



Innovative system Acceptance Certificate

Issue date: 14/04/23
Reference number: 3756
Issue: 02
Innovative system Owner: Starship Homes Ltd
Liverpool International Business Park
De Haviland Drive
Liverpool
L24 8RN
Innovative system name: Starship Homes MMC Panelised System
Generic form: Panelised Steel Frame System

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

- Starship Homes System Manual (Panelised Homes) C16, Dated 30th March 2023.
- Starship Homes Installation Manual C5, Dated 28th September
- Starship Homes Structural Philosophy Manual C3, Dated 01st July 2021

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



Innovative system Acceptance Certificate

Description, Scope and Intended Use

The Starship Homes Panelised System (the System), comprises factory built light gauge steel (LGS) frame wall, intermediate floor, and roof elements.

The LGS panels are prefabricated into external wall units which are considered 'open' to the internal side. External wall panels include a sheathing board, rigid insulation and breather membrane. The panels are faced with Wetherby Epsitec board system with brick slip/ render finish or Cedral fibre cement weather boarding. Installation of the Cedral cladding falls outside the scope of this assessment. Any Cedral installation should be completed on site following the submission and approval of project specific details.

Separating walls are also prefabricated in the factory from light gauge steel, fully filled with insulation and Glassroc X sheathing board fitted to the cavity side.

External windows and doors are normally factory fitted but excluded from the scope of the review as there is a range of suppliers and products offered by Starship. Site specific checks and assessments will be required.

Intermediate floors are prefabricated into open panels and then fixed to Z-bracket hangers between the wall panels.

Roof panels are open panel either fixed using Z-bracket hangers or directly on top of the gable wall panels. The eaves joint between wall panels and roof cassettes are wrapped and jointed with breather membrane, fully filled with rockwool insulation and a closed up with a site fixed stone-coat cement board cladding infill section. The eaves are completed on site.

Once walls, floor and roof panels are erected, follow on trades on site will have access internally so that further insulation, first & second fix M&E can be installed. Final fixtures and fittings, along with internal linings are all completed on site.

The System is designed to be used in houses not exceeding 3 storeys in height. The maximum size of panels will be 12m in length and 3.4m in height. Typically the house configurations are semi-detached, detached and terraced with no limit in the number of houses in a row. The System intended to be used in England & Wales only. The System has not been assessed for use as apartment blocks.

Responsibility for building design and coordination of production, in the factory as well as on site, lies with Starship Homes Ltd and their appointed structural engineers. The LGS frame supplier has responsibility for ensuring the cold rolled steel framing conforms to BS EN 1090 and their SCI Stage



Innovative system Acceptance Certificate

1 certificate. An independent structural engineer will check the design and provide a Stage 2 certificate for each 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:

- The System is limited to houses not exceeding 3 storeys in height. The system has not been assessed for use in apartment blocks
- Project specific aspects of the construction will need to be considered for each project including foundations, subfloor, below ground drainage and ground floor construction
- Due to the range of windows and door suppliers, project specific details and specifications will need to be assessed on a site by site basis
- Installation of Cedral cladding is not within the scope of the System review. Any Cedral cladding installation is not permitted within the factory and will require project specific details
- An engineer is to use the System Manual on a project specific basis for the completion and submission of a bespoke structural design for each project
- As the System is open panel, all first fix services, internal fixtures and final decoration will be project specific
- SAP reports, Final EPCs and air leakage testing will be required on a project basis