



# Thistle One Coat Plaster (Convenience bags)

## Product Data Sheet

### Introduction

#### 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. Artex offers a range of bag sizes, making 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.

#### General product information

Product	Bag weight	Approx. water required for mixing	Approx. coverage per bag (@ 13mm & 10% wastage)
Thistle One Coat Plaster	2.5kg	1.5 litres	0.17m <sup>2</sup>
	7.5kg	4.5 litres	0.50m <sup>2</sup>
	12.5kg	7.5 litres	0.82m <sup>2</sup>
	20kg	12 litres	1.32m <sup>2</sup>

\* 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 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 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 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.

#### 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.

#### General application

Joints between plasterboards should be reinforced with either Thistle Pro-Tape (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

## Installation (continued)

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](http://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.

The figure indicates the recommended coat thickness in millimetres.

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+	

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

+ Dampen background first.

## Finishing

### Drying

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/m<sup>2</sup> 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/m<sup>2</sup>, 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 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.

**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.

**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.

**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.

**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.

## 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.

## Standards

Thistle One Coat Plaster complies with **EN 13279-1 type B4/20/2 and C3/20** standard. Artex Limited is a quality assured company and operates 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 One Coat Plaster should always be 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 Drywall Academy 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.

## Conditions (continued)

### 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.

### 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 Drywall Academy Advice Centre for further guidance on 0844 800 1991 or at [bgtechnical.enquiries@bpb.com](mailto:bgtechnical.enquiries@bpb.com)

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For a comprehensive and up-to-date library of information visit the British Gypsum website at: [www.british-gypsum.com](http://www.british-gypsum.com)

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