



# Lock-Block Ltd.

THE ORIGINAL MANUFACTURER SINCE 1984

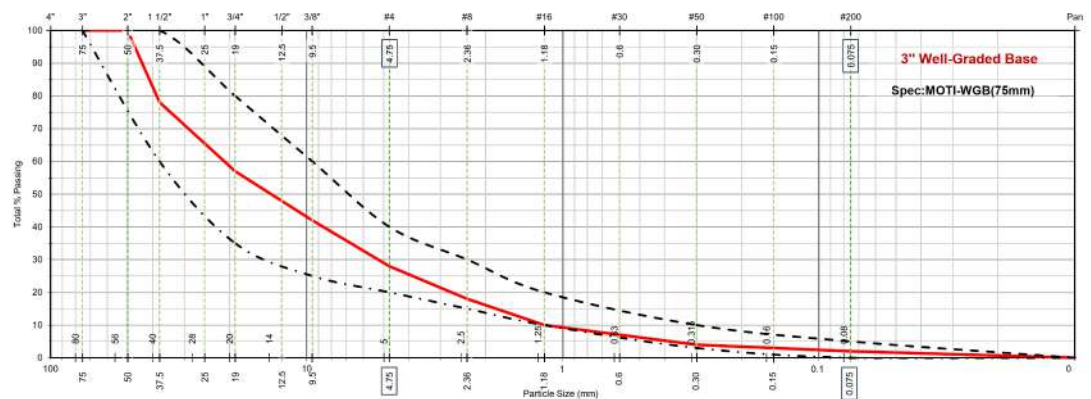




Green-Stone™ Materials utilizes an award-winning state-of-the-art crushing, screening, and washing process to produce hundreds of thousands of tons of high-quality Crushed Concrete Aggregate products annually.

Meets several ASTM, CSA, and MMCD requirements. Test results are available upon request. Products qualify for LEED® credits.

## 3" Minus Roadbase



## 25mm RCA Roadbase & Fill

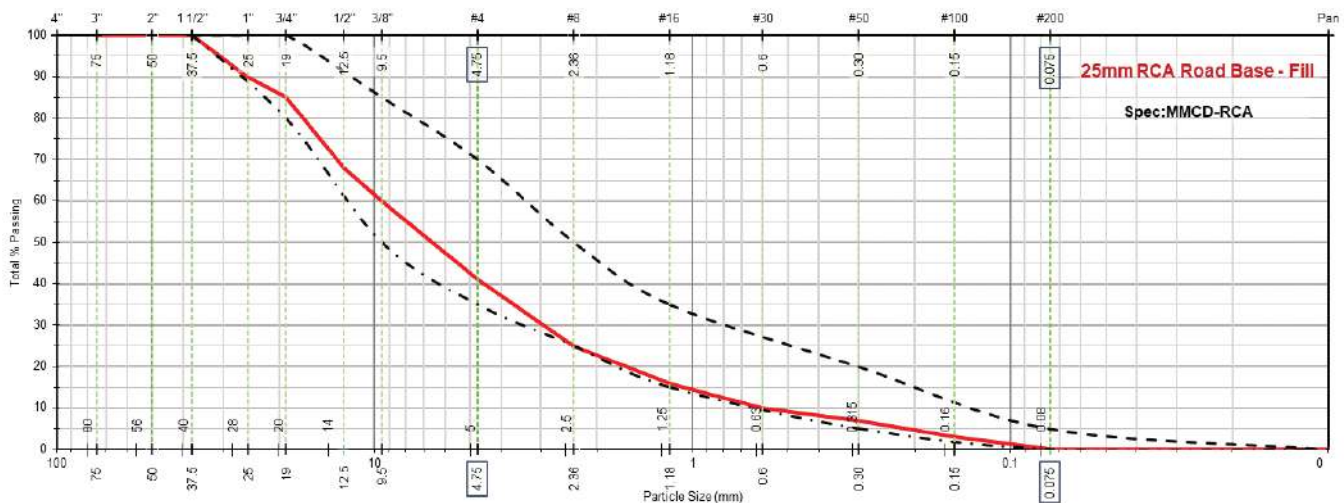
Meets the gradation requirements of MMCD- RCA



Sample ID: **25mm RCA Road Base - Fill**

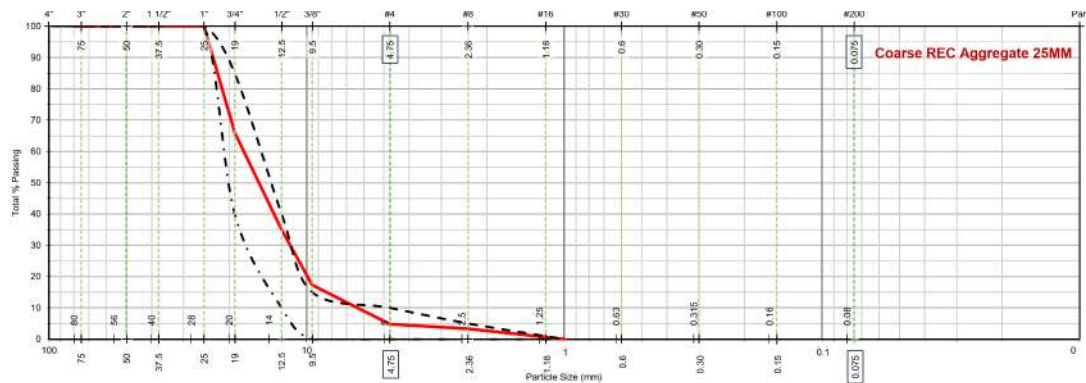
Spec: **MMCD-RCA**

| Particle Size (mm) | Total % Passing | Spec Min | Spec Max | Comment |
|--------------------|-----------------|----------|----------|---------|
| 100                | 100             |          |          |         |
| 75                 | 100             |          |          |         |
| 50                 | 100             |          |          |         |
| 37.5               | 100             | 100      | 100      | Meets   |
| 25                 | 90              |          | 100      | Meets   |
| 19                 | 85              | 80       | 100      | Meets   |
| 12.5               | 68              |          |          |         |
| 9.5                | 60              | 50       | 85       | Meets   |
| 4.75               | 41              | 35       | 70       | Meets   |
| 2.36               | 25              | 25       | 50       | Meets   |
| 1.18               | 16              | 15       | 35       | Meets   |
| 0.6                | 10              |          |          |         |
| 0.3                | 7               | 5        | 20       | Meets   |
| 0.150              | 3               |          |          |         |
| 0.075              | 0               | 0        | 5        | Meets   |
| 0                  | 0               | 0        | 0        | Meets   |

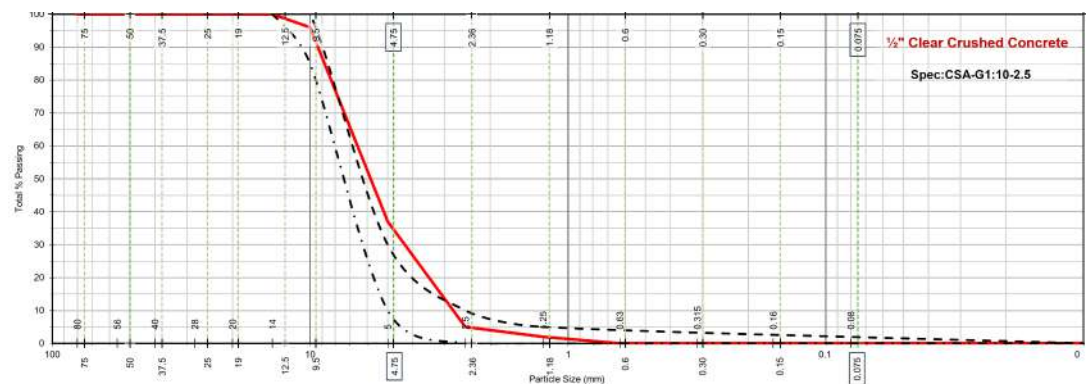




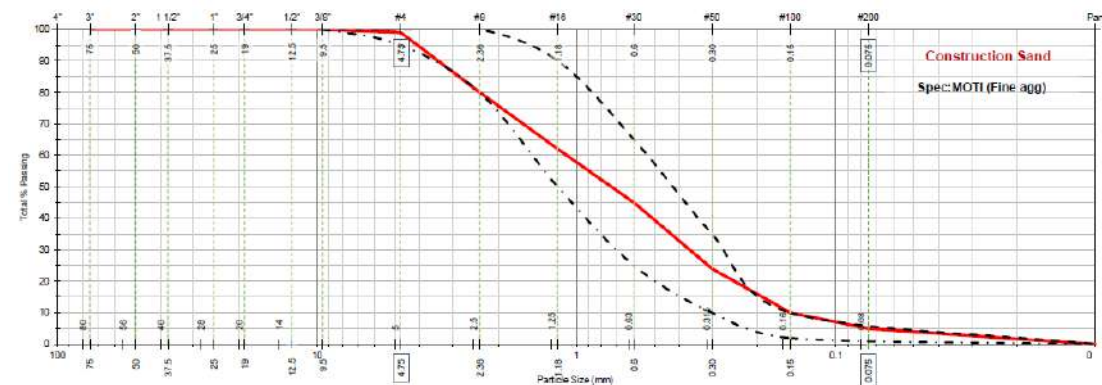
## 1" Crushed Concrete



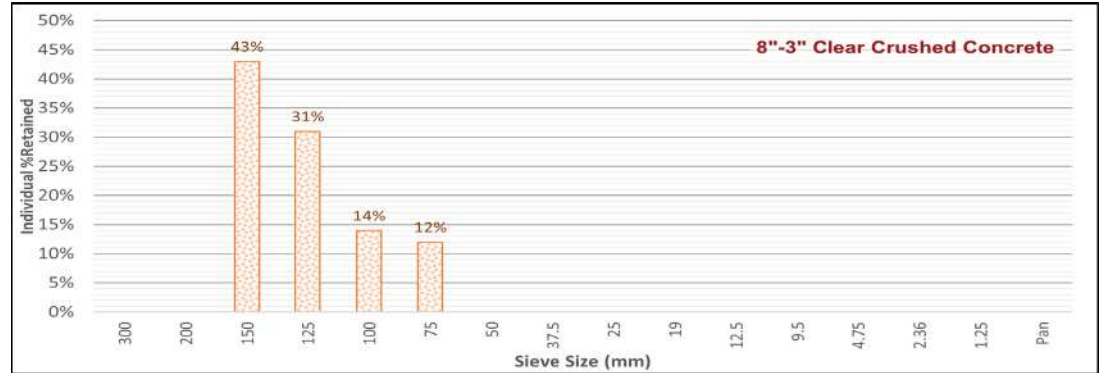
## 1/2" Crushed Concrete



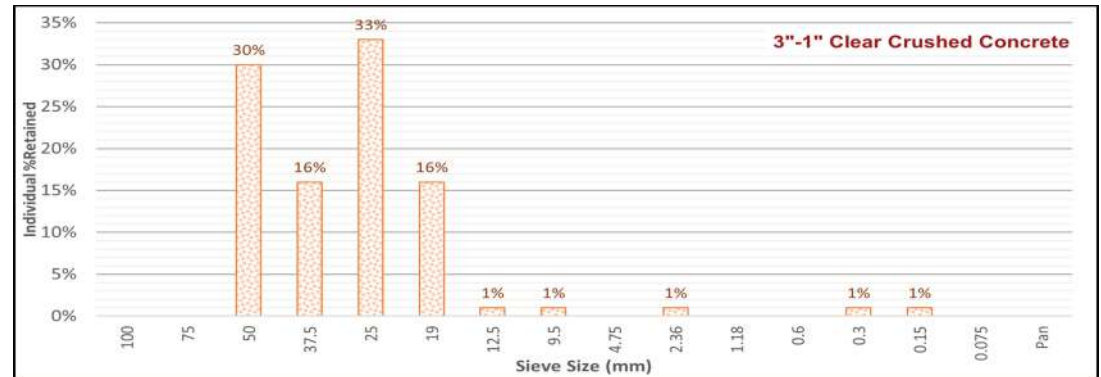
## Construction Sand



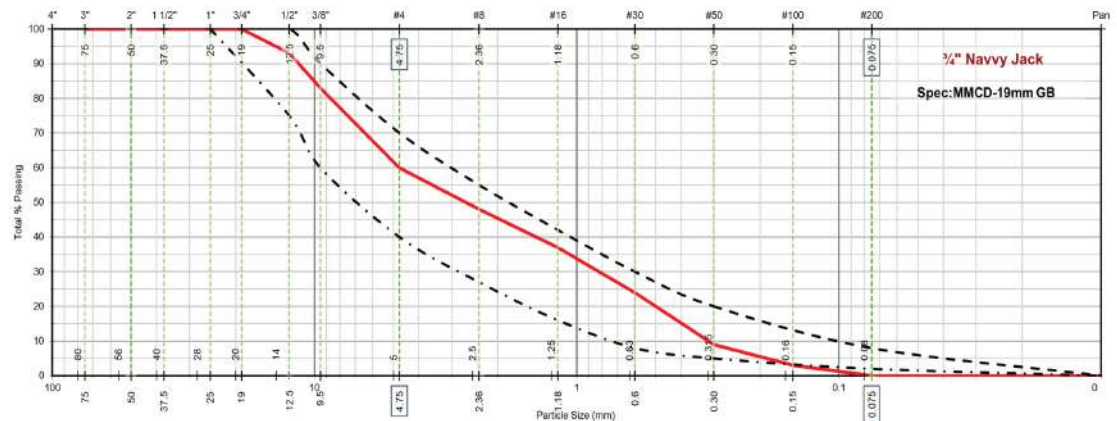
## 8"-3" Crushed Concrete



## 3"-1" Crushed Concrete



## 1" Minus Navy Jack



## Concrete Recycling Services

### Type A- Clean Concrete loads

workable pieces (max 24") No Contamination, dirt, or rebar

### Type B- Light rebar loads

Workable concrete pieces (max 24") with light rebar (max 24" length and 1" diameter), no contamination, or dirt

### Type C- Medium rebar loads

Medium concrete pieces (max 36") with medium rebar (max 36" length and 1" diameter), no contamination, or dirt

### Type D- Complex loads

Large concrete pieces OR heavy rebar (congested, or larger than 36", or 1" diameter, or presence of dirt, plastic, or wood.

Large rock (2-5 ft)

Pump washouts

Off-Load (in flat deck)

Recycling Blocks (Any shape)

Recycling Mini-Blocks (Any shape)

Recycling Highway Barriers (Any shape)

### Notes:

1. There is a \$45 minimum charge per load.
2. All transactions are subjected to the applicable taxes.
3. Load quality is subject to the scale operator's discretion. Depending on the composition, Lock-Block Ltd. reserves the right to charge accordingly.
4. Prices are subject to change

### The following materials will NOT be accepted:

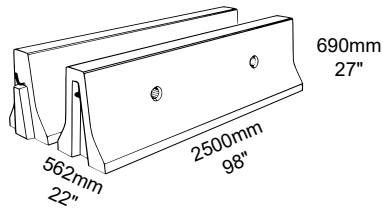
Lock-Block Ltd. Reserves the right to reloading or apply surcharges on loads with these materials

|                           |                               |                                      |
|---------------------------|-------------------------------|--------------------------------------|
| ❌ Asphalt                 | ❌ Radiant floor heating tubes | ❌ Ceramic or porcelain tiles         |
| ❌ Drywall or gypsum board | ❌ Wood                        | ❌ Plastic                            |
| ❌ Styrofoam               | ❌ Flammable materials         | ❌ Garbage                            |
| ❌ Asbestos                | ❌ Red brick                   | ❌ Loads contaminated with heavy dirt |



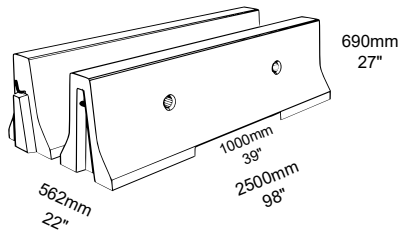
## 690 mm CRB Roadside

3000 lbs | 1350 kg P/N: 690-M32E/H



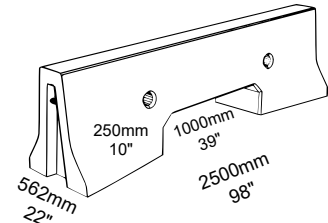
## 690 mm CRB Slotted

2800 lbs | 1250 kg P/N: 690S-M32E/H



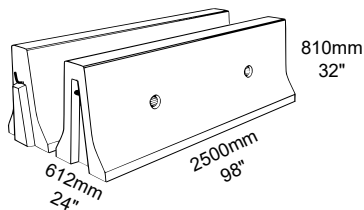
## 690 mm CDB Drainage

2100 lbs | 1000 kg P/N: 690D-M32E



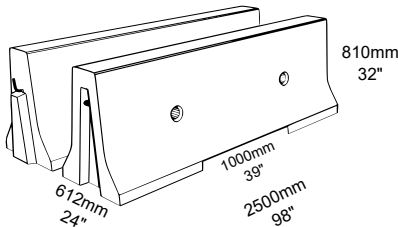
## 810 mm CMB Median

3800 lbs | 1700 kg P/N: 810-M32E/H



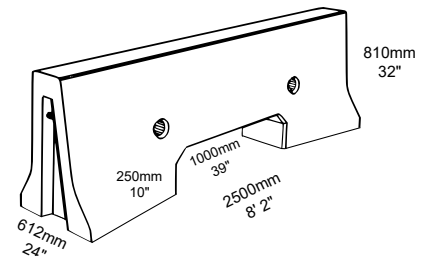
## 810 mm CMB Slotted

3600 lbs | 1650 kg P/N: 810S-M32E/H



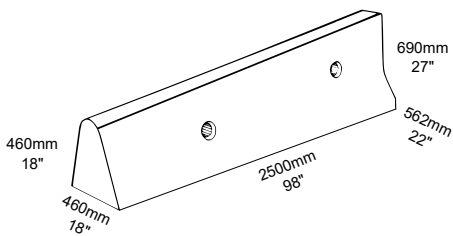
## 810 mm CMDB Drainage

2550 lbs | 1150 kg P/N: 810D-M32E



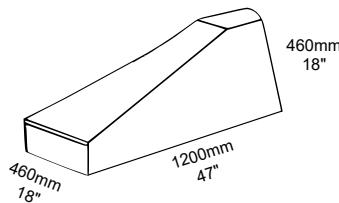
## 460 mm to 690 mm Transition CTB-1E

2400 lb | 1100 kg P/N: 690T460-M32E



## 460 mm CBN Bullnose

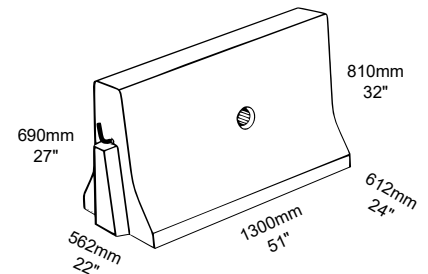
700 lbs | 300 kg P/N: 460BN-M32E/H



Available with lifting hole

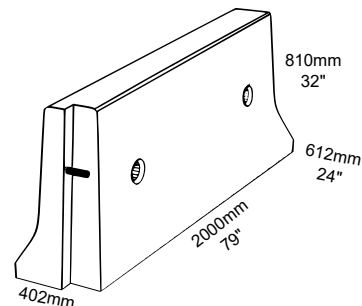
## 690 mm to 810 mm Transition CTB-2H

1800 lbs | 800 kg P/N: 810T690-M32H



## 810 Bridge Parapet Transition

2600 lbs | 1200 kg P/N: 810LPT/RPT-M32



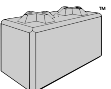
**All MOTI barriers produced by Lock-Block Ltd. are in the BC Recognized product list for road barriers.**

All barriers are available in eye or hook variants unless specified.

All barriers can be made with steel mesh reinforcement instead of fibre on request.

All produced MoTI Barriers meet or exceed the requirements of BC-MOTI-SS, and DBSS section 941.

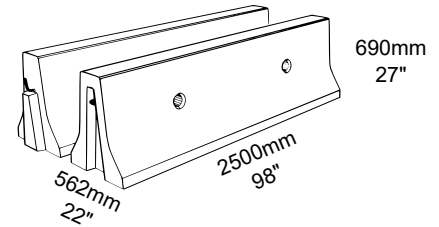
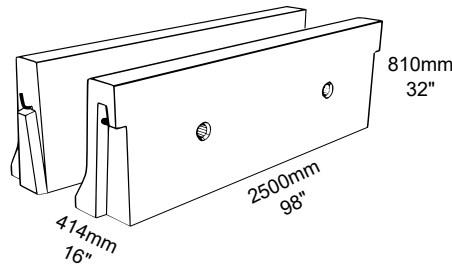
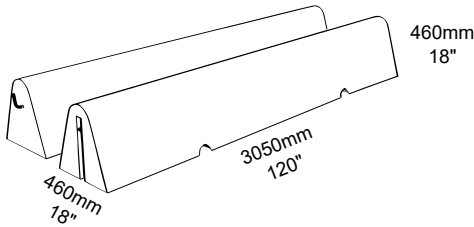
Weights may vary by 5%.



**460 mm CLB 18"**  
2100 lbs | 950 kg P/N: 460-M32EH

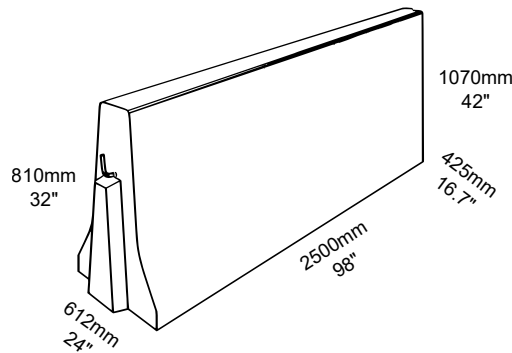
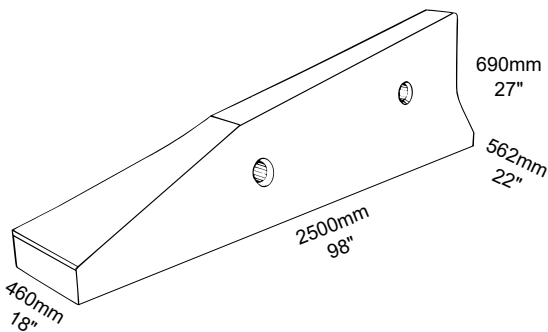
**810 mm CPB Pier Barrier**  
3100 lbs | 1400 kg P/N: 810P-M32E/H

**686 mm to 690 mm  
Transition, CTB3-E/H**  
3000 lbs | 1350 kg P/N: 690T686-M32E/H



**690 mm Bullnition**  
2000 lbs | 900 kg P/N: 690BN-M32E/H

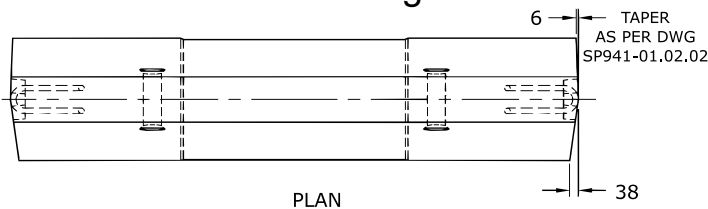
**1070 CMT Parapet Transition**  
3840 lbs | 1750 kg P/N: 1070T810-M32HR/L



All barriers produced by Lock-Block Ltd. are in the BC Recognized product list for road barriers.

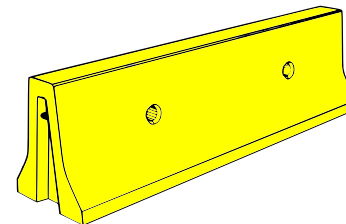
## Barrier Add-Ons

CRB modification for tight curvature



## Painted barrier

Order colour at time of purchase



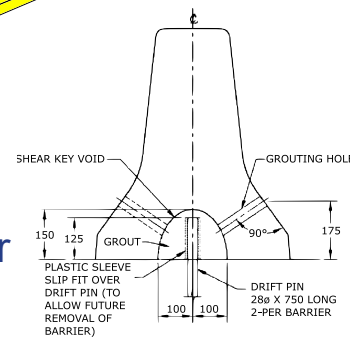
If available:

Used: 50% off regular price.

Utility: 30% off regular price.

\*The minimum Radius of Curvature for CRB barriers with Tight Curvature Modification is 17m (55'9")

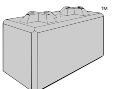
## Grouted barrier



Barriers are made as either:

- Female-Female (E)
- Male-Male (H)
- Male-Female (E/H)

All produced MOT barriers meet or exceed the requirements of BC-MOTI-SS and DBSS section 941.





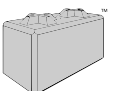
We provide the following services for concrete barriers:

- Installation
- Relocation
- Removal
- Disposal

Call or email for quote.



810 mm CMB barriers on South Fraser Perimeter Road, Surrey



\*The minimum Radius of Curvature for Lock-Block™ One-Cross Barriers with Tight Curvature Modification is 6m (19'8").

## 690 mm Lock-Block™ L junction

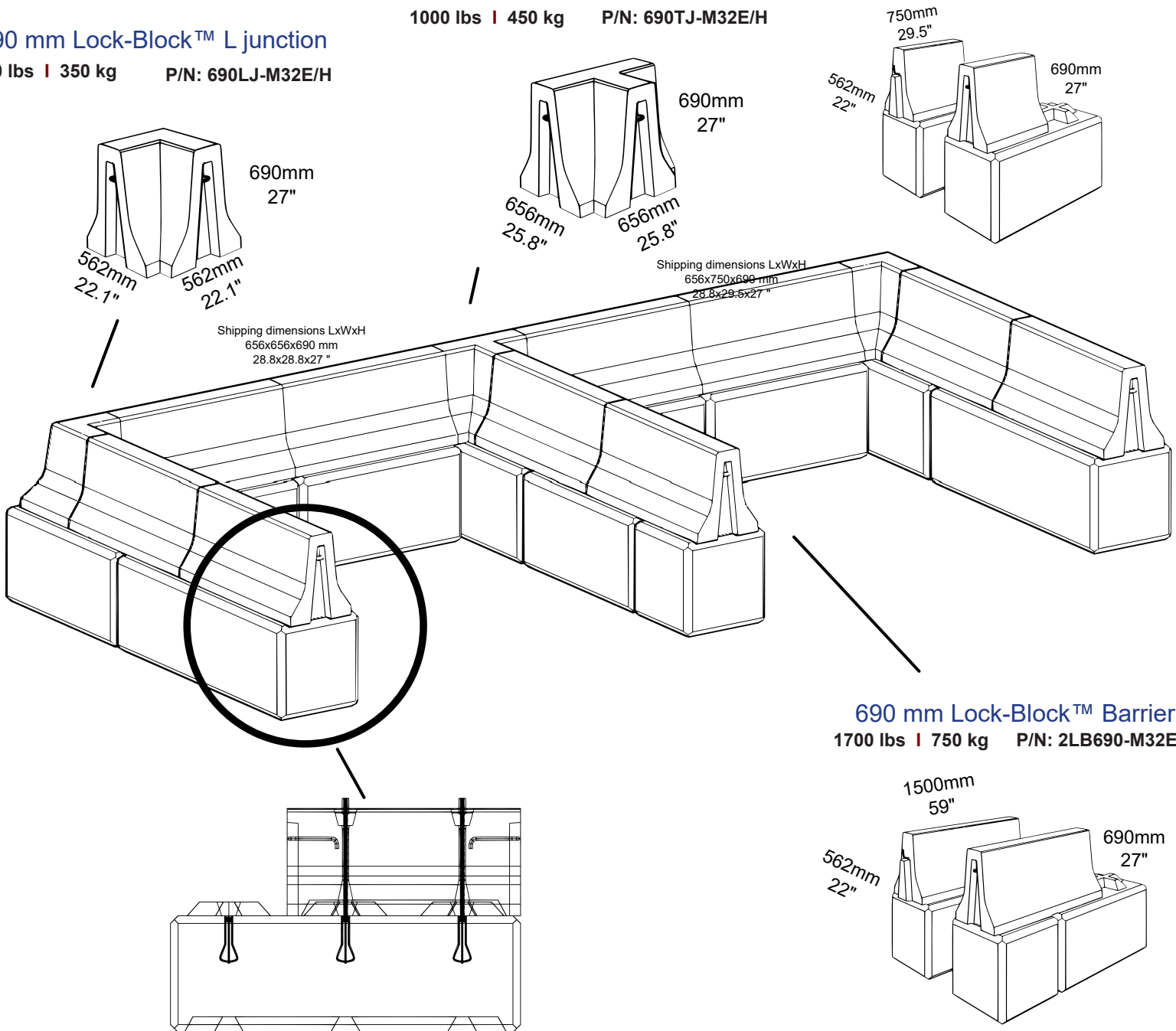
800 lbs | 350 kg P/N: 690LJ-M32E/H

## 690 mm Lock-Block™ T junction

1000 lbs | 450 kg P/N: 690TJ-M32E/H

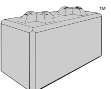
## 690 mm Lock-Block™ Barrier Half

900 lbs | 400 kg P/N: 1LB690-M32E/H



**Lock-Block™ barriers work with our proprietary blocks to provide stability and reinforcement to the barriers. Rod-Lock™ conduits can be added to any barrier (Two-cross, T junction, or L junction).**

\*All Lock-Block™ barriers available in Rod-Lock™ variants.





# SOUTH FRASER PERIMETER ROAD

## MOTI BARRIERS

CONTRACTOR: FRASER TRANSPORTATION GROUP



The South Fraser Perimeter Road (SFPR) project is a part of the Province's Gateway Program, which is improving roads and bridges in Metro Vancouver. The SFPR runs for approximately 37 km along the south side of the Fraser River.

The purpose of the project was to not only create new routes to alleviate traffic with a growing population but also, agricultural benefits and economic benefits. The agricultural benefits include topsoil conservation, irrigation/drainage system improvements, and improving the range and quality of crops grown on more than 15,000 acres of farmland.

The economic component is that the project has the potential to create over 7,000 long-term jobs in Delta and Surrey.

Lock-Block Ltd. spent 5 years producing and installing over 40,000 barriers required for this project. All barriers were produced at our plant on Mitchell Island in Richmond, BC.

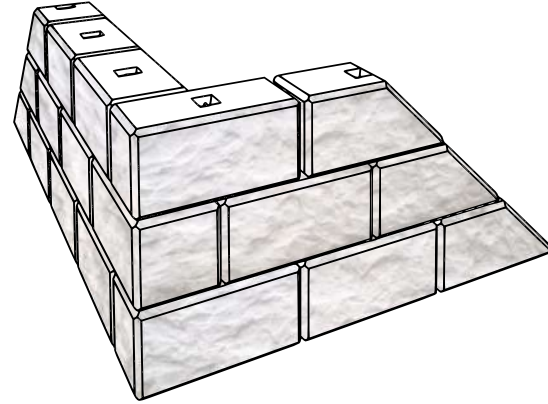
The barriers were poured as per SS941 and were tested accordingly. Lock-Block Ltd's commitment to quality control is an integral part of its reputation for producing reliable and long-lasting concrete barriers, crucial for highway and infrastructure safety.





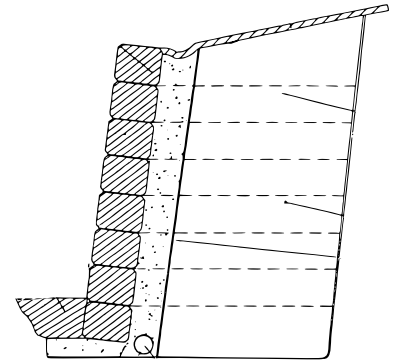
## GRAVITY WALL

- Classic Lock-Block™ wall system used for over 3 decades for various construction application.
- Design Manual available for Professional Engineers free of charge.
- Example uses: retaining wall, storage bin, etc.



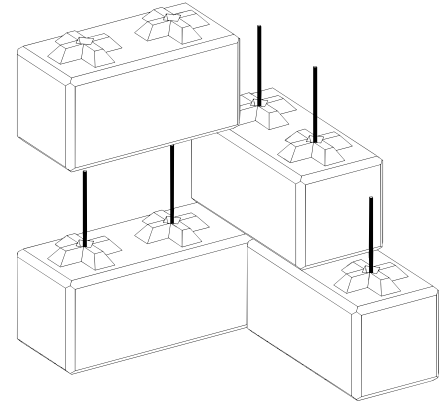
## MSE WALL

- Mechanically Stabilized Earth (MSE) walls constructed with Standard Lock-Block™ units in combination with extensible soil reinforcement (such as Geogrid).
- Design Manual available for professional Engineers free of charge.
- Example uses: Advanced retaining walls.



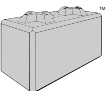
## ROD-LOCK™ WALL

- A composite semi-gravity retaining wall system made of Lock-Block™ concrete blocks and hot-dip galvanized steel rods with locking anchors.
- Design Manual available for professional Engineers free of charge.
- Example uses: Push wall, retaining wall, storage bins, etc.
- Rod-Lock™ units are available in Three-Cross blocks for staggering purposes.



## LANDSCAPING WALL

- Walls made of 1/2 scale blocks
- Each block weighs 1/8 of its full-size counterpart
- Can be used in all wall types above (Gravity, MSE, and Rod-Lock™ walls)
- Default facing: Texturlock™
- Default strength: Min 20MPa with Min 4% air content

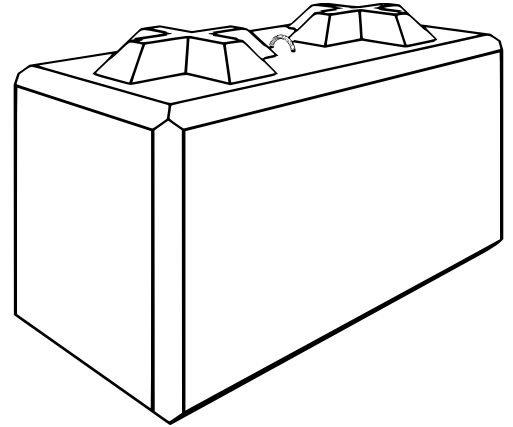


## Step 1- Choose Blocks

Keyed Blocks, Flat-Top, Benches, Slopes, Stairs, Anchor Blocks, and Specialty Blocks.

### LIFTING LOOP DESIGN

The lifting loop was designed and stamped by a licensed Professional Engineer registered in the province of British Columbia. Lifting loops are designed for at least 100 lifts within two years from the date of manufacture. Before lifting, the loop must be inspected to ensure that all cable strands are free from physical or chemical defects. The lifting loop is considered unsafe if one or more strand is broken or significantly pitted by corrosion. A copy of the testing certificate is on file with Lock-Block Ltd. and is available for inspection. Lock-Block™ units should not be lifted overhead of crew or equipment.



## Step 2- Choose a Concrete Mix Design

Utility, 20MPa, Tagged 20, Tagged 25, Tagged 30, Tagged 32, and MOTI spec.

Location of Spec Tag



## Step 3- Choose Facing

Standard Smooth, Smooth Grade A, Texturlock™, Vertical Rib, Cutstone, Granite, or custom.

Facing request are available for most blocks.

Texturlock™ Facing

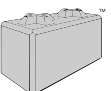


## Step 4- Choose Customizations & Add-ons

Weights, paint, anchors, pipes, Rod-Lock™, conduits, inserts, and more.



Rod-Lock™ Insert

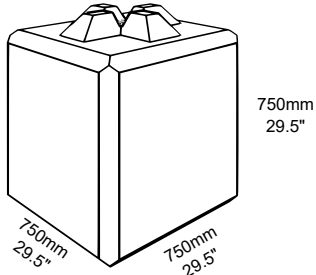




Tagged blocks are guaranteed 20MPa compressive strength, min. 4% air content, and standard smooth facing. Block weights can vary by 5%.

## One-Cross

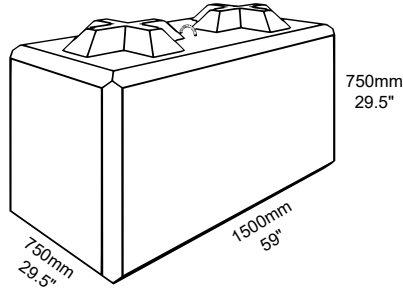
1850 lbs | 850 kg P/N: 1-20



20mm chamfer version available

## Two-Cross

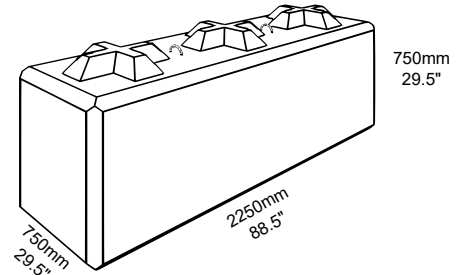
3700 lbs | 1700 kg P/N: 2-20



20mm chamfer version available

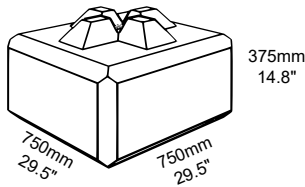
## Three-Cross

5650 lbs | 2550 kg P/N: 3-20



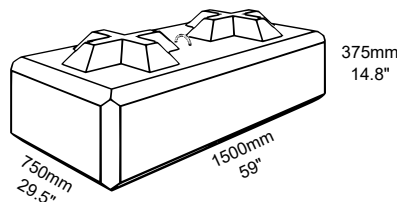
## One-Cross Half

900 lbs | 400 kg P/N: 1H-20



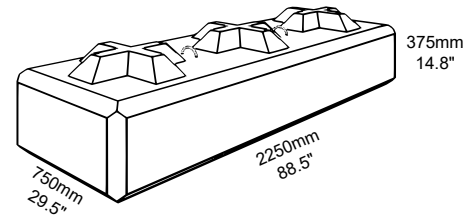
## Two-Cross Half

1850 lbs | 850 kg P/N: 2H-20



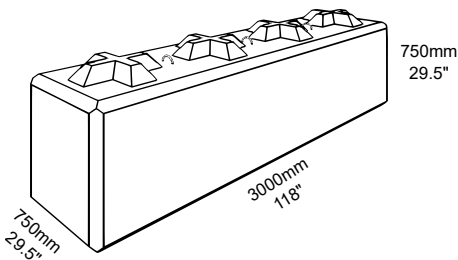
## Three-Cross Half

2750 lbs | 1250 kg P/N: 3H-20



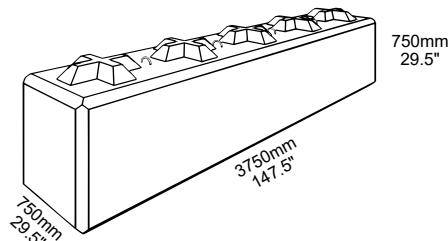
## Four-Cross

7500 lbs | 3400 kg P/N: 4-20



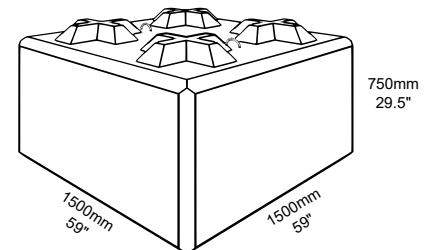
## Five-Cross

9400 lbs | 4250 kg P/N: 5-20



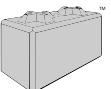
## Double-Wide

7550 lbs | 3450 kg P/N: D2-20



**Design manual available for professional Engineers free of charge. E-mail for info**

Blocks are normally available for immediate delivery, however, some configurations may not be in stock, and will require advance notice. Granite or textured facing can be added to most blocks upon request.

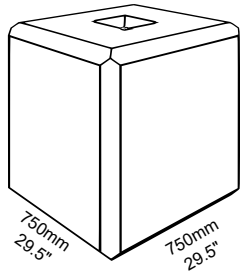


Tagged blocks are guaranteed 20MPa compressive strength, min. 4% air content, and standard smooth facing. Block weights can vary by 5%.

## One-Cross Flat

1800 lbs | 800 kg

P/N: 1F-20

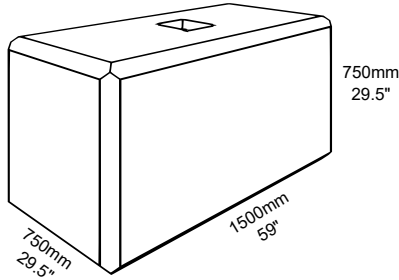


20mm chamfer version available

## Two-Cross Flat

3650 lbs | 1650 kg

P/N: 2F-20

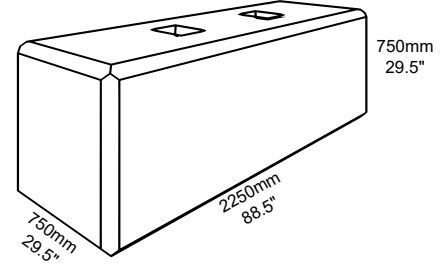


20mm chamfer version available

## Three-Cross Flat

5490 lbs | 2490 kg

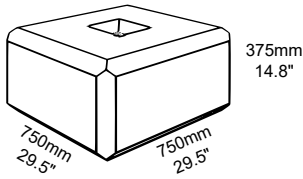
P/N: 3F-20



## One-Cross Half Flat

850 lbs | 400 kg

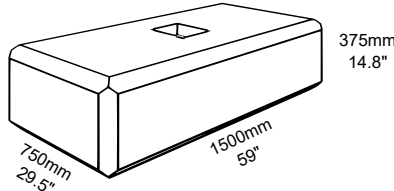
P/N: 1HF-20



## Two-Cross Half Flat

1750 lbs | 800 kg

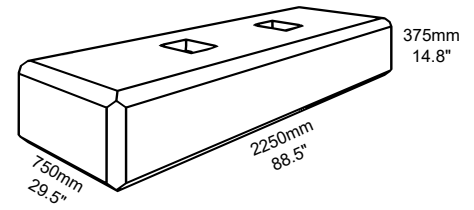
P/N: 2HF-20



## Three-Cross Half Flat

2610 lbs | 1180 kg

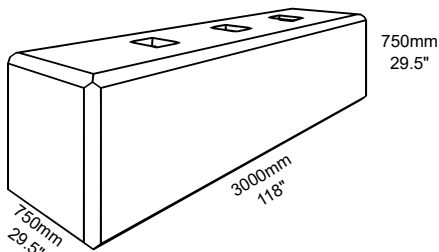
P/N: 3HF-20



## Four-Cross Flat

7320 lbs | 3330 kg

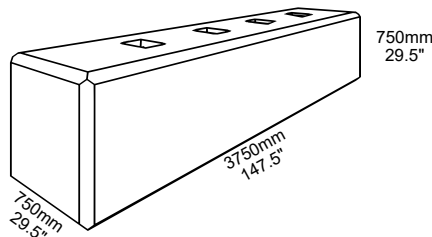
P/N: 4F-20



## Five-Cross Flat

9150 lbs | 4160 kg

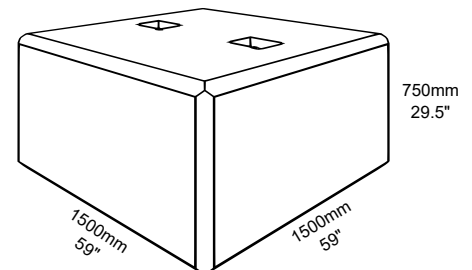
P/N: 5F-20



## Double-Wide Flat

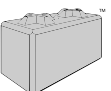
7350 lbs | 3350 kg

P/N: DF2-20



**Design manual available for professional Engineers free of charge. E-mail for info**

Blocks are normally available for immediate delivery, however, some configurations may not be in stock, and will require advance notice. Granite or textured facing can be added to most blocks upon request.

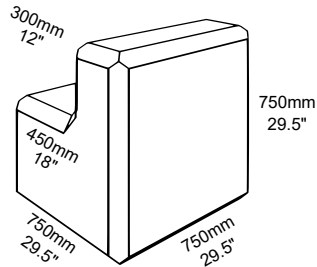


Tagged blocks are guaranteed 20MPa compressive strength, min. 4% air content, and standard smooth facing. Block weights can vary by 5%.

## One-Cross Bench

1350 lbs | 600 kg

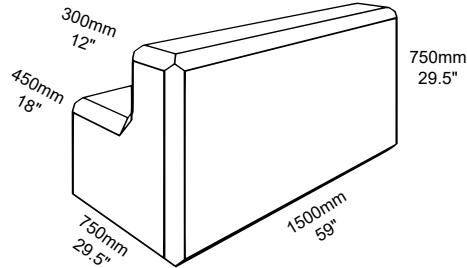
P/N: 1B-20



## Two-Cross Bench

2750 lbs | 1250 kg

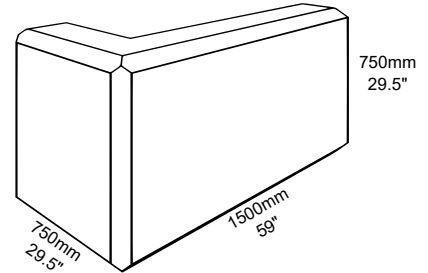
P/N: 2B-20



## Left Corner Bench

2950 lbs | 1350 kg

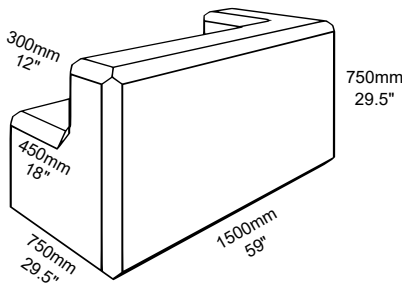
P/N: LCB-20



## Right Corner Bench

2950 lbs | 1350 kg

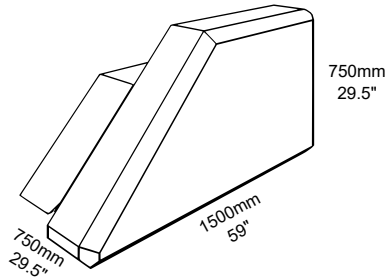
P/N: RCB-20



## Left Slope Bench

2100 lbs | 950 kg

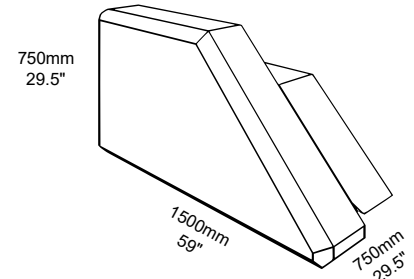
P/N: LSB-20



## Right Slope Bench

2100 lbs | 950 kg

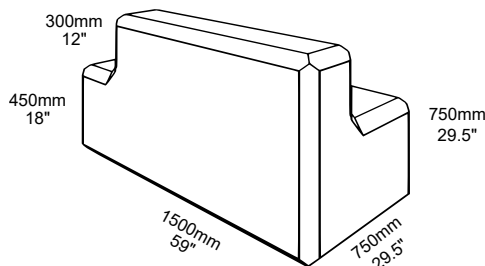
P/N: RSB-20



## Left Inside Corner Bench

2550 lbs | 1150 kg

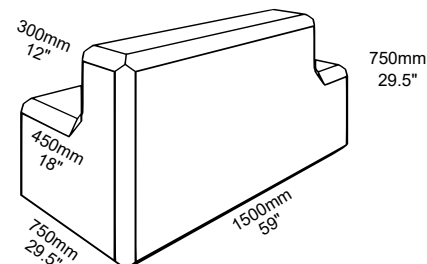
P/N: LICB-20



## Right Inside Corner Bench

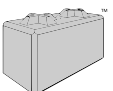
2550 lbs | 1150 kg

P/N: RICB-20



**Design manual available for professional Engineers free of charge. E-mail for info**

Blocks are normally available for immediate delivery, however, some configurations may not be in stock, and will require advance notice. Granite or textured facing can be added to most blocks upon request.





# Slopes

# Lock-Block Ltd.

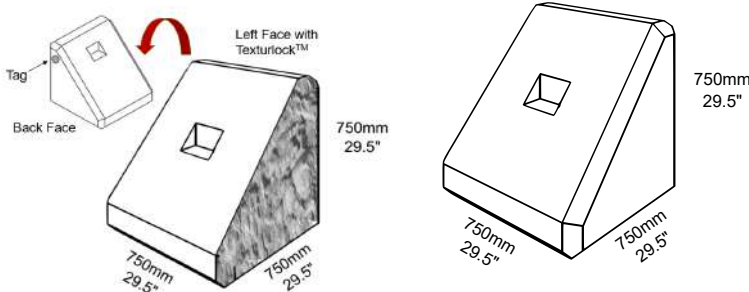
1-800-565-2565 | [www.LockBlock.com](http://www.LockBlock.com) | [sales@lockblock.com](mailto:sales@lockblock.com)  
604-325-9161

Tagged blocks are guaranteed 20MPa compressive strength, min. 4% air content, and standard smooth facing. Block weights can vary by 5%.

## Half Slope - Left

1200 lbs | 550 kg

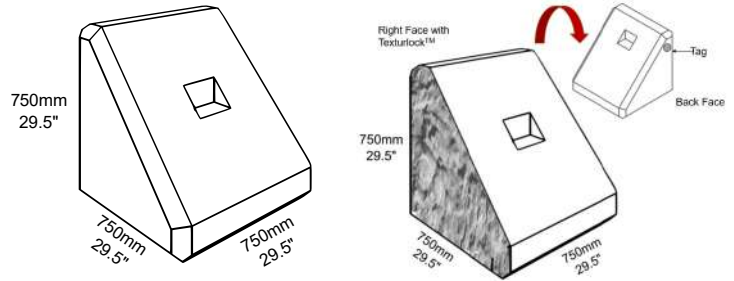
P/N: 1SL-20



## Half Slope - Right

1200 lbs | 550 kg

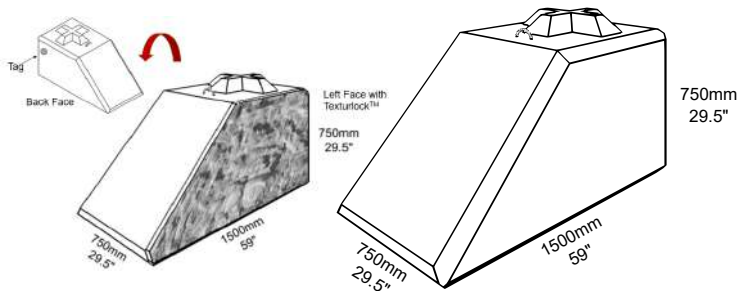
P/N: 1SR-20



## Slope - Left

3000 lbs | 1350 kg

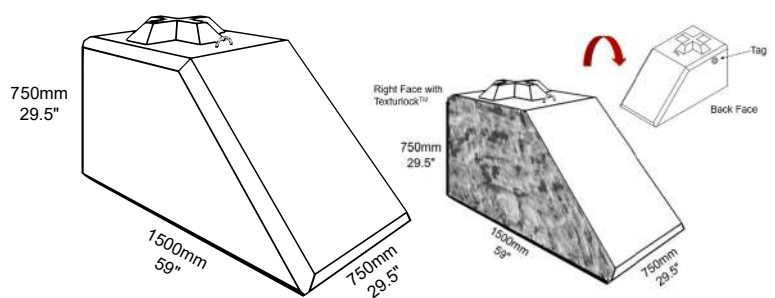
P/N: 2SL-20



## Slope - Right

3000 lbs | 1350 kg

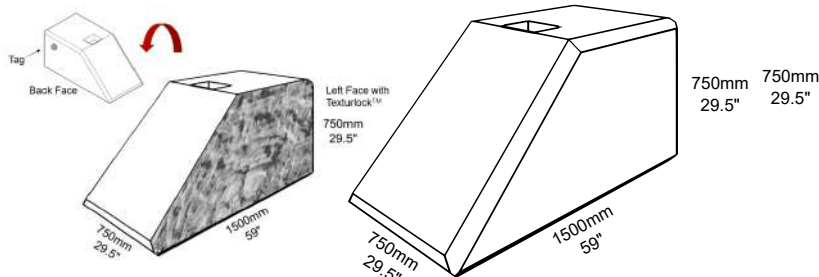
P/N: 2SR-20



## Slope Flat - Left

2950 lbs | 1350 kg

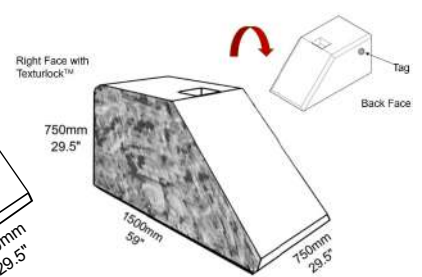
P/N: 2SFL-20



## Slope Flat - Right

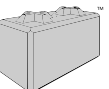
2950 lbs | 1350 kg

P/N: 2SFR-20



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# Slopes

# Lock-Block Ltd.

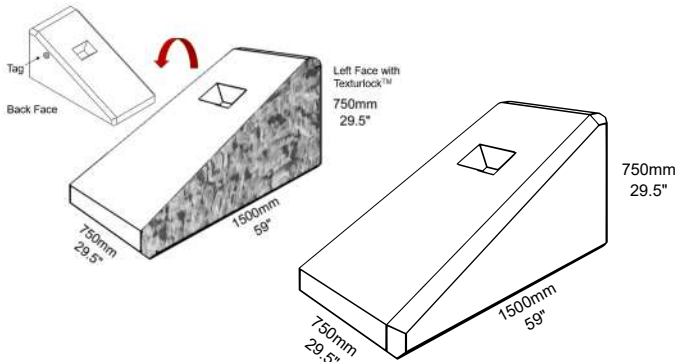
1-800-565-2565 | [www.LockBlock.com](http://www.LockBlock.com) | [sales@lockblock.com](mailto:sales@lockblock.com)  
604-325-9161

Tagged blocks are guaranteed 20MPa compressive strength, min. 4% air content, and standard smooth facing. Block weights can vary by 5%.

## Mild Slope - Left (2:1)

2300 lbs | 1050 kg

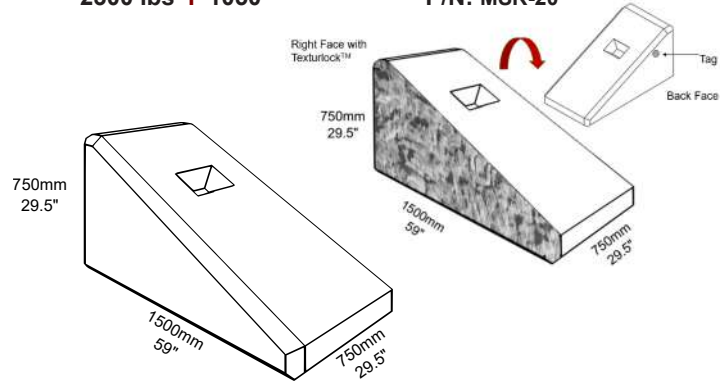
P/N: MSL-20



## Mild Slope Right - (2:1)

2300 lbs | 1050

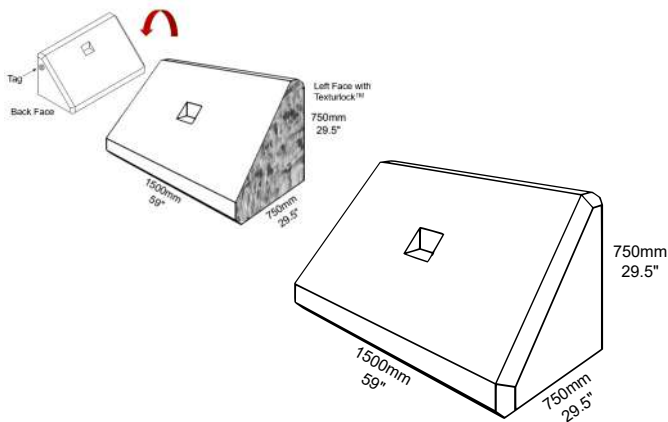
P/N: MSR-20



## Side Slope - Left

2450 lbs | 1100 kg

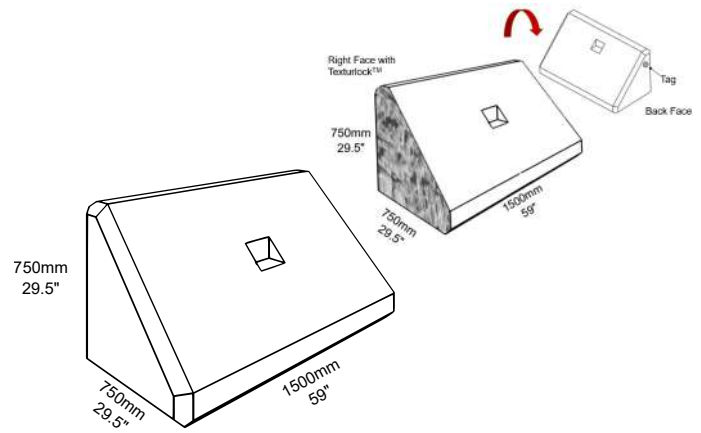
P/N: SSL-20



## Side Slope - Right

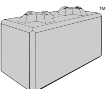
2450 lbs | 1100 kg

P/N: SSR-20



**Design manual available for professional Engineers free of charge. E-mail for info**

Blocks are normally available for immediate delivery, however, some configurations may not be in stock, and will require advance notice. Granite or textured facing can be added to most blocks upon request.

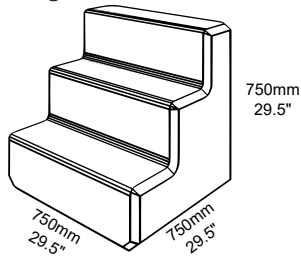


Tagged blocks are guaranteed 20MPa compressive strength, min. 4% air content, and standard smooth facing. Block weights can vary by 5%.

## One-Cross Stairs - Left

1200 lbs | 550 kg

P/N: 1STAIRL-20

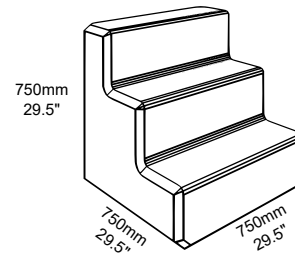


Each step is 250mm deep and 250mm tall

## One-Cross Stairs - Right

1200 lbs | 550 kg

P/N: 1STAIRR-20

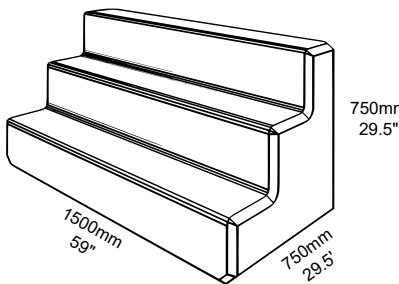


Each step is 250mm deep and 250mm tall

## Two-Cross Stairs - Left

2400 lbs | 1100 kg

P/N: 2STAIRL-20

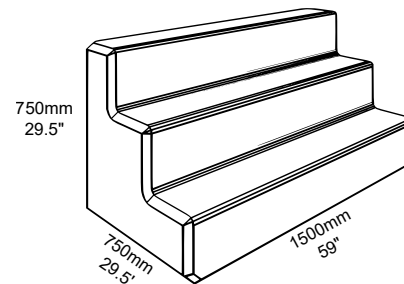


Each step is 250mm deep and 250mm tall

## Two-Cross Stairs - Right

2400 lbs | 1100 kg

P/N: 2STAIRR-20

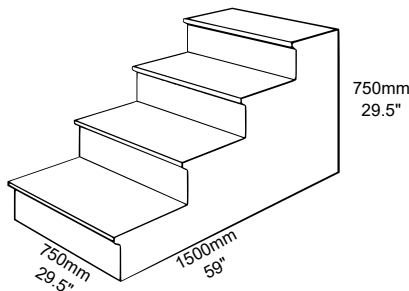


Each step is 250mm deep and 250mm tall

## Speciality Stairs - Left

2250 lbs | 1050 kg

P/N: STEPL-4-20

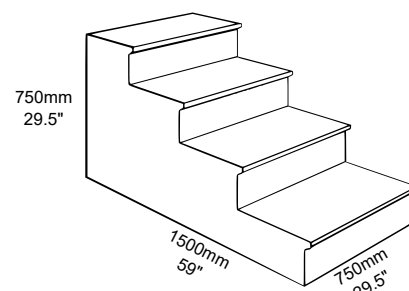


Each step is 375mm deep and 187.5mm tall

## Speciality Stairs - Right

2250 lbs | 1050 kg

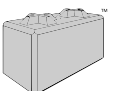
P/N: STEPR-4-20



Each step is 375mm deep and 187.5mm tall

**Design manual available for professional Engineers free of charge. E-mail for info**

Blocks are normally available for immediate delivery, however, some configurations may not be in stock, and will require advance notice. Granite or textured facing can be added to most blocks upon request.



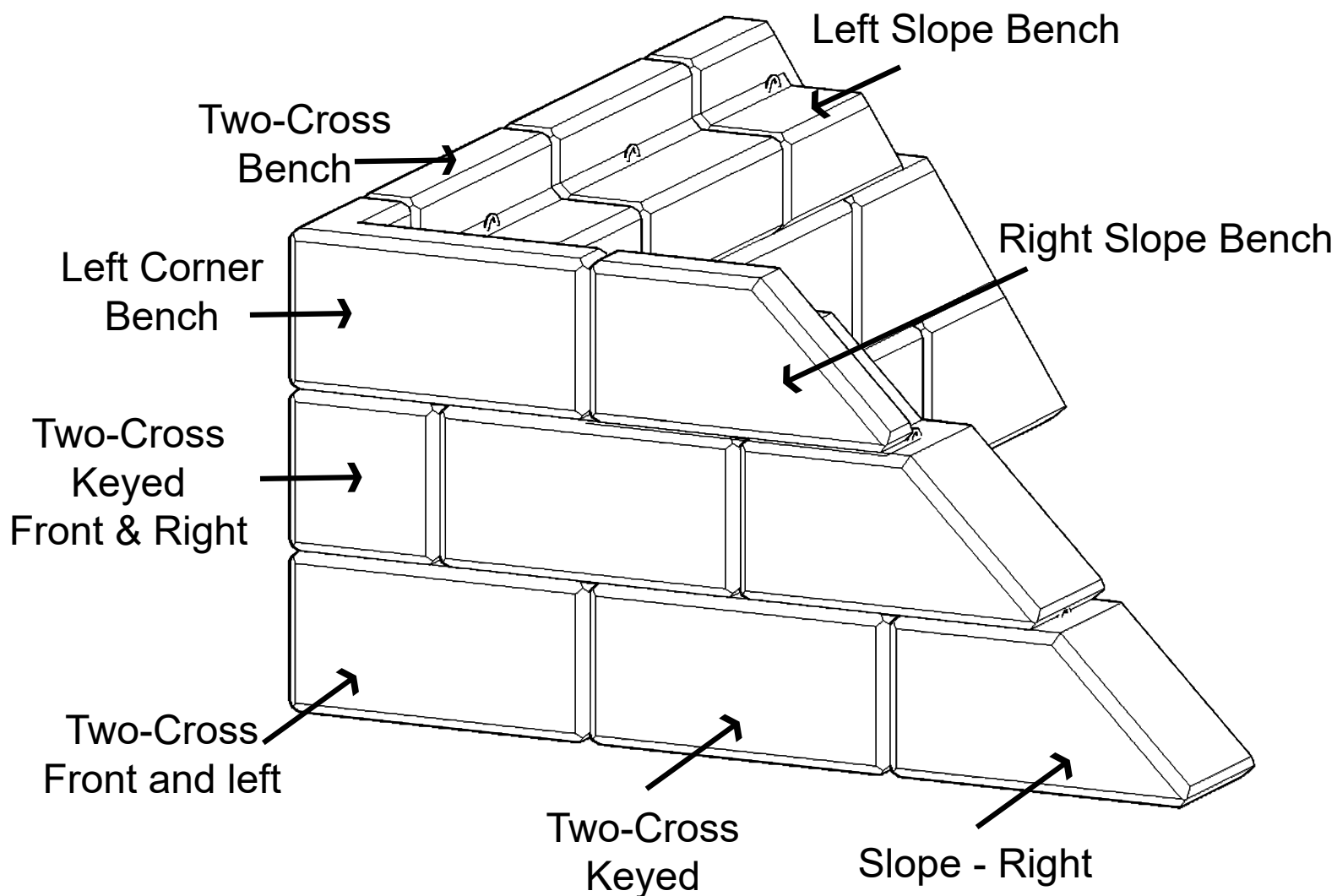


# Example wall

# Lock-Block Ltd.

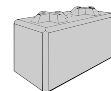
1-800-565-2565 | [www.LockBlock.com](http://www.LockBlock.com) | [sales@lockblock.com](mailto:sales@lockblock.com)  
604-325-9161

Tagged blocks are guaranteed 20MPa compressive strength, min. 4% air content, and standard smooth facing. Block weights can vary by 5%.

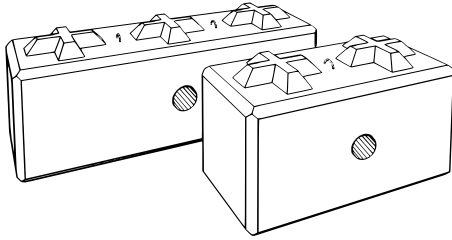


**Design manual available for professional Engineers free of charge. E-mail for info**

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## Option 1 - Horizontal Pipe

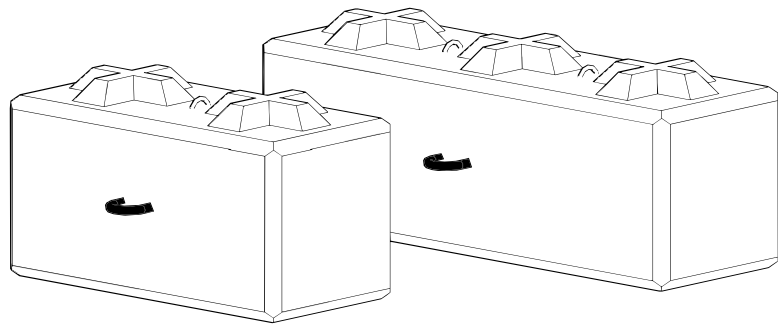


1"-4" Horizontal pipe(s) can be added to any block.



## Option 2 - Heavy Duty Lifting Eye

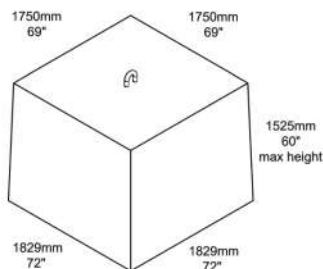
Lifting eye(s) made from 1.5" steel rod can be added to any block.



## Option 3 - Standard Anchor Block

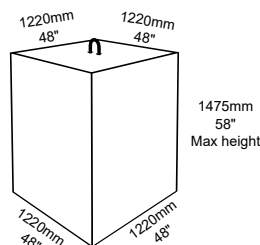
### Large Anchor

Max Weight: 22,700 lbs | 10,300 kg



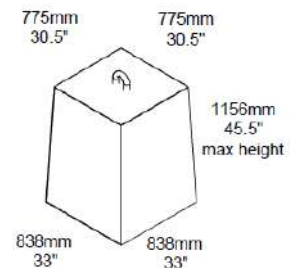
### Medium Anchor

Max Weight: 10,000 lbs | 4550 kg



### Small Anchor

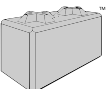
Max Weight: 3550 lbs | 1600 kg



Weight of all anchors is variable +/- 5%

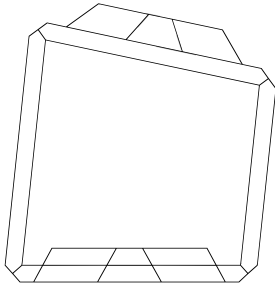
**Design manual available for professional Engineers free of charge. E-mail for info**

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## Battered Block

12 degree block shown



### Batters Available:

1:4.7 - 12°

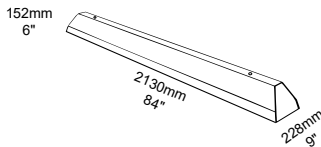
1:2.7 - 20°

Battered blocks can be used to create walls, without doing complex grading to set the wall at an angle. The block can be placed at any level, allowing for greater control over your retaining wall solution.

## Parking Curb

200 lbs | 100 kg

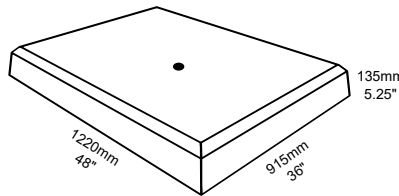
P/N: CURB-7



## 4' x 3' Paving Pad

650 lbs | 300 kg

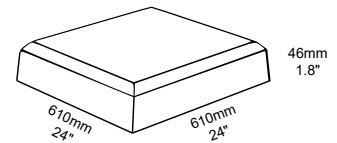
P/N: PAD-4x3



## 2' x 2' Patio Pad

215 lbs | 100 kg

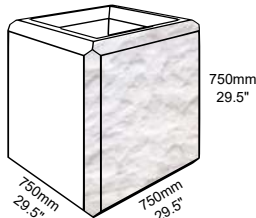
P/N: PAD-2x2



## One-Cross Planter

1550 lbs | 700 kg

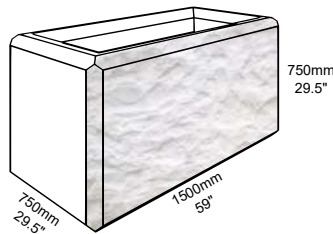
P/N: 1P-20T



## Two-Cross Planter

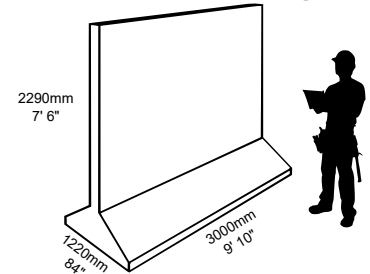
2850 lbs | 1300 kg

P/N: 2P-20T



## Sound Wall

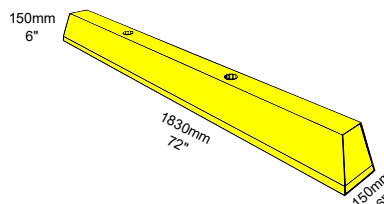
10300 lbs | 4700 kg



## Tuf-Stop™ curb by Tuf-Tite® with Yellow Plastic Cover

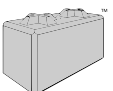
160 lbs | 70 kg

P/N: CURB-6TS



**Design manual available for professional Engineers free of charge. E-mail for info**

Blocks are normally available for immediate delivery, however, some configurations may not be in stock, and will require advance notice. Granite or textured facing can be added to most blocks upon request.

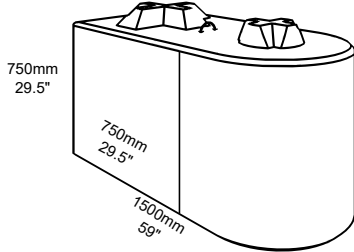




Tagged blocks are guaranteed 20MPa compressive strength, min. 4% air content, and standard smooth facing. Block weights can vary by 5%.

## Hinge Block - Right

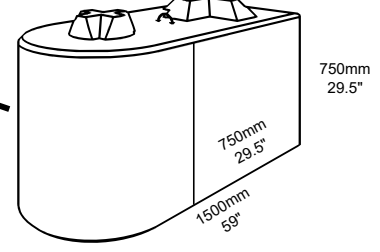
3150 lbs | 1450 kg P/N: 2HingeR-20



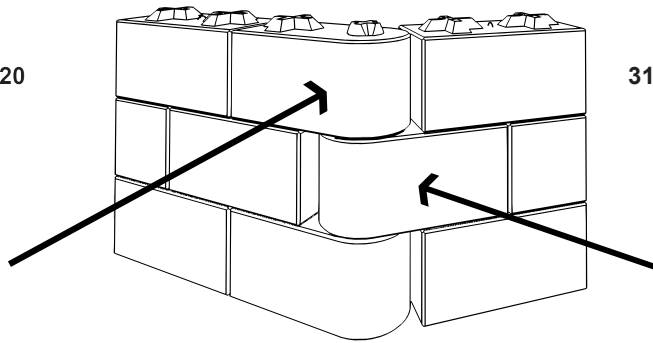
750mm before semi-circular curve

## Hinge Block - Left

3150 lbs | 1450 kg P/N: 2HingeL-20



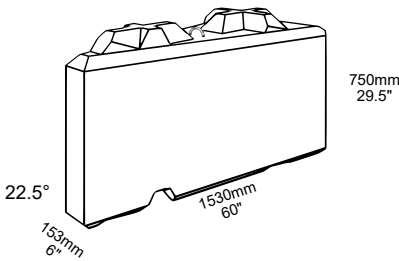
750mm before semi-circular curve



With the Hinge block, corners can be built at any angle between 90 degrees and 270 degrees, when installed at grade.

## Wedge Keyed

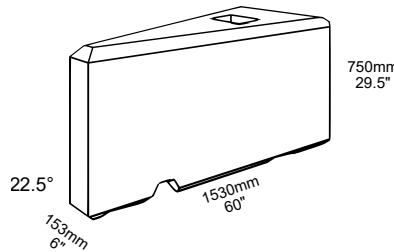
2250 lbs | 1000 kg P/N: W-20



Length is 1500mm along centre-line  
Texture available on back

## Wedge Flat

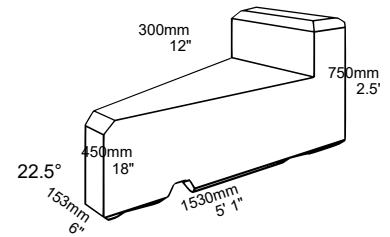
2150 lbs | 1000 kg P/N: WF-20



Length is 1500mm along centre-line  
Texture available on back

## Wedge Bench

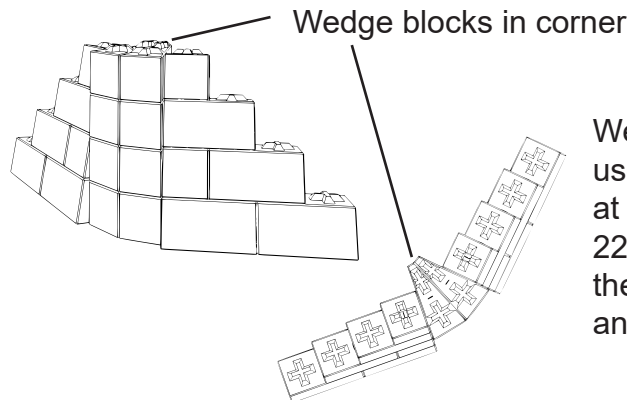
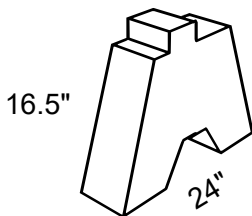
1550 lbs | 700 kg P/N: WB-20



Length is 1500mm along centre-line  
Texture available on back

## Bench Leg

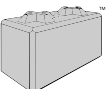
125 lbs | 60 kg P/N: BL-20



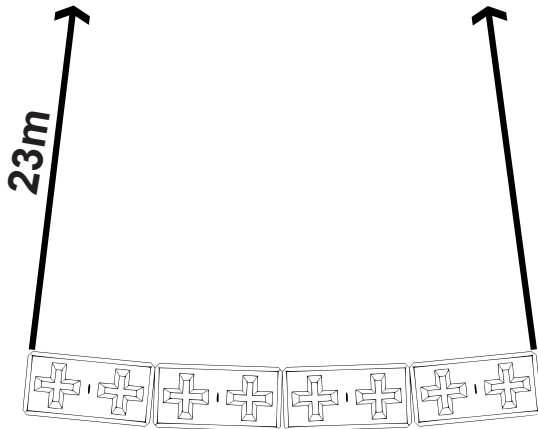
Wedge blocks can be used to connect two walls at angles in increments of 22.5 degrees, making them perfect for pre-loads and irregular site plans.

**Design manual available for professional Engineers free of charge. E-mail for info**

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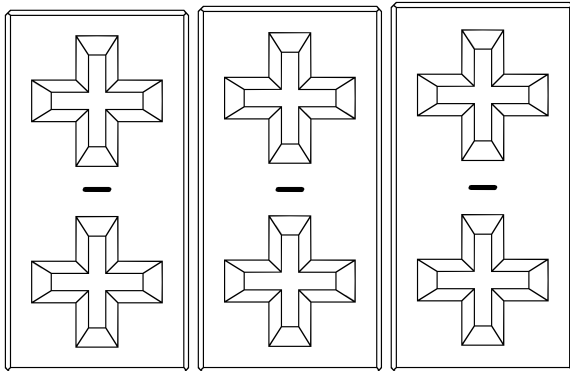


The minimum radius of curvature is 23m and increases with battered walls. Shorter and longer blocks can be used to accommodate tighter radii.

16mm  
(5/8")  
shorter

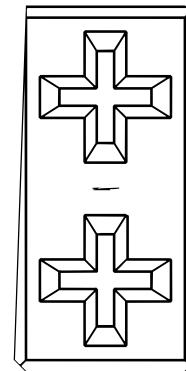
Regular

16mm  
(5/8")  
longer



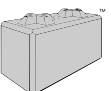
Two-Cross tapered block  
< 3000 lbs | < 1700 kg

Less than  
750mm / 29.5"  
as desired



**Design manual available for professional Engineers free of charge. E-mail for**

Blocks are normally available for immediate delivery, however, some configurations may not be in stock, and will require advance notice. Granite or textured facing can be added to most blocks upon request.





# FEATURE PROJECT

CURVED WALL

CONTRACTOR: JJM CONSTRUCTION LTD.

This wall was constructed along the left bank of the Fraser River in Queensborough, New Westminster. It runs about 165m in length and is reinforced with geogrid between each layer of the Lock-Block units. The wall design was created by Advisian, a Worley Parsons Group Company for Anthem Properties.

There are some specialty long and short (+/- 16mm) Keyed 2-Cross blocks that were made to accommodate the curved design. The specifications for the Lock-Block units were 20MPa standard finish. The top of the walls were finished with Flat 2-Cross blocks which were furnished with a railing by JJM Construction.





## Utility #1

- Contains return/leftover concrete designed for 20MPa or higher compressive strength.
- Engineered lifting eye: PC strand cable with breaking load of 40,000lbs.
- Produced without QC documentation.
- Example uses: General utility use in construction projects such as exterior walls, aggregate bins, tent structures, etc.

## Utility #2

- Contains return/leftover/downgraded concrete.
- Might have some concrete defects and tolerance imperfections or mixed and matched textures.
- Engineered lifting eye: PC strand cable with breaking load of over 40,000lbs.
- Examples uses: Construction projects with no restrictions on concrete properties or aesthetic aspects.

## Tagged 20

- Proprietary Lock-Block™ concrete mix freshly made in our precast facility.
- Over 25 years of track record and proven performance in BC
- Each block has an embedded aluminum tag with traceable QC number.
- Engineered lifting eye: PC strand cable with breaking load over 40,000lbs.
- Minimum guaranteed strength: 20MPa
- Minimum air content: 4%

## Tagged 25

- Meets or exceeds the requirements of CSA-A23 classes of exposure A-4, C-4, F-2, N, R-1, R-2, R-3
- Guaranteed Strength: Minimum of 25MPa
- Guaranteed air content (For durability in freezing conditions): Minimum of 4% or as per customer requirements.
- Maximum Water-Cement ratio: 0.55
- Each block has an embedded aluminum tag with a traceable QC number.
- Engineered lifting eye: PC strand cable with a breaking load of over 40,000lbs.
- Proprietary Lock-Block™ concrete mix freshly made in our precast facility for making the blocks.

## Tagged 30

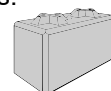
- Meets or exceeds the requirements of CSA-A23 classes of exposure C-3, C-4, A-3, A-4, F-1, F-2, R-1, R-2, R-3.
- Each block has an embedded aluminum tag with traceable QC number.
- Engineered lifting eye: PC strand cable with breaking load of over 40,000lbs.
- Minimum guaranteed strength: 30MPa
- Air content: Minimum 4%, or as per customer requirements.
- Maximum water-cement ratio: 0.50

## Tagged 32

- Meets or exceeds the requirements of CSA-A23 classes of exposure C-2, C-3, C-4, A-2, A-3, A-4, F-1, F-2, R-1, R-2, R-3.
- Each block has an embedded aluminum tag with traceable QC number.
- Engineered lifting eye: PC strand cable with breaking load of over 40,000lbs.
- Minimum guaranteed strength: 32MPa
- Air content: Minimum 4%, or as per customer requirements.
- Maximum water-cement ratio: 0.45

## 32 MOTI

- Meets or exceeds the requirements of:
- BC MOTI standard specification SS942.
- BC MOTI recognized product list, several retaining wall categories.
- CSA-A23 classes of exposure C-2, C-3, A-3, C-4, A-2, A-3, A-4, F-1, F-2, R-1, R-2, R-3.
- Each block has an embedded aluminum tag with traceable QC number.
- Engineered lifting eye: PC strand cable with breaking load of over 40,000lbs.
- Note: Special provisions and job specific requirements may differ and must be considered at the time of ordering.







**Texturlock™**



**Standard Form Finish or  
Smooth Grade A** \*Smooth Grade A shown



**Vertical Rib**



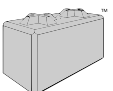
**Cutstone**



**Granite**



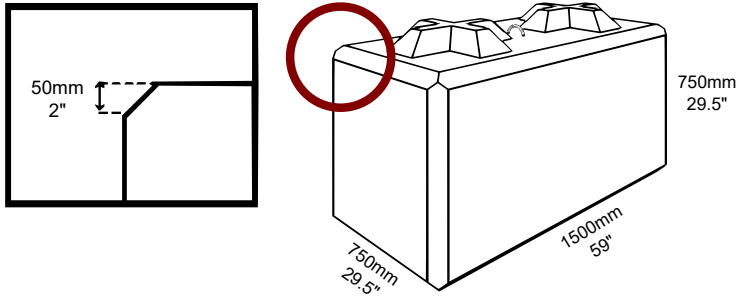
**+Custom Liner  
+Stamping on Block**



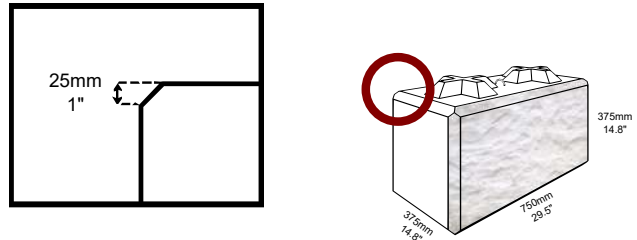


## REGULAR (DEFAULT) CHAMFERS

### Regular blocks

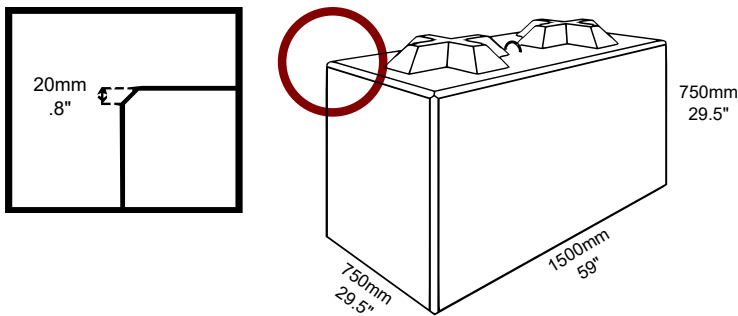


### Landscaping chamfer

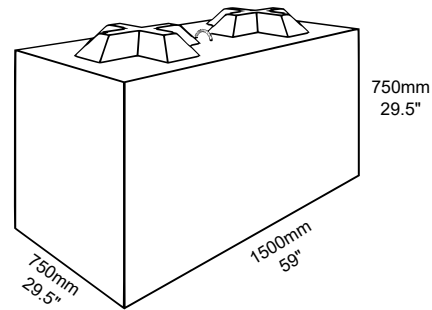


## CUSTOM CHAMFERS

### 20mm (Y) chamfer

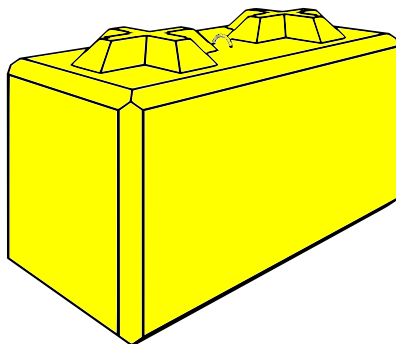


### Zero Chamfer (Z)



## BLOCK ADD-ONS

### Painted block

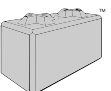


Order colour at time of purchase.  
Block can be textured or smooth.

### Geogrid embedment



Can be installed in any block.  
Geogrid to be provided by client.

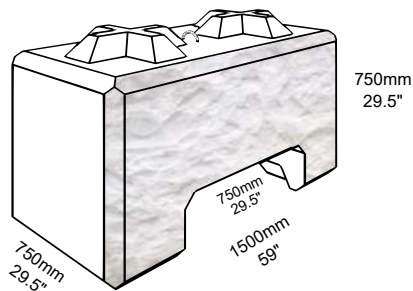




A tapered Arch-Lock™ bridge over a creek



3 Arch-Lock™ structures for a water infiltration vault



**Gutter block**  
3150 lbs | 1450 kg

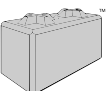
Arch-Lock™ structures, headwalls, and gutter blocks can be used in a variety of assemblies to provide options for water management including drainage, storage, and diversion.

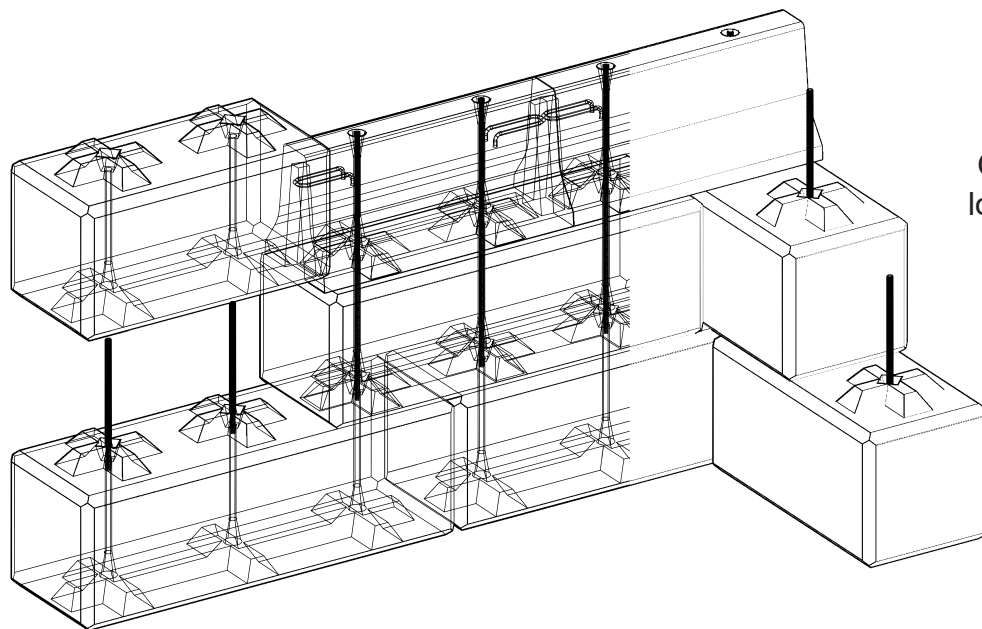


Headwall comprised of Lock-Block™ units with geosynthetic soil reinforcement.



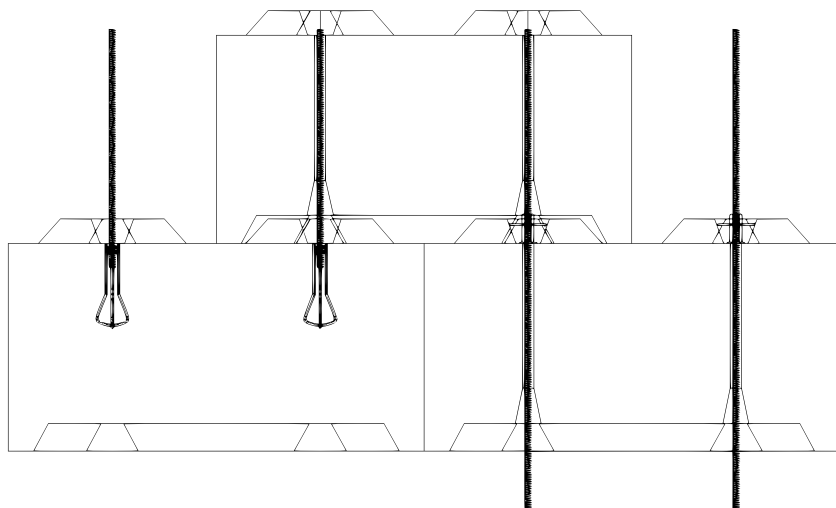
Keyed Two-Cross Lock-Block™ units in headwall





Our Lock-Block™ barriers are specially designed to fit on top of any keyed block, creating a stable and easy to place design. They can also be used with the Rod-Lock™ system for added stability.

Pipe holes 1.25" at the center of each key

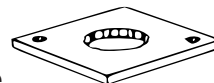


Block transparent view

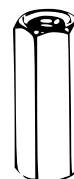
Option shown with blocks anchored to bottom row. Another option is to anchor the bottom block into the ground.

1" Galvanized coil rod  
Minimum yield strength  
54.3 kips / 241 kN

Galvanized  
locking plate



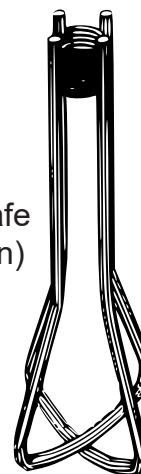
Galvanized  
coupling nut



Galvanized  
washer

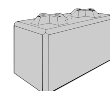


Rod-Lock™ insert safe  
working load (tension)  
13.5 kips/ 60kN

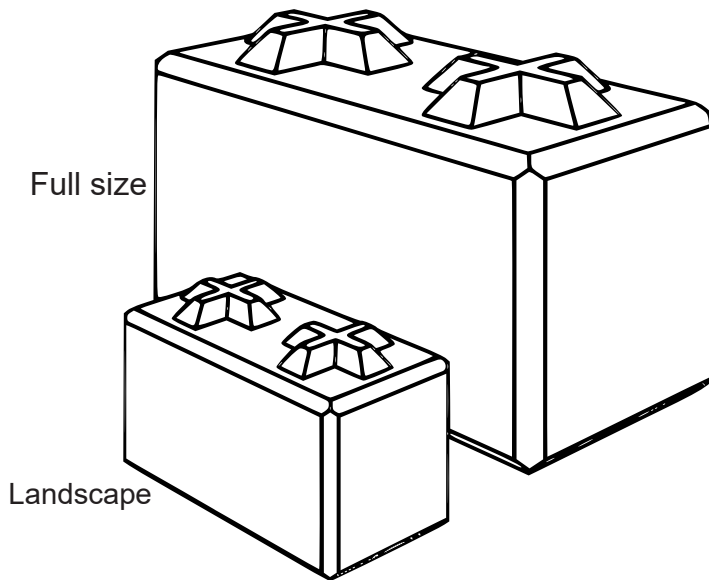


A full kit includes: 1 rod, 1 washer, 1 coupling nut and 1 locking plate

**Rod-Lock™** inserts can be used in first row if the wall does not need to be fixed into the ground. Most products (keyed, flat tops, benches, and some barriers) are available for use in the **Rod-Lock™** system. Please call for more details. **Rod-Lock™** design manual available free of charge for Professional Engineers.







Landscaping blocks are half the size of the standard blocks in each dimension, making them 1/8th in volume and weight. They can be placed with a skid steer, saving time and hard labour costs.

All Landscaping Blocks come with Texturlock™ facing. Planters can also be made with Texturlock™ on all sides.

Landscaping blocks are guaranteed min. strength of 20MPa, and 4% air content

## Landscaping Options

### Strengths

25MPa  
30MPa  
32MPa

### Rod-Lock™

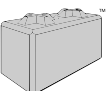
Pipe Holes 1"  
Hardware Kit  
(Coil rod, coupling nut, locking plate,  
and galvanized washer)

### Other options

1"-2" pipe for anchoring  
Additional textured faces  
Granite



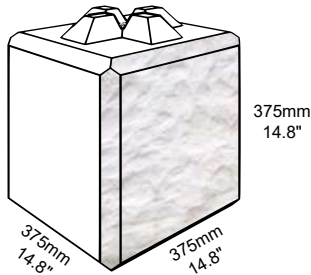
Blocks are normally available for immediate delivery, however, some configurations may not be in stock, and will require advance notice. Granite or textured facing can be added to most blocks upon request.



## Mini One-Cross

230 lbs | 110 kg

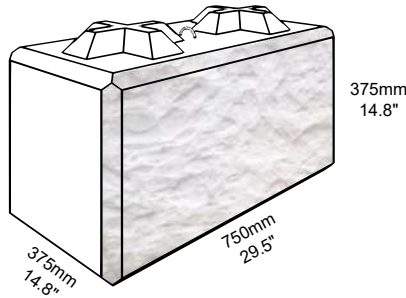
P/N: M.1-20T



## Mini Two-Cross

470 lbs | 210 kg

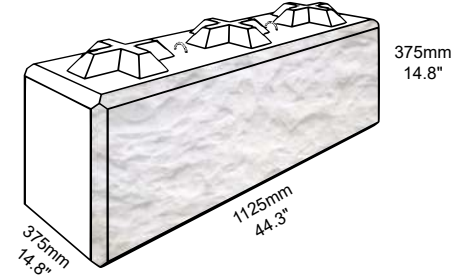
P/N: M.2-20T



## Mini Three-Cross

700 lbs | 320 kg

P/N: M.3-20T



## Mini One-Cross Half

115 lbs | 50 kg

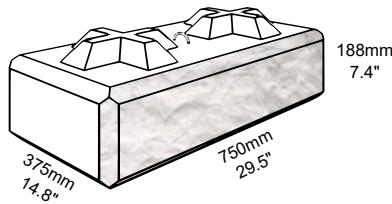
P/N: M.1H-20T



## Mini Two-Cross Half

230 lbs | 110 kg

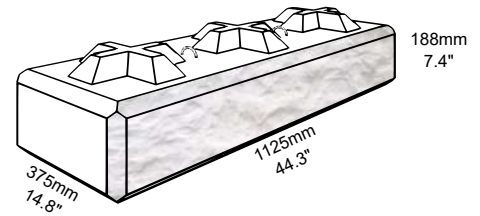
P/N: M.2H-20T



## Mini Three-Cross Half

345 lbs | 165 kg

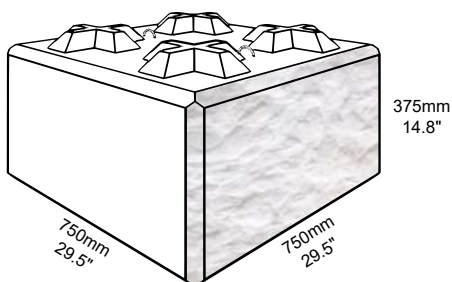
P/N: M.3H-20T



## Mini Double-Wide

940 lbs | 420 kg

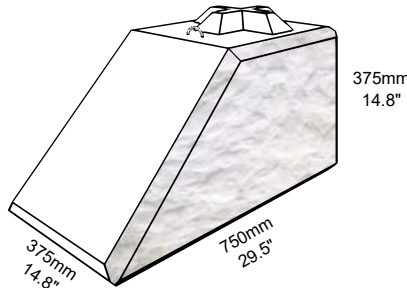
P/N: M.D2-20T



## Mini Slope - Left

370 lbs | 170 kg

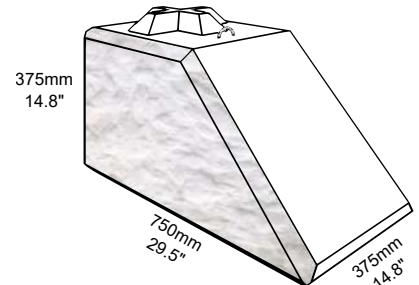
P/N: M.2SL-20T



## Mini Slope - Right

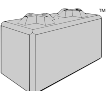
370 lbs | 170 kg

P/N: M.2SR-20T

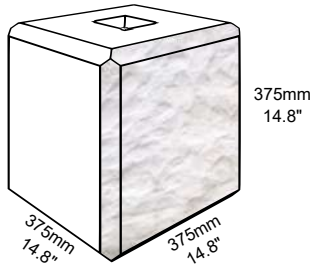


Design manual available for professional Engineers free of charge. E-mail for info

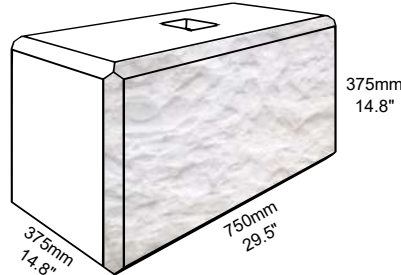
Blocks are normally available for immediate delivery, however, some configurations may not be in stock, and will require advance notice. Granite or textured facing can be added to most blocks upon request.



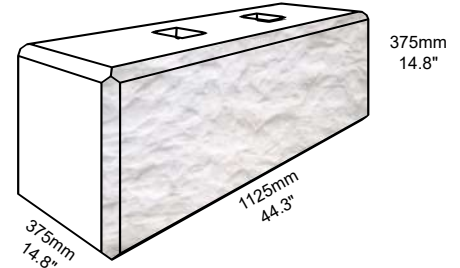
**Mini One-Cross Flat**  
230 lbs | 100 kg P/N: M.1F-20T



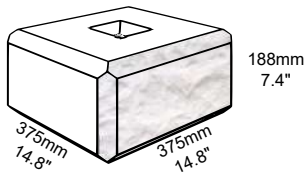
**Mini Two-Cross Flat**  
460 lbs | 210 kg P/N: M.2F-20T



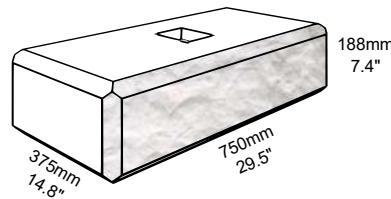
**Mini Three-Cross Flat**  
700 lbs | 320 kg P/N: M.3F-20T



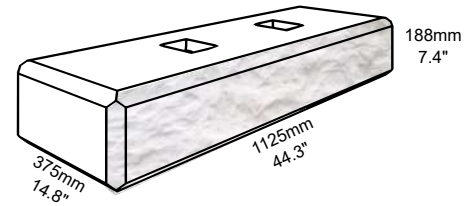
**Mini One-Cross Half Flat**  
115 lbs | 50 kg P/N: M.1HF-20T



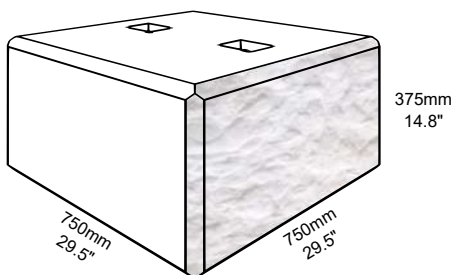
**Mini Two-Cross Half Flat**  
230 lbs | 110 kg P/N: M.2HF-20T



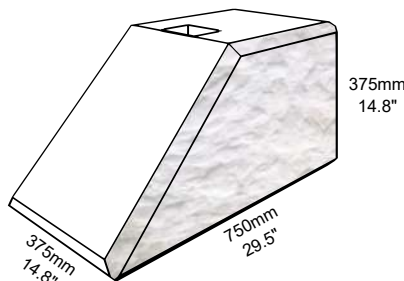
**Mini Three-Cross Half Flat**  
320 lbs | 150 kg P/N: M.3HF-20T



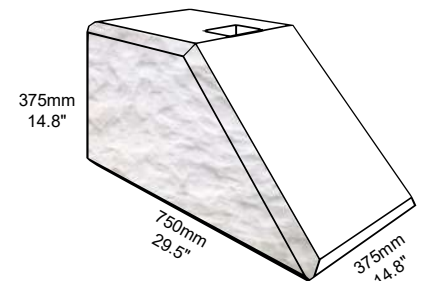
**Mini Double-Wide Flat**  
920 lbs | 420 kg P/N: M.DF2-20T



**Mini Slope Flat - Left**  
370 lbs | 170 kg P/N: M.2SFL-20T

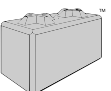


**Mini Slope Flat - Right**  
370 lbs | 170 kg P/N: M.2SFR-20T



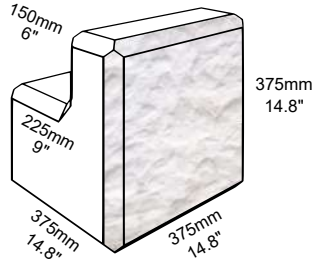
**Design manual available for professional Engineers free of charge. E-mail for info**

Blocks are normally available for immediate delivery, however, some configurations may not be in stock, and will require advance notice. Granite or textured facing can be added to most blocks upon request.

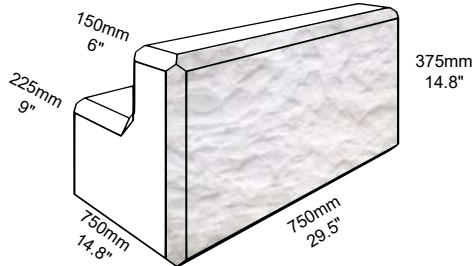




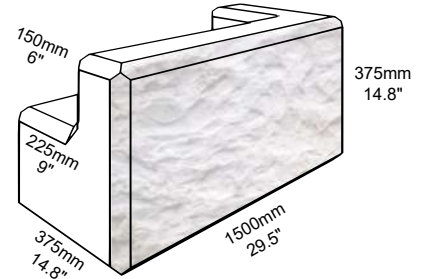
**Mini One-Cross**  
170 lbs | 80 kg P/N: M.1B-20T



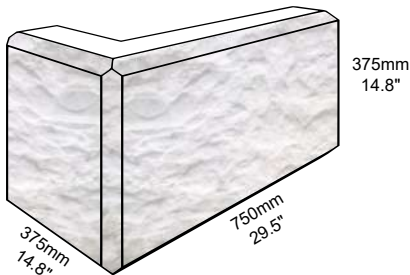
**Mini Two-Cross Bench**  
340 lbs | 160 kg P/N: M.2B-20T



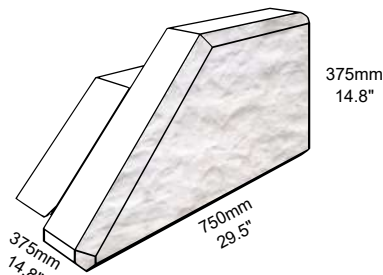
**Mini Right Corner Bench**  
370 lbs | 170 kg P/N: M.RCB-20T



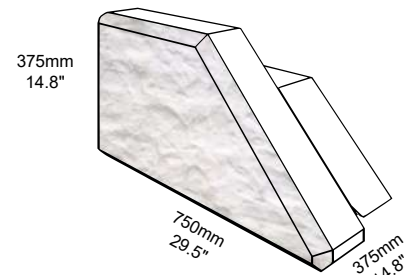
**Mini Left Corner Bench**  
370 lbs | 170 kg P/N: M.LCB-20T



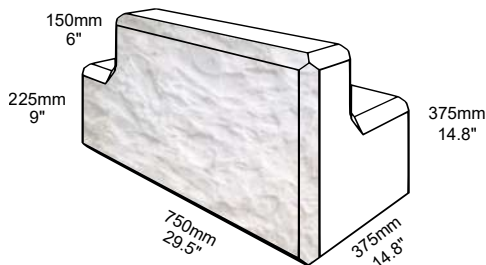
**Mini Left Slope Bench**  
270 lbs | 110 kg P/N: M.LSB-20T



**Mini Right Slope Bench**  
270 lbs | 110 kg P/N: M.RSB-20T



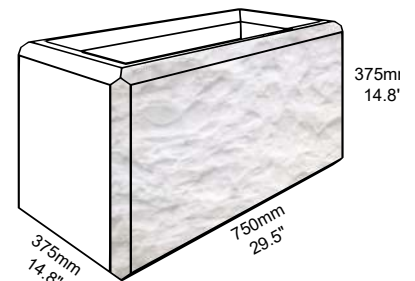
**Left Inside Corner Bench**  
320 lbs | 150 kg P/N: M.LICB-20T



**Right Inside Corner Bench**  
320 lbs | 150 kg P/N: M.RICB-20T

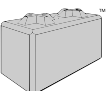


**Mini Two-Cross Planter**  
350 lbs | 160 kg P/N: M.2P-20T



**Design manual available for professional Engineers free of charge. E-mail for info**

Blocks are normally available for immediate delivery, however, some configurations may not be in stock, and will require advance notice. Granite or textured facing can be added to most blocks upon request.

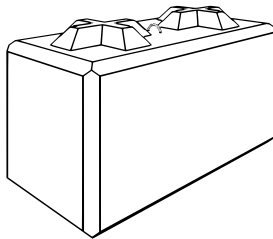
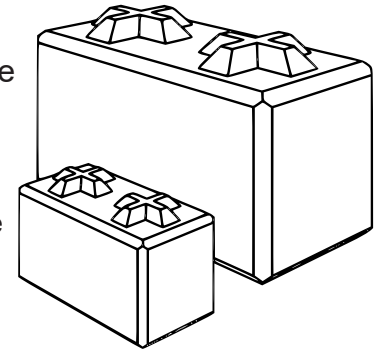


These sample walls can be made in both full scale and landscape scale.

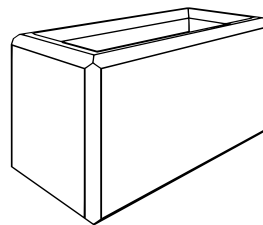
All of the blocks shown are available for both scales.

Full size

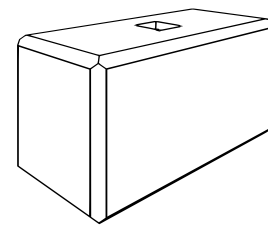
Landscape



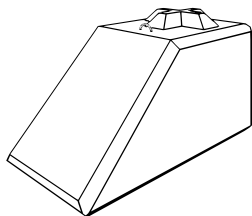
Two-Cross Keyed



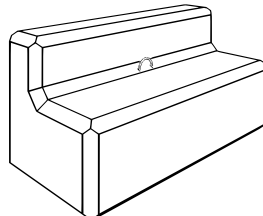
Two-Cross Planter



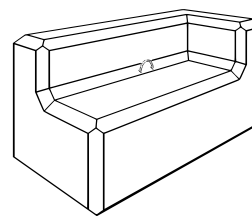
Two-Cross Flat



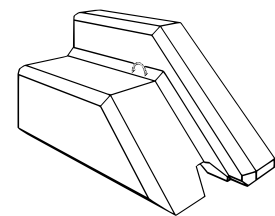
Slope Flat - L+R



Two-Cross Bench



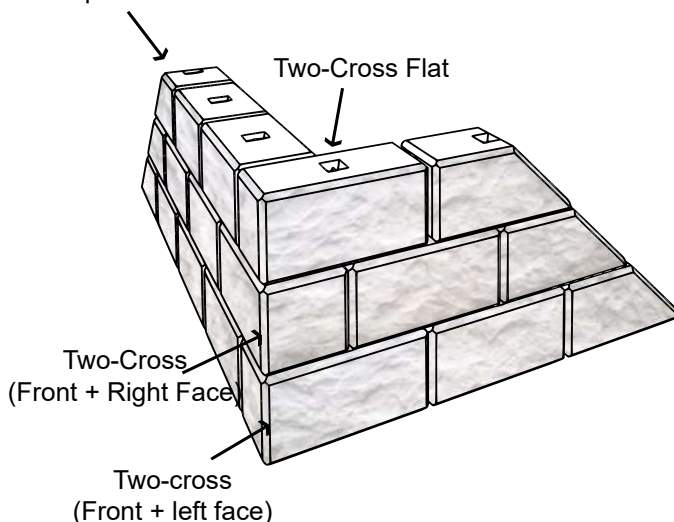
Left Corner Bench



Left Slope Bench

Slope Flat - Left

Two-Cross Flat

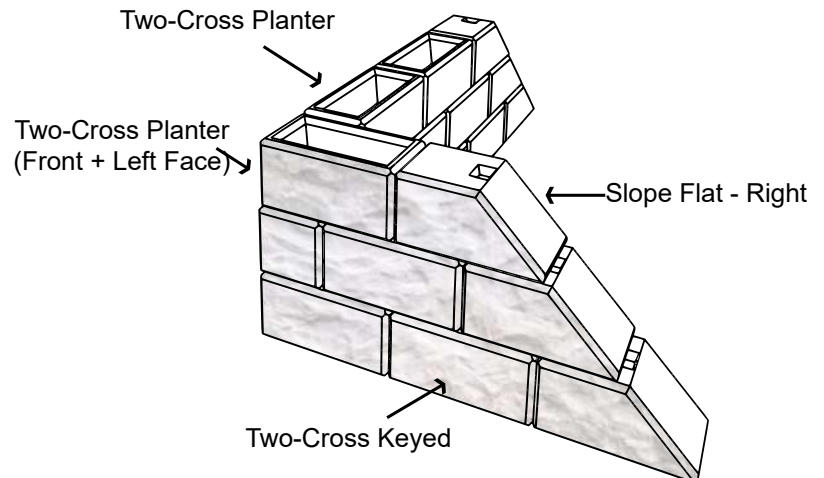


Two-Cross Planter

Two-Cross Planter (Front + Left Face)

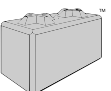
Slope Flat - Right

Two-Cross Keyed

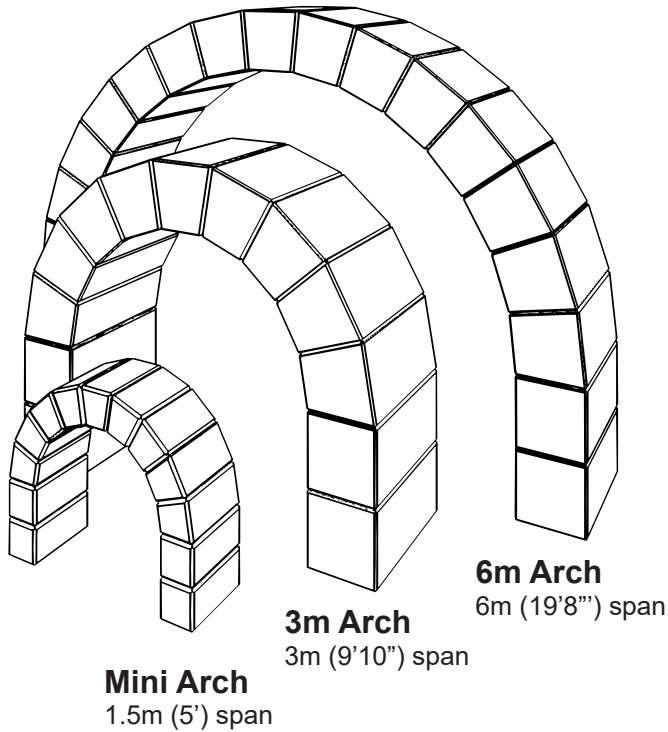


**Design manual available for professional Engineers free of charge. E-mail for info**

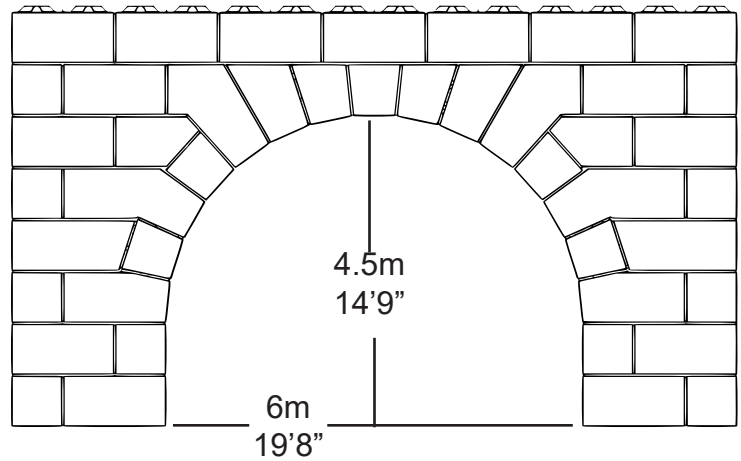
Blocks are normally available for immediate delivery, however, some configurations may not be in stock, and will require advance notice. Granite or textured facing can be added to most blocks upon request.



The **Arch-Lock™** system can be used for many different projects such as river crossings, overpasses, storage sheds, conveyor protection, and more.



With an optional headwall, this arch can be used as an overpass for both trains and cars.



6 meter (19'8") arch with attached headwall

## Arch-Lock™

One-Cross

Two-Cross

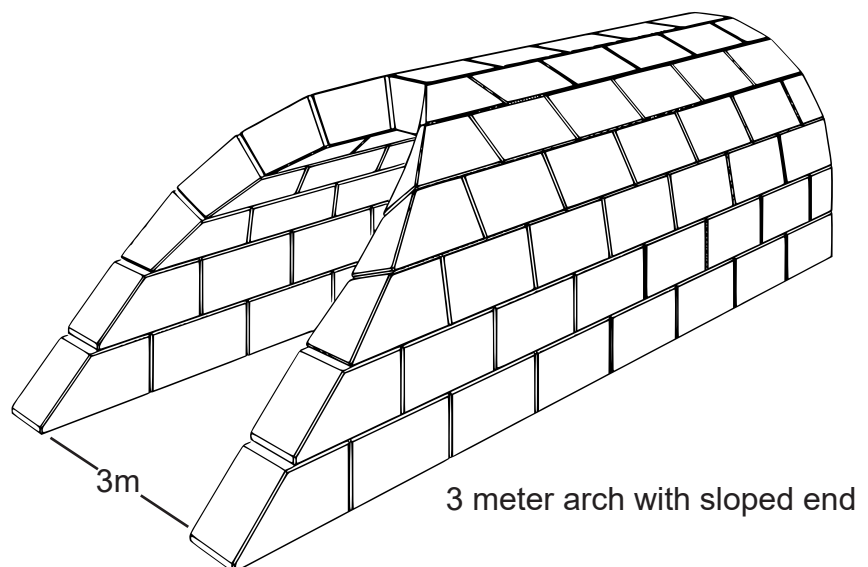
One-Cross Keystone

Two-Cross Keystone

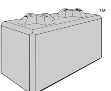
One-Cross with Curved Conduit

Two-Cross with Curved Conduit

Three-Cross with Curved Conduit



Additional blocks can be added for specialty designs such as sloped blocks. Inquire for pricing





# FEATURE PROJECT

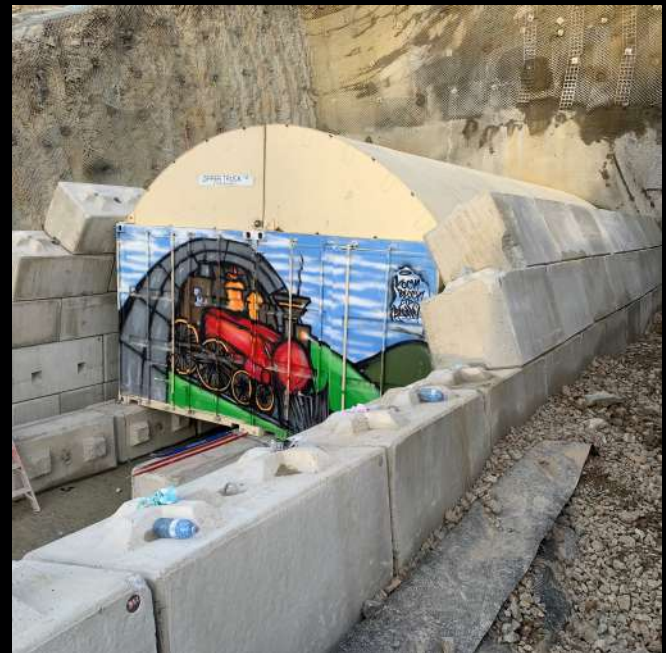
6M ARCH-LOCK™ WITH  
ROD-LOCK™ SYSTEM



The Barkerville 6m Arch-Lock™ System was a project where Lock-Block Ltd. had the opportunity to be involved from the design stage through construction. The objective of this arch was to create a mining tunnel that would connect to an existing tunnel in the mountainside.

The arch columns were elevated 5 rows (just under 4m) and had an outside diameter of 6m to achieve the minimum height requirement by the client. The specifications for this project included a minimum strength of 20MPa, and Rod-Lock™ units in the columns.

The arch was built on a 15% grade which was levelled after blasting rock to make the tunnel. The arch was erected with the Zipper-Truck™ a Lock-Block Ltd. creation.

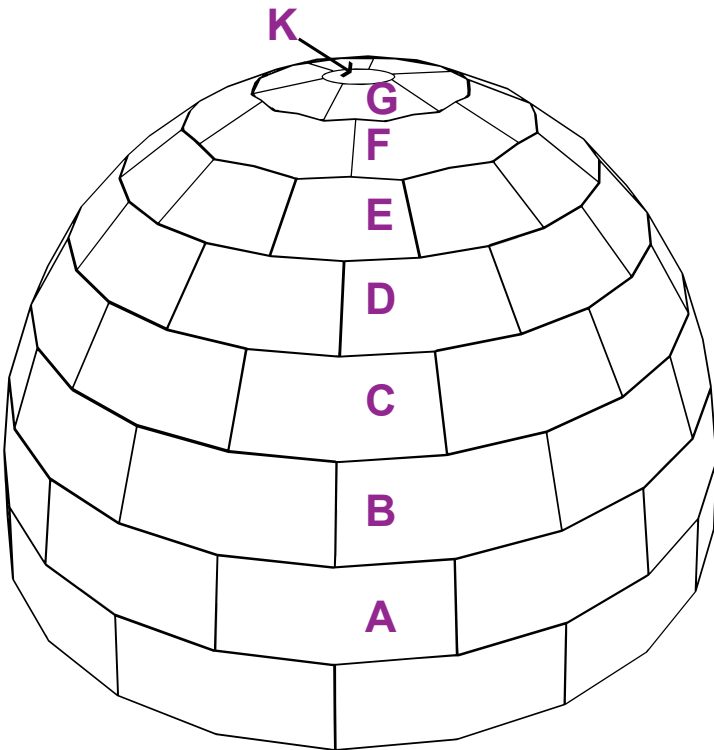






## 6m Dome-Lock™

Domes can be used for a variety of structures such as tornado shelters, bunkers, workshops, or storage sheds. They can also be combined with the Arch-Lock™ system to build larger structures.



Inside diameter: 6m (19.7ft)  
Inside area: 28.2m<sup>2</sup> (305ft<sup>2</sup>)  
Outside diameter: 7.5m (24.6ft)

Base Block (Two-Cross Silo)- 12

Level A block - 12

Level B block - 12

Level C block - 12

Level D block - 12

Level E block - 12

Level F block - 12

Level G block - 6

Dome key- 1

Complete full dome- 79 blocks

## 6m Half-Dome

Dome connection block

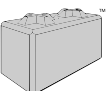
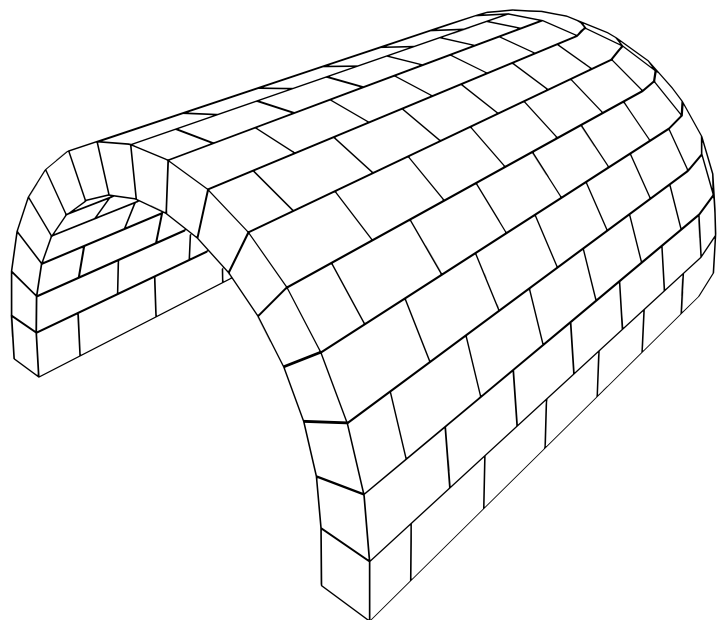
Level B connection block

Level D connection block

Level F connection block

Key connection block

Completed half dome

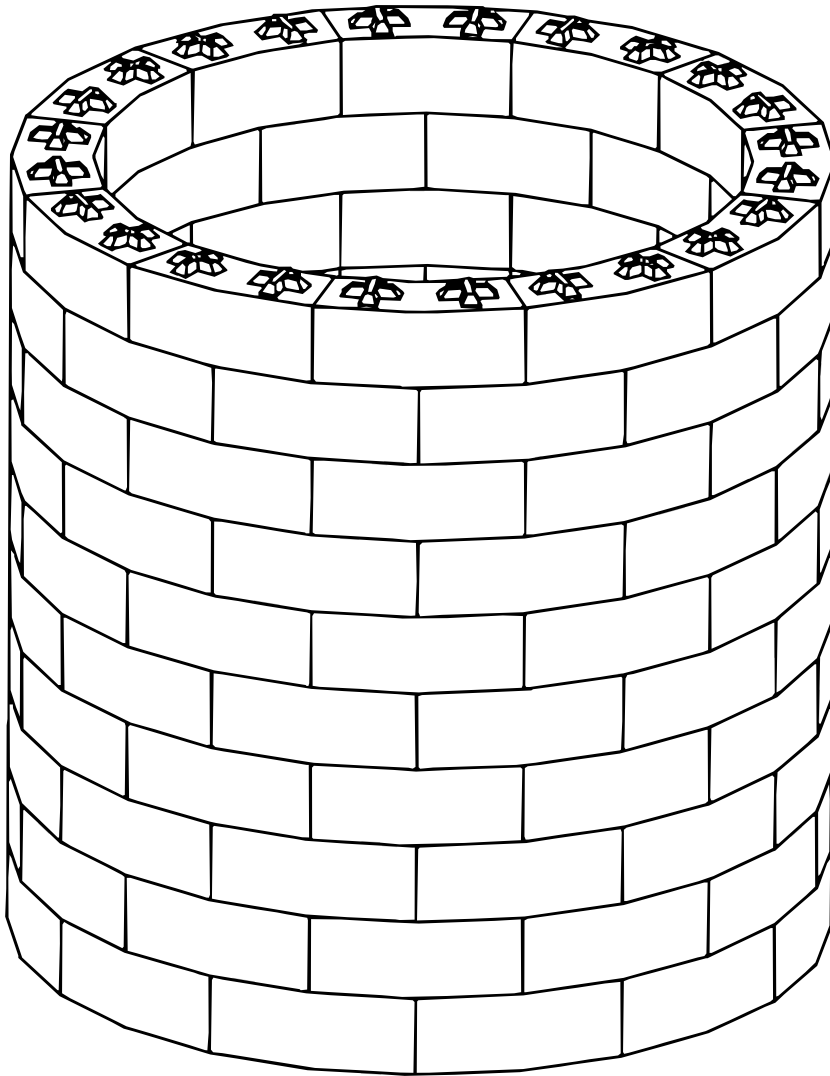




Silos made with Lock-Block™ units are ideal for storage, pole protection, and entrances to shafts and wells. The 6m (19'8") silo can also be capped with a dome.

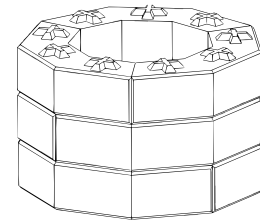
## 6m Silo

12 blocks per level (750mm / 9.5" high)



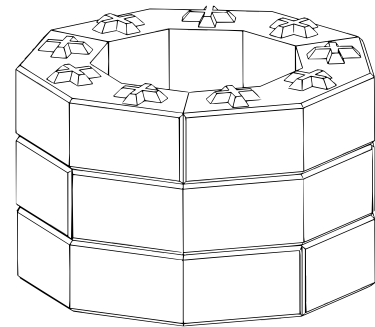
## 1m Silo

3 blocks per level (375mm / 14.8" high)

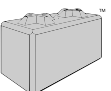
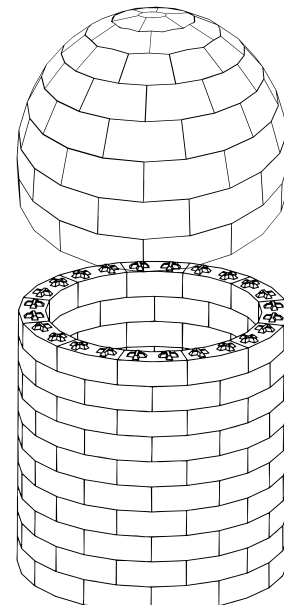


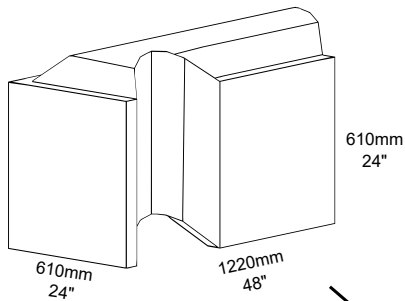
## 1.5m Silo

4 blocks per level (75mm / 14.8" high)

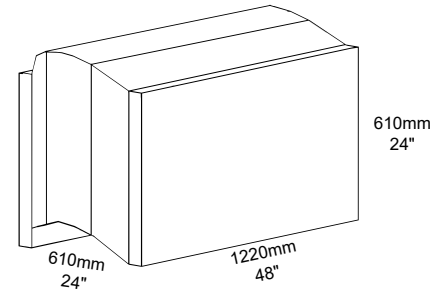


This silo can be capped with a dome

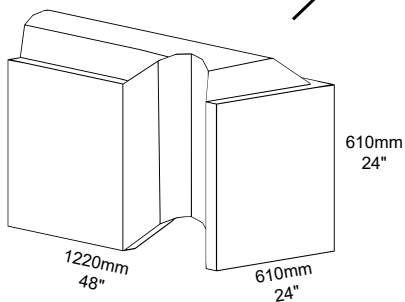
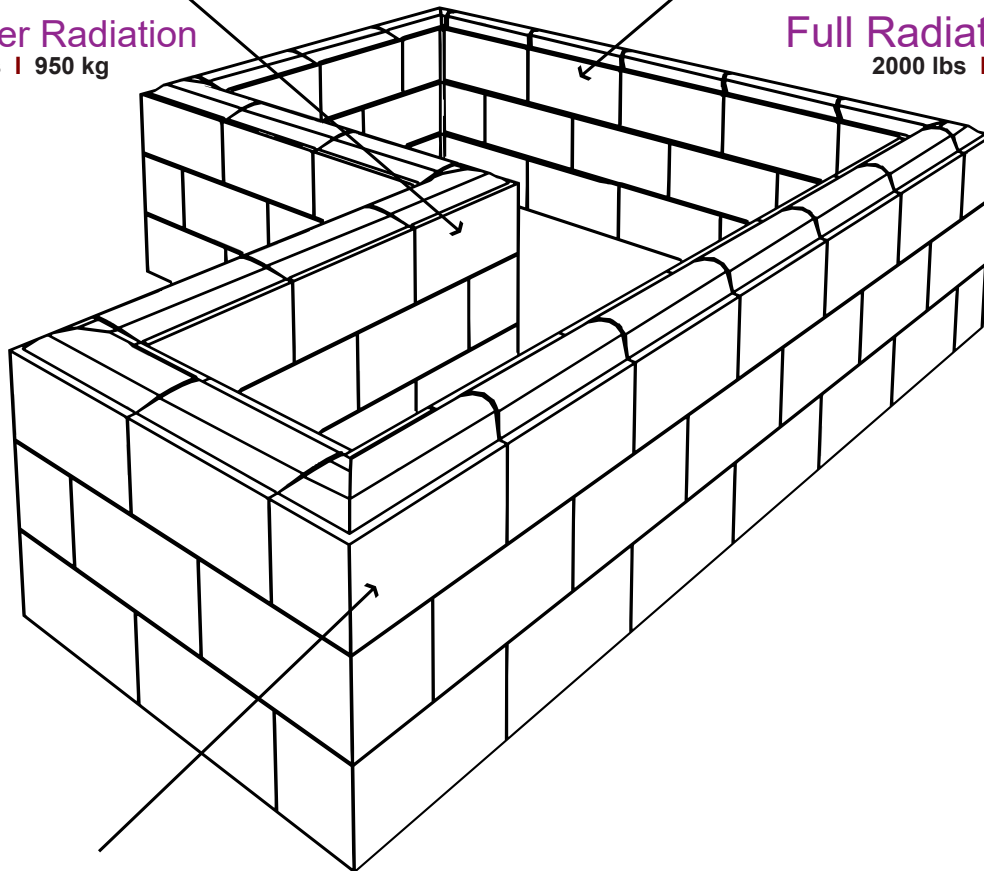




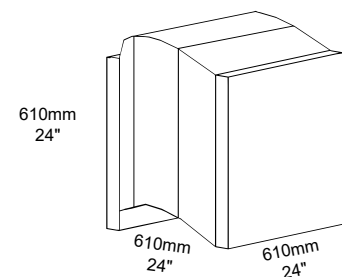
**Right Corner Radiation**  
2000 lbs | 950 kg



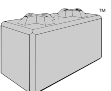
**Full Radiation Block**  
2000 lbs | 950 kg



**Left Corner Radiation**  
2000 lbs | 950 kg

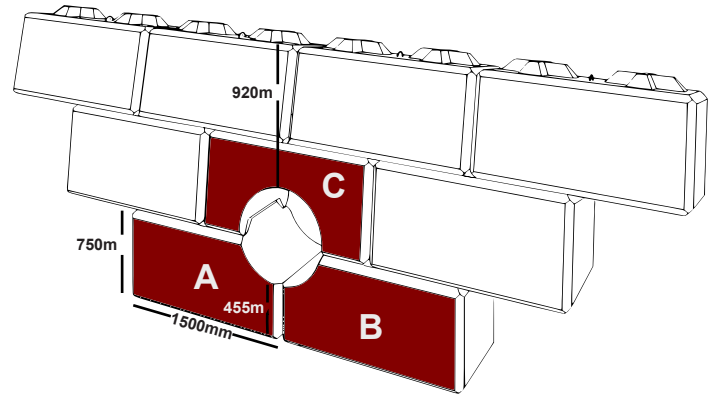


**Half Radiation Block**  
2000 lbs | 950 kg



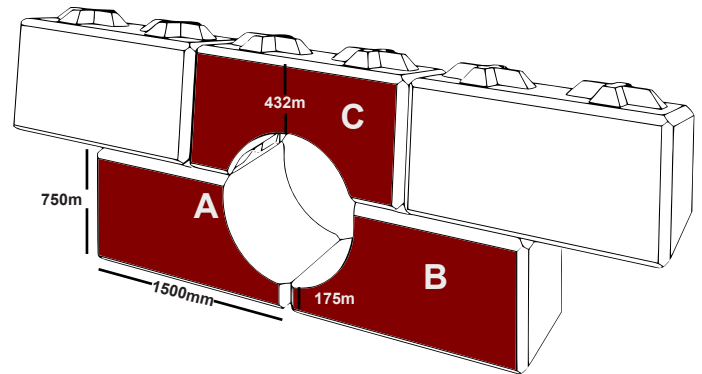
## 600mm / 23.6" headwall (outside diameter: 740mm / 29.1")

3 Blocks



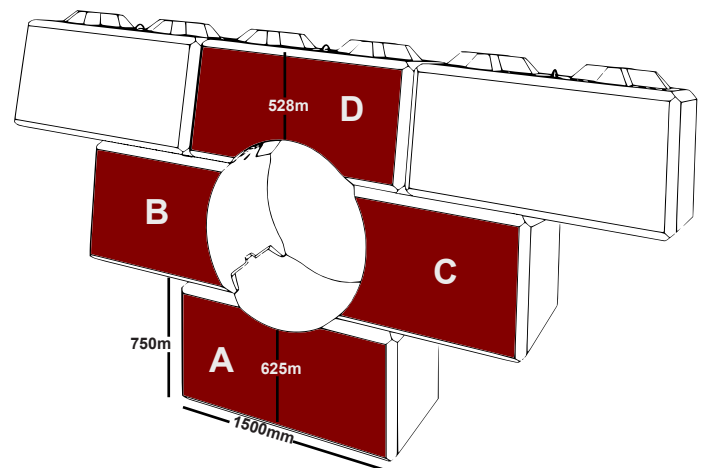
## 750mm / 29.5" headwall (outside diameter: 910mm / 35.8")

3 Blocks

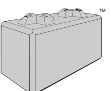


## 900mm / 35.4" headwall (outside diameter: 1100mm / 43.3")

4 Blocks



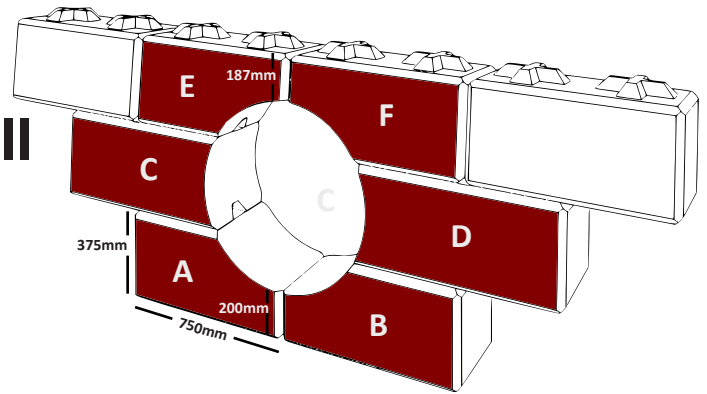
All headwalls come with a 1:10 batter option. Headwalls are sold in pairs unless specified at the time of order. Each example contains keyed full blocks for design purposes. Headwall blocks are specialty formed to fit around the pipes.





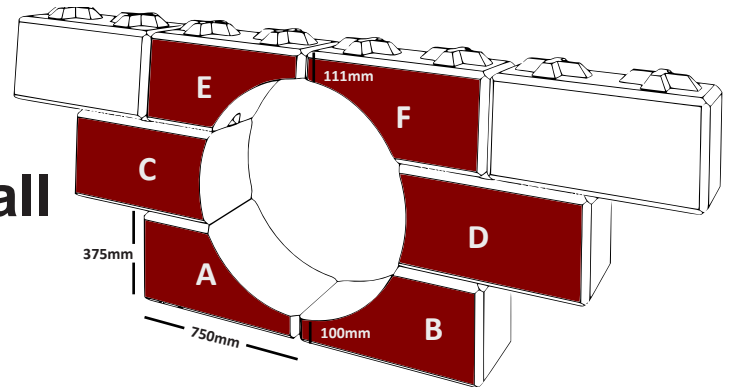
## 600mm / 23.6" mini headwall (outside diameter: 740mm / 29.1")

6 Mini Blocks



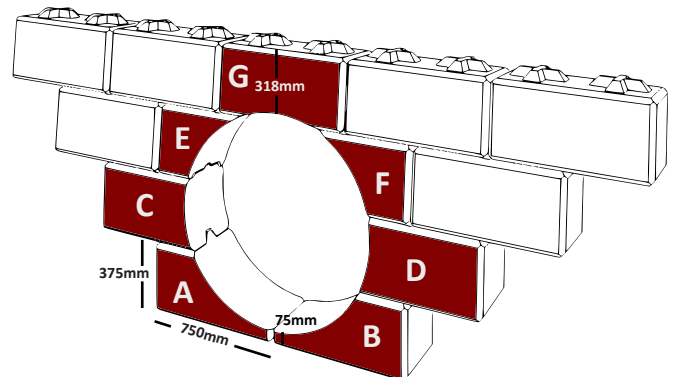
## 750mm / 29.5" mini headwall (outside diameter: 910mm / 35.8")

6 Mini Blocks

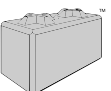


## 900mm / 35.4" mini headwall (outside diameter: 1100mm / 43.3")

7 Mini Blocks



All headwalls come with a 1:10 batter option. Headwalls are sold in pairs unless specified at the time of order. Each example contains keyed full blocks for design purposes. Headwall blocks are specialty formed to fit around the pipes.



## Pre-built and Custom Kits Available for purchase

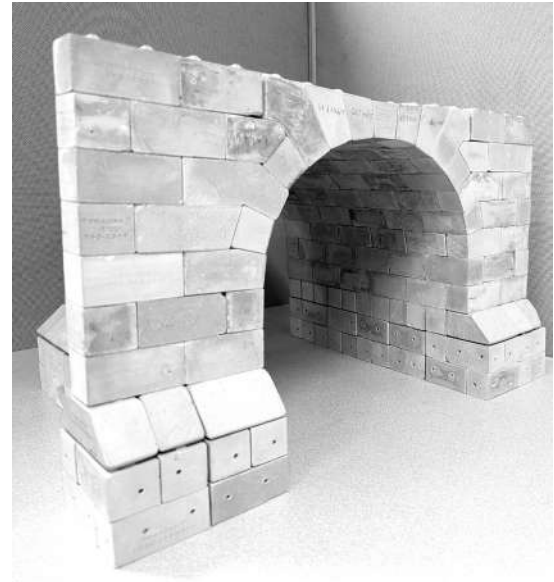
Use Lock-Block™ model blocks to:

- Help visualize your ideas
- Demonstrate a concept
- Plan installation steps

Each block is exactly 1:25 scale.



Arch-Lock™ structure constructed with model blocks



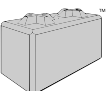
Headwall constructed with model blocks



Arch-Lock™ block kit



A selection of model block shapes



# INSTALLATION TIPS

**Note: These tips only apply to genuine Lock-Block™ products because of our superior manufacturing tolerances.**

1. Always start with a smooth base, joint lines in the wall can only be as straight as the base on which they are placed. A six inch blanket or granular materials, compacted and raked or screeded smooth is normally a sufficient base.
2. If possible, prepare the entire base before placing blocks so that a visual inspection can be made to minimize bumps and hollows.
3. If the location is not level or has a stepped bottom surface, place the lowest block first, taking care to align the front face of the wall.
4. Only use handheld compacting equipment within 4 feet of the fill side of the wall.
5. As the surface finish of the blocks is variable, the best face of the block should be turned out.

**6. IMPORTANT** - Begin placing the second row of blocks after no more than 5 or 6 bottom blocks have been placed, again taking care to align the front face of the wall. This is particularly important if the bottom row of blocks is turned sideways to the direction of the wall, because the smooth-faced liner blocks are slightly less than 750mm wide. The bottom row in this case will have a small gap to provide the correct clearance for the subsequent row. That is, when a row of blocks is placed perpendicular to the face of the wall, the distance between the centers of the key of two consecutive blocks must be 750mm. This would create a small gap between the blocks. (Remember, there is approximately 12mm of clearance in every direction in the fit of the keyways)

7. Should the clearance become tight for the second row of blocks, merely place the next block along the bottom row, with a slight gap (10mm), the second and subsequent rows will then have sufficient clearance. Continue placing subsequent rows, taking care to align the front face.
8. Non right-angle corners, or corners where walls have different batters are achieved more easily by:
  - a. Building a 2 block square column and placing each battered wall against the adjacent sides of the column.
  - b. By using wedge blocks to create a 22.5°, 45°, 67.5°, or 90° corner.
  - c. Building the 2 walls independently and pouring the corners afterwards.
9. If desired, the wall can be curved either vertically, horizontally, or both.
10. For speed & convenience a track mounted hydraulic excavator is the best machine to place the blocks.
11. Pressure washing & sealing the surface will minimize algae growth and prolong new appearance.
12. Some useful tools to have on the job-site includes:

- A transit to lay out a level base. - Shovels and rakes for base preparation..
- A broom to clean the keyways before placing the next layer.
- One or more 5 foot pry bars for jostling the blocks into position.

