

Section 5
Surface Boxes

Section 5
Contents

Grade A

Warrior
Warrior – Wide Flange
Double Triangular
Solid Top

Medium Duty

Hinged Pavement Surface Box

Warrior range

The Warrior surface box has been specifically designed to offer fast and easy access to emergency and below-ground services.

Manufactured from ductile iron and incorporating the large wedge seating principle, the Warrior surface box offers long-term stability and performance.

Conformity
The Warrior range of Grade A surface boxes fully meets the requirements of BS 5834 Part 2: 2011 and the performance requirements of BS 750: 2012 and is certified by the BSI Kitemark for quality.

Badging
A range of standard badged variants such as FH, SV, WO and AV are available. Please contact us for individual badging requirements.

Security
Safety chains can be fitted for added security.

Single-piece unit
Non-rock, heavy duty design.

Large wedge seatings
Offer non-rock performance and greater stability under heavy traffic loading.

Prising slots
Located at both front and rear of unit for easy opening and fast access to services.

Bonding ribs
To increase adhesion between the frame and bedding mortar. High-performance Polyester LTS Bedding Mortar is recommended for installation of this unit.

Positive register
A register is designed into the wedge seat for positive locating each time the cover is closed.

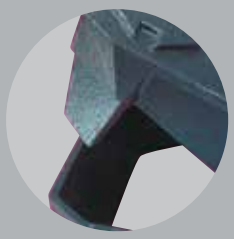
Wedge seat principle
The Warrior wedge seating operates in two directions and has seats to ensure the security and location of the cover within the frame.





LTS FEATURE

For products that have the LTS feature, the trademark is detailed in the 'At a glance' section of the product pages.



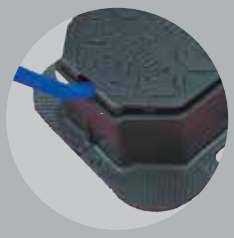
Large wedge seatings.



Bonding ribs.



Single-piece unit.



Prising slots.

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LTS FEATURE | A GRADE | >70 PSRV | APPLICATION | KITEMARK

Warrior

Product code	Product code with security chain	Nominal clear opening sizes A x B (mm)	Over base C x D (mm)	Depth E (mm)	Total mass (kg)	Pallet quantity	Internal Ref	Internal Ref with security chain
FSWA15CK	186963	150 x 150	225 x 225	100	7.3	80	HB50 1	HB50 1/AT
186986	186987	150 x 150	262 x 250	225	13.2	40	HB80 1	HB80 1/AT
186972	186973	225 x 225	325 x 325	100	13.3	45	HB54 1	HB54 1/AT
186980	186981	300 x 300	400 x 400	100	20.2	20	HB58 1	HB58 1/AT
FSWA32EK	168303	380 x 230	505 x 355	125	24.7	30	HB40 1	HB40 1/AT

Recommended for use in carriageways carrying continuous heavy traffic.

Use T-handled lifting key on all units except HB40 1 (FSWA32EK) where a loop handled lifting key is required.

Features

- Non-rock wedge seating design.
- Single piece cover with chevron chequer design.
- A comprehensive range of standard badging and bespoke badging is available.
- All sizes are available as a variant c/w security chain.

Warrior surface box for use in carriageway slot drain applications

Product Code	Nominal clear opening sizes A x B (mm)	Over base C x D (mm)	Depth E (mm)	Total mass (kg)	Pallet quantity	Internal Ref
217233	380x230	535x355	125	29	30	HB37 1

Recommended for use in carriageway slip formed slot drainage systems.

Use loop handle lifting keys product code 190667 460mm long or 190668 610mm long.

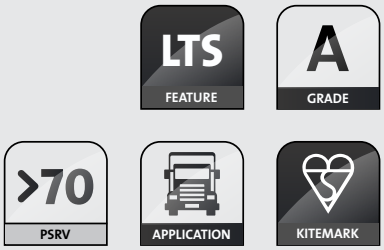
Features

- Non-rock wedge seating design.
- Single piece cover with drainage holes.
- Enlarged frame surface area to enable installation during slip from concrete process.

Lifting Key

Product code	Description	Product code	Internal Ref
FSWA15CK	Light duty “T” handled lifting key	C51	RMA 63
186986			
186972			
186980			
FSWA32EK	Heavy duty loop handled lifting key 460mm long	190667	RMA 56
	Heavy duty loop handled lifting key 610mm long	190668	RMA57





Warrior – wide flange

Product code	Product code with security chain	Nominal clear opening sizes A x B (mm)	Over base C x D (mm)	Depth E (mm)	Total mass (kg)	Pallet quantity	Internal Ref	Internal Ref with security chain
186935	186936	380 x 230	530 x 380	125	26.5	30	HB36 1	HB36 1/AT

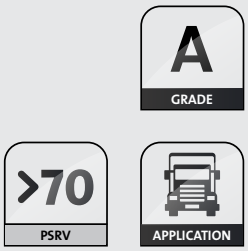
Recommended for use in carriageways carrying continuous heavy traffic.

Use loop handle lifting keys product code 190667 460mm long or 190668 610mm long.

Features

- Wider flange to prevent lateral movement and use on imperial sized chambers.
- Non-rock wedge seating design.
- Single piece cover with chevron chequer design.
- A comprehensive range of standard badging and bespoke badging is available.
- Available as a variant c/w security chain.





Double triangular

Product code	Product code security chain	Nominal clear opening sizes A x B (mm)	Over base C x D (mm)	Depth E (mm)	Total mass (kg)	Pallet quantity	Internal Ref	Internal Ref safety chain
168306	186921	430 x 280	552 x 402	102	38	20	HB07 1	HB07 1/AT

Recommended for use in carriageways carrying continuous heavy traffic.

Use loop handle lifting keys product code 190667 460mm long or 190668 610mm long.

Features

- Double triangular non-rock design.
- Chevron chequer design.
- A comprehensive range of standard badging and bespoke badging is available.
- Available as a variant c/w security chain.

0618



A GRADE

APPLICATION

KITEMARK

Solid Top

Product code	Product code with security chain	Nominal clear opening sizes A x B (mm)	Over base C x D (mm)	Depth E (mm)	Total mass (kg)	Pallet quantity	Internal Ref	Internal Ref with security chain
168304	186932	100 x 100	190 x 190	100	6	100	HB20 1	HB20 1/AT
186926	TBA	430 x 280	550 x 400	100	33.5	20	HB16 1	TBA

Recommended for use in areas subject to heavy loading but not subject to fast-moving through traffic.

Use loop handle lifting keys product code 190667 460mm long or 190668 610mm long.

Features

- Non-rock design.
- Single piece cover with chevron chequer design.
- Available as a variant c/w security chain.
- A comprehensive range of standard badging and bespoke badging is available.



E FEATURE

MEDIUM DUTY CLASS

APPLICATION

Hinged pavement

Product code	Nominal clear opening sizes A x B (mm)	Over base C x D (mm)	Depth E (mm)	Spigot I/D	Total mass (kg)	Pallet quantity	Internal Ref
187022	135 x 125	210 dia	75	–	30.7	100	HH90 1
187032	185 dia	275 x 275	61	–	7.7	80	HH96 1
187029 ✣	185 dia	240 x 240	111	202	7.9	80	HH94 1
187028 ✣ ✪ ❄	185 dia	240 x 240	111	202	7.7	80	HH93E
205341 ❄	205 x 205	260 x 260	75	–	8.1	80	HH97 E
256797	Ø145	201 x 201	90	Ø180	5.7	80	N/A

Recommended for use in pavements and other pedestrian areas where hinged access is required.

✣ Spigot base.

✪ 40mm hole in cover for encoded meter application.

❄ Badged water.

Features

- Single piece captive hinged cover section.
- A comprehensive range of standard badging and bespoke badging is available.

0618