



**01 DRAWING REFERENCES SHOWING LOCATIONS, SPECIFICATION, ETC**

The Combined Drainage and Kerb System (CKDS) shall comprise of Marshalls two-piece Beany® Block consisting of a top block and base block, or alternative with equal or greater hydraulic and loading performance. CKDS to be manufactured from hydraulically pressed concrete, with the exception of certain fitments such as access covers and end caps. CKDS made of polymer bound materials and recycled plastic shall not be used. The selected products must be BSI Kitemark Certified and comply with BS EN 1433.

The CKDS shall be installed to the manufacturer’s guidance and clause 516 of the SHW. The locations of all CKDS, including access points, silt traps and outfalls are shown on the contract drawing numbers:

[Insert drawing numbers]

Typical construction details are shown on drawing numbers:

[Insert drawing numbers]

**02 LIMITING DIMENSIONS**

Maximum width 490mm, excluding any haunching requirements, with a minimum width requirement of 430mm excluding any haunching requirements. Maximum depth from top of kerb to underside of the base unit to be 905mm, excluding any bedding requirements. Minimum depth requirement from top of kerb to underside of the base unit to be 480mm, excluding any bedding requirements.

Top of kerb to underside of base unit (excluding any bedding requirements for each size)	Base 205: 480mm Base 295: 570mm Base 365: 640mm Base 630: 905mm
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Kerb upstand	[Insert info] (See note 1 for guidance)
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Kerb profile	[Insert info]
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**03 STRENGTH REQUIREMENTS**

The CKDS shall comply with BS EN 1433 and achieve load classification E600 as per clause 516.6 of the SHW. The CKDS shall be marked W+R to ensure suitable weathering resistance and long-term performance where there is potential for standing water containing de-icing salts in frost conditions. The selected products must be BSI Kitemark Certified.

To ensure long-term performance and to accommodate accidental loading and impact, the CKDS shall have a minimum front wall thickness ≥80mm when the measurement is taken 125mm from the top of the CKDS.

There shall be a maximum of 1 inlet per 500mm that is not within 150mm of the side of each unit when measured on the front face.

**04 HYDRAULIC DESIGN PARAMETERS**

Design flows shall be accommodated without surcharge within the main combined drainage and kerb section and beneath the underside of any inlet slot sections. The design has been based on Marshalls Beany® Block, any alternative system proposed by the Contractor should provide equal or greater capacity. The water inlet apertures shall increase in size towards the inside of the unit with a minimum divergence angle of 5°. The angle of incline of the water inlet aperture shall be at least 30° to the horizontal.

[Insert design criteria including any climate change or individual run requirements here, including run number, length]

**05 SPECIAL FITTINGS REQUIRED**

All accessories shall be designed to match and be fully compatible with the system used.

Joints shall be sealed with Marshalls M-Seal and shall be watertight.

Access covers to be installed at the head of the run and at a maximum of 50m spacings.

Silt traps with access covers to be installed at a maximum of 100m spacings.

CDKS to outfall via a trapped prefabricated outfall with access cover.

Access covers shall be hinged and installed to the direction of traffic. They shall be designed so as not to reduce the effective waterway area of the system.

The lengths of the units shall be selected to ensure horizontal and vertical curves can be achieved as shown in the drawings. For curves of radii 50m or less, special units with appropriate splayed ends shall be used.

Where the base units of two-piece blocks are to be plated to allow flow under carriageways, there shall be a minimum of 150mm cover of road construction material above the units. This minimum cover shall also apply to vehicular crossings.

**06 SURVEYING REQUIREMENTS WITH PRE-CLEANSING REQUIREMENTS**

[Insert info]

**07 ALIGNMENT**

The units, when installed, shall not deviate by more than 3mm in 3 metres from line and level.

**08 GENERAL**

[Insert info]

**NOTES FOR GUIDANCE**

A kerb upstand of between 75-125mm is permissible with the half battered profile. (150mm with low hole top units) and 75-100mm with the 45° splayed profile, this must be specified on an individual contract basis.

