



Section 5

Surface Boxes

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Medium Duty

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WARRIOR



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



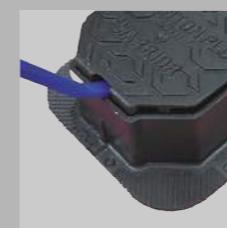
Large wedge seatings



Bonding ribs



Single-piece unit



Prising slots

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 casting 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.





Warrior

Code	SAP code	Code with security chain	SAP code security chain	BS5834 grade	Clear opening A x B (mm)	Over base C x D (mm)	Depth E (mm)	Total mass (kg)
HB50 1	FSWA15CK	HB50 1/AT	186963	A	150 x 150	225 x 225	100	8.5
HB80 1	186986	HB80 1/AT	186987	A	150 x 150	260 x 245	225	14
HB54 1	186972	HB54 1/AT	186973	A	225 x 225	325 x 325	100	14
HB58 1	186980	HB58 1/AT	186981	A	300 x 300	400 x 400	100	20
HB40 1	FSWA32EK	HB40 1/AT	168303	A	380 x 230	505 x 355	125	26

- Features:**
- Non-rock design
 - Single-piece cover
 - Badging options
 - Security chain option

Recommended for use in city and roads carrying heavy traffic.

Use T-handled lifting key on all units except HB40 1 (FSWA32EK) where a loop handled lifting key is required – see accessories page 70.



Warrior – Wide Flange

Code	SAP code	Code with security chain	SAP code security chain	BS5834 grade	Clear opening A x B (mm)	Over base C x D (mm)	Depth E (mm)	Total mass (kg)
HB36 1	186935	HB36 1/AT	186936	A	380 x 230	535 x 385	125	27

- Features**
- Wider flange to prevent lateral movement
 - Non-rock design
 - Single-piece cover
 - Badging options
 - Security chain option

Recommended for use in city and roads carrying heavy traffic.

Use T-handled lifting key on all units except HB40 1 (FSWA32EK) where a loop handled lifting key is required – see accessories page 70.



Double Triangular

Code	SAP code	Code with security chain	SAP code security chain	BS5834 grade	Clear opening A x B (mm)	Over base C x D (mm)	Depth E (mm)	Total mass (kg)
HB07 1	168306	HB07 1/AT	186921	A	430 x 280	550 x 400	100	38

- Features**
- Double triangular
 - Non-rock design
 - Badging options
 - Security chain option

Traditional double triangular design for use in city roads carrying heavy traffic.

Use loop handled lifting keys – see accessories page 70.



Solid Top

Code	SAP code	Code with security chain	SAP code security chain	BS5834 grade	Clear opening A x B (mm)	Over base C x D (mm)	Depth E (mm)	Total mass (kg)
HB20 1	168304	HB20 1/AT	186932	A	100 x 100	190 x 190	100	6
HB16 1	186926	TBC	TBC	A	430 x 280	550 x 400	100	33.5

- Features**
- Solid top cover

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

Use loop handled lifting keys – see accessories page 70.



Hinged Pavement

Code	SAP code	BS 5834 grade	Clear opening A x B (mm)	Over base C x D (mm)	Depth E (mm)	Spigot I/D	Total mass (kg)
HH90 1	187022	Medium	135 x 125	215 dia	75	–	4.2
HH96 1	187032	Medium	180 dia	275 x 275	60	–	7.6
HH94 1 †	187029	Medium	180 dia	240 x 240	110	202	8.5
HH93E † ‡ *	187028	Medium	180 dia	240 x 240	110	202	8.5
HH97 E *	205341	Medium	205 x 205	260 x 260	75		8.1

Features

- Single-piece cover
- Hinged
- Badging options

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

Use loop handled lifting keys – see accessories page 70.