

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

## Durisol 365 ICF Wall construction System

### Description of Product

This is an assessment of Durisol 365 ICF Wall construction System. The system provides a dry laid insulated shuttering system that incorporates, following the concrete pour, a Lattice/Matrix structural concrete frame. The system has achieved BBA Certification and a BRE Environmental profile rating of A. The BRE profile is currently at renewal stage and an application has been made to renew the certificate.



### Key Factors Assessed

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

### Validity

This certificate was first issued on 6<sup>th</sup> July 2015 and is valid until 6<sup>th</sup> July 2016

Issue Dated 6<sup>th</sup> July 2015

## Scope of Registration

This Registration is for the Durisol 365 ICF insulated wall construction system, incorporating a concrete core.

Manufacturers design installation guide is to be followed, and suitable testing procedures followed on completion as listed in the conditions.

Each building will be subject to SAP or SBEM software analysis and certification.

The manufacturer will exercise permanent internal quality control of production, which shall be documented in a systematic manner in the form of written policies and procedures, including records of results.

Production control is to ensure that the product maintains compliance with its BBA Certification.

The required U value of the finished product is to follow the satisfactory completed outcome of the SAP or SBEM assessment procedures.

Typical design using a U value of 0.15W/m<sup>2</sup>K, to meet with the software analysis procedure, which will be dependant on size of building, orientation, number and opening sizes for windows and doors, or changes in legislation in relation to thermal efficiency.

This certificate does not include the choice of external waterproof envelope but can be used with a masonry cavity, rainscreen cladding or Parex thin coat render system. Final choice will be subject to separate verification and approval should be sought from Building Control and Warranty provider prior to any commencement on site.

This Registration:-

Does not cover structural design

Buildings over 5 Storeys high

Exposure to wind driven water (Protection must be by water proof cladding or water proof render system with its own BBA certification.)

## Conditions of Certificate

- Structural assessment undertaken by appointed engineer to calculate design and positioning of reinforcement in the concrete lattice structure.
- SAP or SBEM assessments to provide design to support and prove the thermal performance of the overall structure including air testing on completion to demonstrate build quality.
- Recommend Thermal Imaging Surveys to be undertaken on occupation to demonstrate build quality. 1% of houses on large developments (large developments over 10)
- External water proofing, cladding or a render system is to be used with its own BBA certification to suit the Exposure zone where the building is to be constructed. The choice of external finish should be determined prior to commencement on site to ensure building regulation compliance will be achieved and any additional Warranty provisions satisfied.
- Concrete slump (minimum 180mm) must be adhered to and a 10mm chipping used in the pouring of the concrete lattice/matrix structure.
- Insulation block would be preferred to be used up to DPC level to prevent thermal bridge.
- Compliance with Product Guide Quality Manual and the Linear Thermal Transmittance details.
- On site checklist to be reviewed by Building Control inspection process.

LABC consider that, Durisol 365 ICF Wall construction 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
AD A	Structure
Note:	Subject to Structural Assessment.
AD B	Fire Safety
Note:	Product acceptable.
AD C	Site specific
Note:	Subject to limitations in conditions.
AD E	Sound Separation
Note:	Subject to sound testing.
AD L	Conservation of fuel and power
Note:	Subject to limitations in conditions.



### 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 structure.



### 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 structure.



### The Building (Scotland) Regulations 2004 (as amended)

If you would like to discuss a specific use of the product in Scotland it will require an additional assessment under the Scottish Building Regulations and accordingly you should contact the LABSS STAS Administrator at [www.labss.org](http://www.labss.org)

## Non-Regulatory Information



### LABC Warranty

LABC Warranty conditionally accepts the use of Durisol 365, when installed and used in accordance with the Scope and Conditions of this Certificate. Visit [www.labcwarranty.co.uk](http://www.labcwarranty.co.uk) for our LABC Warranty Technical Manual requirements and Warranty conditions of acceptance.

## Supporting Documentation

European Technical Approval ETA-05/0090, Shuttering blocks made of wood-chip concrete

Firetherm test report NOLOGRT 117-17.12.08

BRE Client report Environmental Profile 264-099 (re application in process)

BBA certificate 10/4784 product sheet2

Carbon Green Consultants comparison of Durisol 365 against traditional cavity and timber frame

Durisol Linear Thermal Transmittance junction details (PSI Values)

Durisol Product Information Guide

Durisol Quality Manual

Durisol Promotional Brochure

Cost comparison of Housing Construction Systems

On site checklist for Building Control Officers

COSHH analysis document

## Contact Information

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