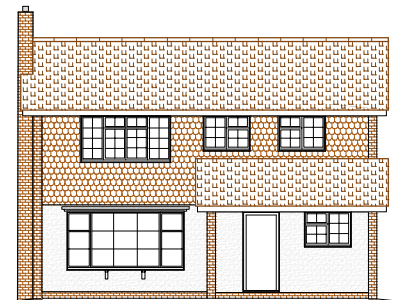


THE FRAME'S THE SAME ~ WHATEVER YOUR PREFERRED STYLE!

With "Timber-Frame" Components Supplied By Builders' Merchants & Trade Suppliers @ Net Trade Prices!



(2017 PRICES)



TYPICAL COST OF OUR "ON-SITE" EQUIVALENT TO A 'PACKAGE-KIT' BASED VERSION (including external doors & windows ~ weathertight ready for external wall & roof claddings)

£175 ~
£185/m²

The ProFrame® "TIMBER-FRAME KIT" ~ comprising full structural design specifications & calc's, material lists, cutting & nailing schedules, wall & floor panel framing layout drwgs, assembly & erection instructions, with Builders' Merchant supplied structural floor, wall & roof framing components including sheathing, nails, etc.

£65/m²

"SLIM-LINE" (GROUND-BEARING) FOUNDATIONS ~ Designed to take full advantage of both timber-frame's incredible strength to resist differential settlement and/or subsidence issues and the huge reduction in deadweight loadings upon footings!

£32/m²

(Typical cost of fabrication and erection on-site.)

£35/m²

Fully insulated ~ NO thermal bridging!
(Ready for floor finish)

£21/m²

ADD YOUR CHOICE OF EXTERNAL DOORS & WINDOWS ~ Typically with 1.4 'U' values (windows) & 1.8 'U' values (external doors) ~ all fitted to timber-frame; including fire-stopping and roof joinery, membrane & battening to complete 'closing-in'.
(Ready for external claddings.)

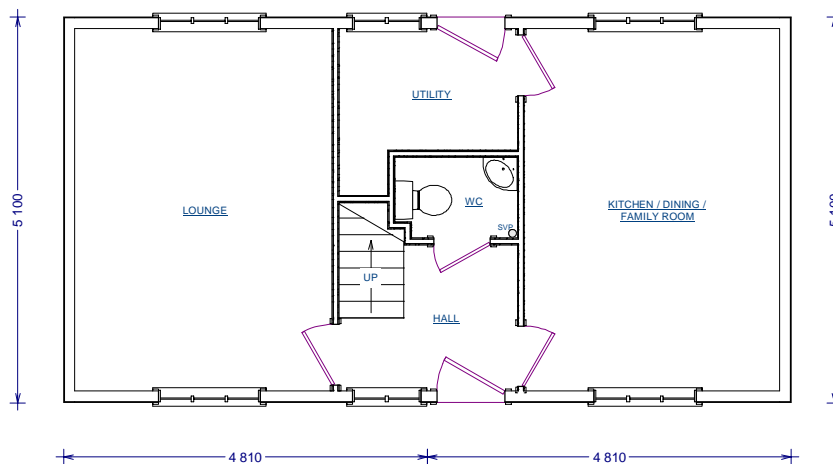
£75-85/m²

A Simple 3-Bed 'Cottage' Style Dwelling.

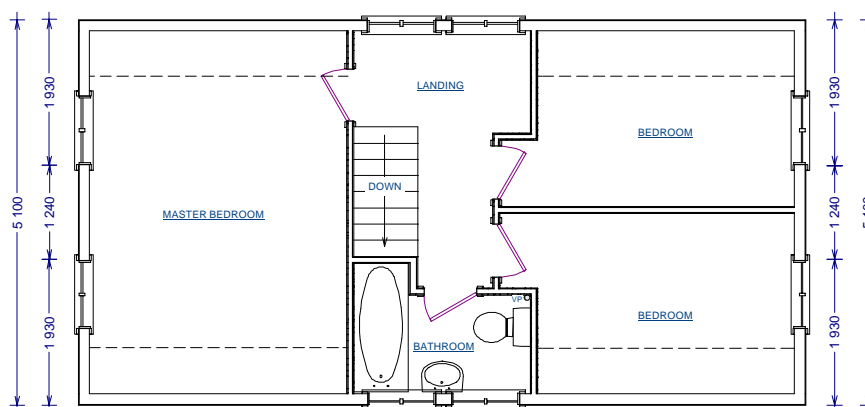
Based upon the smaller cottage within the "An Insider's Design Guide" book, the original cottage had to be enlarged in order to accommodate modern expectations including Part 'M' requirements for mobility accessible main storey W.C. facilities! Despite these concessions to modern living; the economical design also ensures that it is still extremely quick and simple to build.

Typical (2017) Cost Of ProFrame® "TIMBER-FRAME KIT" = £7,950 (£81/m²)

Ground Floor ~



First Floor ~



Front Elevation

"OLDE WORLDE" STYLE

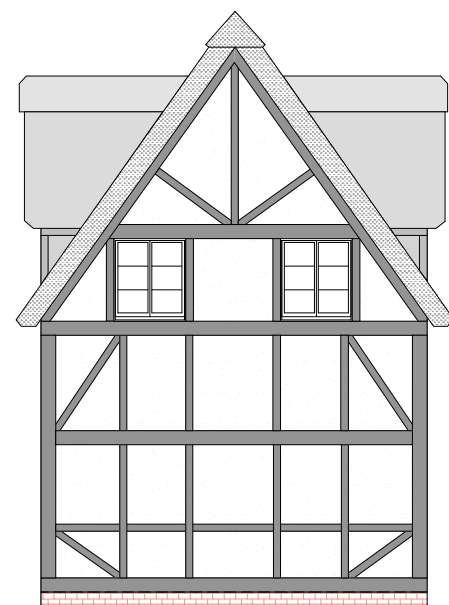
Illustrated with a traditional gabled dormer roof; the cottage is shown with rendered & half-timbered walls under a thatched roof. This traditional vernacular style of cladding is prevalent in many regions of the UK; particularly the South-West (Dorset) and the rural West Midlands & Welsh Marches; albeit it is more usual to see tiled or slated roofs used in the West Midlands & Welsh Marches.

Although not shown; an inglenook fireplace set into a substantial brick-built external chimney built up against the gable wall of the Lounge would be a truly authentic addition!

(NB: Take appropriate fire-protection measures for open-fires when combined with a thatch roof!)

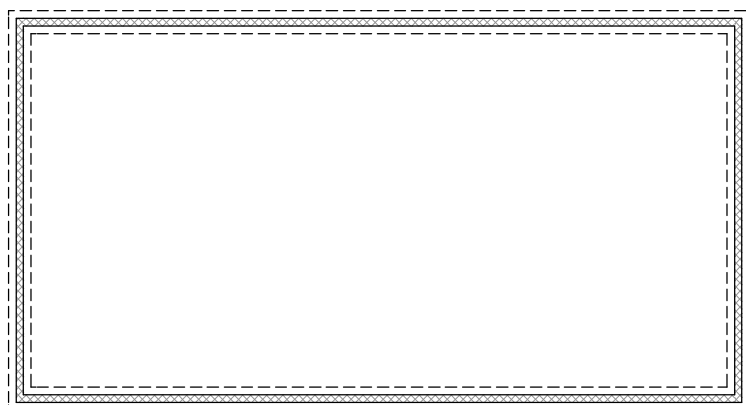


Rear Elevation



LH / RH Side Elevations

Typical (2017) Cost Of "SLIM-LINE" FOUNDATION = £3,300 (£34/m²)
 (£6,200 (£63/m²) when "FULLY INSULATED"; i.e. NO thermal bridging!)

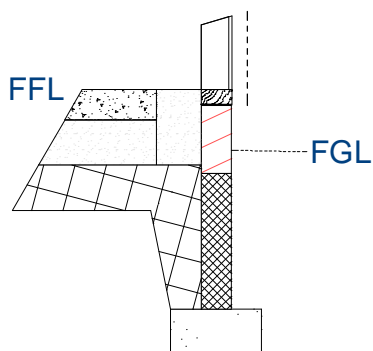


'Slim-Line' Footings Plan

'SLIM-LINE' FOUNDATIONS

With overall loadings n.e. 20 kN/m; Class IV soils or better; footings 300 mm wide.

(NB: No internal footings required.)



**Basic Foundation Section
 (1:25)**

TYPICAL 'SLIM-LINE' FOUNDATION SPECIFICATION

100 mm x 50 mm preservative treated ssw 'anchor-plate' solidly bedded in c.m. on d.p.c.

Three courses facing brickwork upto d.p.c.

100 mm dense aggregate (Class 'A') concrete blockwork ~ minimum two courses

With overall loadings n.e. 20 kN/m; Class IV soils or better; footing concrete 300 mm x 150 mm deep.

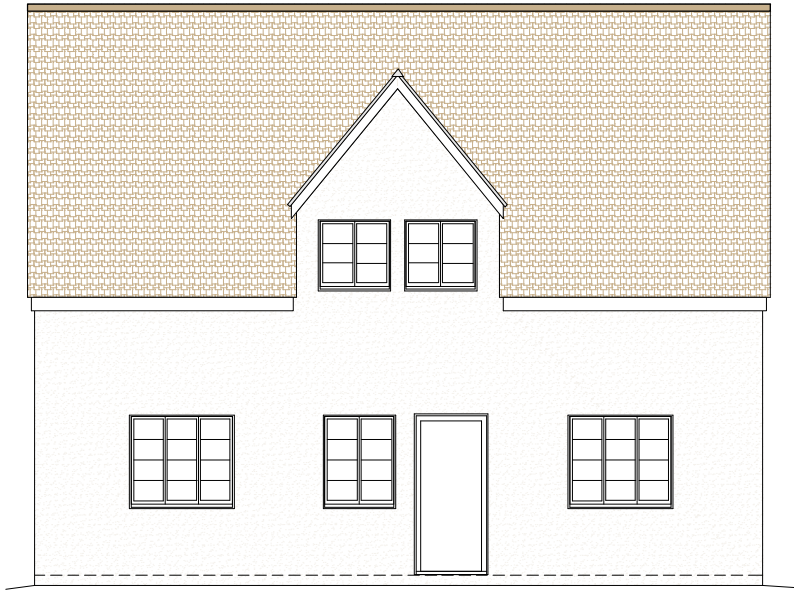
(NB: External claddings to extend down to d.p.c. level.)

ALTERNATIVE CLADDINGS

NB: The underlying structural timber-frame and 'kit' of required components is exactly the same; as are the 'Slim-Line' footings & foundations beneath.

Although the structural framing underneath is identical; externally the full range of roof & wall claddings can be used; tile, slate, thatch, etc. for roofing and anything from 'Olde Worlde' half-timbered to render, tile-hanging, weatherboard, brickwork, etc. or a mix of claddings for the walls.

Similarly; the style of fenestration can also be changed.



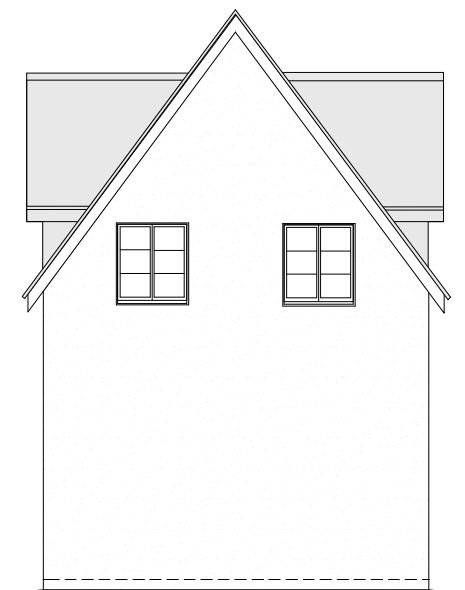
Front Elevation

Illustrated with a traditional gabled dormer roof; the cottage is shown with rendered walls. This traditional vernacular style of cladding is prevalent in many regions of the UK; particularly the West Country, South & West Wales, North-West England and Scotland.

In areas with particularly high rainfall; it is traditional to use slate to give the most weather exposed walls extra protection from driving rain.



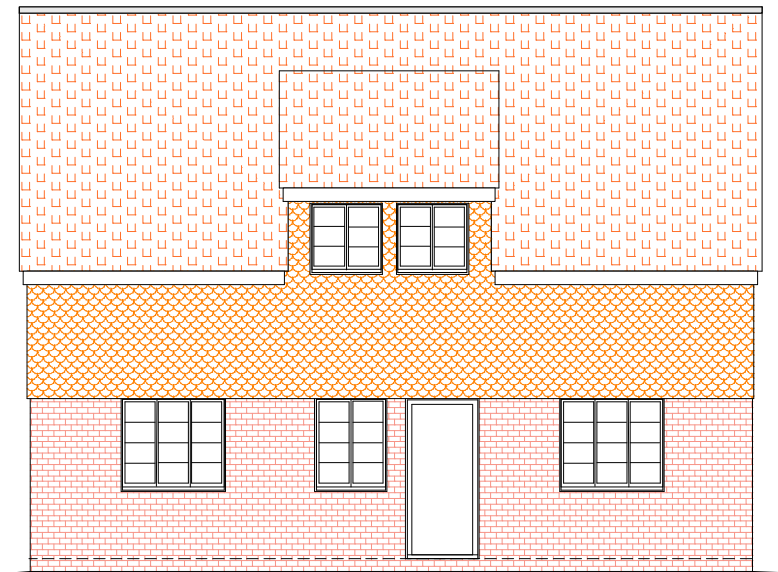
Rear Elevation



LH / RH Side Elevations

ALTERNATIVE CLADDINGS and/or STYLE OF DORMERS

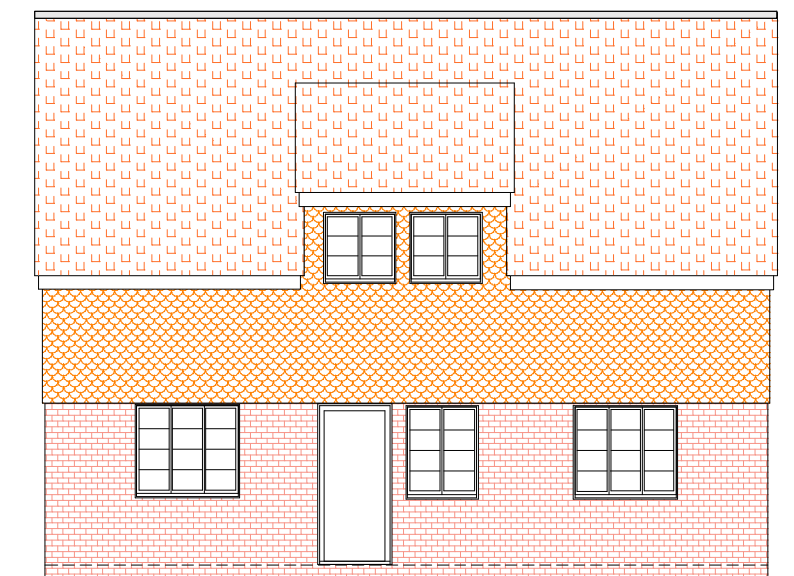
Although illustrated with a contemporary style of dormer roof; the cottage is shown with the traditional mix of orange/red tile-hanging to the upper storey and red facing brickwork to the ground floor. This traditional vernacular style of external cladding is prevalent in the South-East of the UK; particularly around East & West Sussex.



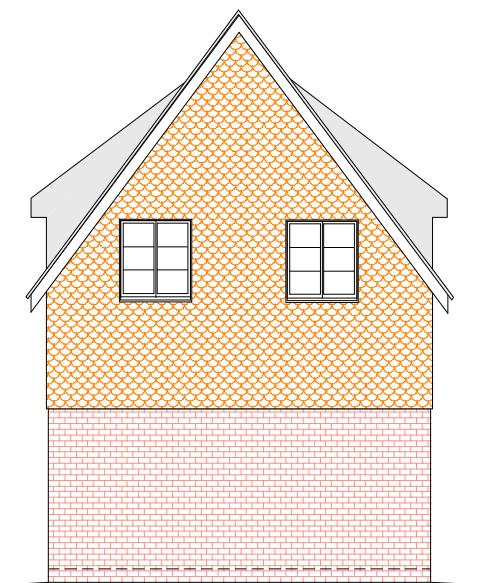
Front Elevation

"SUSSEX" STYLE

NB: The underlying structural timber-frame and 'kit' of required components is exactly the same; however the addition of an outer 'skin' of facing brickwork to the lower storey in this example will necessitate 'Slim-Line' footings 450 mm wide & twin 100 mm concrete blockwork foundation walls.



Rear Elevation



LH / RH Side Elevations

All sorts of different wall & roof claddings can be used WITHOUT affecting the underlying timber-framing and / or the 'kit' of structural components and / or the required footings underneath.

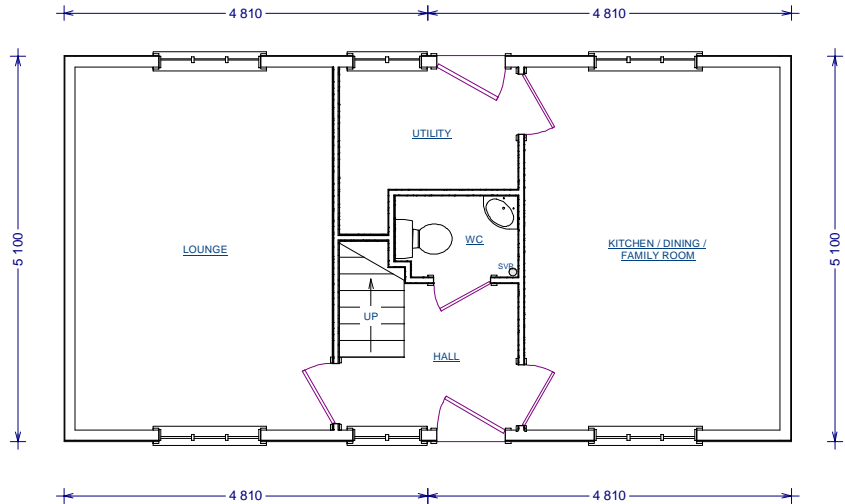
For example:- The 'olde worlde' half-timbered example could have a tiled or slated roof covering instead of thatch; there are many such examples in areas such as Cheshire, Shropshire, etc.

The mixed wall claddings shown with 'Sussex' style example could have a half-timbered 'mock Tudor' upper storey over the facing brickwork to the ground floor ~ although 'planners' aren't so keen about 'mock Tudor' on estate houses these days! Alternatively; the tile-hanging to the upper storey could be above a rendered lower storey OR the tile-hanging could be replaced by a rendered upper storey above the facing brickwork.

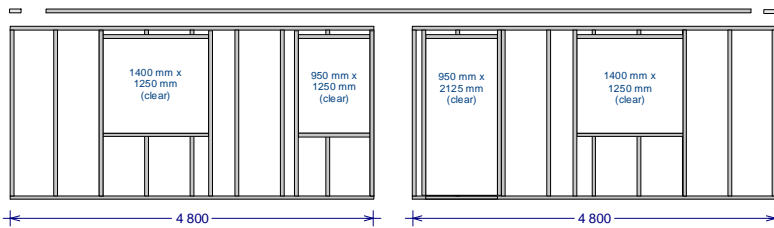
Structural Timber-Frame ~ Wall & Floor Panels

NB: The underlying structural timber-frame and the 'kit' of required components is exactly the same; regardless of the chosen external cladding materials.

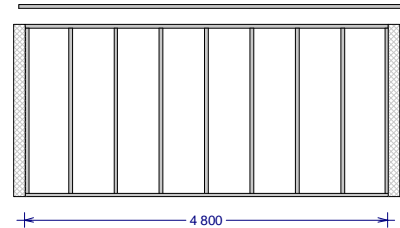
Ground Floor Plan



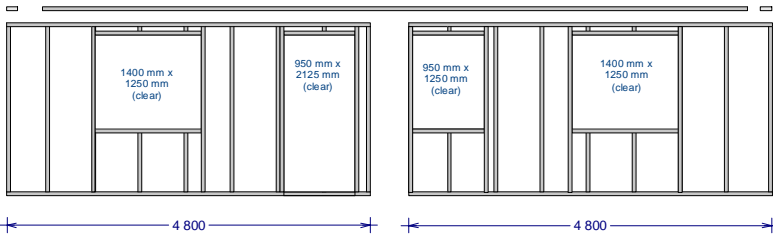
Front Elevation Wall-Panels



End / Side Elevations Wall-Panels



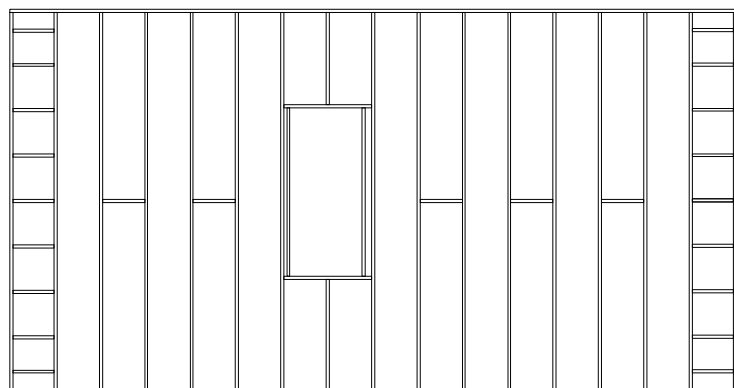
Rear Elevation Wall-Panels



NB:- All floor & wall-panel framing layouts are provided purely for illustration purposes only. The detailed "ProFrame®" 1:50 scale layout plans & panel drawings that are issued to clients are fully dimensioned and include a cutting list & nailing schedule for all the components involved.

(Typical assembly & erection time ~ 6 no. 'GF' Wall-Panels = 3 x 8 hr. days)

First Floor Joist Framing Layout

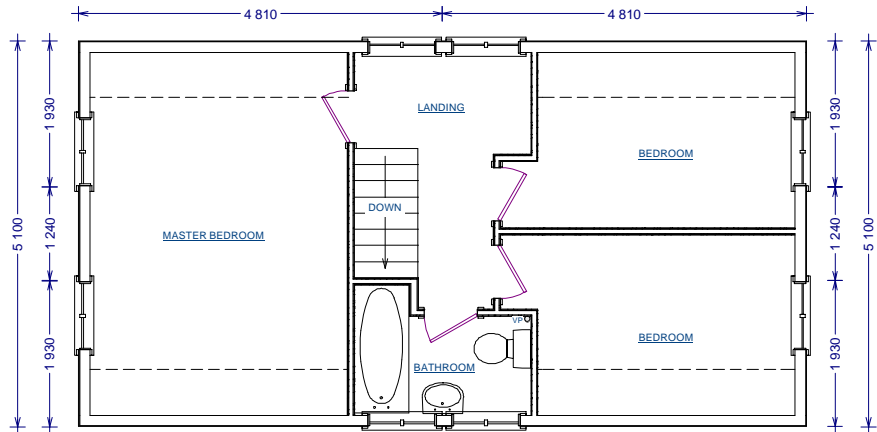


(Typical assembly & erection time ~ 1st Floor Framed & Sheathed = 2 x 8 hr. days)

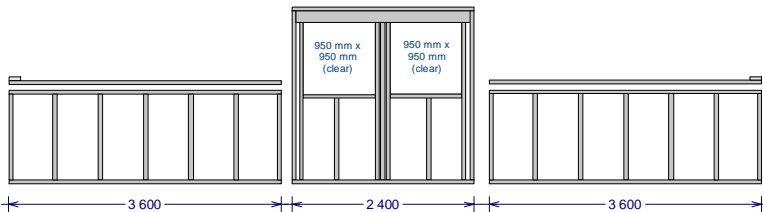
Structural Timber-Frame ~ Wall & Gable Panels

NB: The underlying structural timber-frame and the 'kit' of required components is exactly the same; regardless of the chosen external cladding materials.

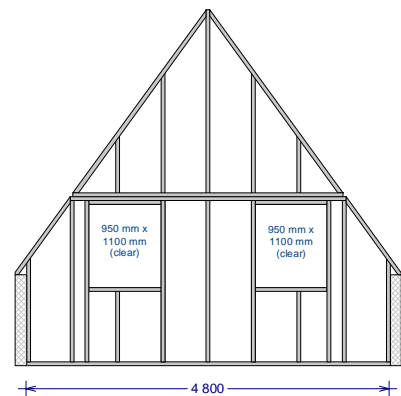
First Floor Plan



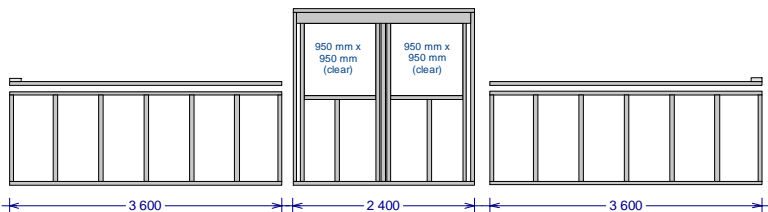
Front Elevation Wall-Panels



End / Side Elevations Gable Wall-Panels

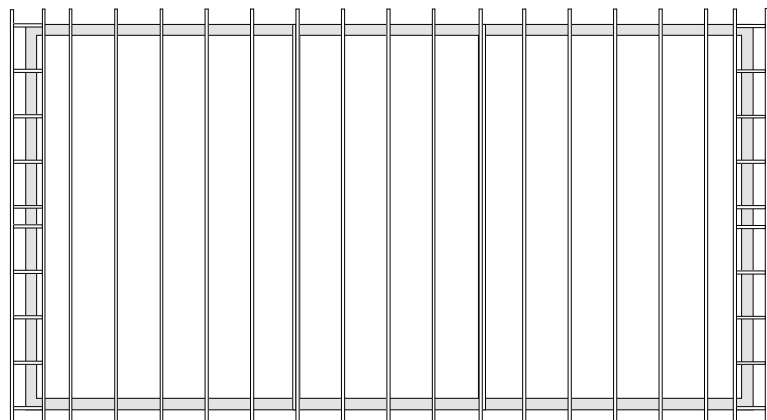


Rear Elevation Wall-Panels



(Typical assembly & erection time ~ 10 no. 'FF' Wall-Panels = 3 x 8 hr. days)

Roof Truss Framing Layout



(Typical erection time ~ Roof Trusses/Gable Ladders Erected & Braced = 3 x 8 hr. days)

The Original "Site Fabricated" DIY-Built House

This is basically a modern version of the very first 'on-site' fabricated house designed & built as a novice 'DIY' enthusiast in 1976; this version of the original house has been enlarged slightly overall in order to maintain the internal room sizes within the thicker external wall construction. Apart from the need to increase the floor, wall & roof insulation in order to achieve compliance with current 'EPC A Rating' requirements; the design is virtually the same and is still extremely quick and simple to build.

Typical (2017) Cost Of ProFrame® "TIMBER-FRAME KIT" = £9,245 (£65/m²)

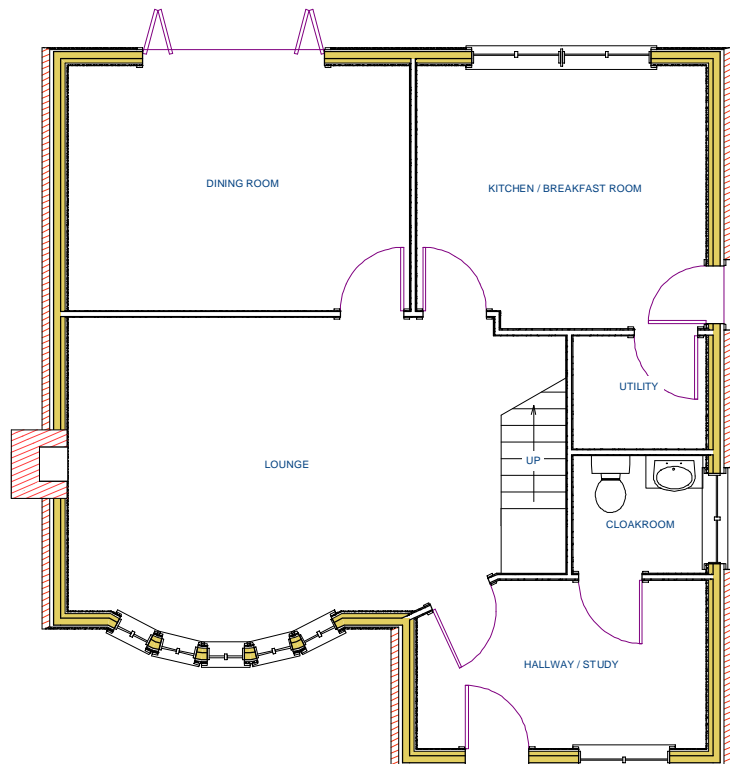
Ground Floor ~

Architecturally; apart from the small increase in overall external dimensions, the other change from how the original house was built is that the attached garage to the right-hand side has been omitted from the plans & elevations. Conversely the open fire & external chimney has been retained; although this is also an optional item which doesn't affect the structural timber-frame apart from the formation of a non-structural opening in order to accommodate the fireplace brickwork.

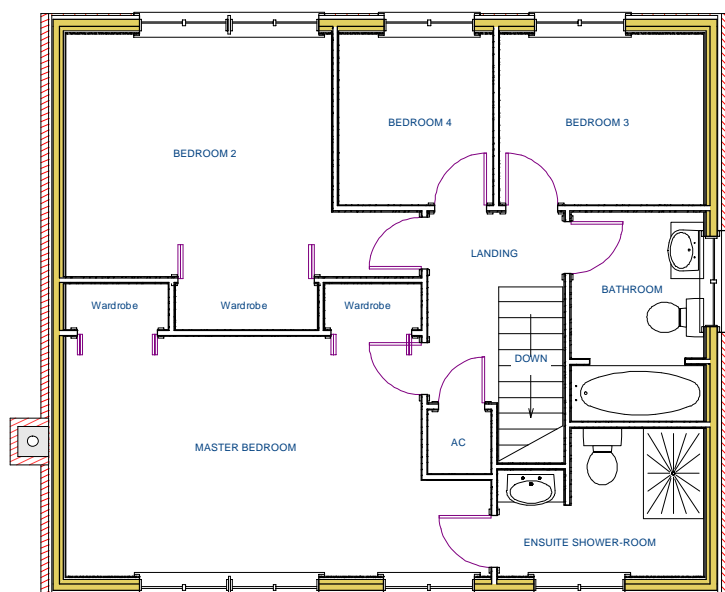
Another optional change has been providing 'Bi-Fold' doors to the Dining Room instead of a window.

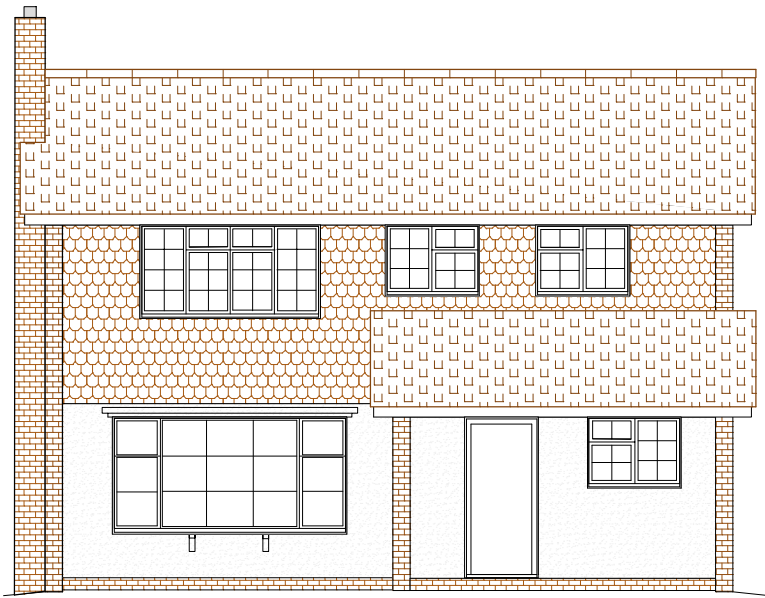
Although the layout of the sanitary fittings in the Cloakroom has been changed to meet Part 'M' accessibility requirements; the only structurally significant change is that the 'Hallway/Study' has been widened by replacing the original structural wall by a new partition wall inset from the original wall-line. To accommodate the extra width; the staircase has been 'shortened' by incorporating a quarter-space landing in lieu of the bottom tread.

Structurally; the change to widen the 'Hallway/Study' means that the upper storey & roof construction is now carried across the 'Hallway/Study' area by a timber beam instead of by a structural wall as used for the original house.



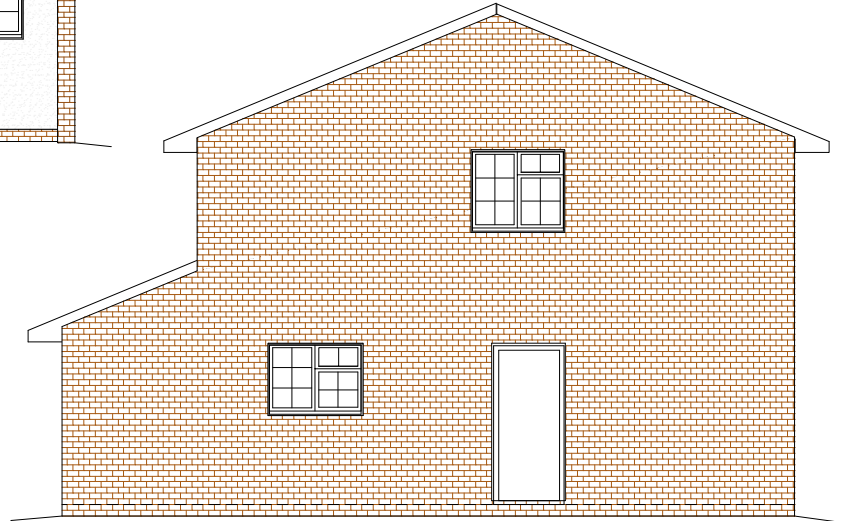
First Floor ~





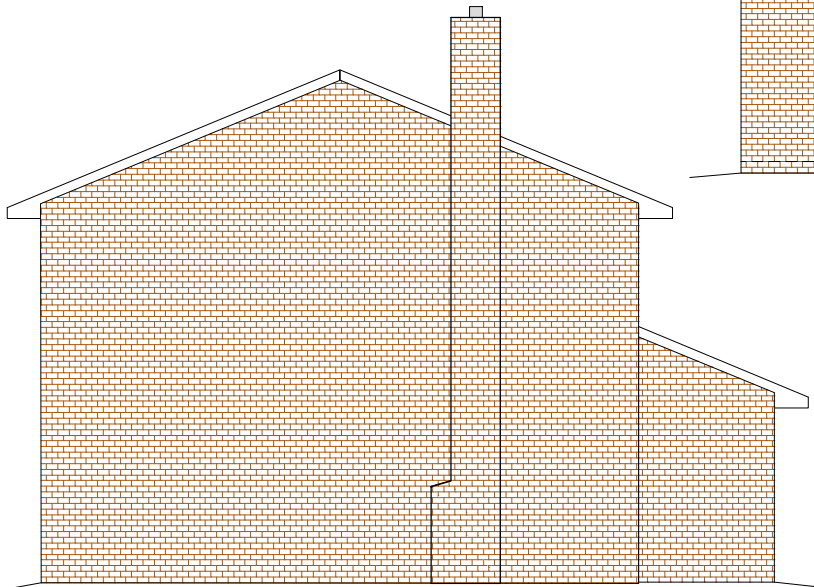
Front Elevation

Although the house is basically a cost-effective rectangular 'box'; the use of facing brickwork, tile-hanging and Tyrolean render as wall claddings not only disguises that but also reduced the 'build cost' quite considerably too when compared to using facing brickwork all round! A real 'win'-'win' choice that proves that the expensive option doesn't necessarily make for the most attractive house!



RHS Elevation

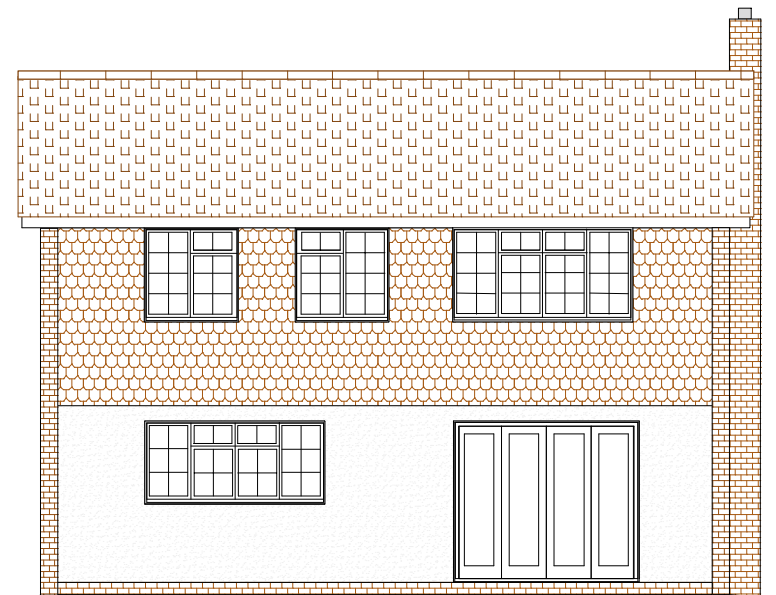
The other factor was that, despite the roof tiles, tile-hanging and facing brickwork being different materials, they were all a very similar shade of brown and blended together very successfully with the off-white render.



LHS Elevation

The original house had a Dining Room window, matching the bedroom window above, upon the rear elevation. Although more expensive; we have shown 'bi-fold' doors instead. These will obviously be very useful with an 'open-plan' layout in-line with the modern trend.

Despite the minor changes made and suggested optional changes; the simple 'box' design of the basic house ensures that the construction will remain very cost-effective!



Rear Elevation

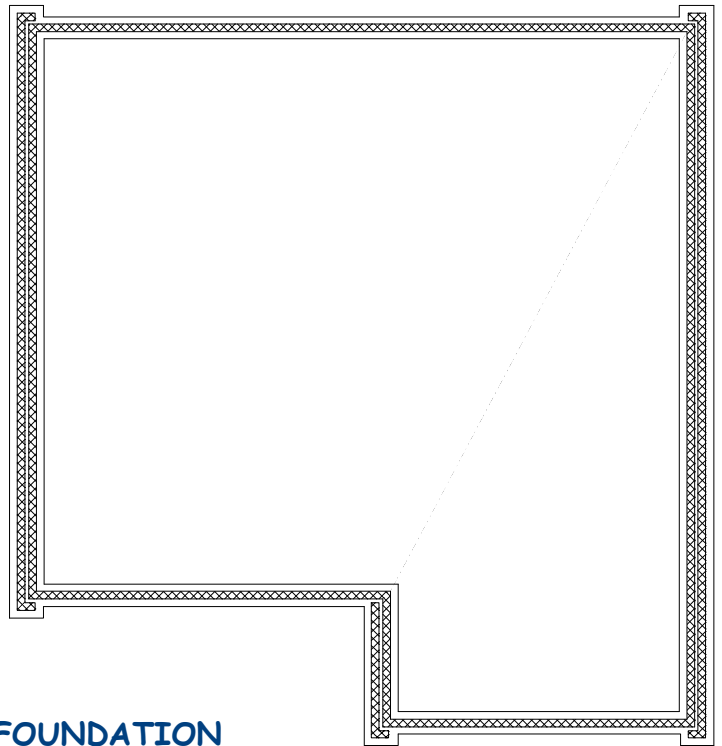
'Slim-Line' Footings Plan ~

'SLIM-LINE' FOUNDATIONS

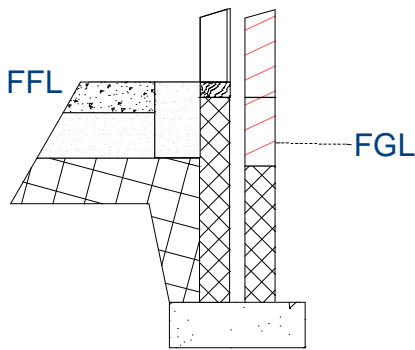
With overall loadings n.e. 20 kN/m;
Class IV soils or better; footings
300 mm wide.

(NB: No internal footings required.)

Footings to cavity walls; i.e. side
walls; increased to 450 mm wide.



Typical (2017) Cost Of "SLIM-LINE" FOUNDATION
= £4,100 (£29/m²) & £8,030 (£57/m²) when
"FULLY INSULATED"; i.e. NO thermal bridging!



'Gable Wall' Foundation Section (1:25)

TYPICAL 'SLIM-LINE' FOUNDATION SPECIFICATION (FOR CAVITY WALLS)

100 mm x 50 mm preservative treated ssw 'anchor-plate' solidly bedded in c.m. on d.p.c.

100 mm dense aggregate (Class 'A') concrete blockwork
~ minimum three courses upto d.p.c.

Three courses facing brickwork upto d.p.c.

100 mm dense aggregate (Class 'A') concrete blockwork
~ minimum two courses under facing brickwork.

With overall loadings n.e. 20 kN/m; Class IV soils or
better; footing concrete 450 mm x 150 mm deep.

NB:- When a 'ground-bearing' floor isn't possible due to the depth of oversite vegetable soil or falls and/or crossfalls; a suspended 'beam & block' floor is the usual alternative of choice. These vary between systems that use blocks of insulation, instead of blockwork, to form the 'infill' AND simply overlaying the top of the blockwork 'infill' with sheet insulation. The former option having the advantage of requiring less floor depth in order to achieve a decent level of thermal insulation than is required with the latter option. Regardless of that choice, it will require a change to the 'normal' slim-line foundation in the form of the dense aggregate blockwork being 215 mm thick to provide a bearing for the floor beams.

Fortunately that doesn't apply with a 'cavity wall' foundation where the inner skin of blockwork will provide a bearing with the timber-frame 'anchor-plate' supported off the edge-blocks infilling the 'beam & block' floor.

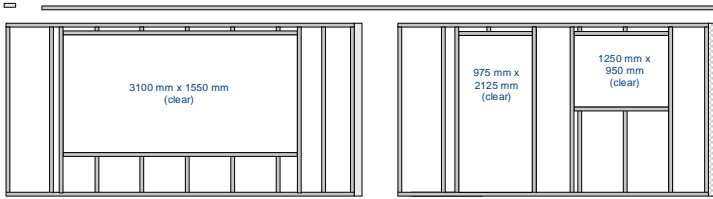
The other 'knock-on' effect is that it is likely that an intermediate 'slim-line' support foundation will be required so as to minimise the 'clear' spans and/or depth of the floor beams. An intermediate support wall can often prove advantageous when used to separate 'ground-bearing floors' from suspended floors.

Typical (2017) Cost Of "BEAM/BLOCK" FOUNDATION = £9,970 (£70/m²)
(£14,200 (£100/m²) when "FULLY INSULATED"; i.e. NO thermal bridging!)

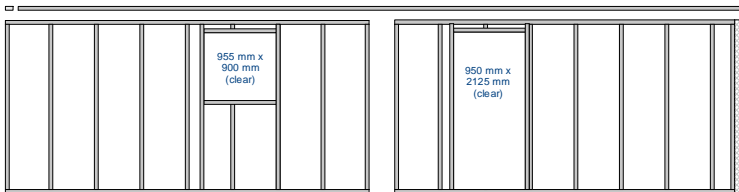
Structural Timber-Frame ~ Wall & Floor Panels

NB: The underlying structural timber-frame and the 'kit' of required components is exactly the same; regardless of the chosen external cladding materials.

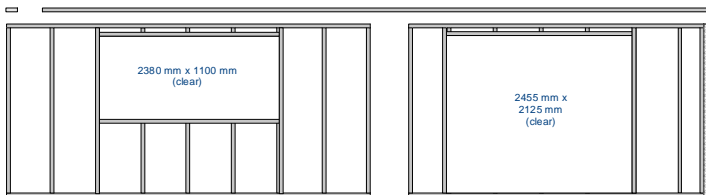
Front Elevation Wall-Panels



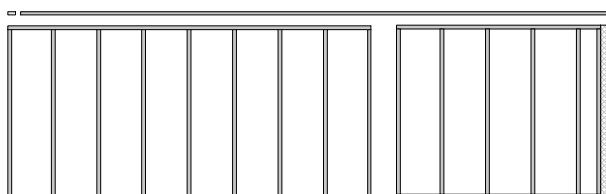
'RHS' Elevation Wall-Panels



Rear Elevation Wall-Panels

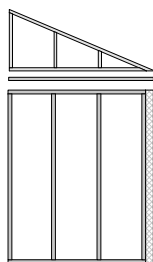


'LHS' Elevation Wall-Panels



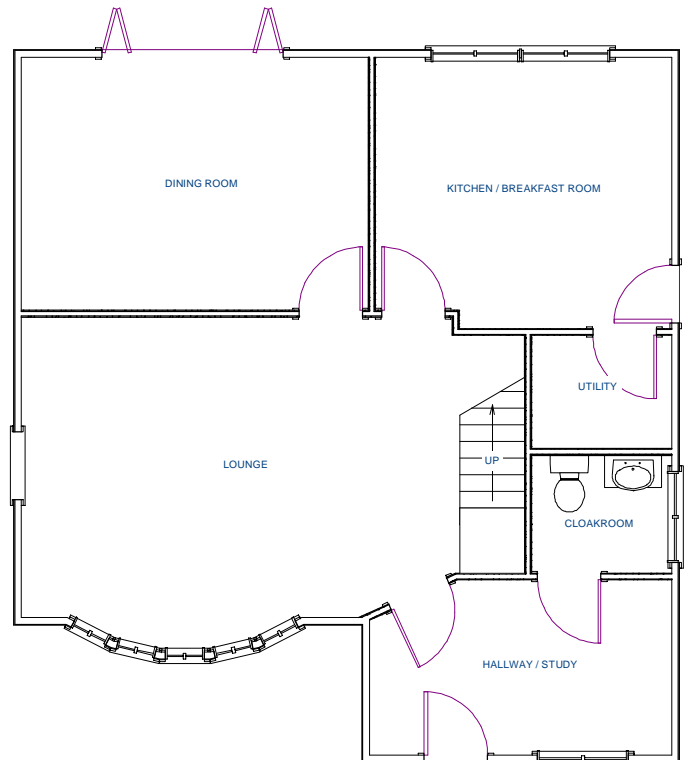
(Typical assembly & erection time ~ 9 no. GF' Wall-Panels = 5 x 8 hr. days)

Side Wall-Panels (Hallway/Study)



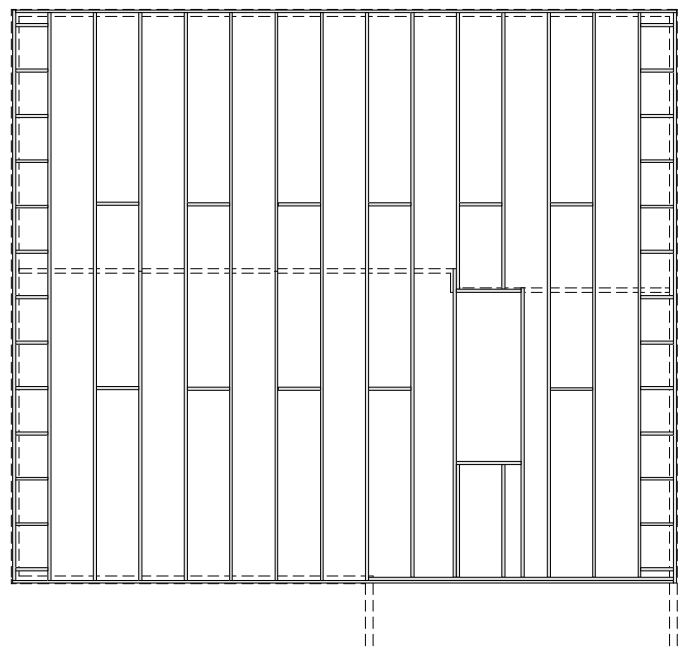
(Typical assembly & erection time ~ 1st Floor Framed & Sheathed = 3 x 8 hr. days)

Ground Floor Plan



OPTIONAL CHOICES ~ This house was designed and built in the mid 70's, when a formal 'Dining Room' was an essential feature for any 'up-market house', however times & tastes change and 'open-plan' living has since become fashionable. The wall between 'Dining Room' & 'Kitchen/Family Room' isn't load-bearing and can be simply omitted. The wall between 'Lounge' & 'Dining Room' is also removable; albeit with a timber beam needed to take the 1st floor loads instead!

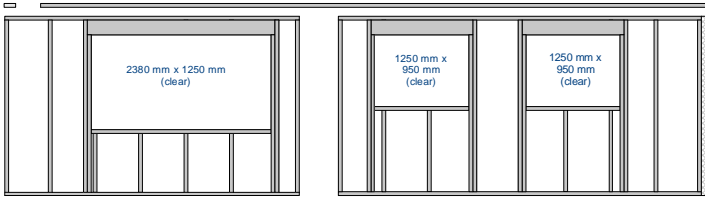
First Floor Joist Framing Layout



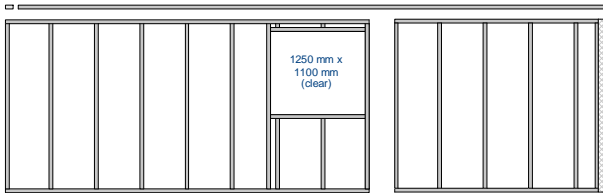
Structural Timber-Frame ~ Wall & Gable Panels

NB: The underlying structural timber-frame and the 'kit' of required components is exactly the same; regardless of the chosen external cladding materials.

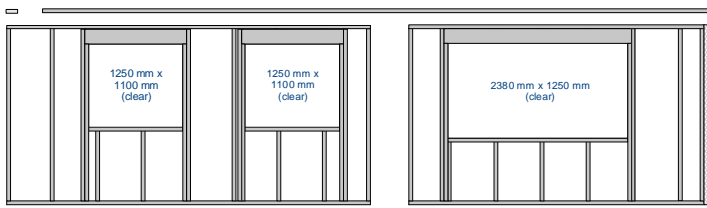
Front Elevation Wall-Panels



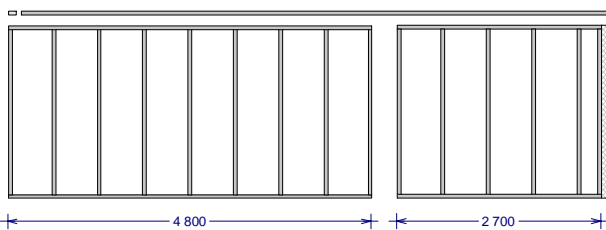
'RHS' Elevation Wall-Panels



Rear Elevation Wall-Panels

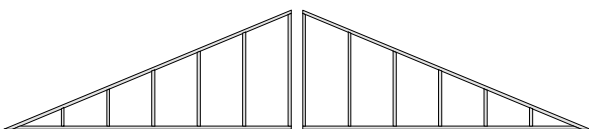


'LHS' Elevation Wall-Panels



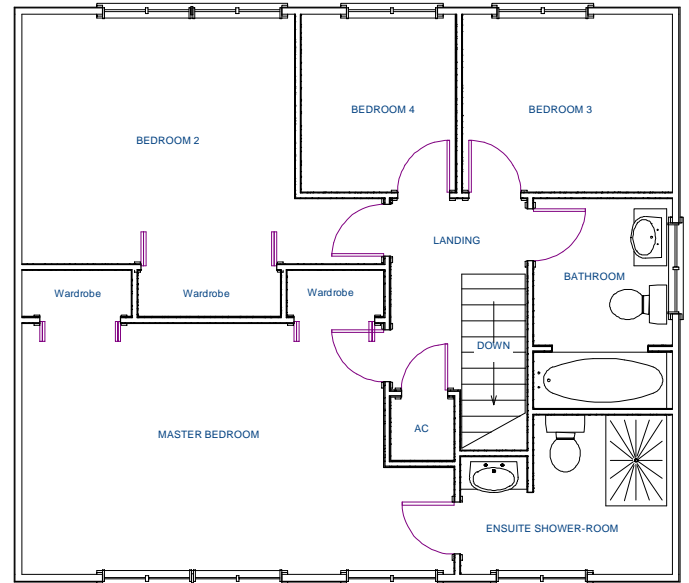
(Typical assembly & erection time ~ 10 no. 'FF' Wall-Panels = 5 x 8 hr. days)

Gable Framing (Two Sets)



(Typical erection time ~ Roof Trusses/Gable Ladders Erected & Braced = 2 x 8 hr. days)

First Floor Plan



OPTIONAL CHOICE

If built as the three-bedroom version; the wall between Bedroom 2 & 3 would be moved to the right and the wall between Bedroom 3 & 4 and door to Bedroom 4 simply removed. NB: Rarely would the three-bedroom version be commercially more viable than the four-bedroom version!

Roof Truss Framing Layout

