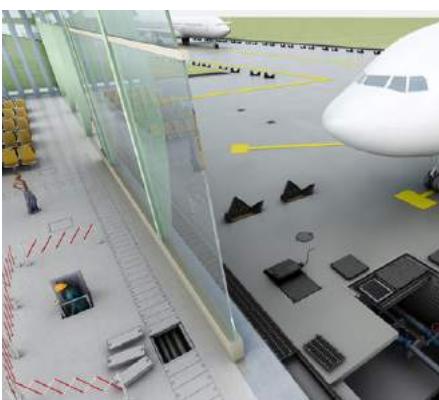
EJ, are global leaders in the design, manufacture and distribution of infrastructure access solutions.

Covering water and sewerage networks, rainwater harvesting, telecommunications and other public utility networks has been **EJ** expertise for decades.

Access your underground infrastructure in cities, railway stations, industries, water & wastewater treatment plants, airports, ports, exhibition halls, tunnels with EJ **access covers and drainage solutions**.

The group's strengths: achieving the highest quality standards, guaranteed safety and respect for the environment.

Its resources: qualified and committed employees.

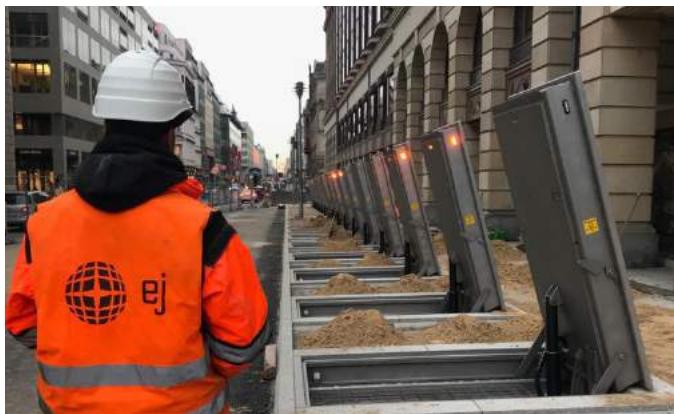


EJ, your partner from design to completion

We operate worldwide and distinguish ourselves by providing services to our customers to offer that leverage both our global and local strengths.



To ensure every customer benefits from our global knowledge, we work together across sectors: from engineering to manufacturing, from research to customer service - from North America to Europe, from Australia to Ireland - we share facts, data and developments across all steps.



This expertise encompasses the cultural background we have acquired through internal research, road testing and participation in standardization bodies around the world.

Our research and our spirit, in targeted collaboration, have allowed us to develop the best available solutions in the field of infrastructure. Solutions that drive industry, set benchmarks for excellence and meet customers' highest expectations.

Our distribution network, manufacturing facilities and sophisticated understanding of local cultures and quality standards put us in the ideal position to offer our customers relevant and dynamic services alongside our solutions.

Our modern local production capacities and warehouses ensure fast product availability for our customers. The result: Our customers have unrivaled local access to innovations, inventories and services.

Citizen group, eco-responsible

Our approach to social and environmental responsibility has been rewarded with a gold medal by EcoVadis. Our production site in Picardie ranks in the top 5% of the most efficient companies across all sectors.



Picardie - France, the Saint Crépin Ibouvillers foundry in Oise, 723 employees, production capacity of 100,000 tonnes, 42 hectares. Management systems certified ISO 9001, ISO 14001, ISO 45001 and ISO 50001 for the management of quality, environment, hygiene, safety and energy.

To be "Eco-Responsible" is not simply an expression but a guiding principle that features predominantly in our daily activities:

· Quantity and nature of materials used

Our innovative products require the use of less material, while maintaining structural integrity and load capacity. In addition, our cast iron products are made from at least **92% recycled materials**.



· Reducing and controlling our emissions

We ensure the use of the best available pollution control techniques to **reduce and control our emissions**.



· Waste reduction, sorting and recovery

Our sites have set up waste sorting at source. EJ favours treatment and recovery channels for waste specific to the activity as well as for other waste.



· Third-party control and commitment to continual improvement

Our plants use processes and management systems to minimise their impact on the environment. For example, with ISO 50001 certification, the Picardie foundry is committed to reducing its energy consumption.



Ardennes - France, our manufacturing site for galvanized or stainless steel products, 71 employees. Management systems certified ISO 9001, ISO 14001, OHSAS 18001 for the management of quality, environment, health and safety.



Birr - Ireland, with both a composite production site and a fabricated steel facility. Management system certification includes ISO 9001, ISO 14001 and ISO 45001 for quality management, environment, health and safety.



Boppard - Germany- Our production on the Rhine, Germany: a total of 70 employees - development and production of steel and stainless steel solutions. Management system certified according to ISO 9001 for quality management.



Nuneaton - UK - This is our UK distribution & manufacturing facility for galvanised and stainless steel products. Our UK facility is certified to ISO 9001 for quality management and ISO 14001 for environmental management.

Our certifications



*To check the validity of these certificates you can call:
Bureau Veritas Certification + 33 (0) 1 41 97 00 60 -
BSI, Kitemark Court, Davy Avenue, Knowhill, Milton Keynes MK5 8PP.
+ 44 345 080 9000
DNV GL Business Assurance Certification & Environmental Verifier GmbH
+49 201 7296-555

Boppard* and Nuneaton

ISO 9001: Quality Management System
ISO 14001 : Environmental Management System

Picardie Foundry*

ISO 9001 : Quality Management System
ISO 14001 : Environmental Management System
ISO 50001 : Energy Management System
ISO 45001 : Health Management System and Safety at work

Manufacture Ardennes*

ISO 9001 : Quality Management System
ISO 14001 : Environmental Management System
OHSAS 18001 : Occupational Health and Safety Management System

Birr Manufacture

ISO 9001 : Quality Management System
ISO 14001 : Environmental Management System
ISO 45001 : Health Management System and Safety at work

EN 124-2

- Determines the technical characteristics of gully tops and manhole tops for vehicular and pedestrian areas.
- Requires quality control according to ISO 9001 : 2015
- Requires the control of these two parameters by an authorized third party

The test marks confirm conformity with EN 124-2: 2015.



Installation:

GROUP 1 CLASS A15	GROUP 2 CLASS B125	GROUP 3 CLASS C250	GROUP 4 CLASS D400	GROUP 5 CLASS E600	GROUP 6 CLASS F900
----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

Test Load 15kN
For use in pedestrian areas where vehicles have no access.

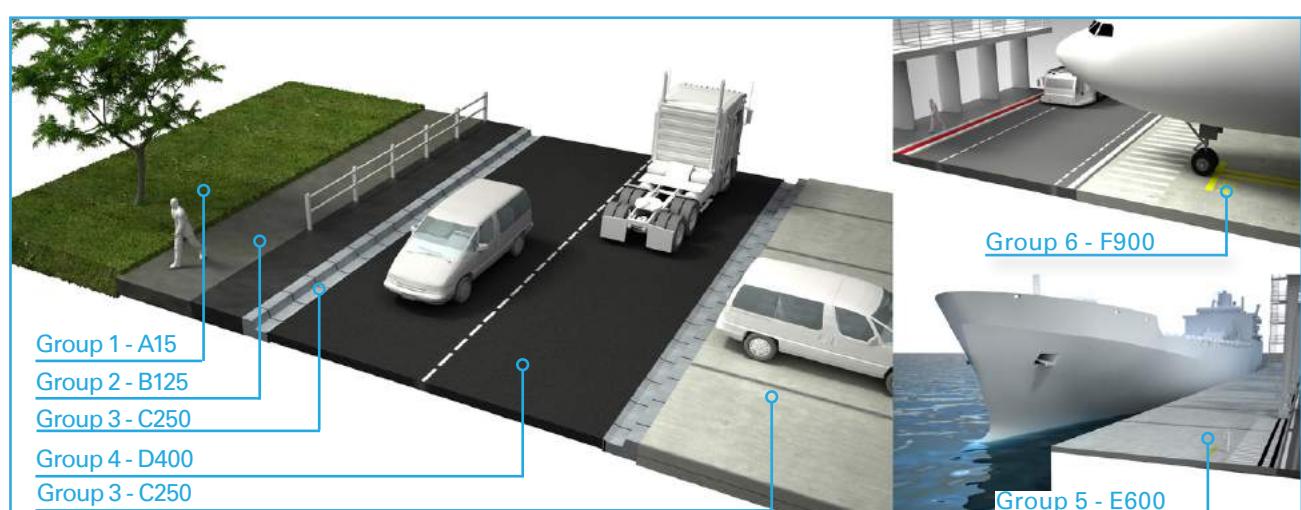
Test Load 125kN
For use in car parks & pedestrian areas where infrequent vehicle access is likely.

Test Load 250kN
For access covers & gully gratings in areas where slow moving heavy traffic have access and for gully gratings in carriageway not exceeding 500mm from the kerbside.

Test Load 400kN
For use in carriageways of roads, hard shoulders and parking areas.

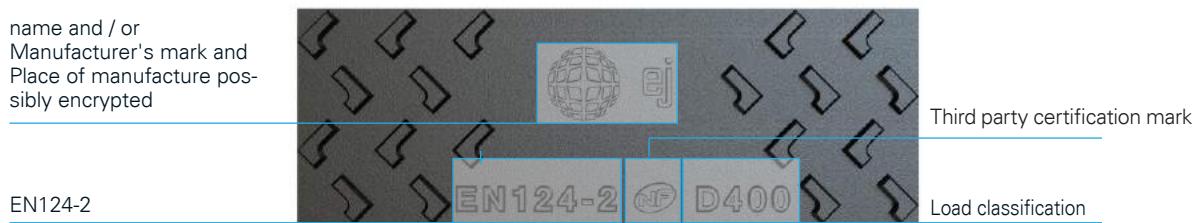
Test Load 600kN
For use in areas where high wheel loads are present.

Test Load 900kN
For use in areas where extremely high wheel loads are present.



The marking according to EN 124-2: 2015

A product marked according to EN 124-2:2015 must have the following markings:



CD 534:2022 (Formerley HA104/09)

This guidance document contains the requirements for road chamber top and gully top installations on motorway and all-purpose trunk roads. CD534:2022 can be read in conjunction with the RSTA Code of Practice for Ironwork Systems Installation and Refurbishment RSTA CoP Ironwork.

To reduce the risks to both road users and maintenance staff, chamber tops are no longer permitted within the carriageway of new construction and the need for existing chamber tops in the carriageway should be assessed. By removing or reducing the number of chamber tops in the carriageway, this reduces the need for lane closures and traffic management when carrying out routine inspection and maintenance tasks.

The premature failure of chamber top and gully top installations as well as the failure of the chamber itself and surrounding pavement surface can pose a risk to both maintenance operatives and road users.

EJ's "HA?" & ULTRA range of access covers and our "SEVERN" drainage products meet all the requirements set out within this document for:

Class D400:

1. Minimum PSRV.
2. Frame Bearing area / pressure.
3. Minimum frame mass etc).

The "E600 STEVENSON" & "F900 WHITTLE" Range of EJ access covers meet all the requirements set out within this document for:

Class E600 & F900:

Minimum PSRV.
Higher Frame Bearing area / pressure than required for D400
Minimum frame mass etc.

4L Raised Pattern

Market leading PSRV of 78 (Minimum)



The EJ "4L" raised anti-skid pattern is a Trademark feature and used on our access covers.

This unique raised pattern has undergone polished skid resistance (PSRV) testing at a UKAS accredited test facility and has achieved a market leading PSRV of 78 (minimum), allowing all covers with this 4L pattern to be installed in potentially high-risk sites according to CD534 (Formerly HA104/09) & BS 9124 (Extremely low skid risk).

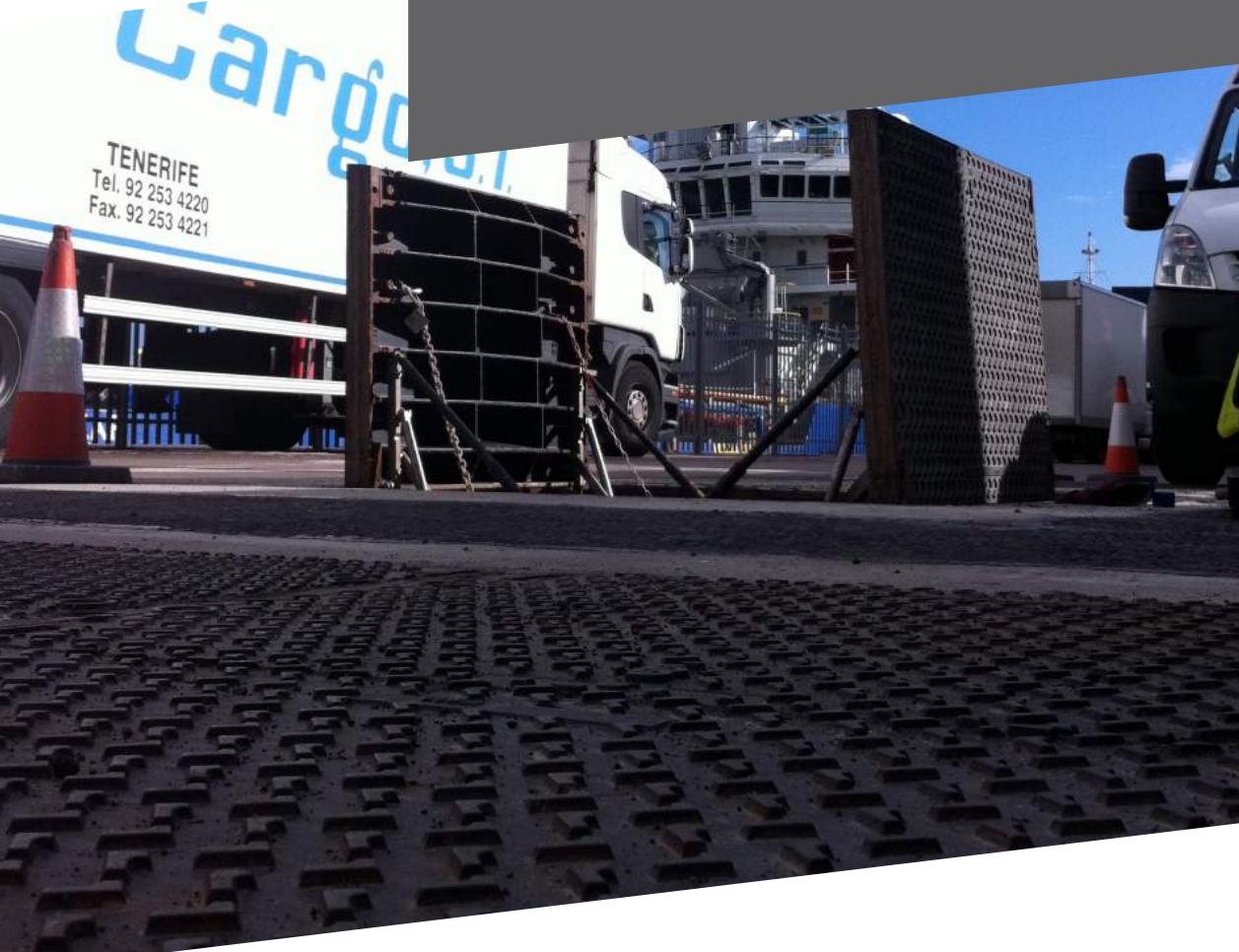
It is critical when using large surface area access covers that skid resistance properties are defined and adhered to for skid risk reduction.



WRc Wheeled Skid Resistance tested.



Iron Access Covers



F900 WHITTLE E600 STEVENSON



WHITTLE 600 H



STEVENSON 600 H

Features:

- Manufactured to BS EN 124 class F900 & E600 as specified
- BSI Kitemarked for third party assurance of quality
- Products comply with CD 534
- Products comply with BS 7903
- AMP™ anti-movement technology frames
- Stiffened frame and extra wide flanges for increased bonding
- Non-rock three point suspension for stability and silent operation
- Ductile iron to ISO 1083 for improved weight to strength ratio
- Black coated finish

Options:

- Standard Locking
- High Security Locking
- Badging e.g. FW, SW, Motorway Comms
- Sealing Plates
- Pressure Plates
- Safety Grids

Standard Sizes

Code	Legacy Code	Clear Opening (mm)	O/all Frame (mm)	Frame Depth (mm)	D/Tri Lids	Loading
WHITTLE 600 H	KD10F	640 x 640	850 x 850	150	1	F900
WHITTLE 675 H*	KD12F	675 x 675	885 x 885	150	1	F900

Standard Sizes

Code	Legacy Code	Clear Opening (mm)	O/all Frame (mm)	Frame Depth (mm)	D/Tri Lids	Loading
STEVENSON 600 H	KD10E	600 x 600	850 x 850	150	1	E600
STEVENSON 675 H	KD12E	675 x 675	930 x 930	150	1	E600
STEVENSON 122067 H	KD19E	1220 x 675	1370 x 825	150	2	E600
STEVENSON 183067 H	KD20E	1800 x 675	2000 x 875	150	3	E600

* Expected launch Mid 2023

D400 HA² AXIS

Hinged

HA² AXIS 600 SHA² AXIS 600 S**Features:**

- Manufactured to BS EN 124 class D400
- BSI Kitemarked for third party assurance of quality
- HA² AXIS™ products comply with CD 534
- HA² AXIS™ products comply with BS 7903
- Suitable for carriageways and fast moving traffic
- AMP™ anti-movement technology frames
- Maximum effort required to open hinged cover less than 25 Kg/f
- Turnbuckle locking design
- Sequenced opening for ease of use
- Unique corner hinge for un-rivalled chamber access. Protected ergonomic design with unique balanced lid removal
- Trademark 4L raised anti-slip pattern (78+ PSRV)
- Frame mechanical lifting points
- Non-rock three point suspension for stability and silent operation
- Ductile iron to ISO 1083 for improved weight to strength ratio
- Black coated finish

Options:

- High Security Locking
- Badging e.g. FW, SW, Motorway Comms
- Sealing Plates
- Pressure Plates
- Safety Grids
- Security Plates

Standard Sizes

Code	Clear Opening (mm)	O/all Frame (mm)	Frame Depth (mm)	D/Tri Lids
HA2 AXIS 600 S	600 x 600	815 x 815	100	1
HA2 AXIS 600 H	600 x 600	815 x 815	150	1
HA2 AXIS 675 S	675 x 675	890 x 890	100	1
HA2 AXIS 675 H	675 x 675	890 x 890	150	1

D400 AXIS Hinged



AXIS 600 S



AXIS 131085 S



AXIS 131085 S Fully Open

Features:

- Manufactured to BS EN 124 class D400
- BSI Kitemarked for third party assurance of quality
- AXISTM products comply with CD 534
- AXISTM products comply with BS 7903
- Suitable for carriageways and fast moving traffic
- AMPSTM anti-movement technology frames
- Maximum effort required to open hinged cover less than 25 Kg/
- Supplied locked as standard with single captive bolt
- Sequenced opening for ease of use
- Frame mechanical lifting points
- Non-rock three point suspension for stability and silent operation
- Ductile iron to ISO 1083 for improved weight to strength ratio
- Black coated finish

Options:

- High Security Locking
- Badging e.g. FW, SW, Motorway Comms
- Sealing Plates
- Pressure Plates
- Safety Grids
- Security Plates

Standard Sizes

Code	Legacy Code	Clear Opening (mm)	O/all Frame (mm)	Frame Depth (mm)	D/Tri Lids
AXIS 6045 S	KDAX9	600 x 450	760 x 610	100	1
AXIS 600 S	KDAX10	600 x 600	815 x 815	100	1
AXIS 600 H	KDAX10-6	600 x 600	815 x 815	150	1
AXIS 675 S	KDAX12	675 x 675	890 x 890	100	1
AXIS 675 H	KDAX12-6	675 x 675	890 x 890	150	1
AXIS 7567 S	KDAX14	750 x 675	910 x 835	100	1
AXIS 12267 S	KDAX19	1220 x 675	1380 x 835	100	2
AXIS 12267 H	KDAX19-6	1220 x 675	1380 x 835	150	2
AXIS 13185 S	KDAX13	1310 x 850	1470 x 1010	100	2

DT RANGE**Hinged**

DT6S150075



DT9S075075

Features:

- Manufactured to BS EN 124 class F900, E600 & D400 as specified
- Ductile iron double triangular (2, 4 or 6) hinged covers
- Third party certified
- Products comply to CD534
- Non-rock three point suspension for stability and silent operation
- Ductile iron to ISO 1083 for improved weight to strength ratio

Options:

- Safety Grids
- Locking : Coded Key and Turnbuckle - VOTC, VOR etc.
- Padlockable (VPAD Only on DTxxx068 A units)
- Lift Assistance only on DTxxx075 units: Gas Strut (Stainless Steel Option) or Mechanical Strut
- Barrier / Edge Protection systems - GCP

Standard Sizes

Code	Clear Opening (mm)	O/all Frame (mm)	Frame Depth (mm)	D/Tri Lids	Loading
DT4S 075075 AV	750 x 750	910 x 950	120	2	D400
DT4S 150075 AV	1500 x 750	1660 x 950	120	4	D400
DT4S 225075 AV	2250 x 750	2415 x 950	120	6	D400
DT4S 122068 AV	1220 x 680	1400 x 915	150	4	D400
DT4S 183068 AV	1830 x 680	2017 x 915	150	6	D400
DT6S 122068 AV	1220 x 680	1400 x 915	150	4	E600
DT6S 183068 AV	1830 x 680	2017 x 915	150	6	E600
DT6S 075075 AV	750 x 750	910 x 950	120	2	E600
DT6S 150075 AV	1500 x 750	1660 x 950	120	4	E600
DT6S 225075 AV	2250 x 750	2416 x 950	120	6	E600
DT9S 075075 AV	750 x 750	910 x 950	120	2	F900
DT9S 150075 AV	1500 x 750	1660 x 950	150	4	F900
DT9S 225075 AV	2250 x 750	2416 x 950	150	6	F900

TI RANGE

Hinged



TI4S090060



TI4S060045

Features:

- Manufactured to BS EN 124 class D400
- Ductile iron double triangular (2 or 4) hinged covers
- Third party certified
- Products comply to CD534
- Non-rock three point suspension for stability and silent operation
- Ductile iron to ISO 1083 for improved weight to strength ratio
- Sequential opening
- Self cleaning hinge system
- Lifting effort < 30dAN (except TI4S 090090 AV)
- Covers interlock with the last cover being locked by a stainless steel turnbuckle

Options:

- Safety Grids
- Unique Locking and handling keys for specific requirements (1/4 Turn Turnbuckle locking)
- Custom badging

Standard Sizes

Code	Clear Opening (mm)	O/all Frame (mm)	Frame Depth (mm)	D/Tri Lids	Loading
TI4S 045045 V*	450 x 450	590 x 590	75	2	D400
TI4S 060045 AV	600 x 450	750 x 600	100	2	D400
TI4S 060060.1 AV	600 x 600	770 x 745	100	2	D400
TI4S 075045 AV	750 x 450	915 x 615	100	2	D400
TI4S 080070 AV	800 x 700	945 x 870	100	2	D400
TI4S 090060 AV	900 x 600	1100 x 765	100	4	D400
TI4S 090090 AV	900 x 900	1100 x 1085	150	2	D400
TI4S 106070.1 AV	1060 x 700	1250 x 885	100	4	D400
TI4S 120060.1 AV	1200 x 600	1400 x 780	100	4	D400
TI4S 120075 AV	1200 x 750	1400 x 930	120	4	D400
TI4S 130080 AV	1300 x 800	1500 x 980	100	4	D400
TI4S 180090 AV	1800 x 900	2020 x 1118	150	4	D400

*Unhinged

HINGED HATCH

Hinged Assisted



HH4S 157076



HH4S 076076

Features:

- Manufactured to BS EN 124 class F900 & D400 as specified
- Ductile iron & assisted hinged covers
- Third party certified
- Products comply to CD534
- Ductile iron to ISO 1083 for improved weight to strength ratio
- Polychloroprene cushioning insert glued to the cover
- 10 years warranty mechanical stainless steel strut
- Lifting effort <25kg
- Maintenance free system

Options:

- | | |
|-----------------------------|---|
| • Safety Grids | • Watertight (Available with certain locking systems, please enquire) |
| • Extensive locking options | • Cable entry points |
| • Custom badging | |

Standard Sizes

Code	Clear Opening (mm)	O/all Frame (mm)	Frame Depth (mm)	Lids	Loading
HH4S 076076	760 x 760	1004 x 994	127	1	D400
HH4S 091091	910 x 910	1146 x 1146	127	1	D400
HH4S 120120*	1200 x 1200	1428 x 1460	127	2	D400
HH4S 157076	1570 x 760	1830 x 994	127	2	D400
HH4S 189091	1890 x 910	2114 x 1146	127	2	D400
HH9S 076076	760 x 760	1004 x 994	127	1	F900
HH9S 091091	910 x 910	1146 x 1146	127	1	F900
HH9S 157076	1570 x 760	1830 x 994	127	2	F900
HH9S 189091	1890 x 910	2114 x 1146	127	2	F900
HH9S 120120*	1200 x 1200	1400 x 930	127	1	F900

*Does not conform to EN 124 due to size, Clear Opening size is approximate.

D400 HA³ BRUNELHA³ BRUNEL 600 SHA³ BRUNEL 600 H**Features:**

- Manufactured to BS EN 124 class D400
- BSI Kitemarked for third party assurance of quality
- HA³ BRUNEL products comply with CD 534
- Suitable for carriageways and fast moving traffic
- AMP™ anti-movement technology frames
- Non-rock three point suspension for stability and silent operation
- Ductile iron to ISO 1083 for improved weight to strength ratio
- Black coated finish
- Trademark 4L raised anti-slip pattern (78+ PSRV)
- Frame levelling features
- 80mm+ Depth of insertion
- Large/reinforced cover seating points
- Turreted corner frame for added strength and rigidity

Options:

- Standard Locking
- High Security Locking
- Badging e.g. FW, SW, Motorway Comms
- Sealing Plates
- Pressure Plates (150 mm Deep Products Only)
- Ventilation
- Safety Grids
- Security Plates

Standard Sizes

Code	Legacy Code	Clear Opening (mm)	O/all Frame (mm)	Frame Depth (mm)	D/Tri Lids
HA3 BRUNEL 600 S	KD10	600 x 600	790 x 790	100	1
HA3 BRUNEL 600 H	KD10-6	600 x 600	790 x 790	150	1
HA3 BRUNEL 675 S	KD12	675 x 675	845 x 845	100	1
* HA3 BRUNEL 675 H	KD12-6	675 x 675	845 x 845	150	1
* HA3 BRUNEL 7560 S	KD14	750 x 600	925 x 775	100	1
* HA3 BRUNEL 7560 H	KD14-6	750 x 600	925 x 775	150	1
* HA3 BRUNEL 9060 S	KD16	900 x 600	1075 x 775	100	1
* HA3 BRUNEL 9060 H	KD16-6	900 x 600	1075 x 775	150	1
* HA3 BRUNEL 900 S	KD17	900 x 900	1105 x 1105	100	1
* HA3 BRUNEL 900 H	KD17-6	900 x 900	1105 x 1105	150	1
* HA3 BRUNEL 12267 S	KD19	1220 x 675	1370 x 825	100	2
* HA3 BRUNEL 12267 H	KD19-6	1220 x 675	1370 x 825	150	2

* Expected launch Mid 2023 - see page 20 for alternatives

D400 HA² BRUNELHA² BRUNEL 675 SLHA² BRUNEL 675 HL**Features:**

- Manufactured to BS EN 124 class D400
- BSI Kitemarked for third party assurance of quality
- HA² BRUNEL products comply with CD 534
- HA² BRUNEL products comply with BS 7903
- Suitable for carriageways and fast moving traffic
- AMP™ anti-movement technology frames
- HA² BRUNEL range had trademark 4L raised anti-slip pattern (78+ PSRV)
- HA² BRUNEL range has frame levelling features
- Non-rock three point suspension for stability and silent operation
- Ductile iron to ISO 1083 for improved weight to strength ratio
- Black coated finish

Options:

- Standard Locking
- High Security Locking
- Badging e.g. FW, SW, Motorway Comms
- Sealing Plates
- Pressure Plates (150 mm Deep Products Only)
- Ventilation
- Safety Grids
- Security Plates

Standard Sizes

Code	Legacy Code	Clear Opening (mm)	O/all Frame (mm)	Frame Depth (mm)	D/Tri Lids
HA2 BRUNEL 600 SL	KD10	600 x 600	752 x 752	100	1
HA2 BRUNEL 600 HL	KD10-6	600 x 600	752 x 752	150	1
HA2 BRUNEL 675 SL	KD12	675 x 675	827 x 827	100	1
HA2 BRUNEL 675 HL	KD12-6	675 x 675	827 x 827	150	1

D400 ULTRA

ULTRA - KD16



ULTRA - KD19

Features:

- Manufactured to BS EN 124 class D400
- BSI Kitemarked for third party assurance of quality
- ULTRA products comply with CD 534
- ULTRA products comply with BS 7903
- Suitable for carriageways and fast moving traffic
- AMP™ anti-movement technology frames
- Non-rock three point suspension for stability and silent operation
- Ductile iron to ISO 1083 for improved weight to strength ratio
- Black coated finish

Options:

- Standard Locking
- High Security Locking
- Badging e.g. FW, SW, Motorway Comms
- Sealing Plates
- Pressure Plates (150 mm Deep Products Only)
- Ventilation
- Safety Grids
- Security Plates

Standard Sizes

Code	Legacy Code	Clear Opening (mm)	O/all Frame (mm)	Frame Depth (mm)	D/Tri Lids
ULTRA - KD14	-	750 x 600	925 x 775	100	1
ULTRA - KD14-6	-	750 x 600	925 x 775	150	1
ULTRA - KD15	-	750 x 750	955 x 955	100	1
ULTRA - KD15-6	-	750 x 750	955 x 955	150	1
ULTRA - KD16	-	900 x 600	1075 x 775	100	1
ULTRA - KD16-6	-	900 x 600	1075 x 775	150	1
ULTRA - KD17	-	900 x 900	1105 x 1105	100	1
ULTRA - KD17-6	-	900 x 900	1105 x 1105	150	1
ULTRA - KD18-6	-	1000 x 1000	1160 x 1160	150	1
ULTRA - KD19	-	1220 x 675	1370 x 825	100	2
ULTRA - KD19-6	-	1220 x 675	1370 x 825	150	2
ULTRA - KD20-6	-	1830 x 675	1980 x 825	150	3
ULTRA - KD21	-	1200 x 900	1360 x 1060	100	2
ULTRA - KD21-6	-	1200 x 900	1360 x 1060	150	2
ULTRA - KD22-6	-	900 x 750	1060 x 910	150	2
ULTRA - D1212*	-	1200 x 1200	1360 x 1360	150	2

*Does not conform to EN 124 due to size

D400 INTEGRITY



INTEGRITY 675 S



PYTHON 150

Features:

- Manufactured to BS EN 124 class D400
- BSI Kitemarked for third party assurance of quality
- Suitable for lower intensity traffic
- AMP™ anti-movement technology frames
- Non-rock three point suspension for stability and silent operation
- Ductile iron to ISO 1083 for improved weight to strength ratio
- Black coated finish

Options:

- Standard Locking
- High Security Locking
- Badging e.g. FW, SW, Motorway Comms
- Sealing Plates
- Safety Grids
- Security Plates

Standard Sizes		Standard Sizes			
Code	Legacy Code	Clear Opening (mm)	O/all Frame (mm)	Frame Depth (mm)	D/Tri Lids
INTEGRITY 450 S	KD800	450 x 450	585 x 585	100	1
INTEGRITY 6045 S	KD900	600 x 450	735 x 585	100	1
INTEGRITY 600 S	KD100	600 x 600	740 x 740	100	1
INTEGRITY 600 H	KD100-6	600 x 600	740 x 740	150	1
INTEGRITY 675 S	KD120	675 x 675	810 x 810	100	1
INTEGRITY 675 H	KD120-6	675 x 675	810 x 810	150	1

Standard Sizes		Standard Sizes			
Code	Clear Opening (mm)	O/all Frame (mm)	Frame Depth (mm)	D/Tri Lids	
PYTHON 100*	600 x 600	750 x 750	100	1	
PYTHON 150*	600 x 600	750 x 750	150	1	
BARIO SC	600dia	850 x 850	100	-	
WATT 100*	675 x 675	830 x 830	100	1	
WATT 150*	675 x 675	840 x 840	150	1	
SINCLAIR*	750 x 600	910 x 760	100	1	
HUDSON 100*	1220 x 675	1365 x 830	100	2	
HUDSON 150*	1220 x 675	1365 x 830	150	2	

*Comply with CD534

C250 WORTHINGTON

WORTHINGTON 600

Features:

- Manufactured to BS EN 124 class C250
- BSI Kitemarked for third party assurance of quality
- Suitable for slow moving heavy traffic
- Full single seal gives airtight seal when filled with grease
- Ductile iron to ISO 1083 for improved weight to strength ratio
- Black coated finish

Options:

- Standard Locking
- High Security Locking
- Badging e.g. FW, SW
- Sealing Plates (Available on select covers)
- Safety Grids

Standard Sizes

Code	Legacy Code	Clear Opening (mm)	O/all Frame (mm)	Frame Depth (mm)
WORTHINGTON 450R	KD31C	450 dia	550 dia	58
WORTHINGTON 4530	KD59C	450 x 300	540 x 390	50
WORTHINGTON 450	KD60C	450 x 450	540 x 540	75
WORTHINGTON 6045	KD61C	600 x 450	700 x 550	75
WORTHINGTON 600	KD62C	600 x 600	700 x 700	75
WORTHINGTON 7560	KD63C	750 x 600	845 x 695	75
WORTHINGTON 750	KD64C	750 x 750	840 x 840	75
WORTHINGTON 9060	KD65C	900 x 600	990 x 690	75
WORTHINGTON 900	KD66C	900 x 900	990 x 990	75

B125 MACADAM

Single Seal



MACADAM 900



MACADAM 450R

Features:

- Manufactured to BS EN 124 class B125
- BSI Kitemarked for third party assurance of quality
- Suitable for slow moving traffic
- Full single seal gives airtight seal when filled with grease
- Ductile iron to ISO 1083 for improved weight to strength ratio
- Black coated finish

Options:

- Standard Locking
- High Security Locking
- Badging e.g. FW, SW
- Safety Grids
- Moly Sealing Grease

Standard Sizes

Code	Legacy Code	Clear Opening (mm)	O/all Frame (mm)	Frame Depth (mm)
MACADAM 300	KD300	305 x 305	385 x 385	47
MACADAM 450SR	KD30	433 dia	530 x 530	25
MACADAM 450R	KD31	450 dia	555 dia	22
MACADAM 900	KD39	900 x 900	1000 x 1000	50

B125 MACADAM

Slide-out



MACADAM 6045



MACADAM 7560

Features:

- Manufactured to BS EN 124 class B125
- BSI Kitemarked for third party assurance of quality
- Suitable for slow moving traffic
- Slide-out design
- Ductile iron to ISO 1083 for improved weight to strength ratio
- Black coated finish

Options:

- Standard Locking
- High Security Locking
- Badging e.g. FW, SW, Motorway Comms
- Safety Grids
- Security Plates

Standard Sizes

Code	Legacy Code	Clear Opening (mm)	O/all Frame (mm)	Frame Depth (mm)
MACADAM 450	KD3240S	450 x 450	525 x 525	40
MACADAM 6045	KD3340S	600 x 450	675 x 525	40
MACADAM 600	KD3440S	600 x 600	675 x 675	40
MACADAM 675	KD34AS	675 x 675	749 x 747	40
MACADAM 7567*	KD14BS	675 x 750	835 x 870	50
MACADAM 7560	KD3540S	750 x 600	825 x 675	40
MACADAM 750	KD3640S	750 x 750	825 x 825	40
MACADAM 9060	KD3740S	900 x 600	975 x 675	40
MACADAM 12267	KD3840S	1220 x 675	1320 x 775	40
MACADAM 13185*	KD13BS	1310 x 850	1430 x 1010	50

*Locked as standard

A15 WREN

WREN 6045

Features:

- Manufactured to BS EN 124 class A15
- Suitable for pedestrian areas only
- Full single seal gives airtight seal when filled with grease
- Cast grey iron
- Black coated finish

Options:

- Badging e.g. FW, SW

Standard Sizes

Code	Legacy Code	Clear Opening (mm)	O/all Frame (mm)	Frame Depth (mm)
WREN 6045	E10B1	600 x 450	672 x 530	26
WREN 600	E10C1	600 x 600	674 x 674	25

PPIC

ECOPLAS 450R



MACADAM 450R

Features:

- Manufactured to BS EN 124 class A15, B125 & C250 as specified
- Suitable for pedestrian areas only
- Full single seal gives airtight seal when packed with grease

Options:

- Badging e.g. FW, SW (not applicable to Polypropylene covers)

35 kN Polypropylene Covers & Frames

Standard Sizes

Code	Legacy Code	Clear Opening (mm)	O/all Frame (mm)	Frame Depth (mm)	Features
ECOPLAS 450R	E10APL	450 dia	550 dia	30	Single Seal, Locking
CHAMBERMATE 450R	CM-450C	450 dia	550 dia	30	Single Seal, Recessed

A15 Cast Iron Covers & Plastic Frames

Standard Sizes

WREN PF 450R	E10ACP	450 dia	551 dia	43	Single Seal
--------------	--------	---------	---------	----	-------------

B125 Ductile Iron Covers & Frames

Standard Sizes

MACADAM 450SR	KD30	433 dia	530 x 530	25	Single Seal
MACADAM 450R	KD31	450 dia	672 x 530	22	Single Seal

C250 Ductile Iron Covers & Frames

Standard Sizes

WORTHINGTON 450R	KD31C	450 dia	520 x 520	58	Single Seal
------------------	-------	---------	-----------	----	-------------

RECESSED

Recessed for Pavior Infill	Features	Product Code	Reference	Clear Opening (mm)	O/all Frame (mm)	Height (mm)	Weight (kg)
TI 600 P EN 124 - D400	Ductile iron cover and frame, D400 to EN 124:1994, Recessed covers for pavior infill, Machined contact surfaces, Assembled components bolted together.	515278 515734	TI 600 P TI 1200 P	625 x 600 1245 x 600	770 x 820 1390 x 820	125 125	115 205
							
3P EN 124 - C250	Ductile iron cover and frame, C250 to EN 124:1994, Recessed covers for pavior infill, Infill depth of 100 mm + 25 mm, Film of grease renders product waterproof under normal conditions. Locking key -EM sold as an accessory.	514512	3P 060 060	600 x 600	710 x 800	80	100
	Options Locked with an OTC or CHC bolt						
Recessed for Concrete Infill							
RRC 250 kN	Ductile iron cover and frame, 250 kN, Recessed covers for concrete infill, Infill depth of 75 mm + 10 mm, Frame incorporates a cushioning insert to prevent noise and vibration. Square frame, square opening.	510812 510813 510814	RRC 350 RRC 500 RRC 650	300 x 300 450 x 450 600 x 600	420 x 420 600 x 600 750 x 750	95 95 95	35 58 83
	Options Cover infilled with concrete - certified NF						

ERMATIC® Modular

ERMATIC® is a comprehensive and highly specified range of access covers for a wide variety of underground services.

- **Sewerage:** inspection pits for sludge chambers, access shafts for large plants etc.
- **Telecommunications:** cable jointing chambers etc.
- **Electricity:** lighting, signals, transformer pits, cable joint boxes, etc.

In the following environments:

- **Airports and ports**
- **Railways**
- **Power stations**
- **Water treatment and purification plants**
- **Manufacturing plants**
- **Industries**
- **Exhibition centres, leisure parks, stadiums etc.**

ERMATIC® products assure protection against damage, debris or aggressive chemicals, and allow designers to conceal underground services, maximising productive use of the unobstructed surface.

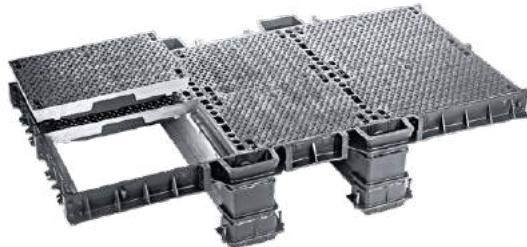
Environment, security, ergonomics, the ERMATIC® range benefits from the advanced technology of EJ.

- **aesthetics of the project is enhanced:** the covers can be recessed to receive a similar material to the surround.
- **rapid and easy access for maintenance and the network deployment.**
- **security reinforced** by the strength and stability of the covers.

Modular construction

The use of modular elements gives a vast range of sizes. Frame elements (side frames and end plates) are assembled using bolts and aluminium joints to provide linear openings for even the longest ducts.

Above clear opening spans of 1200 mm, ERMATIC® units use removable beams supported in boxes which are fixed to the frames. This allows the construction of units to suit the largest openings.



ERMATIC®

B125			Recessed covers	Solid Top covers
Clear Opening (mm)	O/all Frame (mm)	Number of Covers	Code	Code
300 x 300	410 x 500 x 80	■		ER 2S 030 030
620 x 300	730 x 500 x 80	■■		ER 2S 062 030
750 x 300	860 x 500 x 80	■	ER 2R 075 030	
1520 x 300	630 x 500 x 80	■■	ER 2R 152 030	
2290 x 300	2400 x 500 x 80	■■■■	ER 2R 229 030	
450 x 450	560 x 650 x 80	■	ER 2R 045 045	ER 2S 045 045
600 x 450	710 x 650 x 80	■	ER 2R 060 045	
900 x 450	1010 x 650 x 80	■	ER 2R 090 045	
920 x 450	1030 x 650 x 80	■■	ER 2R 092 045	ER 2S 092 045
1070 x 450	1180 x 650 x 80	■■	ER 2R 107 045	
1220 x 450	1330 x 650 x 80	■■	ER 2R 122 045	
1390 x 450	1500 x 650 x 80	■■■■	ER 2R 139 045	ER 2S 139 045
1820 x 450	1930 x 650 x 80	■■	ER 2R 182 045	
1840 x 450	1950 x 650 x 80	■■■■	ER 2R 184 045	
600 x 600	710 x 800 x 80	■	ER 2R 060 060	ER 2S 060 060
750 x 600	860 x 800 x 80	■	ER 2R 075 060	ER 2S 075 060
900 x 600	1010 x 800 x 80	■	ER 2R 090 060	
1220 x 600	1330 x 800 x 80	■■	ER 2R 122 060	ER 2S 122 060
1370 x 600	1480 x 800 x 80	■■■■	ER 2R 137 060	
1520 x 600	1630 x 800 x 80	■■■■	ER 2R 152 060	ER 2S 152 060
1670 x 600	1780 x 800 x 80	■■■■	ER 2R 167 060	
1820 x 600	1930 x 800 x 80	■■■■	ER 2R 182 060	
1840 x 600	1950 x 800 x 80	■■■■	ER 2R 184 060	ER 2S 184 060
1990 x 600	2100 x 800 x 80	■■■■	ER 2R 199 060	
2140 x 600	2250 x 800 x 80	■■■■	ER 2R 214 060	
2290 x 600	2400 x 800 x 80	■■■■	ER 2R 229 060	ER 2S 229 060
2440 x 600	2550 x 800 x 80	■■■■	ER 2R 244 060	
2590 x 600	2700 x 800 x 80	■■■■	ER 2R 259 060	
2740 x 600	2850 x 800 x 80	■■■■	ER 2R 274 060	
600 x 750	710 x 950 x 80	■	ER 2R 060 075	
750 x 750	860 x 950 x 80	■	ER 2R 075 075	ER 2S 075 075
1220 x 750	1330 x 950 x 80	■■	ER 2R 122 075	
1370 x 750	1480 x 950 x 80	■■■■	ER 2R 137 075	
1520 x 750	1630 x 950 x 80	■■■■	ER 2R 152 075	ER 2S 152 075
1840 x 750	1950 x 950 x 80	■■■■	ER 2R 184 075	
1990 x 750	2100 x 950 x 80	■■■■	ER 2R 199 075	
2140 x 750	2250 x 950 x 80	■■■■	ER 2R 214 075	
2290 x 750	2400 x 950 x 80	■■■■	ER 2R 229 075	ER 2S 229 075
600 x 900	710 x 1100 x 80	■	ER 2R 060 090	ER 2S 060 090
750 x 900	860 x 1100 x 80	■	ER 2R 075 090	ER 2S 075 090
900 x 900	1010 x 1100 x 80	■		ER 2S 090 090
1220 x 900	1330 x 1100 x 80	■■	ER 2R 122 090	ER 2S 122 090
1370 x 900	1480 x 1100 x 80	■■■■	ER 2R 137 090	ER 2S 137 090
1520 x 900	1630 x 1100 x 80	■■■■	ER 2R 152 090	ER 2S 152 090
1670 x 900	1780 x 1100 x 80	■■■■		ER 2S 167 090
1820 x 900	1930 x 1100 x 80	■■■■		ER 2S 182 090
1840 x 900	1950 x 1100 x 80	■■■■	ER 2R 184 090	ER 2S 184 090
1990 x 900	2100 x 1100 x 80	■■■■	ER 2R 199 090	ER 2S 199 090
2140 x 900	2250 x 1100 x 80	■■■■	ER 2R 214 090	ER 2S 214 090
2290 x 900	2400 x 1100 x 80	■■■■	ER 2R 229 090	ER 2S 229 090
2440 x 900	2550 x 1100 x 80	■■■■		ER 2S 244 090
2590 x 900	2700 x 1100 x 80	■■■■		ER 2S 259 090
2740 x 900	2850 x 1100 x 80	■■■■		ER 2S 274 090
500 x 1000	680 x 1200 x 80	■	ER 2R 050 100	
1020 x 1000	1200 x 1200 x 80	■■	ER 2R 102 100	
1540 x 1000	1720 x 1200 x 80	■■■■	ER 2R 154 100	
2060 x 1000	2240 x 1200 x 80	■■■■■	ER 2R 206 100	

ERMATIC®

C250	O/all Frame (mm)	Number of Covers	Recessed covers	Solid Top covers
Clear Opening (mm)	O/all Frame (mm)	Number of Covers	Code	Code
300 x 300	410 x 500 x 80	■		ER 3S 030 030
750 x 300	860 x 500 x 80	■	ER 3R 075 030	ER 3S 094 030
940 x 300	1050 x 500 x 80	■■■		ER 3S 094 030
1520 x 300	1630 x 500 x 80	■■■	ER 3R 152 030	
2290 x 300	2400 x 500 x 80	■■■■	ER 3R 229 030	
450 x 450	560 x 650 x 80	■	ER 3R 045 045	ER 3S 045 045
600 x 450	710 x 650 x 80	■	ER 3R 060 045	
900 x 450	1010 x 650 x 80	■	ER 3R 090 045	
920 x 450	1030 x 650 x 80	■■	ER 3R 092 045	ER 3S 092 045
1070 x 450	1180 x 650 x 80	■■	ER 3R 107 045	
1220 x 450	1330 x 650 x 80	■■	ER 3R 122 045	
1390 x 450	1500 x 650 x 80	■■■	ER 3R 139 045	ER 3S 139 045
1520 x 450	1630 x 650 x 80	■■	ER 3R 152 045	
1540 x 450	1650 x 650 x 80	■	ER 3R 154 045	
1820 x 450	1930 x 650 x 80	■■■	ER 3R 182 045	
1840 x 450	1950 x 650 x 80	■■■	ER 3R 184 045	
2140 x 450	2250 x 650 x 80	■■■	ER 3R 214 045	
2440 x 450	2550 x 650 x 80	■■■	ER 3R 244 045	
2740 x 450	2850 x 650 x 80	■■■	ER 3R 274 045	
600 x 600	710 x 800 x 80	■	ER 3R 060 060	ER 3S 060 060
750 x 600	860 x 800 x 80	■	ER 3R 075 060	
900 x 600	1010 x 800 x 80	■	ER 3R 090 060	
1220 x 600	1330 x 800 x 80	■■	ER 3R 122 060	ER 3S 122 060
1370 x 600	1480 x 800 x 80	■■	ER 3R 137 060	
1520 x 600	1630 x 800 x 80	■■	ER 3R 152 060	
1670 x 600	1780 x 800 x 80	■■	ER 3R 167 060	
1820 x 600	1930 x 800 x 80	■■	ER 3R 182 060	
1840 x 600	1950 x 800 x 80	■■■	ER 3R 184 060	ER 3S 184 060
1990 x 600	2100 x 800 x 80	■■■	ER 3R 199 060	
2140 x 600	2250 x 800 x 80	■■■	ER 3R 214 060	
2290 x 600	2400 x 800 x 80	■■■	ER 3R 229 060	
2440 x 600	2550 x 800 x 80	■■■	ER 3R 244 060	
2590 x 600	2700 x 800 x 80	■■■	ER 3R 259 060	
2740 x 600	2850 x 800 x 80	■■■	ER 3R 274 060	
600 x 750	710 x 950 x 80	■	ER 3R 060 075	
750 x 750	860 x 950 x 80	■	ER 3R 075 075	ER 3S 075 075
1220 x 750	1330 x 950 x 80	■■	ER 3R 122 075	
1370 x 750	1480 x 950 x 80	■■	ER 3R 137 075	
1520 x 750	1630 x 950 x 80	■■	ER 3R 152 075	ER 3S 152 075
1840 x 750	1950 x 950 x 80	■■■	ER 3R 184 075	
1990 x 750	2100 x 950 x 80	■■■	ER 3R 199 075	
2140 x 750	2250 x 950 x 80	■■■	ER 3R 214 075	
2290 x 750	2400 x 950 x 80	■■■	ER 3R 229 075	ER 3S 229 075
600 x 900	710 x 1100 x 80	■	ER 3R 060 090	ER 3S 060 090
750 x 900	860 x 1100 x 80	■	ER 3R 075 090	ER 3S 075 090
900 x 900	1010 x 1100 x 80	■		ER 3S 090 090
1220 x 900	1330 x 1100 x 80	■■	ER 3R 122 090	ER 3S 122 090
1370 x 900	1480 x 1100 x 80	■■	ER 3R 137 090	ER 3S 137 090
1520 x 900	1630 x 1100 x 80	■■	ER 3R 152 090	ER 3S 152 090
1670 x 900	1780 x 1100 x 80	■■		ER 3S 167 090
1820 x 900	1930 x 1100 x 80	■■		ER 3S 182 090
1840 x 900	1950 x 1100 x 80	■■■	ER 3R 184 090	ER 3S 184 090
1990 x 900	2100 x 1100 x 80	■■■	ER 3R 199 090	ER 3S 199 090
2140 x 900	2250 x 1100 x 80	■■■	ER 3R 214 090	ER 3S 214 090
2290 x 900	2400 x 1100 x 80	■■■	ER 3R 229 090	ER 3S 229 090
2440 x 900	2550 x 1100 x 80	■■■		ER 3S 244 090
2590 x 900	2700 x 1100 x 80	■■■		ER 3S 259 090
2740 x 900	2850 x 1100 x 80	■■■		ER 3S 274 090
500 x 1000	680 x 1200 x 80	■	ER 3R 050 100	
1020 x 1000	1200 x 1200 x 80	■■	ER 3R 102 100	
1540 x 1000	1720 x 1200 x 80	■■■■	ER 3R 154 100	
2060 x 1000	2240 x 1200 x 80	■	ER 3R 206 100	
750 x 1200	860 x 1400 x 80	■	ER 3R 075 120	
1520 x 1200	1630 x 1400 x 80	■■	ER 3R 152 120	
2290 x 1200	2400 x 1400 x 80	■■■	ER 3R 229 120	

ERMATIC®

C250			Recessed covers	Solid Top covers with removable plug
Clear Opening (mm)	O/all Frame (mm)	Number of covers	Code	Code
600 x 600	710 x 800 x 80	■ ■	ER 3P 060 060	ER 3T 060 060
1220 x 600	1330 x 800 x 80	■ ■ ■	ER 3P 122 060	ER 3T 122 060
1840 x 600	1950 x 800 x 80	■ ■	ER 3P 184 060	ER 3T 184 060
900 x 900	1010 x 1100 x 80	■ ■		ER 3T 090 090
1820 x 900	1930 x 1100 x 80	■ ■ ■		ER 3T 182 090
One removable plug per unit				
D400			Recessed covers	Solid Top covers
Clear Opening (mm)	O/all Frame (mm)	Number of Covers	Code	Code
450 x 450	620 x 630 x 125	■		ER 4S 045 045 VCHC
920 x 450	1090 x 630 x 125	■		ER 4S 092 045 VCHC
1390 x 450	1560 x 630 x 125	■ ■ ■		ER 4S 139 045 VCHC
600 x 600	770 x 780 x 125	■		ER 4S 060 060 VCHC
600 x 600	770 x 820 x 150	■	ER 5R 060 060 VCHC	
750 x 600	920 x 820 x 150	■	ER 5R 075 060 VCHC	
1220 x 600	1390 x 780 x 125	■ ■		ER 4S 122 060 VCHC
1220 x 600	1390 x 820 x 150	■ ■	ER 5R 122 060 VCHC	
1370 x 600	1540 x 800 x 150	■ ■	ER 5R 137 060 VCHC	
1520 x 600	1690 x 820 x 150	■ ■	ER 5R 152 060 VCHC	
1840 x 600	2010 x 780 x 125	■ ■ ■		
1840 x 600	2010 x 820 x 150	■ ■ ■	ER 5R 184 060 VCHC	ER 4S 184 060 VCHC
1990 x 600	2160 x 820 x 150	■ ■ ■	ER 5R 199 060 VCHC	
2140 x 600	2310 x 820 x 150	■ ■ ■	ER 5R 214 060 VCHC	
2290 x 600	2460 x 820 x 150	■ ■ ■	ER 5R 229 060 VCHC	
600 x 750	770 x 970 x 150	■	ER 5R 060 075 VCHC	
750 x 750	920 x 930 x 125	■	ER 4R 075 075 VCHC	ER 4S 075 075 VCHC
750 x 750	920 x 970 x 150	■	ER 5R 075 075 VCHC	
1220 x 750	1390 x 970 x 150	■ ■	ER 5R 122 075 VCHC	
1370 x 750	1540 x 970 x 150	■ ■	ER 5R 137 075 VCHC	
1520 x 750	1690 x 970 x 150	■ ■	ER 5R 152 075 VCHC	
1520 x 750	1690 x 930 x 125	■ ■	ER 4R 152 075 VCHC	ER 4S 152 075 VCHC
1840 x 750	2010 x 970 x 150	■ ■ ■	ER 5R 184 075 VCHC	
1990 x 750	2160 x 970 x 150	■ ■ ■	ER 5R 199 075 VCHC	
2140 x 750	2310 x 970 x 150	■ ■ ■	ER 5R 214 075 VCHC	
2290 x 750	2460 x 930 x 125	■ ■ ■	ER 4R 229 075 VCHC	ER 4S 229 075 VCHC
2290 x 750	2460 x 970 x 150	■ ■ ■	ER 5R 229 075 VCHC	
800 x 800	970 x 980 x 125	■	ER 4R 080 080 VCHC	ER 4S 080 080 VCHC
1620 x 800	1790 x 980 x 125	■ ■	ER 4R 162 080 VCHC	ER 4S 162 080 VCHC
2440 x 800	2610 x 980 x 125	■ ■ ■	ER 4R 244 080 VCHC	ER 4S 244 080 VCHC
600 x 900	770 x 1080 x 125	■		ER 4S 060 090 VCHC
600 x 900	770 x 1120 x 150	■	ER 5R 060 090 VCHC	
750 x 900	920 x 1120 x 150	■	ER 5R 075 090 VCHC	
900 x 900	1070 x 1080 x 125	■	ER 4R 090 090 VCHC	ER 4S 090 090 VCHC
1220 x 900	1390 x 1080 x 125	■ ■		ER 4S 122 090 VCHC
1220 x 900	1390 x 1120 x 150	■ ■	ER 5R 122 090 VCHC	
1370 x 900	1540 x 1120 x 150	■ ■	ER 5R 137 090 VCHC	
1520 x 900	1690 x 1080 x 125	■ ■		ER 4S 152 090 VCHC
1520 x 900	1690 x 1120 x 150	■ ■	ER 5R 152 090 VCHC	
1820 x 900	1990 x 1080 x 125	■ ■	ER 4R 182 090 VCHC	ER 4S 182 090 VCHC
1840 x 900	2010 x 1080 x 125	■ ■ ■		ER 4S 184 090 VCHC
1840 x 900	2010 x 1120 x 150	■ ■ ■	ER 5R 184 090 VCHC	
1990 x 900	2160 x 1120 x 150	■ ■ ■	ER 5R 199 090 VCHC	
2140 x 900	2310 x 1080 x 125	■ ■ ■		ER 4S 214 090 VCHC
2140 x 900	2310 x 1120 x 150	■ ■ ■	ER 5R 214 090 VCHC	
2290 x 900	2460 x 1120 x 150	■ ■ ■	ER 5R 229 090 VCHC	
2440 x 900	2610 x 1080 x 125	■ ■ ■		ER 4S 244 090 VCHC
2740 x 900	2910 x 1080 x 125	■ ■ ■	ER 4R 274 090 VCHC	ER 4S 274 090 VCHC
500 x 1000	600 x 1220 x 150	■	ER 5R 050 100 VCHC	
1000 x 1000	1170 x 1180 x 125	■		ER 4S 100 100 VCHC
1020 x 1000	1190 x 1220 x 150	■ ■	ER 5R 102 100 VCHC	
1540 x 1000	1710 x 1220 x 150	■ ■ ■	ER 5R 154 100 VCHC	
2020 x 1000	2190 x 1180 x 125	■ ■		ER 4S 202 100 VCHC
2060 x 1000	2230 x 1200 x 125	■ ■ ■ ■	ER 5R 206 100 VCHC	
3040 x 1000	3210 x 1180 x 125	■ ■ ■		ER 4S 304 100 VCHC
750 x 1200	950 x 1380 x 125	■	ER 4R 075 120 VCHC	
1520 x 1200	1720 x 1380 x 125	■ ■	ER 4R 152 120 VCHC	
2290 x 1200	2490 x 1380 x 125	■ ■ ■	ER 4R 229 120 VCHC	

ERMATIC®

E600	O/all Frame (mm)	Number of Covers	Recessed covers	Solid Top covers
Clear Opening (mm)			Code	Code
600 x 600	770 x 820 x 150	■	ER 6R 060 060	ER 6S 060 060
750 x 600	920 x 820 x 150	■■	ER 6R 075 060	ER 6S 075 060
1220 x 600	1390 x 820 x 150	■■■	ER 6R 122 060	ER 6S 122 060
1370 x 600	1540 x 820 x 150	■■■	ER 6R 137 060	ER 6S 137 060
1520 x 600	1690 x 820 x 150	■■■	ER 6R 152 060	ER 6S 152 060
1840 x 600	2010 x 820 x 150	■■■■	ER 6R 184 060	ER 6S 184 060
1990 x 600	2160 x 820 x 150	■■■■	ER 6R 199 060	ER 6S 199 060
2140 x 600	2310 x 820 x 150	■■■■	ER 6R 214 060	ER 6S 214 060
2290 x 600	2460 x 820 x 150	■■■■	ER 6R 229 060	ER 6S 229 060
600 x 750	770 x 970 x 150	■	ER 6R 060 075	ER 6S 060 075
750 x 750	920 x 970 x 150	■	ER 6R 075 075	ER 6S 075 075
1220 x 750	1390 x 970 x 150	■■	ER 6R 122 075	ER 6S 122 075
1370 x 750	1540 x 970 x 150	■■	ER 6R 137 075	ER 6S 137 075
1520 x 750	1690 x 970 x 150	■■	ER 6R 152 075	ER 6S 152 075
1840 x 750	2010 x 970 x 150	■■■	ER 6R 184 075	ER 6S 184 075
1990 x 750	2160 x 970 x 150	■■■	ER 6R 199 075	ER 6S 199 075
2140 x 750	2310 x 970 x 150	■■■	ER 6R 214 075	ER 6S 214 075
2290 x 750	2460 x 970 x 150	■■■	ER 6R 229 075	ER 6S 229 075
600 x 900	770 x 1120 x 150	■	ER 6R 060 090	ER 6S 060 090
750 x 900	920 x 1120 x 150	■	ER 6R 075 090	ER 6S 075 090
900 x 900	1070 x 1120 x 150	■		ER 6S 090 090
1220 x 900	1390 x 1120 x 150	■■	ER 6R 122 090	ER 6S 122 090
1370 x 900	1540 x 1120 x 150	■■	ER 6R 137 090	ER 6S 137 090
1520 x 900	1690 x 1120 x 150	■■	ER 6R 152 090	ER 6S 152 090
1670 x 900	1840 x 1120 x 150	■■		ER 6S 167 090
1820 x 900	1990 x 1120 x 150	■■		ER 6S 182 090
1840 x 900	2010 x 1120 x 150	■	ER 6R 184 090	ER 6S 184 090
1990 x 900	2160 x 1120 x 150	■■■	ER 6R 199 090	ER 6S 199 090
2140 x 900	2310 x 1120 x 150	■■■	ER 6R 214 090	ER 6S 214 090
2290 x 900	2460 x 1120 x 150	■■■	ER 6R 229 090	ER 6S 229 090
2440 x 900	2610 x 1120 x 150	■■■		ER 6S 244 090
2590 x 900	2760 x 1120 x 150	■■■		ER 6S 259 090
2740 x 900	2910 x 1120 x 150	■■■		ER 6S 274 090
500 x 1000	670 x 1220 x 150	■	ER 6R 050 100	
1020 x 1000	1190 x 1220 x 150	■■	ER 6R 102 100	
1540 x 1000	1710 x 1220 x 150	■■■	ER 6R 154 100	
2060 x 1000	2230 x 1220 x 150	■■■■	ER 6R 206 100	
750 x 1200	950 x 1380 x 125	■	ER 6R 075 120	
1520 x 1200	1720 x 1380 x 125	■■■	ER 6R 152 120	
2290 x 1200	2490 x 1380 x 125	■■■■	ER 6R 229 120	

ERMATIC®

F900	O/all Frame (mm)	Number of Covers	Recessed covers	Solid Top covers
Clear Opening (mm)	O/all Frame (mm)	Number of Covers	Code	Code
600 x 600	770 x 820 x 150	■	ER 9R 060 060	ER 9S 060 060
750 x 600	920 x 820 x 150	■	ER 9R 075 060	ER 9S 075 060
1220 x 600	1390 x 820 x 150	■■	ER 9R 122 060	ER 9S 122 060
1370 x 600	1540 x 820 x 150	■■	ER 9R 137 060	ER 9S 137 060
1520 x 600	1690 x 820 x 150	■■	ER 9R 152 060	ER 9S 152 060
1840 x 600	2010 x 820 x 150	■■■	ER 9R 184 060	ER 9S 184 060
1990 x 600	2160 x 820 x 150	■■■	ER 9R 199 060	ER 9S 199 060
2140 x 600	2310 x 820 x 150	■■■	ER 9R 214 060	ER 9S 214 060
2290 x 600	2460 x 820 x 150	■■■	ER 9R 229 060	ER 9S 229 060
600 x 750	770 x 970 x 150	■	ER 9R 060 075	ER 9S 060 075
750 x 750	920 x 970 x 150	■	ER 9R 075 075	ER 9S 075 075
1220 x 750	1390 x 970 x 150	■■	ER 9R 122 075	ER 9S 122 075
1370 x 750	1540 x 970 x 150	■■	ER 9R 137 075	ER 9S 137 075
1520 x 750	1690 x 970 x 150	■■	ER 9R 152 075	ER 9S 152 075
1840 x 750	2010 x 970 x 150	■■■	ER 9R 184 075	ER 9S 184 075
1990 x 750	2160 x 970 x 150	■■■	ER 9R 199 075	ER 9S 199 075
2140 x 750	2310 x 970 x 150	■■■	ER 9R 214 075	ER 9S 214 075
2290 x 750	2460 x 970 x 150	■■■	ER 9R 229 075	ER 9S 229 075
600 x 900	770 x 1120 x 150	■	ER 9R 060 090	ER 9S 060 090
750 x 900	920 x 1120 x 150	■	ER 9R 075 090	ER 9S 075 090
900 x 900	1070 x 1120 x 150	■		ER 9S 090 090
1220 x 900	1390 x 1120 x 150	■■	ER 9R 122 090	ER 9S 122 090
1370 x 900	1540 x 1120 x 150	■■	ER 9R 137 090	ER 9S 137 090
1520 x 900	1690 x 1120 x 150	■■	ER 9R 152 090	ER 9S 152 090
1670 x 900	1840 x 1120 x 150	■■		ER 9S 167 090
1820 x 900	1990 x 1120 x 150	■■		ER 9S 182 090
1840 x 900	2010 x 1120 x 150	■■■	ER 9R 184 090	ER 9S 184 090
1990 x 900	2160 x 1120 x 150	■■■	ER 9R 199 090	ER 9S 199 090
2140 x 900	2310 x 1120 x 150	■■■	ER 9R 214 090	ER 9S 214 090
2290 x 900	2460 x 1120 x 150	■■■	ER 9R 229 090	ER 9S 229 090
2440 x 900	2610 x 1120 x 150	■■■		ER 9S 244 090
2590 x 900	2760 x 1120 x 150	■■■		ER 9S 259 090
2740 x 900	2910 x 1120 x 150	■■■		ER 9S 274 090
500 x 1000	670 x 1220 x 150	■	ER 9R 050 100	
1020 x 1000	1190 x 1220 x 150	■■	ER 9R 102 100	
1540 x 1000	1710 x 1220 x 150	■■■	ER 9R 154 100	
2060 x 1000	2230 x 1220 x 150	■■■■	ER 9R 206 100	

F900 Solid Top Cover with Removable Plug

Clear Opening (mm)	O/all Frame (mm)	Number of Covers	Code
750 x 750	920 x 970 x 150	■	ER 9T 075 075
1520 x 750	1690 x 970 x 150	■■	ER 9T 152 075
2290 x 750	2460 x 970 x 150	■■■	ER 9T 229 075

Hinged cover with removable plug (central, clear opening 380 x 230 mm)

For more information on ERMATIC® duct covers, ERMATIC® multiple units with removable beams: please contact our sales team.



ERMATIC®

Hinged and assisted opening systems on the covers

All solid top ERMATIC® covers (from Class B125 to class F900) are available with a hinge lift assist opening system, please contact our sales team.

Note: for duct and beam multiple covers, technical assistance is provided on site.



Options

Where appropriate: choice of gas struts (standard or stainless steel) Please consult us for more details.

Operation

Opening of hinged covers

Hinged covers always open in sequence as marked on the covers.



Iron Gully Gratings



F900 MEDWAY
E600 CALDER
Hinged/Double Tri



MEDWAY 450



MEDWAY 450 4F



CALDER

Features:

- Manufactured to BS EN 124 class F900 & E600 as specified
- BSI Kitemarked for third party assurance of quality
- ULTRA™ products comply with CD 534
- ULTRA™ products comply with BS 7903
- AMP™ anti-movement technology frames
- MEDWAY units feature double triangular gratings
- Non-rock three point suspension for stability and silent operation
- Ductile iron to ISO 1083 for improved weight to strength ratio
- Black coated finish

Standard Sizes

Code	Legacy Code	Over Grate (mm)	O/all Frame (mm)	Frame Depth (mm)	HA 102	Waterway (cm ²)	Flanges	Gully	Loading
MEDWAY 450	KD41F	450 x 450	610 x 542	150	R	1167	3	450	F900
MEDWAY 450 4F	KD41F4F	450 x 450	610 x 610	150	R	1028	4	450	F900

Standard Sizes

Code	Over Grate (mm)	O/all Frame (mm)	Frame Depth (mm)	HA 102	Waterway (cm ²)	Flanges	Gully	Loading
CALDER*	446 x 443	592 x 530	100	-	925	3	450	E600

*End Hinged

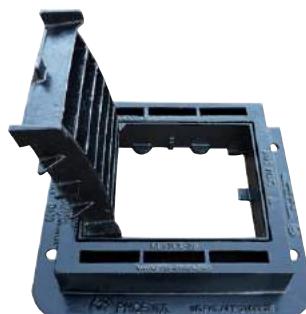
D400 PHOENIX

Theft Reduction

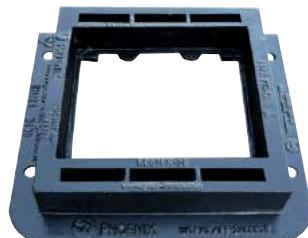
Hinged



PHOENIX 450 S Closed



PHOENIX 450 S Open



PHOENIX 450 S Cassette Removed

Features:

- Manufactured to BS EN 124 class D400
- BSI Kitemarked for third party assurance of quality
- ULTRA™ products comply with CD 534
- ULTRA™ products comply with BS 7903
- AMP™ anti-movement technology frames
- Non-rock wedge seats for stability and silent operation
- Ductile iron to ISO 1083 for improved weight to strength ratio
- Black coated finish

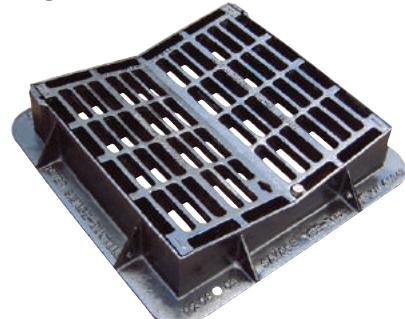
Benefits:

- Removable cassette to deter theft
- Cassette replacement in 15 minutes
- Grating is secured with captive hinges and locking sub frame
- Aperture designed to suit 'Gully Sucker' vehicles
- UK PATT APP 0907964.9

Standard Sizes

Code	Legacy Code	Over Grate (mm)	O/all Frame (mm)	Frame Depth (mm)	HA 102	Waterway (cm ²)	Gully
PHOENIX 450 S	KD53PX	450 x 450	610 x 542	100	R	1171	450
PHOENIX RC	KD53PXC	Replacement cassette		-	-	-	-

V-MAX
1:5 Profiled
ULTRA™ Specification
Hinged



V-MAX 600 H



V-MAX 12267 H



Removable Grates

Features:

- Manufactured to BS EN 124 class D400
- BSI Kitemarked for third party assurance of quality
- Suitable for carriageway and fast moving traffic applications
- 4 flanged for D400 areas
- Fully removable grates
- AMP™ anti-movement technology frames
- Non-rock wedge seats for stability and silent operation
- Designed to suit 1:5 profiled parallel drainage channels
- Ductile iron to ISO 1083 for improved weight to strength ratio
- Black coated finish

Benefits:

- Designed for slip formed drainage channels
- Allows concrete slip forming machines to run over the gratings
- Increased drainage capacity
- UK registered product
- Removable grates for full access

Standard Sizes

Code	Legacy Code	Over Grate (mm)	O/all Frame (mm)	Frame Depth (mm)	HA 102	Waterway (cm ²)
V-MAX 600 H	KD55V	630 x 630	794 x 794	150	P	2380
V-MAX 900 H	KD17V	900 x 900	1105 x 1105	200	P	4831
V-MAX 12267 H	KD19V	1200 x 675	1380 x 835	150	P	4715
V-MAX 67122 H	KD80V	1200 x 675	1410 x 885	200	P	4197

D400 SEVERN

Hinged



SEVERN 450 S



BUFFALO

Features:

- Manufactured to BS EN 124 class D400
- BSI Kitemarked for third party assurance of quality
- Products comply with CD 534
- Products comply with BS 7903
- Suitable for carriageway and fast moving traffic applications
- AMP™ anti-movement technology frames
- Non-rock captive hinged for stability and silent operation
- Pedestrian & cycle friendly products available
- Ductile iron to ISO 1083 for improved weight to strength ratio
- Black coated finish

Options:

- Right hand hinging available on selective products, please enquire.
- Locking with standard bolts

Standard Sizes

Code	Legacy Code	Over Grate (mm)	O/all Frame (mm)	Frame Depth (mm)	HA 102	Waterway (cm ²)	Gully
SEVERN 3138 S#	KD51D	380 x 310	480 x 370	100	-	876	375
SEVERN PROMENADE 3138 S*#	KD51DP*	380 x 310	560 x 410	100	-	370	375
SEVERN 3550 S	KD52D	495 x 345	690 x 485	100	-	1140	450
SEVERN 3743 S	KD50DNN	370 x 430	496 x 610	100	R	1200	450
SEVERN 3743 H	KD50D6N	370 x 430	496 x 610	150	R	1200	450
SEVERN DISHED 420 S**	KD502	420 x 420	585 x 490	100	-	1216	450
SEVERN 450 S	KD53D	450 x 450	640 x 540	100	R	1425	450
SEVERN 450 H	KD53D-6	450 x 450	640 x 540	150	R	1425	450
SEVERN 4560 S	KD54D	600 x 450	790 x 540	100	Q	1815	450
SEVERN DISHED 4575**	KD57D**	750 x 450	940 x 540	150	Q	2262	450

*Pedestrianised

**Dished

#Not CD 534 compliant

Standard Sizes

Code	Over Grate (mm)	O/all Frame (mm)	Frame Depth (mm)	HA 102	Waterway (cm ²)	Gully	Type
BUFFALO	375 x 430	530 x 525	100	-	1140	450	
FORTH 100	446 x 443	592 x 530	100	-	1139	450	
PROMENADE 100	446 x 443	592 x 530	100	-	1139	450	Pedestrianised

D400 AVON
D400 HUMBER
Double Triangular



HUMBER 600 S*



AVON

Features:

- Manufactured to BS EN 124 class D400
- BSI Kitemarked for third party assurance of quality
- ULTRA™ products comply with CD 534
- ULTRA™ products comply with BS 7903
- Suitable for carriageway and fast moving traffic applications
- AMP™ anti-movement technology frames
- Non-rock three point suspension for stability and silent operation
- Ductile iron to ISO 1083 for improved weight to strength ratio
- Black coated finish

Standard Sizes

Code	Legacy Code	Over Grate (mm)	O/all Frame (mm)	Frame Depth (mm)	HA 102	Waterway (cm ²)	Gully
AVON 4044 S	KD410	400 x 440	552 x 526	100	R	1138	450
AVON 4044 H	KD410-6	400 x 440	552 x 526	150	R	1138	450
HUMBER 600 S*	KD43D	600 x 600	752 x 752	100	P	2363	600
HUMBER 600 H*	KD43D6	600 x 600	752 x 752	150	P	2363	600
HUMBER 10045 H	KD44D6	1000 x 450	1170 x 547	150	P	3805	450

*4 Flanged

D400 TWEED

Hinged



TWEED PROMENADE 3743 S



TWEED 3743 S

Features:

- Manufactured to BS EN 124 class D400
- BSI Kitemarked for third party assurance of quality
- Suitable for lower intensity traffic
- Products comply with CD 534
- AMP™ anti-movement technology frames
- Captive hinged for easy access and increased security
- Non-rock three point suspension for silent operation (Double Tri)
- Ductile iron to ISO 1083 for improved weight to strength ratio
- Black coated finish

Options:

- Right hand hinging available on selective products, please enquire
- Locking with standard bolts

Standard Sizes

Code	Legacy Code	Over Grate (mm)	O/all Frame (mm)	Frame Depth (mm)	HA 102	Waterway (cm ²)	Gully
TWEED 3743 S	KD500	430 x 370	585 x 490	100	-	1037	450
TWEED 3743 H	KD500-6	430 x 370	585 x 490	150	-	1037	450
TWEED PROMENADE 3743 S*	KD500P	430 x 370	585 x 490	100	-	864	450
TWEED PROMENADE 3743 H*	KD500P-6	430 x 370	585 x 490	150	-	864	450

*Pedestrianised & not CD 534 compliant.

C250 MERSEY**C250 TEES****Hinged**

TEES 300



TEES DISHED 225

Features:

- Manufactured to BS EN 124 class C250
- BSI Kitemarked for third party assurance of quality
- Suitable for carriageway not exceeding 500 mm from kerbside
- AMP™ anti-movement technology frames
- Pedestrian & cycle friendly products available
- Captive hinged for easy access and increased security
- Ductile iron to ISO 1083 for improved weight to strength ratio
- Black coated finish

Options:

- Right hand hinging available on selective products, please enquire

Standard Sizes

Code	Legacy Code	Over Grate (mm)	O/all Frame (mm)	Frame Depth (mm)	HA 102	Waterway (cm²)	Gully
MERSEY 3138 S	KD51C	380 x 310	480 x 370	75	S	890	375

Yard Gullys

Standard Sizes

Code	Legacy Code	Over Grate (mm)	O/all Frame (mm)	Frame Depth (mm)	HA 102	Waterway (cm²)	Gully
TEES 225	KD70	225 x 225	285 x 263	50	-	237	228
TEES DISHED 225*	KD71	225 x 225	285 x 263	50	-	215	228
TEES 300	KD72C	325 x 325	385 x 365	75	T	530	304
TEES DISHED 300*	KD73C	325 x 325	385 x 365	75	-	495	304

*Dished

All Units Rear Hinged as standard

KERB WEAR

KERB USK



WEAR HB 4934



USK SP 3725

Features:

- Manufactured to BS EN 124 class C250 & D400 as specified
- BSI Kitemarked for third party assurance of quality
- Suitable for carriageway applications
- AMP™ anti-movement technology frames
- Captive hinged for easy access and increased security (kerb drainage units)
- Captive locked as standard for increased security (kerb drainage units)
- Non-rock captive hinged for stability and silent operation
- WEAR unit is hinged as standard
- Ductile iron to ISO 1083 for improved weight to strength ratio
- Black coated finish

Kerb Drainage Units

Standard Sizes

Code	Legacy Code	Opening (mm)	O/all Frame (mm)	Frame Depth (mm)	Loading	Type
WEAR HB 4934	KD115HB	490 x 345	590 x 417	150	D400	Half batter
WEAR SP 4936	KD115SP	495 x 367	585 x 412	150	D400	Splayed
WEAR SUB	DSUB	495 x 335	585 x 415	40	D400	

Kerb Gully Outlets

Standard Sizes

Code	Legacy Code	Opening (mm)	O/all Frame (mm)	Frame Depth (mm)	Loading	Type
USK HB 3725	C44HBB	-	370 x 250	175	C250	Half batter
USK SP 3725	C44SPB	-	370 x 250	175	C250	Splayed

PROPRIETARY

CON-GULLY 3624



BLO-GULLY 3417



NENE 4132

Features:

- Manufactured to BS EN 124 class C250 as specified
- BSI Kitemarked for third party assurance of quality
- Suitable for areas with slow moving traffic
- Captive hinged design (except NENE 4132)
- Ductile iron to ISO 1083 for improved weight to strength ratio
- Black coated finish

Blogully

Standard Sizes

Code	Legacy Code	Over Grate (mm)	O/all Frame (mm)	Frame Depth (mm)	Dish Depth (mm)	Flanges
BLO-GULLY 3417	D58-2	340 x 170	400 x 200	145	15	3
	D58-3	340 x 170	400 x 200	145	15	4
BLO-GULLY 170	D58-1	170 x 170	200 x 200	125	15	3

Congully

Standard Sizes

Code	Legacy Code	Over Grate (mm)	O/all Frame (mm)	Frame Depth (mm)	Dish Depth (mm)	Flanges
CON-GULLY 3624	D58-4	360 x 240	375 x 250	145	30	3
CON-GULLY 3624 4F	D58-5	360 x 240	375 x 250	145	30	4

Gully Chute Connector

Standard Sizes

Code	Legacy Code	Over Grate (mm)	O/all Frame (mm)	Frame Depth (mm)	Dish Depth (mm)	Flanges
NENE 4132	D46-1	415 x 320	515 x 250	180	-	-

LINEAR TRENCH



CA1040 FVLV



CA1070 FVL

Features:

- Manufactured to BS EN 124 class F900 & D400 as specified
- AFNOR NF for third party assurance of quality
- Non rock
- Each grating & frame is 1000 mm long
- Selflocking by means of spring bars and stainless steel bolts
- Ductile iron to ISO 1083 for improved weight to strength ratio

Options:

- End Bars (pair)
- Frame Levelling Kit

Standard Sizes

Code	Clear Opening (mm)	O/all Grate (mm)	Frame Depth (mm)	Waterway (cm ²)	Loading
CA1040 FVLV	1000 x 300	1000 x 400	100	1810	F900
CA1055 FLV	1000 x 450	1000 x 555	100	2386	F900
CA1070 FLV	1000 x 600	1000 x 700	100	2434	F900
CA1085 FVL	1000 x 750	1000 x 850	100	3000	F900
CA 05110 FVL	500 x 1000	500 x 1100	100	2321	F900
CA 0570 FVL	500 x 600	500 x 700	100	1066	F900
CA 10110 FVL	1000 x 1000	1094 x 1094	100	5029	F900
CA1030 DVL	1000 x 210	1000 x 300	100	1023	D400
CA1040 DVL	1000 x 310	1000 x 400	100	1563	D400
CA1050 DVL	1000 x 410	1000 x 500	100	1871	D400
CA1060 DVL	1000 x 510	1000 x 600	100	2443	D400

Large range of C250 also available, contact sales for more information.

AQUERA® 400kN Modular Gratings



AQUERA® Modular Gratings

Modular drainage gratings designed for the urban environment. The AQUERA® range of modular gratings has been designed for maximum drainage capacity alongside ultimate stability under modern urban traffic.



The use of modular elements for the construction of the AQUERA® range of gratings enables the construction of: 1, 2 or 3 part gratings, duct gratings, multiple units.

See ERMATIC® brochure for full range.



For more information on the AQUERA® range of gratings [contact sales](#).

Iron Surface Boxes



GRADE A DERWENT

GRADE B RUTLAND



DERWENT 3823 FH



DERWENT 150 S

Features:

- Manufactured to BS 5834 as specified
- BSI Kitemarked for third party assurance of quality - where applicable
- Grade A suitable for areas with fast moving heavy traffic
- Grade B suitable for medium duty traffic
- AMP™ anti-movement technology frames
- Solid top, double triangular and hinged types available as detailed
- Ductile iron to ISO 1083 for improved weight to strength ratio
- Black coated finish

Options:

- Badging e.g. FH, WO, SU etc

Surface Boxes

Standard Sizes

Code	Legacy Code	Clear Opening (mm)	O/all Frame (mm)	Frame Depth (mm)	Loading	BS 5834	Type
RUTLAND 1114 S	KB1BH	140 x 115	200 x 175	76	Grade B	Part 2	Hinged solid top
DERWENT 150 IDS LOOP-BOX	KB1D	150 x 150	225 x 225	150	Grade A	Part 2	Loop Box, Double Tri
DERWENT 150 S	KB2D	150 x 150	230 x 230	100	Grade A	Part 2	Double triangular
RUTLAND 1416 S	KB2BH	165 x 145	210 x 190	80	Grade B	Part 2	Hinged Solid Top
RUTLAND 168 SR	KB2BHC	168 dia	192 x 190	65	Grade B	Part 2	Hinged Solid Top
RUTLAND 215 S	KB3BH	215 x 215	272 x 272	75	Grade B	Part 2	Hinged Solid Top
DERWENT 225 S	KB3D	229 x 229	310 x 310	100	Grade A	Part 2	Double triangular
DERWENT 300 S	KB4D	300 x 300	385 x 385	100	Grade A	Part 2	Double triangular
DERWENT 3823 FH	KFH125	380 x 230	500 x 350	125	Grade A	Part 3	Solid Top Fire Hydrant
DERWENT 4328 FH	KFH2	430 x 280	535 x 385	105	Grade A	Part 3	Solid Top Fire Hydrant

PEDESTRIAN DRAYCOTE



TYPEA-P



TYPE-A

Features:

- Manufactured to BS 5834 as specified
- Suitable for areas with pedestrian access only
- Hinged solid top
- Cast iron & polypropylene material
- Black coated finish

Cast Iron Surface Boxes

Standard Sizes

Code	Clear Opening (mm)	O/all Frame (mm)	Frame Depth (mm)	Loading	BS 5834	Type
TYPEA	140 x 115	152 x 152	75	Pedestrian	-	Hinged solid top

Polypropylene Surface Box

Standard Sizes

Code	Clear Opening (mm)	O/all Frame (mm)	Frame Depth (mm)	Loading	BS 5834	Type
TYPEA-P	152 x 120	170 x 155	75	Pedestrian	Part 2	Hinged solid top



Iron Technical & Optional Extras



Optional Extras

Sealing & Pressure Plates



Sealing Plates

Galvanised steel sealing plates fitted to the underside of the frame. The plate is bolted to a subframe and is fitted with a rubber seal. Prevents the ingress of surface water and the egress of odours at normal atmospheric pressure.

Pressure Plates

Galvanised steel pressure plates fitted to the underside of the frame. The plate is bolted to a subframe using M10 bolts at approximately 100 mm centres and is fitted with a neoprene seal. Designed to withstand 0.5 bar of pressure (5 metre head).

Fitted to 150 mm deep products only.

Optional Extras

Badging

Badging options include 'Embossed' and 'Applied' badges.

Badges include: GAS, CATV, FW, SW, FH, AV, SV, STREET LIGHTING, MOTORWAY COMMS etc.

Bespoke badging is also available, contact sales for further information.



Applied Badge



Embossed Badge



Bespoke Badging

Optional Extras

Safety Grids & Security Plates

Safety & Security are core values for **EJ**.

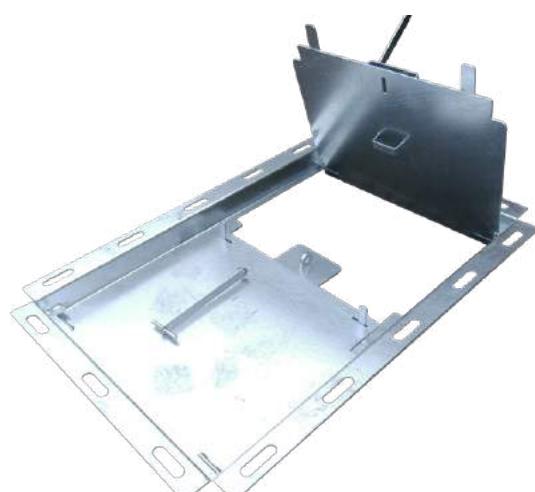
For this reason we do not compromise when designing and manufacturing safety grids & security plates.

Our safety grids & security plates are designed to fit our iron products where applicable.

For more information please contact our sales department.



Safety Grid



Twin Security Plate

Optional Extras

Lifting Keys

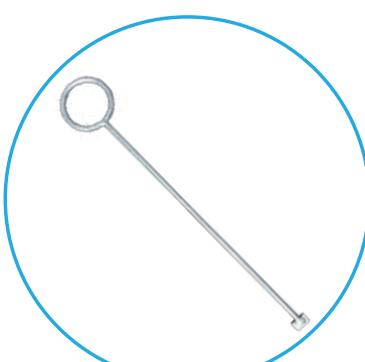
A full range of lifting keys are available to suit all our access covers.



H-KEY



L-KEY



LH-HD-KEY

Optional Extras

Locking

Various stainless steel locking options are available on most of our iron covers and gully gratings.
For more information please contact sales.



Hexagon Head Locking



Countersunk Allen Head & Slotted Head

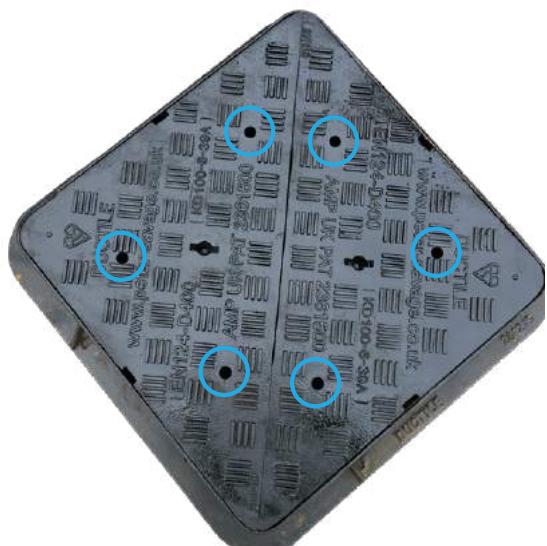
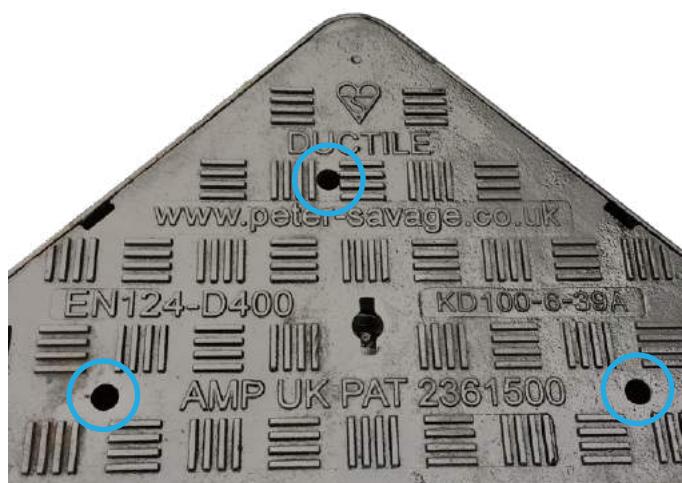


Security Hex Pin Locking

Optional Extras

Air Release Holes

Access covers are drilled with 3 number 19 mm diameter holes per triangular cover.





Extras

Installation Instructions

These installation instructions are intended to assist the work of the company responsible for an installation. They are applicable for the installation of access covers and gully gratings within this brochure (except ERMATIC®).

Prepare the rebate

Ensure the frame supporting structure is structurally integral and all old bedding material is removed. The supporting structure must be of adequate size and strength to support the frame, cover and expected loading.



Installation

It is considered good practice to wet the bedding area before applying the bedding mortar as this will assist with a positive bond between the two surfaces. Additionally this process should be repeated when the frame is lowered into position.

All traffic applications should be installed using appropriate high performance bedding mortars that are compliant with the current version of CD 534 such as Envirobed or other HA approved.



1. The bedding material must be placed on the chamber immediately after mixing. It should be placed at a depth of approximately 5 mm greater than the required bedding thickness and spread across the full width of the chamber wall. Deep trowel marks in the bedding should be filled and the surface of the bedding floated to an even finish.
2. The frame should be lowered onto the bedding as soon as possible. The frame must be placed on the bedding so that it doesn't overhang into the clear opening. All 4 sides of the frame must be fully supported.
3. The frame must be carefully tamped down to the required level and slope. This can be achieved to the specification requirements by placing a straight edge over the top of the frame and surrounding carriageway or other level control points as appropriate.
4. Any holes within the frame must be infilled with bedding material and the flanges of the frame enveloped by a minimum thickness of 20 mm of the same material. A greater thickness may be applied provided that sufficient depth is left available for placement of any surfacing layers.



Extras

Installation Instructions

Installation Continued

5. Exposed surfaces of the bedding around the outside of the frame must be floated to fill any voids and remove and loose fragments, and the exposed surface of the bedding material inside the chamber must be pointed to a smooth finish.
6. For traffic applications, a concrete collar of a minimum width of 300 mm should be formed by mixing enough rapid set high strength concrete such as QC10/QC10F/ Envirobed (flowable) or similar HA approved to achieve a minimum depth of 30 mm. Lay/pour the concrete around the ironwork and allow to set.
7. The cover should be placed in the frame by a mechanical lifting device, or suitable lifting keys after the bedding material has sufficiently set.
8. No surround material must be placed in contact with the frame until the bedding has achieved sufficient tensile and compressive strength.
9. The installation should not be opened up to traffic prematurely. Ensure the bedding mortar manufacturers instructions are carried out and sufficient curing/setting time is permitted before trafficking.



For full details for reinstatement works of surrounding rigid carriageways & flexible carriageways please consult CD 534. Sections of the guide have been extracted for Highways Agency Design Manual for Roads & Bridges, volume 4, section 2, part 5 CD 534 and is offered in good faith.



CT4S Modular Covers & Frames



CT4S Covers & Frames

CT4S is a comprehensive range of access covers and frames designed for various underground services: sewerage, electrical pits, etc. in various environments.



The use of modular elements for the construction of the CT4S range of covers enables the construction of: 1, 2 or 3 part covers, duct covers, multiple units.

See ERMATIC® brochure for full range.

Stability, strength and durability

Covers are designed to conform to D400 loading applications. Made of spheroidal graphite cast iron according to ISO 1083 standard and provided with a water based coating. Covers are solid top with anti skid surface. Galvanised steel frames and beams.

Easy handling

CT4S covers are provided with a strut assisted opening, to aid lifting.

Minimal noise and long term durability

3 point suspension allows for non rock performance.

For more information on the CT4S range of covers [contact sales](#).

Iron Access Covers, Gully Gratings & Surface Boxes





ej

ejco.com



Nuneaton

tel +44 (0) 24 7664 1777
fax +44 (0) 24 7637 5250
uk.sales@ejco.com

Nuneaton

Liberty House
Liberty Way - Nuneaton
CV11 6RZ - UK

**Iron Access Covers,
Gully Gratings &
Hydrant Boxes**
EJ © - March 2023