

Thistle Multi-Finish

Product data sheet

Introduction

Overview

Thistle Multi-Finish is a gypsum finish plaster for use on a wide range of backgrounds. It provides a smooth, inert, high quality surface to internal walls and ceilings, and a durable base for the application of decorative finishes. Thistle Multi-Finish is a retarded hemihydrate, pre-mixed gypsum plaster, requiring only the addition of clean water to prepare it for use.

Applications

Thistle Multi-Finish is designed for the finishing of a wide range of backgrounds, from low-suction (e.g. plasterboard, Glasroc MultiBoard and FireCase s, Thistle Dri-Coat, sufficiently flat concrete and other flat surfaces treated with bonding agents) through to medium-high suction of gypsum or cement-based undercoat plasters.

Standards

Thistle Multi-Finish complies with *EN 13279-1 type B1/20/2*, and is manufactured under a quality system independently audited and certified as conforming with *ISO 9001: 2000*

Performance

Fire resistance

Gypsum plasters provide good fire protection due to the unique behaviour of gypsum in fire. When gypsum-protected building elements are exposed to fire, dehydration 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 calcination 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

It should be assumed that Thistle Multi-Finish makes a negligible contribution to thermal resistance of building elements.

Effect of temperature

Thistle Multi-Finish 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 Multi-Finish 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 gypsum 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 Multi-Finish should be protected from continuous exposure to moisture. Prolonged or repeated exposure to moisture may cause a loss of strength and/or adhesion.

Coverage

Coverage per bag m ²	Setting time hours	Water requirement litres	Dry set weight kg/m ²	Pallet quantity kg
10 @ 2mm thickness	1.5	11.5 per bag	3.4	1400 (56 bags)

Installation

Background preparation

Plasterboards (excluding moisture resistant grade boards):

Skimming should be specified only on the face of boards, i.e. the side without a paper overlap. This will be the ivory face in the case of Gyproc WallBoard, Gyproc WallBoard ТЕН, Gyproc DuraLine and Gyproc HandiBoard, or the coloured face of Gyproc FireLine and Gyproc SoundBloc. Joints must be reinforced with Thistle ProTape FT50 or FT100, or Gyproc Joint Tape. A range of corner and stop beads is available for reinforcement of external angles and edges.

Moisture resistant grade boards:

Skim plastering should not normally be specified to Gyproc Moisture Resistant and MR grade boards. These types of board are intended for use in environments of higher than normal humidity. Where moisture resistant board options are used in shell and core construction to provide temporary resistance to high moisture conditions, they can be skimmed at a later date after the building envelope has been made weather-tight. Plaster should be applied only to the face of moisture resistant boards and pre-treatment with ThistleBond-it is required.

Installation (continued)

Glasroc MultiBoard and Glasroc FireCase s:

Skim finishing using Thistle Multi-Finish should be to the smooth face of the board. Application techniques and joint reinforcement are similar to those used on plasterboards.

Undercoat plasters:

Gypsum-based undercoats should be left reasonably flat and with a scratch key. They are usually finished when set but not dry – if they are dry there will be higher suction which may need to be reduced by damping down before finishing. Cement-based undercoats shrink on drying and can crack, up to days or even weeks after application. If Thistle Multi-Finish is applied before the shrinkage is complete there is an increased risk of delamination 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 delayed shrinkage, and may contain additives which interfere with the strength or setting of Thistle Multi-Finish.

Storage

Bags should be stored dry, as absorption of water shortens the setting time, causes set lumps to form in the bags and may reduce the strength of the set plasterwork. If storing on a concrete floor, dry timber platforms should be provided. Thistle Multi-Finish stored correctly has a shelf life of 4 months and bags are printed with the 'use by:' date in order to permit use in strict rotation

Mixing

Thistle plasters should be mixed by adding to clean water in clean mixing equipment. Contamination from previous mixes adversely affects the setting time and the strength. Fresh contamination has more effect than old – so equipment should be washed just after mixing rather than just before. Thistle finishing plasters are suitable for mixing by hand or mechanical whisk of a slow speed, high torque type. While mechanical mixing speeds the process up, there is no need to continue mixing after dispersing lumps and achieving the right consistency – over-mixing wastes time and energy, can affect setting times, lead to deterioration in workability and create difficulty in achieving a flat finish. A range of suitable mixers and paddles is available in the Gyproc Tools range.

Application

Plastering to board backgrounds:

Plaster is applied with firm pressure, built out to the required thickness in two applications and trowelled to a smooth matt finish as the plaster progressively sets.

Good site practice should be followed as outlined in *BS EN 13914 Code of Practice for Internal Plastering*.

Thistle Thin Coat Angle Bead or Thistle Thin Coat Mini Mesh Bead is fixed to the plasterboard angle by embedding in 'dabs' of finish plaster. To hold the bead in correct alignment as the plaster sets it is recommended that additional mechanical fixings are used (non rusting nails, screws or staples) as required. Before this plaster sets, any surplus should be wiped from the corner, because scraping it away later may damage the zinc coating. If the bead is fixed to the board 'dry' the adhesion may be reduced because it is difficult to squeeze plaster between the bead and the plasterboard.

Before applying Thistle Multi-Finish to Gyproc plasterboards or Glasroc MultiBoard, flat joints are reinforced using Thistle ProTape FT50 or FT100, or any gaps exceeding 3mm are pre-filled and reinforced using Gyproc Joint Tape. Thistle ProTape FT50 and FT100 fibre tapes are self-adhesive and are fixed to the board surface before the first application of plaster. Gyproc Joint Tape is embedded in the first coat over each joint, leaving sufficient plaster under the tape to ensure good adhesion. Gyproc Joint Tape is pressed firmly into the plaster and immediately covered with a further application.

Plaster is applied to the whole surface after the joint treatment has partially set, but not dried. For joints which may be subject to more movement (including around door or window apertures, where board edges are not fully supported or on ceilings below floors which are susceptible to high deflection), Gyproc Joint Tape embedded in the finish provides better resistance to cracking than fibre tapes.

Plastering to undercoat plasters:

Apply with firm pressure, built out to the required thickness in two applications and trowel to a smooth matt finish as the plaster progressively hardens through setting or by loss of water into the background. If background suction is excessive, dampen it down before finishing.

Decoration

Gypsum-based plasterwork must always be thoroughly dry before decorating, although a coat of permeable paint can be applied in the interim. Plaster surfaces can be decorated with most proprietary paint finishes and will accept the majority of wall covering adhesives. The manufacturers' recommendations in respect of applied decorative treatments should always be followed.

Tiling

Tiles up to 20kg/m² can be applied directly to Thistle Multi-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. If plastering to provide a background for tiles, avoid polishing the surface. Polished plaster surfaces should be roughened and a suitable primer used.

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Installation (continued)

Maintenance

Thistle Multi-Finish on plasterboard provides a plastering system suitable for moderate impact/wear areas. When used over undercoat plasters the resistance to minor casual

damage is good, while the resistance to damage from greater impacts depends also on the undercoat used. If the plaster is correctly applied, it should not require any form of maintenance.

Health & Safety

1. Identification of the substances / preparation and company

Thistle Multi-Finish

Supplier British Gypsum Limited
East Leake
Loughborough
Leicestershire
LE12 6HX

Telephone 08705 456123

Recommended uses: Gypsum building plaster used to provide a smooth, flat surface to internal walls and ceilings.

2. Composition / information on ingredients

General composition: Calcium sulphate hemihydrate. Natural constituents may include clay, limestone and minor amounts of quartz. Additives may include minor amounts (less than 4%) of hydrated lime.

3. Hazards identification

THE MOST IMPORTANT HAZARDS ARE:

This product is **not** classified as dangerous according to CHIP.

Plaster may form an alkaline solution on contact with body moistures or when mixed with water.

Dust from mixing or sanding may irritate the respiratory system, skin and eyes.

4. First aid measures

Eye contact Wash eyes with clean water.

Skin contact Wash thoroughly with soap and water.

Ingestion DO NOT INDUCE VOMITING. Rinse out mouth thoroughly and give plenty of water.

Inhalation If irritation occurs, remove person to fresh air.

General Get medical attention if any symptoms persist.

5. Fire fighting measures

The product does not pose a fire hazard. However, packaging materials may burn.

Suitable Extinguishing Media – water, foam, carbon dioxide or dry powder.

6. Accidental release measures

Avoid creating dust – see Section 8 Exposure control/ personal protection for recommended personal protective equipment.

Plaster can be mixed with water, avoid eye contact or prolonged, repeated contact with skin – see Section 3 Hazards identification.

Prevent plasters from contaminating drains.

7. Handling and storage

Use – Minimise dust generation when opening bags, mixing or sanding plasters in poorly ventilated places. Avoid eye contact or prolonged or repeated contact with skin – see Section 8 Exposure control/ personal protection and Section 3 Hazards identification.

Manual handling – Supplied in approximately 25kg bags – use an appropriate lifting technique.

Mechanical handling – In order to maintain the stability of the palletised load, it is important that the lift truck fork length and centres are set to correctly support the load.

Storage – Store in dry conditions. All powdered products can settle in transport. To maintain stability, place pallets on firm level ground. Do not stack more than one lift high.

8. Exposure control / personal protection

Workplace exposure limit

Substance	Total inhalable	Respirable
Calcium Sulphate Hemihydrate	10mg/m ³ (8hr TWA)	4mg/m ³ 8hr TWA
Hydrated Lime	5mg/m ³ (8hr TWA)	–
Quartz (silica)	–	0.1mg/m ³ (8hr TWA)

Health & Safety (continued)

Personal protection

Respiratory Use in a well ventilated area. Where practicable use engineering methods to control dust levels. If the exposure standards could be exceeded use a disposable face mask complying with EN 149 FFP2

Skin Wear appropriate clothing to protect against repeated or prolonged skin contact.

Eye If there is a risk of material entering the eye, wear eye protection to BS EN 166

9. Physical and chemical properties

Appearance Dry Powder

Odour Odourless

pH As wet plaster mix - neutral 7 to alkaline 13

10. Stability and reactivity

No special physical conditions need to be avoided. No specific restrictions regarding incompatible materials.

11. Toxicology information

Inhalation Plaster dust may irritate the respirable system. No known long term effects.

Skin contact Wet plaster may form an alkaline solution and irritate the skin. Dry powder can cause irritation.

Eye contact Wet plaster may form an alkaline solution and irritate the eye. Dry powder can cause irritation.

Ingestion Small quantities of plaster should not cause any significant reaction or long term effect.

12. Ecological information

Slightly soluble in water, forms a suspension and solidifies.

13. Disposal consideration

Wastes from gypsum products are normally classified as 'non-hazardous' but should not be co-disposed with municipal waste. Dispose at an authorised landfill site in accordance with the Waste Management Licensing Regulations (see Section 16 – Other information).

14. Transport information

Not classified as hazardous for transportation.

15. Regulatory information

Not classified under the CHIP regulations.

16. Other information

Control of Substances Hazardous to Health Regulations
The Manual Handling Operations Regulations
HSE Guidance Note EH40: Workplace Exposure Limits
Gypsum Wastes – Environment Agency Information Sheet
The British Gypsum WHITE BOOK
The British Gypsum SITE BOOK

Note to User:

This Product Data Sheet does not constitute a workplace risk assessment for COSHH.

There are a number of situations where the approach to manual handling of British Gypsum products should be considered. For further guidance, please refer to the Manual Handling Section of the SITE BOOK, available to download from www.british-gypsum.com

Date of previous version: First edition.

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British Gypsum reserves the right to revise product specifications without notice. The information in this document was correct to the best of our knowledge at the time of publication. It is the user's responsibility to ensure that it remains current prior to use. The information in this document is for guidance only and should not be read in isolation. Users should read and familiarise themselves with all the information contained in this document and ensure that they are fully conversant with the products and systems being used, before subsequent specification or installation.

For a comprehensive and up-to-date library of information visit the British Gypsum website at: www.british-gypsum.com

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FM 52358

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