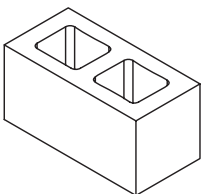




Material Datasheet

HOLLOW DENSE READYBLOCK[®] STANDARD AND CLOSE TEXTURED FINISH

With the ReadyBlock[®] range of Dense and Lightweight Aggregate Blocks from CEMEX, you are assured to find the building solution you need. Our blocks can be used with confidence in a wide variety of internal and external applications. Our quality assured manufacture ensures that ReadyBlock[®] units are of a consistent and superior quality to meet the requirements of all European and British standards.



Sizes available (in mm)

Length	Height	Width	
440	215	140	215
Block Weights (kg)*		140	215
Dry		18.7	28.7
3% Moisture Content		19.3	29.6

*These figures are a national average and variations may occur geographically, please contact your nearest Sales Office for more precise block weights.

ReadyBlock[®] Sales Office:
North: 01236 822461
South: 01298 22244

Product Specifications

CEMEX READYBLOCK[®] TO BS EN 771-3:2003

'Aggregate Concrete Masonry Units Category 1 (dense and light-weight aggregates)'

CATEGORY :	AGGREGATE CONCRETE MASONRY UNIT	
DIMENSIONAL TOLERANCES :	Category	D1 (+3mm, -5mm)
	Flatness	No Performance Determined
	Plane Parallelism	No Performance Determined
CONFIGURATION :	For more information on void configuration, please contact your nearest sales office.	
COMPRESSIVE STRENGTH :	Mean 3.6 N/mm ² , 7.3 N/mm ² Other strengths available on application	
MOISTURE MOVEMENT COEFFICIENT :	= < 0.5 mm/m	
BOND STRENGTH :	Fixed Value, 0.15N/mm ²	
REACTION TO FIRE :	Class A1	
WATER ABSORPTION :	No Performance Determined	
WATER VAPOUR PERMEABILITY(EN 1745) :	5/15 μ	
GROSS DRY DENSITY :	1410 kg/m ³	
NET DRY DENSITY :	1960 kg/m ³	
THERMAL RESISTANCE :	140mm width = Int, 0.18 m ² K/W Ext, 0.17 m ² K/W 215mm width = Int, 0.23 m ² K/W Ext, 0.22 m ² K/W	
DURABILITY AGAINST FREEZE-THAW :	No Performance Determined	
DANGEROUS SUBSTANCES :	Information on dangerous substances will only be given when and where required and in the appropriate form.	

Features and Benefits

- Reduced unit weight for ease of handling
- Reduced floor/foundation loadings
- Available either open textured to provide an excellent medium for surface finishes or close textured for painting
- Can be used to construct steel - reinforced walls, to resist lateral loadings

Delivery and Storage

Blocks are normally delivered to site in banded packs on crane-offload road vehicles. Where requested packs can be delivered shrink-wrapped and/or palletised to aid subsequent site movement activities. All packaging should be disposed of carefully in accordance with local environmental requirements.

If possible, delivered blocks should be stacked in planned locations on the site. This reduces the double-handling of the blocks.

Packs should be stacked carefully onto a prepared, clean, firm area to minimise soiling and damage. They should also be protected from inclement weather and passing vehicles. Allow air to circulate through and around the stacks.

Health and Safety

Care and attention should be given to the working area to minimise accidents. Units of 20kg or more in weight should be handled mechanically, or using a two person team if they have to be used repetitively.

Further information may be found in HSE Construction Sheet 37-Handling Building Blocks.

Safe lift/build heights will vary dependant upon the block type, thickness, etc. Weather conditions can also affect lift heights and restrictions may be needed due to forecasted windy weather. Generally, lift heights should not exceed 6 full block courses in a single working day. For cavity wall construction, the 2 leaves should be built up together and the difference in leaf height, at any stage during construction, should generally not exceed 675mm.

A separate material safety datasheet for precast concrete products is available from CEMEX.

Blocklaying

General Construction: The building of masonry walling should be to the workmanship guidance given in BS 8000-3. When reinforcing bars are to be vertically grouted into the hollow wall voids then the recommendations of BS 5628-2 should be followed.

Walls Below DPC: Hollow Dense Blocks can be used below DPC and ground level as noted in Table 12 of BS 5628-3.

Laying in cold weather conditions: Blocks should not normally be laid when the temperature is at or below 3°C and falling or 1°C and rising.

Laying: Hollow blocks should be laid on a shell-bed of mortar and the cross/perpend joints fully filled. When necessary, adjust the consistency of the mortar to suit the suction of the blocks.

Bond: Blocks should be laid to achieve a good bond, normally not less than one quarter the block length. In certain situations, consideration should be given to the addition of bed joint reinforcement.

Cutting and Chasing: Where cutting of blocks is required on-site, the use of a central cutting area should be encouraged. Each pack of blocks contains a small number of 'splitter' blocks which contain a narrow central slot to aid splitting into two halves. Due to the internal voids, hollow blocks are not suitable for chasing. It is however sometimes possible to locate pipework & cabling within the voids of the blockwork.

Jointing: Mortar joints should be struck off as work proceeds. Where subsequent rendering or plastering is to take place, then the joints should be slightly raked out to act as a mortar key. Flush joints are recommended for facing

work. Lightly tooling the joints highlights the arrises of the blocks and hence the coursing, scale and appearance of the finished wall. Raked joints should be used with caution.

Use in Sulfate Soils: Dense Hollow Blocks can be used in chemically aggressive ground conditions up to & including Class DS-3 as detailed in BRE Special Digest 1.

Mortar: Mortar should be specified in accordance with Cl. 5.7 of BS 5628-3. To limit the visual impact of shrinkage cracking, the weakest mortar specification appropriate to the structural design should be chosen.

Finished Work

Protection of finished work: All blockwork should be protected from inclement weather and other on-site practices. Suitable protective sheeting should be placed over the blockwork and firmly tied into place. Care must be taken to protect the work from frost damage or rapid drying out.

Movement Control: After construction, buildings are subject to small dimensional changes due to settlement, temperature change, moisture movement & carbonation. To account for this, movement joints should be provided in accordance with the recommendations of BS 5628: Part 3. Generally, they are required at intervals of 6-8m for external work. Movement joints are not normally required for basic domestic dwellings. Consideration for the location of movement joints should be given:

- At changes in wall height or thickness
- At changes of loading conditions
- At abutments of walls and columns and junctions of dissimilar materials
- To align with movement joints in concrete floor slabs
- Between 1m & 3m from a corner
- At locations of chases, recesses & openings

In areas of concentrated stress, such as above and below openings, consideration should be given to the use of mortar joint bed reinforcement.

Render: All work should conform to recommendations stated in BS EN 13914-1- External Rendering.

In conditions of severe exposure, 3 coat work is recommended with a total thickness of 20mm. Allow adequate drying time between finishes or coats.

Plastering: All work should conform to the recommendations stated in BS EN 13914-2:2005 - Internal Plastering. The surface of Hollow Dense ReadyBlock[®] provides a good key for all types of plaster. Dry-lining systems are compatible with the ReadyBlock[®] range.

Painting: Standard Finish Hollow ReadyBlock[®] are not intended to be directly painted. Where a paint finish is required a plaster or render finish should first be applied. Alternatively a Close Textured Hollow ReadyBlock[®] can be specified in which case two coats of alkali – resisting masonry paint is recommended, applied after the masonry has dried out. Before application any signs of efflorescence or other surface staining must be removed.

Fixing: The ReadyBlock[®] range is suitable for most types of lightweight fixings, masonry nails, plugs & screws. Heavy items require support from 'built in' anchorages.

Efflorescence: Concrete products with high cement content may suffer the temporary phenomenon of efflorescence. This is not detrimental to the performance of the product and no responsibility can be accepted for its occurrence.

Sustainability

At CEMEX our environment matters, and the thermal mass of our ReadyBlock[®] range not only could reduce the need for air-conditioning in the summer but could also reduce the consumption of winter heating fuel by capturing solar gains.

FAQ's

Q. What is the U value (thermal performance) of ReadyBlock[®]?

A. Individual blocks do not have U Values. A U Value is determined by the type and thickness of each of the elements used to construct the wall, including airspaces. Extensive thermal insulation data is given in BRE Special Digest (SD4) 'Masonry walls and beam and block floors' available free of charge from CBA, alternatively, call our ReadyBlock[®] Helpline Tel: 0800 667 827.

Q. What is the life expectancy of aggregate blockwork?

A. It has been shown over a period of many decades that if protected from aggressive chemical or abrasive situations, concrete blockwork does not deteriorate with time.

Q. Are Hollow Dense ReadyBlock[®] suitable for the construction of party walls as regards sound insulation?

A. These blocks are not recommended for party wall construction.

Q. Are Hollow Dense ReadyBlock[®] suitable for all categories of construction?

A. Hollow blocks can be used from a structural point of view for housing, but due to the widths being higher than the 100mm traditionally used & the high levels of cutting & services installation; they are rarely used. Their ability to accept grouted steel reinforcing makes them eminently suitable for industrial, agricultural & earth-retaining walling situations.

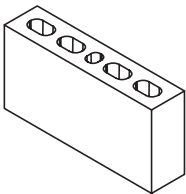
**For more information contact our ReadyBlock[®] Helpline
Tel: 0800 667 827.**



Material Datasheet

CELLULAR DENSE READYBLOCK[®] STANDARD AND CLOSE TEXTURED FINISH

With the ReadyBlock[®] range of Dense and Lightweight Aggregate Blocks from CEMEX, you are assured to find the building solution you need. Our blocks can be used with confidence in a wide variety of internal and external applications. Our quality assured manufacture ensures that ReadyBlock[®] units are of a consistent and superior quality to meet the requirements of all European and British standards.



Sizes available (in mm)

Length	Height	Width	
440	215	100	140
Block Weights (kg)*		100	140
Dry		15.5	19.3
3% Moisture Content		16.0	19.9

*These figures are a national average and variations may occur geographically, please contact your nearest Sales Office for more precise block weights.

ReadyBlock[®] Sales Office:
North: 01236 822461
South: 01298 22244

Product Specifications

CEMEX READYBLOCK[®] TO BS EN 771-3:2003

'Aggregate Concrete Masonry Units Category 1 (dense and light-weight aggregates)'

CATEGORY :	AGGREGATE CONCRETE MASONRY UNIT	
DIMENSIONAL TOLERANCES :	Category	D1 (+3mm, -5mm)
	Flatness	No Performance Determined
	Plane Parallelism	No Performance Determined
CONFIGURATION :	For more information on void configuration, please contact your nearest sales office.	
COMPRESSIVE STRENGTH :	Mean 3.6 N/mm ² , 7.3 N/mm ²	
MOISTURE MOVEMENT COEFFICIENT :	= < 0.5 mm/m	
BOND STRENGTH :	Fixed Value, 0.15N/mm ²	
REACTION TO FIRE :	Class A1	
WATER ABSORPTION :	No Performance Determined	
WATER VAPOUR PERMEABILITY(EN 1745) :	5/15 μ	
GROSS DRY DENSITY :	100mm width = 1640 kg/m ³ 140mm width = 1460 kg/m ³	
NET DRY DENSITY :	1960 kg/m ³	
THERMAL RESISTANCE :	100mm width = Int, 0.11 m ² K/W Ext, 0.10 m ² K/W 140mm width = Int, 0.16 m ² K/W Ext, 0.15 m ² K/W	
DURABILITY AGAINST FREEZE-THAW :	No Performance Determined	
DANGEROUS SUBSTANCES :	Information on dangerous substances will only be given when and where required and in the appropriate form.	

Features and Benefits

- Reduced unit weight for ease of handling
- Reduced floor/foundation loadings
- Available either open textured to provide an excellent medium for surface finishes or close textured for painting

Delivery and Storage

Blocks are normally delivered to site in banded packs on crane-offload road vehicles. Where requested packs can be delivered shrink-wrapped and/or palletised to aid subsequent site movement activities. All packaging should be disposed of carefully in accordance with local environmental requirements.

If possible, delivered blocks should be stacked in planned locations on the site. This reduces the double-handling of the blocks.

Packs should be stacked carefully onto a prepared, clean, firm area to minimise soiling and damage. They should also be protected from inclement weather and passing vehicles. Allow air to circulate through and around the stacks.

Health and Safety

Care and attention should be given to the working area to minimise accidents. Further information may be found in HSE Construction Sheet 37-Handling Building Blocks.

Safe lift/build heights will vary dependant upon the block type, thickness, etc. Weather conditions can also affect lift heights and restrictions may be needed due to forecasted windy weather. Generally, lift heights should not exceed 6 full block courses in a single working day. For cavity wall construction, the 2 leaves should be built up together and the difference in leaf height, at any stage during construction, should generally not exceed 675mm.

A separate material safety datasheet for precast concrete products is available from CEMEX.

Blocklaying

General Construction: The building of masonry walling should be to the workmanship guidance given in BS 8000-3.

Walls Below DPC: Cellular Dense Blocks can be used below DPC and ground level as noted in Table 12 of BS 5628-3.

Laying in cold weather conditions: Blocks should not normally be laid when the temperature is at or below 3°C and falling or 1°C and rising.

Laying: Cellular blocks should be laid on a full bed of mortar and the cross/perpend joints fully filled. When necessary, adjust the consistency of the mortar to suit the suction of the blocks.

Bond: Blocks should be laid to achieve a good bond, normally not less than one quarter the block length. In certain situations, consideration should be given to the addition of bed joint reinforcement.

Cutting and Chasing: Where cutting of blocks is required on-site, the use of a central cutting area should be encouraged. Each pack of blocks contains a small number of 'splitter' blocks which contain a narrow central slot to aid splitting into two halves. Due to the internal voids, cellular blocks are not suitable for chasing.

Jointing: Mortar joints should be struck off as work proceeds. Where subsequent rendering or plastering is to take place, then the joints should be slightly raked out to act as a mortar key. Flush joints are recommended for facing work. Lightly tooling the joints highlights the arrises of the blocks and hence the coursing, scale and appearance of the finished wall. Raked joints should be used with caution.

Use in Sulfate Soils: Dense Cellular Blocks can be used in chemically aggressive ground conditions up to & including Class DS-3 as detailed in BRE Special Digest 1.

Mortar: Mortar should be specified in accordance with Cl. 5.7 of BS 5628-3. To limit the visual impact of shrinkage cracking, the weakest mortar specification appropriate to the structural design should be chosen.

Finished Work

Protection of finished work: All blockwork should be protected from inclement weather and other on-site practices. Suitable protective sheeting should be placed over the blockwork and firmly tied into place. Care must be taken to protect the work from frost damage or rapid drying out.

Movement Control: After construction, buildings are subject to small dimensional changes due to settlement, temperature change, moisture movement & carbonation. To account for this, movement joints should be provided in accordance with the recommendations of BS 5628: Part 3. Generally, they are required at intervals of 6-8m for external work. Movement joints are not normally required for basic domestic dwellings. Consideration for the location of movement joints should be given:

- At changes in wall height or thickness
- At changes of loading conditions
- At abutments of walls and columns and junctions of dissimilar materials
- To align with movement joints in concrete floor slabs
- Between 1m & 3m from a corner
- At locations of recesses & openings

In areas of concentrated stress, such as above and below openings, consideration should be given to the use of mortar joint bed reinforcement.

Render: All work should conform to recommendations stated in BS EN 13914-1- External Rendering. In conditions of severe exposure, 3 coat work is recommended with a total thickness of 20mm. Allow adequate drying time between finishes or coats.

Plastering: All work should conform to the recommendations stated in BS EN 13914-2:2005 - Internal Plastering. The surface of Cellular Dense ReadyBlock® provides a good key for all types of plaster. Dry-lining systems are compatible with the ReadyBlock® range.

Painting: Standard Finish Cellular ReadyBlock® are not intended to be directly painted. Where a paint finish is required a plaster or render finish should first be applied. Alternatively a Close Textured Cellular ReadyBlock® can be specified in which case two coats of alkali – resisting masonry paint is recommended, applied after the masonry has dried out. Before application any signs of efflorescence or other surface staining must be removed.

Fixing: The Cellular ReadyBlock® range is suitable for most types of lightweight fixings, masonry nails, plugs & screws. Heavy items require support from 'built in' anchorages.

Efflorescence: Concrete products with high cement content may suffer the temporary phenomenon of efflorescence. This is not detrimental to the performance of the product and no responsibility can be accepted for its occurrence.

Sustainability

At CEMEX our environment matters, and the thermal mass of our ReadyBlock® range not only could reduce the need for air-conditioning in the summer but could also reduce the consumption of winter heating fuel by capturing solar gains.

FAQ's

Q. What is the U value (thermal performance) of ReadyBlock®?

A. Individual blocks do not have U Values. A U Value is determined by the type and thickness of each of the elements used to construct the wall, including airspaces. Extensive thermal insulation data is given in BRE Special Digest (SD4) 'Masonry walls and beam and block floors' available free of charge from CBA, alternatively, call our ReadyBlock® Helpline Tel: 0800 667 827.

Q. What is the life expectancy of aggregate blockwork?

A. It has been shown over a period of many decades that if protected from aggressive chemical or abrasive situations, concrete blockwork does not deteriorate with time.

Q. Are Cellular Dense ReadyBlock® suitable for the construction of party walls as regards sound insulation?

A. These blocks are not recommended for party wall construction.

Q. Are Cellular Dense ReadyBlock® suitable for all categories of construction?

A. Cellular blocks can be used from a structural point of view for housing, but due to the high levels of cutting & services installation; they are rarely used. Cellular blocks are generally specified where a dense aggregate block is required but less weight is advantageous.

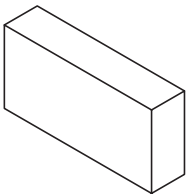
**For more information contact our ReadyBlock® Helpline
Tel: 0800 667 827.**



Material Datasheet

2000 SOLID DENSE READYBLOCK® STANDARD FINISH

With the ReadyBlock® range of Dense and Lightweight Aggregate Blocks from CEMEX, you are assured to find the building solution you need. Our blocks can be used with confidence in a wide variety of internal and external applications. Our quality assured manufacture ensures that ReadyBlock® units are of a consistent and superior quality to meet the requirements of all European and British standards.



Sizes available (in mm)

Length	Height	Width			
390	190			100	
290	215				140
440	215	75	90	100	140

Block Weights (kg)*	75	90	100	140
Dry	13.9	16.7	18.5	26.0
3% Moisture Content	14.3	17.2	19.1	26.8

*These figures are a national average and variations may occur geographically, please contact your nearest Sales Office for more precise block weights.

ReadyBlock® Sales Office:
North: 01236 822461
South: 01298 22244

ReadyFloor® Beam and Block Flooring System:
Tel: 01179 373740

Product Specifications

CEMEX READYBLOCK® TO BS EN 771-3:2003

'Aggregate Concrete Masonry Units Category 1 (dense and light-weight aggregates)'

CATEGORY :	AGGREGATE CONCRETE MASONRY UNIT	
DIMENSIONAL TOLERANCES :	Category	D1 (+3mm, -5mm)
	Flatness	No Performance Determined
	Plane Parallelism	No Performance Determined

COMPRESSIVE STRENGTH : Mean 7.3 N/mm², 10.4 N/mm², 17.5 N/mm²,
Other strengths available on application

MOISTURE MOVEMENT COEFFICIENT : = < 0.5 mm/m

BOND STRENGTH : Fixed Value, 0.15N/mm²

REACTION TO FIRE : Class A1

WATER ABSORPTION : No Performance Determined

WATER VAPOUR PERMEABILITY(EN 1745) : 5/15 μ

GROSS DRY DENSITY : 1960 kg/m³

NET DRY DENSITY : 1960 kg/m³

THERMAL CONDUCTIVITY : Int, 1.29 W/mK Ext, 1.38 W/mK

DURABILITY AGAINST FREEZE-THAW : No Performance Determined

DANGEROUS SUBSTANCES : Information on dangerous substances will only be given when and where required and in the appropriate form.

Features and Benefits

- Have versatility to be used in a wide variety of internal and external applications
- Allows use above and below the ground, where strength and durability are prime considerations
- Typically used in cavity or solid wall constructions, they are also ideal for use in internal load bearing walls and ReadyFloor® Beam and Block Floor system
- Have excellent sound insulation and air permeability properties
- Provide an excellent key for secondary finishes and fixings
- Inherent thermal mass acts as a heat store

Delivery and Storage

Blocks are normally delivered to site in banded packs on crane-offload road vehicles. Where requested packs can be delivered shrink-wrapped and/or palletised to aid subsequent site movement activities. All packaging should be disposed of carefully in accordance with local environmental requirements.

If possible, delivered blocks should be stacked in planned locations on the site. This reduces the double-handling of the blocks.

Packs should be stacked carefully onto a prepared, clean, firm area to minimise soiling and damage. They should also be protected from inclement weather and passing vehicles. Allow air to circulate through and around the stacks.

Health and Safety

Care and attention should be given to the working area to minimise accidents. Further information may be found in HSE Construction Sheet 37-Handling Building Blocks.

Safe lift/build heights will vary dependant upon the block type, thickness, etc. Weather conditions can also affect lift heights and restrictions may be needed due to forecasted windy weather. Generally, lift heights should not exceed 6 full block courses in a single working day. For cavity wall construction, the 2 leaves should be built up together and the difference in leaf height, at any stage during construction, should generally not exceed 675mm.

A separate material safety datasheet for precast concrete products is available from CEMEX.

Blocklaying

General Construction: The building of masonry walling should be to the workmanship guidance given in BS 8000-3.

Walls Below DPC: Dense Blocks can be used below DPC and ground level as noted in Table 12 of BS 5628-3.

Laying in cold weather conditions: Blocks should not normally be laid when the temperature is at or below 3°C and falling or 1°C and rising.

Laying: Solid blocks should be laid on a full bed of mortar and the cross/perpend joints fully filled. When necessary, adjust the consistency of the mortar to suit the suction of the blocks.

Bond: Blocks should be laid to achieve a good bond, normally not less than one quarter the block length. In certain situations, consideration should be given to the addition of bed joint reinforcement.

Cutting and Chasing: Where cutting of blocks is required on-site, the use of a central cutting area should be encouraged. Vertical chasing in blockwork should not exceed one third of the block thickness and horizontal chasing one sixth. Back to back chases should be avoided.

Jointing: Mortar joints should be struck off as work proceeds. Where subsequent rendering or plastering is to take place, then rake out the joints to a depth of 15mm to act as a mortar key. Flush joints are recommended for facing work. Lightly tooling the joints highlights the arrises of the blocks and hence the coursing, scale and appearance of the finished wall. Raked joints should be used with caution.

Use in Sulfate Soils: Dense Blocks can be used in chemically aggressive ground conditions up to & including Class DS-3 as detailed in BRE Special Digest 1.

Mortar: Mortar should be specified in accordance with Cl. 5.7 of BS 5628-3. To limit the visual impact of shrinkage cracking, the weakest mortar specification appropriate to the structural design should be chosen.

Finished Work

Protection of finished work: All blockwork should be protected from inclement weather and other on-site practices. Suitable protective sheeting should be placed over the blockwork and firmly tied into place. Care must be taken to protect the work from frost damage or rapid drying out.

Movement Control: After construction, buildings are subject to small dimensional changes due to settlement, temperature change, moisture movement & carbonation.

To account for this, movement joints should be provided in accordance with the recommendations of BS 5628:

Part 3. Generally, they are required at intervals of 6-8m for external work. Movement joints are not normally required for basic domestic dwellings. Consideration for the location of movement joints should be given:

- At changes in wall height or thickness
- At changes of loading conditions
- At abutments of walls and columns and junctions of dissimilar materials
- To align with movement joints in concrete floor slabs
- Between 1m & 3m from a corner
- At locations of chases, recesses & openings

In areas of concentrated stress, such as above and below openings, consideration should be given to the use of mortar joint bed reinforcement.

Render: All work should conform to recommendations stated in BS EN 13914-1- External Rendering.

In conditions of severe exposure, 3 coat work is recommended with a total thickness of 20mm. Allow adequate drying time between finishes or coats.

Plastering: All work should conform to the recommendations stated in BS EN 13914-2:2005 - Internal Plastering. The surface of 2000 Solid Dense Standard Finish ReadyBlock® provides a good key for all types of plaster. Dry-lining systems are compatible with the ReadyBlock® range.

Painting: 2000 Solid Dense Standard Finish ReadyBlock® is not intended to be directly painted. Where a paint finish is required a plaster or render finish should first be applied.

Fixing: The ReadyBlock® range provides an excellent medium for most types of fixings and readily accepts masonry nails, plugs or screws.

Efflorescence: Concrete products with high cement content may suffer the temporary phenomenon of efflorescence. This is not detrimental to the performance of the product and no responsibility can be accepted for its occurrence.

Sustainability

At CEMEX our environment matters, and the thermal mass of our ReadyBlock® range not only could reduce the need for air-conditioning in the summer but could also reduce the consumption of winter heating fuel by capturing solar gains.

FAQ's

Q. What is the U value (thermal performance) of ReadyBlock®?

A. Individual blocks do not have U Values. A U Value is determined by the type and thickness of each of the elements used to construct the wall, including airspaces. Extensive thermal insulation data is given in BRE Special Digest (SD4) 'Masonry walls and beam and block floors' available free of charge from CBA, alternatively, call our ReadyBlock® Helpline Tel: 0800 667 827.

Q. What is the life expectancy of aggregate blockwork?

A. It has been shown over a period of many decades that if protected from aggressive chemical or abrasive situations, concrete blockwork does not deteriorate with time.

Q. Are 2000 Solid Dense Standard Finish ReadyBlock® suitable for the construction of party walls as regards sound insulation?

A. When built using 100mm blocks, a 50mm cavity wall plastered both sides has sufficient mass to comply with the recommendations of Part E of the Building Regulations. The mass requirement is also achieved by a solid wall 215mm thick built by 'laying flat' any size of these blocks.

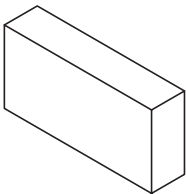
**For more information contact our ReadyBlock® Helpline
Tel: 0800 667 827.**



Material Datasheet

2000 SOLID DENSE READYBLOCK® CLOSE TEXTURED FINISH

With the ReadyBlock® range of Dense and Lightweight Aggregate Blocks from CEMEX, you are assured to find the building solution you need. Our blocks can be used with confidence in a wide variety of internal and external applications. Our quality assured manufacture ensures that ReadyBlock® units are of a consistent and superior quality to meet the requirements of all European and British standards.



Sizes available (in mm)

Length	Height	Width	
440	215	100	140
Block Weights (kg)*		100	140
Dry		18.5	26.0
3% Moisture Content		19.1	26.8

*These figures are a national average and variations may occur geographically, please contact your nearest Sales Office for more precise block weights.

ReadyBlock® Sales Office:
 North: 01236 822461
 South: 01298 22244

Product Specifications

CEMEX READYBLOCK® TO BS EN 771-3:2003

'Aggregate Concrete Masonry Units Category 1 (dense and light-weight aggregates)'

CATEGORY :	AGGREGATE CONCRETE MASONRY UNIT	
DIMENSIONAL TOLERANCES :	Category	D1 (+3mm, -5mm)
	Flatness	No Performance Determined
	Plane Parallelism	No Performance Determined

COMPRESSIVE STRENGTH : Mean 7.3 N/mm², 10.4 N/mm², 17.5 N/mm²,
Other strengths available on application

MOISTURE MOVEMENT COEFFICIENT : = < 0.5 mm/m

BOND STRENGTH : Fixed Value, 0.15N/mm²

REACTION TO FIRE : Class A1

WATER ABSORPTION : No Performance Determined

WATER VAPOUR PERMEABILITY(EN 1745) : 5/15 μ

GROSS DRY DENSITY : 1960 kg/m³

NET DRY DENSITY : 1960 kg/m³

THERMAL CONDUCTIVITY : Int, 1.29 W/mK Ext, 1.38 W/mK

DURABILITY AGAINST FREEZE-THAW : No Performance Determined

DANGEROUS SUBSTANCES : Information on dangerous substances will only be given when and where required and in the appropriate form.

Features and Benefits

- Provides an even surface for paint or other finishes
- Ideal for use where durability, economy and colour co-ordination are major considerations
- Can be utilised without additional finish*
- Inherent thermal mass acts as a heat store

* A consistent natural surface colour cannot be guaranteed

Delivery and Storage

Blocks are normally delivered to site in banded packs on crane-offload road vehicles. Where requested packs can be delivered shrink-wrapped and/or palletised to aid subsequent site movement activities. All packaging should be disposed of carefully in accordance with local environmental requirements.

If possible, delivered blocks should be stacked in planned locations on the site. This reduces the double-handling of the blocks.

Packs should be stacked carefully onto a prepared, clean, firm area to minimise soiling and damage. They should also be protected from inclement weather and passing vehicles. Allow air to circulate through and around the stacks.

Health and Safety

Care and attention should be given to the working area to minimise accidents. Further information may be found in HSE Construction Sheet 37-Handling Building Blocks.

Safe lift/build heights will vary dependant upon the block type, thickness, etc. Weather conditions can also affect lift heights and restrictions may be needed due to forecasted windy weather. Generally, lift heights should not exceed 6 full block courses in a single working day. For cavity wall construction, the 2 leaves should be built up together and the difference in leaf height, at any stage during construction, should generally not exceed 675mm.

A separate material safety datasheet for precast concrete products is available from CEMEX.

Blocklaying

General Construction: The building of masonry walling should be to the workmanship guidance given in BS 8000-3.

Walls Below DPC: Dense Blocks can be used below DPC and ground level as noted in Table 12 of BS 5628-3.

Laying in cold weather conditions: Blocks should not normally be laid when the temperature is at or below 3°C and falling or 1°C and rising.

Laying: Solid blocks should be laid on a full bed of mortar and the cross/perpend joints fully filled. When necessary, adjust the consistency of the mortar to suit the suction of the blocks.

Bond: Blocks should be laid to achieve a good bond, normally not less than one quarter the block length. In certain situations, consideration should be given to the addition of bed joint reinforcement.

Cutting and Chasing: Where cutting of blocks is required on-site, the use of a central cutting area should be encouraged. Vertical chasing in blockwork should not exceed one third of the block thickness and horizontal chasing one sixth. Back to back chases should be avoided.

Jointing: Mortar joints should be struck off as work proceeds. Where subsequent rendering or plastering is to take place, then rake out the joints to a depth of 15mm to act as a mortar key. Flush joints are recommended for facing work. Lightly tooling the joints highlights the arrises of the blocks and hence the coursing, scale and appearance of the finished wall. Raked joints should be used with caution.

Use in Sulfate Soils: Dense Blocks can be used in chemically aggressive ground conditions up to & including Class DC-3 as detailed in BRE Special Digest 1.

Mortar: Mortar should be specified in accordance with Cl. 5.7 of BS 5628-3. To limit the visual impact of shrinkage cracking, the weakest mortar specification appropriate to the structural design should be chosen.

Finished Work

Protection of finished work: All blockwork should be protected from inclement weather and other on-site practices. Suitable protective sheeting should be placed over the blockwork and firmly tied into place. Care must be taken to protect the work from frost damage or rapid drying out.

Movement Control: After construction, buildings are subject to small dimensional changes due to settlement, temperature change, moisture movement & carbonation. To account for this, movement joints should be provided in accordance with the recommendations of BS 5628: Part 3. Generally, they are required at intervals of 6-8m for external work. Movement joints are not normally required for basic domestic dwellings. Consideration for the location of movement joints should be given:

- At changes in wall height or thickness
- At changes of loading conditions
- At abutments of walls and columns and junctions of dissimilar materials
- To align with movement joints in concrete floor slabs
- Between 1m & 3m from a corner
- At locations of chases, recesses & openings

In areas of concentrated stress, such as above and below openings, consideration should be given to the use of mortar joint bed reinforcement.

Painting: For 2000 Solid Dense Close Textured ReadyBlock[®], two coats of alkali – resisting masonry paint is recommended, applied after the masonry has dried out. Before application any signs of efflorescence or other surface staining must be removed.

Fixing: The ReadyBlock[®] range provides an excellent medium for most types of fixings and readily accepts masonry nails, plugs or screws.

Efflorescence: Concrete products with high cement content may suffer the temporary phenomenon of efflorescence. This is not detrimental to the performance of the product and no responsibility can be accepted for its occurrence.

Sustainability

At CEMEX our environment matters, and the thermal mass of our ReadyBlock[®] range not only could reduce the need for air-conditioning in the summer but could also reduce the consumption of winter heating fuel by capturing solar gains.

FAQ's

Q. What is the U value (thermal performance) of ReadyBlock[®]?

A. Individual blocks do not have U Values. A U Value is determined by the type and thickness of each of the elements used to construct the wall, including airspaces. Extensive thermal insulation data is given in BRE Special Digest (SD4) 'Masonry walls and beam and block floors' available free of charge from CBA, alternatively, call our ReadyBlock[®] Helpline Tel: 0800 667 827.

Q. What is the life expectancy of aggregate blockwork?

A. It has been shown over a period of many decades that if protected from aggressive chemical or abrasive situations, concrete blockwork does not deteriorate with time.

Q. Are 2000 Solid Dense Close Textured ReadyBlock[®] suitable for the construction of party walls as regards sound insulation?

A. These blocks when built 'laid flat' as a solid wall have sufficient weight to comply with the recommendations of Part E of the Building Regulations. A 50mm cavity wall constructed with 100mm wide blocks also conforms providing a 13mm lightweight plaster finish is applied to both sides of the wall.

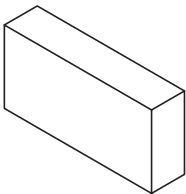
For more information contact our ReadyBlock[®] Helpline Tel: 0800 667 827.



Material Datasheet

850 SOLID LIGHTWEIGHT READYBLOCK[®] STANDARD FINISH

With the ReadyBlock[®] range of Dense and Lightweight Aggregate Blocks from CEMEX, you are assured to find the building solution you need. Our blocks can be used with confidence in a wide variety of internal and external applications. Our quality assured manufacture ensures that ReadyBlock[®] units are of a consistent and superior quality to meet the requirements of all European and British standards.



Sizes available (in mm)

Length	Height	Width	
440	215	100	140
Block Weights (kg)*		100	140
Dry		8.0	11.3
3% Moisture Content		8.2	11.6

*These figures are a national average and variations may occur geographically, please contact your nearest Sales Office for more precise block weights.

ReadyBlock[®] Sales Office:
 North: 01236 822461
 South: 01298 22244

Product Specifications

CEMEX READYBLOCK[®] TO BS EN 771-3:2003

'Aggregate Concrete Masonry Units Category 1 (dense and light-weight aggregates)'

CATEGORY :	AGGREGATE CONCRETE MASONRY UNIT	
DIMENSIONAL TOLERANCES :	Category	D1 (+3mm, -5mm)
	Flatness	No Performance Determined
	Plane Parallelism	No Performance Determined
COMPRESSIVE STRENGTH :	Mean	3.6 N/mm ²
MOISTURE MOVEMENT COEFFICIENT :	= < 1.0 mm/m	
BOND STRENGTH :	Fixed Value, 0.15N/mm ²	
REACTION TO FIRE :	Class A1	
WATER ABSORPTION :	No Performance Determined	
WATER VAPOUR PERMEABILITY(EN 1745) :	5/15 μ	
GROSS DRY DENSITY :	850 kg/m ³	
NET DRY DENSITY :	850 kg/m ³	
THERMAL CONDUCTIVITY :	Int, 0.30 W/mK	Ext, 0.32 W/mK
DURABILITY AGAINST FREEZE-THAW :	No Performance Determined	
DANGEROUS SUBSTANCES :	Information on dangerous substances will only be given when and where required and in the appropriate form.	

Features and Benefits

- Designed to meet the requirements of the building regulations
- Manufactured utilising lightweight aggregates for a lighter block
- Meets the requirements of the manual handling regulations
- Open textured finish provides an excellent medium for surface finishes and fixings
- Demonstrates a high level of thermal resistance thereby enhancing heat loss thermal calculations
- Also available in 1100 and 1400 densities to provide a range of excellent thermal and acoustic properties

Delivery and Storage

Blocks are normally delivered to site in banded packs on crane-offload road vehicles. Where requested packs can be delivered shrink-wrapped and/or palletised to aid subsequent site movement activities. All packaging should be disposed of carefully in accordance with local environmental requirements.

If possible, delivered blocks should be stacked in planned locations on the site. This reduces the double-handling of the blocks.

Packs should be stacked carefully onto a prepared, clean, firm area to minimise soiling and damage. They should also be protected from inclement weather and passing vehicles. Allow air to circulate through and around the stacks.

Health and Safety

Care and attention should be given to the working area to minimise accidents. Further information may be found in HSE Construction Sheet 37-Handling Building Blocks.

Safe lift/build heights will vary dependant upon the block type, thickness, etc. Weather conditions can also affect lift heights and restrictions may be needed due to forecasted windy weather. Generally, lift heights should not exceed 6 full block courses in a single working day. For cavity wall construction, the 2 leaves should be built up together and the difference in leaf height, at any stage during construction, should generally not exceed 675mm.

A separate material safety datasheet from precast concrete products is available from CEMEX.

Blocklaying

General Construction: The building of masonry walling should be to the workmanship guidance given in BS 8000-3.

Walls Below DPC: 850 Solid Lightweight Standard Finish ReadyBlock[®] are not suitable for use below DPC and ground level. We recommend the use of dense aggregate blocks in this situation.

Laying in cold weather conditions: Blocks should not normally be laid when the temperature is at or below 3°C and falling or 1°C and rising.

Laying: Solid blocks should be laid on a full bed of mortar and the cross/perpend joints fully filled. When necessary, adjust the consistency of the mortar to suit the suction of the blocks.

Bond: Blocks should be laid to achieve a good bond, normally not less than one quarter the block length. In certain situations, consideration should be given to the addition of bed joint reinforcement.

Cutting and Chasing: Where cutting of blocks is required on-site, the use of a central cutting area should be encouraged. Vertical chasing in blockwork should not exceed one third of the block thickness and horizontal chasing one sixth. Back to back chases should be avoided.

Jointing: Mortar joints should be struck off as work proceeds. Where subsequent rendering or plastering is to take place, then rake out the joints to a depth of 15mm to act as a mortar key. Flush joints are recommended for facing work. Lightly tooling the joints highlights the arrises of the blocks and hence the coursing, scale and

appearance of the finished wall. Raked joints should be used with caution.

Mortar: Mortar should be specified in accordance with Cl. 5.7 of BS 5628-3. To limit the visual impact of shrinkage cracking, the weakest mortar specification appropriate to the structural design should be chosen.

Finished Work

Protection of finished work: All blockwork should be protected from inclement weather and other on-site practices. Suitable protective sheeting should be placed over the blockwork and firmly tied into place. Care must be taken to protect the work from frost damage or rapid drying out.

Movement Control: After construction, buildings are subject to small dimensional changes due to settlement, temperature change, moisture movement & carbonation. To account for this, movement joints should be provided in accordance with the recommendations of BS 5628: Part 3. Generally, they are required at intervals of 6-8m for external work. Movement joints are not normally required for basic domestic dwellings. Consideration for the location of movement joints should be given:

- At changes in wall height or thickness
- At changes of loading conditions
- At abutments of walls and columns and junctions of dissimilar materials
- To align with movement joints in concrete floor slabs
- Between 1m & 3m from a corner
- At locations of chases, recesses & openings

In areas of concentrated stress, such as above and below openings, consideration should be given to the use of mortar joint bed reinforcement.

Render: All work should conform to recommendations stated in BS EN 13914-1 - External Rendering. In conditions of severe exposure, 3 coat work is recommended with a total thickness of 20mm. Allow adequate drying time between finishes or coats.

Plastering: All work should conform to the recommendations stated in BS EN 13914-2:2005 - Internal Plastering. The surface of 850 Solid Lightweight Standard Finish ReadyBlock[®] provides a good key for all types of plaster. Dry-lining systems are compatible with the ReadyBlock[®] range.

Painting: 850 Solid Lightweight Standard Finish ReadyBlock[®] is not intended to be directly painted. Where a paint finish is required a plaster or render finish should first be applied.

Fixing: The ReadyBlock[®] range provides an excellent medium for most types of fixings and readily accepts masonry nails, plugs or screws.

Efflorescence: Concrete products with high cement content may suffer the temporary phenomenon of efflorescence. This is not detrimental to the performance of the product and no responsibility can be accepted for its occurrence.

Sustainability

At CEMEX our environment matters, and the thermal mass of our ReadyBlock[®] range not only could reduce the need for air-conditioning in the summer but could also reduce the consumption of winter heating fuel by capturing solar gains.

FAQ's

Q. What is the U value (thermal performance) of ReadyBlock[®]?

A. Individual blocks do not have U Values. A U Value is determined by the type and thickness of each of the elements used to construct the wall, including airspaces. Extensive thermal insulation data is given in BRE Special Digest (SD4) 'Masonry walls and beam and block floors' available free of charge from CBA, alternatively, call our ReadyBlock[®] Helpline Tel: 0800 667 827.

Q. What is the life expectancy of aggregate blockwork?

A. It has been shown over a period of many decades that if protected from aggressive chemical or abrasive situations, concrete blockwork does not deteriorate with time.

Q. Are 850 Solid Lightweight Standard Finish ReadyBlock[®] suitable for the construction of party walls as regards sound insulation?

A. These blocks do not meet the general wall mass guidance in Building Regulations for party wall construction. The 100mm wide block has insufficient mass to be used in sound resistant external flanking cavity walls or single leaf internal walls. We do not therefore recommend their use in these situations.

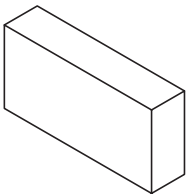
For more information contact our ReadyBlock[®] Helpline Tel: 0800 667 827.



Material Datasheet

1100 SOLID LIGHTWEIGHT READYBLOCK® STANDARD FINISH

With the ReadyBlock® range of Dense and Lightweight Aggregate Blocks from CEMEX, you are assured to find the building solution you need. Our blocks can be used with confidence in a wide variety of internal and external applications. Our quality assured manufacture ensures that ReadyBlock® units are of a consistent and superior quality to meet the requirements of all European and British standards.



Sizes available (in mm)

Length	Height	Width	
440	215	100	140
Block Weights (kg)*		100	140
Dry		10.4	14.6
3% Moisture Content		10.7	15.0

*These figures are a national average and variations may occur geographically, please contact your nearest Sales Office for more precise block weights.

ReadyBlock® Sales Office:
North: 01236 822461
South: 01298 22244

Product Specifications

CEMEX READYBLOCK® TO BS EN 771-3:2003

'Aggregate Concrete Masonry Units Category 1 (dense and light-weight aggregates)'

CATEGORY :	AGGREGATE CONCRETE MASONRY UNIT	
DIMENSIONAL TOLERANCES :	Category	D1 (+3mm, -5mm)
	Flatness	No Performance Determined
	Plane Parallelism	No Performance Determined
COMPRESSIVE STRENGTH :	Mean 3.6 N/mm ²	
MOISTURE MOVEMENT COEFFICIENT :	= < 1.0 mm/m	
BOND STRENGTH :	Fixed Value, 0.15N/mm ²	
REACTION TO FIRE :	Class A1	
WATER ABSORPTION :	No Performance Determined	
WATER VAPOUR PERMEABILITY(EN 1745) :	5/15 μ	
GROSS DRY DENSITY :	1100 kg/m ³	
NET DRY DENSITY :	1100 kg/m ³	
THERMAL CONDUCTIVITY :	Int, 0.39 W/mK Ext, 0.42 W/mK	
DURABILITY AGAINST FREEZE-THAW :	No Performance Determined	
DANGEROUS SUBSTANCES :	Information on dangerous substances will only be given when and where required and in the appropriate form.	

Features and Benefits

- Designed to meet the requirements of the Building regulations
- Demonstrates a high level of performance in loadbearing and other structural applications
- Manufactured utilising lightweight aggregates for a lighter block
- Meets the requirements of the manual handling regulations
- Open textured finish provides an excellent medium for surface finishes and fixings
- Inherent light weight limits heat loss through external walls
- Also available in 850 and 1400 densities to provide a range of excellent thermal and acoustic properties

Delivery and Storage

Blocks are normally delivered to site in banded packs on crane-offload road vehicles. Where requested packs can be delivered shrink-wrapped and/or palletised to aid subsequent site movement activities. All packaging should be disposed of carefully in accordance with local environmental requirements.

If possible, delivered blocks should be stacked in planned locations on the site. This reduces the double-handling of the blocks.

Packs should be stacked carefully onto a prepared, clean, firm area to minimise soiling and damage. They should also be protected from inclement weather and passing vehicles. Allow air to circulate through and around the stacks.

Health and Safety

Care and attention should be given to the working area to minimise accidents. Further information may be found in HSE Construction Sheet 37-Handling Building Blocks.

Safe lift/build heights will vary dependant upon the block type, thickness, etc. Weather conditions can also affect lift heights and restrictions may be needed due to forecasted windy weather. Generally, lift heights should not exceed 6 full block courses in a single working day. For cavity wall construction, the 2 leaves should be built up together and the difference in leaf height, at any stage during construction, should generally not exceed 675mm.

A separate material safety datasheet for precast concrete products is available from CEMEX.

Blocklaying

General Construction: The building of masonry walling should be to the workmanship guidance given in BS 8000-3.

Walls Below DPC: 1100 Solid Lightweight Standard Finish ReadyBlock[®] are not suitable for use below DPC and ground level. We recommend the use of dense aggregate blocks in this situation.

Laying in cold weather conditions: Blocks should not normally be laid when the temperature is at or below 3°C and falling or 1°C and rising.

Laying: Solid blocks should be laid on a full bed of mortar and the cross/perpend joints fully filled. When necessary, adjust the consistency of the mortar to suit the suction of the blocks.

Bond: Blocks should be laid to achieve a good bond, normally not less than one quarter the block length. In certain situations, consideration should be given to the addition of bed joint reinforcement.

Cutting and Chasing: Where cutting of blocks is required on-site, the use of a central cutting area should be encouraged. Vertical chasing in blockwork should not exceed one third of the block thickness and horizontal chasing one sixth. Back to back chases should be avoided.

Jointing: Mortar joints should be struck off as work proceeds. Where subsequent rendering or plastering is to take place, then rake out the joints to a depth of 15mm to act as a mortar key. Flush joints are recommended for facing work. Lightly tooling the joints highlights the arrises of the blocks and hence the coursing, scale and

appearance of the finished wall. Raked joints should be used with caution.

Mortar: Mortar should be specified in accordance with Cl. 5.7 of BS 5628-3. To limit the visual impact of shrinkage cracking, the weakest mortar specification appropriate to the structural design should be chosen.

Finished Work

Protection of finished work: All blockwork should be protected from inclement weather and other on-site practices. Suitable protective sheeting should be placed over the blockwork and firmly tied into place. Care must be taken to protect the work from frost damage or rapid drying out.

Movement Control: After construction, buildings are subject to small dimensional changes due to settlement, temperature change, moisture movement & carbonation. To account for this, movement joints should be provided in accordance with the recommendations of BS 5628: Part 3. Generally, they are required at intervals of 6-8m for external work. Movement joints are not normally required for basic domestic dwellings. Consideration for the location of movement joints should be given:

- At changes in wall height or thickness
- At changes of loading conditions
- At abutments of walls and columns and junctions of dissimilar materials
- To align with movement joints in concrete floor slabs
- Between 1m & 3m from a corner
- At locations of chases, recesses & openings

In areas of concentrated stress, such as above and below openings, consideration should be given to the use of mortar joint bed reinforcement.

Render: All work should conform to recommendations stated in BS EN 13914-1 - External Rendering. In conditions of severe exposure, 3 coat work is recommended with a total thickness of 20mm. Allow adequate drying time between finishes or coats.

Plastering: All work should conform to the recommendations stated in BS EN 13914-2:2005 - Internal Plastering. The surface of 1100 Solid Lightweight Standard Finish ReadyBlock[®] provides a good key for all types of plaster. Dry-lining systems are compatible with the ReadyBlock[®] range.

Painting: 1100 Solid Lightweight Standard Finish ReadyBlock[®] is not intended to be directly painted. Where a paint finish is required a plaster or render finish should first be applied.

Fixing: The ReadyBlock[®] range provides an excellent medium for most types of fixings and readily accepts masonry nails, plugs or screws.

Efflorescence: Concrete products with high cement content may suffer the temporary phenomenon of efflorescence. This is not detrimental to the performance of the product and no responsibility can be accepted for its occurrence.

Sustainability

At CEMEX our environment matters, and the thermal mass of our ReadyBlock[®] range not only could reduce the need for air-conditioning in the summer but could also reduce the consumption of winter heating fuel by capturing solar gains.

FAQ's

Q. What is the U value (thermal performance) of ReadyBlock[®]?

A. Individual blocks do not have U Values. A U Value is determined by the type and thickness of each of the elements used to construct the wall, including airspaces. Extensive thermal insulation data is given in BRE Special Digest (SD4) 'Masonry walls and beam and block floors' available free of charge from CBA, alternatively, call our ReadyBlock[®] Helpline Tel: 0800 667 827.

Q. What is the life expectancy of aggregate blockwork?

A. It has been shown over a period of many decades that if protected from aggressive chemical or abrasive situations, concrete blockwork does not deteriorate with time.

Q. Are 1100 Solid Lightweight Standard Finish ReadyBlock[®] suitable for the construction of party walls as regards sound insulation?

A. These blocks do not meet the general wall mass guidance in Building Regulations for party wall construction. The 100mm wide block has insufficient mass to be used in sound resistant external flanking cavity walls or single leaf internal walls. We do not therefore recommend their use in these situations.

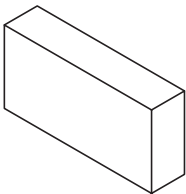
**For more information contact our ReadyBlock[®] Helpline
Tel: 0800 667 827.**



Material Datasheet

1400 SOLID LIGHTWEIGHT READYBLOCK® STANDARD FINISH

With the ReadyBlock® range of Dense and Lightweight Aggregate Blocks from CEMEX, you are assured to find the building solution you need. Our blocks can be used with confidence in a wide variety of internal and external applications. Our quality assured manufacture ensures that ReadyBlock® units are of a consistent and superior quality to meet the requirements of all European and British standards.



Sizes available (in mm)

Length	Height	Width	
440	215	100	140
Block Weights (kg)*		100	140
Dry		13.2	18.5
3% Moisture Content		13.6	19.1

*These figures are a national average and variations may occur geographically, please contact your nearest Sales Office for more precise block weights.

ReadyBlock® Sales Office:
North: 01236 822461
South: 01298 22244

ReadyFloor® Beam and Block Flooring System:
Tel: 01179 373740

Product Specifications

CEMEX READYBLOCK® TO BS EN 771-3:2003

'Aggregate Concrete Masonry Units Category 1 (dense and light-weight aggregates)'

CATEGORY :	AGGREGATE CONCRETE MASONRY UNIT	
DIMENSIONAL TOLERANCES :	Category	D1 (+3mm, -5mm)
	Flatness	No Performance Determined
	Plane Parallelism	No Performance Determined

COMPRESSIVE STRENGTH : Mean 7.3 N/mm² Other strengths available on application

MOISTURE MOVEMENT COEFFICIENT : = < 1.00 mm/m

BOND STRENGTH : Fixed Value, 0.15N/mm²

REACTION TO FIRE : Class A1

WATER ABSORPTION : No Performance Determined

WATER VAPOUR PERMEABILITY(EN 1745) : 5/15 μ

GROSS DRY DENSITY : 1400 kg/m³

NET DRY DENSITY : 1400 kg/m³

THERMAL CONDUCTIVITY : Int, 0.46 W/mK Ext, 0.49 W/mK

DURABILITY AGAINST FREEZE-THAW : No Performance Determined

DANGEROUS SUBSTANCES : Information on dangerous substances will only be given when and where required and in the appropriate form.

Features and Benefits

- Designed to meet the requirements of the Building regulations
- Demonstrates a high level of performance in loadbearing and other structural applications
- Can be used both above and below ground
- Manufactured utilising lightweight aggregates for a lighter block
- Meets the requirements of the manual handling regulations
- Open textured finish provides an excellent medium for surface finishes and fixings
- Inherent light weight limits heat loss through external walls
- Also available in 850 and 1100 densities to provide a range of excellent thermal and acoustic properties
- All 7.3 N/mm² ReadyBlock® are suitable for use in ReadyFloor® Beam and Block floor system.
For 3.6 N/mm² please consult your local sales office for approved certification

Delivery and Storage

Blocks are normally delivered to site in banded packs on crane-offload road vehicles. Where requested packs can be delivered shrink-wrapped and/or palletised to aid subsequent site movement activities. All packaging should be disposed of carefully in accordance with local environmental requirements.

If possible, delivered blocks should be stacked in planned locations on the site. This reduces the double-handling of the blocks.

Packs should be stacked carefully onto a prepared, clean, firm area to minimise soiling and damage. They should also be protected from inclement weather and passing vehicles. Allow air to circulate through and around the stacks.

Health and Safety

Care and attention should be given to the working area to minimise accidents. Further information may be found in HSE Construction Sheet 37-Handling Building Blocks.

Safe lift/build heights will vary dependant upon the block type, thickness, etc. Weather conditions can also affect lift heights and restrictions may be needed due to forecasted windy weather. Generally, lift heights should not exceed 6 full block courses in a single working day. For cavity wall construction, the 2 leaves should be built up together and the difference in leaf height, at any stage during construction, should generally not exceed 675mm.

A separate material safety datasheet for precast concrete products is available from CEMEX.

Blocklaying

General Construction: The building of masonry walling should be to the workmanship guidance given in BS 8000-3.

Walls Below DPC: 1400 Solid Standard Finish Lightweight ReadyBlock® can be used below DPC and ground level as noted in Table 12 of BS 5628-3.

Laying in cold weather conditions: Blocks should not normally be laid when the temperature is at or below 3°C and falling or 1°C and rising.

Laying: Solid blocks should be laid on a full bed of mortar and the cross/perpend joints fully filled. When necessary, adjust the consistency of the mortar to suit the suction of the blocks.

Bond: Blocks should be laid to achieve a good bond, normally not less than one quarter the block length. In certain situations, consideration should be given to the addition of bed joint reinforcement.

Cutting and Chasing: Where cutting of blocks is required on-site, the use of a central cutting area should be encouraged. Vertical chasing in blockwork should not exceed one third of the block thickness and horizontal chasing one sixth. Back to back chases should be avoided.

Jointing: Mortar joints should be struck off as work proceeds. Where subsequent rendering or plastering is to take place, then rake out the joints to a depth of 15mm to act as a mortar key. Flush joints are recommended for facing work. Lightly tooling the joints highlights the arrises of the blocks and hence the coursing, scale and appearance of the finished wall. Raked joints should be used with caution.

Use in Sulfate Soils: 1400 Solid Standard Finish Lightweight ReadyBlock® can be used in chemically aggressive ground conditions up to & including Class DS-3 as detailed in BRE Special Digest 1.

Mortar: Mortar should be specified in accordance with Cl. 5.7 of BS 5628-3. To limit the visual impact of shrinkage cracking, the weakest mortar specification appropriate to the structural design should be chosen.

Finished Work

Protection of finished work: All blockwork should be protected from inclement weather and other on-site practices. Suitable protective sheeting should be placed over the blockwork and firmly tied into place. Care must be taken to protect the work from frost damage or rapid drying out.

Movement Control: After construction, buildings are subject to small dimensional changes due to settlement, temperature change, moisture movement & carbonation. To account for this, movement joints should be provided in accordance with the recommendations of BS 5628: Part 3. Generally, they are required at intervals of 6-8m for external work. Movement joints are not normally required for basic domestic dwellings. Consideration for the location of movement joints should be given:

- At changes in wall height or thickness
- At changes of loading conditions
- At abutments of walls and columns and junctions of dissimilar materials
- To align with movement joints in concrete floor slabs
- Between 1m & 3m from a corner
- At locations of chases, recesses & openings

In areas of concentrated stress, such as above and below openings, consideration should be given to the use of mortar joint bed reinforcement.

Render: All work should conform to recommendations stated in BS EN 13914-1- External Rendering.

In conditions of severe exposure, 3 coat work is recommended with a total thickness of 20mm.

Allow adequate drying time between finishes or coats.

Plastering: All work should conform to the recommendations stated in BS EN 13914-2:2005 - Internal Plastering. The surface of 1400 Solid Standard Finish Lightweight ReadyBlock® provides a good key for all types of plaster. Dry-lining systems are compatible with the ReadyBlock® range.

Painting: 1400 Solid Standard Finish Lightweight ReadyBlock® is not intended to be directly painted. Where a paint finish is required a plaster or render finish should first be applied.

Fixing: The ReadyBlock® range provides an excellent medium for most types of fixings and readily accepts masonry nails, plugs or screws.

Efflorescence: Concrete products with high cement content may suffer the temporary phenomenon of efflorescence. This is not detrimental to the performance of the product and no responsibility can be accepted for its occurrence.

Sustainability

At CEMEX our environment matters, and the thermal mass of our ReadyBlock® range not only could reduce the need for air-conditioning in the summer but could also reduce the consumption of winter heating fuel by capturing solar gains.

FAQ's

Q. What is the U value (thermal performance) of ReadyBlock®?

A. Individual blocks do not have U Values. A U Value is determined by the type and thickness of each of the elements used to construct the wall, including airspaces. Extensive thermal insulation data is given in BRE Special Digest (SD4) 'Masonry walls and beam and block floors' available free of charge from CBA, alternatively, call our ReadyBlock® Helpline Tel: 0800 667 827.

Q. What is the life expectancy of aggregate blockwork?

A. It has been shown over a period of many decades that if protected from aggressive chemical or abrasive situations, concrete blockwork does not deteriorate with time.

Q. Are 1400 Solid Lightweight Standard finish ReadyBlock® suitable for the construction of party walls as regards sound insulation?

A. These blocks when built as a 75mm cavity wall have sufficient weight to comply with the recommendations of Part E of the Building Regulations provided that a plaster finish is applied to both sides of the wall.

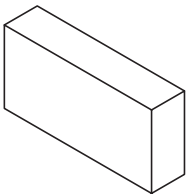
For more information contact our ReadyBlock® Helpline Tel: 0800 667 827.



Material Datasheet

1400 SOLID LIGHTWEIGHT READYBLOCK® CLOSE TEXTURED FINISH

With the ReadyBlock® range of Dense and Lightweight Aggregate Blocks from CEMEX, you are assured to find the building solution you need. Our blocks can be used with confidence in a wide variety of internal and external applications. Our quality assured manufacture ensures that ReadyBlock® units are of a consistent and superior quality to meet the requirements of all European and British standards.



Sizes available (in mm)

Length	Height	Width	
440	215	100	140
Block Weights (kg)*		100	140
Dry		13.2	18.5
3% Moisture Content		13.6	19.1

*These figures are a national average and variations may occur geographically, please contact your nearest Sales Office for more precise block weights.

ReadyBlock® Sales Office:
North: 01236 822461
South: 01298 22244

Product Specifications

CEMEX READYBLOCK® TO BS EN 771-3:2003

'Aggregate Concrete Masonry Units Category 1 (dense and light-weight aggregates)'

CATEGORY :	AGGREGATE CONCRETE MASONRY UNIT	
DIMENSIONAL TOLERANCES :	Category	D1 (+3mm, -5mm)
	Flatness	No Performance Determined
	Plane Parallelism	No Performance Determined
COMPRESSIVE STRENGTH :	Mean 7.3 N/mm ² Other strengths available on application	
MOISTURE MOVEMENT COEFFICIENT :	= < 1.0 mm/m	
BOND STRENGTH :	Fixed Value, 0.15N/mm ²	
REACTION TO FIRE :	Class A1	
WATER ABSORPTION :	No Performance Determined	
WATER VAPOUR PERMEABILITY(EN 1745) :	5/15 μ	
GROSS DRY DENSITY :	1400 kg/m ³	
NET DRY DENSITY :	1400 kg/m ³	
THERMAL CONDUCTIVITY :	Int, 0.46 W/mK	Ext, 0.49 W/mK
DURABILITY AGAINST FREEZE-THAW :	No Performance Determined	
DANGEROUS SUBSTANCES :	Information on dangerous substances will only be given when and where required and in the appropriate form.	

Features and Benefits

- Ideally suited for use in commercial and leisure developments
- Perfect for use where durability, economy and colour co-ordination are major considerations
- Provides an even surface for paint or other finishes
- May be utilised without an additional finish in internal situations*
- Provides excellent resistance to air permeability when utilised with two coats of masonry paint
- Manufactured utilising lightweight aggregates for a lighter block
- Meets the requirements of the manual handling regulations

* A consistent natural surface colour cannot be guaranteed

Delivery and Storage

Blocks are normally delivered to site in banded packs on crane-offload road vehicles. Where requested packs can be delivered shrink-wrapped and/or palletised to aid subsequent site movement activities. All packaging should be disposed of carefully in accordance with local environmental requirements.

If possible, delivered blocks should be stacked in planned locations on the site. This reduces the double-handling of the blocks.

Packs should be stacked carefully onto a prepared, clean, firm area to minimise soiling and damage. They should also be protected from inclement weather and passing vehicles. Allow air to circulate through and around the stacks.

Health and Safety

Care and attention should be given to the working area to minimise accidents. Further information may be found in HSE Construction Sheet 37-Handling Building Blocks.

Safe lift/build heights will vary dependant upon the block type, thickness, etc. Weather conditions can also affect lift heights and restrictions may be needed due to forecasted windy weather. Generally, lift heights should not exceed 6 full block courses in a single working day. For cavity wall construction, the 2 leaves should be built up together and the difference in leaf height, at any stage during construction, should generally not exceed 675mm.

A separate material safety datasheet for precast concrete products is available from CEMEX.

Blocklaying

General Construction: The building of masonry walling should be to the workmanship guidance given in BS 8000-3.

Walls Below DPC: 1400 Solid Lightweight Close Textured Blocks can be used below DPC and ground level as noted in Table 12 of BS 5628-3.

Laying in cold weather conditions: Blocks should not normally be laid when the temperature is at or below 3°C and falling or 1°C and rising.

Laying: Solid blocks should be laid on a full bed of mortar and the cross/perpend joints fully filled. When necessary, adjust the consistency of the mortar to suit the suction of the blocks.

Bond: Blocks should be laid to achieve a good bond, normally not less than one quarter the block length. In certain situations, consideration should be given to the addition of bed joint reinforcement.

Cutting and Chasing: Where cutting of blocks is required on-site, the use of a central cutting area should be encouraged. Vertical chasing in blockwork should not exceed one third of the block thickness and horizontal chasing one sixth. Back to back chases should be avoided.

Jointing: Mortar joints should be struck off as work proceeds. Where subsequent rendering or plastering is to take place, then rake out the joints to a depth of 15mm to act as a mortar key. Flush joints are recommended for facing work. Lightly tooling the joints highlights the arrises of the blocks and hence the coursing, scale and appearance of the finished wall. Raked joints should be used with caution.

Use in Sulfate Soils: 1400 Close Textured Lightweight Blocks can be used in chemically aggressive ground conditions up to & including Class DS-3 as detailed in BRE Special Digest 1.

Mortar: Mortar should be specified in accordance with Cl. 5.7 of BS 5628-3. To limit the visual impact of shrinkage cracking, the weakest mortar specification appropriate to the structural design should be chosen.

Finished Work

Protection of finished work: All blockwork should be protected from inclement weather and other on-site practices. Suitable protective sheeting should be placed over the blockwork and firmly tied into place. Care must be taken to protect the work from frost damage or rapid drying out.

Movement Control: After construction, buildings are subject to small dimensional changes due to settlement, temperature change, moisture movement & carbonation. To account for this, movement joints should be provided in accordance with the recommendations of BS 5628: Part 3. Generally, they are required at intervals of 6-8m for external work. Movement joints are not normally required for basic domestic dwellings. Consideration for the location of movement joints should be given:

- At changes in wall height or thickness
- At changes of loading conditions
- At abutments of walls and columns and junctions of dissimilar materials
- To align with movement joints in concrete floor slabs
- Between 1m & 3m from a corner
- At locations of chases, recesses & openings

In areas of concentrated stress, such as above and below openings, consideration should be given to the use of mortar joint bed reinforcement.

Painting: For 1400 Solid Lightweight Close Textured ReadyBlock[®], two coats of alkali – resisting masonry paint is recommended, applied after the masonry has dried out. Before application any signs of efflorescence or other surface staining must be removed.

Fixing: The ReadyBlock[®] range provides an excellent medium for most types of fixings and readily accepts masonry nails, plugs or screws.

Efflorescence: Concrete products with high cement content may suffer the temporary phenomenon of efflorescence. This is not detrimental to the performance of the product and no responsibility can be accepted for its occurrence.

Sustainability

At CEMEX our environment matters, and the thermal mass of our ReadyBlock[®] range not only could reduce the need for air-conditioning in the summer but could also reduce the consumption of winter heating fuel by capturing solar gains.

FAQ's

Q. What is the U value (thermal performance) of ReadyBlock[®]?

A. Individual blocks do not have U Values. A U Value is determined by the type and thickness of each of the elements used to construct the wall, including airspaces. Extensive thermal insulation data is given in BRE Special Digest (SD4) 'Masonry walls and beam and block floors' available free of charge from CBA, alternatively, call our ReadyBlock[®] Helpline Tel: 0800 667 827.

Q. What is the life expectancy of aggregate blockwork?

A. It has been shown over a period of many decades that if protected from aggressive chemical or abrasive situations, concrete blockwork does not deteriorate with time.

Q. Are 1400 Solid Lightweight Close Textured ReadyBlock[®] suitable for the construction of party walls as regards sound insulation?

A. These blocks when built as a 75mm cavity wall have sufficient weight to comply with the recommendations of Part E of the Building Regulations. It is recommended that a plaster finish is applied to both sides of the wall.

For more information contact our ReadyBlock[®] Helpline Tel: 0800 667 827.



Material Datasheet

PART E

Use of ReadyBlock® for compliance with the 2003 Edition of The Building Regulations (England & Wales) – Resistance to the Passage of Sound

BASIC REQUIREMENTS TO BE MET

Part E of the Building Regulations defines the requirements for acceptable control of the spread of noise within buildings and to adjoining buildings. Part E is applied in England and Wales as a requirement of the Local Authority planning approval process before a building can be constructed from new, or substantial alterations can be made to an existing construction.

Masonry wall constructions to which Regulations are applied are:

- Party walls which form the separation between areas of independent occupation
- The inner leaf of external walls in the vicinity of a party wall
- The internal walls within a building area of single occupation

1) TO MEET THE REQUIREMENTS FOR A PARTY WALL

There are two alternative procedural ways of meeting the Part E requirements for party walls using ReadyBlock®

- Opt to use a registered **Robust Detail**. A robust detail is a design of wall that has been pre-approved by 'Robust Details Ltd.' and provided their fee is paid and the detail is followed in construction then the wall built will be accepted as suitably sound resistant without pre-completion sound testing. (Designs of walls that meet Robust Detail requirements using ReadyBlock® are as detailed in The Robust Details Ltd Handbook).

- Use one of the technical solutions as detailed in Part E which use minimum wall mass to anticipate compliance. These designs are suggested as normally compliant as regards sound reduction and therefore suitable to gain approval for construction.

- 1) **Wall Type 1.1** – Solid party wall, 215mm width, block laid flat, 13mm plaster each side, requirement = 415kg/m². This type can be built using any ReadyBlock® solid dense block type laid flat.
- 2) **Wall Type 2.1** – 50mm cavity party wall, 100mm block type, 13mm plaster each side, requirement = 415kg/m². This type of wall can be built using ReadyBlock® 100mm solid dense blocks.
- 3) **Wall Type 2.2** – 75mm cavity party wall, 100mm block type, 13mm plaster each side, requirement = 300kg/m². This type of wall can be built using ReadyBlock® 1400 solid lightweight blocks.
- 4) **Wall Type 3.2** – Solid core of 140mm width lightweight block + Independent wall panels party wall, requirement = 150kg/m² (for core). This type of wall can be built using ReadyBlock® 1400 solid lightweight blocks.
- 5) **Wall Type 3.3** – 50mm cavity core of 100mm width blocks + Independent wall panels party wall, requirement = No density requirement (for core). This type of wall can be built using any 100mm wide ReadyBlock®.

As the above designs are not presently registered with Robust Details it is necessary to have a pre-completion sound test conducted after construction before full acceptance of compliance with Part E can be obtained.

2) TO MEET THE REQUIREMENTS FOR THE INNER LEAF OF EXTERNAL WALLS IN THE VICINITY OF A PARTY WALL OR A SEPARATING FLOOR

The requirement here is to prevent excessive sound transmission around the ends of a party wall or a separating floor. The potential sound path is through the inner leaf of the flanking external wall and via the connecting cavity.

If there is no separating floors, the party wall is a Type 2.1 or the party wall is a Type 3 and the independent panels continue along the flanking wall then there is no sound reduction requirement and any ReadyBlock® can be used.

If there is a separating floor, the party wall is a Type 1.1 or Type 2.2 or the party wall is a Type 3 and the independent panels finish at the flanking wall junction then a minimum mass of 120kg/m² needs to be applied to the inner leaf of the flanking wall. To comply with this requirement any ReadyBlock® can be used except for the 100mm 850 and 1100 solid lightweight blocks.

3) TO MEET THE REQUIREMENTS FOR THE INTERNAL WALLS WITHIN BUILDING AREAS OF SINGLE OCCUPATION

This is a new requirement and applies to walls within a single occupancy building. To meet this requirement using ReadyBlock® requires a wall plastered or plasterboarded on both sides and a minimum mass of 120kg/m². To comply with this requirement any ReadyBlock® can be used except for the 100mm 850 and 1100 solid lightweight blocks.

**For more information contact our ReadyBlock® Helpline
Tel: 0800 667 827.**



Material Datasheet

PART L

Use of ReadyBlock[®] for compliance with the 2006 Edition of the Building Regulations (England and Wales) – Conservation of Fuel and Power

Part L1A – New dwellings

Part L1B – Existing dwellings

Part L2A – New buildings other than dwellings

Part L2B – Existing buildings other than dwellings

BASIC REQUIREMENTS TO BE MET

Part L1 of the Building Regulations (England and Wales) defines the requirements for the design of new dwellings and the conversion/extension of existing dwellings so as to provide reasonable provision for the conservation of heat and power.

Part L2 of the Building Regulations (England and Wales) defines the requirements for the design of new buildings other than dwellings and the conversion/extension of existing buildings other than dwellings so as to provide reasonable provision for the conservation of heat and power.

Despite the above separation being of dwellings from non-dwellings, the approach differences are actually between *new-build* and *conversion/extension*.

TO MEET THE REQUIREMENTS FOR NEW-BUILD

1) At the design stage

The 2006 regulations no longer approve the use of the Elemental or Target U-value processes to achieve compliance. The only way to show compliance is the achievement of a **TER** (Target CO₂ Emissions Rate).

Calculation processes called **SAP procedures** are used at the design stage to combine together all factors that can influence the heating requirements of the building. These are – building size and shape, insulation performance, size and type of windows, space and water heating systems/controls/ fuel type and building air tightness. The SAP procedures can be calculated manually but they are normally conducted by architects or insulation suppliers and installers using proprietary software.

To calculate what the TER is for a proposed construction, the following SAP calculations must be followed

- a) The SAP from the Part L 2002 is applied to a 'benchmark' notional basic building to calculate a **DER** (Dwelling CO₂ Emission Rate) if constructed under the 2002 Part L.
- b) The DER from (a) then has the 2005 Part L SAP procedure applied to achieve a further saving in CO₂ emissions of at least 20%. The resultant DER is then the **TER** (Target CO₂ Emission Rate) which the building must achieve to comply with building regulations.

Once the TER has been set for the proposed construction the SAP calculations require repeating using the particular details and features being specified to check that in theory the target TER will be complied with.

In addition to the basic thermal efficiency of the design, Part L also requires designers to:

- a) Use design features which are within minimum reasonable efficiency parameters. In the case of external walls a maximum U-value of 0.35W/m²K is the limit.
- b) Use appropriate design features such that high internal temperature due to excessive solar gain is avoided. This is to limit the need for fuel-consuming air conditioning systems.
- c) Provide operation and maintenance instructions to the building owner as to how to correctly and efficiently use the building.

So far as external walls are concerned, the upshot of the above design and approval procedures is that the U-value requirements will almost always fall somewhere within the range of 0.25 – 0.30W/m²K. The exact figure will depend on the detail design.

2) At the construction Stage

Inappropriate construction detailing or poor workmanship can result in a theoretically acceptable design becoming non-compliant on completion. This is due to thermal bridging and air leakage paths. Thermal bridging will be checked for during construction and excessive air leakage will be shown up by mandatory air pressure testing, as demanded by the regulations and required by the local authority. This site testing must be carried out by a contractor approved by the ATTMA (Air Tightness Testing and Measurement Association).

Use of Accredited Construction Details (ACD's) will result in a reduced number of site tests being required.

TO MEET THE REQUIREMENTS FOR REFURBISHMENT AND EXTENSIONS

1) DWELLINGS

The 2006 Regulations allow a considerably simpler elemental approach to be taken to extensions/material alterations and change of use situations.

The requirements for walls being:

Constructional Element	Required U-Value
Newly built walling (Cavity or Other Type)	0.30 (W/m ² K)
Replacement walling (Cavity or Other Type)	0.35* (W/m ² K)
Upgraded but retained walling (Cavity)	0.55** (W/m ² K)
Upgraded but retained walling (Other Type)	0.35 (W/m ² K)
Renovated walling (Cavity or Other Type)	0.35* (W/m ² K)

* A lesser requirement may be allowed if more than 5% of internal floor area bounded by the wall would be lost.

** This value is stated to allow compliance where the cavity can be filled with insulation. If any other design is proposed then the compliant value is changed to 0.35.

2) Non-Dwellings

Requirements are as in (1) above, with the following additional factors:

- 1) Where the building being developed is in excess of 1000m² of floor area, the development must be treated as new-build.
- 2) Where the building work is an extension in excess of 100m² and it represents in excess of 25% of the floor area of the existing building, then the development must be treated as new-build.

TO ACHIEVE A STIPULATED U-VALUE FOR A WALL USING READYBLOCK[®]

Whatever U-value is demanded by the above processes, the actual wall construction chosen will be a compromise based on the aesthetic requirements of the building and the type of insulation system to be used.

The basic wall structure of external leaf, cavity, internal leaf and plaster/render finishes is a long way from complying with a U-value between 0.25 and 0.35W/m²K. A compliant U-value is reached by adding insulating materials to either the external wall surface, the cavity or the internal surface; or a combination of these locations.

The most common forms of insulation are cavity lining with low emissivity thermal boards and full cavity fill with rigid or semi-rigid fibrous batts. The thicker the insulation layer is the lower the U-value obtained, so theoretically to achieve a compliant wall you simply choose the required thickness of insulation. However in some situations it is advantageous to choose to use lighter-weight blocks and/or thermal plasterboard systems as their enhanced thermal performance can reduce the required thickness of the main insulation.

CEMEX technical staff can advise on product selection and carry out U-value calculations.

**For more information contact our ReadyBlock[®] Helpline
Tel: 0800 667 827.**



Material Datasheet

NOTIONAL FIRE RESISTANCE OF WALLS

for CEMEX ReadyBlock[®] manufactured using CLASS 1 aggregates.

	SINGLE LEAF		CAVITY WALL	
	Loadbearing	Non-loadbearing	Loadbearing	Non-loadbearing
Solid Dense				
75mm	-	2 hr (2 hr)	-	4 hr
90mm	1 hr	2 hr (3 hr)	1 hr	6 hr
100mm	2 hr	2 hr (4 hr)	6 hr	6 hr
140mm	3 hr	4 hr (4 hr)	6 hr	6 hr
190mm	6 hr	6 hr (6 hr)	6 hr	6 hr
215mm	6 hr	6 hr (6 hr)	6 hr	6 hr
Cellular / Hollow				
100mm	2 hr	2 hr (2 hr)	4 hr	6 hr
140mm	2 hr	3 hr (4 hr)	4 hr	6 hr
190mm	2 hr	4 hr (6 hr)	4 hr	6 hr
215mm	2 hr	4 hr (6 hr)	4 hr	6 hr
Lightweight 1400				
100mm	2 hr	2 hr (4 hr)	6 hr	6 hr
140mm	3 hr	4 hr (4 hr)	6 hr	6 hr
Lightweight 1100				
100mm	2 hr	2 hr (4 hr)	6 hr	6 hr
140mm	3 hr	4 hr (4 hr)	6 hr	6 hr

The bracketed figures denote walls finished with not less than 13mm of sand:cement or sand:gypsum (with or without lime) plaster or rendering on each face of a single leaf wall. Plasterboard of an equivalent thickness may be substituted for fire resistance periods up to 2 hrs.



Material Datasheet

NOTIONAL FIRE RESISTANCE OF WALLS

for CEMEX ReadyBlock[®] manufactured using CLASS 2 aggregates.

	SINGLE LEAF		CAVITY WALL	
	Loadbearing	Non-loadbearing	Loadbearing	Non-loadbearing
Solid Dense				
75mm	-	1 hr (1 hr)	-	4 hr
90mm	1 hr	1½ hr (2 hr)	1 hr	6 hr
100mm	2 hr	2 hr (3 hr)	2 hr	6 hr
140mm	2 hr	3 hr (4 hr)	2 hr	6 hr
190mm	2 hr	4 hr (6 hr)	2 hr	6 hr
215mm	2 hr	6 hr (6 hr)	2 hr	6 hr
Cellular / Hollow				
100mm	-	½ hr (½ hr)		
140mm	-	3 hr (4 hr)		
190mm	- (½)	4 hr (6 hr)		
215mm	- (½)	6 hr (6 hr)		

The bracketed figures denote walls finished with not less than 13mm of sand:cement or sand:gypsum (with or without lime) plaster or rendering on each face of a single leaf wall. Plasterboard of an equivalent thickness may be substituted for fire resistance periods up to 2 hrs.

For more information contact our ReadyBlock[®] Helpline Tel: 0800 667 827.