



Leaders in Sustainable Building

INTRODUCTION TO CYGNUM TIMBER FRAME



Established in 1997 Cygnum is a leading provider of timber frame structures in the UK offering in house solutions including:-

- Project evaluation and pricing
- In house design and engineering
- Manufacturing and installation



Market Sectors



Residential



- Cygnum have supplied timber frames to many leading developers in the UK and Ireland.
- Our sophisticated automated production system can manufacture over 2,400 houses a year.
- We can meet your project's exact specifications, whether your priority is to achieve the highest possible energy rating or the lowest possible cost.
- Our team of experienced professionals will provide any necessary assistance to builders in the areas of design, engineering or contract management.

To date we have manufactured supplied and installed circa
12,000 residential units including:

Development Housing:



To date we have manufactured supplied and installed circa
12,000 residential units including:

Apartments:



Sheltered Apartments



Education



- In recent years Cygnum Timber Frame has established itself as one of the leading timber frame manufactures in the UK Education sector. Current projects include primary, secondary and 3rd level buildings.



CWM IFOR Primary School, Wales.



2011 – Installed the UK's first **Passivhaus School**

Oakmeadow:



Have supplied many Passivhaus projects since including:
Wilkinson School:



Constructed using the Brettstapel method with locally sourced timber

Burry Port Community School



The Enterprise Centre, University of East Anglia:



The Enterprise Centre, University of East Anglia:
The UK's Greenest Building



The Enterprise Centre, University of East Anglia:
Locally sourced timber from Thetford Forest – 30 miles from site.



Commercial



- Cygnum has built up a wealth of experience of supplying timber frames for a wide range of large buildings including multi-storey hotels and apartment blocks, supermarkets and nursing and care homes.
- We are also specialists in energy-efficient schools and other public buildings
- Our dedicated team of engineers, designers, energy efficiency and construction experts enjoy working on cutting-edge technical projects like this, and we can bring that knowledge and experience to your next project.

Commercial Builds

Supermarkets:



The UK's first Passivhaus archive building

Hereford Archive Centre:



Hansard Close, Norwich City Council

The first Passivhaus housing development in Norwich – 2 apartment blocks of 20 Units



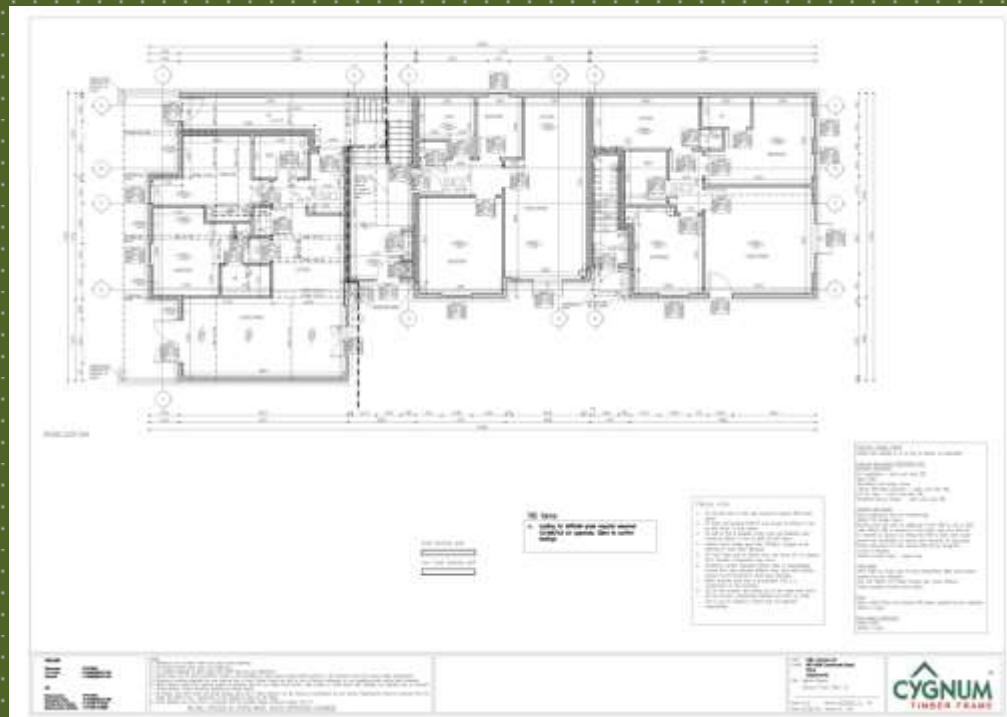
Goldsmith Street, Norwich City Council
Set to be the largest Passivhaus affordable scheme in the UK



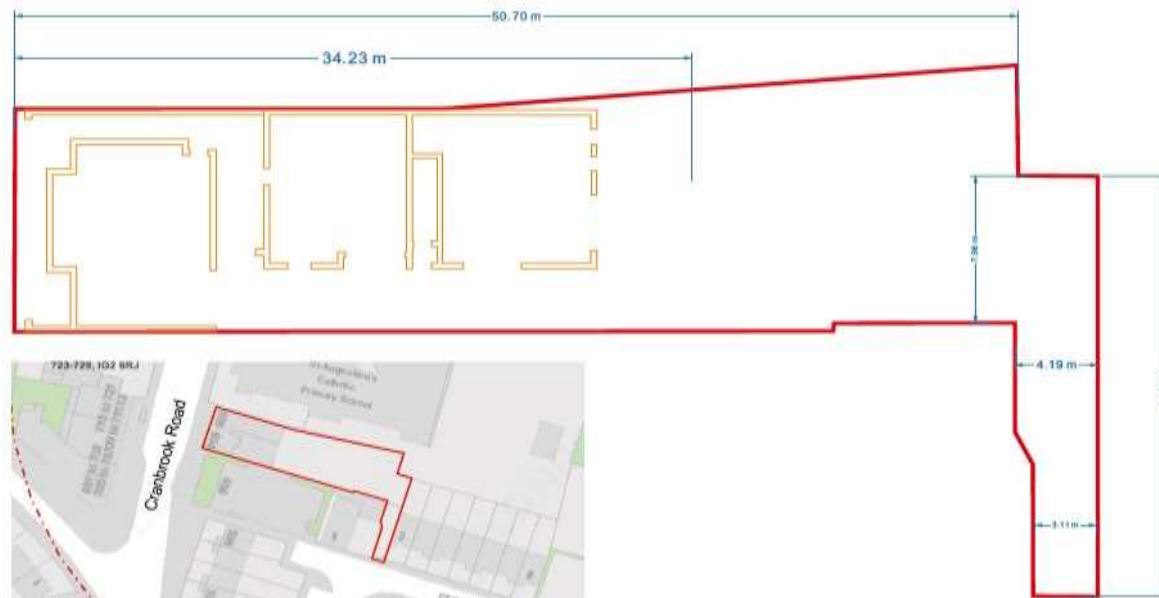
Cygnum will be providing rapid Passivhaus housing solutions for Norwich, Swansea and Colchester co councils – with over 200 confirmed units to date



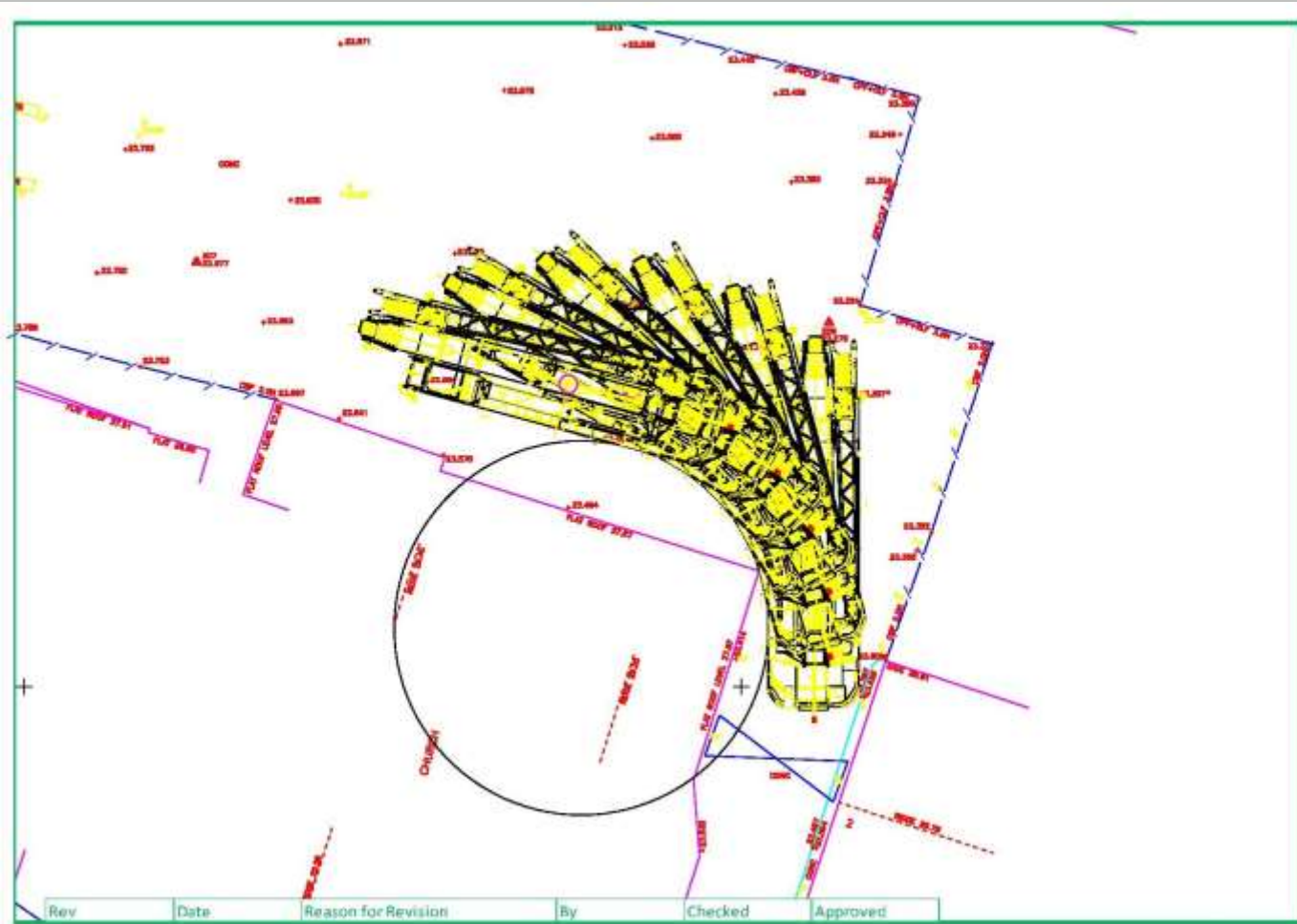
Design Process







Size: A1
Scale 1:100





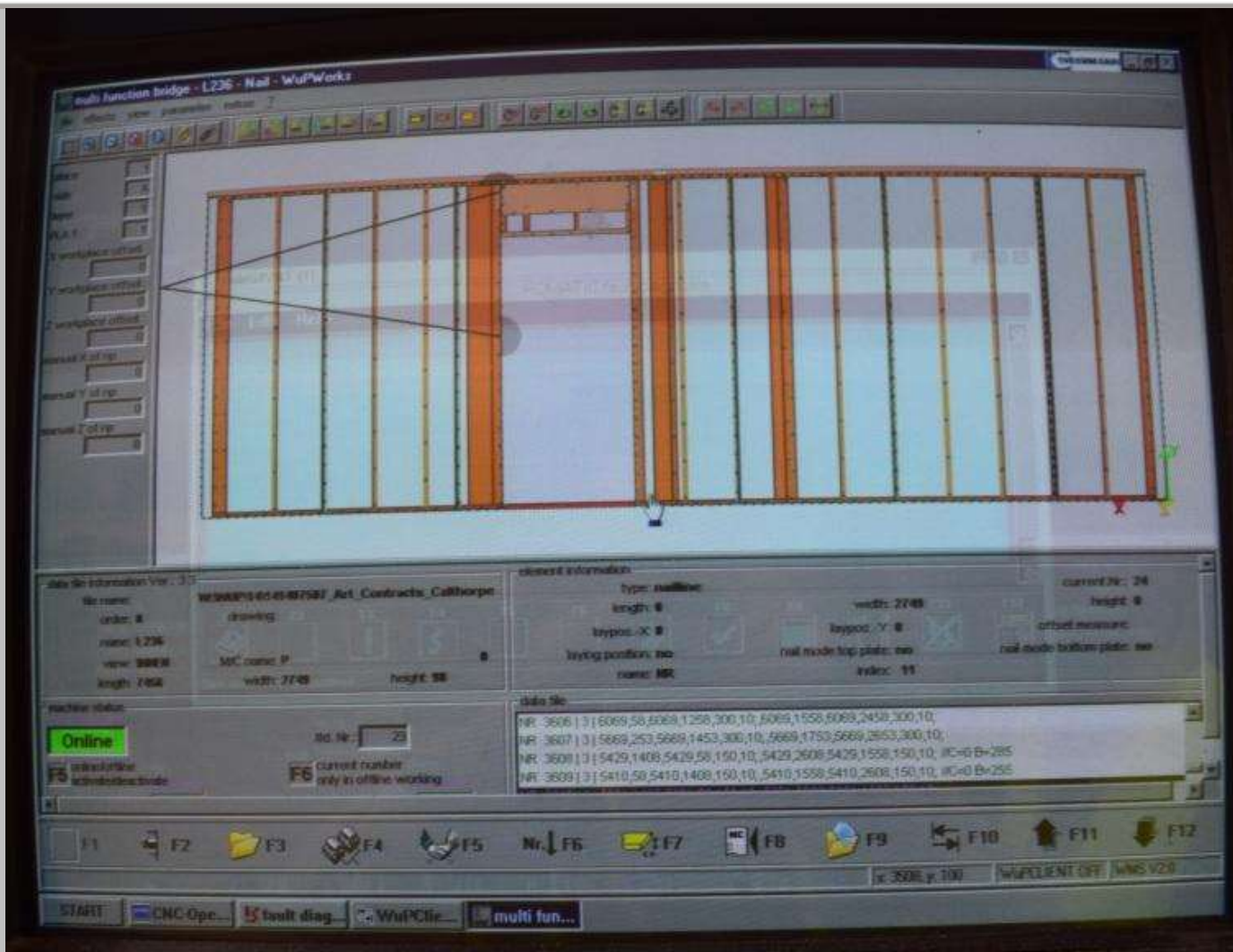


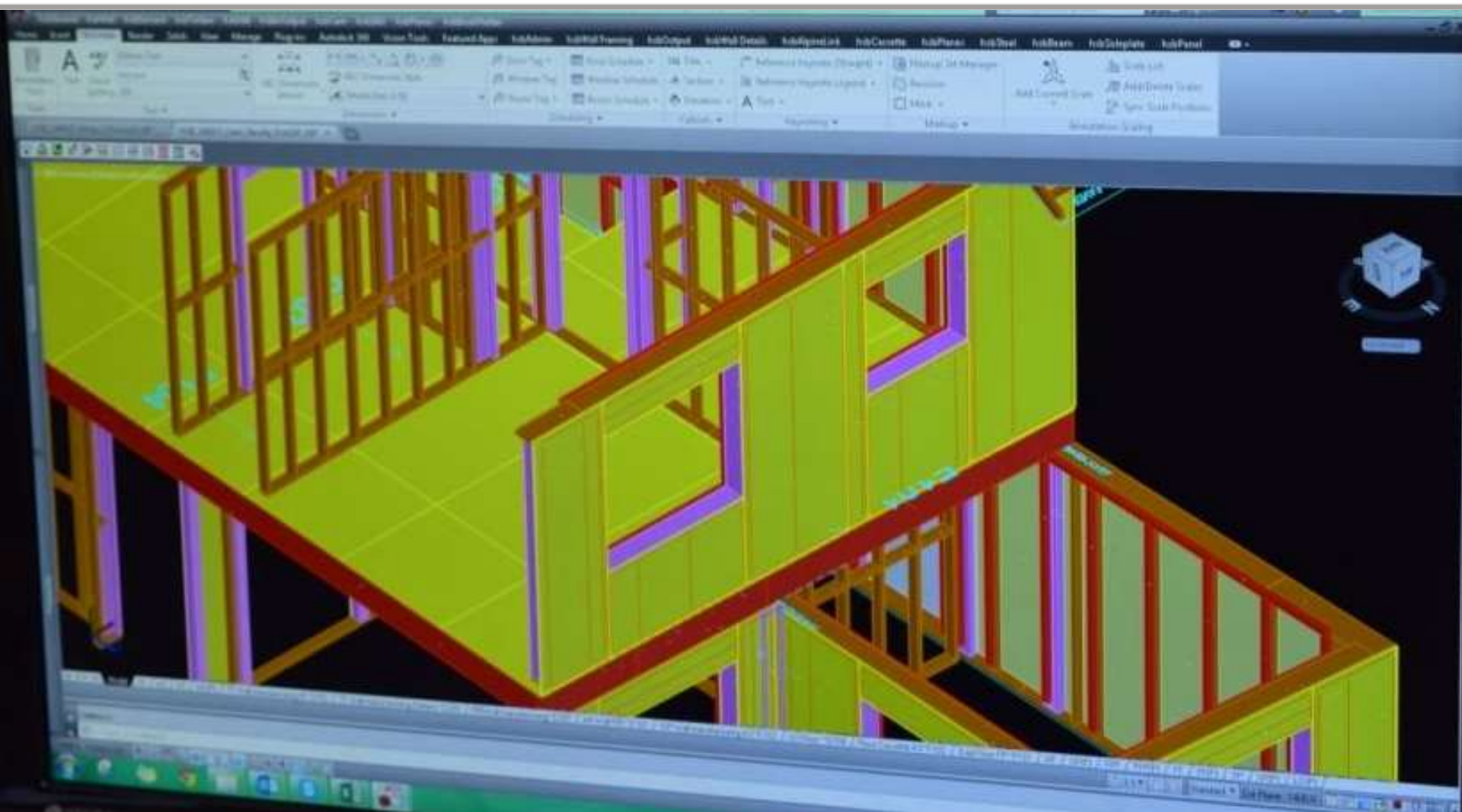
MANUFACTURING PROCESS

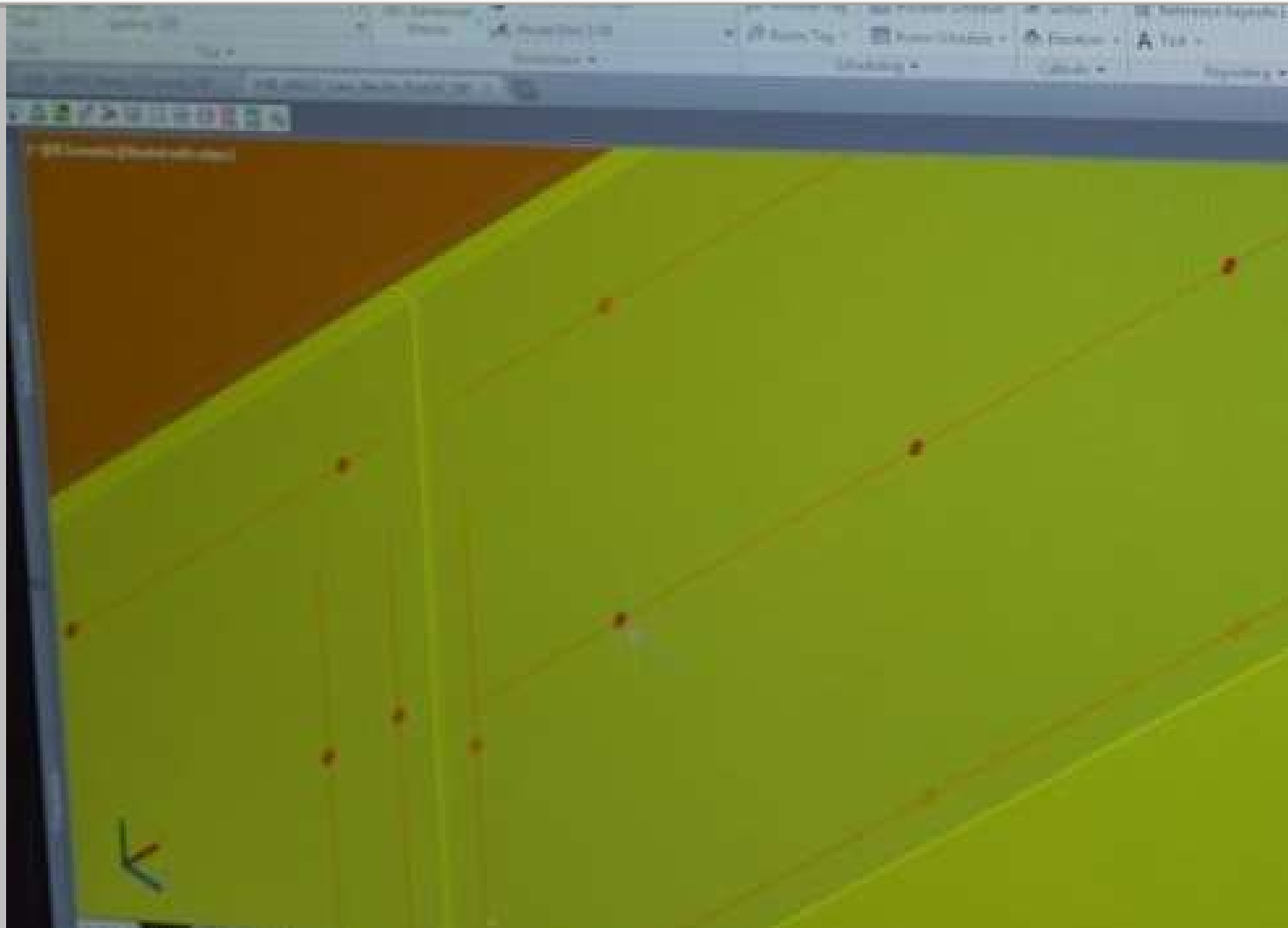
































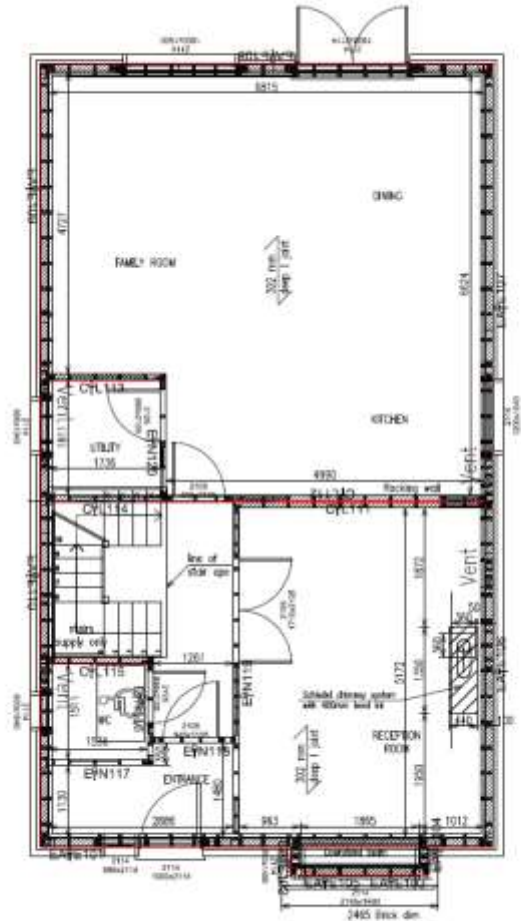


Site construction of
our frame

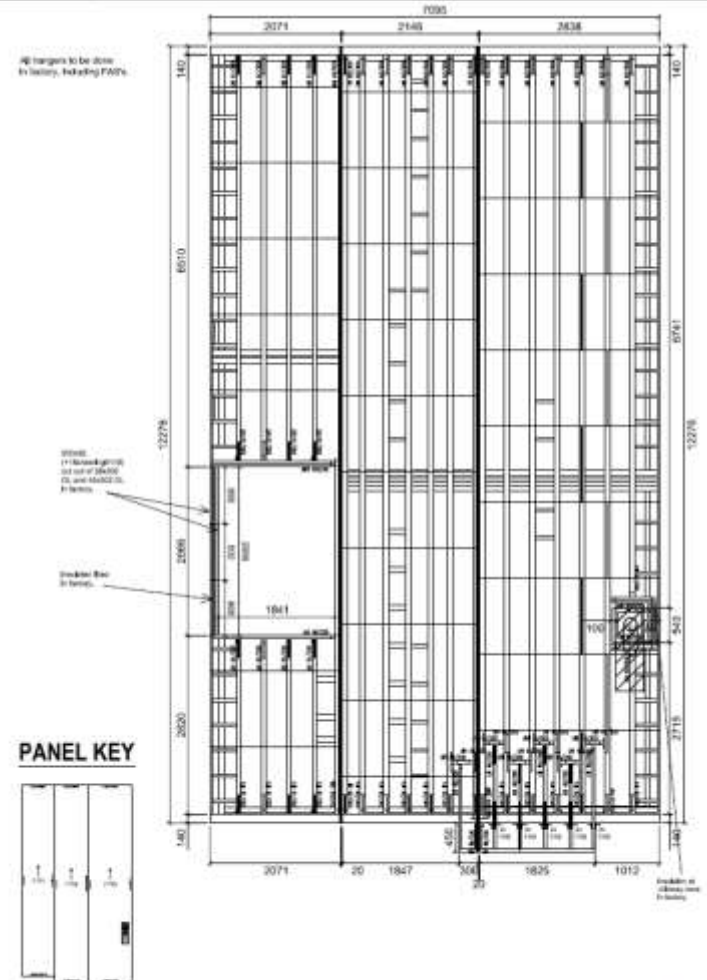




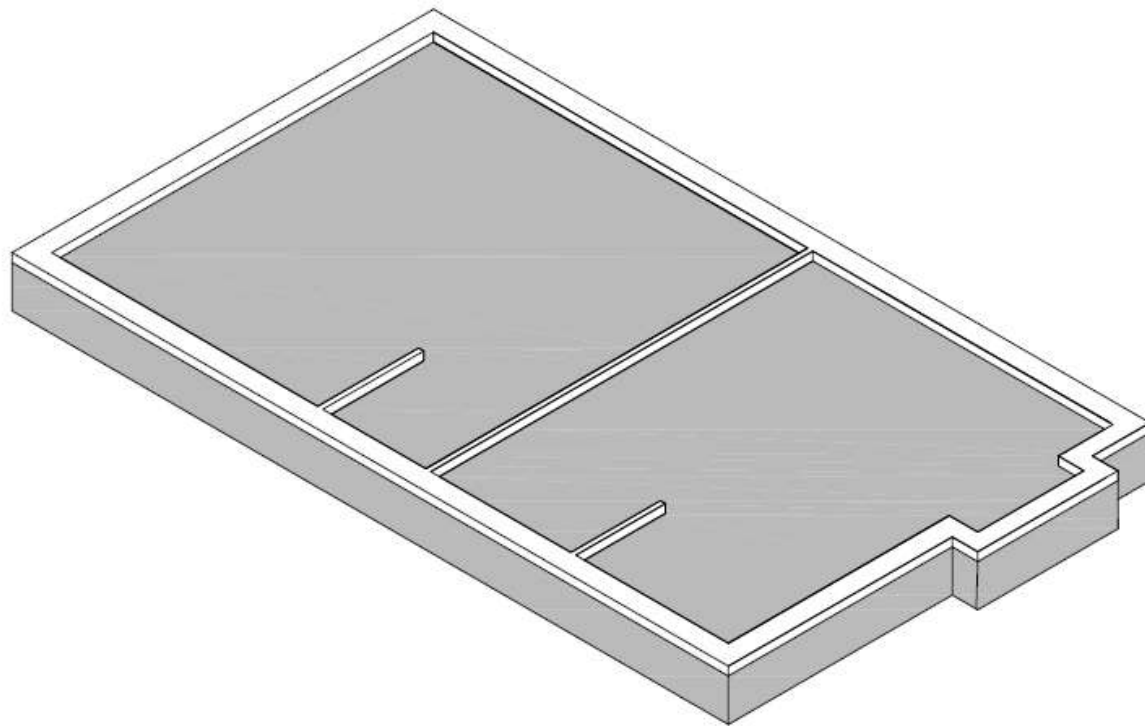




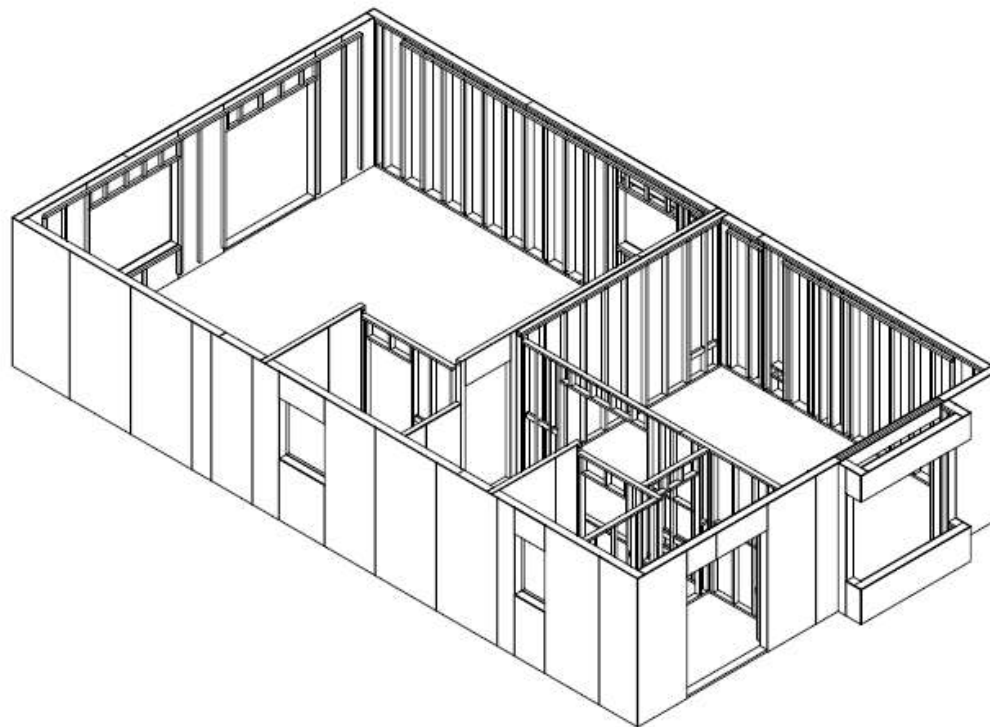
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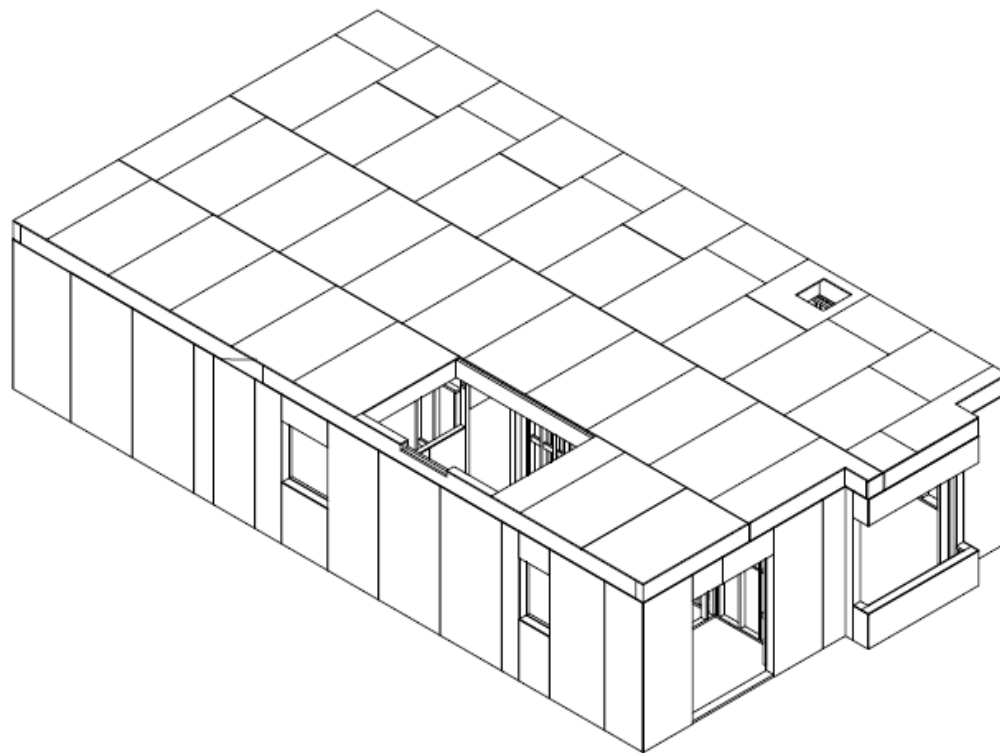
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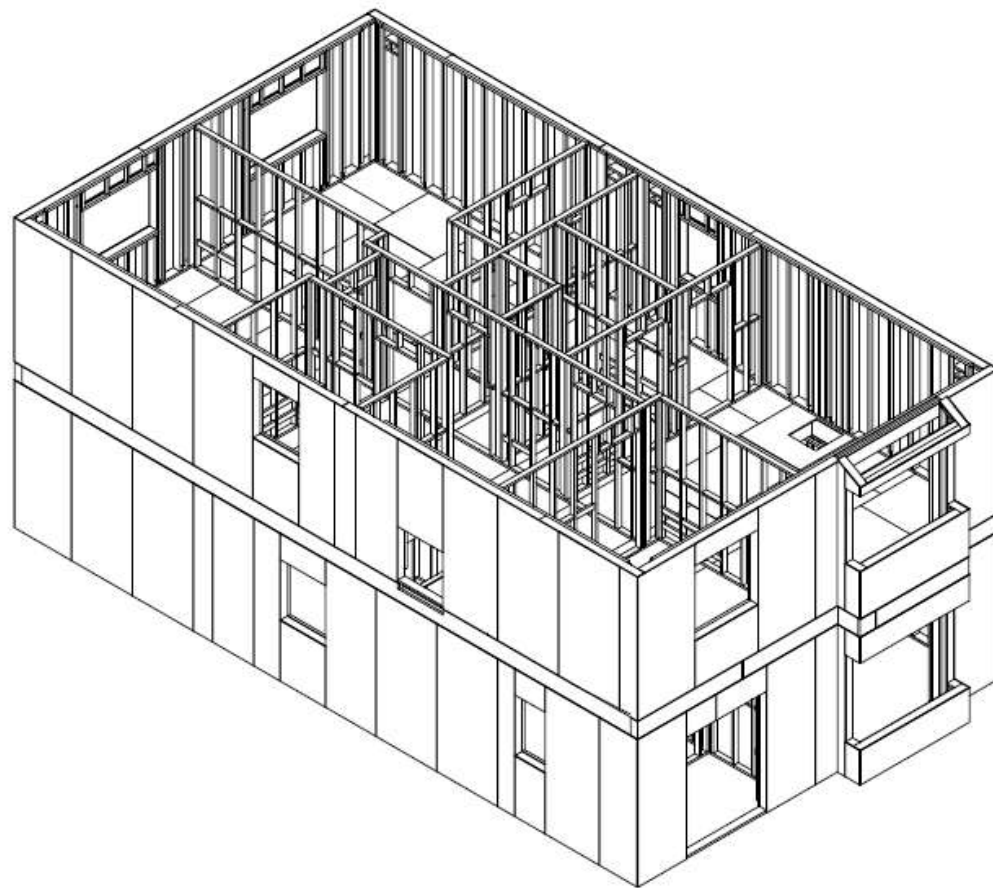
7.30 to 9.00



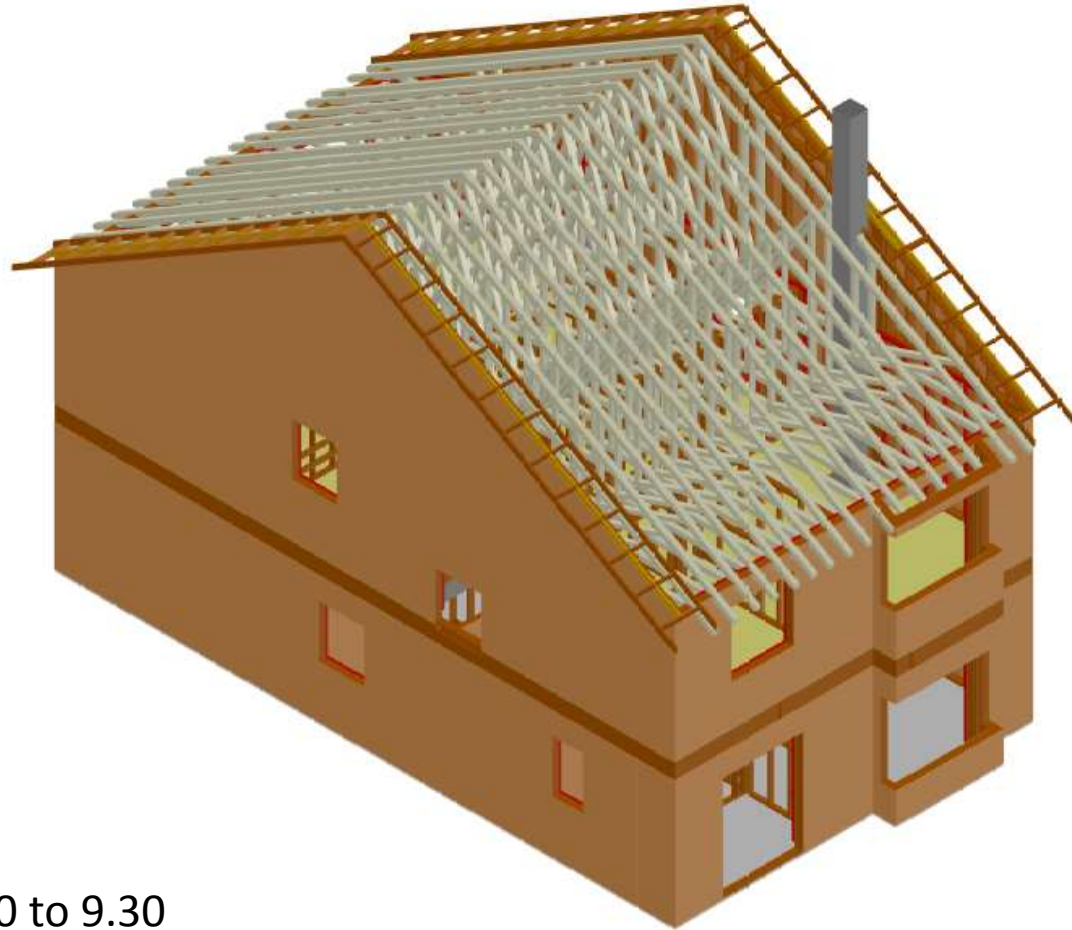
09.00 to 11.00



11.00 to 14.00



14.00 to 16.00



Day 2 7.30 to 9.30



Site inspections

Responsibilities

Document: SPECIFICATION
Title: Ancillary Design Certificate of Compliance: Design, Scope of Cert

Issue No: 1
Revision No: 2

Section Approved By: 
Issue date: 17/04/2015
Page: 1 of 4

1. Scope
Supporting information which forms part of Cygnum Timber Frames's Ancillary certificate of compliance [design] for the structural timber frame

2. Normative References

- EN 14732: Timber structures – Prefabricated wall, floor and roof elements – Requirements
- EN 1995-1-1:2004 Eurocode 5: Design of timber structures – Part 1.1: General – Common rules and rules for buildings
- BS 440: Timber Frame Dwellings
- Building Control Regulations (see list below)

3. Terms and Definitions

Cygnum: Refer to Cygnum Timber Frames Ltd

4. Responsibility

Nothing in the Ancillary Certificate of Compliance: Design or this supporting information document shall be deemed to impose any higher standard of care on Cygnum than the reasonable care and skill to be expected of a properly qualified sub-contractor of the appropriate discipline carrying out works of a similar size, scope, nature, complexity and value as those specified in the take order in respect of the design obligations.

With reference to Ancillary Design Certificates of Compliance: Design, item 4, the following is an outline of the limits of Cygnum's competence as a timber frame manufacturer under each subsection of the regulations.

5.1. Building regulations part A - Structure

A1 loading

The following codes of practice will be used to design the structural timber frame

- EN1990 Eurocode 0: Basis of structural design
- EN1991 Eurocode 1: Actions on structures
- EN1993 Eurocode 3: Design of steel structures (for any steel design within structural timber frame)
- EN1995 Eurocode 5: Design of timber structures
- BS 440
- Current Irish Building Regulations
- Building Control Regulations 2004
- BSI/ETB/TRADA - PD 6693-1:2012, Guidance to Eurocode 5: Design of timber structures – Part 1.



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It is noted the masonry is provided stability from the timber frame which are connected (through the external masonry) and the steel nails to the timber frame studs.

It is noted with stainless steel nails. These are the fixings which must be

provision of lateral stability is not provided by the timber frame

supply steelwork to carry masonry elements the calculations, drawings for this steelwork will be issued to the clients design if the proposed design. These elements do not form part of

the expected settlement of the timber frame which should be

re-

your's design certification.

calculations the structural timber frame will be so designed to take disproportionate collapse and items carried by the structural timber frame will be assessed

elign. All other items are not included in Cygnum's design

Fire safety

the timber frame will be based on the architectural drawings issued to by Cygnum.

Cygnum have details which are approved by Trade as compliant within the scope of Cygnum's design certification

your's design certification.



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your's design certification.

your Service your's design certification.

Separation of Site & Resistance to Moisture your's design certification.

Material and Workmanship
It be in accordance with BS440 where appropriate.

Insulation
Cygnum have details which are approved by Trade as compliant as this is not within the scope of Cygnum's design certification.

Ventilation
your's design certification.

Roofing
your's design certification.

Drainage and Waste Water Disposal
your's design certification.

Heat producing Appliances
Innovis, where Cygnum will show the proposed structural drawings for approval and compliance check by the clients design for heat producing appliances unless Cygnum are instructed to through the timber frame to accommodate other heat producing

in the scope of Cygnum's design certification.

Stairways, ladders, catwalks and guards
providing sites for stair openings and show the assumed stair pitch

able headroom for approval and compliance check by the

scope of Cygnum's design certification.

scope of Cygnum's design certification.



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Observations of heat and Energy DWELLINGS
being supplied by Cygnum, Cygnum will confirm the

of Cygnum's design certification.

your's design certification.





Accreditations

STA : Structural Timber Association

SMAS : Worksafe Contractor as recognised by Safety Schemes in Procurement.

Constructionline

Accreditations

CHAS: Contractors Health and safety scheme



PEFC: Program for the endorsement of Forest Certification

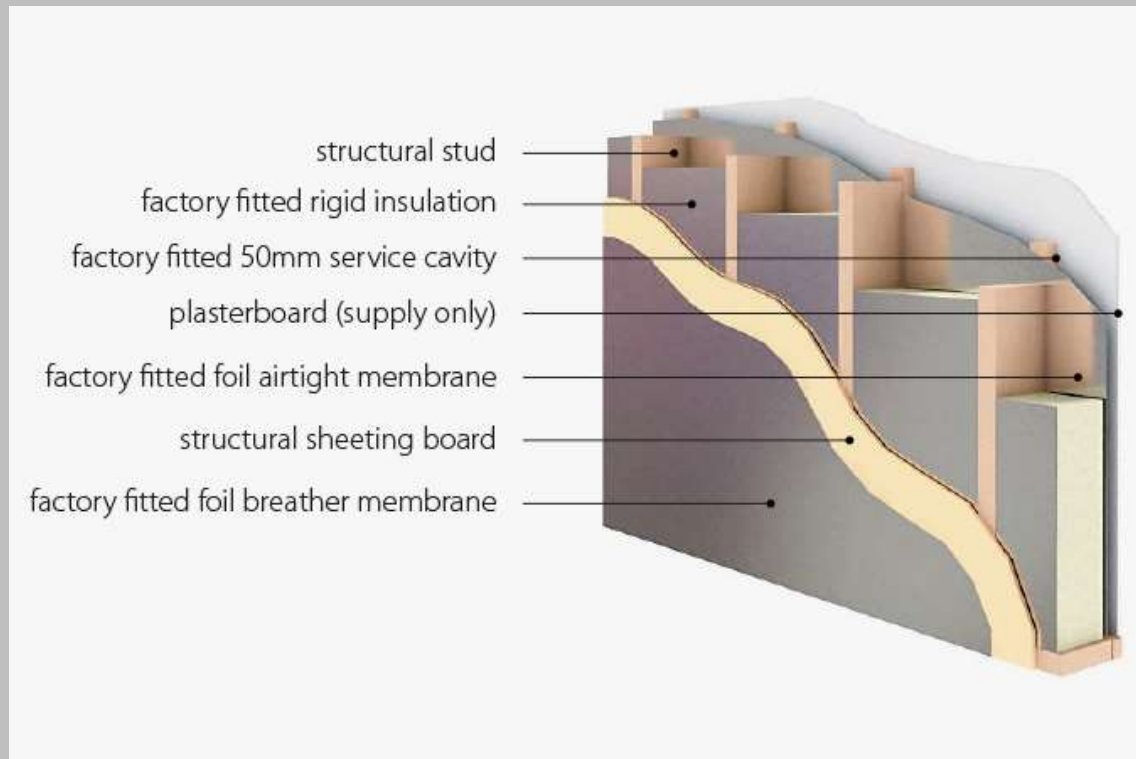


FSC: Forest Stewardship Council

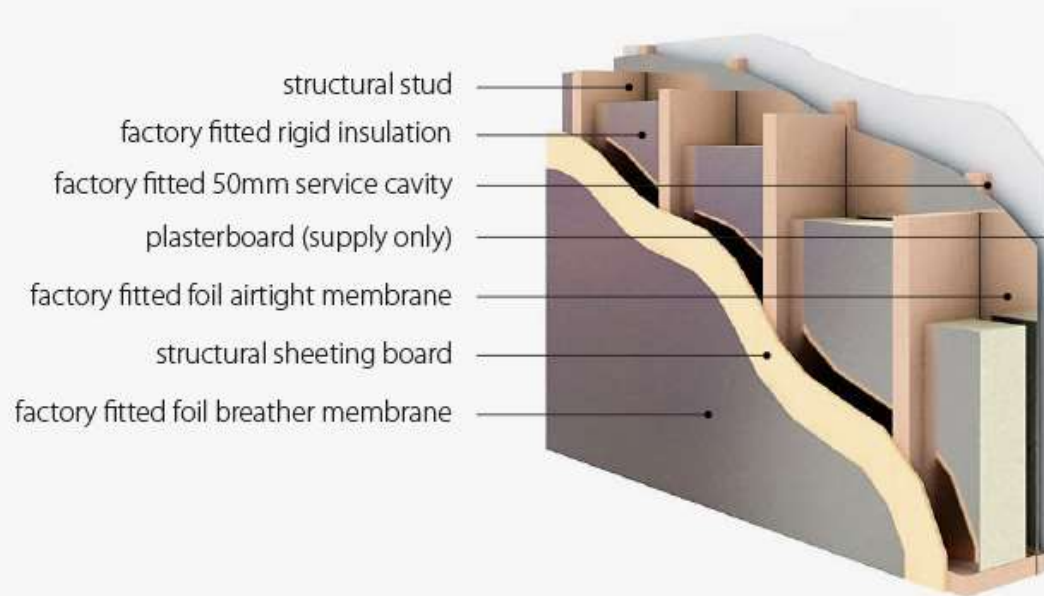


Our wall systems

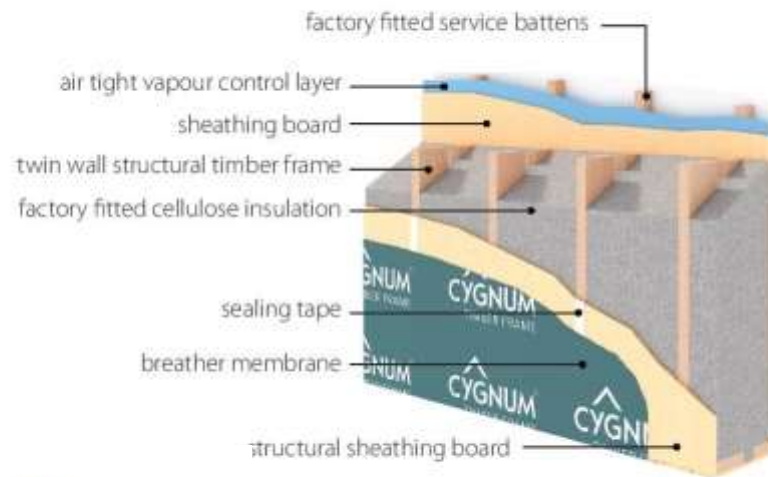
Reflect 140



Reflect 200



Passive 350



WARMCEL[®]

THE END

Thank you for your time