

Product Data Sheet

Thistle® Universal OneCoat

Thistle Universal OneCoat is a versatile gypsum undercoat and finish plaster in one product. It provides a smooth, inert and high quality surface to internal walls and ceilings, as well as a durable base for applying decorative finishes.

Where to use

Apply the plaster by hand or spray machine to a range of internal surfaces, including brick, blockwork, plasterboard and concrete finish plaster. It's also ideal for filling larger holes and chasing in. Simply build up the coverage in stages to a maximum of 25mm.

Certifications

Environmental Product Declaration (EPD) available [Click here](#).



Product information

Composition

This is a retarded hemihydrate, pre-mixed gypsum plaster.

Colour

White.

Nominal weight (kg)

25.

Performance

Here we only provide performance information related to the product. Please see the White Book online for system-dependent performance.

Standards

EN 13279-1:2008, Type B4/20/2 and C3/20.

Declarations of Performance (DoP) available [Click here](#).

Reaction to fire	A1
Thermal resistance (m ² K/W)	0.038

Effect of moisture and condensation

Don't expose the plaster to moisture repeatedly or for long periods of time, as this can cause it to lose strength and adhesion.

Effect of temperature

Thistle plasters aren't suitable for plastering onto frozen backgrounds. However, you can use them in frosty conditions as long as you prevent the plaster from freezing after it's been applied. Dry, bagged plaster isn't affected by low temperatures.

Once Thistle plasters are fully set and dry, they shouldn't be exposed to temperatures above 49°C. When applying in hot or dry conditions, make sure the plaster doesn't lose water too quickly, as it needs some of the mixing water to set and reach full strength.

Application

Background preparation: plasterboards

Only use Thistle finishing plasters on the face of the board, which is the side without a paper overlap. This doesn't apply to moisture resistant boards. Reinforce joints with Thistle ProTape FT50 or FT100, or with Gyproc Joint Tape.

Background preparation: undercoats

Leave gypsum based undercoats reasonably flat and with a scratch key. Finish them when they're set but not dry to avoid high suction that needs to be damped down first. Use Thistle GypPrime to pre-treat very high suction backgrounds.

Cement based undercoats shrink when they are dry, and can crack days or even weeks after application. If you apply a Thistle finishing plaster before the shrinkage is complete, it's more likely to crack or delaminate, particularly if the undercoat wasn't keyed enough. Therefore, the key 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 delayed shrinkage, and may contain additives that interfere with the strength or setting of Thistle finishing plasters.

Background preparation: moisture resistant grade boards

Avoid applying skim plaster to Gyproc Moisture Resistant boards. These boards are designed for environments with high humidity, which can cause the plaster to lose strength and adhesion.

Where moisture resistant boards are used in shell and core construction to provide temporary moisture resistance, it's best to skim them after the building envelope has been made weather tight. Only apply plaster to the face of moisture resistant boards, and pre-treat them with Thistle Bond-it.

Background preparation: Glasroc F MultiBoard and Glasroc F FireCase

Apply Thistle finishing plasters to the smooth face of the board. Application techniques and joint reinforcement are similar to those used on plasterboards.

Background preparation: solid backgrounds

Follow this guidance when working with solid backgrounds:

- Before applying the plaster, use the Thistle Essential Selector Guide to check that the background is suitable.
- Make sure the surface is dry, clean and protected from the weather.
- Before plastering concrete backgrounds, remove any mould, oil or other agents from the surface.
- You don't need to wet no-fines concrete before plastering.
- Allow enough time for normal ballast concrete to mature before applying the plaster.
- Don't apply plaster to 'green' backgrounds, or where any free water is visible.
- Wet mature concrete to displace the air before plastering.
- You may need to use Thistle Bond-it on smooth low suction backgrounds.

Mixing up

Hand operation: Add Thistle plasters to clean water and use clean mixing equipment, as contamination from previous mixes affects the setting time and strength. Fresh contamination has more of an effect than old, so you should wash equipment just after mixing rather than just before.

Thistle plasters are suitable for mixing by hand or using a mechanical whisk with a slow speed and high torque. While mechanical mixing speeds up the process, there's no need to continue mixing after you've dispersed the lumps and reached the right consistency. Over-mixing wastes time and energy, and can affect setting times, reduce workability, and make it difficult to achieve a flat finish.

Machine operation: You can also mix and apply Thistle Universal OneCoat using a worm pump plastering machine. To learn how to do this with your chosen machine, please refer to the machine manufacturer's guidance. In general, the plaster's consistency should be slightly softer than that used for hand application. You don't need to throw away any plaster you mix to check the consistency. Instead, you can apply this by hand when carrying out small jobs like prefilling joints, fixing beads, and finishing reveals. Be aware that your machine may need to be cleaned periodically, if you are spraying for long periods of time.

Application (continued)

Plastering onto board backgrounds

- 1 Before applying Thistle Universal OneCoat to Gyproc plasterboards or Glasroc F MultiBoard, Glasroc F Firecase, Ridigur H (pre-treated with Thistle GypPrime) reinforce flat joints using Thistle ProTape FT50 or FT100, or prefill any gaps wider than 3mm and reinforce them using Gyproc Joint Tape. Thistle ProTape FT50 and FT100 fibre tapes are self-adhesive, so you can fix them to the board's surface before the first application of plaster. If you're using Gyproc Joint Tape, embed it in the first coat over each joint, leaving enough plaster under the tape to ensure good adhesion. Then press the tape firmly into the plaster and immediately cover it with a further application.
- 2 Apply plaster to the whole surface after the joint treatment has partially set but not dried. Some joints will experience more movement, such as around door or window apertures, where board edges aren't fully supported, or on ceilings below floors that are susceptible to high deflection. In these areas, embed Gyproc Joint Tape in the finish for better resistance to cracking than with fibre tapes.
- 3 Fix Thistle Thin Coat Angle Beads to plasterboard angles by embedding them in dabs of finish plaster. Avoid fixing the bead to the board 'dry'; this could reduce the adhesion as it's difficult to squeeze plaster between the bead and the plasterboard.
- 4 To hold the bead in alignment as the plaster sets, we recommended you use additional mechanical fixings like non-rusting nails, screws and staples. Wipe any surplus from corners before the plaster sets, as scraping it away later may damage the zinc coating.
- 5 Apply the finish plaster with a firm pressure and build it out to the required thickness in two applications, trowelling to a smooth matt finish as it sets. Follow good site practice as outlined in BS EN 13914 Code of Practice for Internal Plastering.

Plastering onto solid backgrounds

- 1 As part of the preparation, fix all Thistle angle beads in position using Thistle gypsum plaster. Once the angle beads are in place, leave them to set before applying plaster to the rest of the wall.
- 2 Apply the first coat to the background. Once the entire background has been covered, apply a second thin coat over the whole surface. When you've reached the required thickness, the wall can be ruled off. You can then fill any low or hollow spots that have been missed. Once the wall has been levelled, use a spatula to close and flatten the surface.
- 3 When the surface begins to tighten and firm, it's ready to be sponged. Rub a sponge float over the plaster in circular motions to bring the fat to the surface, then leave it until it stiffens. After this, you can do a final trowel for a flat, seamless finish.

Application (continued)

Wall application thickness (mm)	13
Ceiling application thickness (mm)	10
Gyproc HandiBoard, Gyproc WallBoard and Gyproc Plank: maximum recommended thickness (mm)	13 (use Thistle Bond-it on moisture resistant boards)
Engineering bricks with raked joints: maximum recommended thickness (mm)	13
Dense aggregate concrete blocks and no-fines concrete: maximum recommended thickness (mm)	13 (use Thistle Bond-it on smooth, low suction blocks)
Normal ballast concrete soffits: maximum recommended thickness (mm)	13
Other aggregate concrete: maximum recommended thickness (mm)	13
Precast concrete units and composite ceilings: maximum recommended thickness (mm)	13 (use Thistle Bond-it)
Extended metal lath: maximum recommended thickness (mm)	13
Backgrounds treated with Thistle Bond-it (e.g. glazed or painted surfaces): maximum recommended thickness (mm)	13
Expanded polystyrene soffits: maximum recommended thickness (mm)	13
Expanded polystyrene walls: maximum recommended thickness (mm)	13
Aerated concrete blocks: maximum recommended thickness (mm)	13
Common brick walls and concrete bricks with raked joints: maximum recommended thickness (mm)	13
Painted and tiled surfaces: maximum recommended thickness (mm)	13 (use Thistle Bond-it)
Coverage per bag (m ²)	2.25 at 13mm thick
Working time: maximum	45 minutes
Set time: minimum	90 minutes
Water requirements per bag (litres)	15
Dry set weight (kg/m ²)	12.6 at 13mm thick

Painting and wallpapering

Make sure Thistle plasters are thoroughly dry before decorating, although you can apply a coat of permeable paint in the interim. You can decorate the finished surface using most proprietary paint finishes and wall covering adhesives, but always follow the manufacturers' recommendations for the best results.

Tiling

You can apply tiles up to 20kg per m² directly to Thistle finishing plasters, 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 per m², consider tiling directly to the background instead.

If you're plastering to provide a background for tiles, avoid polishing the surface. If the surface has already been polished, roughen it and use a suitable primer to create a good key for the tile adhesive.

Snagging and minor repairs

Thistle plasters on plasterboard provide a system that's suitable for moderate impact and wear. When used over solid backgrounds, they offer good resistance to minor casual damage, but the resistance to damage from greater impacts depends on the background. If the plaster is correctly applied, you shouldn't need to maintain it afterwards.

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Sitework

Storage

Bags should be stored inside on a flat and stable surface, away from any sources of moisture, heat or direct sunlight. If storing on a concrete floor, use dry timber platforms. The bags should not be stored near any edges, openings, walkways or traffic areas, where they could fall or cause obstruction. Damaged or opened bags should be used first or discarded appropriately.

Handling

British Gypsum fully accepts its responsibilities as a supplier of building materials and systems as required by Section 6 of the Health and Safety at Work etc. Act 1974.

To reduce manual handling risk, employers and workers should follow HSE's Manual Handling Operations Regulations 1992 (MHOR) and the HSE's guidance on manual handling at work (INDG143). Employers should carry out a risk assessment and implement control measures to avoid or minimise the need for manual handling. Workers should follow safe lifting and moving techniques and report any hazards.

Safety Data Sheet

Safety Data Sheet (SDS) available [Click here](#).

Shelf life

Stored correctly, this product has a shelf life of four months, and bags are marked with a use by date so you can use them in strict rotation.

Packaging overview

This plaster is packaged in a paper bag and is supplied palletised.

Quantity per pallet	56 bags
Pallets: nominal height (mm)	980
Pallets: nominal length (mm)	1200
Pallets: nominal depth (mm)	850
Pallets: nominal weight (tonnes)	1.4

Environmental

Disposal

Segregate the plaster from non-gypsum waste for recycling where possible, and dispose of it according to local authority requirements.

BES 6001 classification

Excellent.



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