The Compo Matte™ Thermal Insulating Mats™
Thermal Insulating Wall Panels™

Technical White Paper
Specifications

The Compo Matte™ Thermal Insulating Mats™ and Thermally Insulated Wall Panels™ created to eliminate internal and external damp problems are available to private homeowners, councils and private landlords.

Background and History
The UK housing stock has some of the oldest properties (Victorian and Georgian) across Europe and is made up of nearly 31.2 million dwellings across, England, Scotland, Wales and Northern Ireland and it is reported that as many as 936,000 of these homes are affected by either rising or penetrating damp.

Victorian Homes (1837 – 1901)
There are approximately 3.5 to 3.7million Victorian homes, approximately 13% of the Country's overall housing stock, making this period the most common period architechture in cities like London and Bristol.

Georgian Houses (1714–1830)
Georgian homes are significantly rarer and older, making up a much smaller fraction of the remaining pre-1919 inventory (for context, market trackers typically note only a few thousand actively listed or remaining intact standalone Georgian examples compared to hundreds of thousands of Victorian terraces).

The Designer & Design
The reason behind the design and manufacture of the Compo Matte™ thermally insulated wall panels™ is to target those homes specifically with rising or penetrating damp issues.

Chris Brown the Director of Compo Matte has always been interested in the environment and a big part of the Thermal Insulating Mats™ and Thermal Insulating Wall Panels™ was the fact that the manufacturing of the prooduct uses ~83% of recycled, fibre-free materials and the thermally insulated wall panels™ are perfect to use to beat and combat the effects of both rising and penetrating damp.

The design of the Compo Matte™ Thermally Insulated Wall Panels™ came about very specifically to combat and defeat the issues and effects of both rising and penetrating damp.

Technical Specification
It is important to understand the technical specification and the process behind the Thermal Insulating Wall Panels™. They have a Class 1 fire rating, tested for flame spread and surface burning characteristics, the panels are made from ~83% recyclable materials, which contributes to a greener build, they have an advanced moisture level vapour control layer (VCL) and they have been designed to minimise moisture transfer through walls.

The Thermal Insulating Wall Panels™ have a multi-layer composition, which includes timber and plasterboard, with a multifoil composition, true aluminium outer layers, high-density waddings, and reflective interior films.

The product has an overall thickness of 50mm, which includes a revolutionary 38-layer aluminium foil, which reduces down in size to 20mm under installation pressure. Standard panel dimensions are 2.4m by 1.2m fitted. Each panel has Built-in high-performance vapour control layer (VCL) / vapour resistance of 1569 MNs/g.

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Process of Installation
The process that is employed when using the Thermal Insulating Wall Panels™ to treat and eradicate both rising damp and pentrating damp is as follows:

1. Remove the affected plaster from all walls showing damp issues;
2. Install and secure the Thermal Insulating Wall Panels™ using correct fixings;
3. Seal around the frame using a waterproof silicone sealant to stop transfer of moisture and seal the Thermal Insulating Wall Panel to stop air leakage;
4. Remove minimum of four bricks from the outside wall structure and install four airbricks allowing ventilation into the cavity – area behind the fitted Thermal Insulating Wall Panels™. This will ensure a positive air flow is added to the property, which will allow the damp wall to dry out and yet stop cold air entering the property.
   NB: Ventilation of the property is essential to stop damp and condensation from reoccuring.
5. Once everything is completed the property will be ready for redecoration.

Reduction of Carbon Emissions
When installing the Thermal Insulating Wall Panels™ you not only eradicate the damp within your property, you make it warmer, you will spend less money on heating the property, we estimate you will make upto a 35% to 40% saving on your energy bills, you will contribute to a reduction in your carbon emissions and you will be helping the environment.

Reducing damp in a property can lead to significant carbon savings by improving energy efficiency and reducing the need for heating and cooling. Damp proofing and insulation can keep buildings warmer in winter and cooler in summer, leading to lower energy consumption and reduced carbon emissions. By addressing damp issues, property owners, private landlords, private tenants and council tenants can contribute to a more sustainable and energy-efficient future.

Insulation is also an essential factor in reducing moisture levels in the home. Insulating the home helps to keep the heat inside, which reduces the likelihood of cold surfaces forming condensation. There are several types of insulation available, such as loft insulation, cavity wall insulation, and solid wall insulation. Insulation can be a significant investment, but it can also help to save money on heating bills in the long term, as well as reducing the likelihood of damp and mould issues.

Decarbonising homes is not only good for the planet, but it can also be good for our health and the health of our homes.

Reduction of Stress and Consumer Concerns
When damp comes into a home so does stress, anxiety, a fear for the families health, the worry that children living in damp properties may suffer health issues, there are worries regarding costs and these include how a family might pay for heating the property, how would they pay to run a dehumidifier and the mental stress and the disruption caused to the everyday family life.

Typically a family living with damp can have serious concerns about health issues. Families may worry about the health risks associated with damp, such as respiratory problems, infections, and allergies. This can create a sense of anxiety and uncertainty about the family's well-being.

They will have mental health worries and the stress of dealing with damp can have a significant impact on mental health within the family home, leading to symptoms such as anxiety, depression, and low mood. Families may experience increased stress levels due to the need to address the damp issue and the associated costs.

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They may have financial burdens, this could be the worry about the costs associated with damp, such as heating, dehumidifiers, and cleaning, and all of these things can be a financial strain on families, it can lead to financial stress, cause family argumnents and affect the family's ability to manage their finances.

Damp can cause a serious disruption to their daily life, just the presence of damp can disrupt daily routines and activities, leading to frustration and stress. Families may feel unable to enjoy their home life due to the damp conditions. Families can have furniture, clothing, childrens toys and other possessions damaged by damp and this all adds to the financial stress and worry.

Addressing damp issues promptly and effectively can help alleviate these stressors and improve the overall well-being of families.

If you have damp in your internal walls, then SFIR Home Improvements can eliminate the damp, they can make your walls dry and free from any signs of the damp using the Thermal Insulating Wall Panels™.

You might have damp in your childrens bedrooms just like the image below



We can eradicate the damp from your property, your internal walls will remain free from damp or the signs of damp GUARANTEED.

Your property will instantly feel warmer, dryer and will be free from damp or condensation and all of this is achieved using the Compo matte™ Thermally Insulating Wall Panels™.

These products are Trade Marked ™ and are only available throughout the UK from SFIR Home Improvements, which is a trading style of Compo Matte Limited.

For your free, no obligation quotation
Call SFIR Home Improvements on 01252 750 444