



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 LABC Warranty upon renewal each year.
2. That periodic factory inspections are carried out by LABC Warranty, 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 LABC Warranty '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/m² 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: 10th October 2020

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

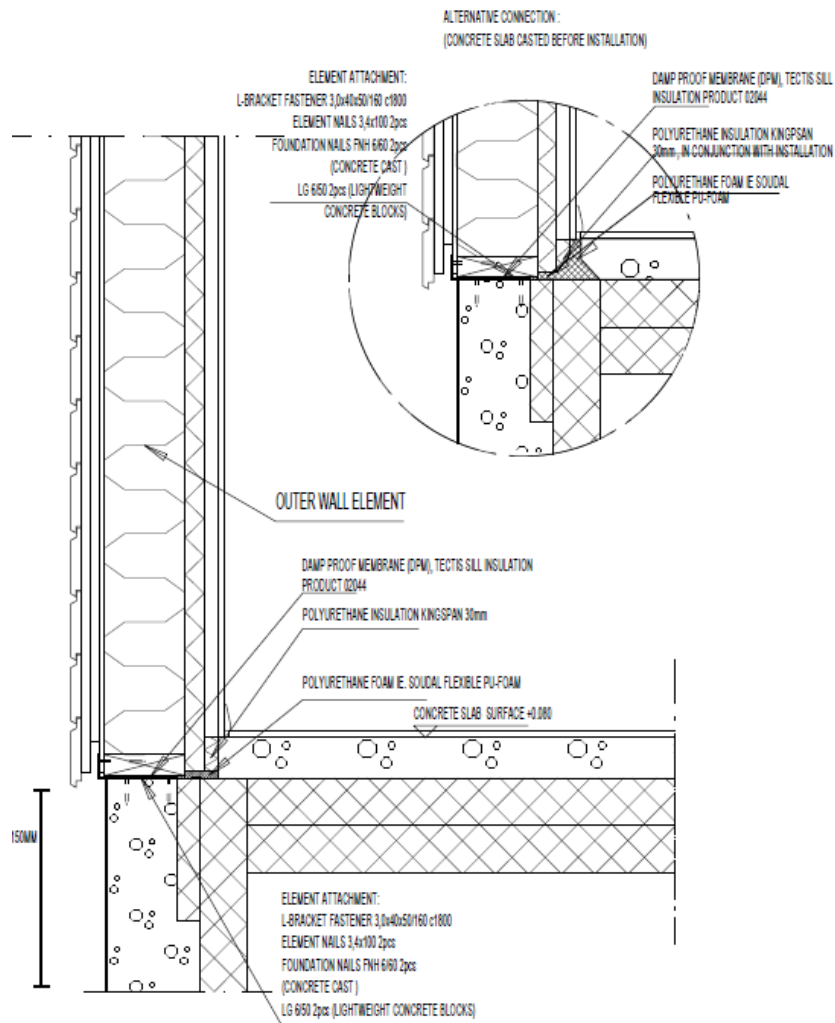
Use: This system is limited to a maximum no. of 4 stories, subject to Structural Engineer's Report.

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

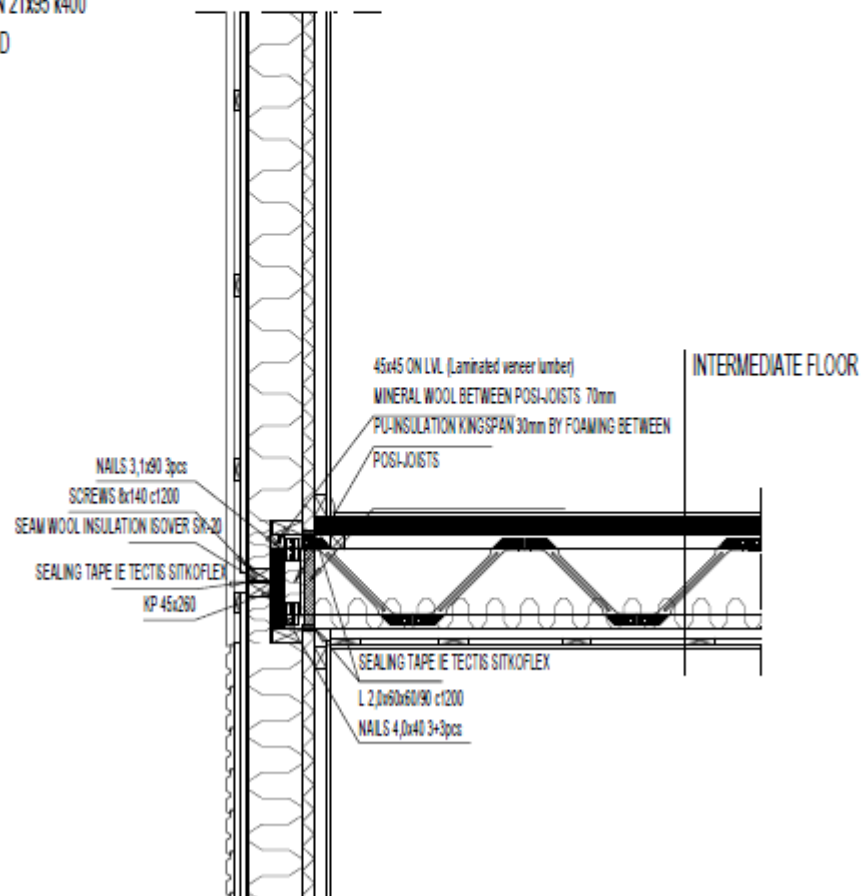
+MIN.WOOL 100mm

*BUILDING CARDBOARD

*BATTEN 30x42 (SAME SPACING AS JOISTS)

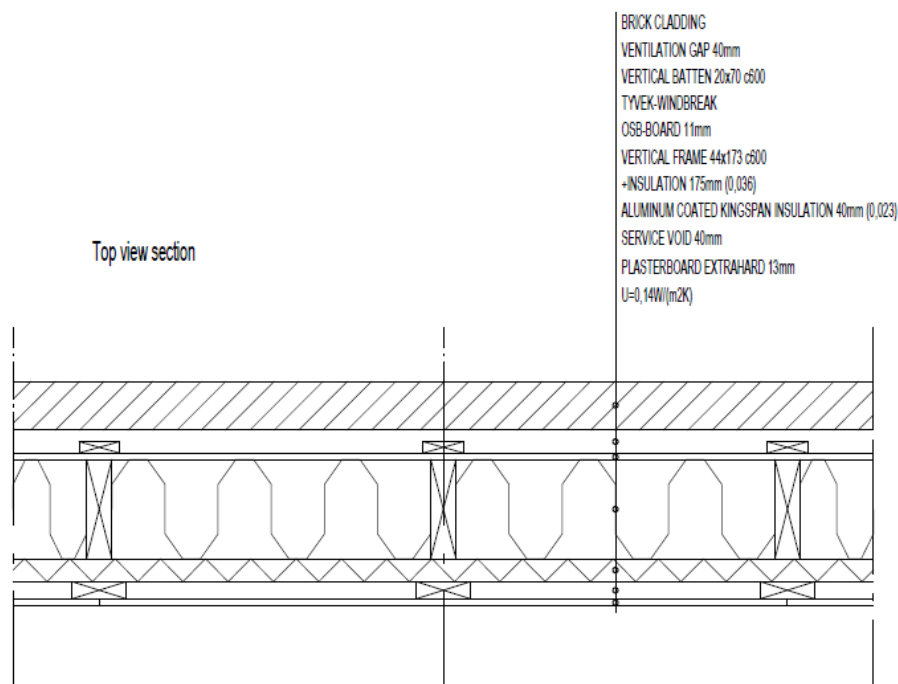
*CROSS BATTEN 21x95 k400

*PLASTERBOARD

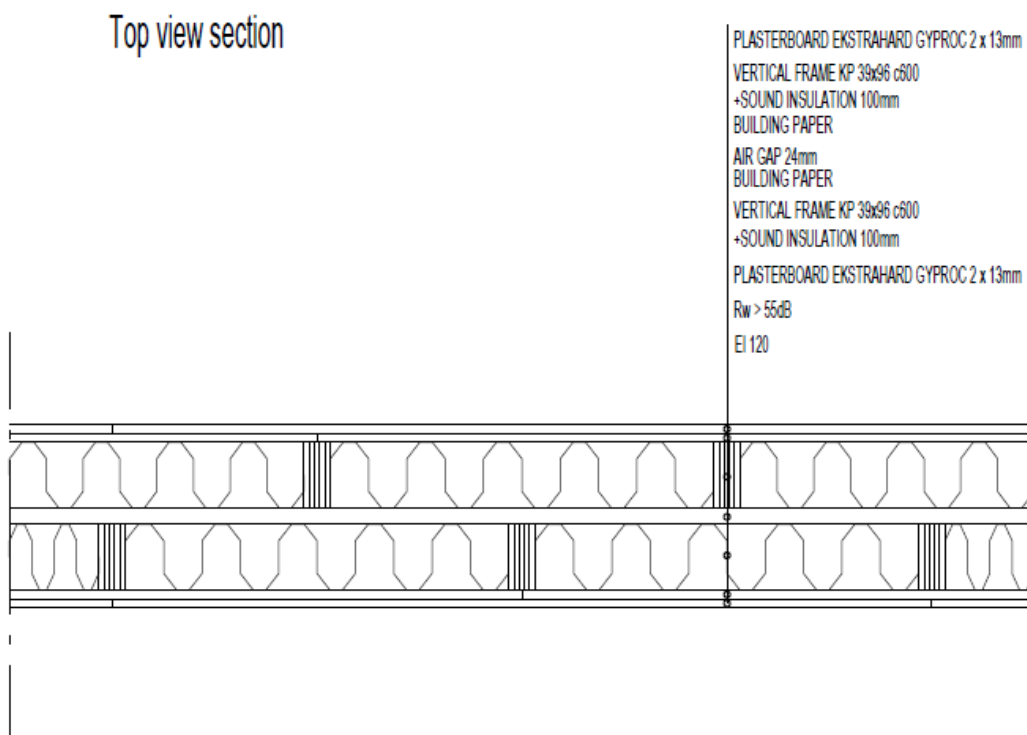


Walls

External walls



Party Walls



Roof

ROOF / CEILING:

AIRFLOW

WOOL INSULATION 300mm PAPER UP (LAMBDA 34)

NR-ROOF TRUSS

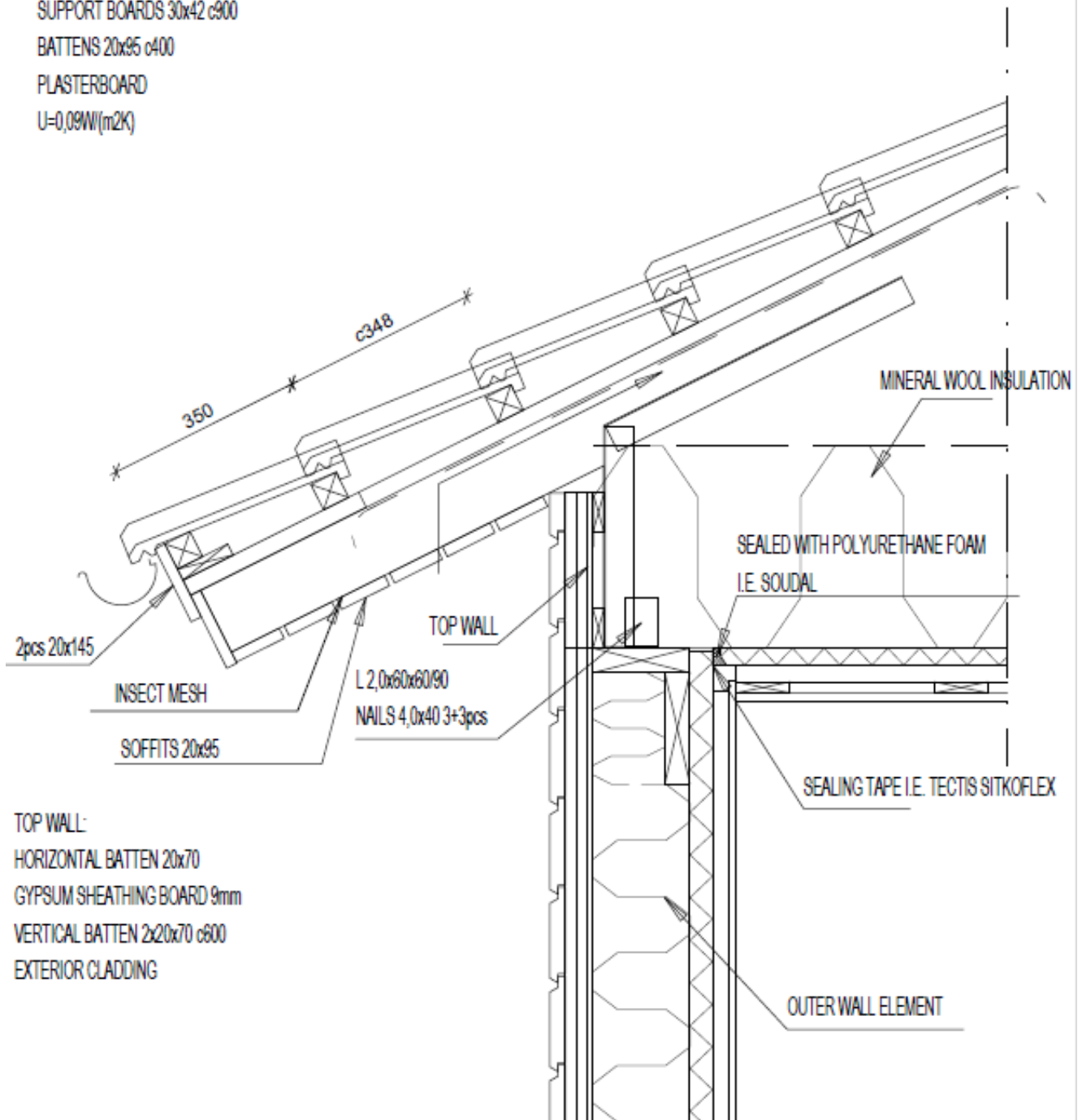
KINGSPAN ALUMINUM COATED POLYURETHANE BOARD 30mm (0,023)

SUPPORT BOARDS 30x42 c900

BATTENS 20x95 c400

PLASTERBOARD

U=0,09W(m2K)



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 External doors and windows	
Water Efficiency	
Foul Water Drainage (Below Ground)	
Surface Water Drainage	
Solid Waste Storage	
Conservation of Fuel and Power 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; Connection to house - 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; Gas Membrane, if required	The oversite must be inspected to ensure compliance with approved details.
Connection of panels; - Horizontal Connections between panels - 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 Cavity barriers/closers where applicable	All fire stopping must be inspected to ensure compliance with approved details.
Stair; - Handrail - Guarding - Landings - 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; - Fire stopping at party wall lines. - Penetrations	Ensure that fire stopping continues along the party wall line at roof level. 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.
Other Comments	

AS BUILT COMMISSIONING CERTIFICATES AND COMPLIANCE REPORTS REQUIRED AT COMPLETION

- The following certificates are reports as 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	

Talo Elements Ltd

Approval Date: 10th October 2019

2 Compton Cottages, Moor Park Way, Farnham, Surrey, GU9 8EL

FACTORY AUDIT

The following Checklist is 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">- Timber frame- Vapour Barrier- Insulation- Internal & external boarding- Breather membrane- Cladding system where applicable- Cavity closers & fire stopping- M&E services- Roof structure & coverings Tolerances	
Windows; <ul style="list-style-type: none">- Fixings- Reveals- Height of windows from floor- Means of Escape	

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Other Comments

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
TE-DET-PG-5.2
TE-DET-PG-5.3
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