



THINKING PRECAST?
THINK FP MCCANN

AGRICULTURE PRODUCTS QUICK REFERENCE GUIDE

v1.1





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 LEVELLERS | DRAINAGE | FENCING
FILTER BEDS | 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), 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.



FP McCann has been supplying the agricultural industry with quality precast concrete solutions for over 60 years. Our agricultural range includes solutions for livestock dairy buildings, bulk storage such as grain, crops, fertiliser, slurry storage and silage. We deliver to any part of the UK and Ireland, meeting your requirements with affordable and safe solutions.

Our valued customer relationships drives FP McCann to develop better products, in addition to adapting existing products to best meet the needs of farmers and farm building contractors. We remain committed to the agricultural community by developing high-quality products that are built to last and can be quickly and easily installed, ensuring on-time delivery.



CONTENTS

| | |
|----------------------------|----|
| Prestressed Precast Panels | 4 |
| L Walls | 5 |
| T Walls | 6 |
| Rocket Walls™ | 7 |
| Livestock Flooring | 8 |
| Dirty Water/Effluent Tank | 9 |
| Easi-Bloc™ | 10 |
| Water Troughs | 11 |

PRESTRESSED PRECAST PANELS



L WALLS



PRODUCT FEATURES & BENEFITS

- The prestressed panels are all manufactured to BS-EN 1992 standard and are designed in accordance with BS 5502
- Horizontal and vertical panels available
- Quick, easy and efficient installation
- No foundation required for horizontal panels
- Tailor-made lengths and a variety of widths and thicknesses
- Prestressed panels offer superior strength and resilience
- Smooth impervious surface - easily washed down, hygienic solution
- Panels absorb minor accidental damage from livestock
- Cost-effective solution
- Tongue and groove joints for easy alignment and sealing
- Horizontal panels are ideal for supporting against columns of a building or within the flanges of stub columns of an open bunker. The stub columns may be designed to allow the later addition of a roof, or form a building to the outside
- Vertical panels are an effective way of constructing a permanent bunker. Generally double loading panels are available for dividing walls
- Vertical cantilever panels are cast-in to position using cradles prior to construction of the floor slab
- Vertical Cantilever Panels are suitable for use where the situation demands negating any loading onto the frame of an existing structure

The versatility of FP McCann's prestressed concrete panels makes them ideal for creating flexible storage bays of all sizes with a range of thicknesses. Our prestressing process provides enormous strength over a precast panel, making our panels ideal for securely containing grain and other crops.

| Dimensions - Horizontal Panel | | | | | |
|-------------------------------|---|-------|-------|-------|-------|
| Height | 1.0m | 1.2m | 1.5m | | |
| Thickness | 80mm | 120mm | 160mm | 200mm | 240mm |
| Length | To suit the project, limited by load/span and handling considerations | | | | |

| Dimensions - Vertical Panel* | | | | |
|------------------------------|---|-------|-------|-------|
| Lengths | To suit the project, limited by load/span and handling considerations | | | |
| Thickness | 120mm | 160mm | 200mm | 240mm |
| Widths | 1.5m standard, 1m and 1.2m special order | | | |

* Note: This product is not manufactured in NI.

APPLICATIONS:

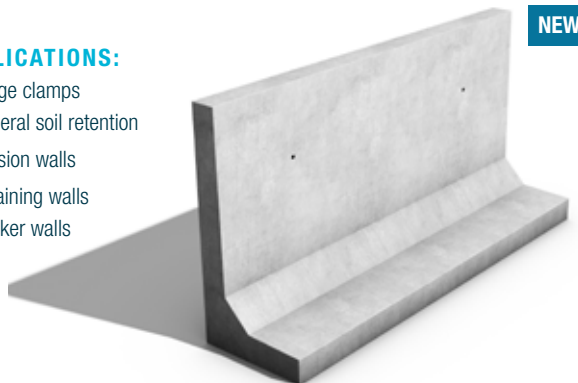
- Livestock buildings
- Silage storage
- Grain and crop storage
- Underground slurry stores

PRODUCT FEATURES

- Precast L wall units can be loaded on one side or both sides. They can be placed in bays either sitting near existing walls or using corner units to create a complete L wall system. No steel is required for this option.

APPLICATIONS:

- Silage clamps
- General soil retention
- Division walls
- Retaining walls
- Bunker walls



STANDARD L WALL SIZES

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

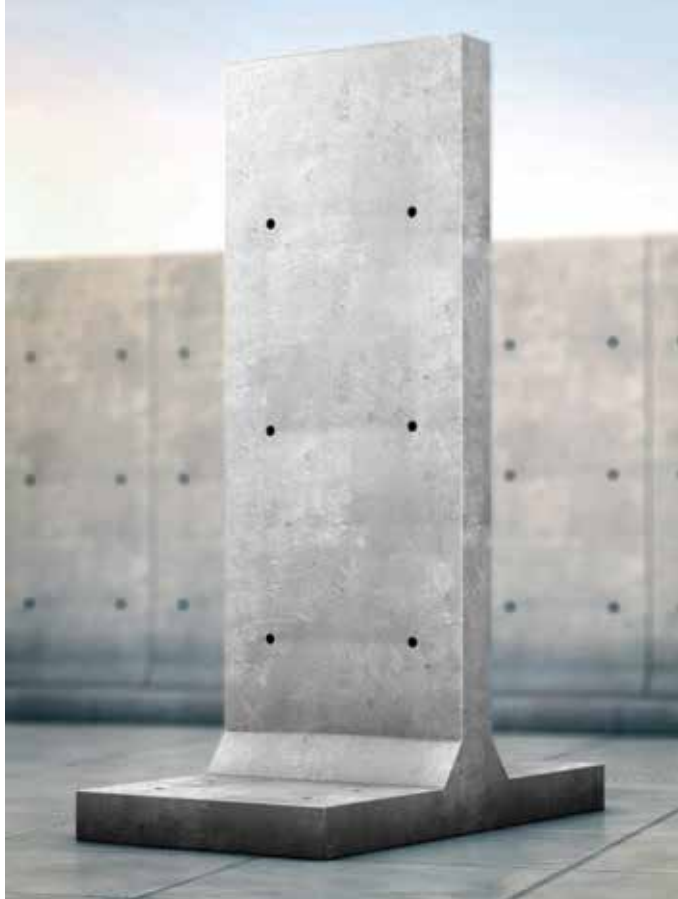
| Height (mm) | Width (mm) straight unit | Weight (kg) straight unit | Width (mm) corner unit | Weight corner unit (kg) |
|-------------|--------------------------|---------------------------|------------------------|-------------------------|
| 1000 | 1000 | 440 | 1000 X 1000 | 790 |
| NEW 1000 | 2000 | 900 | 1000 X 1000 | 790 |
| 1500 | 1000 | 710 | 1000 X 1000 | 1170 |
| NEW 1500 | 2000 | 1450 | 1000 X 1000 | 1170 |
| 1750 | 1000 | 870 | 1000 X 1000 | 1390 |
| 2000 | 1000 | 1010 | wx1000 X 1000 | 1580 |
| 2500 | 1000 | 1500 | 1250 X 1250 | 2950 |
| 3000 | 1000 | 1960 | 1500 x 1500 (2 Piece) | 2350 |
| 3750 | 1000 | 2950 | 2310 x 2310 (4 Piece) | 2780 |

(Include 5% lifting allowance)

Similar benefits to T Wall. See overleaf

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.



| Unit height (mm) | Weight code 1 (kg) | Weight code 2 (kg) |
|------------------|--------------------|--------------------|
| 2000 | 2304 | 1632 |
| 2500 | 2544 | 1872 |
| 3000 | 2784 | 2112 |
| 4000 | 3600 | 3360 |

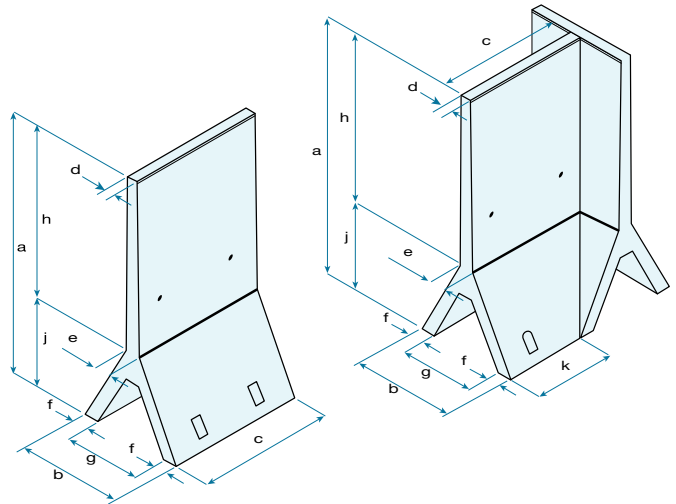
PRODUCT BENEFITS

- Large range of sizes 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/m³

ROCKET WALL™

Our Rocket Wall precast unit is an alternative to panels for storing grain and other cereals. These units come in three heights, 2.4m, 3m and 4m and are all the same 1.25m width; by design, these units are freestanding and require no base fixing for level fill grain storage. If surcharged (heaped) grain storage is required, then we recommend that the precast units are bolted to an existing level floor using Excalibur bolts into pre-drilled holes, then grouting over and sealing the joints. Rocket Walls can also be re-sited after the grain has been removed with relative ease, giving the option to reuse the storage area for alternative purposes.

The Rocket Wall units can support material up to 16kN/m³ and can be loaded from both sides making them a versatile, fast and effective way to store grain and other cereals. Alternatively, use them to create a dividing wall within a shed to increase storage options.



Please note: A-J measurements are in mm.

| Dimensions - Rocket Wall (Straight) | | | | | | | | | | |
|-------------------------------------|-------------|------|------|------|-----|-----|-----|------|------|------|
| Height (m) | Weight (kg) | a | b | c | d | e | f | g | h | j |
| 2.4 | 1100 | 2400 | 970 | 1250 | 100 | 131 | 131 | 710 | 1600 | 800 |
| 3.0 | 1860 | 3000 | 1200 | 1250 | 110 | 150 | 165 | 870 | 2000 | 1000 |
| 4.0 | 2820 | 4000 | 1650 | 1250 | 110 | 170 | 185 | 1280 | 2600 | 1400 |

| Dimensions - Rocket Wall (Corner) | | | | | | | | | | | |
|-----------------------------------|------------------------------|------|------|------|-----|-----|-----|-----|------|------|-----|
| Height (m) | Weight (kg) | a | b | c | d | e | f | g | h | j | k |
| 2.4 | 1091 | 2400 | 970 | 1200 | 100 | 131 | 131 | 710 | 1600 | 800 | 759 |
| 3.0 | 1842 | 3000 | 1200 | 1200 | 110 | 150 | 165 | 870 | 2000 | 1000 | 680 |
| 4.0 | Steel corner infill assembly | | | | | | | | | | |

Please note: A-K measurements are in mm.

LIVESTOCK FLOORING



FP McCann produces a range of agricultural cattle slats, ideal for use over slurry channels, underground tanks or as part of a suspended floor system.

| Gang slats | | | | | | | | | |
|--------------|------|------|------|------|------|------|------|------|------|
| Length (ft) | 8ft | 9ft | 10ft | 11ft | 12ft | 13ft | 14ft | 15ft | 16ft |
| Width (mm) | 1265 | 1265 | 1265 | 1265 | 1265 | 1265 | 1255 | 1255 | 1255 |
| Depth (mm) | 195 | 195 | 195 | 195 | 195 | 195 | 225 | 225 | 225 |
| Axle loading | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Weight (Kg) | 1040 | 1220 | 1320 | 1480 | 1560 | 1620 | 2188 | 2345 | 2500 |

| Safety slats | | | | | | | | | |
|--------------|---------------------|------|------|------|------|------|------|------|------|
| Length (ft) | 8ft | 9ft | 10ft | 11ft | 12ft | 13ft | 14ft | 15ft | 16ft |
| Width (mm) | 1265 | 1265 | 1265 | 1265 | 1265 | 1265 | 1255 | 1255 | 1265 |
| Depth (mm) | 195 | 195 | 195 | 195 | 195 | 195 | 225 | 225 | 225 |
| Axle loading | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Weight (Kg) | 900 | 1020 | 1160 | 1240 | 1400 | 1520 | 1852 | 1985 | 2117 |
| Opening size | 1000mm x 830mm wide | | | | | | | | |

| Multi-purpose slats | | | | | | |
|---------------------|------|------|------|------|------|------|
| Length (ft) | 8ft | 9ft | 10ft | 11ft | 12ft | 13ft |
| Width (mm) | 1265 | 1265 | 1265 | 1265 | 1265 | 1265 |
| Depth (mm) | 175 | 175 | 175 | 175 | 175 | 175 |
| Axle loading | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Weight (Kg) | 840 | 920 | 1020 | 1180 | 1260 | 1420 |

| Diagonal slats | | | | | | |
|----------------|------|------|------|------|------|------|
| Length (ft) | 8ft | 9ft | 10ft | 11ft | 12ft | 13ft |
| Width (mm) | 1265 | 1265 | 1265 | 1265 | 1265 | 1265 |
| Depth (mm) | 195 | 195 | 195 | 195 | 195 | 195 |
| Axle loading | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Weight (Kg) | 1040 | 1220 | 1320 | 1480 | 1560 | 1620 |

| Support beams | | | | | | |
|---------------|-----|-----|------|------|------|------|
| Length (ft) | 8ft | 9ft | 10ft | 11ft | 12ft | 13ft |
| Width (mm) | 305 | 305 | 305 | 305 | 305 | 305 |
| Depth (mm) | 305 | 305 | 305 | 305 | 305 | 305 |
| Weight (Kg) | 518 | 583 | 648 | 713 | 778 | 842 |

| Slurry Channels | |
|-----------------|------|
| Length (mm) | 2400 |
| Width (mm) | 1200 |
| Depth (mm) | 1200 |
| Weight (Kg) | 2400 |

| Cubicle bases | | | | |
|---------------|---------|---------|---------|---------|
| Length (ft) | 7ft | 8ft | 14ft | 15ft |
| Width (mm) | 1150 | 1200 | 1140 | 1200 |
| Depth (mm) | 270-200 | 225-170 | 280-200 | 225-170 |
| Weight (Kg) | 880 | 1479 | 2500 | 2773 |

| Passage Covers | | | | | | | | | |
|----------------|------|------|------|------|------|------|------|------|------|
| Length (ft) | 8ft | 9ft | 10ft | 11ft | 12ft | 13ft | 14ft | 15ft | 16ft |
| Width (mm) | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 |
| Depth (mm) | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 |
| Weight (Kg) | 1218 | 1370 | 1523 | 1672 | 1827 | 1972 | 2097 | 2246 | 2446 |

DIRTY WATER/ EFFLUENT TANK

The precast dirty water tank is used to store all forms of dirty water and is available in a range of sizes, depending on the estimated volume of effluent produced. All tanks come complete with solid lids.

PRODUCT BENEFITS

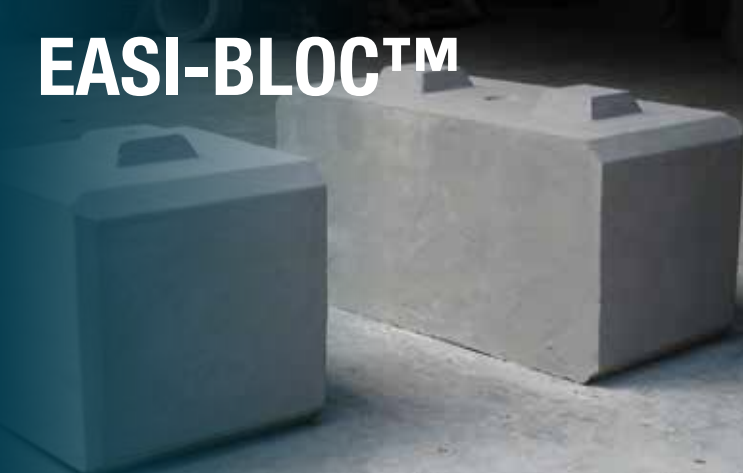
- Speedy installation, no ready-mixed concrete backfill required
- One piece construction – eliminates risk of leakage through joints
- Unobtrusive (buried underground)
- Low maintenance

VOLUME CAPACITY OF STORAGE CHAMBERS

| Internal Diameter (x1000mm) | Litres |
|-----------------------------|--------|
| DN1500 | 1767 |
| DN1800 | 2544 |
| DN2100 | 3464 |
| DN2400 | 4514 |
| DN2700 | 5726 |
| DN3000 | 7069 |



EASI-BLOC™



Easi-Bloc™ is a precast concrete block offering solutions where limited space is available for containment. They 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.

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 BENEFITS

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

APPLICATIONS

- Segregation
- Temporary road blocks
- Agricultural storage bays suitable for grain, silage, etc.
- Earth retention
- Partition walling
- Landscaping
- Retaining wall

| Length (mm) | Width (mm) | Height (mm) | Weight (kg) |
|-------------|------------|-------------|-------------|
| 1200 | 600 | 450 | 750 |
| 600 | 600 | 450 | 375 |
| *1400 | 700 | 700 | 1700 |
| *700 | 700 | 700 | 850 |

* NI only

WATER TROUGHS



FP McCann offers a range of high-quality precast water troughs for the agricultural sector. Our precast concrete water troughs provide a strong, reliable and quick fit solution for cattle drinking requirements.

Due to the weight of the concrete water troughs, less time is required to fit and install them as they are able to sit under their own weight. Unlike plastic troughs, the robustness of the precast water trough removes the risk of the trough losing shape or being pushed around by livestock.

Our precast concrete water troughs are available in four sizes.

PRODUCT BENEFITS

- Versatile - can be easily moved to a different location using the correct lifters
- Durable - maintains shape in all conditions and centre core pipe is protected from frost etc.
- Safe - no sharp edges and centre core pipe is protected from livestock
- Drainage - can be easily drained to allow for cleaning and transportation
- Indoor or outdoor – the strength of our water troughs means they can be used indoor or outdoor in any weather conditions

PRECAST WATER TROUGH SIZES

| Capacity | Length (M) | Width (M) | Height (M) | Weight (T) |
|---------------------------|------------|-----------|------------|------------|
| 75 Gallons / 340 Litres | 1.7 | 0.8 | 0.5 | 0.75 |
| 150 Gallons / 680 Litres | 2.1 | 0.9 | 0.7 | 1.10 |
| 200 Gallons / 909 Litres | 2.2 | 1.1 | 0.7 | 1.30 |
| 300 Gallons / 1365 Litres | 2.5 | 1.2 | 0.8 | 1.73 |



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AGRICULTURE

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ARCHITECTURAL PRECAST

London 020 3905 7640

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/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

Lydney 01594 847500 Grantham 01476 562277