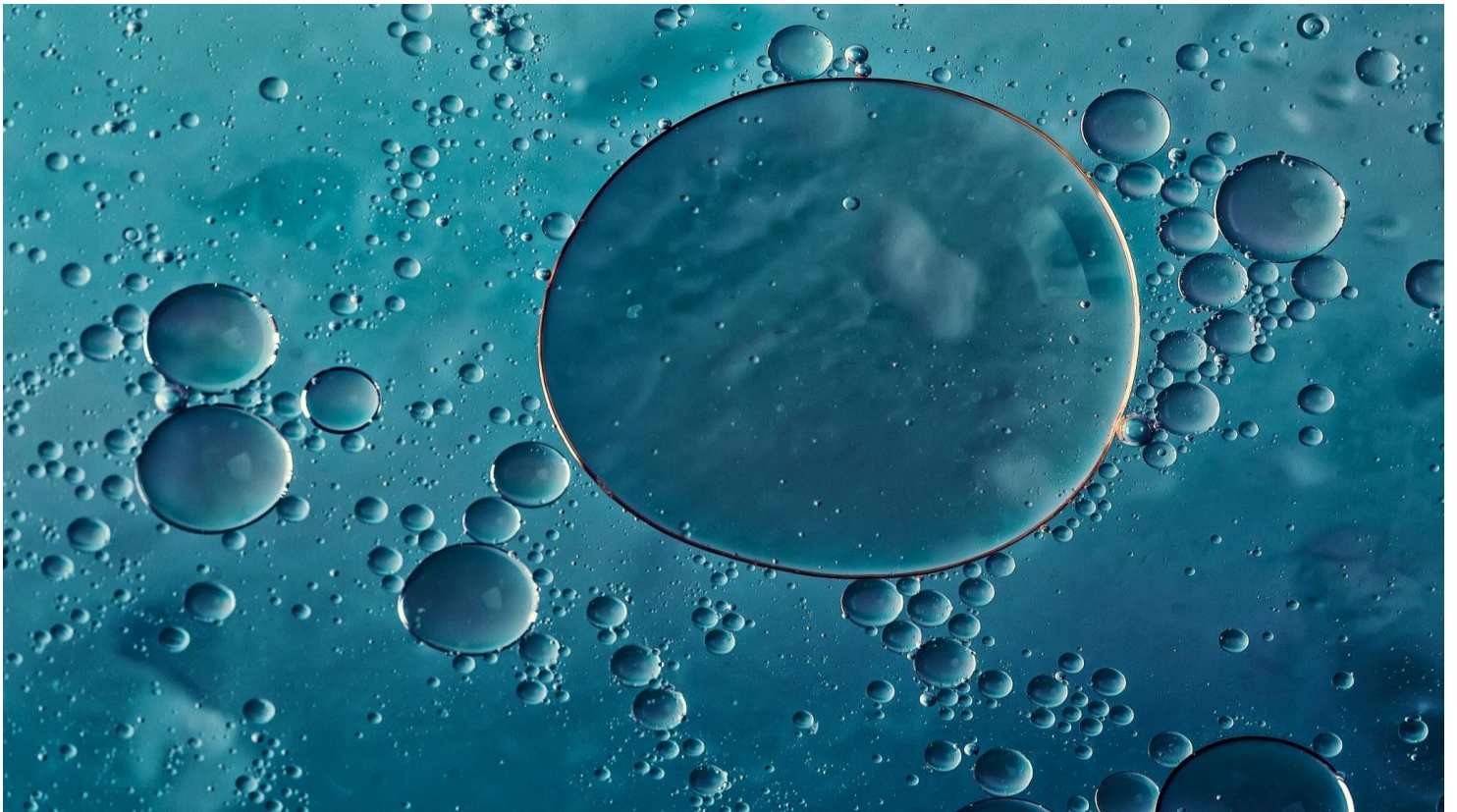




**PALATINE
PAINTS**



TRUTHERM ANTI-CONDENSATION PAINT



Protected By Performance

Harnessing Innovation: The Dual Power of Trutherm Anti-Condensation Paint

Introduction:

In the realm of building maintenance and climate control, innovation continues to drive solutions that enhance comfort, efficiency, and sustainability. One such innovation gaining attention is thermal anti-condensation paint—a powerful combination of thermal insulation and moisture control. The following literature delves into the science behind thermal anti-condensation paint, its unique benefits, applications, and why it's becoming a preferred choice for combating both heat loss, condensation issues and mould growth.

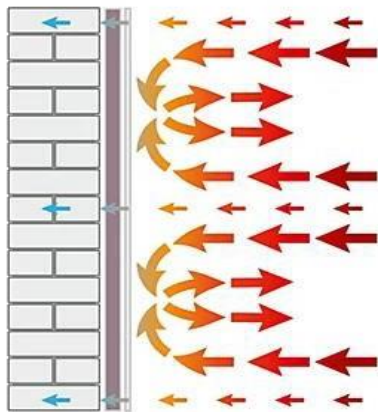
Understanding Thermal Anti-Condensation Paint:

Thermal anti-condensation paint represents a fusion of two essential functionalities: thermal insulation and moisture resistance. Engineered with advanced additives, this specialised paint not only helps to regulate surface temperatures but also mitigates condensation formation. By addressing both heat transfer and moisture control, thermal anti-condensation paint offers a comprehensive solution to common building performance challenges.

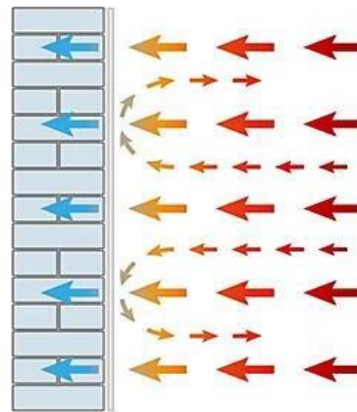
The Science Behind Trutherm Anti-Condensation Paint:

Thermal anti-condensation paint contains ceramic microspheres or reflective particles. These additives create a thermal barrier that reduces heat transfer through surfaces, helping to maintain stable indoor temperatures and minimize energy consumption.

Heat is reflected back into the room with thermally efficient wallpaper

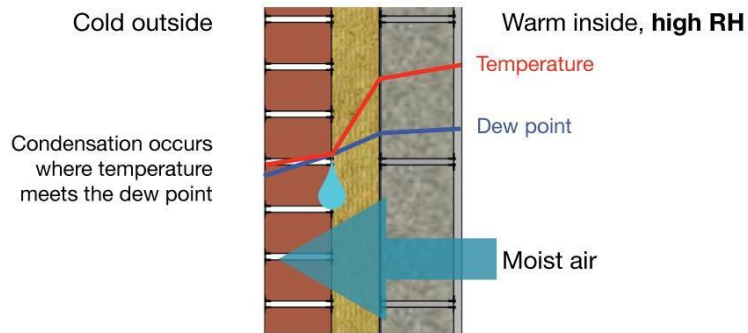


Heat is lost through the wall without thermally efficient wallpaper



In addition to thermal insulation, thermal anti-condensation paint incorporates moisture-absorbing or hygroscopic materials. These additives actively manage humidity levels by

In addition to thermal insulation, thermal anti-condensation paint incorporates moisture-absorbing or hygroscopic materials. These additives actively manage humidity levels by absorbing excess moisture from the air, thereby preventing condensation formation on painted surfaces.



Benefits of Trutherm Anti-Condensation Paint:

- **Enhanced Energy Efficiency** – by combining thermal insulation and moisture control, thermal anti-condensation paint helps to optimize energy efficiency by reducing both heat loss and condensation-related energy losses.
- **Improved Indoor Air Quality** – by controlling moisture levels and inhibiting mold and mildew growth, thermal anti-condensation paint contributes to healthier indoor environments with better air quality.
- **Long-Term Protection** – thermal anti-condensation paint forms a durable coating that not only insulates surfaces but also provides protection against moisture-related damage, such as corrosion, peeling, and staining.
- **Cost Savings** – with its ability to reduce energy consumption, prevent moisture-related repairs, and prolong the lifespan of building components, thermal anti-condensation paint offers significant cost savings over time.

Applications of Trutherm Anti-Condensation Paint:

1. **Residential Properties** – homeowners can apply thermal anti-condensation paint in areas prone to both heat loss and moisture buildup, such as exterior walls, attics, basements, and bathrooms, to improve comfort and energy efficiency.
2. **Commercial Buildings** – offices, retail spaces, hotels, and healthcare facilities can benefit from thermal anti-condensation paint to create healthier, more comfortable environments for occupants while reducing operational costs.
3. **Industrial Facilities** – factories, warehouses, and storage facilities can utilize thermal anti-condensation paint to protect equipment, machinery, and structural elements from temperature fluctuations and moisture-related damage.

Conclusion:

In the quest for high-performance building solutions, thermal anti-condensation paint emerges as a game-changer, offering a holistic approach to thermal and moisture management. By seamlessly integrating thermal insulation with moisture control, this innovative paint technology delivers tangible benefits in terms of energy efficiency, indoor comfort, and long-term sustainability. Whether applied in residential, commercial, or industrial settings, thermal anti-condensation paint proves its worth as a versatile and effective solution for optimizing building performance in the face of fluctuating environmental conditions.

In summary, embracing the dual power of thermal anti-condensation paint is not just about painting walls—it's about transforming spaces into healthier, more efficient, and more resilient environments for generations to come.

TDS information

Preparation: Check for any damp spots or visible signs of moisture on the walls. Address any existing dampness issues before proceeding. If you have had issues with peeling paint due to condensation, consider using a damp seal or stain block before applying the anti-condensation paint. These products help prevent contamination from penetrating the surface and causing damage to the paint being applied. Sand down the walls to ensure a smooth and even surface. Wipe the wall clean to remove dust and debris. Make sure the wall is completely dry before starting the painting process

Application: Before starting, thoroughly stir the Paint to make sure the consistency of the anti-condensation paint is smooth. Give it a good stir to mix any settled particles. Pour the paint into a tray and cover a roller or paintbrush with it. Apply the paint to the wall, ensuring even coverage. Avoid brushing or rolling it out too thinly. Wait for the first coat to dry (usually around four hours) before applying a second coat. If dilution is required for airless spray application, thin by up to 10% with clean water. Follow the spray manufacturers guidance for tip size and pressure.

After Use: Wash any equipment with clean water. Store paint cans in a cool, dry place where the temperature is above freezing. Place them on a shelf (not the floor) to prevent them from getting wet. Avoid direct sunlight. Properly sealed water-based paint can last up to 2 years.

CONDENSATION CONTROL COATING

Apply 2 or 3 coats at 4-6m²/litre per coat, allowing sufficient time for the initial coat to dry before applying the subsequent ones. Subsequent coats will appear to dry more quickly due to the adsorbent effect of the previous coats. In areas of very high humidity, further applications may be required. Will require periods of low humidity to allow any trapped water to evaporate from the coating, especially in areas of constant or very high humidity.

STORAGE

Store in dry, frost-free conditions. Ensure strict stock rotation is observed.

LIMITATIONS OF USE

Allow good ventilation in the working area to aid drying. Do not apply if the RH exceeds 85% or if the surface is less than 3°C above the dewpoint. Do not apply directly to ferrous metals. Not normally recommended for exterior use. Must be allowed to dry thoroughly before the area is returned to service. Therefore, we recommend showers etc. be not used for at least 48 hours after application. A relatively hard coating may be used on walls provided they are not subject to wear or frequent washing. Some dirt pick-ups may be noticed which can be removed by gentle wiping with a damp cloth. However, surfaces subject to a high degree of soiling may retain dirt.

If used on walls, may be over-painted with Emulsion to provide a more dirt and wear resistant finish. However, this will degrade the ability of the coating to adsorb moisture, although it will still provide some of its thermal insulation qualities. Any person proposing to use this product should plan to assess the suitability for application prior to commencing work. Samples can be arranged if required.

There are basic measures property owners can take, which will help keep mold and condensation to a minimum. Will compliment these practical points:

- Ensure rooms are always warm and properly ventilated. Maintain some background heat throughout the day.
- Provide good levels of natural or mechanical ventilation in susceptible areas such as bathrooms, shower rooms and kitchens.
- Improve internal or external wall insulation.
- On solid walls, consider the use of masonry water repellents to reduce water uptake and the subsequent drop in thermal insulation caused when walls are wet.
- Vent tumble driers to the outside air and, when possible, do not dry clothes over radiators. Put lids on saucepans and close doors in rooms where large amounts of condensation are created.

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Further Information

Information relating to the safe handling of this product can be found in the Material Safety Data

Sheet. Local regulations concerning the safe handling of water-based coating materials must be observed. Suitable protective clothing including suitable eye protection must be always worn.

All consumptions listed are for recommendation purposes only. Detailed application instructions and system build-up advice can be provided on request through our Technical Services team.

Palatine' systems and products are guaranteed against defective material and manufacture and are sold subject to its standard Terms and Conditions of Sale, copies of which can be obtained on request. For more information, please refer to individual product data sheets or contact our Technical Services team.

Palatine accepts no responsibility for liability claims based on the suggested practices and data values listed on product data sheets. Product data sheets are regularly updated, and it is the user's responsibility to ensure they obtain the most recent version.

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