



# Innovative system Acceptance Certificate

**Issue date:** 18/10/21  
**Reference number:** 3541  
**Issue:** 01  
**Innovative System Owner:** Van Elle Limited  
Summit Close,  
Kirkby in Ashfield,  
Notts, NG17 8GJ  
**Innovative System Name:** Smartfoot  
**Generic form:** Precast concrete ground beams

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

- System Manual, titled Smartfoot Modular Foundation System Design Compendium, rev P05, dated 09.09.21 (document Ref: G10063-JNP-16-XX-RP-S-0001).

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](http://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](http://www.nhbc.co.uk/accepts) or contacting NHBC directly.

**Issued by:**

A handwritten signature in black ink, appearing to read 'A. Smith', is written over a light blue horizontal line.

Technical Innovation Manager  
NHBC Services Ltd



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## **Description, Scope and intended**

Van Elle's Smartfoot is a modular foundation system comprising precast concrete ground beams. The Smartfoot ground beams are typically supported on piles and piles caps, or piers, depending on ground conditions. Although piles, pile caps and piers are generally not included within the Smartfoot system, the system may also include precast concrete Smartfoot pile caps. The system includes both standardised and bespoke ground beams to ensure flexibility to suit a wide variety of applications. The ground beams are post tensioned using steel prestressing tendons that are tightened on site following beam placement into their final positions. The tendons tie the precast beam elements together providing stiff joints to form a rigid and robust network of ground beams. Van Elle's Smartfoot foundation system is suitable for use on low-rise masonry or concrete panel construction up to three storeys or timber framed construction up to four storeys high. The system is compatible with cellular floor layouts with load bearing external and internal walls supporting predominantly uniformly distributed loads to the foundations. It is possible that the system could be used for low-rise steel or concrete framed buildings, however this is subject to additional design checks and measures to resist horizontal and uplift forces applied to the foundation by the building's lateral stability system.

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## **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.

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## **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:



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- The Smartfoot foundation system is to be designed on a site-specific basis to suit building layouts and site conditions
  - The Smartfoot foundation system comprises precast concrete ground beams and pile caps only. Although the system is compatible with Van Elle's pile, pile cap and pier systems, these items have not been reviewed under NHBC Accepts and are not covered by this certificate
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