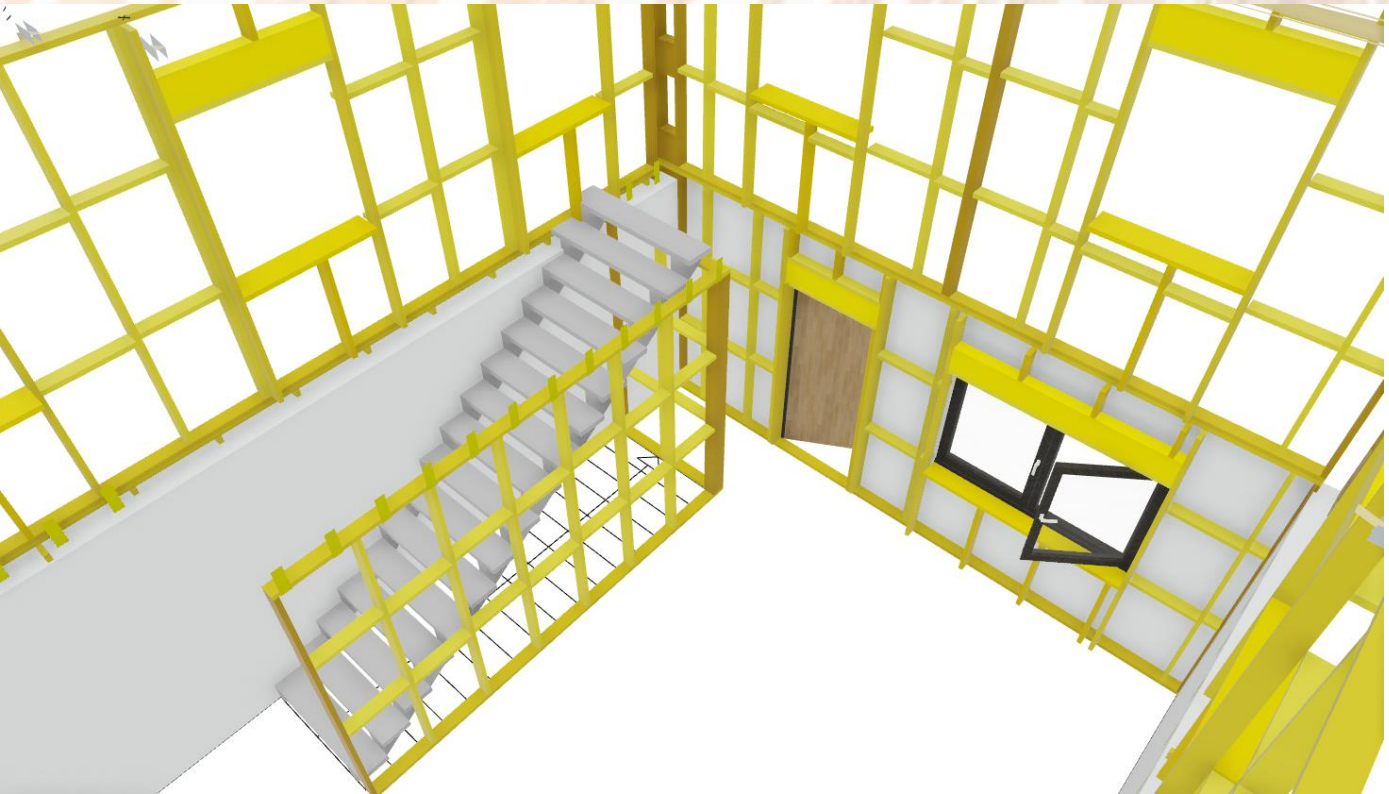
Roof Trusses Africa
Timber wall Frame Manufacturing

Framing Index

What Is A Timber Frame

- Engineered structural timber members assembled into wall panels.
- Manufactured in a controlled environment for quality assurance.
- Can accommodate doors, windows, electrical, and plumbing services.
- Suitable for residential, commercial, and light industrial applications.



How The System Works

- Timber studs transfer vertical loads to the foundation.
- Bracing systems resist wind and lateral loads.
- Roof trusses integrate directly with wall plates.
- Sheathing and cladding provide additional stiffness and protection.

Typical Wall Build up

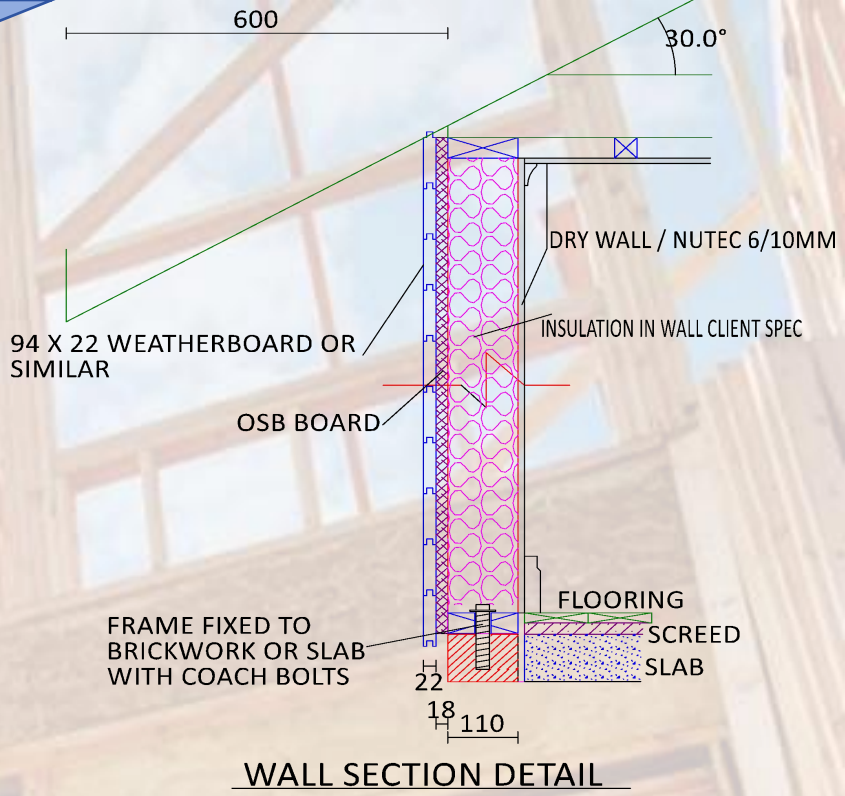
-External cladding (fibre cement, timber, brick slips, or composite panels).

-Breather (waterproofing)membrane and cavity where required.

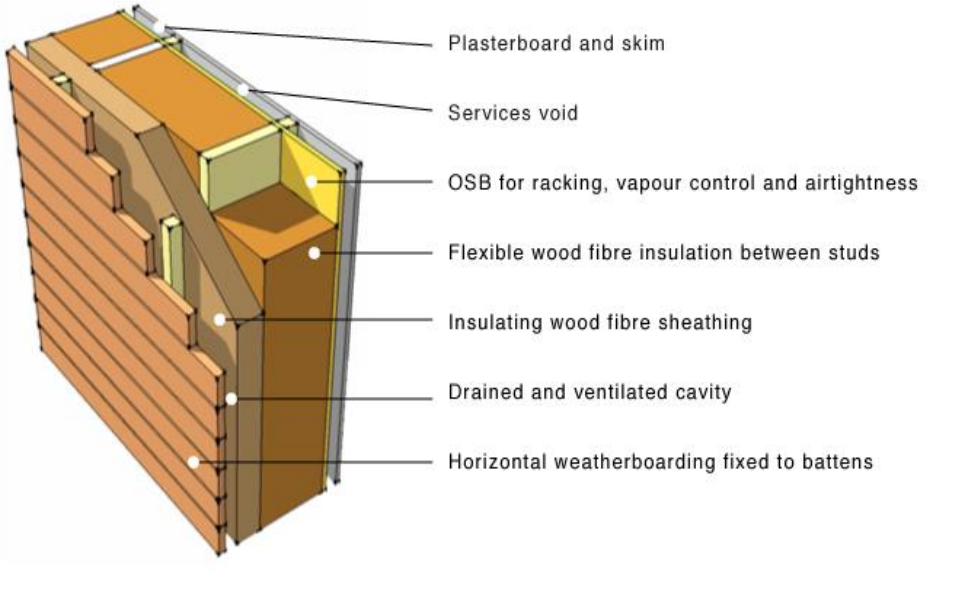
-Structural timber frame.

-Insulation between studs.

-Internal lining (gypsum board/drywall).



WALL SECTION DETAIL



Why choose Timber vs Traditional Methods?

- Faster construction timelines.
- Reduced foundation loads.
- Improved thermal performance(r Values).
- Cleaner construction sites with less waste.
- Potentially lower overall project costs.

-Renewable and sustainable material.

-Excellent strength-to-weight ratio.

-Factory-controlled quality.

-Easier future modifications and extensions.

-Reduced labor requirements on-site.

Compliance *With SABS & Associated Governing Bodies*

- ***SANS 10400 – National Building Regulations.***
- ***SANS 10163 – Structural use of timber.***
- ***SANS 10082 – Timber frame buildings.***
- ***SANS 1783 – Timber preservation and treatment.***
- ***Applicable municipal building Plan approval requires that the plan is drawn in a timber frame format.***

SABS APPROVED

SAITB
South African Institute of Timber Builders

ITC SA
Institute for Timber Construction South Africa®

Consumer Buying Journey

-Timber frame products are dynamic and versatile to the market.

Several options are available to the customer in the decision making phase of building and/or installing these systems.

1) Self service option (Receive the prefabricated frames from Roof Trusses Africa and install them themselves).

2) Roof Trusses africa does the installation of the prefabricate wall panels on site for the client at a calculated cost.

1.1) The customer has the choice to install the frames themselves with a detailed layout.

1.2) The frames will be made according to the clients spec. In the self service option it's the client's responsibility to install them to standard if the mentioned option is selected.

1.3) The frames are made according to the given dimensions (building plan or measured) & specifications and therefore no additional cutting of the panel is needed on site.

1.4) Roof Trusses Africa won't take responsibility if the frame has been altered or tampered with after delivery on site if standards aren't met.

2.1) Roof Trusses Africa takes responsibility to install these frames on site professionally and to comply with the necessary standards where enforced by regulation.

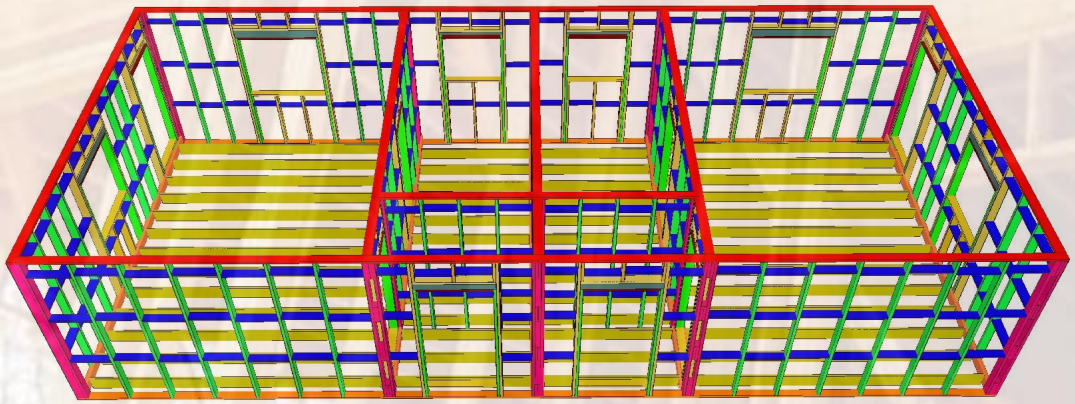
Ordering of Timber Frames

Ways of ordering timber frames is up to the client to decide.

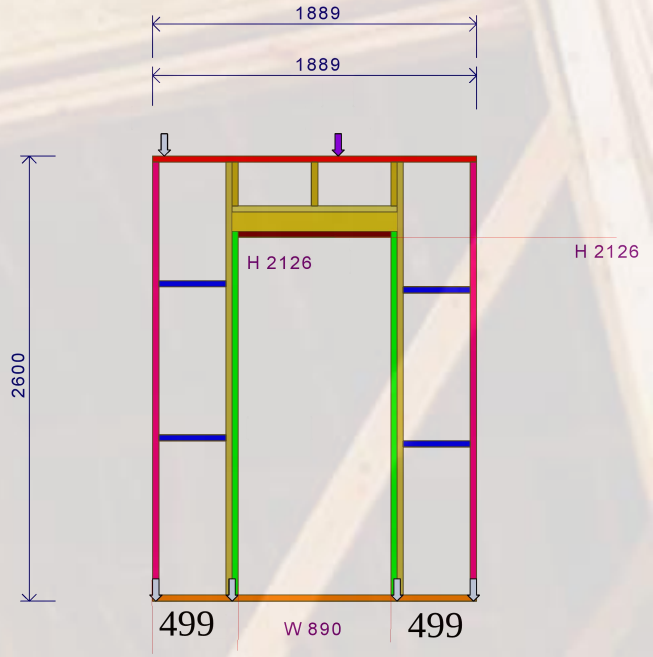
1) Client provides us with a building plan drawn, in the setting and format of timber wall frames with all the needed details for lengths, window sizes and locations, door sizes and locations on the wall.

2) The client can provide us with dimensions of the length, width, height and quantity of frames to suit the client's desired layout of the house.

2.1) The client will also need to specify Window and Door locations on the walls if no plan is present.



-In the detail on the right is a simple example of basic dimensions needed for quoting and manufacturing.



Ordering of Timber Frames Options

1)The Timber Frames can be sold alone as just the ***skeleton- wall panel*** without Windows, Doors,Insulation or OSB boards.

1.2) The skeleton Panel is only the wall panels and the supply of windows, doors and dry-walling sheets if the client requests it. The windows, dry walling & doors are ***Not*** installed on the skeleton panel.

2)The Timber Frames can be sold as a ***Panel with the external skin*** OSB board already attached and the client does the Internal (dry-walling) window, doors & Insulation themselves.

2.1) The Panel and External skin option also does not come with windows,Insulation, doors & dry-walling installed. But Windows & Doors can be requested to be installed beforehand(***except dry-walling***) or supplied only.

3) Or the client can choose the ***full system*** with the external skin(OSB/Shutterply boards) already applied along with the services of installing the drywalling, the external cladding (material of choice specified by the client) and the windows & doors specified by the client as mentioned on the previous page along with Insulation installed.

General Info of a Timber wall Panel

- Timber Frames are exceptional alternatives to traditional building methods in strength, durability, insulation, maintenance, cost - effectiveness and overall properties.
- A Traditional Frame on the exterior consists of a panel(*skeleton*), an outer skin (*OSB board*), a waterproof cover (*house wrap or a breather skin*)

a form of cladding on the outside (*timber, sheeting, nutec boards etc.*)

- A Traditional Frame on the Interior side consists of a Insulation barrier in between the layers(*Glasswool, Think Pink*), a Dry wall finish with the thickness acc. to client spec.
- These frames are perfect for maintenance, as its easy to remove a drywall sheet to access electric or plumbing etc.
- Timber Frames work very well with extensions or additions, as one can remove the outer layer and extend the frame from the clusters(corners) without needing to break down a whole wall.
- Timber Frames are more cost effective but also dynamic in pricing depending on what materials(*outer cladding like sheeting*) the client wants to use.

Roof Trusses Africa

COMMITTED CRAFTMANSHIP