



A CRH COMPANY

## Specification AX-S™ Recessed Cover & Frames

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## AX-S™ Recessed Covers & Frames

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# Specification

## AX-S™ Recessed Covers & Frames

### 1. GENERAL DESCRIPTION

1.1 This specification describes a range of Frames and Covers consisting of single and multiple cover units capable of being installed over a jointing chamber entrance in an area designated for pedestrian use, with occasional use for service and emergency vehicles. The frames and covers meet the requirements of Class B125 of EN124: 1994.

1.2 All multiple cover units shall incorporate a removable crosspiece(s) to allow the associated covers to be slid out in either direction.

1.3 Each cover shall be supplied unfilled but capable of receiving a depth of concrete, paving bricks, cobble or natural stone of varying depth and are suitable for internal or external use.

1.4 Construction, materials and performance shall comply with EN124, Class B 125.

### 2. CONSTRUCTION

2.1 The frame and covers shall be manufactured from steel of a minimum thickness of 6mm. All welded butt joints shall be flush, being free from steps and raised welded runs on seating surfaces.

2.2 The interface between each cover and the frame will provide a seating width of 30mm minimum.

2.3 Each frame shall be provided with a flange or steel lugs to allow bonding of the frame into the bedding material.

2.4 Each cover shall be provided with a drain hole of not less than 20mm diameter positioned in the base under each keyhole.

2.5 Each cover shall be constructed so as to provide an internal angle of 95° minimum between the seating and upright face.

2.6 Frames containing multiple covers will be fitted with removable crosspiece(s) so as to provide a minimum overlapping flange width level with frame seating flange of 30mm minimum beneath each unsupported cover seat.

2.7 The up stand of each crosspiece shall be the same height as the frame.

2.8 Each cover within a frame shall be interchangeable with any other within that frame.

2.9 Each cover shall be constructed with a sheet of expanded mesh, of not more than 3mm thick, secured to the base, to aid bonding of the paving material.

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### 3. DIMENSIONS

- 3.1 Each frame shall be dimensioned to provide the required clear opening.
- 3.2 The overall depth of any cover shall be dependent on the depth of brick or filling material

### 4. WEIGHT

- 4.1 The maximum weight of any cover when filled with proprietary paviour blocks or concrete to density of 2210kg/m<sup>3</sup> shall not exceed 78kg.
- 4.2 The maximum weight of any crosspiece shall not exceed 19kg.

### 5. MATERIALS

- 5.1 Materials shall be as specified in EN124 para 6
- 5.2 Each cover shall be resistant to frost, petrol, oil, salt and de-icing solution.
- 5.3 The cover shall be resistant to impact damage and will not warp at temperatures up to 40°C

### 6. LIFTING

- 6.1 Each cover shall be provided with keyholes to accept lifting keys/lifting equipment.
- 6.2 The keyhole shall be designed so that the key tang can be turned through 360°.
- 6.3 The keyhole shall be capable of withstanding a 250kgf pull without duress.
- 6.4 The keyhole engagement depth to be a maximum of 15mm.
- 6.5 The keyhole shall be self-draining of water and stones.
- 6.6 The keyhole shall be sufficiently durable to withstand damage and long term wear.
- 6.7 Each crosspiece shall contain keyholes to facilitate removal.

### 7. SURFACE FINISH

- 7.1 All steel will be hot dip galvanised to EN1461.

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### 8. LOAD TEST

8.1 Testing and test loads shall be specified in EN 124 para 8 for Class B 125, all load tests shall be carried out using the cover(s) in their condition in service and without its filling.

### 9. COVER ROCK

9.1 When the cover is placed firmly on a flat surface and held such that it is resting on any 3 points of contact, it will not be possible to insert a gauge in excess of 3mm thickness fully between the cover and the seating at any point.

### 10. MARKING

10.1 The frame and cover shall be clearly marked in accordance with EN 124 para 9.

### 11. CERTIFICATION

11.1 All covers supplied against this specification shall meet the certification requirements as specified in EN 124 para 10.

### 12. INSTALLATION

12.1 Frames are supplied with slots in the flanges to facilitate the bolting down of the frames to the chambers with expansion bolts if required. Frames need to be bedded on a suitable mortar. Cubis recommend Tarmac Ultibed HA104.

### 13. PAVING INFILL

13.1 Precinct cover trays are supplied empty ready to receive paviour infill. Paviments (including natural stone and concrete block paving) need to be bedded on an approved mortar, CUBIS recommend Tarmac Resipave and paving laid in accordance with BS677 Part III.

13.2 Grout paviments using a free-flowing grout, CUBIS recommend Tarmac Pavpoint. After materials have set remove trays and thoroughly clean inside of frame and all seating surfaces. If sand is being used between concrete block paving, the application of a sealant is recommended to stop the sand being removed by mechanical sweepers.