

Thistle One Coat Plaster (Convenience bags)

Product Data Sheet

Product description

Overview

Thistle One Coat Plaster is a gypsum-based plaster suitable for hand application to most internal backgrounds. Thistle One Coat plaster is essentially made up of gypsum hemihydrate, which is formulated with special additives to control its setting profile. A lightweight aggregate is also used to improve its workability and application. Once dry, it gives a smooth, matt off-white finish.

Applications

Due to its special formulation, Thistle One Coat Plaster enables easy application and often can be applied in just one coat (limited to depth), onto various backgrounds, including brick, block, concrete, plasterboard and expanded metal lath. The range of bag sizes make the product ideal for either the small patching jobs or larger applications. Thistle One Coat Plaster can be built up in stages up to a thickness of 25mm and provides an off-white matt finish for easy decoration.

Standards

Thistle One Coat Plaster complies with *EN 13279-1 type B4/20/2 and C3/20* and is manufactured under a Quality Management System in accordance with *BS EN ISO 9001:2015*. The QMS is independently audited (certificate no: *FM 504548*).

Performance

Fire resistance

The Thistle brand of plasters provides good fire protection due to the behaviour of the gypsum in fire. When gypsum-protected building elements are exposed to fire, de-hydration by heat (calcination) occurs at the exposed surface and proceeds gradually through the gypsum layer. Calcined gypsum on the exposed face adheres tenaciously to uncalcined material, retarding further calcinations, which slows as the thickness of calcined material increases. While this continues, materials adjacent to the unexposed side will not exceed 100°C - below the temperature at which most materials will ignite and far below the critical temperatures for structural components. Once the gypsum layer is fully calcined, the residue acts as an insulating layer while it remains intact.

Thermal resistance

Thistle One Coat Plaster makes a negligible contribution to thermal resistance of building elements.

Acoustic performance

Thistle One Coat Plaster may be used within the Robust Detail construction E-WM-1, a dense aggregate block cavity separating wall and E-WM-2 lightweight aggregate block cavity separating wall. In these applications, the specified thickness is 13mm and attention to detail is important to achieve the required sound insulation, including plastering the complete wall surface down to finished floor level where appropriate. Refer to the current Robust Details handbook for full details.

Effect of temperature

Thistle One Coat Plaster is not suitable for plastering onto frozen backgrounds but it may be used under frosty conditions provided that, after plastering, the surfaces are adequately protected from freezing. Once fully set and dry, Thistle One Coat Plaster is only suitable for situations where the temperature does not exceed 49°C. Dry bagged plaster is not affected by low temperatures. During the application of plasters in hot and / or dry conditions, care should be taken

to ensure that rapid loss of water is avoided. Gypsum plasters require a proportion of the mixing water in order to set and achieve full strength. If the water is dried off too rapidly, the strength of the plaster will be impaired.

Effect of condensation and other moisture

Thistle One Coat Plaster should be protected from continuous exposure to moisture. Prolonged or repeated exposure to moisture may cause a loss of strength and / or adhesion.

Product information

The figure indicates the recommended coat thickness in millimetres.

Plaster selector guide	Thistle Undercoat Plaster mm	Thistle Finishing Plaster mm	Thistle One Coat Plaster mm
Common bricks	11		11
Engineering brick (raked joint)	11		11
Medium density block	11		11
Dense block	11		11
Plasterboard	8 ¹	2 ¹	8 ¹
Cast in situ/pre-cast concrete	11 ¹		11 ¹
Flat, smooth concrete		2 ¹	11
Damp undercoat plaster (e.g. finished same day)		2 ¹	
Dry undercoat plaster (e.g. finished after leaving overnight)		2 ²	

¹Thistle Bond-It bonding agent is required on concrete and moisture resistant plasterboards.

²Dampen background first.

Application and installation

Background preparation

Plasterboards (excluding moisture resistant grade boards): Surfaces should be reasonably dry, clean, free from dust and protected from the elements, and suitable for the chosen specification. Skimming should only be carried out on the face of the boards, i.e. not the side with a paper overlap near the edge. In the case of Gyproc WallBoard, Gyproc WallBoard **TEN**, Gyproc DuraLine and Gyproc HandiBoard this will be the ivory-coloured side.

Moisture resistant grade boards: Skim plastering is not specified for Gyproc Moisture Resistant and **MR** grade boards. These types of board are intended for use in areas of high humidity and, only once the building can be guaranteed to be completely weather-tight, can they be skimmed. The plaster should be applied to the face of the boards. However, the boards should be pre-treated with Thistle Bond-It before plastering can commence.

Surfaces should be reasonably dry, clean, free from dust and protected from the elements, and suitable for the chosen specification. In addition, some masonry backgrounds of exceptionally high suction may require controlling with a pre-treatment of Thistle GypPrime.

It is advisable to brush down the surface to remove any dust or loose pieces and then dampen the surface. Additionally, if plastering is to be undertaken on a concrete surface, ensure all mould oil, grease or other agents present are removed from that surface. Fine concrete does not require 'wetting' prior to plastering. Normal ballast concrete should be given sufficient time to mature before applying the plaster. Plaster should not be applied onto a 'green' background or if there is free water visible. Mature concrete will require wetting to displace the air before plastering. Any concrete that is exceptionally smooth will require pre-treatment with Thistle Bond-It bonding agent.

Storage

Thistle One Coat Plaster should be stored off the floor in a clean and dry environment as absorption of moisture can shorten the setting profile, cause set lumps to form in the bags and possibly reduce the strength of the set plasterwork. The plaster is bagged in two-ply poly lined paper sacks and the valves are ultrasonically sealed to enable a longer shelf life than normal trade bags, so if stored correctly, the product shelf life is 6 months. Bags are printed with a 'use by date' in order to permit use in strict stock rotation.

Mixing

Thistle One Coat Plaster is pre-mixed with aggregate and only clean water needs to be added to prepare it for use. Simply sprinkle plaster into clean cold water and then mix until thick and creamy. Mechanical mixing should be carried out with a high torque yet slow or variable speed type. Hand mixing should be carried out in a bucket, tray or mixing bath, making sure that the mixing vessel and tools are clean and free from set pieces of plaster as this may shorten the setting time and reduce the strength of the plaster when set. Fresh contamination has more effect than old, so equipment should be washed right after mixing. The table overleaf will help you choose the correct plaster for the background you are working on.

Application

Joints between plasterboards should be reinforced with either Thistle ProTape (self-adhesive mesh) or by pre-filling with plaster and embedding Gyproc Joint Tape (paper). Apply plaster to solid backgrounds with firm pressure. The best results are obtained by applying a 'tight' coat, then turning back with the same batch of material to fill out to the required thickness. If a substantial area is to be covered a 'feather-edge' is used to straighten the plaster to a reasonable plane, whilst at the same time filling in any hollows. When the plaster has stiffened sufficiently, further ruling with a 'feather-edge' may be necessary to achieve a flat surface. As the plaster progressively stiffens, further flattening and paring should be carried out by using a trowel along with some water (to lubricate the edge of the trowel). When the plaster is sufficiently firm, 'Closing in' with a trowel should commence. Wet a trowel with water and apply pressure to the surface DO NOT OVER POLISH. For full details, please refer to the British Gypsum **Site Book**, which can be downloaded from www.british-gypsum.com

Angle beads

Angle beads can be fixed to the plasterboard angle by embedding dabs of Thistle One Coat Plaster. To hold the bead in correct alignment as the plaster sets,

it is recommended that additional mechanical fixings are used, e.g. non-rusting nails, screws or staples. Care should be taken when fitting the beads 'dry' as the adhesion may be reduced due to it often being difficult to squeeze plaster between the bead and the plasterboard.

Finishing

Thistle One Coat Plaster has a setting profile of 90 minutes to 2 hours. However, the ambient temperature may have some effect on the time required. Thistle Finishing Plaster should always be protected from continuous and repeated exposure to moisture as this may result in loss of strength and / or adhesion.

Thistle plasters can be decorated with most paint finishes and wall coverings. However, for the correct specification in respect of any applied decorative material, reference should be made to the manufacturer of that material and their recommendations always followed. Impermeable finishes including tiles, should not be applied until the background is thoroughly dry. A permeable paint may be used in the interim. *BS EN 13914 Code of practice for internal plastering* states that plastering should be done in similar or better lighting conditions than the final work will be judged in. This is particularly important for glossy finishes and / or low angle natural or artificial lighting.

Tiling

Tiles of up to 20kg/m² can be applied directly to the Thistle finish except where the system includes a bonding agent. As the total weight of tiles and plaster applied over a bonding agent is limited to 20kg/m², consideration should be given to tiling directly to the background. When plastering to provide a background for tiles, avoid 'polishing' the finished surface. Polished finished surfaces should be roughened and a suitable primer used.

Maintenance

Thistle One Coat Plaster provides a plastering system suitable for moderate impact / wear areas. If the plaster is correctly applied, it should not require any form of maintenance.

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