

This certificate is valid for Building Regulations & associated technical guidance in force on the date of registration and for the regulations in the countries indicated

Ty-Mawr sublime flooring system

Description of Product

This is an assessment of the Sublime flooring system as supplied by Ty Mawr.

Sublime is a system designed to provide an insulated breathable ground bearing floor slab, intended primarily for traditionally built housing which might not be well suited to the provision of impervious, non-flexible concrete floor construction.



Key Factors Assessed

- ☐ Mechanical Resistance & Stability
- ☐ Safety in case of Fire
- ☐ Health, Hygiene and Environmental
- ☐ Safety in Use
- ☐ Energy Economy and heat retention
- ☐ Durability serviceability and identification

Validity

This certificate was first issued on 2nd October 2013 and is valid until 6th November 2018.

Issue Dated 8th January 2016

Scope of Registration

An insulation material for use in floors where breathable construction is necessary.

The registered detail is limited to works in properties that are identified as having less than 3% potential of Radon Gas exposure, as assessed against information carried by Public Health England, and available via www.ukradon.org. Where a higher radon potential is identified, additional measures to control movement of gases must be incorporated, these could be impervious membrane or sumps. Contact the relevant building control body for further information.

The acceptance of the registered detail for any given project must also remain conditional on the wider suitability of the existing building to receive the Sublime floor system. This suitability must be established by carrying out a thorough assessment of the building, site topography and ground conditions. This assessment must therefore form part of the design and specification process to be carried out by a suitably qualified professional and if it identifies problems these should be addressed prior to installation of the system.

Buildings which are also subject to a 'Material Change of Use', may have additional requirements imposed over those for alterations to a building not undergoing a change of use, and early discussions with the building control body should be sought.

When a ground bearing floor slab is replaced in an existing property, the building regulations require that it is replaced to an appropriate standard with regard to all of the applicable requirements of the regulations. These would include structural integrity, thermal insulation, resistance to ground moisture and resistance to contaminants such as radon gas, methane etc, since the work constitutes both a material alteration of the property, and the provision of a new thermal element where this is applicable.

These can be onerous requirements, particularly in an older building and their application needs to be considered on a case by case basis to establish how the regulations should be applied. Early engagement of the building control body is important to ensure an appropriate solution is achieved. Relaxation of the standards of the Building Regulations will typically only be considered where there are reasons of building conservation or preservation.

Conditions of Certificate

The floor system is not intended to span over soft spots in the oversite area, and additional means of reinforcing the flooring system will need to be considered if the subsoil is of poor load-bearing capacity.

If work proceeds beneath foundation level, additional precautions need to be taken to prevent undermining the existing construction.

A breathable floor is not able to resist the ingress of gasses such as radon and methane. In areas where there is a risk of contaminant gasses, consideration must be given to whether the regulations require that a gas tight membrane is added as part of the floor system and whether a de-gassing sump should be considered below the new floor. In this case the floor would work as different elements, please contact us for further information.

The Sublime system has a non-capillary nature and will not draw ground moisture but as the system is not impervious, where required it should be combined with ancillary drainage measures to control water build-ups within the ground beneath the Sublime floor and surrounding external area.

The new floor construction should not need to alter the character or appearance of the building. Therefore, even in a listed building, there is no automatic allowance for a reduction in insulation value below that required for new thermal elements in Part L of the regulations. Consider whether the full elemental requirement of Part L can be achieved using the Sublime system. The design should include a U-value assessment as supporting information. If the elemental requirement cannot be met, then more efficient insulating products should be considered before assessing whether it is necessary or acceptable to reduce the standard of insulation.

Please note that at minimum recommended thickness of insulation component of 120mm, meets and exceeds the minimum r-value recommended for use beneath underfloor heating in a solid ground floor in BS 1264-4, therefore will adequately limit heat loss through floor system when utilising underfloor heating.

For Scottish purposes:

That the specifications and materials referred to have been assessed and approved in accordance with the Building (Scotland) Regulations 2004 and in accordance with the supporting guidance in the Domestic Technical Handbooks which came into force with effect from 1 October 2015.

That where reference is made on a plan or specification document to any Code of Practice, British or European Standard or manufacturer's instruction it shall be construed as a reference to such publication in the form in which it is in force at the date of this registered detail.

That the materials specified shall not be changed without first gaining approval so to do. Failure to do so will invalidate the registered detail.

This registered detail should not be regarded as a formal approval under the building warrant process prescribed by the Building (Scotland) Act 2003 enacted from 1 May 2005

That this Registered Detail shall contribute to compliance with relevant Mandatory Standards specified under the Building (Scotland) Regulations 2004 as amended when read with the Limitations of Use Section to this Registered Detail.



LABC and LABSS consider that, Ty-Mawr sublime flooring system, will meet the functional requirements of the Building Regulations (listed below) if the criteria detailed in this certificate are met;

The Building Regulations 2010 (as amended) England & Wales

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| Regulation 7 | Materials and workmanship |
| Note: | If used in the correct manner, the components and system are acceptable |
| AD A | Structural integrity |
| Note: | The system is acceptable, subject to a favourable assessment in relation to the host building. |
| AD B | Fire Safety |
| Note: | The system is acceptable. |
| AD C | Site preparation and resistance to contaminants and moisture |
| Note: | Part C1 of the regulations will only be met if there are no contaminant gasses identified that might require the introduction of a gas proof membrane. Part C2 of the regulations will only be met if the site is properly assessed and/or designed to prevent the build up of ground/surface water beneath the floor system. |
| AD J | Heat Producing Appliances |
| Note: | If used beneath a fireplace, major component products are non combustible. Consideration may need to be given to positions of geotextile and cork insulation depending on hearth detailing and appliance specifications. |
| AD L | Conservation of fuel and power |
| Note: | The system is capable of meeting the requirements of Part L, to be proven by an appropriate insulation value calculation and/or comprehensive assessment of the insulation value required by the regulations, in that specific building. |



The Building Regulations 2010 (as amended) England

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|------------|--|
| AD L1A/L2A | Conservation of fuel and power |
| Note: | The thermal insulation performance of this system should be considered in the context of the contribution made to the overall performance of the floor |



The Building Regulations 2010 (as amended) Wales

| | |
|------------|--|
| AD L1A/L2A | Conservation of fuel and power |
| Note: | The thermal insulation performance of this system should be considered in the context of the contribution made to the overall performance of the floor |



The Building (Scotland) Regulations 2004 (as amended)

Technical Handbooks Domestic and Non-Domestic

Regulation 8 Durability, workmanship and fitness of materials

0.8.5: Ways of establishing the fitness of materials

Regulation 9 Building Standards applicable to construction

Note: Construction shall be carried out so that the work complies with the applicable requirements of schedule 5.

Mandatory

Standard 1.1 Structure

Note: The system is acceptable, subject to a structural assessment in relation to the host building

Mandatory

Standard 3.1 Site preparation - harmful and dangerous substances

Note: The system is only acceptable if there are no contaminant gases identified that may require the introduction of a gas tight membrane.

Mandatory

Standard 3.2 Site preparation - Protection from radon gas

Note: The system is only acceptable where levels of radon are such that radon protective measures are not required.

Mandatory

Standard 3.4 Moisture from the ground

Note: The system is only acceptable if the site is assessed and designed to prevent moisture penetration from the ground beneath the floor system

Mandatory

Standard 6.2 Building insulation envelope

Note: The system will contribute towards achieving the required U-value although a thermal analysis is to be provided

Non-Regulatory Information



LABC Warranty

The use of the Ty-Mawr sublime flooring system has not been assessed to meet the requirements of the LABC Warranty Technical Manual. If you would like to discuss a specific use please make an enquiry to technical.services@labcwarranty.co.uk

Supporting Documentation

Geotextile Material Multitrack data sheet 20NW8

Glapor Gravel technical data

Glapor installation guide English

Hanson Natural Hydraulic Lime Data Sheet

Port Talbot BFS Technical data 11-12

SB NHL5 2012-TM

BFS Lime Screed Flexural and Compressive Test Results V2

Sublime Floor System - Flexural Strength Test Results – Addendum

Sublime Floor System - Ty-Mawr Lime - Final Report - 12T002

Sublime Floor System - Ty-Mawr Sublime Flooring System Details

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