Building Consent Process Summary

Truss House™ – Structural System by Pryda

This document provides an overview of the Truss House structural system and how Building Code compliance is achieved.

This document is intended to accompany detailed drawings, specifications, and Producer Statements to clarify scope, responsibility, and compliance pathways when compared to a traditional truss and frame building.

1. About the Truss House Structural System

Truss House is a prefabricated light-timber building system in which the floor, wall, and roof structure are engineered and plated together off site at the truss plant to create a set of structural portals.

On site, the building work is limited to assembly of the engineered system.

The completion of foundations, cladding, and architectural elements are in accordance with the NZ3604 as per usual standard.

The on-site assembly is less complex than conventional frame-and-truss construction and does not introduce additional construction risk.

2. Building Code compliance approach

a) The entire superstructure (floor, walls, and roof) is designed as a Specific Engineering Design (SED).
b) Compliance with B1 Structure and B2 Durability for the superstructure is provided by Pryda under a Producer Statement PS1 (Design).
c) NZS 3604 is not relied on for structural sizing of the superstructure and where NZS 3604 is referenced, it is for non-structural architectural detailing only.
d) There is no requirement for monitoring above CM-1.

3. Scope of the Pryda engineered system

Pryda's design and responsibility include:

a) Structural design of floor trusses, wall trusses, and roof truss portal components.
b) Structural connections between floor, wall, and roof structural components to form the portal system – all connections between floor, wall and roof happen prior to the structural system leaving the truss plant.
c) Structural resistance to gravity, wind, and earthquake actions.
d) Durability of the timber superstructure above foundations.
e) The only departure from standard light-timber practice is that structural walls are engineered, not designed using NZS 3604 span tables.

This scope is fully described and bound by the Pryda PS1 and supporting documentation.

4. Scope of on-site building work On-site work

includes:

1. Construction of foundations (others)
2. Assembly of the engineered truss system in accordance with Pryda installation instructions.
3. Installation of cladding, roofing, windows, linings, services, and finishes (others)

5. Design responsibility split

Structural engineer (Pryda):

1. B1 Structure and B2 Durability for the superstructure.
2. Wind and earthquake resistance through the portal system.
3. Structural deflection and load paths, including where conventional lintels are not present.

Architect / Designer / LBP:

1. Site planning and architectural design.
2. Foundation design (with engineering input where required).
3. E2 External Moisture and E3 Internal Moisture design and detailing.
4. Internal non-load-bearing walls and linings.

6. Foundations

a) Foundation systems may follow NZS 3604-type solutions where load limits are not exceeded.
b) Pryda confirms design actions at the interface with foundations.
c) Where loads exceed NZS 3604 limits, Pryda provides specific design actions for foundation engineering.

7. Inspection and construction monitoring

a) The inspection regime is consistent with standard residential construction.
b) Pryda's PS1 indicates if construction monitoring beyond CM1 is required.
c) No additional inspection points are introduced.

8. Documentation provided for consent Council

should expect to see:

1. Pryda PS1 (Design) covering B1 and B2 for the superstructure.
2. Pryda structural drawings and calculations.

9. Close-out of compliance

Structural compliance is certified through Pryda's PS1 and supporting documentation from the LBP.