

Adbri Masonry manufacture all masonry products to comply with the AS4455 suite of codes for masonry units, pavers and flags, and segmental retaining walls. These codes determine the allowable dimensional tolerances for the products, minimum strengths, and advise the testing methodology for other unit parameters. Wherever this information has been utilised in developing this data sheet it will be identified accordingly.

## GENERAL

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- Inspect your ordered product immediately upon delivery and advise Adbri Masonry if there are any concerns regarding colour or quality of the supplied product.
- When ordering product, we recommend organising delivery of all product at the one time so that it can be delivered from the same production batch.
- If there is insufficient room on site for all product to be delivered, please speak to your local representative about commissioning a “made to order” production run to ensure your product is delivered from that run of product. (Minimum production run volumes and lead times do apply)
- Masonry is manufactured from raw materials. Natural variations that occur in the raw materials from one production run to another can result in minor colour variations in the finished product. Ordering your product from one production run will help minimise possible colour variations on site.
- By installing any delivered product, you accept the colour or finish of the products and assume responsibility for the products. Colour and finish acceptance, given by installing the product, is the responsibility of the customer. Product quality faults remain the liability of Adbri Masonry.
- If blending product, Adbri Masonry recommends blending from random pallets as you lay to ensure the best results.
- Adbri Masonry utilises varying degrees of admixtures in its masonry mixes to help mitigate the appearance of efflorescence, but will not guarantee that it will not occur. The presence of and/or severity of efflorescence is not a manufacturing fault and no warranty or consequential damages are accepted by Adbri Masonry.
- Some damage can be expected to masonry product during the transportation, loading and unloading of products. This can be in the form of product chipping, minor breakages and missing lugs. Chipping and breakages shall not exceed more than 5% of the overall volume of product supplied to site. Lug breakages shall not exceed two per unit. Any damaged units should be used for cuts or partial units, units with damaged lugs should be utilised where units are to be capped.
- Honing and shotblasting of product will remove 2 to 3mm of surface from any product treated in such a manner. The depth of finish may vary based upon the aggregate content at the area being treated and may result in a visibly different finish unit to unit due to this volume of aggregate content.
- Refer to the Adbri Masonry MSDS sheet for further information on saw-cutting, grinding and bolsterring of masonry units.
- Store masonry off the ground and loosely cover with a waterproof membrane to prevent exposure to excessive moisture.

## BESSER BLOCKS

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- Adbri’s Besser® Blocks are manufactured to a dimensional tolerance of  $\pm 2\text{mm}$  in each direction as per the requirements of AS4455.1.
- Block that cannot be steel reinforced is manufactured to achieve a minimum characteristic compressive strength of 10MPa or higher (refer to local product data sheets for clarification). Block that can be steel reinforced is manufactured to a minimum characteristic compressive strength of 15MPa.
- Cover tops of unfinished block walls at the end of each work shift to prevent exposure to rain and to minimise the risk of possible resulting efflorescence.
- Keep blockwork clear of mortar smears.

## BESSER BLOCKS (Continued)

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- Refer to Table 11.1 of AS3700 for recommended mortar mixes for use with concrete masonry block.
- Refer to AS3700 for recommended mortar bed finishes.
- Grout shall achieve a minimum compressive strength of 15MPa.
- Colour variation may occur between standard units and fractions due to the product being manufactured in different production runs.
- Allowance should be made for potential shrinkage in the concrete masonry block walls in the structural design. This is achieved by the installation of control joints at required centres. The spacing of the control joints, if not supplied by the design or geotechnical engineers for the project, should meet the minimum dimensions supplied by the Concrete Masonry Association of Australia ([www.cmaa.com.au](http://www.cmaa.com.au))

## BRICKS

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- Bricks are manufactured to a dimensional tolerance of  $\pm 2$ mm in each direction as per the requirements of AS4455.1.
- Brick may be manufactured to a minimum characteristic compressive strength of 3MPa for non-loadbearing brick or 5MPa for loadbearing brick. Please ensure the manufactured strength of the product you have ordered is suitable for your proposed application. The manufactured strengths are available in data sheet template from your local sales office.
- Cover tops of unfinished brick walls at the end of each work shift to prevent exposure to rain and to minimise the risk of possible resulting efflorescence.
- Keep brickwork clear of mortar smears.
- Refer to Table 11.1 of AS3700 for recommended mortar mixes for use with concrete masonry brick.
- Refer to AS3700 for recommended mortar bed finishes.
- Allowance should be made for potential shrinkage in the concrete masonry block walls in the structural design. This is achieved by the installation of control joints at required centres. The spacing of the control joints, if not supplied by the design or geotechnical engineers for the project, should meet the minimum dimensions supplied by the Concrete Masonry Association of Australia ([www.cmaa.com.au](http://www.cmaa.com.au))

## PAVERS

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- Pavers are manufactured to a dimensional tolerance of  $\pm 2$ mm in each direction as per the requirements of AS4455.2.
- All paving should be installed with a minimum of 2 – 3mm between paving units to allow for placement of jointing sand between the paving units.
- Mechanical lock up of a pavement with a drum roller or plate compactor can result in minor damage to the paving units. It is common practice to cover the plate or drum with a piece of carpet or rubber to prevent this damage.
- Paving units are available in varying thicknesses ranging from 40mm in depth to 100mm in depth. 40mm units should only be used for pedestrian only applications, small vehicles can be used on 50mm and 60mm units. Commercial and Industrial vehicles should be operated only on 80mm and 100mm deep units.

## SEGMENTAL RETAINING WALLS

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- Segmental Retaining Wall units are manufactured to a dimensional tolerance of  $\pm 2$ mm in each direction as per the requirements of AS4455.3.
- Designs for all segmental wall systems are available in the Adbri Masonry segmental retaining wall systems technical specification brochures. Please refer to these documents for engineered designs.

## FLAG PAVERS

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- Flag Pavers are manufactured to a dimensional tolerance of  $\pm 2\text{mm}$  in each direction as per the requirements of AS4455.2.
- All flag paving should be installed with a minimum of 2 – 3mm between paving units to allow for placement of jointing sand between the paving units when installed on a flexible base. When installed on a rigid base, this gap should increase to 5 – 10mm for placement of a grout.
- Mechanical lock up of a pavement with a drum roller or plate compactor can result in minor damage to the paving units. It is common practice to cover the plate or drum with a piece of carpet or rubber to prevent this damage.
- Paving units are available in varying thicknesses ranging from 40mm in depth to 80mm in depth. 40mm units should only be used for pedestrian only applications, small vehicles can be used on 50mm, 60mm and 80mm units, but only when adhered to a reinforced concrete slab (rigid construction).
- Only the Euro range of products should be used around swimming pools. The Euro product has been tested and proven to achieve exposure rating and is a suitable product for use around swimming pools.
- Refer to the Euro Paving Guide for detailed information on the different types of installation.

## VERSALOC® WALLING SYSTEM

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- Versaloc mortarless wall units are manufactured to a dimensional tolerance of  $\pm 2\text{mm}$  in each direction as per the requirements of AS4455.1.
- Designs for the Versaloc wall system are available in the range of Adbri Masonry Versaloc technical brochures. Please refer to these documents for engineered designs.
- Versaloc is manufactured to achieve a minimum characteristic compressive strength of 20MPa.
- Cover tops of unfinished block walls at the end of each work shift to prevent exposure to rain and to minimise the risk of possible resulting efflorescence.
- Grout shall achieve a minimum compressive strength of 20MPa.
- Colour variation may occur between standard units and fractions due to the product being manufactured in different production runs.
- Allowance should be made for potential shrinkage in the concrete masonry block walls in the structural design. This is achieved by the installation of control joints at required centres. The spacing of the control joints, if not supplied by the design or geotechnical engineers for the project, should meet the minimum dimensions supplied by the Concrete Masonry Association of Australia ([www.cmaa.com.au](http://www.cmaa.com.au))