

CI/SfB | Yq4 | (Agn)

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Introduction

This data sheet provides a brief directory of simplified terms, descriptions and definitions in common usage within the construction industry in both UK and European markets.

Terms, descriptions and definitions

A Basic terms

Term	Description
Mortar	A mixture of one or more inorganic or organic binders, aggregates, fillers, additives and/or admixtures
Mortar class	Numeric value stating the minimum compressive strength at 28 days (as from BS EN 998)
Mortar designation	A notation that indicates the composition of the mortar from which certain physical properties may be inferred (traditional)
Factory produced mortars	These are produced in a factory in an either wet or dry state and delivered to site ready to use
Wet ready to use	Material produced in a factory and delivered to site, requiring no further mixing and stored in containers
Dry ready to use	Material produced in a factory and delivered to site in silos or bags and requiring only the addition of water
Premixed lime:sand	Constituents batched and mixed in a factory and supplied to the building site where cementitious binder and water are added to produce mortar
Silo mortar	Material whose constituents are batched in a factory and supplied to the building site for use in a transportable silo and mixed there according to manufacturer's instructions
Prebatched mortar	Mortar composed of constituents batched in a factory, supplied to the building site and mixed there in accordance with the manufacturer's instructions e.g. twin compartment silo and lime:sand

B Materials

Term	Description
Additive	A finely divided inorganic material added to a mortar to modify the chemical and/or the physical properties
Admixture	Material added in small quantities during the mixing process to modify the properties of the mortar in the fresh and/or hardened state
Aggregate	Granular material that does not contribute to the hardening reaction of the mortar
Air entraining admixture	Admixture that enables a controlled quantity of small uniformly distributed air bubbles to be incorporated during the mixing of mortar material and which remain after hardening. This gives enhanced wet workability and improved durability/frost resistance

B Materials continued

Term	Description
Binder	Material used for the purpose of holding solid particles together in a coherent mass
Hydraulic Binder	Binder that sets and hardens by chemical interaction with water and is capable of doing so under water
Lightweight aggregate	Aggregate having a particle density not exceeding 2000kg/m ³ or a loose bulk density not exceeding 1200kg/m ³
Pigment	Material used for imparting various colours to a mortar mix
Reinforcement	Bars, wires, meshes or fibres within the mortar
Set retarding admixture	Admixture which delays the beginning of setting of mortar materials thus extending the working life of the mortar

C Type of mortar

Term	Description
Coloured mortar	Mortar specially coloured to achieve a decorative effect
Damp-proofing mortar	Designed mortar for use on moist walls containing water-soluble salts (also referred to as renovation mortar)
Designed mortar	Mortar whose composition and manufacturing method is selected by the producer in order to achieve specified properties (performance concept)
Fresh mortar	completely mixed and ready to use
Internal plastering mortar	Mortar, which is applied in the fresh state to an internal wall or other surface and which hardens after application
Lightweight mortar	Mortar designed with a dry density below 1300kg/m ³
Masonry mortar	Mortar used for laying masonry units
Prescribed mortar	Mortar made in pre-determined proportions the properties of which are assumed from the stated proportions, of the constituents (recipe concept)
Rendering mortar	Mortar, which is applied in the fresh state to an external wall or other surface and which hardens after application
Renovating mortar	Rendering mortar designed for use on moist masonry walls containing soluble salts
Thermal insulating mortar	Designed mortar with specific thermal insulating properties
Thin layer mortar	Mortar with a maximum aggregate particle size of 2mm

D Characteristics of mortar materials

Term	Description
Air content	The quantity of air contained in a mortar
Bond strength	Adhesion perpendicular to the bed between the masonry mortar and the masonry unit
Chloride content	Water soluble chloride content of a fresh mortar
Consistency	The fluidity of a fresh mortar
Density	Mass per unit volume

D Characteristics of mortar materials continued

Term	Description
Durability	The resistance of the mortar to adverse chemical, mechanical and climatic conditions.
Hardening time	The time during which the mortar develops strength
Plasticity	The cohesiveness and ease of spreading of a mortar
Setting time	The time after which the mortar begins to harden
Shelf life	The time interval of storage under stated conditions during which a mortar may be expected to retain its intended working properties
Shrinkage	The volume reduction of an unrestrained mortar during hardening
Thermal conductivity	A measure of the rate of heat transfer through unit thickness and area of a material from face to face
Water absorption	The amount of water taken up by the mortar in a given time
Water retentivity	The ability of a fresh mortar to retain its mixing water when exposed to substrate suction
Water vapour permeability	The rate at which water vapour passes through mortar
Workable life	The time taken for a fresh mortar of a prescribed flow value to reach a defined level of stiffness or workability
Workability	The overall properties of a fresh mortar which influence its suitability for a particular application e.g. consistence, cohesion

E Construction elements

Term	Description
Metal lathing	A plastering background composed of metal laths that provides a mechanical key
Perpend joints	Vertical joints between adjacent masonry units
Substrate	The surface to which the mortar is applied

F Construction Materials

Term	Description
Final coat	The final coat of a multi-coat rendering or plastering system
Pointing	The final process of finishing a mortar joint to give a finished appearance
Rendering/plastering system	A sequence of coats to be applied to a substrate. It can be used in conjunction with a support and/or reinforcement and/or a pre treatment
Rendering/plastering coat	A layer applied in one or more operations or passes with the same mix, with the previous pass not being allowed to set before the next one is made
Repointing	The process of raking out the mortar joints and refilling with fresh mortar
Undercoat	The lower coat (or coats) of render or plaster in a system

G Construction finishing

Term	Description
Bucket handle joint	Method of forming joints by rubbing a convex jointing iron over them
Flush joint	Method of pointing whereby the mortar is pressed into the joint and finished flush with the brick surface
Pebble dash	Finish in which selected aggregate is thrown onto a freshly applied coat of mortar, and left exposed (also known as dry dash)
Roughcast	Finish produced when the final coat containing a proportion of selected aggregate is thrown on as a wet mix and is left in the rough condition. The texture is regulated by the size of the coarse aggregate
Scratch coat	An undercoat that is applied to a background
Scraped textured	Finish in which the final coat of mortar is allowed to harden for several hours and the surface is then scraped with a suitable tool, such as an old saw blade, which removes the outer surface and some of the coarser particles, usually of 3-5mm size leaving a textured finish
Smooth floated	Finish in which the final coat is made flat and relatively smooth with a wooden float.
Spatterdash	Mixture of cement and coarse sand prepared as a thick slurry. It is thrown on as an initial coating to provide a key on dense backgrounds having poor suction, or to reduce or even out suction of other types of background
Stipple	Mixture of cement and coarse sand prepared as a thick slurry. Applied using a stiff brush to produce a rough textured finish. It may be used as an alternative to spatterdash to provide a key or to control suction
Tyrolean	Finish produced by a hand operated machine which flicks droplets onto a wall where they set and harden
Weather struck joint	Method of pointing for external work which provides good protection against the penetration of rain

H Miscellaneous

Term	Description
Adhesion failure	Failure occurring at the interface between mortar and substrate or associated material
Autogenous healing	The "self sealing" of cracks under moist conditions, occurring primarily due to further hydraulic reactions within the mortar
Bloom	Form of efflorescence
Blowing	Surface imperfections in the form of small lumps, bumps or eruptions that have occurred after the plastering process has been completed as a result of an expansive chemical reaction
Blistering	Surface imperfections in the form of smooth blisters that have formed during the application and finishing of the final coat
Cracking - render/plaster	Fracture or discontinuity that may extend deeper than the surface layer and may penetrate the substrate
Cracking - masonry	Fracture or discontinuity
Crazing	Cracking of a surface layer into small irregular shaped contiguous areas
Efflorescence	Crystallisation of salts on the surface of a mortar
Retemper	The remixing of a mortar which has begun to stiffen



MPA Mortar is part of the Mineral Products Association, the trade association for the aggregates, asphalt, cement, concrete, dimension stone, lime, mortar and silica sand industries.

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Factory produced mortar products will contain either cement or lime, both of which have properties which are hazardous to health. Please refer to the manufacturers or suppliers Material Safety Data Sheet for the specific product/grade to find more information on the nature of the hazardous properties, the risks and health effects of exposure and the recommended safe use and handling procedures.