

MTG MONTALGUEDES

WHY CHOOSE MTG HOUSE SOLUTION?

1. MTG offer Complete House to you from A - Z, you will not worry to find each item from hundreds of different suppliers.
2. MTG house solution - Easy & Fast building and labour cost Saving The speed of this construction method is 300% faster than the traditional style which results in a 394% reduction in labour costs.
3. MTG House come with Green & Energy saving
On a conventional building site, 25% wastage is evident against the MTG PANEL displaying less than 1% of wastage. In testing it was evident that there was 96% retention of energy.



MTG PREFAB HOUSE

The main wall building material is from EPS cement sandwich wall panel, which will make the prefab house

- 96o/o ENERGY SAVING warm preservation of MTG Panel
- 300% FAST INSTALLATION
- 39% LABOUR COST SAVING
- 8 GRADE ANTI-SEIM IC
- 240 MINS FIRE PROOF (1000 degree)
- 70 YEARS LIFE SPAN



Sustainable & Green House

Construction never EASY and FAST like this

Part 1. Wall building main material

Lightweight EPS cement sandwich wall panel(MTG Panel) is new sustainable green partition wall building material, The thickness of panel range from 50 - 200mm, and the length is 2270/ 2440/ 2700/ 3000mm, the width is 610mm.

The thickness(s) are below:

50mm, 60mm, 75mm, 90mm, 100mm, 120mm, 150mm, 180mm, 200mm.

Houses exterior walls usually use panel thickness above 90mm.

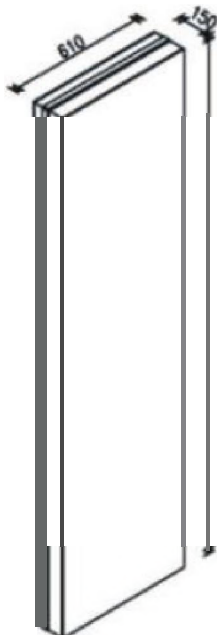
Houses interior walls usually use panel thickness below 90mm.

Houses roof and slab usually use 60mm panel.

If you have customized needs, we will calculate the costs and give you a suggestion to make a decision.

EPS cement sandwich wall panel is kind of energy saving wall material taking 4.5mm Reinforced calcium silicate board as face panel, with 42.5# cement, EPS sand as core material and forming by one time compound.

Build prefab house with EPS cement sandwich wall panel, one skillful worker can finish 30sqm wall panel in 8 hours working day. The panel will help you to build a More fast building, cost-efficiency and sustainable house.



- Typical dimension of a panel are 610mm wide x 2270mm high
- Typical thicknesses are 60mm 90mm 120mm 150mm, - 180mm.
- Density of Panel = 650kg/m³
- Concrete compressive strength minimum 5MPa.





Panel size	Weight(kg/m ²)
2270 x 610 x 50mm	40
2270 x 610 x 60mm	45
2270 x 610 x 75mm	56
2270 x 610 x 90mm	63
2270 x 610 x 100mm	73
2270 x 610 x 120mm	83
2270 x 610 x 150mm	101
2270 x 610 x 180mm	119
2270 x 610 x 200mm	130

1.1 Behaviour in Fire

The face panel of MTG energy-saving boards on both side are 4.5mm silicate calcium fire proof boards and the main material is a mixture of cement sand, fly ash and so on. MTG energy saving boards have a fire proof of **4 hours** against a high temperature of **1000°C** and incombustibility standard achieve national level A. Besides, these materials give out no toxic gas and perfectly meet the international environmental protection criterion. The tests also prove that water containers can be made by using MTG panel with no need for plastering and the containers have no leakage at all.



Raw panel before test at testing Lab



Incombustible

1.2 Thermal performance

When compared with the traditional brick house, maximum summer temperatures in MTG dwellings will be up to 8°C warmer when no ceiling are installed, up to 1°C warmer with ceiling installed and up to 2°C cooler when 40mm glass wool or similar, insulated ceiling are installed.



Inside temperature: 29.7.C



Outside temperahue: 41.1 C

1.3 Water penetration and rising damp

MTG Building System buildings meet EU criteria for resistance to water penetration.



Waterproof Sample

1.4 Easy construction shorter time

The construction work with traditional block taking 5 people 60 minutes to complete will need only 1 person 60 minutes to finish if they use MTG panel, which can save a lot of labor cost for the construction part.

One laborer can finish 30sqm wall panels with 8 hours working time per day. For example, If you want to build a 100 sqm bungalow, the exterior wall is 160sqm, the interior wall is 100sqm, the roof is 90sqm, with 5 workers will only cost 3 days to finish the footing, and the whole structure, then will cost more or less 4 days to install the Doors, windows, ceiling, roof and decoration etc.

1.5 Space cost saving

The thickness of MTG energy saving panel is between 50mm-200mm, compared with traditional block thickness greatly increase the building space. At the same time, the weight is only 1/6 of the traditional wall, also save the cost on the construction structure.

1.6 Acoustic performance

Chinese performance criteria for sound attenuation between adjacent rooms and between adjacent dwellings have been met. See also GB/T 19889.3-2005 Acoustical properties of buildings.

On testing it was found that the insulation used to retain the energy simultaneously resulted in a superior sound insulation of 45db (decibels) against a conventional house that has sound insulation of 32.8db.

1.7 Earthquake performance

MTG energy saving panel all with high strength, the seismic performance up to 8.5 Degree, and shock resistance function is dozens times higher than other wall material, and can be directly nailing or hanging heavy things with bolts hook; can be covered directly by ceramic tile, wall paper, wood trim, paint, etc.

1.8 Durability

Given regular and adequate maintenance, the durability of MTG Building System building will be more than **50** years.



Durability:
70years
House in South
Africa

What MTG panel can be used for

MTG panel can be used in following application:

- House construction
- Multi Unit Construction/ Fire Walls
- Projects with difficult sites
- Commercial Construction
- High-rise building
- Retaining Wall
- Basement
- Fences

REMARK:

1. When build small single story house, we can only need MTG panel in some places.
2. When build double or more stories , will build the concrete or steel frame first. Then build the MTG panel as the exterior and interior wall.
3. MTG panel will be sent with all installation accessories.

Wall building supporting material

This Installation Guide is based on accepted methods and practices constructing over many years. If you have any concerns regarding your particular building you should seek clarification from MTG board before you start.

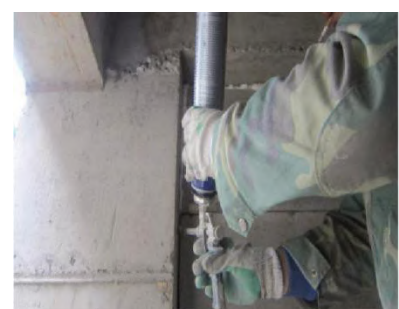
1.1 Anti-crack tape



1.2 Cement Adhesive



1.3 PU Foam



1.4 White glue



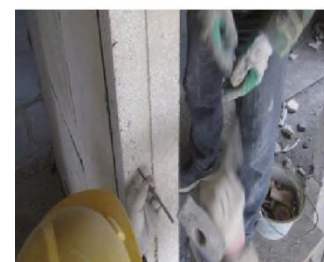
1.5 Fiber Mesh Cloth



1.6 Putty powder



1.7 Steel bar



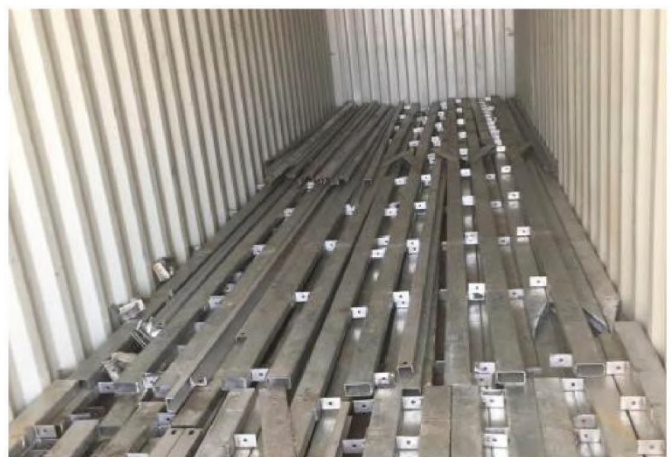
PART 2. Light weight galvanized steel structure

Q2358 galvanized steel material

Steel structure design using PKPM software according to China's standard design

Professional engineer make design of steel structure

All the steel structure are welded with connection plates in our factory before delivery

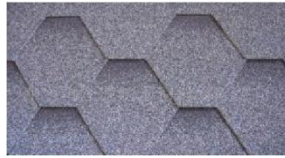


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PART 3. Roofing material

Option 1: Tiles



Advantages:

1. Light Weight and Environmental Conservation Roof System
2. Easy and fast Fittings, Low Cost
3. Heat Insulation and Sound Absorption
4. Class A Fireproof and Wind Resistance
5. Keep Clean by itself
6. Excellent roof appearance.

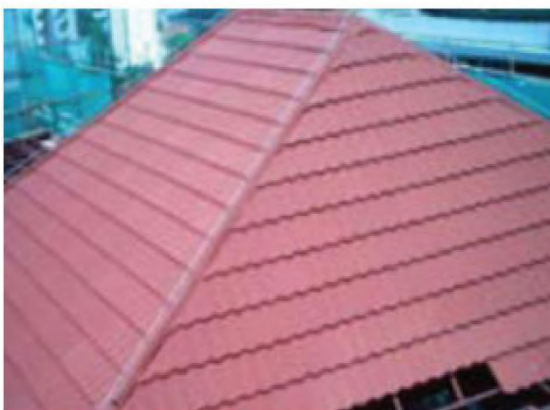


Option 2: Colorstone tiles



Advantages:

1. Beautiful appearance
2. Long service life for 50 years
3. Light weight
4. Easy construction
5. Energy saving and environment friendly



Option 3: Synthetic resin roofing tiles



Advantages:

1. Long-lasting color (at least 10 years)
2. Excellent anti-corrosion performance
3. Good waterproofing performance
4. Strong fire resistance
5. Excellent heat insulation property
6. Good sound insulation

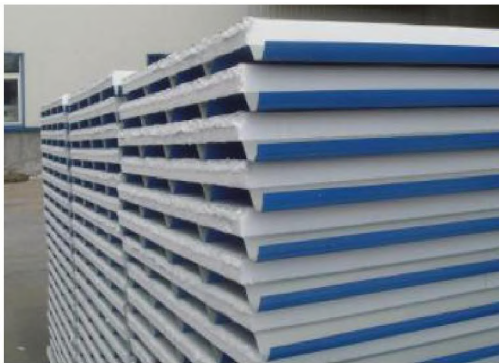
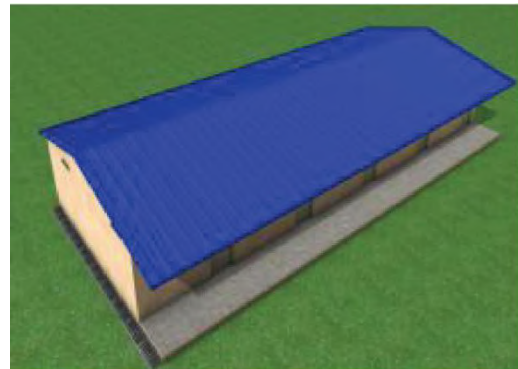


Option 4: Color-coated steel sandwich board



Advantages:

- 6. Light Weight
- 7. Easy and fast Fittings, Low Cost
- 8. Heat Insulation



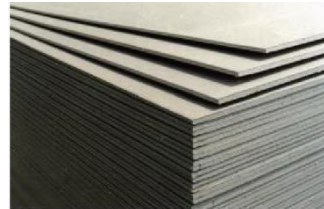
Roof will be sent with all accessories.

Sustainable & Green House

Construction never EASY and FAST like this

PART 4. Ceiling

Gypsum board ceiling _ Living room, bedroom, dining room



Advantages:

1. Fireproof & Heat insulation
2. Sound absorption
3. Moth proof and anti-aging.
4. Beautiful ceilings style as your original ideal.
5. Low cost and fast installation.



Sustainable & Green House

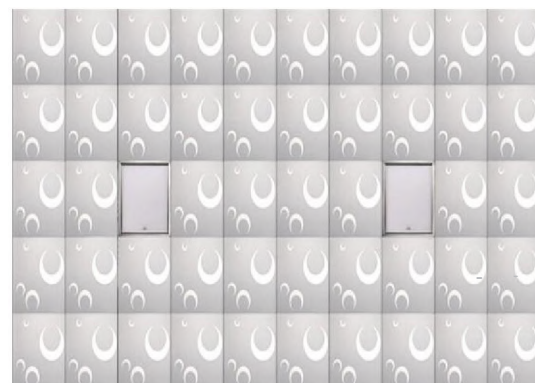
Construction never EASY and FAST like this

Aluminum ceiling - Kitchen & Bathroom



Advantages:

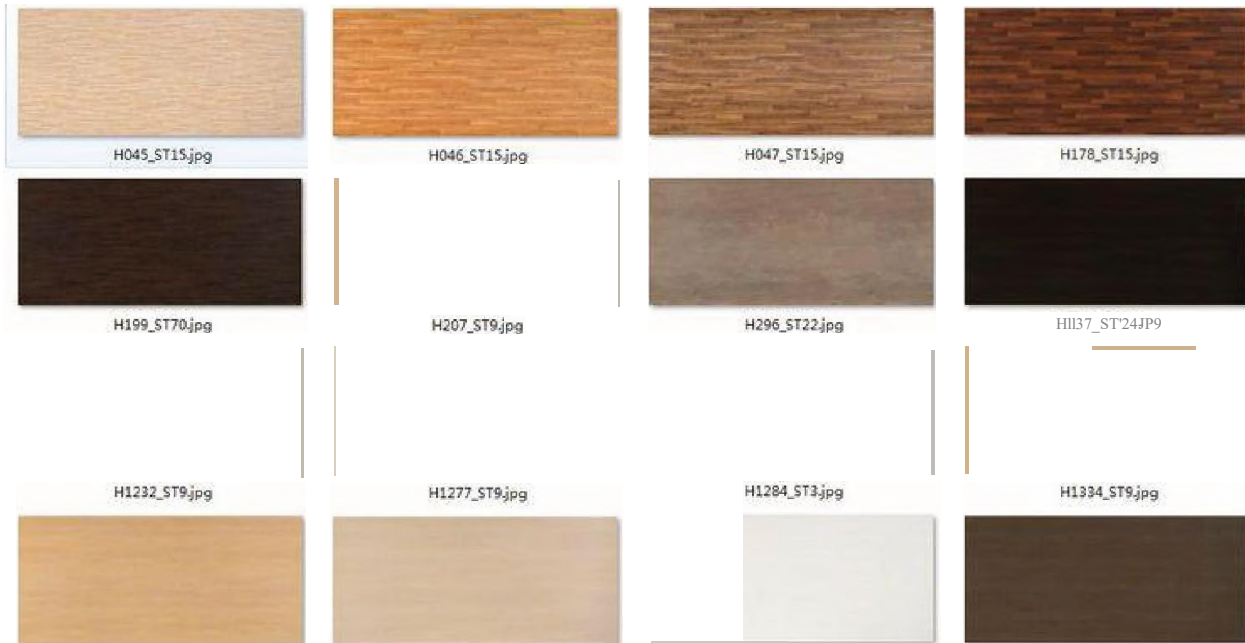
1. Many types, colors for chosen
2. Fire& Water proof.
3. Smoke proof.
4. Easy for installation and clean
5. Easy & Fast installation



Ceiling will be sent with all accessories.

PART 5. Floor and wall tiles

Option 1. Laminated flooring - Living room, dinning room and Bedroom



Advantages:

1. Natural and grace appearance
2. Lightweight and high strength
3. Easy fitting
4. Warm preservation
5. Non-condensation
6. Long durability

Option 2. Ceramic tiles - Living room, dinning room and bed room



Ceramic tile Size:

800x800x8m m

600x600x8m m

Ceramic tiles - Floor for kitchen and bathroom



Ceramic tile Size:

300x300x8m m

Ceramic tiles - Wall tiles for kitchen and bathroom



Ceramic tile Size:

300x300x8m m

450x300x8m m

PART 6. Doors and windows

Entrance door - steel Door



"There is nothing
but upwards to be seen."
— Significance of the door

