



# Certificate No: EW342



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

## Istidama Ltd- 4wall

### Description of Product

The Istidama System uses a repeatable joint design for both the horizontal and vertical elements keeping the main structure simple to erect by an unskilled labour force.



### 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 17<sup>th</sup> December 2012 and is valid until 17<sup>th</sup> December 2017.  
Issue Dated 16<sup>th</sup> December 2016

## Scope of Registration

The System Comprises a small number of unique components which assemble into a range of house and building types without the addition of 'Special Panels' being used.

The System can accommodate any design where domestic loading principles apply and can typically be used in any design where other systems such as SIP's, timber frame or indeed other light gauge steel frame systems can be used.

The approval is for the use of the system above DPC level only. As all substructure works will be specific to the individuality of the site, further design details are going to need to substantiate compliance of each individual application.

The panel has been tested to BS 476 and can achieve one hour fire resistance.

If services are to be installed in party walls then the use of proprietary fire resistant patress boxes etc shall be required

The acoustic results are samples - a suitable sound testing regime on party walls/floors should be established for each individual application. Alternatively the Robust Details route may want to be considered.

The thermal insulation performance of this system should be considered in context of the contribution made to the overall performance of the wall structure.

Continuity of insulation at junctions and thermal bridging should be checked for individual projects.

## Conditions of Certificate

May be used only in residential buildings of up to three storeys with a trussed or panel roof.

Appropriate thermal analysis will be provided in each instance to demonstrate continued compliance with Approved Document L 2013.

The 4wall relies on other construction products, materials and components to form a complete wall, floor and roof element.

Structural design of the building /element incorporating the EMSIEP shall be in accordance with the relevant Eurocode

Details of additional protection measures to resist moisture/contaminants from the ground and from moisture outside the building are site specific: to be determined by location, subsoil and exposure conditions

The installation must be undertaken in strict accordance with Ecomech details and specifications and by competent installers trained, registered and monitored by Ecomech.

If services are to be installed in party walls then the use of proprietary fire resistant patress boxes etc shall be required

The acoustic results are samples - a suitable sound testing regime on party walls/floors should be established for each individual application. Alternatively the Robust Details route may want to be considered.

The thermal insulation performance of this system should be considered in context of the contribution made to the overall performance of the wall structure.

Continuity of insulation at junctions and thermal bridging should be checked for individual projects.

Further RD applications are to follow to develop the product into standardised use for extension to dwellings and ultimately full dwelling type approval

LABC consider that, 4wall, 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 products are acceptable.
AD A	Structure
Note:	Subject to limitations detailed below in Conditions section.
AD B	Fire Safety
Note:	Subject to limitations detailed below in Conditions section.
AD C	Site preparation and resistance to contaminants and moisture
Note:	Subject to limitations detailed below in Conditions section.
AD E	Sound
Note:	Subject to limitations detailed below in Conditions section.
AD L1	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 building.



## 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 building.



## 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 building.



## 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

The use of the 4wall 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](mailto:technical.services@labcwarranty.co.uk)

## Supporting Documentation

12-013-201-02 - Section through typical masonry envelope

12-013-005-02 - Section through typical rendered panel

12-013-101-02 - Section through typical brick slip panel

System Overview document

System principles and details document

Structural Calculations (ECO 01 – 05)

12777 (QT21210/1/SL)/Ref 1.0A - Racking Tests on EMSIEP Wall Panels

12777 (QT21210/1/SL) Ref. 2.0 - Air Leakage Performance Tests on EMSIEP Wall Panels

12777 (QT21210/1/SL) Ref.3.0 - Axial and Eccentric Compressive Strength Tests on SIEP Wall Panels to BS5268 Part 2:2002

WF Report No:187154/A - The fire resistance performance of load-bearing wall.

122965 (QT21210/2/SL) Ref.1.0 - Tests on Timber Frame Wall Ties Tested in Tension on Steel Clad Structural Insulated Panels Supplied by Eco Mech Ltd

121312 (QT21609/2/SL) Ref. 1.0A - Hygrothermal Performance of EMSIEP Wall Panels

ISOVER U VALUE REPORT

NPL 2012030336 - Thermal Transmittance test of EMSIEP Wall Panels

EJOT - Pullout EJOT JT3-3-5.5xL from 9mm JUB UK Resistant Multi-pro XS board

EJOT - Pullout EJOT LS 5.5xL from 9mm JUB UK Resistant Multi-pro XS board

EJOT - Pullout EJOT SW8-R from 9mm JUB UK Resistant Multi-pro XS board

121312 (QT21609/2/SL) Ref. 2.0A - Structural performance of EMSIEP Wall Panels before and after accelerated weathering tests

BuildDesk U 3.4 - Condensation risk analysis

Salford University Report No: 728-599 - Measurement of airborne sound insulation

BBA Certificate – Aquapanel

BBA Certificate – Cavalock

Strongtie S-IUQ Brochure

Multi -pro XS Board\_factsheet

## Contact Information

Istidama Ltd

Unit 4A Indigo Business Park

Oil Sites Rd

Ellesmere Port

Wirral

CH65 4AJ

Tel: 0151 378 6118

Email: [chris.moss@istidama.com](mailto:chris.moss@istidama.com)

Web: Not currently available