premier guarantee®

SYSTEM APPROVAL

Istidama Ltd

Castle Chambers, 43 Castle Street, Liverpool, L2 9TL

Approval Date: 24th August 2018

Product Name: Istidama 4wall SIP System

Conditions of Approval:

1. The BDA Agrément BAW 18-079/01/A must remain valid.
2. The BDA Agrément BAW 18-085/01/A for Euroform Versaliner board must remain valid.
3. The product is to be used and installed in strict accordance with the BDA certification.
4. The system must be installed by installers who have been trained and approved by the certificate holder.
5. The system is limited to buildings up to 10m or three storeys high.
6. The wall panels and claddings / DPC details must meet the requirements of Chapter 7.3 of the Warranty Technical Manual.
7. If the external finish has a cavity, this must be drained and vented and formed in accordance with Chapter 7.3 of the Warranty Technical Manual.
8. Where there is no cavity, the condition listed in the Parex warranty approval ref 13 0019a must be adhered to and approved by the RMS on a site-by-site basis.
9. There must be a fully detailed structural design package submitted for approval for each project to confirm that the structural performance of the panels meets the requirements of Regulation 7 and Part A of the Building Regulations.
10. The arrangement of openings for windows and doors in the wall panels should be undertaken by either the factory or approved contractors following the manufacturer's details and a structural engineers design.
11. A suitable breather membrane & roofing must be provided to protect the SIP panels from water penetration through the claddings.
12. Projects with Balconies or parapets are not covered by this assessment. Any projects which include balconies and/or parapets are subject to project specific approval, with particular emphasis on how water penetration and rainwater disposal (through the panels) will be managed.
13. Site based manufacturing facilities of Istidama 4wall will require satisfactory assessment of quality control systems prior to production and installation.

Cert No: 4wall0618

Valid Until: 24th August 2019

Summary: Offsite built structural insulation panel wall system for use as walls for residential, non-residential, industrial and commercial buildings.

Use: This system is subject to a Structural Engineer's Report on a site-by-site basis.

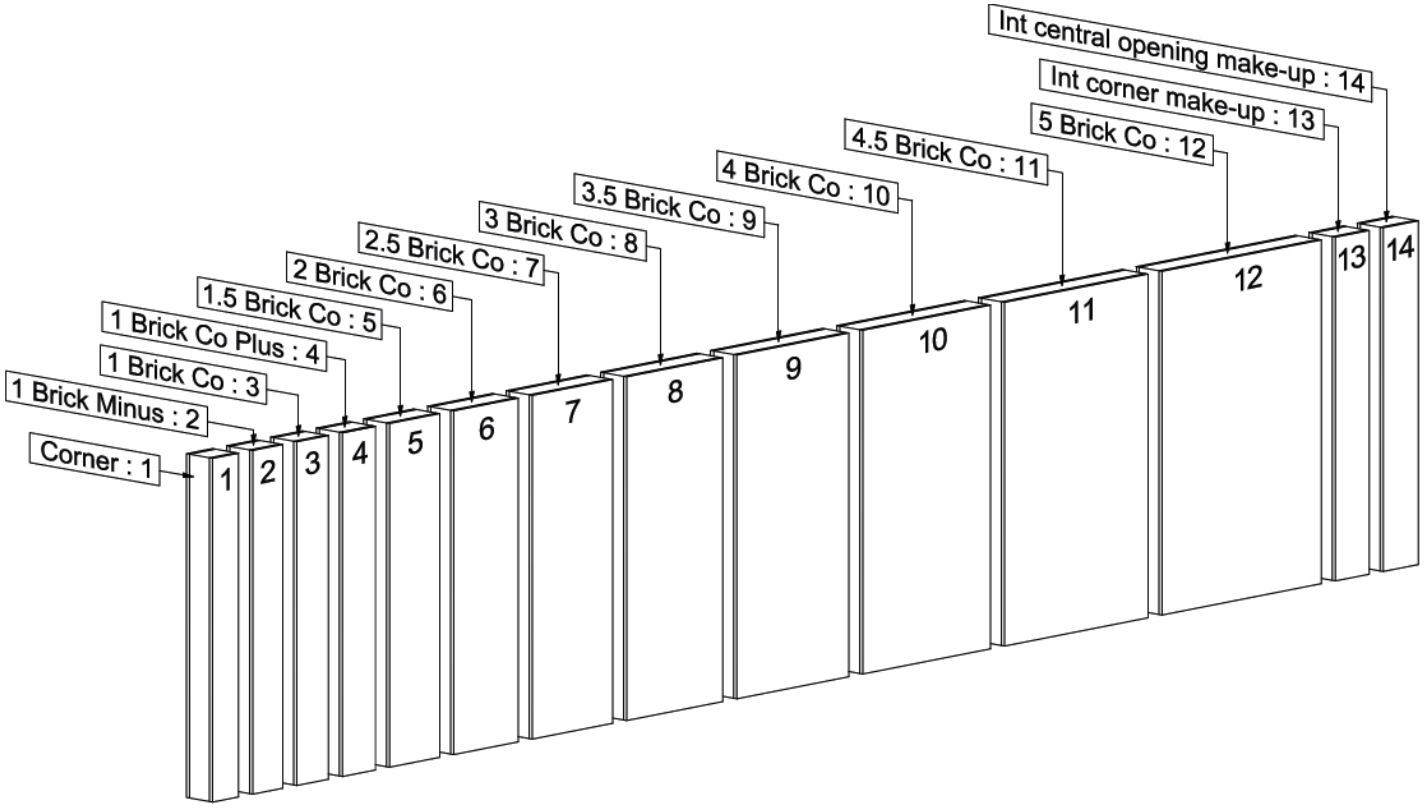
THE BUILDING STRUCTURE

Structure and Building Design

The Istidama 4wall SIP System is an offsite building system, built in their factory, using a repeatable joint design for both the horizontal and vertical structural insulation

The panelling system provides the structural elements for all aspects of the external walls, with the approriate connectors.

The below shows the range of different sizes of 2.4m high structural wall panels;



Please note; an extensive series of various Lintel Panel Sizes, Window base panel sizes, standard window &door assemblies are available from the manufacturer.

Panel

Each panel is made up of 2 skins of 12mm Versaliner MgO board and 161mm PU core, and are 185mm thick.

The MgO Board is bonded via Structurally Overpacked BASF PU foam pumped core
1mm profiled top hat galvanised steel female perimeter connection on all 4 sides.

Aluminium electrical cable conduits are installed as per design down the internal face of the board.

Connections

- 12mm Euroform Versaliner MgO spines for panel joints and leg stiffness.
- 1mm profiled top hat galvanised steel male soleplate and head-binder
- Apollo joint adhesive
- 50mm long stainless steel temporary fastiners
- Jointing paste between internal and external vertical joists of MgO boards or MgO boards and other materials (variable)

External Finishes:

- Insulated render carrier / render
- Insulated brick slip carrier / brick slips
- Timber cladding / cladding
- Brick / stone / cavity

Internal Finishes:

- Knauf 'air spray' thin coat plaster

NB: Details

Details of examples can be found in 9 of the **BDA Agrément BAW 18-079/01/A.**

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PLAN CHECKING TEAM

The following will be checked on a site-by-site basis by our plan check team.

To be Reviewed	Comments
A1 Loading	
A2 Ground Movement	
A3 Disproportionate Collapse	
B1 Means of warning and escape	
B3 Internal fire spread (structure)	
B4 Boundary conditions	
B5 Access and Facilities for the Fire Service	
C1 Site preparation and resistance to contaminants.	
C2 Resistance to Moisture Cladding finishes Roof coverings External doors and windows	
G2 Water Efficiency	
H1 Foul Water Drainage (Below Ground)	
H3 Rainwater Drainage	
H6 Solid Waste Storage	
J2 Discharge of Product of Combustion (with regard to flue positioning).	
L1 Conservation of Fuel and Power	
M1 Access and Use	

SITE INSPECTION

The following will be inspected on site by the Risk Management Surveyor.

To be inspected	**Comments**
Foundations	
Drainage; - Connection to house - Plot drainage	
Foundation connection to panels	
Ground Floor; - Gas Membrane, if required - Sub-floor ventilation - Sub-floor drainage	
Intermediate Floors;	
Connection of panels; - Stitching external - Stitching internal - Party wall - Connections	
Cladding	
Part B; - Fire stopping to lines of compartmentation - Spandrel Panels/roof fire stopping - Means of escape, - Fire detection/alarms and emergency lighting	
Stair; - Handrail - Guarding	
Roof; - Insulation/fire stopping at eaves - Terminals	
Access to Plot for Part M	
Final Inspection	

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AS BUILT COMMISSIONING CERTIFICATES AND COMPLIANCE REPORTS REQUIRED AT COMPLETION

- The following certificates and reports are required at the completion of each dwelling to demonstrate compliance with the building regulations and warranty requirements.

Information required prior to completion of works	**Comments**
Sound test results (site performed)	
Ventilation commissioning certificates	
Gas appliance Commissioning Certificates	
As Built SAP Calculations	
Air tightness test results	
EPCs	
Operation & Maintenance Manual	
Quality control document for each module	

Other Comments

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PLANS AND DOCUMENTS

The plans and documents used to complete this assessment are as follows

Document Reference:	BDA Agrément BAW 18-079/01/A
	BDA Agrément BAW 18-085/01/A
	4wall Offsite Hyper SIPS Walling System - Overview - Booklet 'A'
	PAREXTHERM Mineral - 4wall Hyper SIPS system
	PAREXTHERM Mineral - 4wall Hyper SIPS system - cavity batten
	PAREXTHERM Acrylic Revlane - 4wall Hyper SIPS system
	PAREXTHERM Acrylic Revlane - 4wall Hyper SIPS system - cavity batten