Certificate No: EWWS546

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

Kingspan TEK Building System

Description of Product

Kingspan TEK Building System for use as wall and roof panels. The system is a structural insulated panel (SIP) system comprising of rigid urethane between OSB.

Key Factors Assessed

- Mechanical Resistance & Stability
- Safety in case of Fire
- Hygiene, health and environment
- Protection against noise
- Energy Economy and heat retention
- Durability serviceability and identification

Validity

This certificate was first issued on 7th May 2015 and is valid until 7th May 2019

Issue Dated 24th June 2016

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Scope of Registration

This registration system relates to Kingspan TEK building System. The panels are constructed using rigid urethane insulation between two layers of 15mm OSB/3. The panels are manufactured in overall thicknesses of 142mm and 172mm. The exposed panels achieve surface spread of flame of class 3 although this will be exceeded where suitable cladding and surface finish is applied. The panels are suitable for use as load bearing partitions, separating walls, the inner leaf of external walls and pitched roofs in dwellings up to four storeys high subject to provision of solid timber spline joints at ground floor level. The system may also be used as infill panels in multi-storey buildings subject to design constraints in height and method of fixing to the structural frame. All fixings must be designed to allow movement within the structural frame due to expansion/ contraction or differential movement.

The panels are available in widths ranging from 200 mm to a maximum of 1220 mm, and lengths up to 7500 mm, and are supplied in the appropriate shapes and sizes for each project.

The panels have a minimum service life of 60 years provided that they are protected from damage/weather prior to installation. Protection is achieved by the external and internal finishes.

The anticipated working life of 60 years is subject to packaging, transport, storage and installation. Damaged panels should not be used or repaired. The indications of working life should be indicative rather than prescriptive as conditions on site are beyond the scope of the manufacturer.

The panel assembly has been tested by Exova Warringtonfire see test report WF345653 - Fire Resistance Performance testing of load bearing wall assembly to BS EN 1365:1 1999 achieving a 78 minute fire resistance period

Compliance with the current requirements of L1A will be achieved and air leakage can be minimised by adherence to the manufacturers detailing and the relevant agrement certificate.

The system has been approved through Robust Details for acoustic performance.

Further individual details will be required when considering siting of heat producing appliances, flues and chimneys.

The manufacturer shall exercise permanent internal control of products to ensure that a consistently high standard is achieved.

Design, manufacture and installation should be carried out strictly in accordance with the requirements of ETA 11 /0466 for the product issued by BBA as demonstration of compliance with ETAG 019 Prefabricated wood-based loadbearing stressed skin panels.

Conditions of Certificate

All panels should be loaded, transported, unloaded and stored in a suitable manner to reduce the risk of damage (Mechanical or weather).

Installation/ erection should only be undertaken by persons who are trained and assessed to undertake this work and should be undertaken in accordance with details and construction drawings designed in accordance with the BBA Agrement Certificate holder's recommendations.

Installed panels should be protected appropriately with a vapour-permeable membrane to EN 13859: 2010, prior to the addition of the final weather-proof construction materials.

When used to construct walls and roofs the panels will normally be protected by internal and external finishes to prevent impact damage.

LABC consider that, Kingspan TEK Building 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

Regulation 7	Materials and workmanship
Note:	The system is acceptable.
AD A1	Loading
Note:	Walls and roof will have sufficient strength and stiffness when designed and constructed in accordance with sections 5.1 and 5.2 of the BBA Certificate 02/S029
AD A3	Disproportionate Collapse
Note:	The system has sufficient strength and stiffness when designed and constructed in accordance with sections 5.1 and 5.2 of the BBA Certificate 02/S029
AD B3(1)(2)	Internal Fire Spread (Structure)
Note:	Walls with the requisite lining can give a fire resistance in excess of 60 minutes. See sections 9.1 to 9.3 of the BBA Certificate.
AD C2(c)	Resistance to Moisture
Note:	Walls can adequately limit the risk of surface condensation and contribute to minimising the risk of interstitial condensation. See sections 8.1 and 8.2 of the BBA Certificate
AD E1	Protection against sound from other parts of the building and adjoining buildings
Note:	walls can adequately meet these requirements.
AD E2	Protection against sound within a dwelling-house etc
Note:	walls can adequately meet these requirements.
AD L	Conservation of fuel and power
Note:	Walls can contribute to a building meeting the Target Emission Rate. See sections 6.4 and 6.6 of this Certificate. Walls can also adequately limit heat loss at junctions between walls, with other elements and around openings. See sections 6.1, 6.3, 6.4, 6.6 to 6.8, 7.1 and 7.2 of the BBA Certificate.

The Building Regulations 2010 (as amended) England

AD L1A	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 wall.

The Building Regulations 2010 (as amended) Wales

AD L1A	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 wall.

Non-Regulatory Information

LABC Warranty

LABC Warranty conditionally accepts the use of Kingspan TEK Building System, when installed and used in accordance with the Scope and Conditions of this Certificate. Visit www.labcwarranty.co.uk for our LABC Warranty Technical Manual requirements and Warranty conditions of acceptance.

Supporting Documentation

BBA Certificate 02/S029

European Technical Approval ETA – 11/0466

Kingspan TEK literature (Introduction specification manual, standard details - 142mm thick panels)

Kingspan TEK standard 172mm thick panels

Kingspan TEK 172mm Structural Insulated Panels

Exova Warington Fire test report WF345653 Fire Resistance Performance testing of load bearing wall assembly to BS EN 1365:1 1999

Robust Details Appendix A2 – Proprietary Flanking Conditions: Kingspan TEK inner leaf flanking condition for robust details timber separating walls

Kingspan TEK Building System U values design document

Contact Information

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