FP McCann offers an industry leading range of standard and bespoke retaining and containing walling solutions. From supply only to fully designed and fitted schemes, FP McCann can offer a full service. With over 90 years’ of combined experience at our Lydney, Grantham and Uddingston plants, we are able to deliver high quality precast concrete products at competitive market rates.

**The Concrete Force**

The Concrete Force defines our relentless drive to continually improve on our own expectations while exceeding yours, ensuring we add value to your project.

**Concrete Commitment**

FP McCann is committed to delivering more efficient, cost-effective and safety-focused sustainable concrete solutions. Our vision is to continue to exceed our customers’ expectations whilst making an impact on new customers.

**Concrete Relationships**

We believe in working with you as a partner from the start, which means offering our expertise in designing and manufacturing precast concrete to suit your individual project requirements.

**Concrete Quality**

Through our factories based in Lincolnshire, Gloucestershire, Lanarkshire and Magherafelt, Northern Ireland, FP McCann has got your project covered across the entire UK.
**L WALLS**

**PRODUCT FEATURES**
- L Wall units are an ideal product where speed of installation is necessary.
- They offer a fast, cost-effective solution to constructing retaining and containing developments.
- Standard sizes range from 1m high up to 3.75m high, with a width of 1m for all units. 2m widths are available for certain heights.

**INSTALLATION STEPS**
1. Position the units on to the shimmmed concrete foundation.
2. Dry pack mortar to the edge of the base of the units to create a seal to the perimeter.
3. Through the 30mm preformed holes, drill a 20mm diameter hole, 150mm deep into the foundation.
4. Fill holes with Silka Anchorfix-1 resin to a level so that when the dowels are inserted, the resin becomes level with the top of the foundation (as a minimum).
5. Insert the B.16 dowel bar into the resin. Ensure that the bar is pushed to the base of the drilled hole.
6. Ensure the units are uniformly supported by using the grouting hole to completely flood the shimmed void (and grouting hole) with Parex C.S grout.
7. Grout around the dowel using a suitable high flow, non-shrink structural grout so that the dowel is completely encapsulated.
8. Do not touch the dowel bar or unit until grout has achieved full strength, in accordance with grout manufacture guidelines.

**FOUNTAIN**
The foundation requirements should be determined by a qualified engineer. Units placed on a concrete foundation should be bedded on mortar and wedged to attain correct alignment.

**PRODUCT APPLICATIONS**
- Storage facilities
- Division walls
- General soil retention
- Waste recycling bunkers
- Making up levels within buildings
- Bunker walls
- Retaining walls

**L WALLS - STRAIGHT UNITS**

**STANDARD SIZES**
Designed for retained material with a density of 18 kN/m³ (approximate bulk density of 1800 kg/m³)

| Height (mm) | Weight (kg) | Weight (kg) |
| 1000       | 440         | 1000 x 1000  |
| 1500       | 590         | 1500 x 1000  |
| 2000       | 710         | 2000 x 1000  |
| 2500       | 1010        | 2500 x 1000  |
| 3000       | 1560        | 3000 x 1500  |
| 3750       | 2350        | 3750 x 2310  |

(Includes 5% lifting allowance)

**ANCHORS FOR STANDARD CONDITIONS**

| Height (mm) | Weight (kg) | Weight (kg) |
| 1000       | 440         | 1000 x 1000  |
| 1500       | 590         | 1500 x 1000  |
| 2000       | 710         | 2000 x 1000  |
| 2500       | 1010        | 2500 x 1000  |
| 3000       | 1560        | 3000 x 1500  |
| 3750       | 2350        | 3750 x 2310  |

(Includes 5% lifting allowance)

**HANDLING AND INSTALLATION**
Units are delivered laid down on their edge and are fitted with 2 no. recessed lifting anchors. Quick release loops (1) and erection shackles (2, 3 & 4) are available for purchase and can be used in conjunction with customer’s plant to offload and erect.

Conformity with current lifting legislation and vehicle off-loading is the customer’s responsibility.
L WALLS - STRAIGHT/CORNER UNITS

1000MM HIGH STRAIGHT UNIT

1500MM HIGH STRAIGHT UNIT

2000MM HIGH STRAIGHT UNIT

3000MM HIGH STRAIGHT UNIT

1750MM HIGH STRAIGHT UNIT

3750MM HIGH STRAIGHT UNIT

2500MM HIGH STRAIGHT UNIT

1000MM HIGH CORNER UNIT
L WALLS - CORNER UNITS

1500MM HIGH CORNER UNIT
2000MM HIGH CORNER UNIT
2500MM HIGH CORNER UNIT
3000MM HIGH CORNER UNIT
3750MM HIGH SECTIONS 1 & 2 CORNER UNIT
3750MM HIGH SECTIONS 1, 2, 3 & 4 CORNER UNIT
3750MM HIGH SECTIONS 3 & 4 CORNER UNIT

Corner Section 2 3000mm
PRESTRESSED HORIZONTAL PANELS

FP McCann’s prestressed horizontal panels allow you to construct walls quickly and efficiently with the future-proof option of re-siting, if required; providing the ideal solution where the adaptability of buildings is important. Our wall panels are manufactured using prestressing wires and a C45/55 concrete, which gives them in-built strength and resilience.

PRODUCT BENEFITS
- Tongue and grooved joints for easy alignment and positive sealing
- Smooth impervious surface which is easily washed down
- Prestressed panels absorb minor accidental damage
- More cost-effective – more versatile than blockwork
- Tailor-made lengths and a variety of widths
- Simple and quick installation
- No foundation required

HANDLING AND INSTALLATION

1. Panels to be off-loaded from delivery vehicles and stacked on flat hard standing. Stacking timbers to be placed between panels directly above the one below, as shown. Do not stack panels more than 6 high. The panel weights are marked on each panel.

2. Using suitable lifting machine, fix wire rope slings (or D shackles) to pre-formed holes in panels or proprietary lifting devices to cast-in lifters. All units to be lifted under the direction of a banksman.

3. Ensure all 4 clips and bolts are fitted to panel and are tightened before removing load from lifting machine.

NOTE: Bolts must be regularly checked for tightness.

4. Seal and tool joints using gunned mastic.

Refer to FP McCann manual for instructions.

Dimensions - Horizontal Panel

<table>
<thead>
<tr>
<th>Panel Height (m)</th>
<th>1.0m</th>
<th>1.2m</th>
<th>1.5m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Panel Thickness (mm)</td>
<td>80mm</td>
<td>120mm</td>
<td>160mm</td>
</tr>
<tr>
<td>Panel Length (mm)</td>
<td>200mm</td>
<td>240mm</td>
<td></td>
</tr>
</tbody>
</table>

We are committed to providing high-quality products and services that meet our clients’ needs. For more information, visit our website at fpmccann.co.uk/walling or call us at 01594 847500 / 01476 562277 / 01698 803300.
The FP McCann Prestressed Vertical Cantilever Panel system provides the user with a more cost-effective and time-efficient system when comparing against a traditional on-site, in-situ wet-cast system.

**PRODUCT FEATURES**
- The vertical cantilever panels are prestressed, allowing greater strength in a more slender panel
- Prestressing reduces the incidence of tensile cracking in the panels
- The concrete used for the prestressed panels is designated as a C45/55 grade
- The foundation can be individually designed to suit site and loading requirements
- The prestressed panels are tongue and grooved together, allowing effective sealing between units without stressing the sealant
- The units are lighter so require smaller site lifting vehicles
- The prestressed unit can be lifted and handled more easily on site
- Manufactured on 70m long prestressing beds, retained heights of up to 4m can be achieved for many material types
- Manufactured to ISO 9001 and ISO 14001

Depending on the prestressed panel thickness, security or fire walls can achieve a fire exposure rating of up to 4 hours and effective heights of up to 7.6m maximum. The units are cast as standard with a Class A steel mould finish to one side and all edges, complete with hand trowelled finish to the other face.

During the casting process, Wavy Tail Lifters can be cast-in to the top edge of the panel to assist with on-site installation.

**PANEL APPLICATIONS**
- Soil retention
- Retention of materials / aggregates
- Slagheating
- Underground slurry stores
- Basements of structures
- Waste recycling bunkers
- Prison security walls
- Substation fire walls
- Flood alleviation schemes

### Dimensions - Vertical Panel

<table>
<thead>
<tr>
<th>(a) Panel Height</th>
<th>(b) Panel Thickness</th>
<th>(c) Panel Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>120mm</td>
<td>1.5m standard</td>
<td>1.0m, 1.2m special order</td>
</tr>
<tr>
<td>160mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>200mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>240mm</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: This product is not manufactured in NI.

**HANDLING AND INSTALLATION**

1. Panels to be off-loaded from delivery vehicles and stacked on flat hard standing. Stacking dimensions to be placed between panels directly above the one below, as shown. Do not stack panels more than 6 high. The panel weights are marked on each panel.
2. Foundation trenches are excavated and a strip footing formed in the base. Cradles are set out on the footing, and the panels lowered into them, shimmed and levelled as necessary. Temporary propping must be used - the frequency depending on height and exposure.
3. Second Panel to be propped as detailed in stage 3. Load maintained by lifting machine until panel is adequately propped.
4. Set up rebar and framework. Do not remove props until adjacent units are secure.

Seal joints as required. Pour and compact concretes.
Props to remain in position until foundation concrete is in excess of 25N.
Our Rocket Walls are high quality, freestanding, precast concrete units. They are designed to be sited on an existing concrete floor slab or foundation and, for improved site safety and maximum efficiency, are bolted down using fixing bolts to prevent movement. It is this uniqueness that makes them suitable for a variety of uses.

### PRODUCT BENEFITS
- Simply installed and easily moved
- Designed for materials up to 16kN/m²
- Manufactured to ISO quality and environmental standards
- Inverted Y shape design provides high capacity
- Value engineering means less concrete than typical alternatives
- Engineered to allow for up to 4m high units and 1.25m wide
- No protruding foot
- Ideal for bunkers and division walls
- Self-shedding units – prevents the lodging of stored material
- Corner units available
- Load one side or both

### GUIDELINES FOR INSTALLATION
1. Position, line and level wall units on continuous mortar bed, both sides. Strike mortar off flush.
2. Drill 16mm diameter holes, 125mm deep into base slab, using holes in unit as pilots.
3. Insert 16mm screw bolts with plate washer into each hole, then tighten to 100N/m torque.
4. Using non-shrink mortar and a trowel, fill recess and strike off flush.
5. Leave to cure for a minimum of 48 hours before loading.

### UNIT SCREW BOLT REQUIREMENTS

<table>
<thead>
<tr>
<th>Height (m)</th>
<th>2.4 unit</th>
<th>2.4 corner</th>
<th>3.0 unit</th>
<th>3.0 corner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screw bolts required (no.)</td>
<td>4</td>
<td>2</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Diameter (mm)</td>
<td>16</td>
<td>16</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Length (mm)</td>
<td>200</td>
<td>200</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>Length in foundation (mm)</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Height (m)</th>
<th>4.0 unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screw bolts fixed with a split grip (no.)</td>
<td>6</td>
</tr>
<tr>
<td>Diameter (mm)</td>
<td>16</td>
</tr>
<tr>
<td>Length (mm)</td>
<td>215</td>
</tr>
<tr>
<td>Length in foundation (mm)</td>
<td>85</td>
</tr>
</tbody>
</table>

---

ROCKET WALLS™ STRAIGHT AND CORNER UNITS

---

Load share connector (optional)

---

Dimensions - Rocket Wall (Straight)

<table>
<thead>
<tr>
<th>Height (m)</th>
<th>2.4</th>
<th>2.4</th>
<th>3.0</th>
<th>3.0</th>
<th>4.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight (kg)</td>
<td>2400</td>
<td>3000</td>
<td>2400</td>
<td>3000</td>
<td>2800</td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>1250</td>
<td>1250</td>
<td>1500</td>
<td>1500</td>
<td>1280</td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>1100</td>
<td>1100</td>
<td>1200</td>
<td>1200</td>
<td>150</td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>100</td>
<td>100</td>
<td>110</td>
<td>110</td>
<td>170</td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>131</td>
<td>131</td>
<td>135</td>
<td>135</td>
<td>165</td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>710</td>
<td>710</td>
<td>720</td>
<td>720</td>
<td>870</td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>1600</td>
<td>1600</td>
<td>2000</td>
<td>2000</td>
<td>2600</td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>800</td>
<td>800</td>
<td>1000</td>
<td>1000</td>
<td>1400</td>
</tr>
</tbody>
</table>

Dimensions - Rocket Wall (Corner)

<table>
<thead>
<tr>
<th>Height (m)</th>
<th>2.4</th>
<th>2.4</th>
<th>3.0</th>
<th>3.0</th>
<th>4.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight (kg)</td>
<td>2400</td>
<td>3000</td>
<td>2400</td>
<td>3000</td>
<td>2800</td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>1250</td>
<td>1250</td>
<td>1500</td>
<td>1500</td>
<td>1280</td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>1100</td>
<td>1100</td>
<td>1200</td>
<td>1200</td>
<td>150</td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>100</td>
<td>100</td>
<td>110</td>
<td>110</td>
<td>170</td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>131</td>
<td>131</td>
<td>135</td>
<td>135</td>
<td>165</td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>710</td>
<td>710</td>
<td>720</td>
<td>720</td>
<td>870</td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>1600</td>
<td>1600</td>
<td>2000</td>
<td>2000</td>
<td>2600</td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>800</td>
<td>800</td>
<td>1000</td>
<td>1000</td>
<td>1400</td>
</tr>
</tbody>
</table>

Please note: A-J measurements are in mm.
T -WALLS

T wall units are an ideal product where speed of installation is necessary. They offer a fast, cost-effective solution to constructing retaining and containing developments. Standard sizes range from 2m high up to 4m high, with a width of 1m for all unit sizes.

PRODUCT BENEFITS

- Large range of sizes are available
- Quick and easy installation
- Create storage bays without imposing a load to the building frame
- Can retain material on both sides
- Retain material up to 18kN/m²

FOUNDATION

The foundation requirements should be determined by a qualified engineer. Units placed on a concrete foundation should be bedded in mortar and wedged to attain correct alignment. Where it is necessary to anchor the unit to the foundation, see the ‘Stability’ section.

STABILITY

Anchors comprise of 4 no. B.16 high yield deformed bars with a nominal penetration of 150mm both into the foundation and the unit, used with two part resin mortar (as for retaining walls), in accordance with the manufacturer’s instructions.

1. Position the T walls onto the concrete foundation and align using a cement mortar bed and shims, as required.
2. With the 30mm diameter holes in the unit base as a guide, drill into the foundation to the required depth using a 28mm diameter rotary percussive drill to give rough-sided holes (do not use a diamond drill which leaves a smooth sided hole).
3. Pour sufficient mixed resin into the hole first, then insert the B.16 bar to the full depth so that the resin covers and encapsulates the bar.

EASI-BLOC™

Easi-Bloc™ is a precast concrete block offering solutions where limited space is available for containment. Blocs are simplistic in design, allowing for effortless handling and speed of installation. Easi-Bloc comes in two sizes, making them ideal for a variety of applications.

STANDARD SIZES AND UNIT DIMENSIONS

<table>
<thead>
<tr>
<th>Unit height (mm)</th>
<th>Weight code 1 (kg)</th>
<th>Weight code 2 (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2900</td>
<td>2904</td>
<td>1632</td>
</tr>
<tr>
<td>2503</td>
<td>2544</td>
<td>1872</td>
</tr>
<tr>
<td>3003</td>
<td>2784</td>
<td>2112</td>
</tr>
<tr>
<td>4003</td>
<td>3600</td>
<td>3380</td>
</tr>
</tbody>
</table>

ANDACRIB CONCRETE CRIB RETAINING WALLS

Andacrib is a modular precast concrete crib retaining wall system, which has been designed to cater for the most onerous loading conditions demanded of structures in highway, industrial and commercial sectors.

PRODUCT APPLICATIONS

Andacrib’s flexibility enables it to be utilised in a variety of situations:

- Road and railway embankments and cuttings
- Bridge and underpass wing walls and approach ramps
- Sewerage / water treatment plant developments
- Local authority developments, schools, public service buildings, etc
- Airport development and improvements
- Retail parks
- Service stations
- Car parks
- Leisure developments

COMPOSITION AND MANUFACTURE

Andacrib concrete components conform with Class 2 Sulphate Resistance and ‘very severe’ salt attack conditions, as required by both BS EN 1992 and BS EN 1990. The concrete has a design strength of 50 N/mm². Andacrib headers and stretchers are steel reinforced and fully comply with the requirements of BS EN 1992.

DURABILITY

A completed Andacrib wall provides a substantial, maintenance-free structure with a design life in excess of 120 years and its design meets Highway Agency requirements.

PRODUCT BENEFITS

- Cost-effective
- Interlocking design for easy alignment and added security
- Quick installation
- Durable
- Reusable product
- Cast-in lifting pin makes them easy to lift

Easi-Bloc contains a central cast-in lifting loop for ease of handling and installation. Products are manufactured to comply with the requirements of BS EN 1992-1-1:2004.

PRODUCT APPLICATIONS

Segregation • Temporary road blocks • Security barricades
Storage bays • Agricultural bays suitable for grain, silage, etc.
Earth retention • Aggregate bays • Partition walling • Landscaping
Waterways / Shoreline defences • Highways • Retaining walls

Easi-Bloc contains a central cast-in lifting loop for ease of handling and installation. Products are manufactured to comply with the requirements of BS EN 1992-1-1:2004.
CONCRETE SAFETY BARRIERS

PRODUCT APPLICATIONS
- Segregation
- Temporary road blocks
- Security barricades
- Traffic management
- Flood defence
- Rockfall

PRODUCT BENEFITS
- Durable – has a design life of 60+ years
- Cost-effective
- Easy to handle and install
- Durable
- Interlocking design for easy alignment and added security
- Free-standing unit
- Provides a high level of containment
- Absorbs the impact of a moving vehicle
- Slows down the impacting vehicle quickly
- Product can be painted on request
- Reusable product

PRODUCT DIMENSIONS

<table>
<thead>
<tr>
<th>Length (mm)</th>
<th>Width (mm)</th>
<th>Height (mm)</th>
<th>Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4000</td>
<td>1000</td>
<td>1000</td>
<td>5200</td>
</tr>
</tbody>
</table>

Our precast concrete, interlocking jersey barriers are ideal to use for a variety of applications, including many types of temporary works.

PYRA-BLOC™

PRODUCT BENEFITS
- Durable – has a design life of 60+ years
- Simplistic and quick installation, including four integral lifting points
- Interlocking design for easy alignment and added security
- Smooth impervious surface which is easily washed down
- Operational under power failure conditions

PRODUCT APPLICATIONS
- Airports
- Factories
- Power stations
- Service Stations
- Sub-stations

PRODUCT DIMENSIONS

<table>
<thead>
<tr>
<th>Length (mm)</th>
<th>Width (mm)</th>
<th>Height (mm)</th>
<th>Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1500</td>
<td>500</td>
<td>800</td>
<td>900</td>
</tr>
</tbody>
</table>

Pyra-Bloc is a modular precast concrete safety barrier unit consisting of four 1-metre square pyramids with interlocking connectors. Its unique design will prevent vehicle movement, as vehicles will become impaled whilst trying to drive over them.

PRODUCT APPLICATIONS
- Segregation
- Temporary road blocks
- Security barricades
- Traffic management
- Flood defence
- Rockfall

PRODUCT BENEFITS
- Cost-effective
- Easy to handle and install
- Durable
- Interlocking design for easy alignment and added security
- Free-standing unit
- Provides a high level of containment
- Absorbs the impact of a moving vehicle
- Slows down the impacting vehicle quickly
- Product can be painted on request
- Reusable product

PRODUCT DIMENSIONS

<table>
<thead>
<tr>
<th>Length (mm)</th>
<th>Width (mm)</th>
<th>Height (mm)</th>
<th>Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4000</td>
<td>1000</td>
<td>1000</td>
<td>5200</td>
</tr>
</tbody>
</table>

fpmccann.co.uk/pyra-bloc
01789 336960
GRANTHAM:
Summit House
Alma Park Road Grantham
Lincolnshire
NG31 9SP
T 01476 562277
sales@fpmccann.co.uk

LYNEY:
Lydney Industrial Estate
Harbour Road Lydney
Gloucestershire
GL15 4EJ
T 01594 847500
sales@fpmccann.co.uk

MAGHERAFELT:
16-18 Quarry Road
Knockloughrim
Magherafelt
BT45 8NR
T 028 7954 9026
sales@fpmccann.co.uk

UDDINGTON:
New Edinburgh Road
Uddingston Glasgow
Lanarkshire
G71 6NE
T 01698 803300
sales@fpmccann.co.uk

AGRICULTURE
Lydney 01594 847500  Grantham 01476 562277

ARCHITECTURAL PRECAST
London 020 3905 7640

BOX CULVERTS
Weston Underwood 01335 361269

BUILDING PRODUCTS
Cadeby 01455 290780

DOCK LEVELLERS
Weston Underwood 01335 361269

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

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

TANKS & CHAMBERS
Wellesbourne 01789 336960

TUNNELS & SHAFTS
Cadeby 01455 290780

WALLING
Grantham 01476 562277  Lydney 01594 847500
Magherafelt 028 7954 9026 (NI)  Uddingston 01698 803300 (Scotland)