

System Review certificate

NHBC Services Ltd confirms that

System owner: ITW Ltd (T/A ITW Construction Products)

System name: Gang-Nail Truss Frame

System manual: ETA-23/0625 (18/09/2023)

has been reviewed by the NHBC System Review team and as detailed in the System Manual can meet the NHBC Technical Requirements, subject to the exclusions and limitations listed in this certificate.

This 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 nhbc.co.uk/systemreview or contacting NHBC directly.

NHBC Services Ltd has undertaken a technical review of the System manual as set out in line with the NHBC System Review Technical Document for Innovative systems. The NHBC System Review 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 system against building regulations is not carried out as part of this Service.

NHBC reference: 3884

First issued: 07/07/2025

Version number: 01.2

Revised on: 26/01/2026

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NHBC reference: 3884.01.2

System description

Gang-Nail Truss Frame is a timber frame wall system with all members connected using punched metal plate fasteners. The System Owner provides design guidance and supplies the Gang-Nail plates for timber frame fabricators to produce structural timber framed wall elements. Wall panels formed using the System incorporate diagonal (bracing) members connected by punched metal plate fasteners. These provide strength and stability to the panels and remove the need for external sheathing boards. The punched metal plate fasteners are independently assessed to the requirements of BS EN 14545:2008 and the manufacture of these panels are covered under BS EN 14250:2010.

Gang-Nail Truss Frame is intended for use in buildings as load bearing and racking resistant elements in external and internal walls above DPC level. They are for use in Service Classes 1 and 2 as defined in EN 1995-1-1 and in Use Classes 1 and 2 as defined in EN 335-1 and 2. The System can be used for external and internal walls in dwelling houses up to four storeys where the top storey does not exceed 11m from the lowest external ground level. The System is expected to have a service life of not less than 60 years.

NHBC review also based on Gang-Nail Truss Frame Technical Guide EC5, Rev.F dated 03/06/2024 and Gang-Nail Truss Frame Site Installation Guide, Rev.A dated 03/06/2024.

Exclusions and limitations

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 [nhbc.co.uk](https://www.nhbc.co.uk)).

- The overall design and structural limitations of wall panels fabricated from the System must be assessed on a project-by-project basis by a suitably qualified Structural Engineer.
- Wall panels that incorporate the System should carry UKCA/ CE marking, applied by the timber frame manufacturer.
- Gang-Nail Truss Frame is not considered suitable for Service Class 3 conditions.
- The System cannot be used to form closed panel walls, and it is to be used only in conjunction with a masonry outer leaf and minimum 50mm clear cavity.
- All non-structural performance characteristics of wall panels fabricated from the System are excluded from this certificate, and must be justified on a project-specific basis.