

Terrix® IP-ST-P Polymer Silicate Premium dispersion paint



Terrix[®]IP-ST-P paint is based on innovative Swiss technology combining a silicate and dispersive binding agents. Due to its vapour permeable characteristic, it allows walls to naturally receive and give off moisture. In "wet rooms" (such as kitchens, bathrooms, laundry rooms, basements) the excess of moisture in the air may be easily reduced. Another important property of the paint is its resistance to microbial contamination (e.g. black mould). Its very high Ph level offers natural and far better protection than other systems.

The benefits of Terrix® IP-ST-P premium dispersion-silicate internal paint

Benefits to the customer:

- 1. No flaking or cracking as Terrix[®] IP-ST-P paints bond to the substrate by chemical reaction,. Traditional paints create a film on top of a substrate which can lead to peeling or cracking.
- 2. Very high resistance to dirt, not achievable by organic based paints on the market (all emulsions including acrylic, latex and silicon) it is due to its mineral formulation therefore lack of surface electrostatics. The dust wont't be attracted to the paint.
- 3. Flame retardancy due to the lack of organic components in the paint and pigments used for colouring. In contrast to most paints on the market and all standard emulsion paints, Terrix[®] IP-ST-P provides protection against the spread of flame. Mineral characteristic of the paint makes it fully incombustible.
- 4. Very high resistance to yellowing Built in UV blockers to maintain original look of paint.
- 5. Black mould and algae resistance Increased Ph level (high alkalinity) delivers natural and long lasting protection. Terrix® IP-ST-P paints do not contain any Biocide (which are not recommended for internal use)
- 6. Very high resistance to wet scrubbing and washing. The product exceeds Category I (BS-EN-13300) requirements and it is suitable for use in heavy traffic areas.
- 7. Suitability for swimming pools and high moisture environments due to its high permeable characteristics and chemical bonding to the substrate.
- 8. Sprayable application:
 - increased speed and quality of application
 - very easy for patching and spot repairs
- 9. No mist coat or priming required sprayable directly onto plaster due to its chemical bonding properties. Two coats of paint only required.
- 10. **Deep, quality matt appearance** smooth, velvety finish that does not reflect light and provides a luxury appearance. The deep matt finish can also mask any wall imperfections.
- 11. **Spot repairs** the product can be easily spot repaired without leaving any visible patches which is usually impossible to achieve with all other deep matt or matt paints available on the market
- 12. Natural regulation of moisture levels due to microporous structure enabling the "free" travel of moisture and use of hydroscopic proprieties of the wall. Lower moisture levels means less expensive heating and lower risk of development of any asthmatic health conditions.

Benefits to the decorator:

- 1. Spray application up to 10 times faster than traditional application.
- 2. No cracks, flaking or paint lifting even on substrates with high levels of moisture content, due to chemical bonding and full vapour permeability.
- 3. Easy spot repairs effortless snagging and seamless spot repairs the product consistency and formulation allows for simple snagging without need to repaint entire wall.
- 4. Can be applied on not fully dry substrates due to the polymer-silicate prosperities of the product, it is fully vapour permeable and therefore the paint can be used for difficult applications like old damp buildings or new builds where walls and renders are still wet and use of standard paints would require minimum 30 days of curing.
- 5. Superior matt finish hiding substrate imperfections. As matt surfaces are not reflecting light it is much easier to use the product on non perfect walls or ceilings.
- 6. Drip free less wastage and mess the high viscosity of the paint makes it painter a friendly product and highly suitable for ceilings application.
- 7. No mist coat required smaller material usage and less time required. The product is partly absorbed by the substrate and then chemical reaction is developed.
- 8. Touch dry after 15 minutes second coat can be applied almost immediately.

Suitable for schools, hospitals, food processing - Terrix® offers premium hygienic (anti-bacterial) latex paints. For more information contact your local Terrix® supplier.



technical data:

Basic binding agent: acrylic resin and potassium sodium silicate;

Pigments: non-organic coloured pigments; **Density:** about 1.50 g/cm3:

Colours: white and selected colours from PCC colour chart as well as custom pastel

colours; Degree of lustre: matte;

Diluent: water;

Average consumption: about 0.22 l/m² (for two coats on a smooth surface);

Temperature of use (ambient and substrate): from +5°C to +25°C

Relative diffusive resistance (coat thickness 140 um): Sd = 0.02 m;

Coefficient of surface absorbability: w = 0.058 kg/m²h0.5

Maximum application relative air humidity: $\leq 75\%$;

Resistance to scrubbing while wet: class I paint (according to the EN-C-81914: 2002 standard).

Packaging: Single-use plastic packaging is containing 2.5 and 10 l of the product.

Storage: Store in the tightly sealed, original packaging in a cool area ensuring protection against frost. Opened packaging should be tightly closed and used as quickly as possible.

Shelf life: 12 months from the date of production (factory sealed packaging).

comparison of paints:

	property	Typical high quality trade paint in the UK	PCC TERRIX® IP-ST dispersion-silicate premium paint		
1	Paint type	acrylic emulsion	polymer-silicate		
2	Category	trade	premium		
3	VOC content	cat A/a	cat A/a		
4	Adhesion to substrate	mechanical (film)	chemical bonding		
5	Risk of cracking or flacking	high	none		
6	Dirt resistance	low	very high		
7	Vapour permeability	none	very high		
8	Application on not fully dry substrates	not possible	possible		
9	Resistance to wet scrubbing	low	above class I (BS-EN-13300)		
10	Spot repair	difficult	easy		
11	Black mould/ algae resistance	none	very high		
12	Colour resistance	low	very high		
13	Primer/mist coat	required	not required		
14	Flame retardant	none	Cat A		
15	Spray spot repair	not possible	possible		

application:

Substrate preparation:

The substrate must be stable (no scratches and cracks), degreased, clean, and dry as well as free from stains and efflorescence of biological or chemical origin. In the case of microbial contamination, the substrate should be cleaned mechanically, then washed with Terrix[®] PR-AR solution for removing microbial contamination

as per product manual. Discolourations, nicotine stains, and efflorescence resulting from water seepage are to be initially painted with the Terrix® IP-SB stain blocker. All loose layers not connected with the surface (loose render or flaking paint

coatings) are to be removed. The remnants of adhesive or lime paints are to be thoroughly removed

and washed with water.

New cement and limestone renders can be painted only after a two-week seasoning, gypsum based plasters after one week. Seasoning is not required for plasterboards.

Note: Directly before the application of the paint, surfaces made from materials susceptible to alkalis (such as wood, metal, glass, or clinker bricks) should be protected against splashing.

Preparation of the paint:

The packaging contains a ready-to-use product. If necessary, the paint can be diluted with a small amount of water (20-30% volume for the first coat and 5-15% for the second coat).

When determining the amount of water to be used, the type of substrate, drying conditions, and application technique must be considered.

Note: Mixing Terrix®IP-ST-P paint with other paints may affect the technical properties of the product.

Paint application:

The paint should be applied to the surface in two layers using a paintbrush, roller, or through spraying (including the "airless" method). The use of a fleece paint roller with a hair length of 18 mm is recommended. The second layer of paint should be applied only after the first layer has dried.

Note: The paint is highly alkaline, eyes and skin should be protected. Use PPE during the application process. In case of contact with eyes, they should be washed immediately with a large amount of water. If irritation occurs, consult with a doctor.

Airless application:

Nozzle size		Spraying angle	Pressure	Filter	Diluent addition	Yield*
[inches]	[mm]	[°]	[bar]	[mesh]	[%]	[l/min]
0.017	0.43	50	200	60	about 20-30	1.25

Drying:

The drying time of one layer of paint applied to the surface (at a temperature of +20°C and relative air humidity of 55%) amounts to about three hours. Complete binding (hardening) of the applied paint takes places after a minimum of 24 hours. Closed rooms should be aired out after painting until the distinctive smell is gone.

Note: Low temperature and high air humidity lengthen the drying time of the paint.

Guidelines for application:

In order to avoid differences in colour, it is necessary to apply paint to each wall within one work cycle. During the application and binding of the paint, the air temperature should be above $+5^{\circ}$ C.

Wash tools with water just after concluding work.

Note: Low temperatures and high air humidity may have a disadvantageous influence on the shade of the coating.





Comparison of high quality Emulsion paints and Terrix IP-ST-P black mould resistant and fully vapour permeable paint

1. Testing conditions

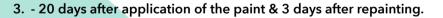


Skim-coat applied to dot and dabbed plasterboard. Substrate - block work The substrate is not suitable for application of any typical emulsion paint.

2. - 10 days after application of high quality emulsion paint (DULUX)



Black mould and straining is clearly visible and penetrating through the paint coat.





Even after use of stain blocker and repainting the wall several times the mould and staining is still clearly visible.

The substrate (skim coat) is not drying out as the paint is not vapour permeable.

 wall RH%
 84.1

 wall surface temperature
 4.8

 air RH%
 76.1

 air temperature
 8.2

4. - 48h after application of Terrix® IP-ST-P

Excess of moisture is clearly visible & freely evaporating through the paint. No staining.



The level of moisture in the substrate is noticeable lower. No staining or black mould.

6. - 18 days after application of Terrix® IP-ST-P

5. - 7 days after application of Terrix® IP-ST-P





PCC Therm UK phone: 02921 675 293 <u>terrix@pcc.eu</u> <u>www.pcc.eu</u>

Regus House Malthouse Avenue

Cardiff Gate Business Park Cardiff, Mid Glamorgan CF23 8RU,United Kingdom

Part of: PCC SE

Moerser Straße 149, 47198 Duisburg, Germany Phone: +49 (0)2066 20190 Fax: +49 (0)2066 54682 **Email:** <u>info@pcc.eu</u> <u>http://www.pcc.eu</u>

Official distributor:



SPECIALISTS IN BUILDING CONSUMABLES AND FINISHES

F&T Ltd. 298 Langley Rd S, Salford, M6 6ST, UK **T: 0333 320 1513**



