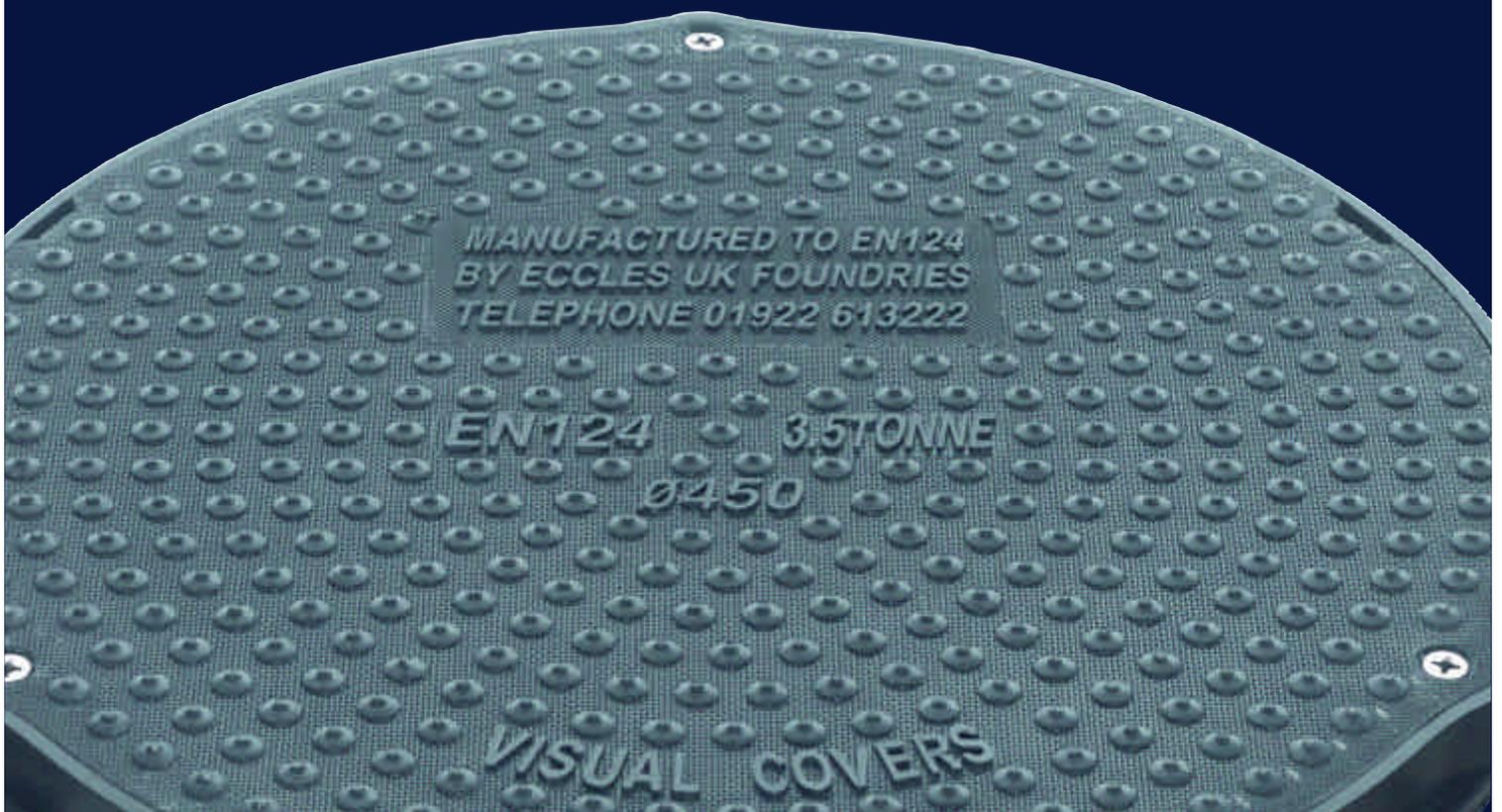




**eccles**

## Advanced Composite Manhole Covers



# So many advantages!

The new lightweight and durable composites used in Eccles' manhole cover range is the result of extensive research. As a direct alternative to ductile iron and steel, this is - by common consensus - the way forward for the industry. Benefits include:

- Higher fatigue endurance limit.
- 30-45 % lighter than aluminium when designed to the same functional requirements.
- Lower embedded energy, when compared to other structural materials like steel and aluminium.
- Less noisy.
- Lower vibration transmissions.
- Composite are generally more versatile, and can be tailored to meet performance and complex design needs.
- Long Life - Superior durability of composites, with only cosmetic maintenance requirements, are expected to last a decade. Unlike metals, they will not rust and do not deteriorate in a saline environment which curtails the life of most conventional materials.
- The material offers excellent fatigue impact.
- Environmentally resistant which reduces maintenance or replacement.
- Composites exhibit excellent corrosion resistance and are fire retardant.
- Improved appearance compared to conventional metal parts.
- Composite has far greater UV resistance than polypropylene, which can be damaged by ultra violet light.
- Recyclable.

## other product ranges

Ductile Manhole Covers



Twin Triangular Covers



Gully Gratings



Surface Boxes



CERTIFICATION MARKS AWARDED  
TO OUR PRODUCTION FACILITIES

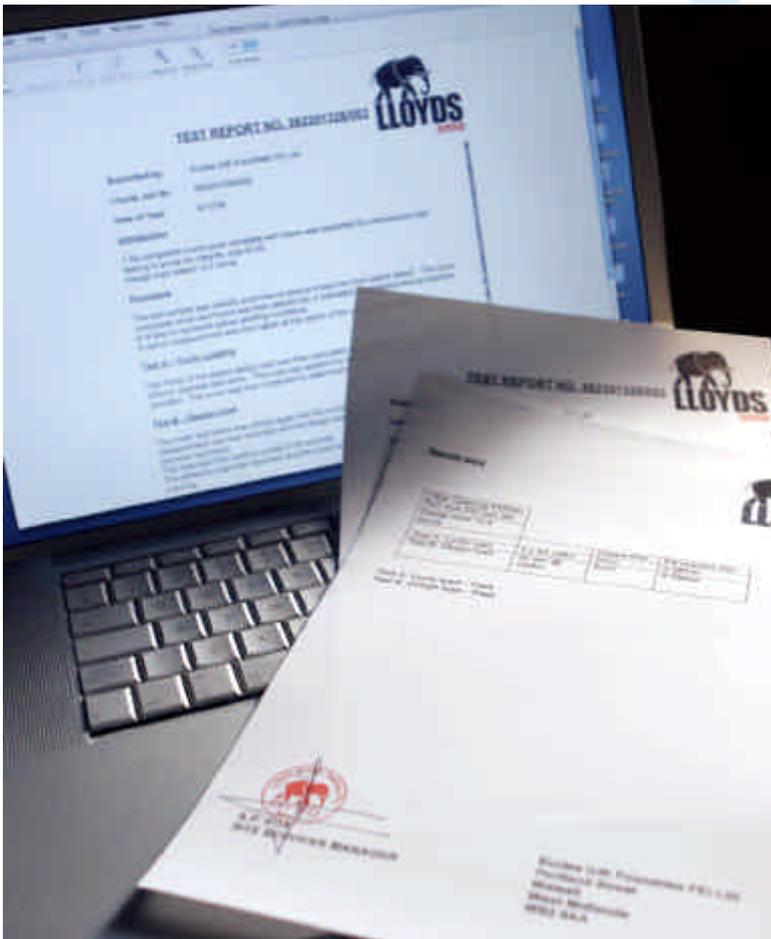


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### Manufactured to European Standards

All models in the new advanced composite range are manufactured to BS EN 124 : 1994, an exacting industry standard which requires the product to undergo substantial load test requirements.

## Eccles and technology raise the standards

**As a long-established name in the manhole cover industry, Eccles (UK Foundries FE) have taken new technology and created an outstanding range of reinforced fibre resin composite manhole covers.**

Unlike other products in the market-place - manufactured from traditional materials like cast iron or, increasingly nowadays, from lightweight polypropylene - Eccles' all-new composite products:

- are equal in strength
- have a longer life-span
- have many features linked with accuracy of manufacture

In so many ways, Eccles' products are a huge step forward. The composite material itself allows for innovative design features which builders' merchants and contractors alike are sure to welcome.

In addition, Eccles' experience in this industry has ensured that the composite manhole cover range conforms to - and in some cases exceeds - the latest NHBC and LABC regulations.



...further variations of composite manhole covers will be added to our range...



## The advantages of composite materials

Composites have only been around for 15 years or so, compared to traditional materials like polypropylene which have been used for about 40 years.

Until recently, composites were seen as a high-cost alternative to the more traditional materials. However, major technical advances by manufacturers have greatly reduced the cost of composites which enables them to compete head-on with traditional materials.

Today, composites are used for a wide variety of applications ranging from bridges to sporting goods to aerospace products - and even satellites!

For Eccles, here was an exciting opportunity to take the manhole cover industry onto another level. Extensive research by the company into these new lightweight and durable materials has resulted in an innovative range of manhole covers that outperforms its traditional rivals and points the way forward for the industry.

### **Specify only composite covers!**

When a specifier's reputation depends on getting it right, the reassurance provided by Eccles' new range of manhole covers is priceless.

### **Non-slip safety**

Composite manhole covers have been designed with all safety standards in mind. The non-slip surface design has been achieved without creating sharp or dangerous edges. Contractors can therefore have total confidence in all matters relating to health and safety.

Eccles spent several years in developing this design. Features given specific attention were directional slip and achieving a suitable 'feel' to enable the visually impaired to use them as a locator.

### **Suppliers - don't slip-up!**

*Did you know that suppliers can be sued for personal injuries and damages as a result of third parties slipping on covers - even though they weren't responsible for either the design or manufacture of the cover?*

*Thanks to Eccles' new composites, this can now be a thing of the past! All products in the range are now manufactured with non-slip specifications (patents pending) which prevent slipping and therefore unwelcome claims.*

### **Safety... and performance-plus!**

- All products are child-proof and can be locked down to deny access to unauthorised people.
- Lloyds British have exhaustively tested and approved the full product range.
- Composite covers conform to all the latest Health & Safety Regulations.
- All products in the range come with a no-nonsense guarantee.

...an innovative range of manhole covers that outperforms its traditional rivals...



## Composites in action!

The practical advantages of reinforced fibre resin composite manhole covers are enormous. Eccles' experience in the field ensures that every product detail and its application have been addressed.

**LIGHTWEIGHT** - The weight of each cover is much lower than standard ductile iron or steel equivalent. This means they can be lifted by one man which conforms to new industry working standards.

**MULTI-USES** - The products are compatible with all existing chambers so they can be used for both replacement projects and new build. The benefits of this include:

- Time saved on maintaining stocks on-site.
- More covers can be transported per vehicle at reduced cost.
- Cover usability allows for a safer working environment.

**NEW APPLICATIONS** - The new advanced composite material provides the option for covers to be customised for a wide range of applications such as incorporating company and usage details on the surface.

**VERSATILE** - The covers can be manufactured to a customer's own specifications, including a range of colours to suit different design concepts. The durable finish keeps its profile and colour in all weather conditions, and is particularly resistant to de-icing salts.

**AVAILABILITY** - Products are always available ex-stock to be despatched from the company's Walsall depot to every part of the country via the Midlands motorway network.

**WEIGHT LOADING** - Eccles' products cover weight capacities of up to 1.5 tonne, 3.5 tonne and 12.5 tonne, making them suitable for a vast array of uses ranging from pedestrian and cycle-ways to carriageways, hard shoulders and parking areas. The diagram (below) shows the areas where the products can be used.

### **A15** Group 1

Pedestrian and pedal cyclist areas only.

### **B125** Group 2

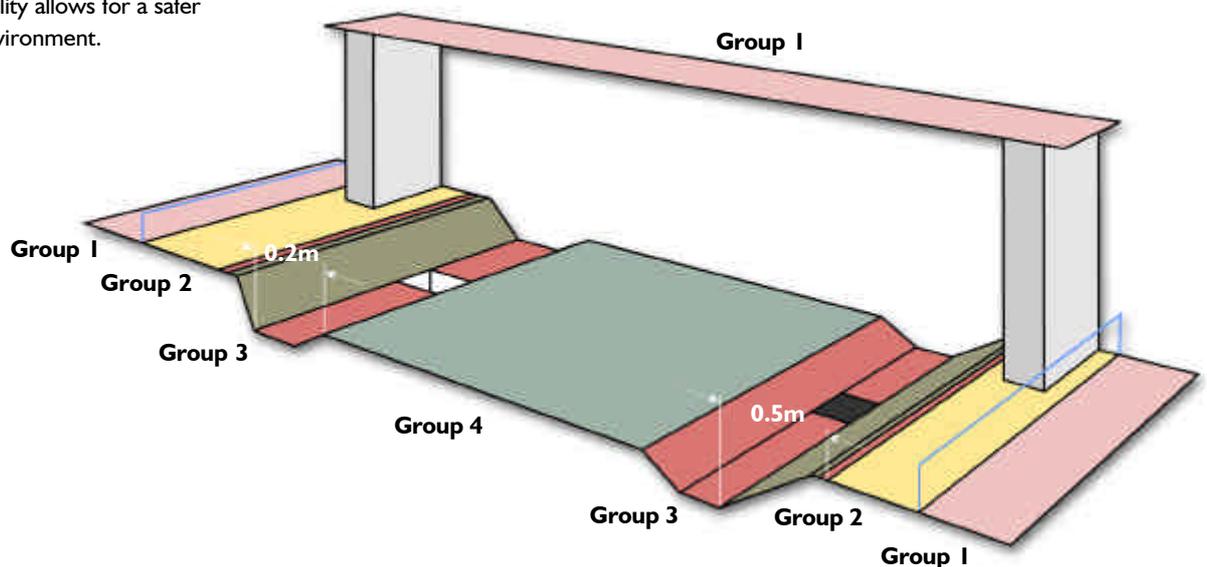
Footways, Pedestrian areas, car parks and parking decks.

### **C250** Group 3

Gully tops installed in kerbside channels of roads which when measured from kerb edge extend to a maximum of 0.5m into the carriageway and a maximum of 0.2m into footway.

### **D400** Group 4

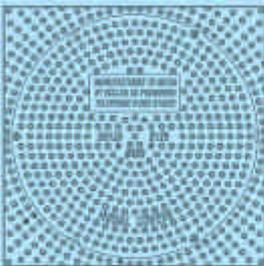
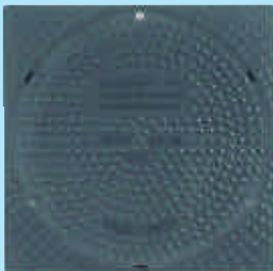
Carriageways (including pedestrian streets), hardshoulders and parking areas for all types of road vehicles.





## 450ø Circular Composite

Reference	Load weight	Size	Description
ECOM201C	1.5 Tonne Loading	450mm Diameter	Circular Cover & Frame
ECOM202C	3.5 Tonne Loading	450mm Diameter	Circular Cover & Frame
ECOM203C	B125 Tonne Loading	450mm Diameter	Circular Cover & Frame



## 450mm x 450mm Round to Square Composite

Reference	Load weight	Size	Description
ECOM204SQ	1.5 Tonne Loading	450x450mm	Round to Square Cover & Frame
ECOM205SQ	3.5 Tonne Loading	450x450mm	Round to Square Cover & Frame
ECOM206SQ	B125 Tonne Loading	450x450mm	Round to Square Cover & Frame

For further technical details please contact us:

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