ENVIROCON
CAPTURING CONCRETE EXCESS

INTERBLOC
INSTALL GUIDE

IINTERBLOC® Product Specification and Reference Sheet

GENERAL NOTES:

These drawings are provided solely as preliminary guidance for wall design and are not suitable for final design or construction without further evaluation.

All site-specific walls must be certified and approved by a engineer licensed in the region where construction will occur, in accordance with New Zealand Standards and relevant building codes. Where applicable, building consent should also be obtained.

The user assumes full responsibility for verifying the accuracy and proper application of the details provided in this document.

Density Standards for Weight and Volume Calculations:

Concrete densities typically range from 2200 to 2500 kg/m³ in accordance with standard construction practices. It is important to note that variations in dimensions of 1 to 3 mm may result in different volume calculations, which can subsequently affect the estimated weight. These values are provided as estimates, as actual weights may vary based on the specific concrete mix used, any additives, and adherence to relevant New Zealand standards and policies.

Concrete Type:

Interbloc is primarily manufactured using high quality, certified, excess concrete. 100% of blocks are 20 MPa or greater, and 50% of blocks are 30 MPa or greater. Concrete is tracked from source and each block carries a unique barcode for tracking. You can find out more information about this in our articles on excess concrete, and quality.

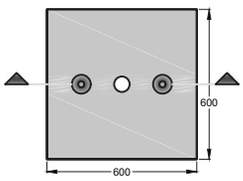
Foot Anchor:

2.5t x 120mm SwiftLift™ Foot Anchor.
1.3t x 120mm SwiftLift™ Foot Anchor.
Compliance: NZ GPG 2018.
System: Fully engineered with cast-in lifting anchors, recess formers, and lifting clutches.
Working Load Limit (WLL): 2.5 or 1.3 tons.
Factor of Safety (FoS): 4 for high tensile steel, exceeding NZ GPG 2018 minimum requirements.

- *Drawn by* *Sam Salari*
- *Checked by*
- *Approved by*
- *Scale @ A4* *1:300*
- *Date* *11/11/2024*

600 FLAT TOP BLOCK

DESCRIPTION	METRIC
Width	600 mm
Height	600 mm
Depth	600 mm
Face Area	0.36 m²
Volume(±)	0.206 m^3
Weight (±)	500 kg



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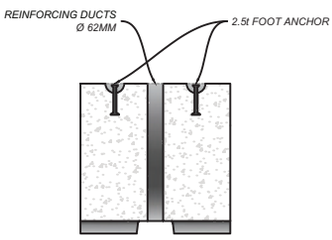

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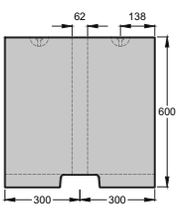
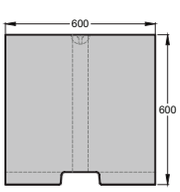


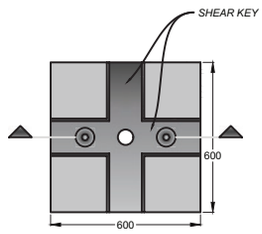
FRONT ELEVATION



SIDE ELEVATIONS

600 STANDARD BLOCK

DESCRIPTION	METRIC
Width	600 mm
Height	600 mm
Depth	600 mm
Face Area	0.36 m²
Volume (±)	0.214 m^3
Weight (±)	500 kg



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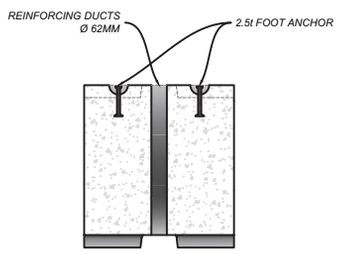

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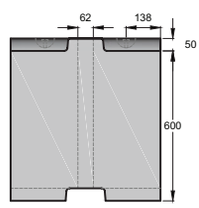

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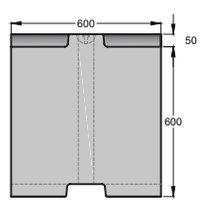
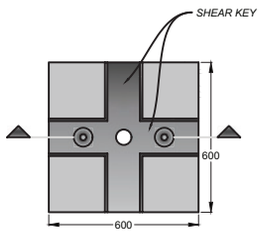


SIDE ELEVATIONS

600 FLAT BOTTOM BLOCK

DESCRIPTION	METRIC
Width	600 mm
Height	600 mm
Depth	600 mm
Face Area	0.36 m²
Volume (±)	0.221 m³
Weight (±)	500 kg



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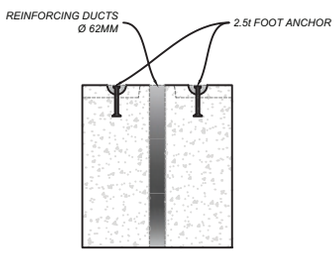

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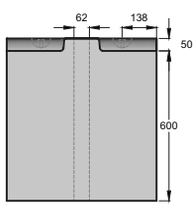

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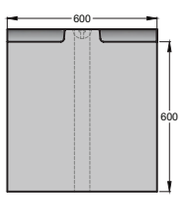
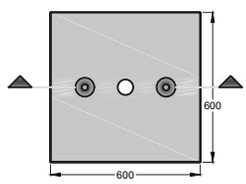


SIDE ELEVATIONS

600 CAPPER BLOCK

DESCRIPTION	METRIC
Width	600 mm
Height	297 mm
Depth	600 mm
Face Area	0.18 m²
Volume (±)	0.096 m³
Weight (±)	220 kg



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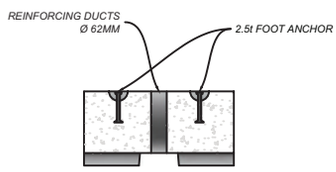

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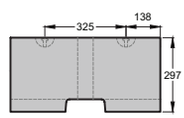

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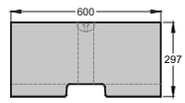
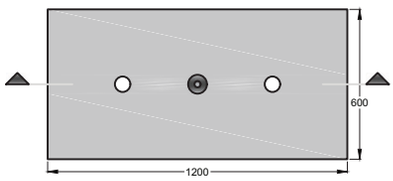


SIDE ELEVATIONS

1200 FLAT TOP BLOCK

DESCRIPTION	METRIC
Width	1200 mm
Height	600 mm
Depth	600 mm
Face Area	0.72 m²
Volume (±)	0.413 m³
Weight (±)	1.00 TN



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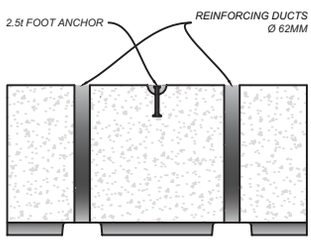

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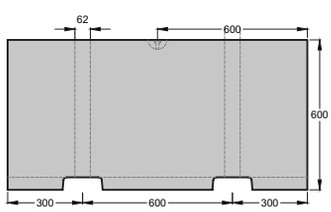

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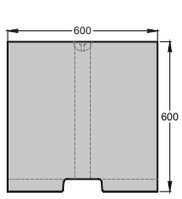
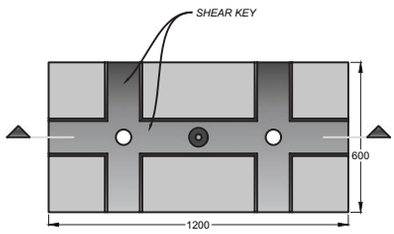


SIDE ELEVATIONS

1200 STANDARD BLOCK

DESCRIPTION	METRIC
Width	1200 mm
Height	600 mm
Depth	600 mm
Face Area	0.72 m²
Volume (±)	0.428m³
Weight (±)	1.00 TN



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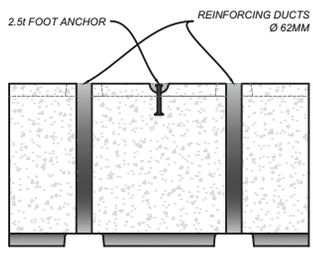

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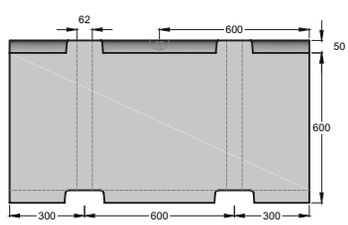

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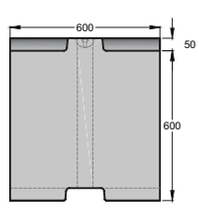
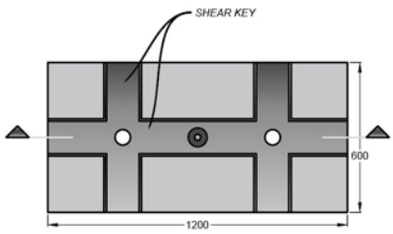


SIDE ELEVATIONS

1200 FLAT BOTTOM BLOCK

DESCRIPTION	METRIC
Width	1200 mm
Height	600 mm
Depth	600 mm
Face Area	0.72 m^2
Volume (±)	0.443 m^3
Weight (±)	1.00 TN



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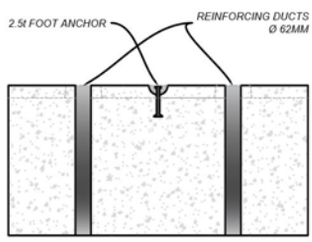

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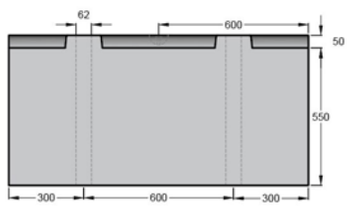
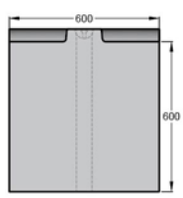


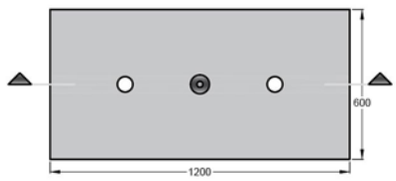
FRONT ELEVATION



SIDE ELEVATIONS

1200 CAPPER BLOCK

DESCRIPTION	METRIC
Width	1200 mm
Height	297 mm
Depth	600 mm
Face Area	0.36 m^2
Volume (±)	0.192 m^3
Weight (±)	440 kg



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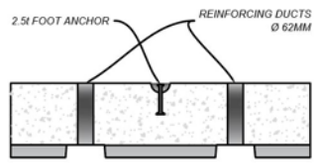

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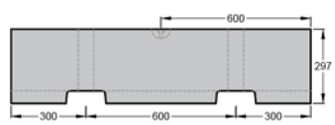
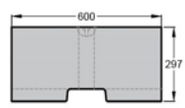


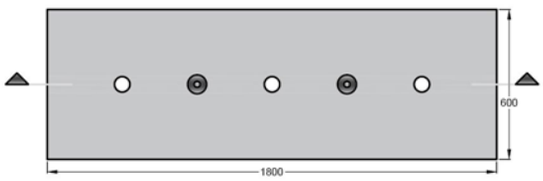
FRONT ELEVATION



SIDE ELEVATIONS

1800 FLAT TOP BLOCK

DESCRIPTION	METRIC
Width	1800 mm
Height	600 mm
Depth	600 mm
Face Area	1.08 m^2
Volume (±)	0.620 m^3
Weight (±)	1.50 TN



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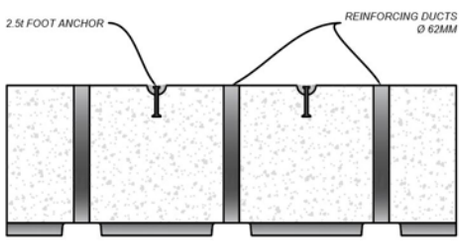

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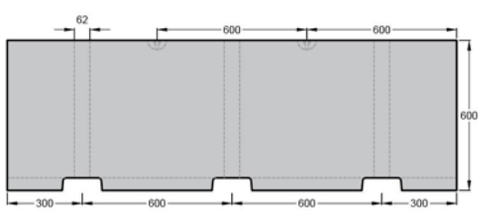

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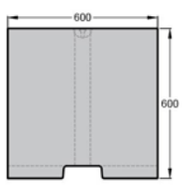
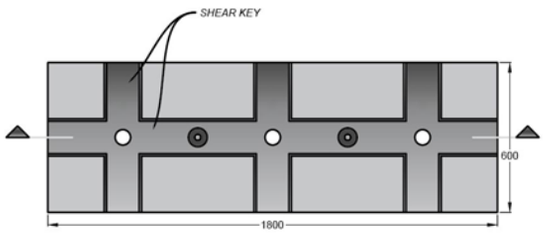


SIDE ELEVATIONS

1800 STANDARD BLOCK

DESCRIPTION	METRIC
Width	1800 mm
Height	600 mm
Depth	600 mm
Face Area	1.08 m^2
Volume (±)	0.642 m^3
Weight (±)	1.50 TN



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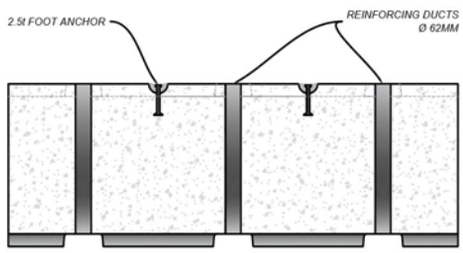

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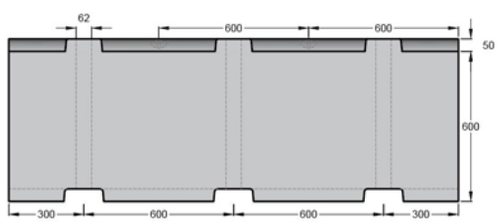
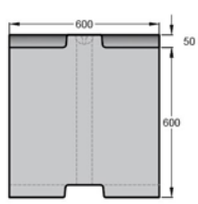


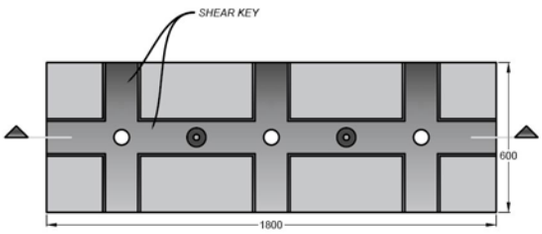
FRONT ELEVATION



SIDE ELEVATIONS

1800 FLAT BOTTOM BLOCK

DESCRIPTION	METRIC
Width	1800 mm
Height	600 mm
Depth	600 mm
Face Area	1.08 m²
Volume (±)	0.665 m³
Weight (±)	1.50 TN



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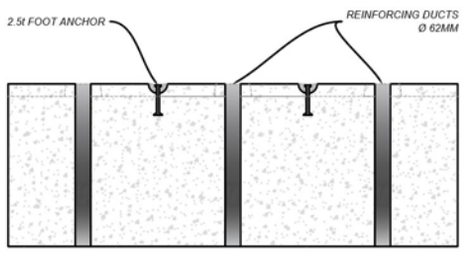

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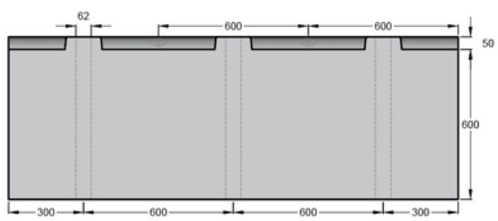

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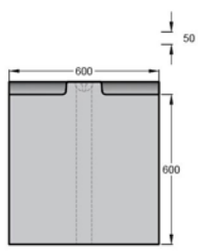
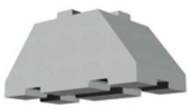
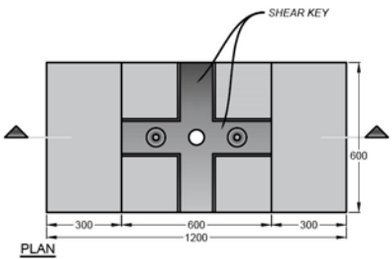


SIDE ELEVATIONS

1200 BASE BLOCK

DESCRIPTION	METRIC
Width	1200 mm
Height	600 mm
Depth	600 mm
Face Area	0.58 m²
Volume (±)	0.339 m^3
Weight (±)	780 kg





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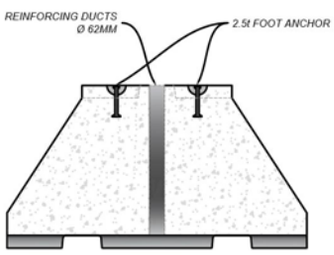

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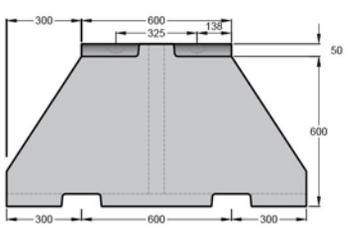
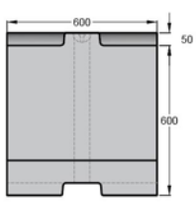


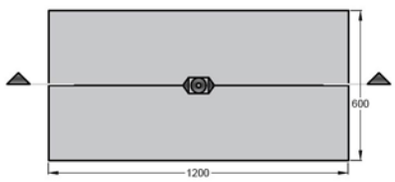
FRONT ELEVATION



SIDE ELEVATIONS

1200 TOP BLOCKS

DESCRIPTION	METRIC
Width	1200 mm
Height	600 mm
Depth	600 mm
Face Area	0.72 m²
Volume (±)	0.254m^3
Weight (±)	585 kg



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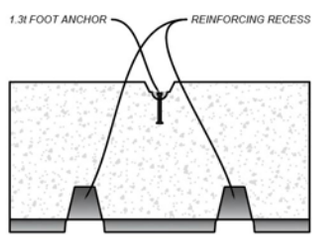

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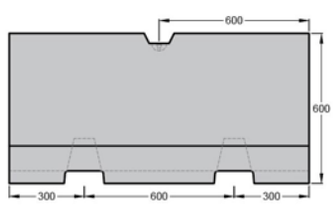
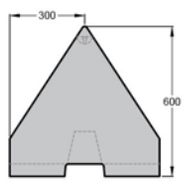


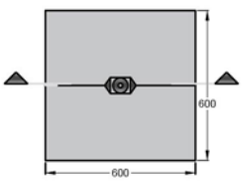
FRONT ELEVATION



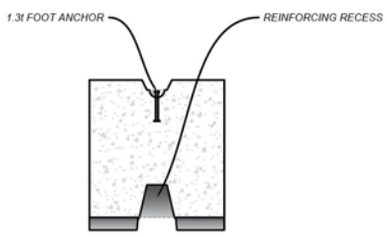
SIDE ELEVATIONS

600 TOP BLOCKS

DESCRIPTION	METRIC
Width	1200 mm
Height	600 mm
Depth	600 mm
Face Area	0.36 m^2
Volume (±)	0.127 m^3
Weight (±)	290 kg



PLAN



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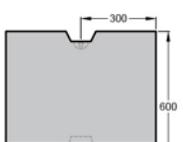
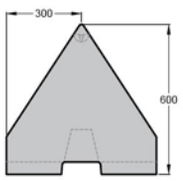


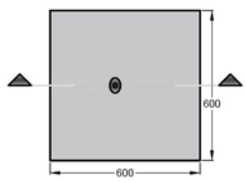
FRONT ELEVATION



SIDE ELEVATIONS

600 TAPER BLOCK

DESCRIPTION	METRIC
Width	1200 mm
Height	600 mm
Depth	600 mm
Face Area	0.18 m^2
Volume (±)	0.100 m^3
Weight (±)	230 kg



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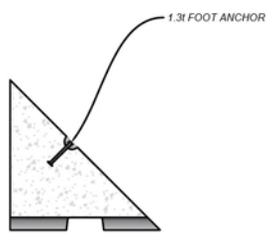

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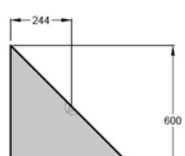
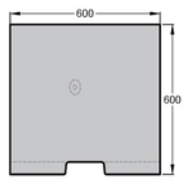


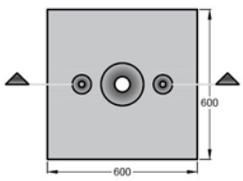
FRONT ELEVATION



SIDE ELEVATIONS

600 FLAT TOP RECESS BLOCK

DESCRIPTION	METRIC
Width	600 mm
Height	600 mm
Depth	600 mm
Face Area	0.36 m²
Volume(±)	0.205 m^3
Weight (±)	470 kg



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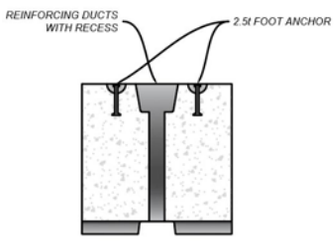

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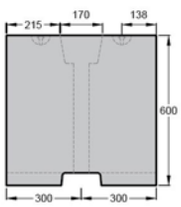

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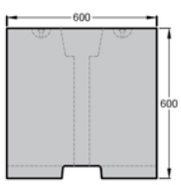
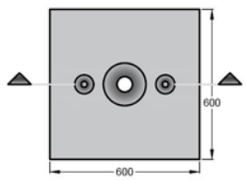


SIDE ELEVATIONS

600 CAPPER RECESS BLOCK

DESCRIPTION	METRIC
Width	600 mm
Height	297 mm
Depth	600 mm
Face Area	0.18 m²
Volume(±)	0.097 m^3
Weight (±)	225 kg



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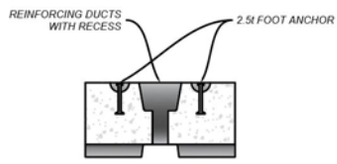

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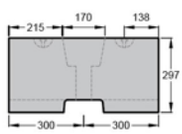
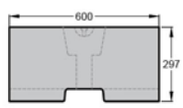


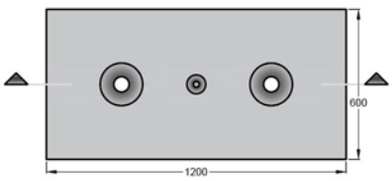
FRONT ELEVATION



SIDE ELEVATIONS

1200 FLAT TOP RECESS BLOCK

DESCRIPTION	METRIC
Width	1200 mm
Height	600 mm
Depth	600 mm
Face Area	0.72 m^2
Volume (±)	410 m^3
Weight (±)	0.94 TN



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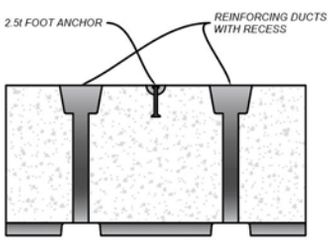

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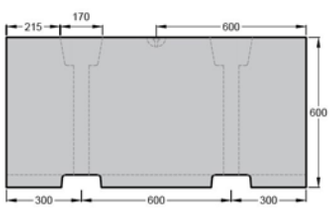
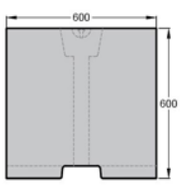


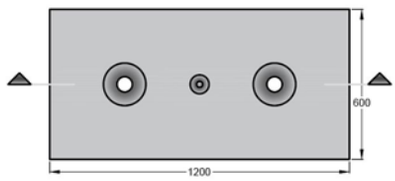
FRONT ELEVATION



SIDE ELEVATIONS

1200 CAPPER RECESS BLOCK

DESCRIPTION	METRIC
Width	1200 mm
Height	297 mm
Depth	600 mm
Face Area	0.36 m^2
Volume (±)	0.192 m^3
Weight (±)	440 kg



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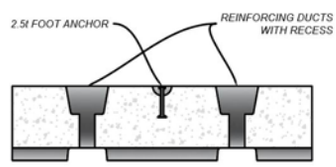

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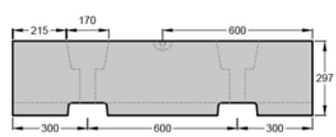
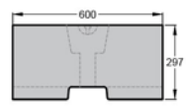


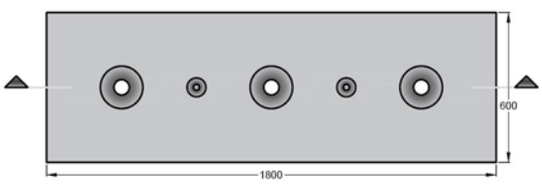
FRONT ELEVATION



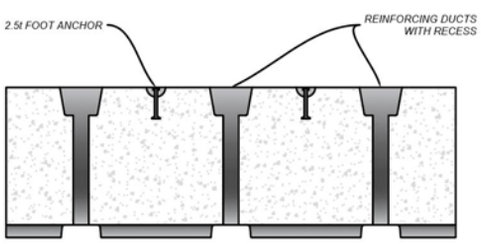
SIDE ELEVATIONS

1800 FLAT TOP RECESS BLOCK

DESCRIPTION	METRIC
Width	1800 mm
Height	600 mm
Depth	600 mm
Face Area	1.08 m^2
Volume (±)	0.615 m^3
Weight (±)	1.415 TN



PLAN



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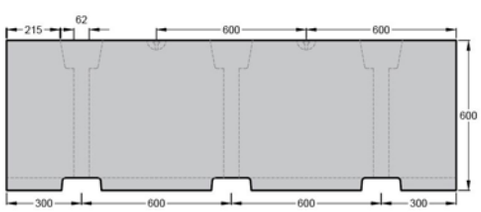
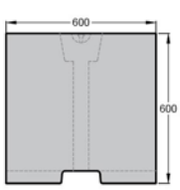


FRONT ELEVATION



SIDE ELEVATIONS

PRE-START CHECKLIST

Before commencing an installation we will check the following, ideally with you. These are issues which will delay the start of the installation, or may lead to additional costs.

ITEM	CHECKBOX

SITE ACCESS

- Clear access for trucks to deliver blocks, including turn around circles ☐
- Clear access for forklifts/lifting equipment to manoeuvre ☐

FOUNDATIONS

- If Concrete: ☐
  - Level surface where blocks will be placed
  - Identify location and size of steel reinforcing as it may impact on the drilling of holes for fixing kits ☐
- If non-Concrete - well compacted firm ground ☐

SURROUNDING STRUCTURES

- Area for placement of blocks is free of all structures ☐
  - If not, measurements have been taken between structures to ensure blocks will fit (allow for 5mm creep per block) ☐
- If using fixing kits - airspace above blocks should clear for at least the planned height of the wall ☐

OTHER

- Review block structure plans - will the structure fit in the floorspace provided? ☐
- If modifications are required to the structure these should be made before dispatch commences ☐
- Customer supplied starting/survey/datum points ☐

BLOCK DELIVERY PROCESS OVERVIEW

This section provides an overview of Envirocon's block delivery process.

BLOCK LAY DOWN AREA:

• You will need to ensure you have sufficient space to store the blocks between unloading the truck and installing the blocks.

• Each block takes up 0.72m2, blocks can be stacked to a max of 4 blocks high only if you have level ground

• You may need to consider site specific H&S requirements, blocks may be stack to a max of 2 or 3 blocks high so an individual can hook the lifting klaw during installation.

• Avoid placing blocks on muddy or soft ground, this will cause the block to be unstable and will affect the aesthetics of the block.

• Place the blocks as close of feasible to the place they will be installed. This will increase the speed of installation and reduce double handling of blocks.

• Consider how the blocks are stored - blocks used at the base of the wall should be easily accessible first.

• A forklift is the most cost effective and efficient way of unloading trucks, handling blocks onsite, and installing the blocks.

CUSTOMER COLLECT

If you opt to collect the blocks yourself or have organised your own freight. Theres a couple of key points you need to keep in mind:

• You need to arrange for the collection of blocks well before we are due on site for installation.
• Contact Envirocon Dispatch before sending any trucks. Pick ups need to be scheduled in our dispatch system.
• Drivers must contact the Dispatch Coordinator before arriving on site to confirm pick up times.
• If this is not done, the truck may not be loaded and turned away.
• Drivers must have the job reference number on them.
• Payment terms must have been met before loading can commence.
• Drivers must have correctly rated chains for securing blocks.
• Drivers must arrive on time.
• Drivers must not arrive before you scheduled time.
• Drivers will not be loaded early.
• Drivers must use corner protectors.

Truck types that are acceptable:

- Flat deck
- No high metal lips on edge (5cm is too high)
- Curtain siders
- No tow trucks
- No fixed side trucks

- Drivers are required to sign for the load before leaving
- Trucks must have a clean truck deck area
- Drivers are not allowed to smoke on site

Drivers must follow Envirocon's site safety rules:

- 10km/h speed limit on site
- Everyone must have appropriate high-viz
- Everyone must wear steel toed shoes
- You must know your maximum tonnage and not overload your ratings
- You must have a current COF
- Your vehicle must be mechanically sound
- The load must be strapped properly
- You need to always follow instructions given by Dispatch Staff
- No parking overnight on Envirocon premises
- Drivers must be visible to the Dispatcher when blocks are being loaded onto the truck.

The forklift driver must always have line of sight of drivers. There is a risk of blocks being dislodged off the deck as they are pushed to the edge.

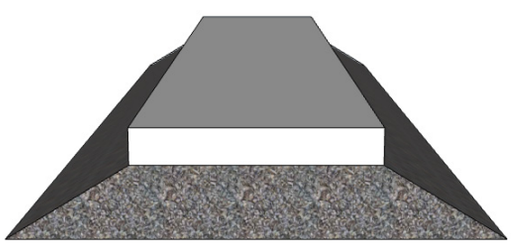
INSTALLING THE BLOCKS

THE FOLLOWING IS A GENERAL DESCRIPTION OF HOW WE WILL INSTALL YOUR BLOCKS.

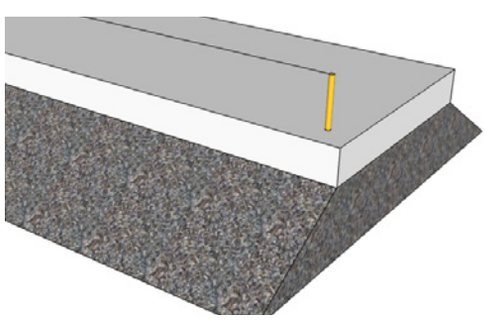
KEY LIFTING SAFETY RULES:

- Do not stand under, or near a block while it is being lifted.
- Machinery should only be operated by competent persons with appropriate training and certificates.
- All lifting clutches, chains, and booms should be regularly checked and be in good working condition.
- Only Reid® Klaw's should be used, use of any other lifting clutch/device will void the block warranty and may result in failure of the lifting anchor.
- Blocks should never be transported over distances or rough terrain using the lifting anchor.
- Where it is intended the blocks are to be lifted regularly (more than five times in one year) blocks with dual lift anchors will be required.

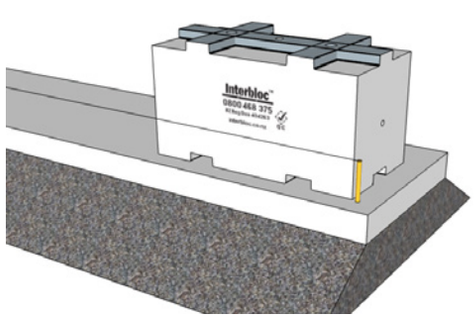
PLACING THE BLOCKS



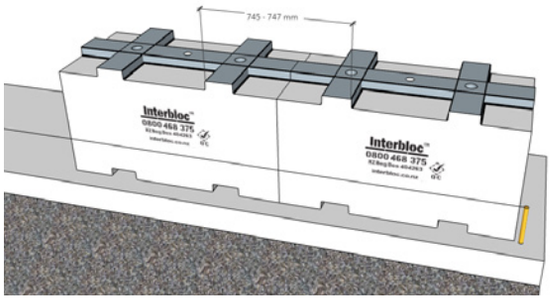
For best results the wall should be built on a level, concrete, foundation. Prior to block placement sweep the concrete surface to ensure the foundation is free of debris.



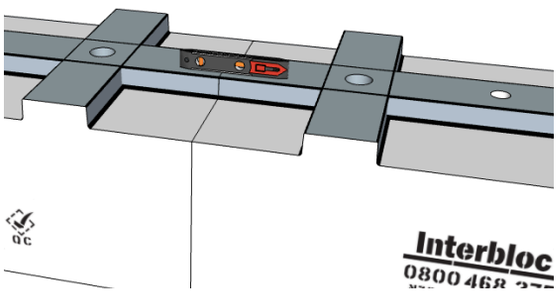
Lay a string line along the length of the pad as a guide.



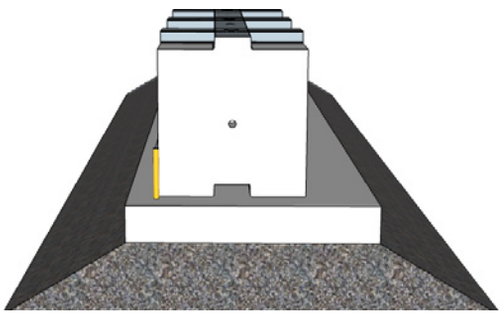
Starting from a corner (if the wall has one) place the first block. Maintain a 10mm gap from the string line with all blocks.



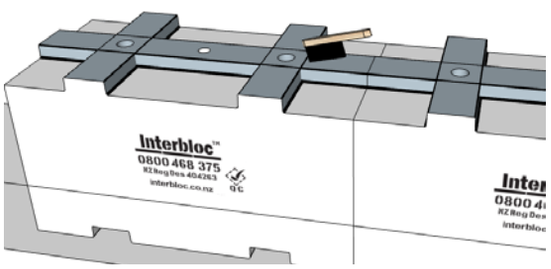
Place your next block, and ensure the gap between the interlocking grooves is between 745mm and 747mm. The correct spacing allows the wall to be built at height without binding.



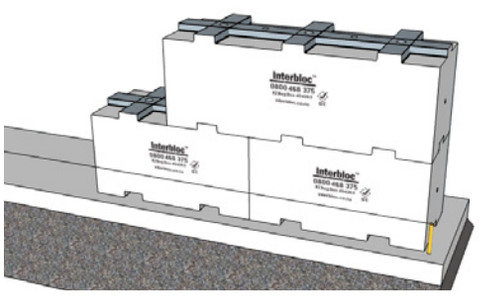
It is important to ensure the base layer of the blocks are level, flush, and correctly spaced.



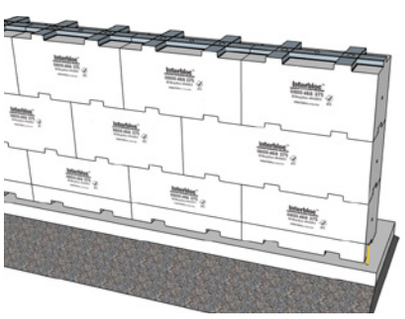
Blocks can be repositioned post placement by using a pinch/crow bar to leverage the block around.
When placing blocks, ensure the interlocking crosses are lined up.



Before adding a layer of blocks, ensure the top of the previous layer is swept free of debris. Use a brush or blower to do this.



Place your next layer of blocks, ensuring a running bond pattern is maintained.



You may need to use shims to ensure each layer of blocks is level.