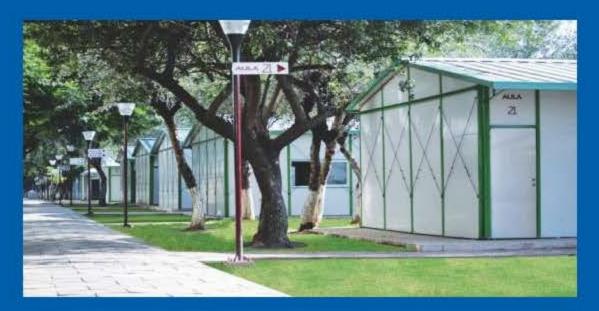
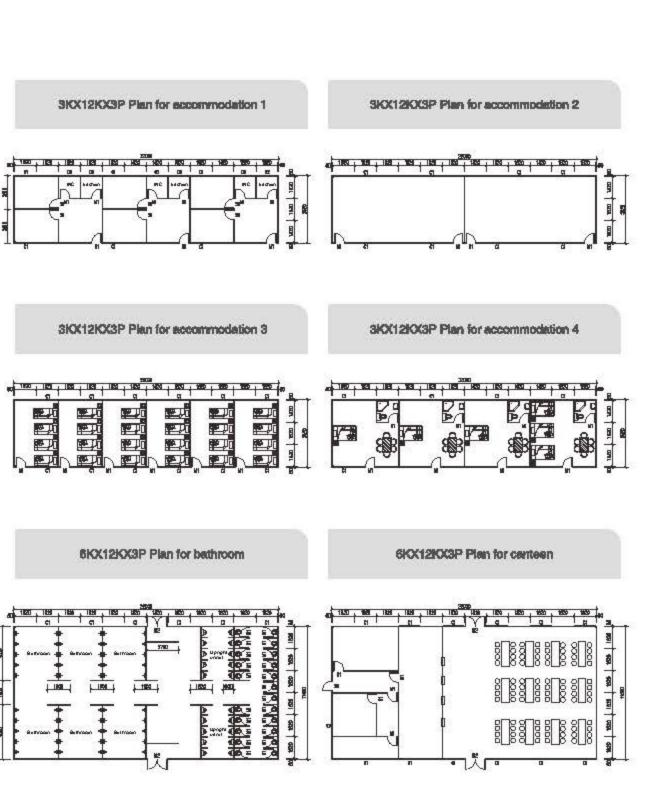
# S tandard k house -Sandwich panel house

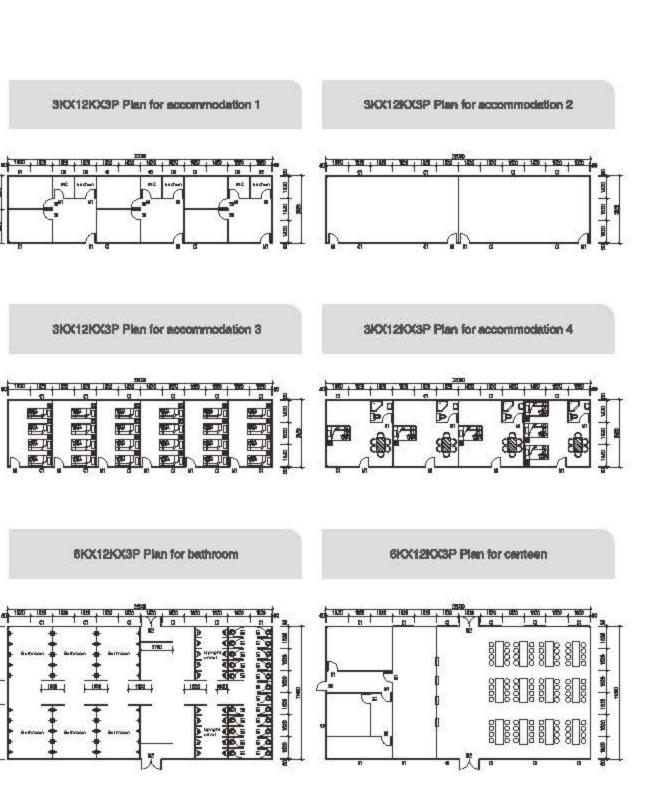
K house is suitable for the office, accommodation, stock, canteen, etc.

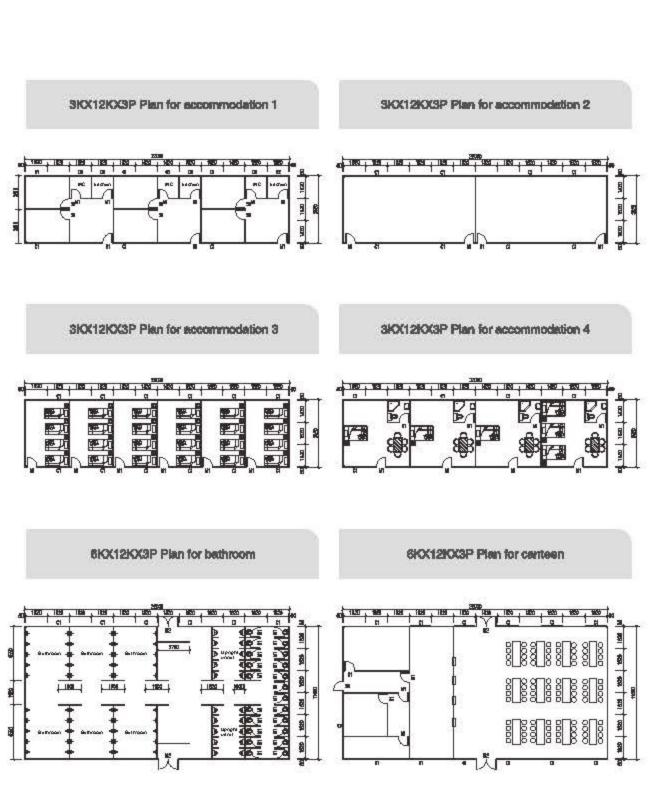




SICK12ICK3P Plan for accommodation 1



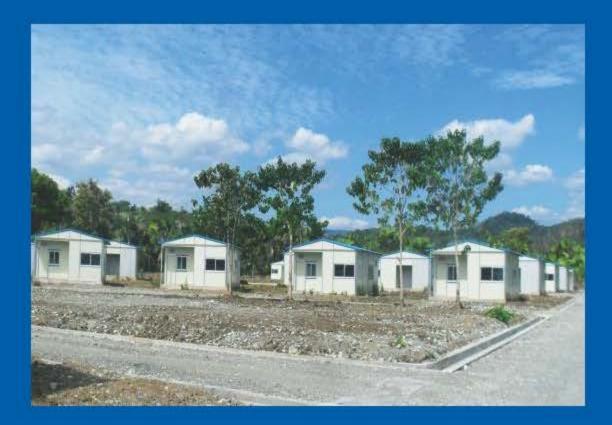




## ast Timor K house-Sandwich panel house

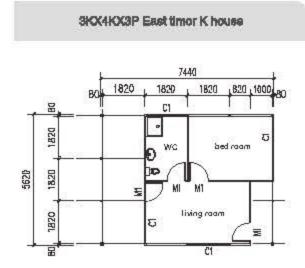
Suit for refugee house, poor people house, and cottage house, etc.

- Special structure for 7 grade earthquake resistance.
- 10 grade typhcon resistance design.
- Special design save 30% shipping freight.
- Cut down 100% installation cost.

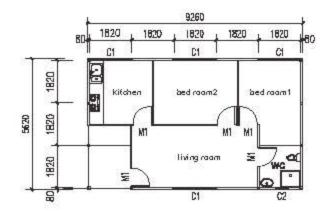


## **INTRODUCTION:**

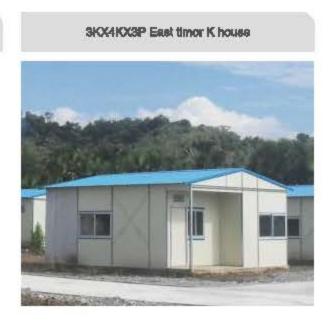
- 1, EPS sandwich panel for roof and wall.
- 2, Galvanized steel structure for main frame.
- 3. Aluminium alloy sliding window and Sandwich panel door.



## 3KX5KX3P East timor K house



ime. andwich panel door.





The material list comparing between the different style house

序号/	部件名称/ Componentname		平顶型板房/ Flat style house			
Number		普通型∕ Normal classic	标准型/ Standard classic	高档型/ Luxury classic	豪华型/ Luxury classic	
1	地梁/ Ground beam	8#C型钢∕ 8#C section steel	8#C型钢/ 8#C section steel	8#C型钢/ 8#C section steel	55mm镀锌槽/ 55mm Z inc channel steel	
2	立柱/Column	双8#C型钢∕ Double 8# section steel	双8#C型钢∕ Double 8# section steel	双8#C型钢∕ Double 8# section steel	双14#C型钢/ Double 14# section steel	
3	圈梁/ Ring beam	8#C型钢∕ 8#C section steel	8#C型钢/ 8#C section steel	8#C型钢∕ 8#C section steel		
4	一字梁/ "—"shape beam	16#C型钢/ 16# section steel	16#C型钢/ 16# section steel	16#C型钢∕ 16# section steel	双18#C型钢/ Double 18# C section steel	
5	楼面檀条/ Purlin in the floor	8#C型钢∕ 8#C section steel	8#C型钢∕ 8#C section steel	8#C型钢∕ 8#C section steel	8#C型 钢∕ 8#C section steel	
6	屋架梁/ "A"shape beam	8#C型钢∕ 8#C section steel	8#C型钢∕ 8#C section steel	8#C型钢∕ 8#C section steel		
7	屋面檀条/ Purlin in the roof	L40角钢/ L40 angle iron	L40角钢/ L40 angle iron	L40角钢/ L40 angle iron		
8	楼梯/Stair	钢楼梯/Steel stair	钢楼梯/Steel stair	钢楼梯/Steel stair	钢楼梯/Steel stair	
9	走道板/ Aisle board	3mm花纹钢板/ 3mm grain board	3mm花纹钢板/ 3mm grain board	3mm花纹钢板/ 3mm grain board	3mm花纹钢板/ 3mm grain board	
10	外墙板∕ Exteriro wall panel	外:50mm彩钢夹芯板 内:镀锌板/ Outer.50mm sandwich panel Inner: Zinc board	50mm彩钢夹芯板/ 50mm sandwich panel	50mm彩钢夹芯板/ 50mm sandwich panel	50mm彩钢夹芯板/ 50mm sandwich panel	
11	内隔墙板/ Interior wall panel	50mm镁磷夹芯板/ 50mm double color Phosphor magnesium filled board	50mm彩钢夹芯板/ 50mm sandwich panel	50mm彩钢夹芯板/ 50mm sandwich panel	50mm彩钢夹芯板/ 50mm sandwich panel	
12	屋面板/ Roof panel	20mm PU发泡瓦/ 20mm PU foamed tile	20mm PU发泡瓦/ 20mm PU foamed tile	50mm彩钢夹芯大波瓦/ 50mm sandwich roof panel	75mm彩钢夹芯大波瓦/ 75mm sandwich roof panel	
13	楼板/ Floor board	15mm木夹板/ 15mm ply wood board	15mm木夹板/ 15mm ply wood board	15mm木夹板/ 15mm ply wood board	15mm木夹板/ 15mm ply wood board	
14	窗/ Window	塑钢推拉窗/ Plastic steel sliding window	塑钢推拉窗/ Plastic steel sliding window	塑钢推拉窗/ Plastic steel sliding window	塑钢推拉窗/ Plastic steel sliding window	
15	门/ Door	钢型门框彩钢复合门板/ Steelframe with sandwich panel door	钢型门框彩钢复合门板/ Steel frame with sandwich panel door	钢型门框彩钢复合门板/ Steelframe with sandwich panel door	钢型门框彩钢复合门板/ Steelframe with sandwich panel door	

## The area comparing form of slope style house

$\smallsetminus$	Width		One Floor	(3P)		Two Floor	(6P)		Three Floor	(9P)
Leng	gth	3K	4K	5K	ЗK	4K	5K	ЗK	4K	5K
4	к	45.53	59.07	72.61	103.79	130.87	157.95	176.04	216.66	257.28
5	ĸ	56.67	73.52	90.38	126.97	160.68	194.39	211.27	261.83	312.39
6	ĸ	67.81	87.98	108.14	150.16	190.49	230.82	246.51	307.01	367.50
7	К	78.95	102.43	125.90	173.35	220.30	267.26	281.74	352.18	422.61
8	К	90.09	116.88	143.67	196.53	250.11	303.69	316.98	397.35	477.72
9	K	101.22	131.33	161.43	219.72	279.93	340.13	352.21	442.52	532.83
10	К	112.36	145.78	179.19	242.91	309.74	376.57	387.45	487.70	587.94
11	к	123.50	160.23	196.96	266.09	339.55	413.00	422.68	532.87	643.05
12	K	134.64	174.68	214.72	289.28	369.36	449.44	457.92	578.04	698.16
13	К	145.78	189.13	232.48	312.47	399.17	485.88	493.16	623.21	753.27
14	К	156.92	203.58	250.25	335.65	428.98	522.31	528.39	668.38	808.38
15	К	168.06	218.03	268.01	358.84	458.79	558.75	563.63	713.56	863.49
16	К	179.19	232.48	285.77	382.03	488.61	595.19	598.86	758.73	918.60
17	К	190.33	246.93	303.54	405.21	518.42	631.62	634.10	803.90	973.71
18	К	201.47	261.38	321.30	428.40	548.23	668.06	669.33	849.07	1028.82
19	К	212.61	275.84	339.06	451.59	578.04	704.49	704.57	894.25	1083.93
20	ĸ	223.75	290.29	356.83	474.77	607.85	740.93	739.80	939.42	1139.04
21	К	234.89	304.74	374.59	497.96	637.66	777.37	775.04	984.59	1194.15
22	К	246.02	319.19	392.35	521.15	667.48	813.80	810.27	1029.76	1249.26
23	K	257.16	333.64	410.12	544.33	697.29	850.24	845.51	1074.94	1304.37
24	К	268.30	348.09	427.88	567.52	727.10	886.68	880.74	1120.11	1359.48
25	к	279.44	362.54	445.64	590.71	756.91	923.11	815.98	1165.28	1414.58
26	К	290.58	376.99	463.40	613.90	786.72	959.55	951.21	1210.45	1469.69
27	К	301.72	391.44	481.17	637.08	816.53	995.99	986.45	1255.63	1524.80
28	к	312.85	405.89	498.93	660.27	846.35	1032.42	1021.68	1300.80	1579.91
29	К	323.99	420.34	516.69	683.46	876.16	1068.86	1056.92	1345.97	1635.02
30	К	335.13	434.79	534.46	706.64	905.97	1105.30	1092.15	1391.14	1690.13

6. Expect the no standard house, this regular is suitable for all the house 7. Above regular also is fit for the flat style house

## Explanation:

The two floors house has two pcs stair in standard. Each side of gable wall has one. The stair's area is 4.5m<sup>2</sup>/pc. The three floor stair is 16m<sup>2</sup>/pc. The area will increase or reduce according to stair's quantity

## The regular of area counting way:

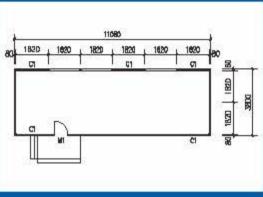
1. The house area: Exterior wall length x exterior wall width x floor number 2. Standard stair:4.5m<sup>2</sup>/pc, corner stair(special for three floor house): 16m<sup>2</sup>/pc 3. Awning area: house shadow area x 0.5

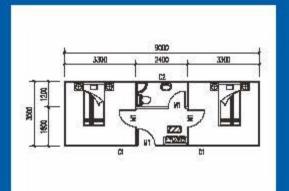
4. Aisle board area: house shadow area

5. Total area= (1)+(2)+(3)+(4)

## Houses with steel base







Sudan house SMx9Mx3H



Singapore office



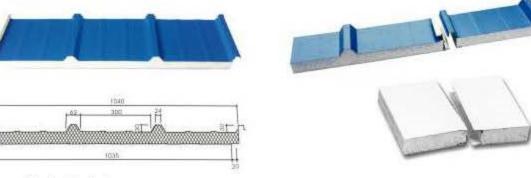


Two floor steel structure





## Material application



Polystyrene sandwich panel

Polystyrene sandwich panel is a new type of building material with EPS layer as the core, the color steel plates on both side externally. It is pressed by computer controlling color steel molding machine with high strength glue.

Feature: Light weight, 10-14kg/m<sup>3</sup>, convenient installation, short construction period, low building cost, high bearing capability, strong integrative stiffness and excellent strength.

Flexible usage, the length can be determined by requirements of project design as well as installation and transportation condition. It is of good heat and sound proofing as well as moisture-proofing, the average coefficient of heat conductivity is 0.032kcal/m.h.C





FORM of the signals of polystyrene sandwich panel house (Deformation controlled under U240)

移展/ Spann (m) Thickness 何取/ Load (kg/m)	50	75	100	150	200	250
25	5.19	6.91	8.09	9.91	11.45	12.80
50	3.74	4.96	5.72	7.01	8.09	9.05
100	2.53	3.49	4.05	4.96	5.72	5.40
150	1.90	2.70	3.31	4.05	4.57	5.23
200	1.40	2.10	2.80	3.51	4.0.5	4.53
250	1.10	1.70	2.30	3.13	3.62	4.05
300	0.90	1.40	1.90	2.86	3.31	3.70

## PU panel

PU foam panel is one of the popular roof material in the field. PU foam panel is not only beautiful in appearance, light in weight and convenient for installing, but also possesses the advantages of specially high heatproofing and sound-proofing, and the long service life comparing with the other products in the same field.

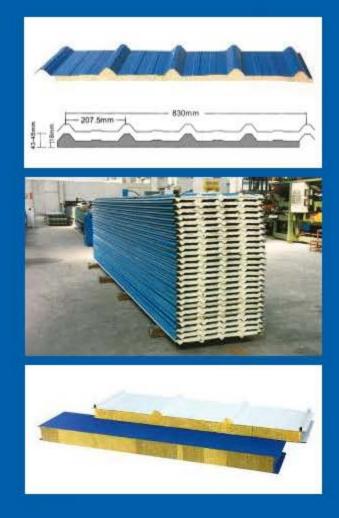
Rock wool sandwich panel

## Feature

Rock wools and wich panel has a good feature in noise reduction specially suitable for the place where is high requirements in the sound-insulation. Via testing according to ISO 717/82 and UNI18270/7 standards, selecting the rock wool which with the density 105kg/CBM and the thickness 50-100mm as the core, the sound coefficient will achieve RW=29-30dB.

## Excellent fire resistance:

The ability of the fire-proofing of the rock wool sandwich panel is over 1000 for the rock wool is the non-fire material. According to the test of the Italy authority organization Istituto Giordano S.P.A, the fireproofing margin of rock wool sandwich panel is as below: (take the wall panel as the example) Thickness: 100mm(REI) 120 minutes 75mm(REI) 60minutes 50mm(REI) 30miuntes The fireproof degree of rock wool panels of 50-75-100mm are 0/1 (with their fire-proof degrees from high to low is 0,1,2,3,4,5)





Anti hail



Waterproof



Fireproof

## Polyurethane sandwich panel



Structure: Upper and lower metal exterior sheets sandwich with the PU foamed. The exterior metal sheet can be color steel sheet, aluminum&zinc coated steel sheet, aluminum coated steel sheet and embossed color steel sheet, etc. PU sandwich panel is the best heat resisting& maintaining material acknowledged in the world at present.

Feature: Light weight: 10-14kg/m³ Good heat resisting: 0.0175kcal/m.h.c. Strong integrative stiffness and excellent strength.

Reasonable and simple connection: For using the snap connection, the roof panel avoids the hidden trouble of roof leakage. The wall panel adopts coupling board connection. It takes the beautiful in appearance, economy of spare parts and convenient for construction.

Application range: Factory& work-shop, ware-house, public stadium and gymnasium, villa, cold storage and other buildings.

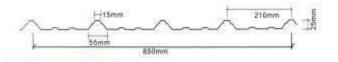
## Steel deck



型 别/ Model	标准宽度/ Standard	钢板总厚度/ Steel plates thickness(mm)	单位重量/ Unit weight (kg/ft)	单位面积重/ Weight/s.q.m		断面慣性力矩/ Inertia moment	断面系数/ Section coefficient	
1010-061	width(mm)			kg- m²	kg/坪pyeong	t(mm⁺⁄m)	s(mm³/m)	
		0.80	2.54	9.54	31.55	1001181.38	26274.21	
YD3W75	880	1.00	3.03	11.37	37.58	1196382.77	31394.91	
Dunite		1.20	3.61	13.55	44.??	1429643.04	37513.59	

Color corrugated steel sheet





## Turbo exhaust ventilator

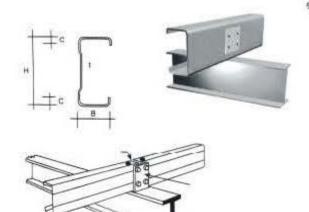




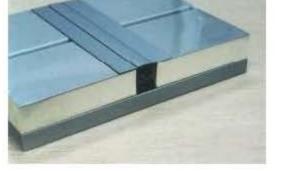




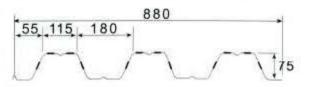
"C"&"Z" Section steel



\*C\* Section steel view drawing







单位/Unit: mm

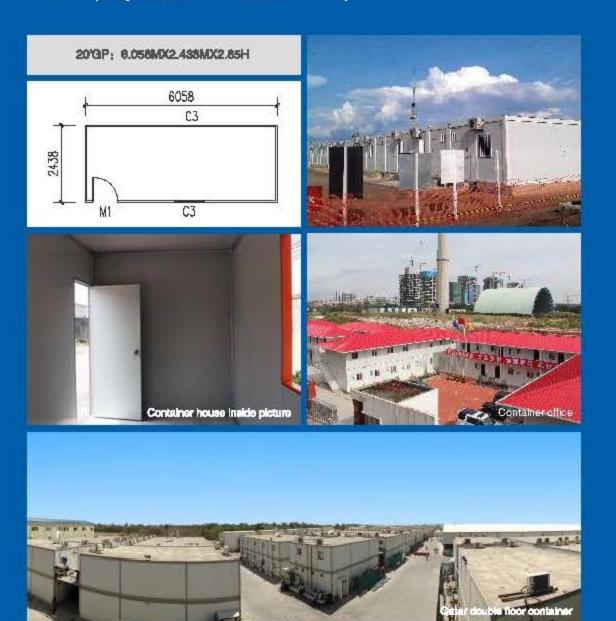


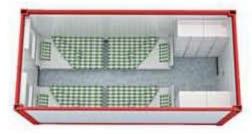
\*Z\* Section steel view drawing



## CONTAINER HOUSE

Suit for temporary office, accommodation, soldier camp.

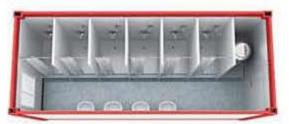




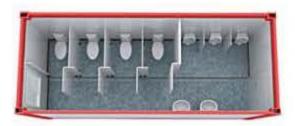
TYPE A



TYPE C



TYPE E



TYPE G

## TYPE H



## TYPE F



## TYPE D



TYPE B





A: EPS/Rock wool/PU sandwich panel for wall and roof. B: 0.426mm/0.476mm Galvanized steel sheet for wall and roof.





# S imple villa-Sandwich panel house

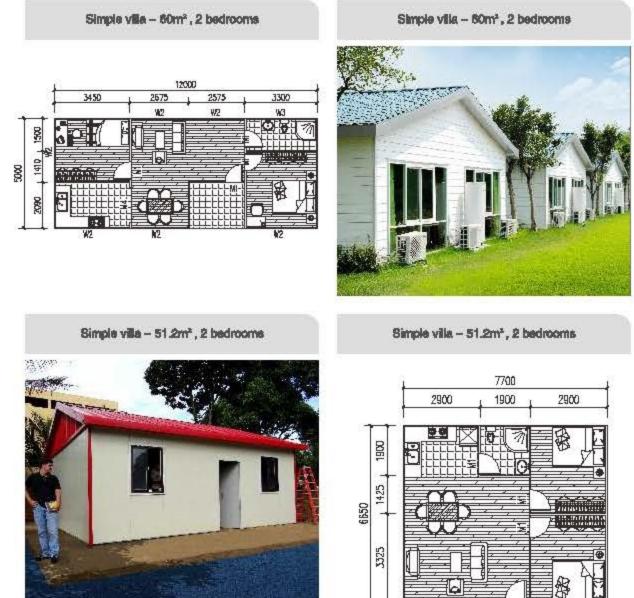
Suit for supervisor dormitory, family house, poor people housing and disaster housing.

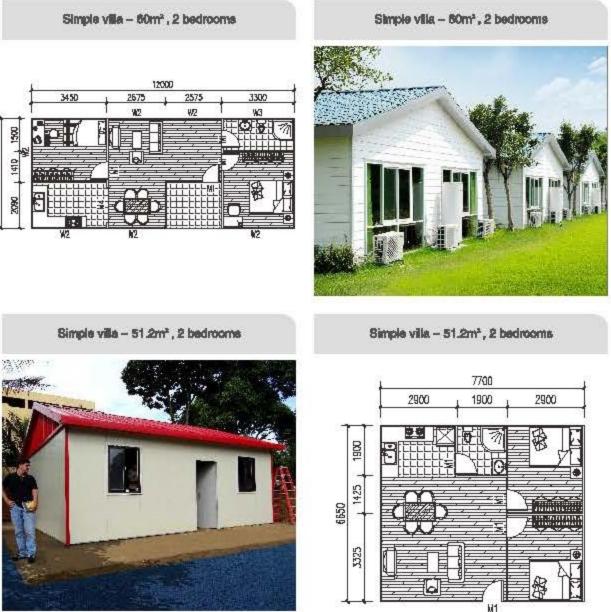


- CALERAN

## INTRODUCTION:

- 1. Steel structure for frame.
- 2、EPS/Rock wool/PU sandwich panel for wall and roof.
- 3, Alumnium alloy sliding window and steel door.





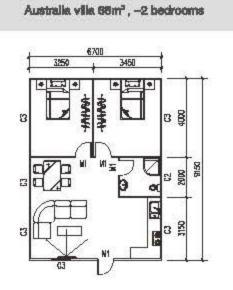


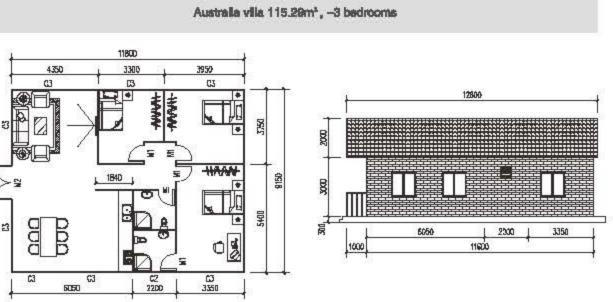
Service life is more 30years, suit for cottage house, holiday resort, villa resort.

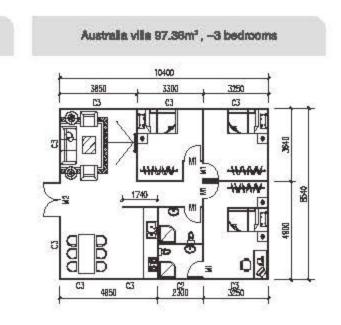


## INTRODUCTION:

- 1, Steel structure for main frame.
- 2, 100mm Concrete panel for external and internal wall.
- 3, Sandwich panel for roof + Villa tile or asphalt fiber glass shingle.
- 4. Aluminium alloy sliding window and steel door.
- 5. Ceramic wall tile decoration outside , painting inside.









Door Window

Floor

## C ommon accessories







## Toilet



# Engineering example

## and the second second



① 阿根留警括項目/ UAE labour camp project
② 本学技会会主要用/ Timor laste office project
③ 有限会会主要目/ Thaliand office project
④ 告知管知項目/Lace labour camp project
④ 有限主人供会常知道用/Thaliand worker domains project
⑤ 有限者会項目工程/Indexeds worker domains project













**Earthquake** disaster housing project. Suit for Disaster relief house and Temporary relocation settling house.







Panonima in the diseater area





Double Floor K House Project Gallery



















1.Workshop 2.Warehouse **3.Chicken sheds** 









# Engineering example

Villa resort project





