

MPA Masonry Resources

This leaflet provides an overview of the data sheets available on our website www.mpamasonry.org/Resources.aspx

Aggregate block resources

[A Guide to Selection & Specification \(2017\)](#)

This guide has been produced to assist designers and specifiers with the selection and specification of building blocks, which are manufactured in accordance with BS EN 771-3.

[External Walls \(2017\)](#)

The versatility of aggregate concrete blockwork is an attribute which has been recognised for a considerable time. There are many examples of fine buildings which incorporate aggregate concrete blocks as either a facing or a background unit.

[Use In Sulphate Soil Conditions \(2017\)](#)

Aggregate concrete blocks have been used successfully below ground level for many years.

A significant proportion of these will have been used on sites where sulphates are present, and no failures of precast aggregate concrete blocks from sulphate attack have been reported.

[Walls Below Damp Proof Course \(2017\)](#)

Aggregate concrete blocks have been used below damp proof course for many years where they have proved to be durable, efficient and highly economical. Aggregate concrete blocks permit fast on-site working since the standard dimension of a block is equivalent to six bricks.

[UHB - The Universal Housing Block \(2017\)](#)

The UHB concept is based on a single block selected from a range of 100mm thick solid (Group 1) aggregate blocks so as to meet the precise needs of your specific design.

[Suspended Floors \(2017\)](#)

Beam and block floor systems combine precast concrete beams and infill blocks to produce high performance yet economic ground and intermediate floors in housing and other building types.

[Separating Walls – Acoustic Performance \(2017\)](#)

The Building Regulations require a wall, which separates dwellings to resist the passage to sound. This data sheet gives guidance on the specification of blocks for separating walls, which if built correctly, meet the requirements indicated.

[External Walls Thermal Performance \(2017\)](#)

This data sheet gives guidance for the specification of blocks in conjunction with full fill and partial fill insulation materials to meet Building Regulation requirements for external walls.

[Partitions and Internal Walls \(2017\)](#)

Aggregate concrete blocks are a durable and economic solution for partitions and internal walls in all types of buildings. Block partitions are robust, easily erected and compare favourably in cost terms with other types of partition construction.

[Unreinforced Diaphragm Masonry Walls \(2017\)](#)

A blockwork diaphragm wall is a wide cavity wall with two leaves of concrete blockwork bonded together with blockwork cross ribs. These ribs are bonded by steel ties or block bonding to allow the wall cross section to act integrally as a series of box sections producing a high section modulus and radius of gyration.

[Good Site Practice \(2017\)](#)

Care needs to be taken in the use of aggregate concrete blocks such that mishandling, incorrect stacking and lack of protection are avoided. It is important for the designer/user to indicate clearly how the units should be installed.

[A Guide to Movement Control \(2017\)](#)

This datasheet gives guidance on how to accommodate such movements based on the rule of thumb.

[Safe Handling and Correct Use \(2017\)](#)

Much can be done to improve the safe handling and use of concrete blocks by following simple and straightforward good working practices and giving adequate consideration to health and safety aspects at the appropriate stage in the construction programme.

Careful consideration of the blocklayer's working area can also contribute significantly to safe working.

[Cellular Blocks \(2017\)](#)

Independent Guidance and Technical Expertise.

[Acoustics For Framed Buildings \(2017\)](#)

This data sheet covers the basic principles required to provide satisfactory acoustic junctions and basic acoustic design to realise the full potential of the construction.

[Aggregate Block Sustainability \(2017\)](#)

Aggregate concrete block construction and CBA members provide a valuable contribution to the creation of a sustainable built environment through the development of low carbon construction, efficient use of resources and providing durable, cost-effective construction solutions.

[Normalised Strength of Aggregate Concrete Blocks \(2017\)](#)

Eurocode 6 (BS EN 1996) commonly referred to as EC6, replaced BS 5628 as the UK masonry design code on 1 April 2010 when BS 5628 was withdrawn.

[Rendering Aggregate Concrete Blocks \(2017\)](#)

This guidance note gives application guidance for the successful use of renders on aggregate blocks.

[Beam and Block Flooring \(2017\)](#)

Use Guidance: Beam and block floor systems are suitable for low-rise housing and similar applications.

Aircrete resources

[The Use Of Aircrete Below Ground \(2018\)](#)

Offering light weight properties, and a quick build speed, aircrete allows foundations to be quickly and easily constructed. The benefits of aircrete make them a sustainable alternative solution in most below ground situations. Read more about this here.

[The Use Of Aircrete In Concrete Beam and Block Flooring \(2018\)](#)

Beam and aircrete block suspended floor systems offer improved thermal insulation, reliability and performance. Read more in this datasheet.

[The Use Of Aircrete In External Walls \(2018\)](#)

Aircrete offers the labour-saving benefits of fast build whilst being one of the most cost-effective overall forms of construction using traditional skills. Find out more here.

[Thermal Performance \(2018\)](#)

Aircrete has excellent thermal insulation characteristics offering good thermal insulation, and robust construction details, good thermal mass and air tightness properties. Read more about these qualities of aircrete within this datasheet.

[Design Flexibility \(2018\)](#)

One of the beneficial characteristics of aircrete is its design flexibility which is why it is such a popular choice with designers and architects as well as housebuilders and developers. Find out more in this datasheet.

[Fire Protection \(2018\)](#)

Fire can be a major risk to any home or building and the results can be devastating. Many rules, laws and safeguards exist to protect homeowners from the risk of fire, however, accidents can and do happen. Read more about the fire protection properties of aircrete within this datasheet.

[Health and Safety \(2018\)](#)

This datasheet summarises the key issues relating to both the composition of aircrete and its safe use in practice, and relates these to the CDM responsibilities of the construction team. Find out more.

[Sound \(2018\)](#)

Aircrete's intrinsic acoustic efficiency makes it a particularly appropriate material to use for internal and external walls in order to comply with these requirements. Read more about this here...

[The Use Of Thin Joint Blockwork \(2018\)](#)

This datasheet looks at the benefits of aircrete's thin joint system in increasing productivity and reducing build times on site. Find out more about this here.

[Construction Details \(2018\)](#)

The publication of the latest Constructive Details handbook for solid external walls completes the set for aircrete blocks, with the common constructions of partial fill, full fill and externally insulated solid walls all now being covered. Read more in this datasheet.

[The Ra Build Cost Advantage \(2018\)](#)

Further to a previous study undertaken in 2008 calfordseaden was commissioned to again research the comparative costs of five different common house construction methods. Read more about this research, and the conclusions made.

[Masonry Design For Disproportionate Collapse \(2018\)](#)

This Technical Note was first published in 2005 to provide assistance for the structural design of traditional masonry buildings to resist accidental damage. Take a read of this updated Technical Guide which includes the latest Building Regulation changes.

Homeowners survey

[A Dream Home: An Exploration of Aspirations \(2018\)](#)

Homes that last. Read our survey report, based on data from a survey of 2,000 homeowners and tenants.

Masonry resources

[Brick \(2019\)](#)

This Easy Guide on bricks aims to provide an overview of this method of construction for housing. The guidance is a practical introduction to the characteristics, performance benefits and latest design guidance for bricks in construction.

[Beam and Block Ground Floors \(2018\)](#)

This Easy Guide on beam and block floors aims to provide an overview of this method of construction for housing. The guidance is a practical introduction to the characteristics, performance benefits and latest design guidance for beam and block ground floors.

[Blocks \(2018\)](#)

This Easy Guide on concrete blocks aims to provide an overview of this method of construction for housing. The guidance is a practical introduction to the characteristics, performance benefits and latest design guidance for concrete blocks in construction.

[Cavity Walls \(2018\)](#)

This Easy Guide on cavity walls aims to provide an overview of this method of construction for housing. The guidance is a practical introduction to the characteristics, performance benefits and latest design guidance for masonry cavity walls.

Mortar resources

[Data Sheet - Factory Produced Silo Mortar \(2019\)](#)

Ready-to-use mortars may be "wet ready-to-use" which requires no further mixing and are stored in tubs on site. They incorporate a retarding agent making them fully useable for a specific period, usually some 36 hours. Alternatively, they may be "dry ready-to-use" which are delivered in silos or bags and requiring the additional mixing of water.

[Data Sheet - Benefits Of Lime: Sand Mortar \(2018\)](#)

Pre-batched lime: sand materials are delivered to site, with cement and water added prior to use. These mortars are well known for their plasticity and workability. The mortar also spreads easily under the trowel, so increasing productivity and minimising wastage.

[Blocks \(2018\)](#)

All production methods of factory-produced mortars can offer both coloured and natural shades. This opens up a whole new dimension for architects and specifiers – once regarded only as a means of avoiding clashed with specific bricks, coloured mortars have now become recognised as a design tool in their own right. For more information, please see this data sheet on pigment types for mortars.

[Cavity Walls \(2018\)](#)

For prescribed composition information on mortar mixes as well as their physical characteristics please see this guidance document. All the technical guidelines to help you choose the right grade of mortar for your desired application and the quality standard requirements to ensure it's used correctly have been developed by the Mortar Industry Association.

Eurocode 6 resources

[How to design masonry structures to Eurocode 6 \(2014\)](#)

This suite of three publications includes the documents 'Introduction', 'Vertical Stability' and 'Lateral Stability'. Their aim is to make the use of Eurocode 6, Design of masonry structures as easy as possible by drawing together in one place key information and commentary required for the design of typical masonry elements.

[Eurocode 6 website](#)

The Eurocode6 website provides further information on development of Eurocode 6, worked examples, design software from Denmark, related masonry product and test standards and FAQs.

Eurocode 6 manuals are published by [Institution of Civil Engineers], [Institution of Structural Engineers and International Masonry Society].