

## PTH Light steel villa Solutions

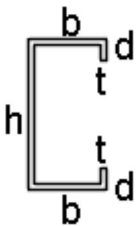
Light steel villas are manufactured by Stud Mill which combined FrameCAD software with Heyes' roll forming technology.

Frame CAD from New Zealand, automatic bending, cutting, punching, accuracy  $\pm 0.5\text{mm}$ . G550-AZ150 steel, all aluminizing zinc treatment.

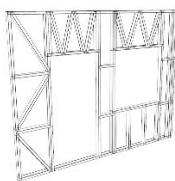
### 1. Framing System Solution

Light steel keels:

Light steel keels takes composite G550 steel(AU standard) as raw material, which have characteristics of light weight, high strength. General steel using quantity about 25 to 30 kg / m<sup>2</sup>. 50 years lifetime corrosion resistance with galvanized AZ150 generally if there is no special anticorrosive requirement.

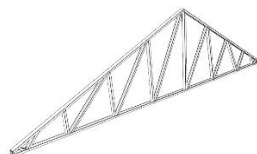
Section size	Service holes	h mm	b s mm	bp mm	d mm	t mm	Section	Material
70C075	yes	70	41	39	11	0.75		G550 galvanized
70C095	yes	70	41	39	11	0.95		
70C120	yes	70	41	39	11	1.2		
89C075	yes	89	41	39	11	0.75		
89C095	yes	89	41	39	11	0.95		
89C120	yes	89	41	39	11	1.2		
140C075	yes	140	41	39	11	0.75		
140C095	yes	140	41	39	11	0.95		
140C120	yes	140	41	39	11	1.2		

Wall keel



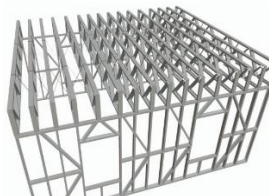
89C095,  
space 600mm

Roof keel



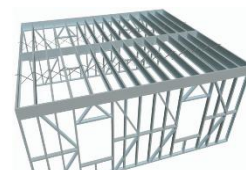
70C075, space range  
600-1800mm

Floor keel



Truss beam form, usually  
89C095/120, according to  
different floor load, truss

C beam form



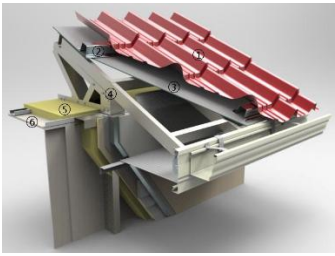
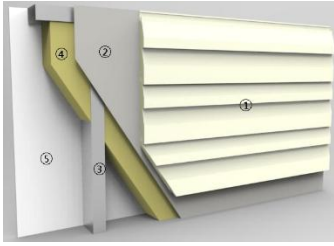
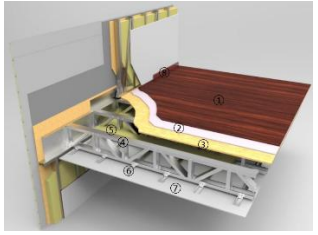
adopt 200c200 or higher  
specifications of the purlin,  
make the floor thinner,

take 400mm or 600mm


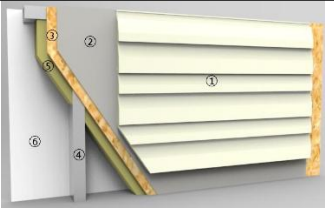
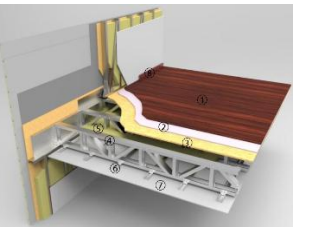
saving space, easy installation

## 2.Three housing options

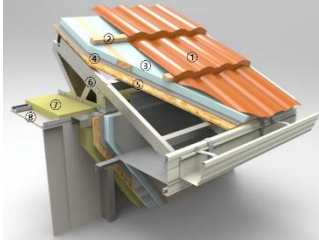
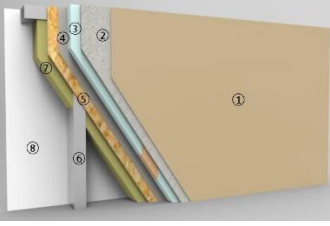
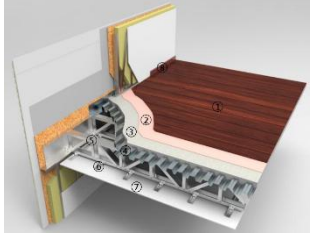
### Style 1: Economic

Type	Roofing System Solution	Wall System Solution	Floor System Solution
Image			
Advantage	Better water-proof, convenient and fast to install, highly economic efficiency.	Convenient installation, no need external wall coating, highly economic efficiency.	Dry construction on-site, convenient installation; light self-weight, can be applied in large scale.
Insulation parameters	Roof thermal resistance: 1.817 m <sup>2</sup> ·K/W	Wall thermal resistance: 2.624 m <sup>2</sup> ·K/W	

### Style 2: Standard

Type	Roofing System Solution	Wall System Solution	Floor System Solution
Image			
Advantage	Structure with high intensity, better wind and seismic resistance performance.	Highly water-proof, beautiful appearance and long lifespan of maintenance.	Dry construction on-site, convenient installation; light self-weight, can be applied in large scale.
Insulation parameters	Roof thermal resistance: 1.909 m <sup>2</sup> ·K/W	Wall thermal resistance: 2.716 m <sup>2</sup> ·K/W	

### Style 3: Better insulation

Type	Roofing System Solution	Wall System Solution	Floor System Solution
Image			
Advantage	Enhanced thermal effect by extra insulation layers, can be used in extremely cold area.	Perfect insulation efficient suitable for cold area, long lifespan, rich coating selections.	Better sound proof, more stable and comfortable floor, more convenient to stick ceramic tile.
Insulation parameters	Roof thermal resistance: 3.576 m <sup>2</sup> ·K/W	Wall thermal resistance: 3.458 m <sup>2</sup> ·K/W	