



Beany Guide



Marshalls

Creating Better Spaces



E600 – Traffic areas used by vehicles imposing particularly heavy wheel loads.

LOADING



D400 Carriageways of roads (including pedestrian streets and parking areas) catering for all legal road going vehicles.



*Drainage areas are a guide based on level ground and 50mm/hr rainfall intensity



Kerb & Drainage

The Case for Combined Kerb & Drainage Systems

Introduction

The growing demand for more cost effective and less complicated drainage systems has led to modern linear drainage becoming the preferred choice amongst specifiers and contractors.

Linear Drainage is more efficient than point drainage at surface water interception which means ponding is reduced or eliminated. Combined kerb and drainage is a type of linear drainage which in addition to restraining the edges of roads and footways, also intercepts and transports water.

The introduction of Mono Beany to sit alongside Mini Beany and Beany Block means Marshalls' is now able to offer a complete range of combined kerb and drainage solutions. Marshalls' unique Beany product offer combines the clear-cut advantages of combined kerb and drainage systems, with the benefits of a high quality, robust concrete which provides a number of competitive advantages.

Manufactured in Concrete

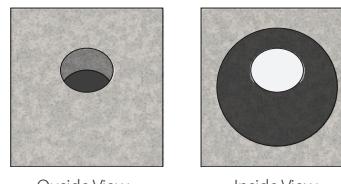
The high inherent strength and durability of concrete means:

- Manufactured to tight dimensional controls, producing consistent units for ease of on-site construction
- Withstand de-icing salts and freeze/thaw effects, reducing maintenance and increasing service life
- Textured surface, providing excellent slip/skid resistance
- Manufactured in a variety of concrete aesthetics to complement surrounding components and the environment

Construction savings

- Combines water interception and transportation in one, minimising/eliminating the need for carrier drains, gullies and manholes, reducing construction costs and saving time.
- Simple to design, easy to set out and straightforward to install, reducing design time and cost.
- Overall construction period can be reduced as carriageway materials may be laid in a continuous sequence.

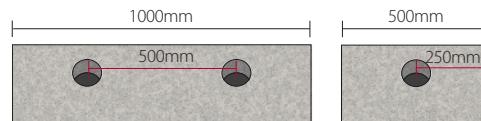
The Beany inlet aperture



Outside View

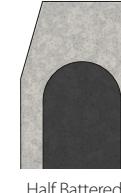
Inside View

- Wider on the inside to prevent blockages, inclined at 45° to prevent silting and allow inspection of rodding access
- Designed to provide maximum strength and resistance against loads imposed by overriding heavy vehicles

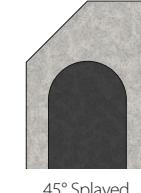


- Inlet apertures are 500mm apart, to reduce the running of fast flowing water on the carriageway and eliminate ponding
- Positioned and shaped to give maximum drainage efficiency as well as a pleasing appearance

Versatility



Half Battered



45° Splayed

- Available in both Half Battered and 45° Splayed profiles, suitable for schemes ranging from estate roads and car parks to trunk roads and motorways
- Offered across a range of invert depths, providing a suitable solution for all hydraulic needs
- Each system allows for the construction of pedestrian crossings with drop kerbs and centre stones, and corners with radius units

Accreditation/Certification

All of Marshalls combined kerb and drainage systems:

- Carry the British Standard Kitemark
- Certified to BS EN:1433
- CE approved

The Beany range adds up to a trusted, reliable and highly effective combined kerb and drainage solution.



Mono Beany

A concrete one piece combined kerb and drainage system.

Installation

- Quick and easy installation, which reduces construction time and cost
- Sealant groove at one end of each unit, for easier and quicker installation

Not included on the majority of our competitors comparable ranges

- A single mechanical lift equates to one metre installed, the 321 units are the same weight as the equivalent standard kerb.

Manufacture

- Achieves D400 loading due to Marshalls M-Tech, a unique high strength concrete, haunching can be minimised and installation costs reduced
- Excellent flow hydraulics with reduced turbulence due to smooth, low friction plastic liner

Certification

- Certified to BS EN:1433
- CE marked
- Carries the British Standard Kitemark, therefore Highways Agency accredited

The majority of our competitor's comparable products don't carry the British Standard Kitemark



Mini Beany

Evolved from Beany Block success, a robust two piece design with excellent flow rates, ideal for medium capacity requirements

Product

- A low/medium capacity system
- Half Battered and 45° Splayed profiles for a variety of road schemes
- Available in two depths – 321mm and 502mm
- Available in 500mm and 1000mm lengths, for quicker installation and less on site cutting

The majority of comparable products are only available in 500mm lengths, increasing installation costs with 2 installations per metre

- Includes Drop Kerbs, Centre Stones and Radius units for a variety of road schemes

The majority of competitors do not offer radius or pedestrian crossing units within their comparable ranges

- Complete range of accessories, including outfalls and access units to provide a total system solution

Product

- A medium capacity system
- A higher capacity than the majority of our competitor's comparable products**
- Available in Half Battered, 45° Splayed & Bull Nose profiles, offering a solution for any scheme

The majority of competitors only offer Half Battered and 45° Splayed profiles within their comparable ranges

- 4 base depths (210, 260, 310, 360mm) a solution for a variety of projects
- Available in 500mm and 1000mm lengths, for quicker installation and less on site cutting

The majority of our competitor's comparable products are only available in 500mm lengths

- Includes Drop Kerbs, Centre Stones and Radius units for a variety of road schemes

The majority of competitors do not offer radius or pedestrian crossing units within their comparable ranges

Installation

- Low installation costs as front haunch not required to achieve E600 loading

The majority of our competitors comparable products require an "installation guarantee" to give installation confidence, and a front haunch is required to achieve only D400 loading

- The loading strength of Mini Beany means that only a standard concrete mix is required for haunching, this minimizes installation costs

To achieve the minimum required load classification the majority of our competitor's comparable products require a "structural" concrete mix for haunching, which makes installation more expensive

- Design and installation means that when at full capacity, there will be no water running in the kerb line

At full capacity some of our competitor's comparable products can cause a risk by allowing water to run in the highway

- Compatible with Traffic Drain and with base and cover plates available to accommodate road crossings

Manufacture

- Robust concrete construction achieves E600 loading, able to withstand loadings imposed by both road and construction traffic

The majority of our competitors only achieve D400 loading within their comparable ranges

- Available in a standard and attractive Conservation finish

The majority of competitors only offer standard or plastic finishes within their comparable ranges

Certification

- Certified to BS EN:1433
- CE marked
- Carries the British Standard Kitemark, therefore Highways Agency accredited

The majority of our competitor's comparable products don't carry the British Standard Kitemark



Beany Block

The original and largest capacity combined kerb and drainage system, over 1 million linear metres installed in the UK.

Product

- A high capacity combined kerb and drainage system
- Available in Half Battered and 45° Splayed profiles suitable for any road project
- 4 base depths (205, 295, 365, 630mm), the highest capacity system available

Significantly higher capacity than the majority of our competitor's comparable products

- Available in 500mm lengths, to reduce on site cutting
- Radius units available for roundabouts and bends

The majority of competitors do not offer radius units within their comparable ranges

Installation

- Low installation costs as front haunch not required to achieve E600 loading

The majority of our competitors comparable products require an "installation guarantee" to give installation confidence, and a front haunch is required to achieve only D400 loading

- The loading strength of Mini Beany means that only a standard concrete mix is required for haunching, this minimizes installation costs

To achieve the minimum required load classification the majority of our competitor's comparable products require a "structural" concrete mix for haunching, which makes installation more expensive

- The unique design of the Beany top means that even when at full capacity no water run is able to run into the highway

At full capacity some of our competitor's comparable products can cause a risk by allowing water to run in the highway

- Compatible with Max-E Channel, base and cover plates available to accommodate road crossings.

Manufacture

- Robust concrete construction achieves E600 loading, able to withstand loadings imposed by both road and construction traffic

At full capacity some of our competitor's comparable products can cause a risk by allowing water to run in the highway

The majority of competitors only achieve D400 loading within their comparable ranges

- Available in a standard and attractive Conservation finish

The majority of competitors only offer standard or plastic finishes within their comparable ranges

Certification

- Certified to BS EN:1433
- CE marked
- Carries the British Standard Kitemark, therefore Highways Agency accredited

No Envirokerb units carry British Standard Kitemark



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