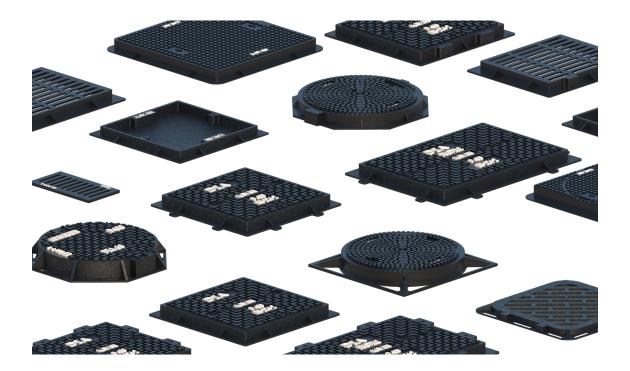
# MANHOLE COVERS

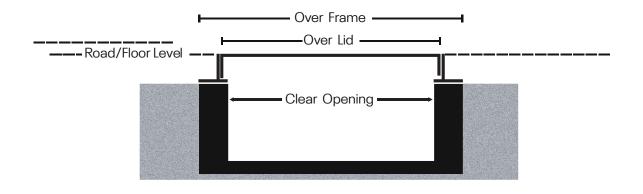




# **FINDING THE RIGHT PRODUCT**

Designs vary between manufacturers and are often changed, so you cannot simply replace the lid of a broken or missing cover, as you will have difficulty finding a lid to fit an existing frame. We work on what is known as the "clear opening" size. This is the size of the hole you wish to cover i.e. the hole in the cover slab or internal measurement of the brick or plastic chamber. Other dimensions such as the lid or frame dimensions can vary between manufacturers. The clear opening is always the same.

For gully grates - we need to know the size of the gully pot you are planning on using.



## **STANDARDS AND LOAD CLASSES**

There are three main third party standards which apply to utility castings and determine key criteria, such as load bearing ability.

Level 1. European Standard BS EN 124-2:2015

Level 2. British Standards Institute (BSI) 'Kitemark'

Level 3. Highways Authority CD534

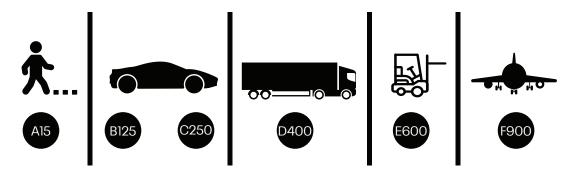
EUROPEAN STANDARD BS EN 124-2:2015.

Access covers and gully grates installed in the UK should meet the requirements of the European Standard BS EN 124-2:2015.

This standard divides access covers and gully grates into a number of classes by static test load. It also categorises the various places where they may be installed from Group 1, the least demanding environment, through to Group 6, the most demanding. It provides guidance on the minimum class to be used against each installation group.

# **STANDARDS AND LOAD CLASSES**

The table below explains how weight loadings work, however, if you are still unsure of what you need then please give us a call and we will be happy to talk through your requirements.



A15	Areas which can only be used by pedestrians and cyclists.
B125	Footways, pedestrian and comparable areas, car parks or car parking decks
C250	For gully tops installed in the area of kerbside channels of roads which when measured from the kerb edge, extend a maximum of 0.5m into the carriageway and a maximum of 0.2 m into the footway.
D400	Carriageways or roads (including pedestrian streets), hard shoulders and parking areas, for all types of road vehicles.
E600	E600 Areas imposing high wheel loads, e.g. docks, aircraft pavements.
F900	Areas imposing particularly high wheel loads, e.g. aircraft pavements

#### Group 1: Minimum Class A15

Access covers and gratings capable of withstanding a 15kN test load. For use in areas where only pedestrians have access.

#### Group 2: Minimum Class B125

Access covers and gratings capable of withstanding a 125kN test load. For use in car parks and pedestrian areas where only occasional vehicular access is likely

#### Group 3: Minimum Class C250

Access covers and gratings capable of withstanding a 250kN test load. For use in car parks, forecourts, industrial sites and areas with slow moving traffic also in highway locations up to 500mm from the kerb and up to 200mm into the verge, excluding motorways.

#### Group 4: Minimum Class D400

Access covers and gratings capable of withstanding a 400kN test load. For use in areas where cars and lorries have access, including carriageways, hard shoulders and pedestrian areas.

#### Group 5: Minimum Class E600

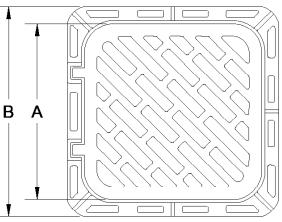
Access covers and gratings capable of withstanding a 600kN test load. For use in areas where high wheel loads are imposed such as loading areas, docks or aircraft pavements.

#### Group 6: Minimum Class F900

Access covers and gratings capable of withstanding a 900kN test load. For use in areas where particularly high wheel loads are imposed such as aircraft pavements.

### D400KM DUCTILE IRON HINGED DOUBLE TRIANGULAR GRATING & FRAME





- Complies fully with BS EN 124-2:2015 suitable for intensity of traffic in Class D400 applications
- Engineered from quality assured ductile iron
- All tight fit, non rattle interference hinged (inc double triangular non-rock) as standard
- · Available with secure, tamper-proof lock and non-lock versions
- Increased waterway available
- Lift out covers for 600 x 600 and above, providing 135° hinging giving superior site safety and one man operation



SUITS CLASS D400 APPLICATIONS



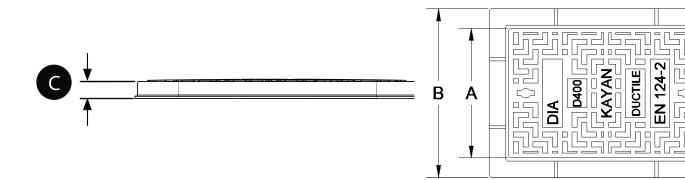
INTERFERENCE HINGE



COMPLIES WITH BS EN 124-2

CLEAR OPENING (A) MM	OVER FRAME (B) MM	DEPTH (C) MM
420 × 420	590×460	100
420 x 420	590 x 460	100
450 x 450	604 x 535	100
450 x 450	604 x 535	150
600 x 600	753 x 753	100
600 x 600	753 x 753	150

### C250 KM DUCTILE IRON SOLID TOP COVER & FRAME



### **Benefits**

- · Complies fully with
- BS EN 124-2:2015
- · Engineered from quality assured ductile iron
- Unique, slip resistant Thomas Dudley drain covers tread pattern







SUITS CLASS B125 APPLICATIONS

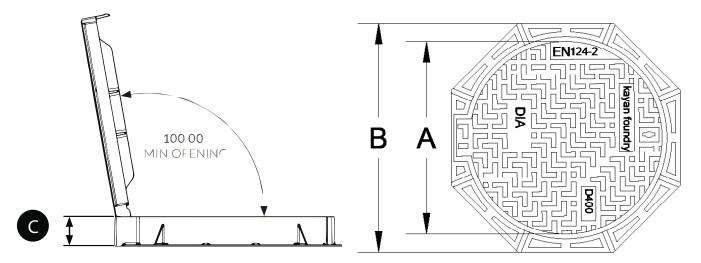
SLIP RESISTANT

COMPLIES WITH BS EN 124-2

CLEAR OPENING (A) MM	OVER FRAME (B) MM	DEPTH (C) MM
300 x 300	368×368	40
320 DIA	410 DIA	50
450 x 450	518 x 518	40
450 x 450	515 x 515	70
450 DIA (A15KM)	550 DIA (A15KM)	50 (A15KM)
450 DIA	550 DIA	40
600 x 450	662 x 512	40
600 x 600	668 x 668	40
600 DIA	700 x 700	75
675 x 675	737 x 737	40
750 x 450	818 x 550	50
750 x 600	818 x 668	40
750 x 750	811 x 811	40
900 x 600	968 x 668	40
900 x 900	968×968	40
1000 x 750	1180 x 820	50

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# D400 VERTICAL DROP-IN DUCTILE IRON COVER & FRAME



### **Benefits**

- Complies fully with BS EN 124-2:2015 Standard suitable for intensity of traffic in Class D400 applications
- Engineered from quality assured ductile iron
- Unique, slip resistant Thomas Dudley heavy duty drain covers tread pattern
- One piece Gripfix lid
- Snap-lock feature for added security
- Lift out covers for 600 dia, providing 135° hinging giving superior site safety and one man operation
- Full 360° seal for 600 dia





SUITS CLASS

D400 APPLICATIONS



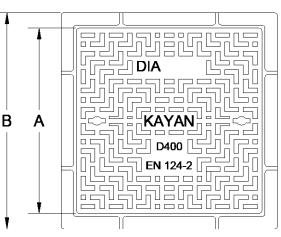
COMPLIES WITH BS EN 124-2

SNAPLOCK FEATURE

CLEAR OPENING (A) MM	OVER FRAME (B) MM	DEPTH (C) MM	GRIPFIX	SNAPLOCK
600 dia	768×750	100	$\checkmark$	<ul> <li>✓</li> </ul>
760 dia	820 x 860	100		
800 dia	950 x 1000	100		

## D400KM DUCTILE IRON VERTICAL DROP-IN DOUBLE TRIANGULAR COVER & FRAME





- Complies fully with BS EN 124-2:2015 suitable for intensity of traffic in Class D400 applications
- Engineered from quality assured ductile iron
- Unique, slip resistant Thomas Dudley heavy duty drain covers tread pattern



COMPLIES WITH BS EN 124-2

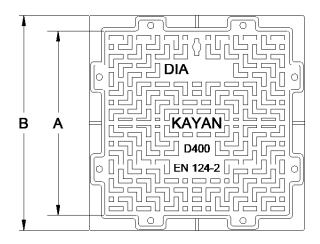
- Hinged as standard
- Hinged double triangular non-rock cover complying to one man lift manual handling regulations
- Lift out covers providing 135° hinging,giving superior site safety and one man operation



SUITS CLASS D400 APPLICATIONS

CLEAR OPENING (A) MM	OVER FRAME (B) MM	DEPTH (C) MM
450 x 450	600×600	100
600 x 450	750 x 600	100
600 x 600	750 x 750	100
600 x 600	750 x 750	150
675 x 675	825 x 825	100
675 x 675	825 x 825	150
750 x 600	900 x 750	100
750 x 750	900 x 900	100
900 x 600	1050 x 750	100
900 x 900	1050 x 1050	100
1000 x 1000	120 x 120	100

### Watertight Double Seal





### **Benefits**

- Standard sizes available and also customized to order
- Very high impact and abrasion resistance.
- Cost effective.
- Fulfills with all standards specification requirements.
- Strong, durable and highly chemical resistant.
- Reasonable weight and easy to handle.
- Manufactured from newly developed very high strength polymeric materials.
- No risk of theft due to low scrap value.





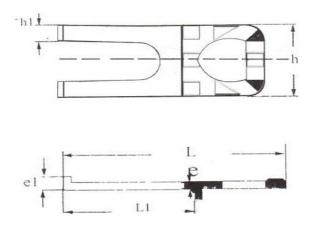
SUITS CLASS

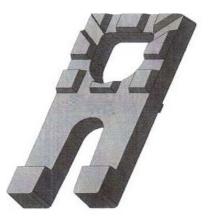
D400

D400 APPLICATIONS

CLEAR OPENING (A) MM	OVER FRAME (B) MM	DEPTH (C) MM
600 × 600	700 x 700	600
700 x 700	800 x 800	600
600 x 900	1050 x 750	600

# **Step Single Face**





- Ductile Iron Manhole cover GJS 500/7 according to ENI 563
- class B125 in compliance with EN 124 Footways, pedestrian areas and comparable areas, car parks or parking decks
- Square covers with anti-slippery surface in compli ance with ENI 24 Single seal design
- Non ventilated cover to prevent vitiated air spreading from underground to the outside
- Bituminous paint coating (Epoxy or galvanized covers are optional)
- Option to customize the manhole cover surface with writing and /or logos





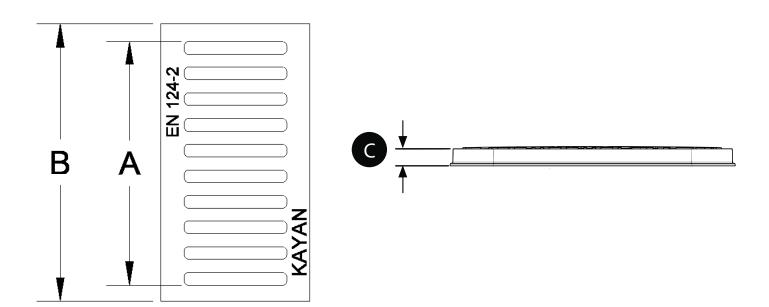
COMPLIES WITH BS EN 124-2



D400 APPLICATIONS

Roduct Name	Dimensions(mm)				Material	Coating		
ManhdeStepSngleFaceMS001	L	Ц	E	E	н	H1		
	330	175	28	27	140	45	GG15	Btumen Coating
	380	180	20	35	153	41		

### Drainage





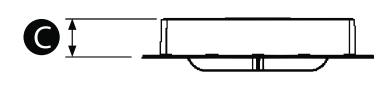


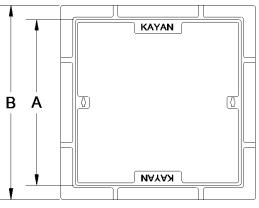
OMPLIES WITHSUITS CLASSBS EN 124-2D400 APPLICATIONS

CLEAR OPENING (A) MMOVER FRAME (B) MMDEPTH (C) MM200500300300500300400500300500500300

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# B125 & D400 DUCTILE IRON RE-CESSED COVER & FRAME





- Complies fully with BS EN 124-2:2015
- Engineered from quality assured ductile iron
- Drop-in recessed covers

- 80mm deep internal recessed tray
- Non-rock cover design



COMPLIES WITH BS EN 124-2



80mm RECESSED TRAY



AVAILABLE FOR B125 or D400 APPLICATIONS

CLEAR OPENING (A) MM	OVER FRAME (B) MM	DEPTH (C) MM	LOAD
750 x 450	900×600	100	B125
750 x 450	900×600	100	D400
900 x 600	1050 x 750	100	D400







### **KAYAN FOUNDRY**

21 Amin Samy Street, Asr EL Einy Street

Mobile: 01092998475

Telephone: 24312225

E-mail:contact-us@kayanfoundryeg.com

Website: www.kayanfoundryeg.com