

premier<sup>®</sup>  
guarantee

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SYSTEM APPROVAL

**Product Name:** Talo Elements

**Conditions of Approval:**

- 1) That Talo Elements' ISO 9001 accreditation remains valid, a copy of which must be provided to Premier Guarantee upon renewal each year.
- 2) That periodic factory inspections are carried out by Premier Guarantee, the frequency of which will be agreed, based on both the quality and quantity of housing units produced.
- 3) That any developments within 5km of the coast are referred to Premier Guarantee's Technical Surveying Department to assess fixings and finishes prior to manufacturing commencing.
- 4) That all works are carried out in strict accordance with the functional requirements of the warranty Technical Manual.
- 5) That the design of the system remains unaltered.
- 6) That site installation of the system is carried out by the certificate holder, or companies under the direct supervision of the certificate holder. Where installation is carried out by third party companies, details of that company must be provided.
- 7) That structural calculations are provided and accepted on a project specific basis.
- 8) That foundation design details and calculations are provided and accepted on project specific basis.
- 9) That sound testing is carried out on a project specific basis in accordance with regional Building Regulations.
- 10) That SAP calculations are provided on a project specific basis demonstrating compliance with energy efficiency requirements in accordance with regional Building Regulations.
- 11) Access to and around buildings will be assessed in accordance with regional Building Regulations.
- 12) That compliance with respect to fire safety and means of escape will be assessed in accordance with regional Building Regulations.
- 13) That a copy of the manufacturer's specification and warranty is provided on a project specific basis, together with third party accreditation for all external doors and windows.
- 14) That stairs and landings are assessed for compliance with regional Building Regulations on a project specific basis.
- 15) That all timber elements are located at least 150mm above external ground level.
- 16) That an insurance backed warranty is provided for external render systems in locations where rainfall of 75l/m<sup>2</sup> is expected.
- 17) That a site specific roof tile fixing schedule is provided.
- 18) That any ventilated cold deck balcony roofs are tested upon completion to demonstrate waterproofing integrity.

**Cert No:** Talo1019

**Valid Until:** 10<sup>th</sup> October 2020

**Summary:** Manufacture and erect a closed panel timber frame system & pitched roof onto prepared foundations.

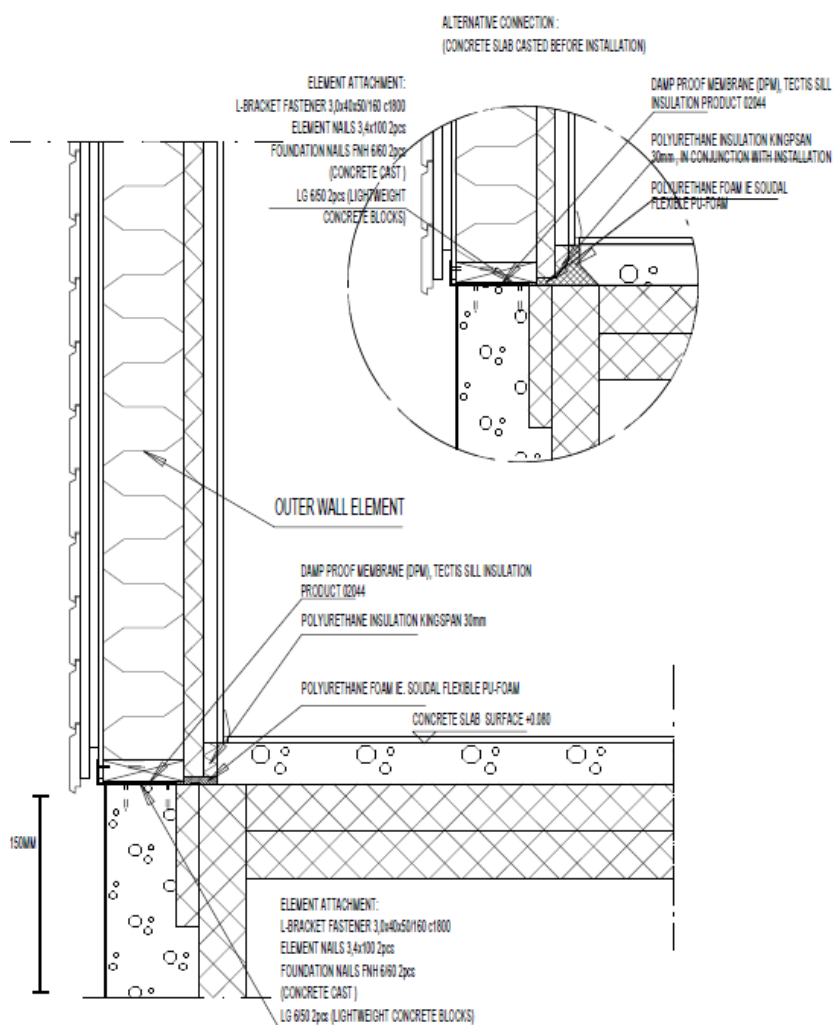
**Use:** This system is limited to a maximum no. of 4 stories, subject to Structural Engineer's Report.

## Structure/Building Design

### Ground floors and Foundations

Site specific. Refer to Structural Engineers Design on a project specific basis.

### Substructure Connection Details



## Intermediate Floors

### INTERMEDIATE FLOOR STRUCTURE:

#### \*FLOORING

\*SELV LEVELING CAST approx. 40mm (OPTIONAL)

PRIMING ACCORDING TO MANUFACTURER DIRECTIONS

\*OSB3 TG4-BOARD 18mm OR 22mm (PROJECT SPECIFIC),

GLUED TO BEAMS AND TO NEXT BOARD

\*MID FLOOR JOIST POSI-PS-12

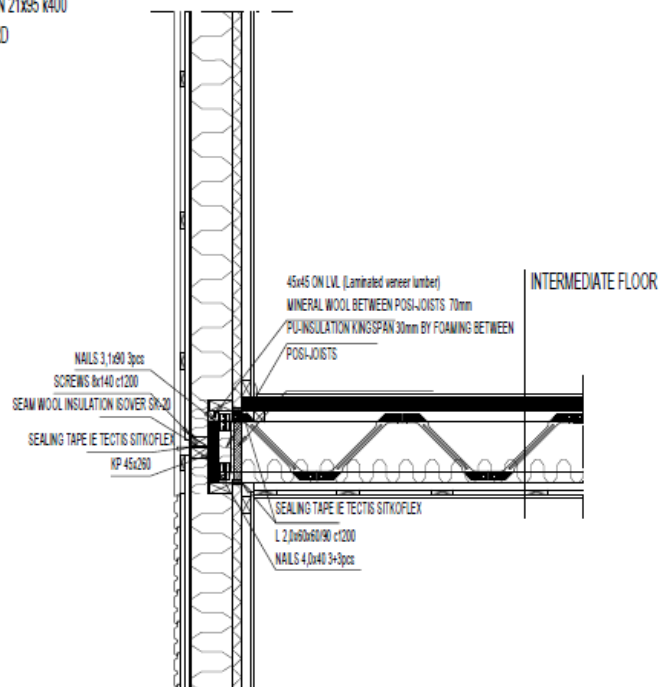
+MIN. WOOL 100mm

\*BUILDING CARDBOARD

\*BATTEN 30x42 (SAME SPACING AS JOISTS)

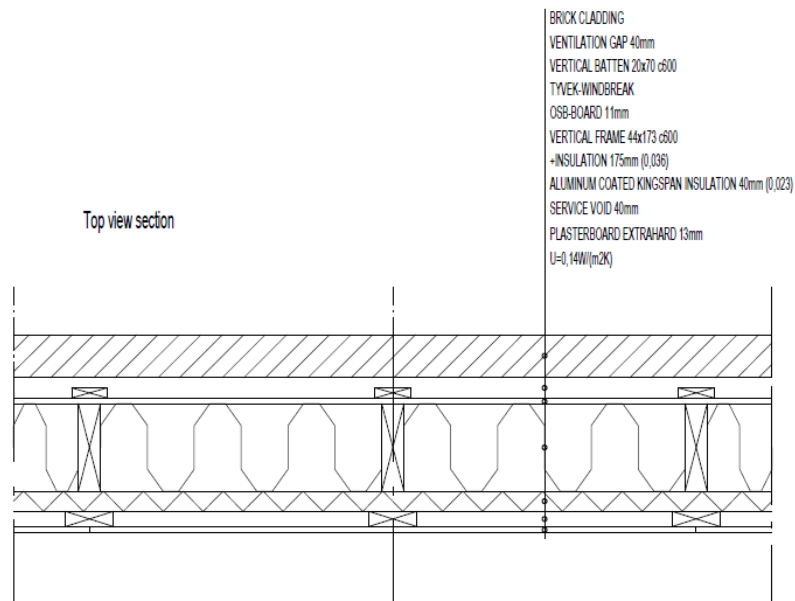
\*CROSS BATTEN 21x95 k400

\*PLASTERBOARD

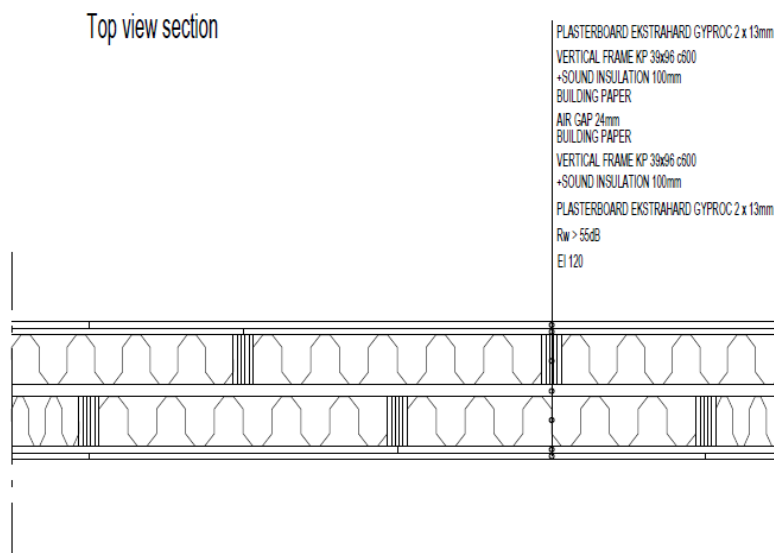


## Walls

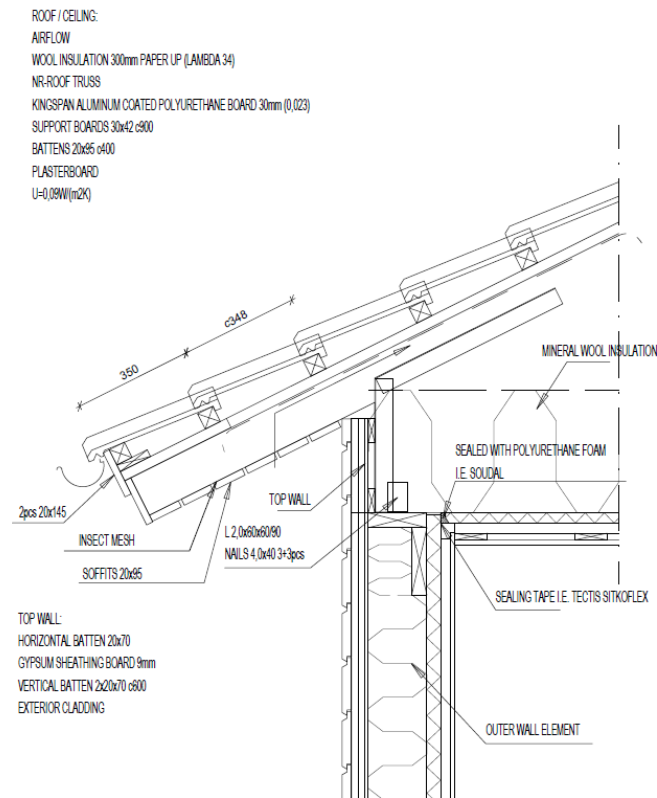
### External walls



### Party Walls



## Roof



## Technical Information Required on a Project Specific Basis

| To be Reviewed                                       | Comments |
|--|----------|
| Ground conditions and foundations                    |          |
| Means of warning and escape                          |          |
| External fire spread & boundary conditions           |          |
| Access and Facilities for the Fire Service           |          |
| Site preparation and resistance to contaminants.     |          |
| Resistance to Moisture<br>External doors and windows |          |
| Water Efficiency                                     |          |
| Foul Water Drainage (Below Ground)                   |          |
| Surface Water Drainage                               |          |
| Solid Waste Storage                                  |          |
| Conservation of Fuel and Power<br>- SAP calculation  |          |
| Access and Use                                       |          |
| Stairs, ramps guards                                 |          |

## SITE INSPECTION

The following is a checklist of what should be inspected during erection on site.

| To be inspected   | Comments   |
|---|--|
| Foundations   | All foundations must be inspected in accordance with the MDWIS Operations & Guidance Manual.   |
| Drainage;<br>Connections<br>- Plot drainage   | All below ground drainage must be inspected in accordance with the MDWIS Operations & Guidance Manual.   |
| Foundation connections  | The connections between the panels and the foundations must be inspected to ensure compliance with approved details.                                       |
| Ground Floor;<br>Gas Membrane, if required  | The oversite must be inspected to ensure compliance with approved details.   |
| Connection of panels;<br>- Horizontal Connections between panels<br>- Vertical Connections between panels | The connections between the panels must be inspected to ensure compliance with approved details.   |
| - Fire stopping to compartment walls and floors<br>- Cavity barriers/closers where applicable             | All fire stopping must be inspected to ensure compliance with approved details.  |
| Stairs;<br>- Handrail<br>- Guarding<br>- Landings<br>- Headroom   | Internal layouts may vary on a project specific basis so all stairs must be inspected to ensure compliance with the regional Building Regulations.         |
| Roof;<br>- Fire stopping at party wall lines.<br>- Penetrations   | Ensure that fire stopping continues along the party wall line at roof level.<br>Ensure that any roof penetrations are appropriately sealed around.         |
| Access, facilities and use of building  | Internal layouts may vary on a project specific basis so access to and around buildings must be assessed in accordance with regional Building Regulations. |
| Final Inspection  | The final inspection must be carried out in accordance with the MDWIS Operations & Guidance Manual.  |

**AS BUILT COMMISSIONING CERTIFICATES AND COMPLIANCE REPORTS REQUIRED AT COMPLETION**

The following certificates are required at the completion of each dwelling to demonstrate compliance with the building regulations and warranty requirements.

| Information required prior to completion of works    | Comments |
|--|----------|
| Sound test results (site performed)                  |          |
| Ventilation commissioning certificates               |          |
| As Built SAP Calculations                            |          |
| Air tightness test results                           |          |
| EPCs   |          |
| Electrical Part P certificate                        |          |
| Operation & Maintenance Manual                       |          |
| Quality control document for each panel              |          |
| Fire stopping (where required by Technical Manual)   |          |
| Fire alarm systems                                   |          |
| Emergency lighting (where applicable)                |          |
| Automatic opening vents (Where applicable)           |          |
| Sprinklers (Where applicable)                        |          |
| Membrane roof testing (Where applicable)             |          |
| Electrical Heating Systems (Part P certificate)      |          |
| Unvented hot water systems                           |          |
| Package sewerage treatment plants (where applicable) |          |
| Building Control completion cert                     |          |

## FACTORY AUDIT

The following Checklist is indicative of what will be inspected during a factory audit.

| To be inspected  | Comments |
|--|----------|
| ISO 9001 accreditation   |          |
| Do the incoming materials comply with the technical specifications for raw materials and constituents?   |          |
| Procedures for management of suppliers and sub-contractors.  |          |
| Staff training records.  |          |
| Calibration and maintenance records for machinery and equipment.   |          |
| Evidence of measures to avoid or correct deficiencies identified in products.  |          |
| Processes for storage and delivery of materials and finished products.   |          |
| System components; <ul style="list-style-type: none"> <li>- Timber frame</li> <li>- Vapour Barrier</li> <li>- Insulation</li> <li>- Internal &amp; external boarding</li> <li>- Breather membrane</li> <li>- Cladding system where applicable</li> <li>- Cavity closers &amp; fire stopping</li> <li>- M&amp;E services</li> <li>- Roof structure &amp; coverings</li> <li>- Tolerances</li> </ul> |          |
| Windows; <ul style="list-style-type: none"> <li>- Fixings</li> <li>- Reveals</li> <li>- Height of windows from floor</li> <li>- Means of Escape</li> </ul>   |          |

## PLANS AND DOCUMENTS

The plans and documents used to complete this assessment is as follows

**Drawing Reference:** TE-DET-PG-1.1  
TE-DET-PG-1.2  
TE-DET-PG-1.3  
TE-DET-PG-1.4  
TE-DET-PG-2.1  
TE-DET-PG-2.2  
TE-DET-PG-2.3  
TE-DET-PG-2.4  
TE-DET-PG-3.1  
TE-DET-PG-3.2  
TE-DET-PG-4.1  
TE-DET-PG-5.1  
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TE-DET-PG-5.4  
TE-DET-PG-5.5  
TE-DET-PG-5.6  
TE-DET-PG-6  
TE-DET-PG-6.1  
TE-DET-PG-7.1