

Thistle Finishing Plaster (Convenience bags) Product Data Sheet

Introduction

Overview

Thistle Finishing Plaster is a gypsum-based plaster suitable for use on a wide range of backgrounds. Used in conjunction with Thistle Undercoat Plaster, Thistle Finishing Plaster provides a smooth, inert, high quality surface to internal walls and ceilings and a durable base for the application of decorative finishes. Thistle Finishing Plaster is a retarded hemihydrate that is pre-mixed gypsum plaster incorporating exfoliated vermiculite aggregate, which only requires the addition of clean water to prepare it for use.

Applications

Thistle Finishing Plaster is designed for use on a wide range of backgrounds, from low suction (e.g. plasterboards, Glasroc F MULTIBOARD, flat concrete or other flat surfaces treated with bonding agents) through to medium / high suction of gypsum or cement based undercoat plasters.

The range of bag sizes make the product ideal for either the small patching jobs or larger applications.

General product information

Product	Bag weight	Approx. water required for mixing	Approx. coverage per bag* (@ 2mm & 10% wastage)
Thistle Finishing Plaster	7.5kg	3.4 litres	2.7m ²
	12.5kg	5.7 litres	4.5m ²
	20kg	9.2 litres	7.2m ²

* Coverage is dependent on background and thickness of application and details above should be used only as a guide.

Installation

Background preparation

Plasterboards (excluding Moisture Resistant board):

Surfaces should be 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 the ivory-coloured side.

Moisture resistant board: 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 ThistleBond-it before plastering can commence.

Glasroc F MULTIBOARD: Thistle Finishing Plaster should be applied to the smooth surface. Application and joint reinforcement techniques are similar to those used on plasterboards.

Undercoat plasters: Gypsum-based undercoats should be left flat and with a scratch key. They are normally finished when set, but not dry. If they are dry, there will be a higher suction rate and they may need to be dampened before the plaster is applied.

Cement-based undercoats can shrink on drying and can crack days or even weeks after application. If the Thistle Finishing Plaster is applied before the shrinkage is complete, there is an increased risk of de-lamination or cracking of the finish, particularly if the undercoat was not adequately keyed. The key provided to cement-based backgrounds therefore needs to be much better and the drying time allowance much longer than for gypsum-based undercoats. Retarded ready-mixed cement-based mortars may have a delayed shrinkage and may contain additives which interfere with the strength or setting of the Thistle Finishing Plaster.

General application

Joints between plasterboards should be reinforced with either Thistle Pro-Tape (there is no need for pre-filling as it is self-adhesive) or by pre-filling with plaster and embedding Gyproc Joint Tape. 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. 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**

Onto undercoat plasters: Apply plaster with firm pressure and build out to the required thickness in two applications and trowel to a smooth matt finish as the plaster



Installation (continued)

progressively hardens through setting or by loss of water into the background. If background suction is excessive, then it may be necessary to dampen it down before finishing.

Angle beads: Angle beads can be fixed to the plasterboard angle by embedding dabs of Thistle Finish 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.

Mixing

Thistle Finishing 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.

This table will help you choose the correct plaster for the background you are working on.

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

The figure indicates the recommended coat thickness in millimetres.

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

+ Dampen background first

Finishing

Drying

Thistle Finishing 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.



Conditions

Effect of condensation and other moisture:

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

Effect of temperature: Thistle Finishing 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 Finishing 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.

Thermal resistance: Thistle Finishing Plaster makes a negligible contribution to thermal resistance of building elements.

Acoustic performance: Thistle Finishing 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.

Maintenance: Thistle Finishing 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.

Fire resistance: The Thistle brand of plasters provides good fire protection due to the unique 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 $100^{\circ}C$ – 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.

Storage

Thistle Finishing Plaster should be stored off the floor in a clean and dry environment as absorption of moisture can shorten the setting profile and 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.

Standards

Thistle Finishing Plaster complies with *EN 13279-1 type B1/20/2* and is manufactured under a Quality Management System in accordance with *BS EN ISO 9001:2008*. The QMS is independently audited (certificate no: *FM 504548*).

Manual handling

It is important to observe appropriate Health and Safety legislation when working on site, e.g. protective clothing and equipment, etc. In practice, consideration must be given to design criteria requiring specific project solutions. Thistle Finishing Plaster should be always carried using correct manual handling techniques and safe systems of work appropriate to the size and length of the product. Some of these guidelines are summarised below. For further guidance, please refer to the Manual Handling section of the British Gypsum **SITE BOOK** and the British Gypsum Manual Handling Guide. Both can be downloaded from **www.british-gypsum.com** or can be obtained by calling the British Gypsum Technical Advice Centre on 0844 800 1991.

- Whenever possible, place one foot in front of the other to produce a good base and reduce the pressure on the body.
- Assess the load by placing your hand on it and moving.
- Only handle what you feel you can manage.
- Initiate movements with your legs, unlocking the knees and driving with the legs to start the lift.
- Keep the load as close to your body as possible when lifting or handling.
- Turn instead of twisting and move your feet.
- Let your back find its natural curvature.
- Never lose control of the load.

Loading and unloading pallets

- Always wear safety shoes.
- Always place one foot forward by operating from the corner of the pallet or placing one foot on the pallet taking care to ensure that the pallet does not tip in the process.
- Unlock the knees for low level work.
- Take a firm grip of the load with both hands.
- Lift using the legs to start the movement.
- Turn by moving the feet.



Conditions (continued)

Application and installation

- Always work in a balanced position.
- Operate with one foot forward.
- Keep the body upright.
- Always use appropriate platforms where necessary.

General notes

In practice, consideration must be given to design criteria requiring specific project solutions. Please contact the British Gypsum Technical Advice Centre for further guidance on 0844 800 1991 or at bgtechnical.enquiries@bpb.com

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