

# U Values

The U Value of triple glazed windows and doors will be no greater than 1.2  
The following table provides typical wall U Values achievable using the system.

EXTERNAL SKIN OF BUILDING	STANDARD BUILDECO HOMES WALL PANELS WITH	BRE AVERAGE "U" VALUE ESTIMATE
EXTERNAL TIMBER CLADDING	... NO ADDITIONAL INSULATION	0.25
EXTERNAL TIMBER CLADDING	... ADDITIONAL INTERNALLY FIXED 30mm MINERAL WOOL INSULATION	0.24
EXTERNAL TIMBER CLADDING	... ADDITIONAL INTERNALLY FIXED 70mm MINERAL WOOL INSULATION	0.20
EXTERNAL TIMBER CLADDING	... ADDITIONAL INTERNALLY FIXED 35mm PHENOLIC FOAM INSULATION	0.22
EXTERNAL TIMBER CLADDING	... ADDITIONAL INTERNALLY FIXED 70mm PHENOLIC FOAM INSULATION	0.18
102mm BRICK OR RENDERED 100mm DENSE CONCRETE BLOCK	... NO ADDITIONAL INSULATION	0.25
102mm BRICK OR RENDERED 100mm DENSE CONCRETE BLOCK	... ADDITIONAL INTERNALLY FIXED 30mm MINERAL WOOL INSULATION	0.23
102mm BRICK OR RENDERED 100mm DENSE CONCRETE BLOCK	... ADDITIONAL INTERNALLY FIXED 70mm MINERAL WOOL INSULATION	0.20
102mm BRICK OR RENDERED 100mm DENSE CONCRETE BLOCK	... ADDITIONAL INTERNALLY FIXED 35mm PHENOLIC FOAM INSULATION	0.21
102mm BRICK OR RENDERED 100mm DENSE CONCRETE BLOCK	... ADDITIONAL INTERNALLY FIXED 70mm PHENOLIC FOAM INSULATION	0.18

# Air Leakage

Air leakage rates of less than 1 ACH @ 50 Pa have been proven to be possible using the system.

\* A separate leaflet is available on request for our Foundation System.

## Contact Details

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**Low Cost, Fast Fix**  
**Low Energy Modular Timber Frame**  
**Wall & Window System**



## Who are we?

**"We are a small UK based company dedicated to helping our customers attain the very best value low energy homes they desire"**

In the main we do this by providing our customers with two separate, but complementary, Modern Methods of Construction (MMC)  
This leaflet gives a brief overview of our wall and window system.

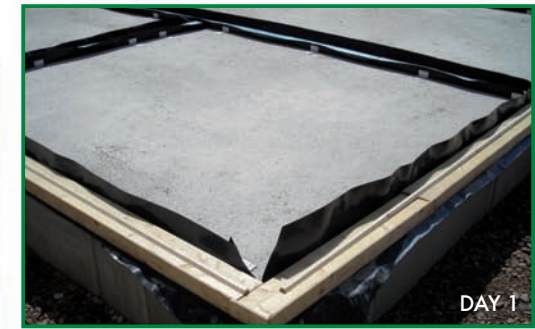
Dr. Vahid Tabatabai  
BSc (Hons), MEng, PhD.  
Managing Director



## Typical Site Process



DAY 1



DAY 1



DAY 1



DAY 2



Our Low Cost, Fast Fix, Low Energy Modular Wall and Window System.



Our Low Cost, Fast Fix, Super Insulated Modular Foundation System.

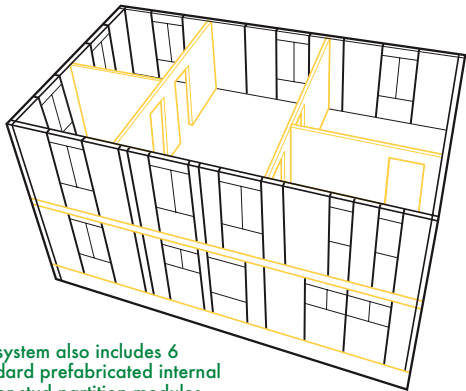
## Low Cost, Fast Fix, Low Energy Modular Wall & Window System

### Basic description

The system comprises a selection of over 80 standard, easily handled, prefabricated, fully insulated, closed panel timber frame external wall modules.

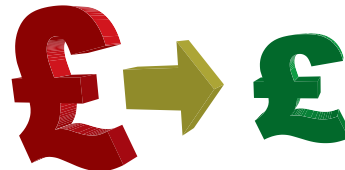


Many of the modules incorporate factory fitted triple glazed timber windows and doors of various designs.



The system also includes 6 standard prefabricated internal timber stud partition modules.

This unique and Modern Method of Construction (MMC) provides almost infinite design possibilities and allows new build homes and extensions to be made wind and watertight within days at a cost that can be 10-20% less than traditional construction costs.



DAY 2



DAY 2



DAY 3



DAY 3



## The Installation Process cont:



**8.** Head binders are used to help tie all the internal and external wall modules together.

**9.** In single storey properties the roof trusses are installed directly onto the head binders. On two or three storey properties floor joists and boarding are fixed on top of the head binders. Upper wall modules are fixed on soleplates located on top of the floor and fixed to each other in a similar way to the ground floor.

**10.** When the wall, floors and roof trusses are in place the superstructure is wrapped in breather membrane creating a completely wind and watertight structure ready for follow on trades to complete their works.

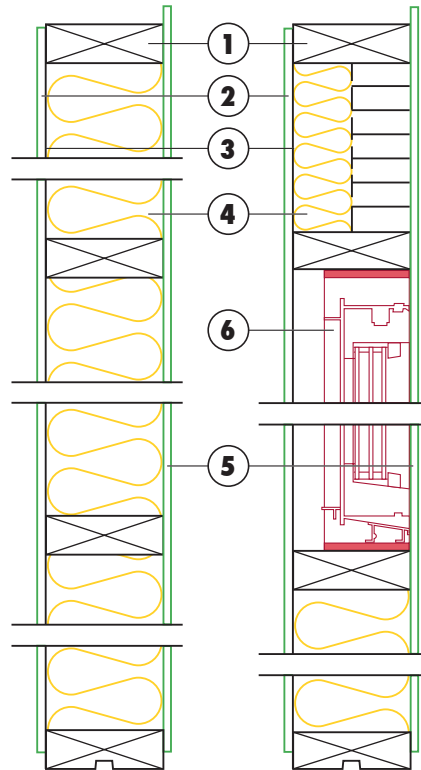
**11.** This picture shows our timber frame being externally clad with horizontal timber cladding and brickwork.

## External Wall Modules Basic Specification Details

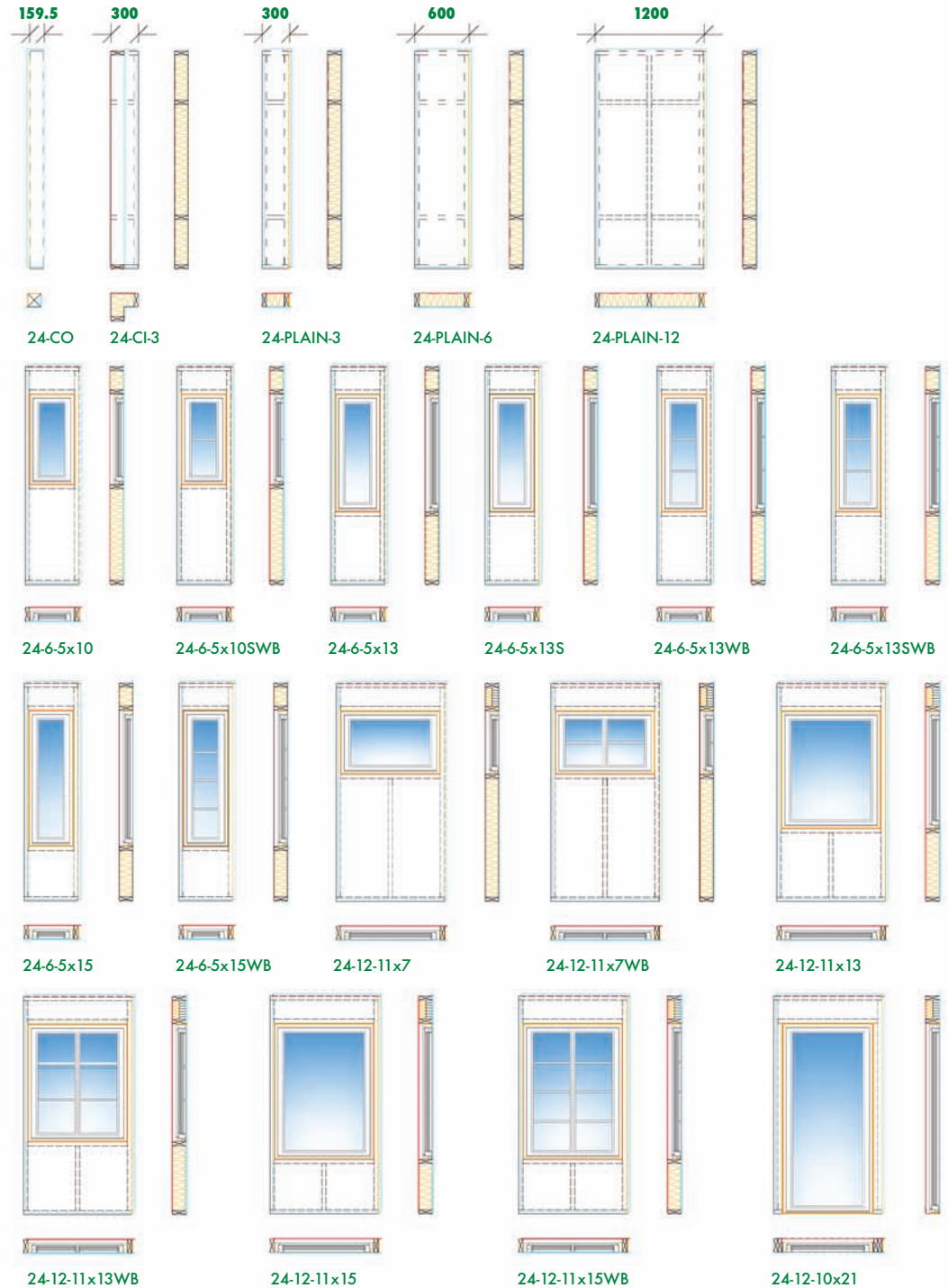
The Modules are used to create the external walls of a building

The components are manufactured in heights of 2400mm or 2700mm, widths of 300mm, 600mm and 1200mm

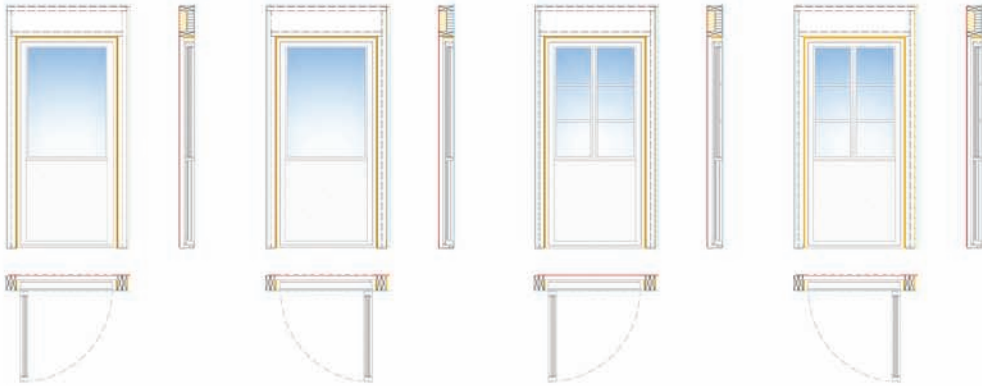
1. Timber Stud Frame of Spruce 45x145mm, quality; SS 23 01 20 (Swedish standard) Construction quality; C14
2. Masonite Wood Fibre Board 9.2mm, meeting the requirements of DIN 68 754 and ISO 14 001 and registered according to EMAS
3. Isofol Building Film 0.2mm approved according to SITAC 2698/90
4. Isover Insulation G-33-A1, 145mm in compliance with EU directive 89/106/ECC, Lambda 0.35
5. Visa Spruce 850 Plywood 9.5mm approved according to JAS (Japanese Agriculture Standard)
6. Triple Glazed Timber Windows P marked, certificate 35 35 01 Unpainted or Painted in Akzo Nobel; US A NCS S-0502 Y (Akzo Nobel is certified according to ISO 9001 and ISO 14001.



## Standard External Wall Modules 2400 or 2700 High



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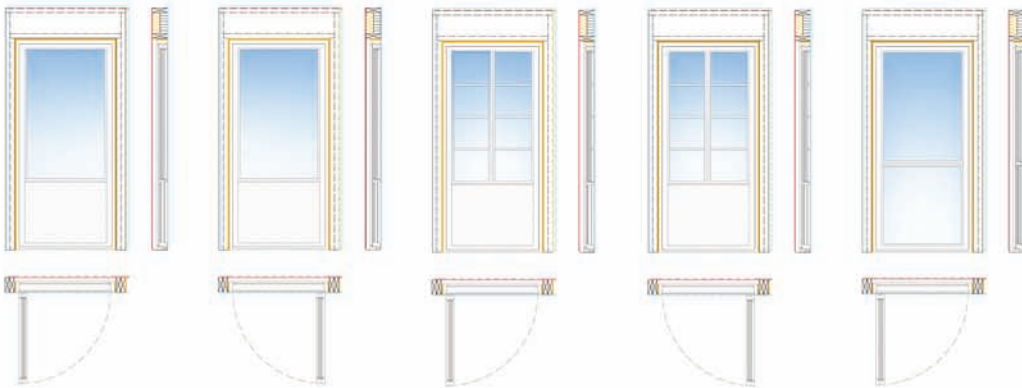


24-12-10x21-13L

24-12-10x21-13R

24-12-10x21-13LWB

24-12-10x21-13RWB



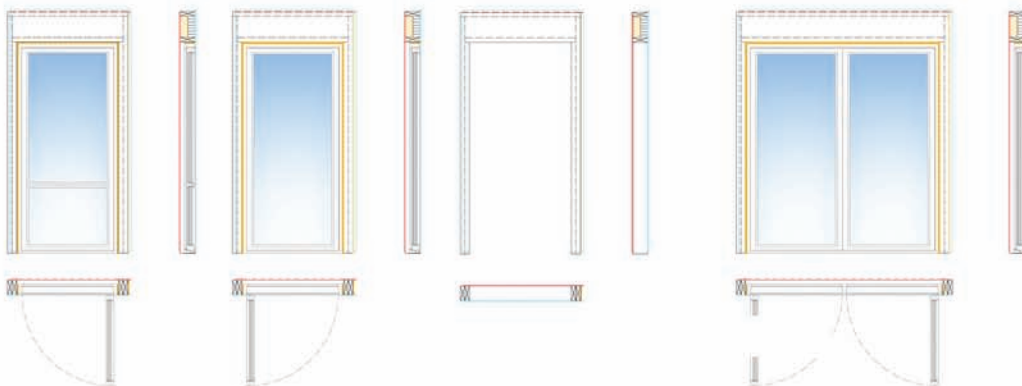
24-12-10x21-15L

24-12-10x21-15R

24-12-10x21-15LWB

24-12-10x21-15RWB

24-12-10x21-13/8L



24-12-10x21-15/6R

24-12-10x21-21L

24-12-10x21D

16x21 PATIO DOOR

## The Installation Process



1. The external and internal wall module soleplates are fixed to the top of the foundation system.

2. The external wall module soleplate guide rail is fixed in place.

3. The first external wall corner module is fixed to the top of the soleplate and temporarily supported.



4. Each external wall module is then individually fixed in position and secured to each adjacent using the unique fast fix installation method.



5. Note the insulation positioned between each module and the way the integral vapour barriers are sealed and lapped.

6. The external wall modules may require temporary support until the superstructure is completed.

7. The internal wall modules are now installed. Please note exact opening sizes and positions can be created using loose timber supplied.