



Innovative system Acceptance Certificate

Issue date: 25/11/22
Reference number: 3905
Issue: 01
Innovative system Owner: Istadama Ltd
Castle Chambers
43 Castle Street
Liverpool
Innovative system name: Istadama 4wall CBPB SIP Wall System
Generic form: SIP (with cement bonded particle board)

NHBC Services Ltd has reviewed the following information (the System Manual) related to the Innovative system supplied by the Innovative Product Owner:

- 4wall System Manual CBPB V1.6, 09th November 2022
- BDA Kiwa Agrément Certificate BAW-20-175-S-A-UK, rev A
- 4wall Structural Design Principles V1.8, 09th November 2022

Relying on the information provided by the Innovative system Owner, NHBC Services Ltd considers that the Innovative system can meet NHBC Standards.

Additional requirements must be met in order for a new home to qualify for Buildmark cover. Buildmark cover for new homes will only be issued to Builders or Developers in accordance with the latest version of the NHBC Rules (a copy of which can be found at www.nhbc.co.uk).

This acceptance certificate is valid until such time as it is no longer published or authorised by NHBC. Readers are advised to check the validity and latest issue number of this Certificate by either referring to our website at www.nhbc.co.uk/accepts or contacting NHBC directly

Issued by:

Innovation Manager

NHBC Services Ltd



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Description, Scope and intended

The Istdama 4wall System (the System), is a Structural Insulated Panel (SIP) system for loadbearing walls, intended for use above DPC level, on houses up to two storeys plus room in the roof. Houses may be attached or detached, and the System can be used in all nations within the UK. Wall panels are factory produced to standard brick coordinating widths by 2400mm tall. They are a standard 185mm thick, comprising a layer of 12mm Versapanel CBPB either side of an injected 160mm BASF Elastopor H PU core. The panels are formed with galvanised steel folded plates set into all edges which accommodate glued-in 12mm CBPB splines to connect the panels together. The System can be used in all environmental conditions, as the site applied external cladding solution (not part of the System), will provide the weather resistance for the project.

Extent of review for NHBC Warranty on NHBC Registered Sites

NHBC Services Ltd has undertaken a technical review of the System Manual as set out in line with the NHBC Accepts Technical Document for Innovative systems.

The NHBC Accepts Service is intended solely to provide confidence that the Innovative system meets NHBC Standards and is not intended as evidence of performance for any other purpose. Appraisal of the Innovative systems against building regulations is not carried out as part of this Service.

Exclusions and Limitations

This Acceptance Certificate is made out solely to the System Owner. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the System Owner arising out of, or in connection with, this Acceptance Certificate.

Exclusions and limitations are set out in the System Manual. Additional considerations in the use of the Innovative system include:

- Besides the loadbearing element of perimeter walls, all other fabric elements are excluded from this certificate and will be designed on a project specific basis
- Project specific ground investigations will be required together with a foundation and floor design that responds to the particular characteristic of the site, including the presence of ground gases or radon



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- A structural design calculation pack will be provided to NHBC for every project including details for the loadbearing walls, racking walls, ground floor, intermediate floors, roof, structure and connections. This pack should also include information on all elements fixed to the wall panel system eg. Wall ties, cavity trays etc, alongside fixings used and pull-out resistance provided by the CBPB (cement bonded particle board) skin. No nail fixings are permitted into the wall panel system for structural purposes
- Any works on site involving Apollo adhesive should only be undertaken when the outdoor temperature is within the manufacturer's permitted temperature range (5 to 30 degrees). The full cure time of the adhesive is 24 hours at 20 degrees
- The outer leaf of the external walls is not covered by the certificate.
- Full specification and details of the external leaf should be provided, including wall ties, cavity trays and cavity barriers/ fire stopping.
- The System review is limited to use of the System not less than 1m from a boundary and use with masonry outer leaf, therefore additional fire test / assessment information is required to support use with other external cladding systems or use of the System less than 1m from a boundary
- A drained and ventilated cavity is always required between panels and external masonry / cladding
- Internal lining details and specification to be provided to the project surveyor on a site specific basis
- Maximum size of openings within each panel is 300x300mm provided that any opening is minimum 100mm from a vertical joint and 200mm from horizontal joint
- Canopies, balconies and Juliet balconies are not part of the system, so full specifications and calculations will be required on a project specific basis
- The System is intended to be used without a VCL however, a Condensation Risk Analysis should be carried out in accordance with BS EN ISO 13788 for each project to determine whether a VCL using the parameters in NHBC chapter 6.10.18
- Use of any part of the System below 150mm above external ground level is not covered by this certificate
- Project specific details are required for DPC / Wraptite installation at base of wall panel
- Windows and external doors are outside the scope of this certificate so full specifications and fixing details will be provided on a project specific basis
- Design, specification and pre-completion testing confirming resistance to the passage of sound are required on all relevant projects
- SAP calculations and EPCs will be required on a project specific basis
- Air tightness tests will be required for each house
- Services design and co-ordination is not covered by the certificate, except services that pass directly through the panels from one side to the other following the correct detailing



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stated in the system manual. No other services should be run within the panel core insulation

- The System is limited to use on houses up to two storeys plus room in the roof. The System would not be acceptable for use with the current polyurethane core for buildings with a storey 11m or more in height
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