

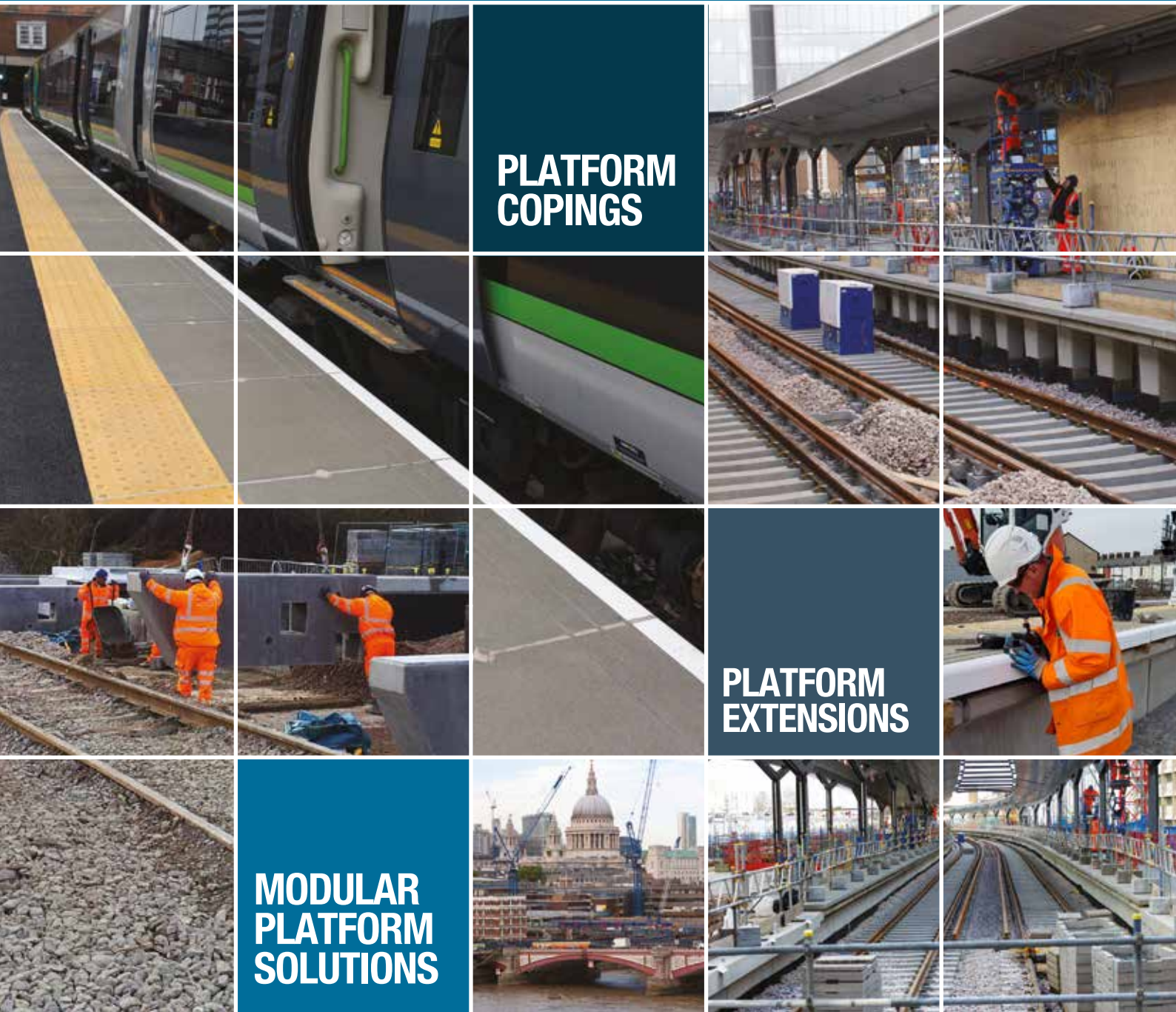


THINKING PRECAST?  
THINK FP MCCANN



# PRECAST RAIL SOLUTIONS

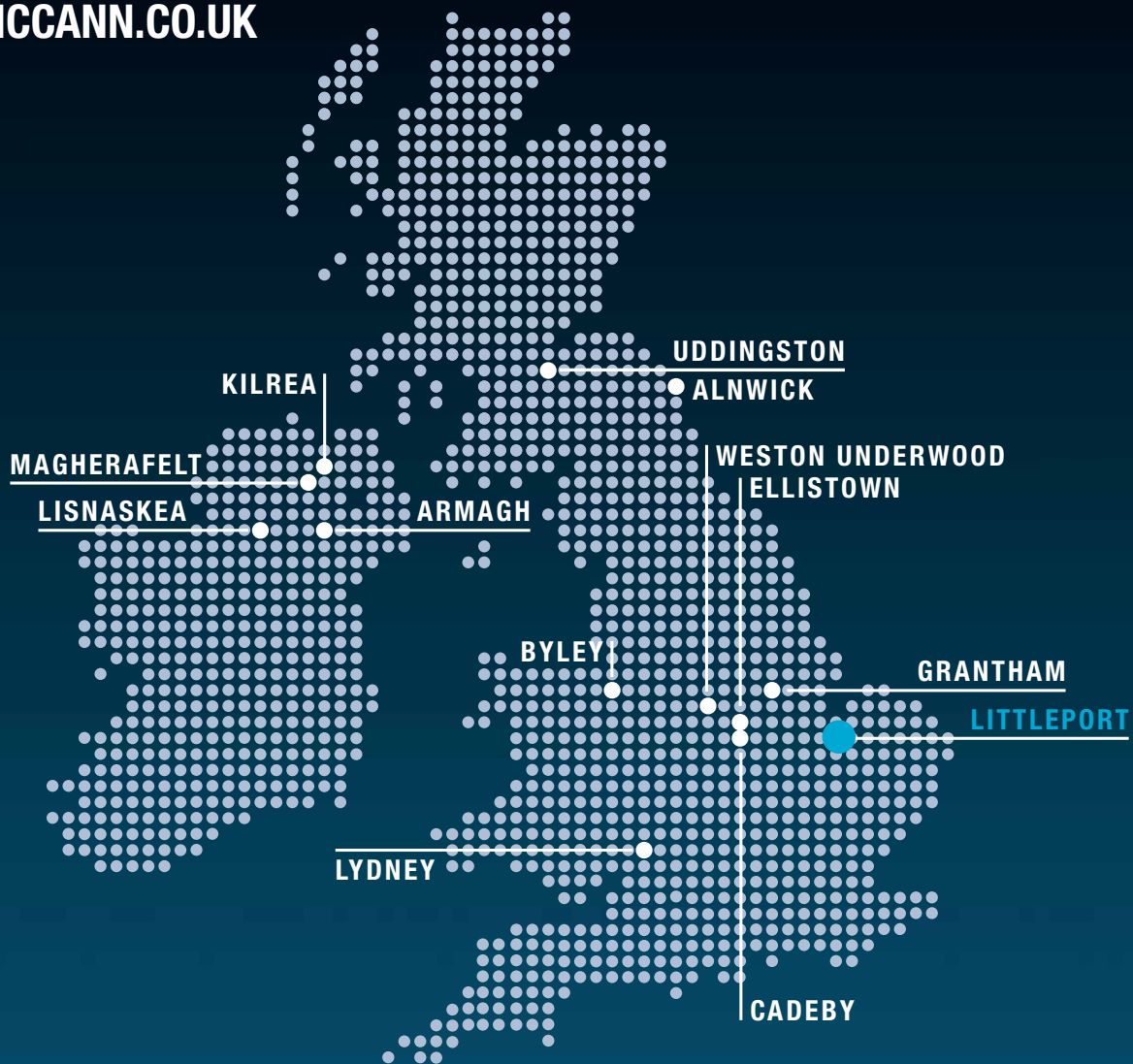
v2.3



PLATFORM  
COPINGS

PLATFORM  
EXTENSIONS

MODULAR  
PLATFORM  
SOLUTIONS



FP McCann is the UK's market leader in the manufacture, supply and delivery of precast concrete solutions. Our comprehensive precast concrete business extends to include:

**AGRICULTURE | ARCHITECTURAL PRECAST | BOX CULVERTS | BUILDING PRODUCTS  
DOCK LEVELLER PITS | DRAINAGE | FENCING | FILTER BED SYSTEMS | FLOORING  
POWER & INFRASTRUCTURE | RAIL | SPECIALIST PRECAST | STRUCTURAL PRECAST  
TANKS & CHAMBERS | TUNNELS & SHAFTS | WALLING**

Modern manufacturing plants at Alnwick (Northumberland), Armagh (Northern Ireland), Byley (Cheshire), Cadeby (Warwickshire), Ellistown (Leicestershire), Grantham (Lincolnshire), Lisnaskea (Northern Ireland), Littleport (Cambridgeshire), Lydney (Gloucestershire), Kilrea (Northern Ireland), Magherafelt (Northern Ireland), Uddingston (Lanarkshire) and Weston Underwood (Derbyshire) incorporate the latest computerised batching, distribution, casting, curing and handling systems and are operated by skilled and experienced workforces to ensure consistency of quality. Their geographical spread gives us an unrivalled ability to serve the construction industry throughout the UK and Ireland.

By applying the DFMA principles, FP McCann's design engineers are able to evaluate individual precast concrete products part by part, in addition to documenting the assembly process step by step. This allows them to generate the cost, part count and assembly time to provide a benchmark to measure its success and identify the parts and process improvement opportunities. In turn, this has allowed FP McCann to design and manufacture more cost-effective and efficient high-quality precast concrete products with less wastage and greater on-site recycling. As a result, increased productivity, combined with a reduction in production time and costs, allows FP McCann to be more competitive within the marketplace.

*Please note: all information is correct at time of going to print.*



Manufactured to Network Rail specification, FP McCann is a nominated approved supplier of precast concrete concrete platform copings to the rail sector.

FP McCann manufactures a standard range of precast concrete railway platform components to Network Rail Specification NR/L3/CIV 030; these include modular platform systems, platform copings, platform edge warning paving (tactiles) and oversail blocks. Nosing slabs to London Underground specification are also available.

All products are manufactured under a quality assurance system assessed against BS EN 9001 by BSI.

FP McCann is a Supply Line and RISQS approved company; Achilles Supplier number 061598.

For all your product enquiries, please contact our sales team at the Littleport office on 01353 861416.

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# PLATFORM COPING UNITS

FP McCann Dual Copings used at Walsall Railway Station.

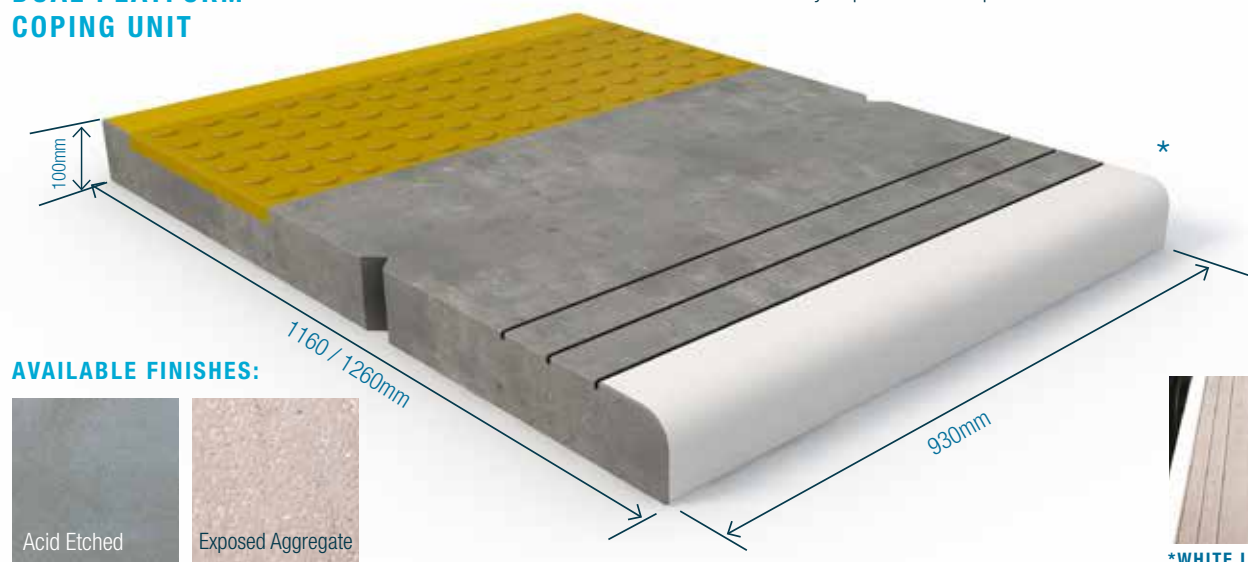
FP McCann is an approved manufacturer and supplier of platform copings to Network Rail and London Underground specifications. Copings are manufactured in full accordance with the requirements of NR/L3/CIV/030 and are accredited as conforming to the pendulum test slip resistance requirements of BS EN 13036-4.

Network Rail copings are available in two industry approved sizes 930x760x100 and 1219x914x100. Network Rail dual copings are available in two industry approved sizes 930x1160x100 and 930x1260x100. Requests for non-standard product sizes and colours can be accommodated. London Underground nosing slabs are available from stock.

## DUAL PLATFORM COPING UNIT

## PRODUCT BENEFITS

- Manufactured to NWR specification
- Meets NR/L3/CIV/030 requirements
- A one piece unit consisting of a standard copier unit combined with contrasting colour tactile section
- Available with optional pre-painted white and/or yellow lines factory applied for visual warning, saving time and labour on site, with obvious benefits in health and safety
- Available with optional cast-in lifting inserts to aid installation
- Available with grit blasted or acid etched finish as standard
- One piece unit not only saves time during installation, but avoids the problems associated with joining coping and tactile units, such as trip hazards, de-bonding during temperature fluctuations and freeze/thaw exposure
- Reduced whole life costs due to the reduced maintenance and serviceability required with one piece units



### AVAILABLE FINISHES:



Acid Etched



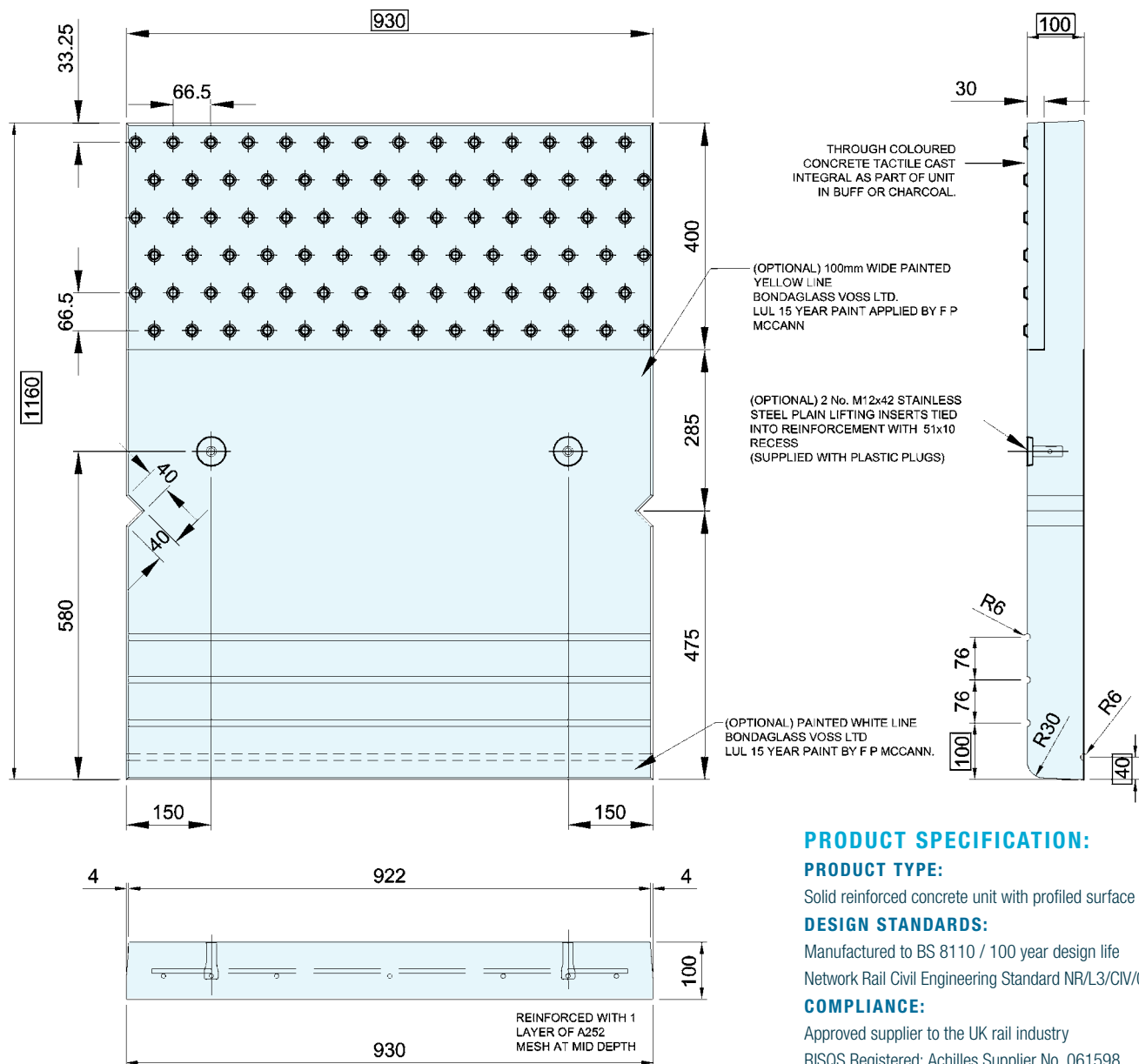
Exposed Aggregate



\*WHITE LINE OPTIONAL



## DUAL PLATFORM COPING



### PRODUCT SPECIFICATION:

#### PRODUCT TYPE:

Solid reinforced concrete unit with profiled surface

#### DESIGN STANDARDS:

Manufactured to BS 8110 / 100 year design life  
 Network Rail Civil Engineering Standard NR/L3/CIV/030

#### COMPLIANCE:

Approved supplier to the UK rail industry  
 RISQS Registered; Achilles Supplier No. 061598

### PHYSICAL PROPERTIES

**DIMENSIONS:** 930 x 1160 x 100mm

**TOLERANCES:** Length +/- 6mm, Width +/- 6mm,  
 Thickness +/- 6mm

**SLIP/SKID:** Mean Unpolished Skid Resistance  
 Value (USRV) >55

**FINISH:** Shortblasted or Acid Etched or Exposed (NR)  
 & Acid Etched (LUL)

**REINFORCEMENT:** Steel Reinforcement to BS4449

**CONCRETE STRENGTH:** Characteristic 28 day  
 cube strength = 55N/mm<sup>2</sup>

**DENSITY:** Typically 2500kg/m<sup>3</sup>

**CONCRETE DESIGN CHEMICAL CLASS:**

DC4 to BS8500

**COLOUR:** Grey

**APPROX UNIT WEIGHT:** 273kg

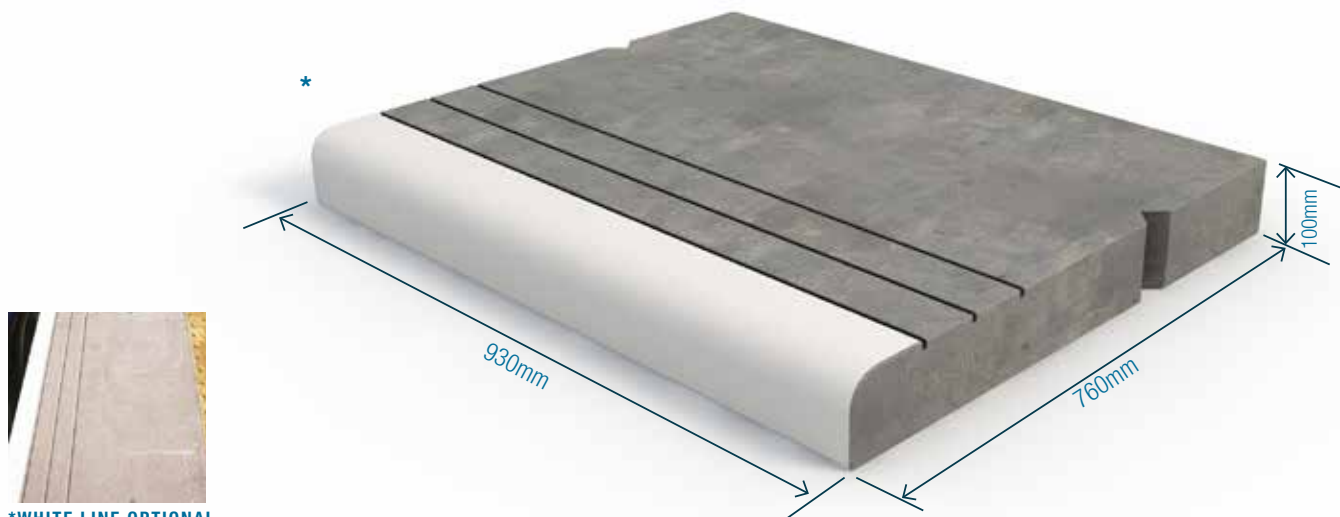
### SUPPLY

**UNITS PER PALLET:** 5 number

**AV. PACK WEIGHT:** 1365kg



## STANDARD PLATFORM COPING



### PRODUCT SPECIFICATION:

#### PRODUCT TYPE:

Solid reinforced concrete unit with profiled surface

#### DESIGN STANDARDS:

Manufactured to BS 8110 100 year design life  
Network Rail Civil Engineering Standard NR/L3/CIV/030

#### COMPLIANCE:

Approved supplier to the UK rail industry  
RISQS Registered; Achilles Supplier No. 061598

### PHYSICAL PROPERTIES

**DIMENSIONS: TYPE A** 930 x 760 x 100mm

**TYPE B** 1219 x 914 x 100mm **TOLERANCES:**

Length +/- 6mm, Width +/- 6mm, Thickness +/- 6mm

**SLIP/SKID:** Mean Unpolished Skid Resistance  
Value (USR) >55

**FINISH:** Acid Etched or Exposed (NR) & Acid Etched  
(LUL)

**REINFORCEMENT:** Steel Reinforcement to BS4449

**CONCRETE STRENGTH:** Characteristic 28 day  
cube strength = 50N/mm<sup>2</sup>

**DENSITY:** Typically 2500kg/m<sup>3</sup>

**CONCRETE DESIGN CHEMICAL CLASS:**  
DC2 to BS8500

**COLOUR:** Grey

**APPROX UNIT WEIGHT:**

**TYPE A** 179kg **TYPE B** 286kg

### SUPPLY

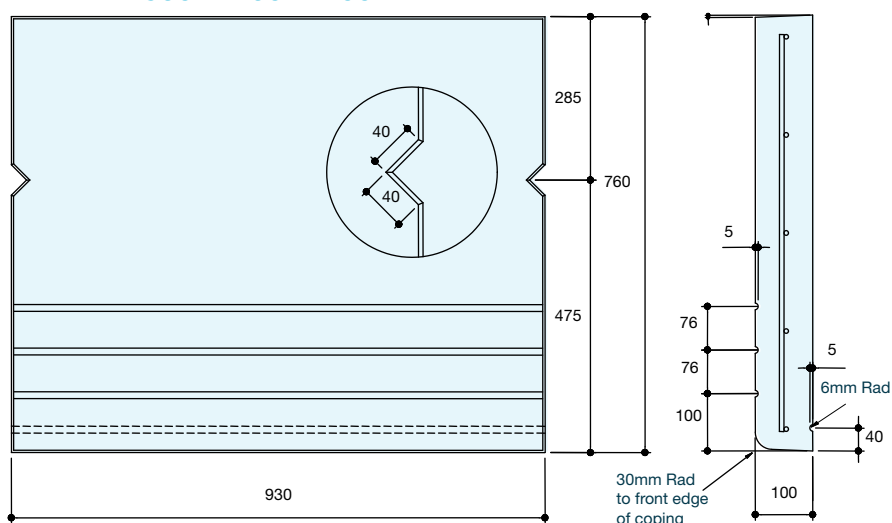
**UNITS PER PALLET:**

**TYPE A** 6 number **TYPE B** 5 number

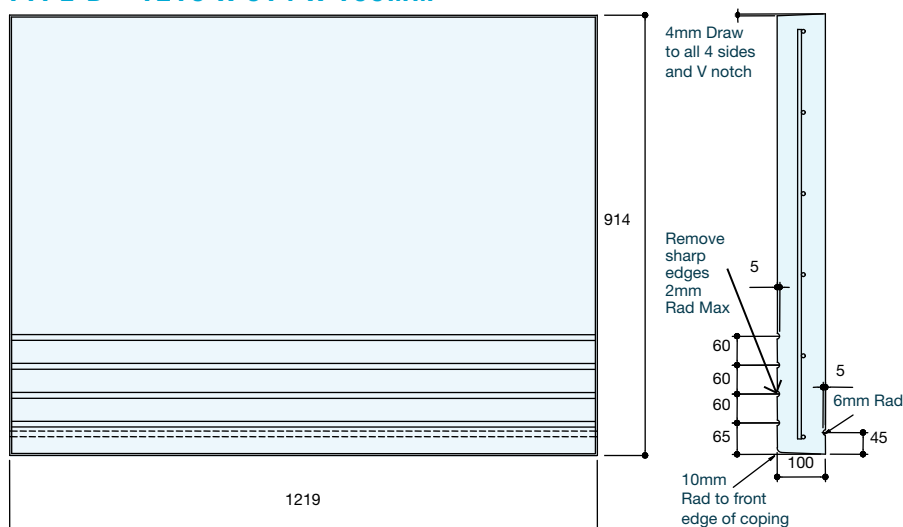
**AV. PACK WEIGHT:**

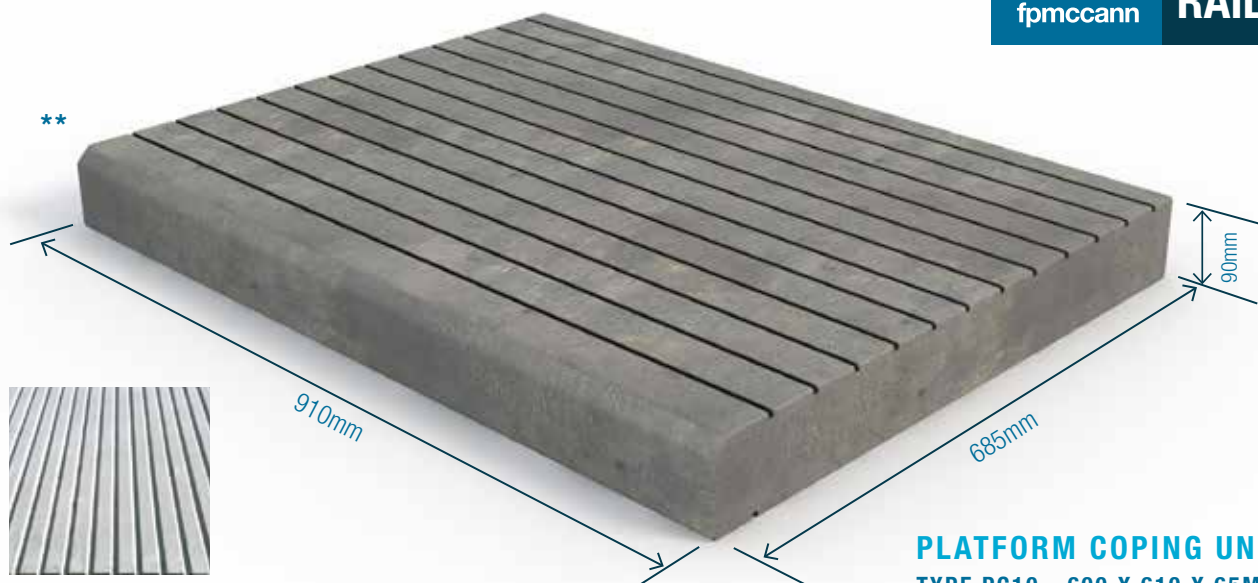
**TYPE A** 1075kg **TYPE B** 1430kg

### TYPE A - 930 X 760 X 100MM



### TYPE B - 1219 X 914 X 100MM





**PLATFORM COPING UNIT**  
**TYPE PC10 - 600 X 610 X 65MM**

**PRODUCT SPECIFICATION:**

**PRODUCT TYPE:**

Solid reinforced concrete unit with profiled surface

**DESIGN STANDARDS:**

Manufactured to BS 8110

100 year design Life

**COMPLIANCE:**

Approved supplier to the UK rail industry

RISQS Registered; Achilles Supplier No. 061598

**PHYSICAL PROPERTIES:**

**DIMENSIONS:**

600 x 610 x 65mm

**TOLERANCES:**

Length +/- 6mm, Width +/- 6mm, Thickness +/- 6mm

**SLIP/SKID:**

Mean Unpolished Skid Resistance Value (USRV) >55

**FINISH:**

Acid Etched or Exposed (NR) & Acid Etched (LUL)

**REINFORCEMENT:**

Steel Reinforcement to BS4449

**CONCRETE STRENGTH:**

Characteristic 28 day cube strength = 50N/mm<sup>2</sup>

**DENSITY:** Typically 2500kg/m<sup>3</sup>

**CONCRETE DESIGN CHEMICAL CLASS:**

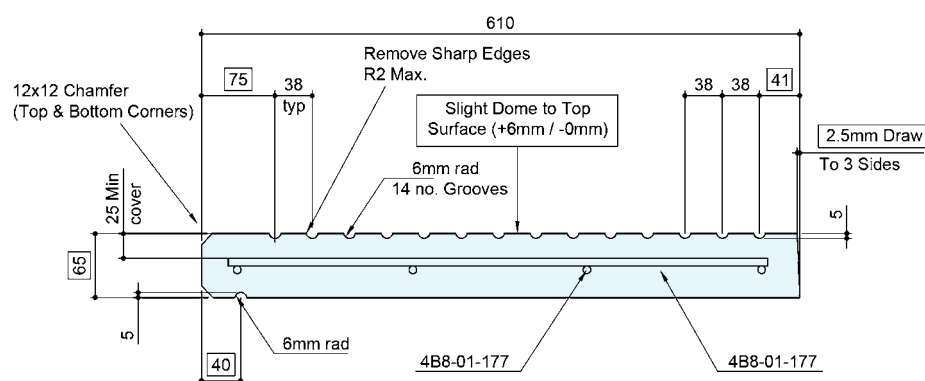
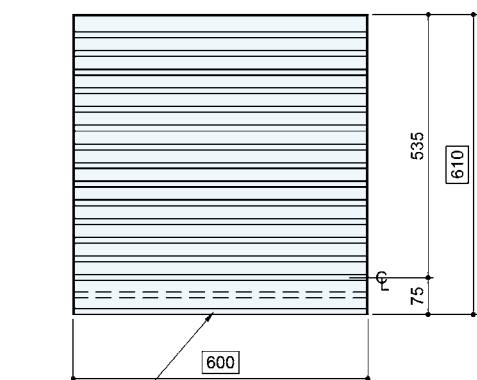
DC2 to BS8500

**COLOUR:** Grey

**APPROX UNIT WEIGHT:** 56kg

**SUPPLY:**

**UNITS PER PALLET:** 12 number



All sizes in mm

# PLATFORM COPING UNITS

## PRODUCT SPECIFICATION:

### PRODUCT TYPE:

Solid reinforced concrete unit with profiled surface

### DESIGN STANDARDS:

Manufactured to BS 8110  
100 year design Life

### COMPLIANCE:

Approved supplier to the UK rail industry  
RISQS Registered  
Achilles Supplier No. 061598

## PHYSICAL PROPERTIES:

### DIMENSIONS:

**PC 20** - 910 x 685 x 90mm

**PC 30** - 910 x 685 x 90mm

### TOLERANCES:

Length +/- 6mm, Width +/- 6mm, Thickness +/- 6mm

### SLIP/SKID:

Mean Unpolished Skid Resistance Value (USRV) >55

### FINISH:

Acid Etched or Exposed (NR) & Acid Etched (LUL)

### REINFORCEMENT:

Steel Reinforcement to BS4449

### CONCRETE STRENGTH:

Characteristic 28 day cube strength = 50N/mm<sup>2</sup>

**DENSITY:** Typically 2500kg/m<sup>3</sup>

### CONCRETE DESIGN CHEMICAL CLASS:

DC2 to BS8500

**COLOUR:** Grey

### APPROX UNIT WEIGHT:

**PC20** - 164kg

**PC30** - 143kg

## SUPPLY:

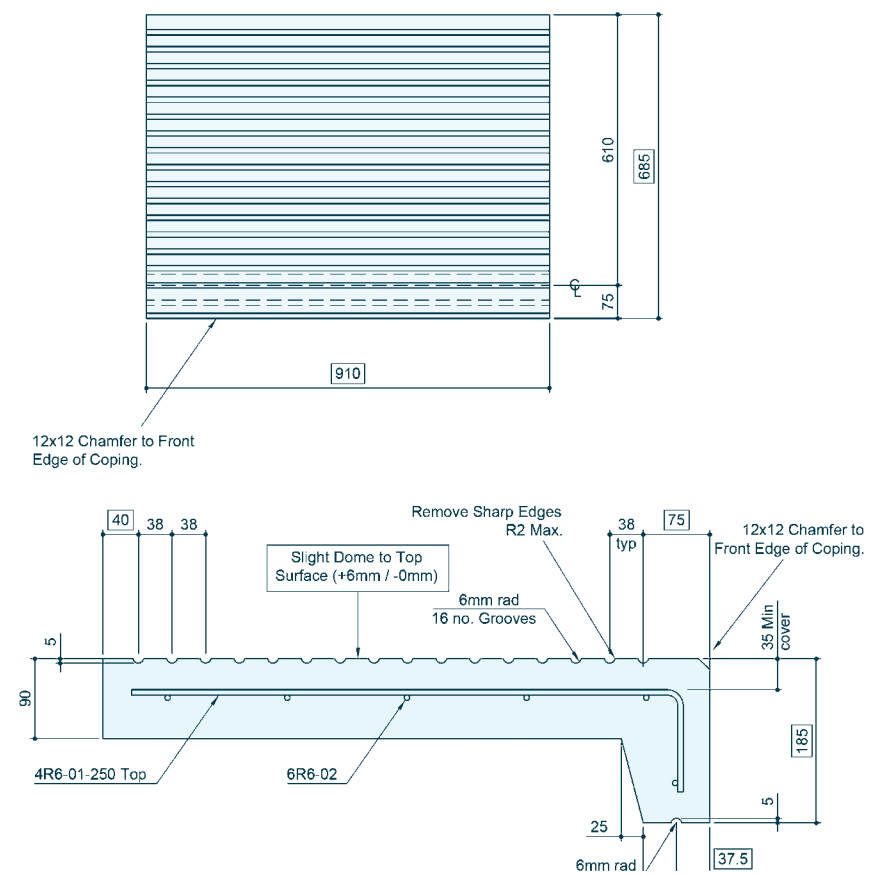
### UNITS PER PALLET:

**PC20** - 6 number

**PC30** - 6 number

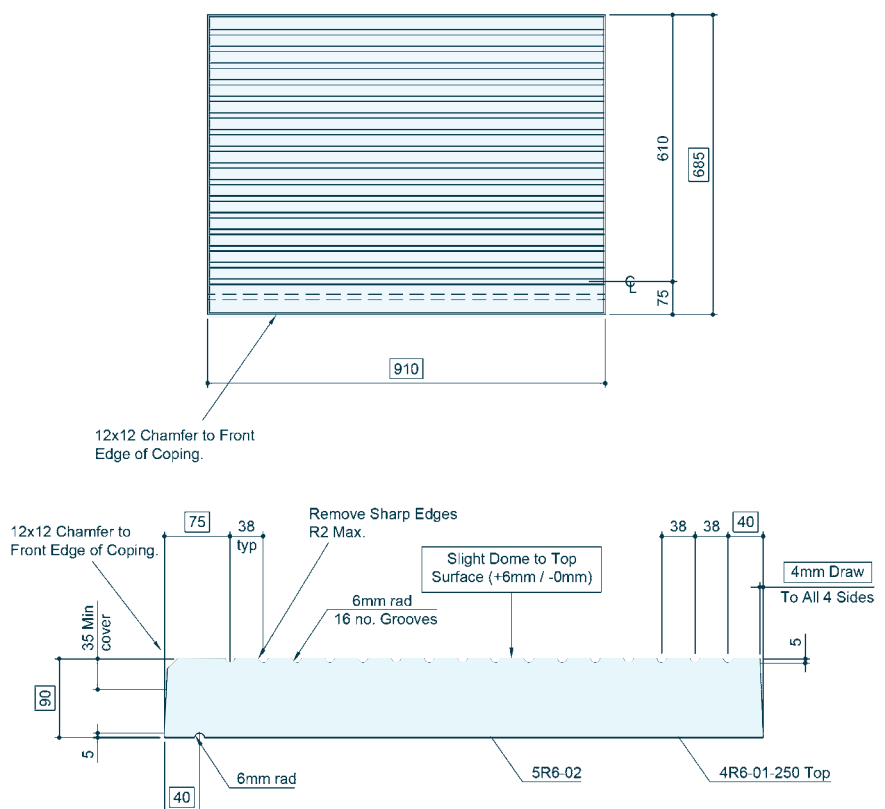
## PLATFORM COPING UNIT

### TYPE PC 20 - 910 X 685 X 90MM



## PLATFORM COPING UNIT

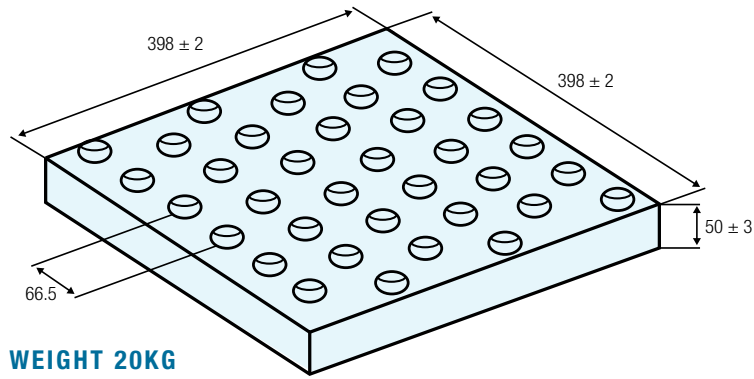
### TYPE PC 30 - 910 X 685 X 90MM



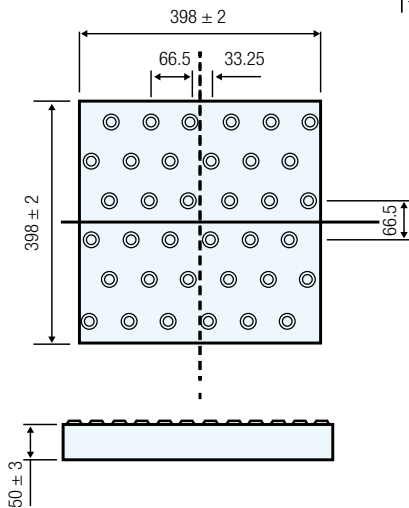
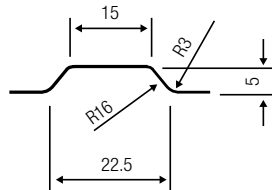


## OFFSET TACTILE PAVING

ALL SIZES ARE IN MM



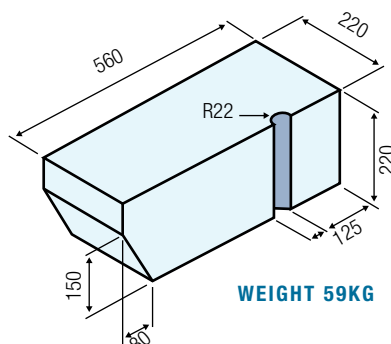
**WEIGHT 20KG**



To denote off Street/Rail application to the visually impaired, FP McCann supplies flat domed offset tactile paving units in accordance with BS EN 1339.

Approved for use in both surface and underground platforms, this product is available in buff, charcoal grey and standard grey colours.

## OVERSAIL BLOCK



**WEIGHT 59KG**

Supplied to individual customer requirements, FP McCann manufactures a standard oversail block. The integral unit is formed to key in with the platform edge. The block has a location notch for coping pavement dowels. The oversail block is manufactured in accordance with BS EN 1339.



## COMPLEMENTARY PRODUCTS

Other complementary products include locating insets (large and small), precast concrete posts and rail ballast boards. Through our fencing division, we can also supply security chain link posts, universal posts, bollards, gravel boards and screed rails.



**BUFF**



**CHARCOAL GREY**



**STANDARD GREY**

# PLATFORM EXTENSIONS AND NEW PLATFORMS

FP McCann provides a number of construction solutions for new build platforms and platform extensions. These range from the very traditional approach, through to the latest innovations in modular design. Every station can provide a different set of challenges and FP McCann has the right solution to answer these challenges.

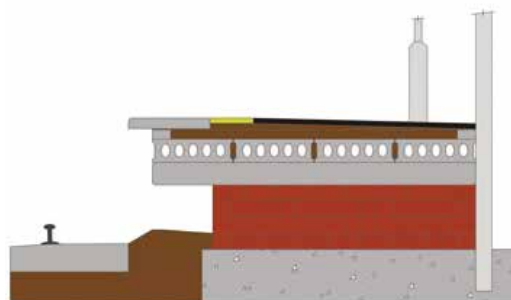
## PRECAST REINFORCED CONCRETE RETAINING WALL

The traditional platform construction can be replaced with a FP McCann precast platform retaining wall. This can be combined with FP McCann's oversail blocks to provide an offsite solution to the traditional construction method.



## PRESTRESSED HOLLOWCORE PLANKS AND REINFORCED CONCRETE BEAMS

The use of hollowcore widspan flooring planks reduces labour and time onsite, while providing a cost-effective working platform.

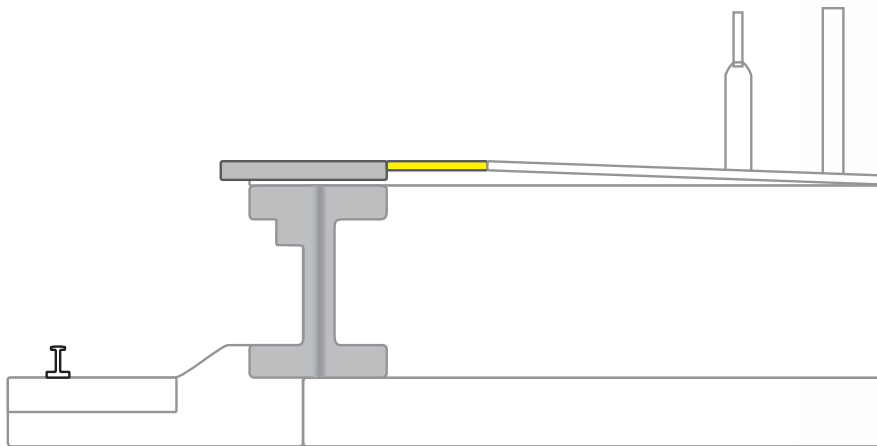


## PRESTRESSED HOLLOWCORE PLANKS AND REINFORCED CONCRETE CROSSWALLS

Removing the need for masonry work, a precast crosswall can be combined with hollowcore planks to provide a more efficient construction system that can be installed with greater speed.



# REINFORCED PRECAST CONCRETE RETAINING FRONT WALLS



**RETAINING FRONT  
WALL BLOCK**

## RETAINING FRONT WALLS FEATURES

- Most commonly 1000mm high, but available in a range of sizes
- Can be combined with FP McCann oversail blocks to provide replacement for traditional masonry front wall

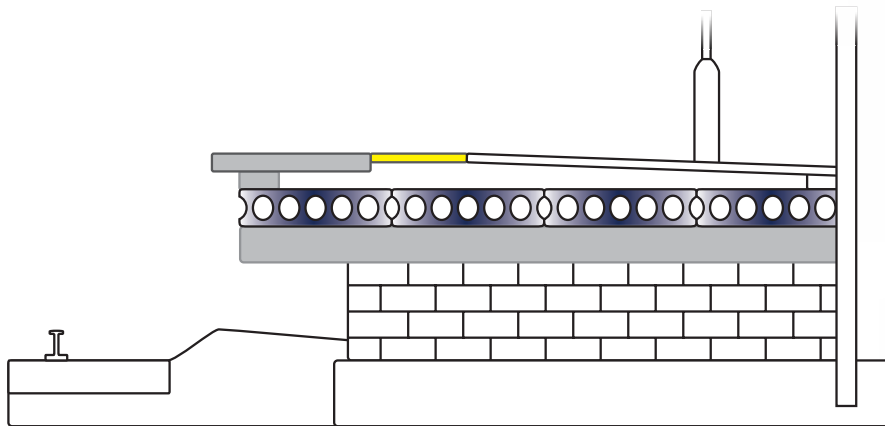
## PLATFORM CONSTRUCTION ADVANTAGES

- Economical when building alongside track with no running rails
- Flexible construction where platform width varies along length or on curved platforms
- Effective at base of cutting where only one wall is required
- Platform level can be adjusted
- Presents a clean elevation, free from litter traps
- Lamp posts and station buildings can be readily accommodated. Can cater for platform loading, even if increased at a later date





# PRESTRESSED CONCRETE HOLLOWCORE PLANKS AND REINFORCED CONCRETE BEAM



## HOLLOWCORE PLANKS FEATURES

- Manufactured with a series of voids to reduce weight. Comes in standard widths of 1200mm or 600mm
- Depths vary depending on the span required
- Common depths include 150mm deep for spans up to 6000mm and 200mm deep used in spans up to 7500mm

## CANTILEVER BEAMS FEATURES

- Allow overhang from masonry wall to ensure maximum amount of green zone working during construction
- Typically 440x210x3000mm, but varying lengths can be accommodated

## PLATFORM CONSTRUCTION ADVANTAGES

- Can be generally constructed with lower track possession time
- Reasonably flexible in catering for different platform widths with constant section
- Allows choice of surfacing
- Heavy platform loading can be catered for in the design
- Services can be catered for with accessible ducts running through the cross walls

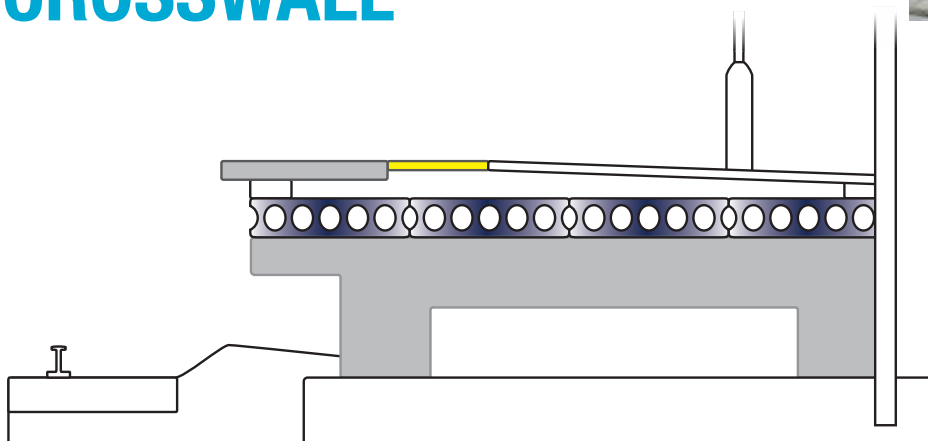


**HOLLOWCORE  
PLANKS**



**CANTILEVER BEAM**

# PRESTRESSED CONCRETE HOLLOWCORE PLANKS AND REINFORCED CONCRETE CROSSWALL



## PLATFORM CONSTRUCTION ADVANTAGES

- Can be constructed with lower track possession time
- Reasonably flexible in catering for different platform widths with constant section
- Allows choice of surfacing
- Heavy platform loading can be provided for in the design
- Services can be accommodated with accessible ducts running through the crosswalls

## CROSSWALLS FEATURES

- Reduces the need for wet trades onsite
- Replaces traditional masonry crosswall by combining the crosswall and cantilever beam in one precast unit
- Considerable time saving against traditional methods
- Typically 440x1000x3000mm, however various sizes can be accommodated
- FP McCann can provide form B design services, if required



## CROSSWALL



# MODULAR PRECAST PLATFORM SOLUTIONS

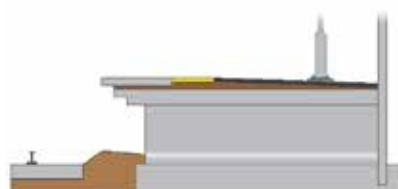
FP McCann has developed an adaptable modular precast platform system which has the flexibility to suit most platform construction projects.

With extensive experience in modular precast platforms, including high profile projects at Blackfriars and London Bridge, FP McCann has been able to demonstrate the benefits of utilising a precast modular system in place of more traditional construction methods.

FP McCann's modular platforms have the versatility to be adopted on almost all platform schemes. A number of standard components can be used to provide solutions to scenarios such as large width platform, curved platforms, derailment loadings and island platforms.

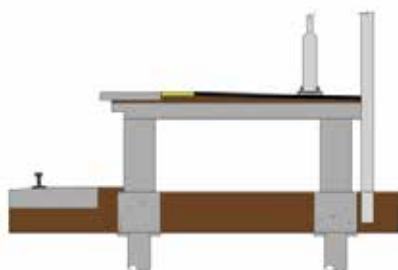
## SEMI-MODULAR REINFORCED CONCRETE CROSSWALLS AND SLABS

Removes the need for hollowcore planks and provides a level surface without the need for a levelling screed. A semi-modular precast system further reduces the need for onsite wet trades and allows flexibility in its design. Precast slabs allow for greater coverage per unit, making them more economical.



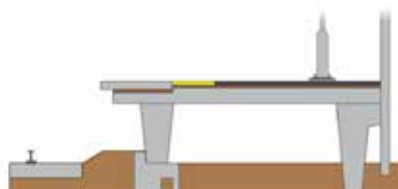
## SEMI-MODULAR PRECAST REINFORCED CONCRETE FRONT/REAR WALLS AND SLABS

A semi-modular precast system with front wall construction allows ample access for services and crawl space. Apertures can be formed in the front to also allow access trackside.



## MODULAR REINFORCED CONCRETE PLATFORM

FP McCann's fully modular precast reinforced concrete platforms are the latest innovation in platform construction in the UK. A one piece unit allows up to 50m of platform construction per night time possession, which can take up to three weeks in traditional build.



## DESIGN SERVICE

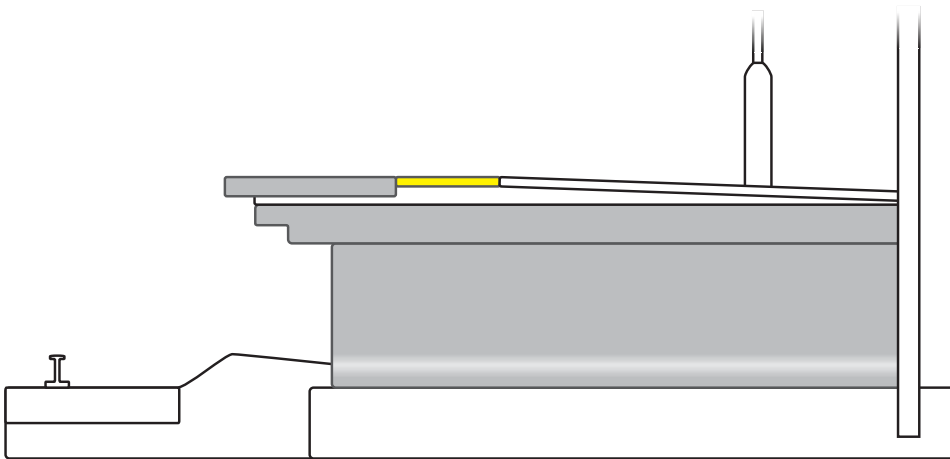
FP McCann offers a full design service and is able to develop solutions for any platform construction project.

Due to the flexibility in manufacture, cast-in items to aid construction on-site can be accommodated. For example, cast-in channel to hang services, fixing sockets for lighting columns and platform signs.

FP McCann's platforms can be provided with a finished surface to meet the required slip resistance, and can be delivered with the platform copings and/or tactile paving factory fitted.



# SEMI-MODULAR REINFORCED CONCRETE CROSSWALL AND PLATFORM SLABS



## PLATFORM SLABS FEATURES

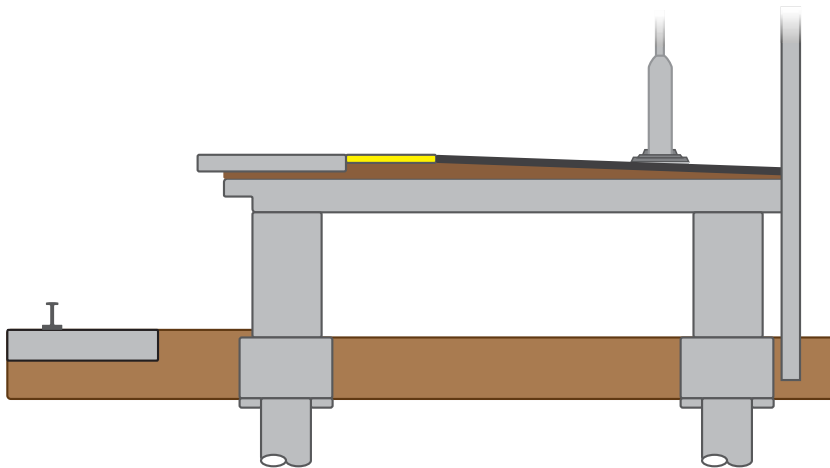
- For use on its own or with FP McCann's platform crosswalls to create a semi modular precast platform system
- Allows a greater square metre coverage per unit, reducing installation time and making them more economical
- Does not require levelling screed
- Greater flexibility in unit design



## CROSSWALL & SLABS



# SEMI-MODULAR REINFORCED CONCRETE FRONT WALL AND PLATFORM SLABS



**FRONT/REAR WALL AND SLAB**

## PLATFORM SLABS

Allows greater square metre coverage than traditional construction methods.



## PLATFORM SLAB



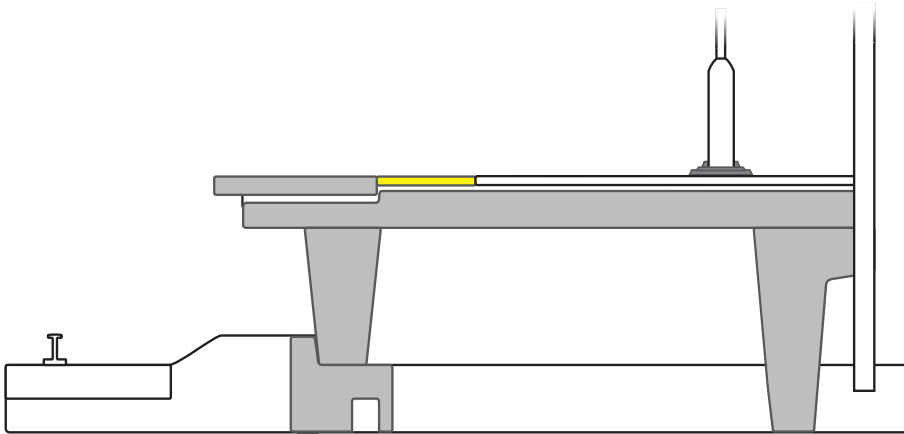
**PLATFORM FRONT WALL**

## FEATURES

- Modular design reduces installation time and minimises wet trades
- Allows for flexibility in design and manufacture for individual unit variance
- Provides crawl space and service access for current and future requirements
- Provides facilities and access for complicated service provisions
- Allows damp proofing



# MODULAR PRECAST PLATFORMS



With increased demand for new and extended railway platforms, FP McCann can provide a revolutionary modular precast platform solution whereby the majority of the construction works can be carried out offsite.



**TABLE &  
KICKER UNIT**

## TABLE AND KICKER UNITS

Table units are best utilised where a platform has a consistent width, with little or no curvature. Table units are used alongside a kicker unit and are suitable for both non impact and impact scenarios. They can also be used back-to-back as an island platform, with the option of an infill slab between them to achieve larger width platforms.

## FEATURES

- Fully modular precast unit
- Available in a large range of sizes and configurations
- Greatly reduces and in many cases eliminates wet trades







**CROSSWALL  
AND SLABS**



**FRONT/REAR  
WALL AND SLAB**

## CROSSWALL AND SLABS

Replacing the traditional crosswall construction with precast units, this method of construction is flexible to accommodate curved platform, and also large width platforms. Walls can be used end-to-end for island platforms and slabs can be provided for large spans of 6m and above.

## FRONT/REAR WALL AND SLAB

Replacing a traditional front wall construction, this system is best suited to straight platforms with a large width. This system can also be used where impact loading is required and can accommodate platform widths of up to 6m and above.

## FEATURES

- Modular design reduces installation time and minimises wet trades
- Allows for flexibility in design and manufacture for individual unit variance
- Provides crawl space and service access for current and future requirements
- Provides facilities and access for complicated service provisions
- Allows damp proofing
- Dramatically increases speed of construction, with foundations being constructed in green zone working and units being positioned quickly



# MODULAR PRECAST PLATFORM SYSTEMS INNOVATIONS IN RAILWAY CONSTRUCTION

## FEATURES

- Significant reduction of installation time and track possessions, with minimal disruption to train services
- Offsite construction reduces project costs and potential health and safety risks
- Platform sections can be built and assembled offsite and, if required, can be inspected by the client prior to delivery
- Fully flexible design which can be modified to cater for a wide range of platform sizes or foundation heights. Designs can be customised to suit any shape and size of platform, including curved or sloping sections
- Integrated fixings, services and drainage reducing the time required to drill, fix and assemble once onsite

## CURVED PLATFORMS

Platform sections can be cast with a small taper by using adjustable mould sides; these tapered sections enable curved platforms to be constructed up to a minimum radius of 300m. For tighter curved platforms, FP McCann can design and manufacture bespoke sections to suit any location.

## FOUNDATIONS

FP McCann's modular precast platform solution has been designed to cater for a range of foundation types to suit most ground conditions. Typical foundations range from simple strip footings to driven piles. All designs are compatible with our universal base design, which is used to locate each platform section in place.

## FINISHES

Platform sections are available with a trowelled finish to allow surfacing or paving, or can be provided with a slip resistant finish to meet network rail standards. FP McCann is also able to pre-fit commercial flag and block paving products to further reduce wet trades on site.

## QUALITY ASSURANCE

FP McCann's precast modular solution is manufactured using a wet-cast process and is compliant to BS 8110 and European Standard Eurocode 2.

## MANUFACTURING STANDARDS

All FP McCann products are manufactured in accordance with ISO 9001, with factory compliance to ISO 14001.

## PLATFORM CONSTRUCTION

Single wet-cast concrete construction, additional pre-painted platform copings and tactile paving can be included as a secondary operation. These can be fixed in place prior to delivery at our factory or fixed onsite.

## INSTALLATION

Entire platform sections, including copers, tactiles and cable trays can be lifted into place using a crane, mechanical offload or specialist lifting rail vehicle, if required.

## COMPLEMENTARY PRODUCTS

Designed for use with FP McCann's platform copings, tactiles, drainage and hard landscaping products.



## PLATFORM CONSTRUCTION ADVANTAGES

- Speed of construction is faster than traditional design
- Less possession time required
- Piled foundations suitable for poor ground conditions or embankments



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Lydney 01594 847500 Grantham 01476 562277

**ARCHITECTURAL PRECAST**

Byley 01606 843500 Grantham 01476 562277 Littleport 01353 861416

**BOX CULVERTS**

Weston Underwood 01335 361269

**BUILDING PRODUCTS**

Cadeby 01455 290780

**DOCK LEVELLER PITS**

Weston Underwood 01335 361269

**DRAINAGE**

Ellistown 01530 240000 (England/Wales) Magherafelt 028 7954 9026 (Scotland)

**FENCING**

Cadeby 01455 290780

**FILTER BED SYSTEMS**

Littleport 01353 861416

**FLOORING**

Weston Underwood 01335 361269 Uddingston 01698 803300

**POWER & INFRASTRUCTURE**

Littleport 01353 861416

**RAIL**

Littleport 01353 861416

**SPECIALIST PRECAST**

Littleport 01353 861416

**STRUCTURAL PRECAST**

Byley 01606 843500 Grantham 01476 562277 Littleport 01353 861416

**TANKS & CHAMBERS**

Littleport 01353 861416

**TUNNELS & SHAFTS**

Cadeby 01455 290780

**WALLING**

Grantham 01476 562277 Lydney 01594 847500  
Uddingston 01698 803 300 (Scotland)

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