

Thistle Dri-Coat

Product data sheet

Introduction

Overview

Thistle Dri-Coat is a cement-based renovating plaster formulated for replastering after the successful installation of a new damp proof course. For other replastering operations, British gypsum recommends the use of the appropriate plaster for the same new background – usually Thistle Hardwall or Thistle Bonding Coat.

Applications

Thistle Dri-Coat is intended for replastering after the successful installation of a new damp proof course. Walls which have had defective damp proof courses (or none at all) are likely to contain hygroscopic salts, which can continue to be a source of dampness, even after rising damp is prevented, because they absorb atmospheric moisture. Thistle Dri-Coat is cement-based with waterproofing additives, which restrict the migration of these salts from the background through the plaster and thereby limit their detrimental effect on internal decoration.

Performance

Fire resistance

It should be assumed that Thistle Dri-Coat makes a negligible contribution to fire resistance or fire protection of building elements.

Thermal resistance

11mm Thistle Dri-Coat with a final coat of 2mm Thistle Board Finish or Multi-Finish (total thickness 13mm) has a thermal resistance (R) of 0.04m²K/W.

Effect of temperature

Thistle Dri-Coat is not suitable for plastering onto frozen backgrounds. Use in ambient conditions below 5°C may reduce the strength of the set plasterwork and should be avoided. Once fully set and dry, Thistle Dri-Coat should not be exposed to situations where the temperature exceeds 49°C due to potential detrimental effects on the finishing plaster. Dry, bagged plaster is not affected by low temperatures. During application in hot and/or dry conditions, care should be taken to ensure that rapid loss of water is avoided. The plaster requires 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 Dri-Coat is unaffected by exposure to moisture encountered in most building situations, however any applied finishes including finishing plasters may be unsuitable for such conditions. Thistle Dri-Coat must not be used to resist water under hydrostatic pressure.

Coverage

Coverage per bag m ²	Setting time hours	Water requirement litres	Dry set weight kg/m ²	Pallet quantity kg
3.0 @ 11mm thickness	N/A	13.0	7.5 @ 11mm plus 3.4 of finish	1000 (40 bags)

Installation

Background preparation

The source of the rising dampness must be identified and eliminated. The existing plasterwork should be hacked off to a height at least 0.5m above either the new damp proof course or the last detectable sign of dampness. Where the old plaster is gypsum based, it must be completely removed. Following chemical damp-proof injection, old mortar joints, which are the site of the higher salt concentrations, should be thoroughly raked out and the face of the brickwork brushed with a wire brush.

Ideally, replastering with Thistle Dri-Coat should be delayed as long as possible to allow the background to dry out. Before replastering, any salts brought to the surface of the background during drying should be carefully removed. Heavy salt contamination in the background can cause persistent damp problems. Buildings such as old farmhouses, stables and barns not originally built with a damp-proof course, or buildings that have been exposed to storage of chemicals, are particularly at risk from this problem. Thistle Dri-Coat should not be used in these situations unless a proper survey shows that the risk from salts is minimal. An independent wall lining may be a better solution. Chimney breasts are another area where salt deposits may be heavy.

Storage

Bags should be stored dry, as absorption of water 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 Dri-Coat stored correctly has a shelf life of 6 months and bags are printed with the 'use by:' date in order to permit use in strict rotation. Any bags not used before their 'use-by:' date should be disposed of appropriately and not used.

Mixing

Thistle Dri-Coat plaster is pre-mixed with aggregate and only clean water needs to be added to prepare it for use. Hand mixing should be carried out in a clean tray or bath. Excessive mechanical mixing should be avoided. Tools and water used in mixing must be clean. Contamination from previous mixes can reduce the strength of the plaster when set.

Application

Application of Thistle Dri-Coat can proceed once the background is clean, sound, free from dust and efflorescence, and where only residual moisture is present. Low suction or smooth backgrounds, such as engineering bricks, should be treated prior to plastering with a water-resisting bonding aid (by others) which should be plastered in accordance with the manufacturers' recommendations.

Where the background is dry, it is important to control suction with the application of water. This prevents rapid drying of the plaster which would impair its strength. Angle beads must not be fixed with gypsum-based materials. If the floor is solid, a 50mm gap should be left between the plasterwork and the floor level. Under no circumstances should the damp proof course be bridged.

Finishing

Initial curing and shrinkage of the scratched undercoat must be allowed to take place prior to application of finish plaster. In good drying conditions, a minimum delay of 24 hours is required. In cold / damp conditions, or where background suction is low, a longer delay will be necessary. If sufficient delay is not allowed, cracking or shelling of the finish coat may result. Finish using Thistle Board Finish (optional if tiling - see 'Decoration' below)

Decoration

Thistle plasters can be decorated with most paint finishes and wallcoverings. Follow manufacturers' recommendations. Impermeable finishes, including tiles, should not be applied until the background and plaster are dry. A permeable paint can be used in the interim. *BS EN 13914 Code of Practice for Internal Plastering* states that plastering should be done under 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 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. If plastering to provide a background for tiles, avoid polishing the surface. Polished plaster surfaces should be roughened and a suitable primer used. Tiles may be applied directly to Thistle Dri-Coat.

Maintenance

Thistle Dri-Coat with a final coat of 2mm Thistle Board Finish provides a plastering system suitable for moderate to high impact / wear areas. If the plaster is correctly applied, it should not require any form of maintenance.

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Product data sheet

Health & Safety

1. Identification of the substances / preparation and company

Cement-based plaster

Thistle Dri-Coat

Supplier British Gypsum Limited
East Leake
Loughborough
Leicestershire
LE12 6HX

Telephone 08705 456123

Recommended uses: To provide a smooth, level internal surface to walls and ceilings which have been treated to prevent rising damp or other forms of penetrating dampness.

2. Composition / information on ingredients

Ingredient	Contents	Class	Risk Nos.	Risk phases
Cement	>47%	Xi	R36, 38, 41	Irritating to the eyes & skin and risk of serious damage to the eyes
Hydrated Lime	>5%	Xi	R36, 38, 41	
Expanded Perlite		N/A		
Expanded Perlite	<10%	N/A	N/A	N/A

3. Hazards identification

THE MOST IMPORTANT HAZARDS ARE:

This product is classified as dangerous according to CHIP.

Plaster powder produces a strong alkaline solution when mixed with water.

Contact with wet plaster or contact with body fluids, e.g. sweat or eye fluids may cause irritation, dermatitis or burns.

Allergic contact dermatitis may also be caused by individual sensitivity to chromium compounds which may occur in cement.

Dust may irritate nose and airways.

There is a serious risk of damage to eyes if not treated immediately.

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

Non combustible and inhibits the spread of flame.

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
Cement	10mg/m ³ (8hr TWA)	4mg/m ³ 8hr TWA
Hydrated Lime	5mg/m ³ (8hr TWA)	–

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

Health & Safety (continued)

9. Physical and chemical properties

<u>Appearance</u>	Dry powder
<u>Odour</u>	Odourless
<u>pH</u>	As wet plaster 12-13

10. Stability and reactivity

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

11. Toxicology information

<u>Inhalation</u>	Plaster dust may irritate the respirable system. No known long term effects.
<u>Skin contact</u>	Wet plaster may form an alkaline solution and irritate the skin. Dry powder can cause irritation/dermatitis and/or burns.
<u>Eye contact</u>	There is a risk of serious damage to the eyes from dry or wet plaster. Mild untreated contact or gross exposure can cause chemical burning and ulceration.
<u>Ingestion</u>	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.

Aquatic effect not determined, but may cause pH to rise and be toxic to some aquatic life.

13. Disposal consideration

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

Chemicals (Hazard Information and Packaging for Supply) Regulations 1994.

Danger classification and label

Risk/Safety Phrases



<u>R36</u>	Irritating to the eyes.
<u>R38</u>	Irritating to the skin.
<u>R41</u>	Risk of serious damage to the eyes.

Safety Phrases

<u>S2</u>	Keep out of the reach of children.
<u>S26</u>	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
<u>S28</u>	After contact with skin, wash immediately with water.
<u>S36, 37, 39</u>	Wear suitable protective clothing, gloves and eye/face protection.

16. Other information

Control of Substances Hazardous to Health Regulations
The Manual Handling Operations Regulations
HSE Guidance Note EH40: Workplace Exposure Limits
The British Gypsum WHITE BOOK
The British Gypsum SITE BOOK
CHIP Regulations

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

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

Telephone: 08705 456123

Fax: 08705 456356

E-mail: bgtechnical.enquiries@bpb.com

Training enquiries: 08702 406040



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