

### MGO Board

- . Enjoy the respect for environmental protection
- . Apprehend the low carbon path



### FOR FIREPLACE



Refractory time up to 4 hours  
100% Resistant to Fire Damage

### FOR THE ENVIRONMENT



Very low carbon footprint  
100% recyclable

### FOR WET AREAS



Does not warp or swell  
Does not degrade in most areas  
Available in water resistant,HD T&G

### FOR TERMITE PROTECTION



Termite proof  
Of no interest to white ants and pests

### FOR HEALTH SAFE AREAS

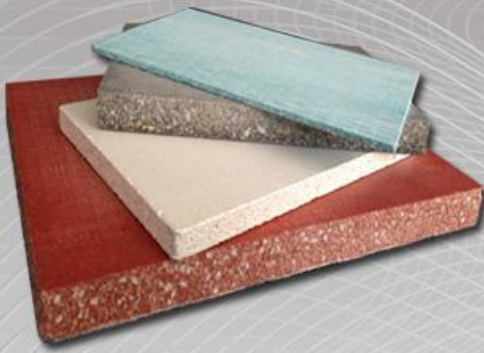


Totally non-toxic,chemical free  
Helps protect from mould and bacteria

### FOR NOISY AREAS



Acoustic Decibel Rating over 50Db.  
Sound insulation to RW 61 plus Ctr=Net Rw52



Create the beauty in greenness  
Enjoy the respect for environmental protection

Green/Environmental Protection/Security/Energy Conservation

**ZJLEADER MGO Board** uses proprietary processes with MgO, MgCl<sub>2</sub>, Perlite, Fiberglass, Chip compounds to deliver a multi-purpose, versatile, non-combustible, and unique board material.

**Magnesium oxide (MgO)** comes from the steel manufacturing process and a naturally abundant supply... .

MgO is a recyclable salt based mineral that is totally fire proof and when mixed with specialised resins and compounds. **ZJLEADER MGO panels** have the qualities of timber but with no combustibility to 800°C and no flame out at 1000°C making it the ideal choice for building in fire rated areas.



## Technical Data

### LEADER Magnesium oxide board technical data

Density (Specific Mass)	1000 Kg/m <sup>3</sup> (+/-<2%)
Compressive Strength	20 MPa (3,000 PSI)
Impact Resistance	>6 KJ/m <sup>2</sup>
Tensile Strength	>5.5 MPa
Moisture Absorption	26% maximum saturation (slow absorption rate)
Moisture Content	6%
Water Vapour Diffusion	28 / 35
Specific Heat	930 J/KgK
Thermal Conductivity	0.44 W/mK
Modulus of elasticity	6045 N/mm <sup>2</sup>
Flexibility UNI E 12372	20.1 N/mm <sup>2</sup> maximum 12mm x 1220 x 2440=10 N/mm <sup>2</sup>
Surface Alkalinity	10 Ph
Thermal Expansion Hot/Cold	0.01 mm/mC (from temp +20°C to -20°C)



Apprehend the low-carbon path  
Feel the power of energy conservation

Green/Environmental Protection/Security/Energy Conservation

## Board Size Dimensions

Thickness (mm)	Board Size (mm)	Approx Weight(Kg)	Edge	Use
3	1220×2440	11	Square	SIP Skins / Custom projects
4	1220×2440	14	Square	SIP Skins / Custom projects
4.5	1220×2440	16	Square	SIP Skins / Custom projects
5	1220×2440	17	Square	Internal Walls / Ceilings/SIP Skins
6	1220×2440	18	Square/Feather	Internal Walls / Ceilings
8	1220×2440	24	Square/Feather	Internal Walls/Decorative board substrate
9	3000×900	28	Chamfer	Fire Rated Easy joint external walls
10	1220×2440	30	Square / Taper	Fire Rated Walls / Ceilings / Soffits
12	1220×2440	36	Square / Taper	Fire Rated Walls / Ceilings / Soffits
14	1220×2440	42	Square / Taper	Fire Rated Walls / Ceilings / Soffits
15	1220×2440	45	Square / Taper	Fire Rated Walls / Floors / Fences/Decks
18	1220×2440	54	Square / Taper	Fire Rated Walls / Floors / Fences/Decks
20	2400×900	45	Square / T&G	Fire Rated Walls / Floors / Fences/Decks

- MGO board thickness: 3-25 mm;
- Width: 600 mm, 1100 mm, 1220 mm;
- Length: 1100 mm, 2100 mm, 2440 mm, 2600 mm, 2700 mm, 2800 mm, 2900 mm, 3000 mm;
- Color: White, Grey, Red, blue etc.
- Other colors and size can be designed by clients' requirements

### Propose About The Place To Use

**Commercial building:**commercial mansion,public place of environment,market and hotel.

**Industrial building:**factory,warehouse

**Residential housing&Public place:**New-type house,fitting up renovating;hospital,theater and station.

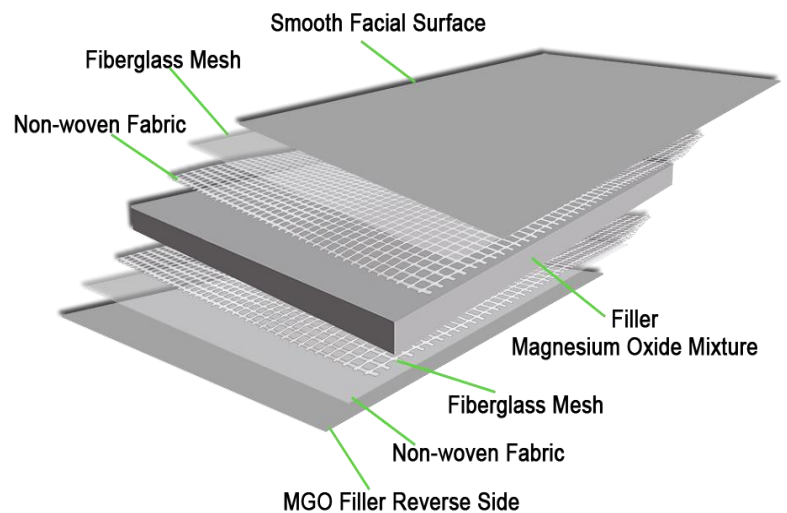
*Walls,Floors, Ceilings, Soffits, Decks, Fences,Tile Backing, Bathrooms, Kitchens..*



## Appearance of ZJGLEADER Board

**ZJGLEADER BOARD** have one smooth side and one textured and are generally off white in colour or grey for the high-density board.

The top and bottom edges of the board are square with the long edges being square, tapered, chamfered or tongue & groove.



### Square Edge Fire Board

For a all-in-one board, the 10mm Square Edge (SE) board is perfect. Easy to use with a top class finish on one side.



### Tapered (Recessed) Edge Fire Board

The Tapered Edge (TE) board is designed for easy taping and clean joints. The board is recessed on the long sides by a depth of 0.5mm and a width of 30mm.



### Chamfered Edge External Wall Board

Chamfered Edge (CE) board is an innovative external wall board, with a 45° V chamfer cut down 5mm on the 10mm board long sides. Does not require any surface trowelling to join and eliminates stud joint cracking. Supplied as a 900mm nominal width (894mm).



### Feather Edge Lightweight Board

The Feather Edge board similar to the tapered edge board for use except it is produced in 6mm only. It is designed for use in internal applications where joint taping is required. special order only



### Tongue & Groove HD Floor Board

The Tongue & Groove High Density board a water resistant, stronger and denser board grooved down one long side with a matching tongue down the other. This board comes in a grey finish distinguishing it from other product and is perfect for decks and external applications. More information available online.





张家港市益和新型建材有限公司  
ZHANGJIAGANG LEADER NEW CONSTRUCTION MATERIAL CO.,LTD.

Green/Environmental Protection/Security/Energy Conservation

**ZJGLEADER BOARD** is a modern, extensively tested modern building board used in construction. It is made from a mixture of magnesium oxide (MgO), non organic minerals, bonders and fibre mesh composites. **ZJGLEADER BOARD** is completely free of toxins, including formaldehyde, silica, asbestos, heavy metals, and organic solvents. It's highly resistant to fire, doesn't retain water, termite proof, strong and increases the R value in any panel application. **ZJGLEADER BOARD** has extensive applications in construction for residential and commercial properties. It is also of particular interest to those renovating or repairing homes where either plasterboard gypsum style linings or other kinds of high maintenance products have been used.

### ZJGLEADER BOARD(General Application) Specifications

**ZJGLEADER BOARD** is 8 to 10 times stronger than plasterboard reducing loss and breakage. It is also less expensive and lighter in weight than compressed fibre panels. Due to it's material properties, ZJGLEADER BOARD does not break down or warp in water, therefore less replacement requirement after flooding... simply clean, sand and repaint.

Additionally, ZJGLEADER BOARD is resistant to mould and mildew, blocks noise with a high acoustic value of  $R_w + C_{tr} 61$  for the 10mm board, is imperviousness to termites and ZJGLEADER BOARD is virtually fire proof.

This is why we say "ZJGLEADER BOARD- One Building Board, Multiple Applications".

### Application Overview

**INTERNAL APPLICATIONS** - Internal walls, ceilings, floor sub base, tile backer, counter tops, kitchen furniture, built in wardrobes. Wet area applications: bathrooms, shower recess, kitchen - suitable for any wet areas or humidity prone areas. **ZJGLEADER BOARD** will not degrade in water or flood conditions it remains inert and can simply be dried, re plaster set and repainted. Must be sealed before or at installation. **EXTERIOR APPLICATIONS** - Weatherboarding, lining or decking (meets AS/NZS 3959 BAL Regulation - Fire Zone areas). Must be sealed. Can be painted, papered, tiled, rendered or veneered.

Tool Requirements

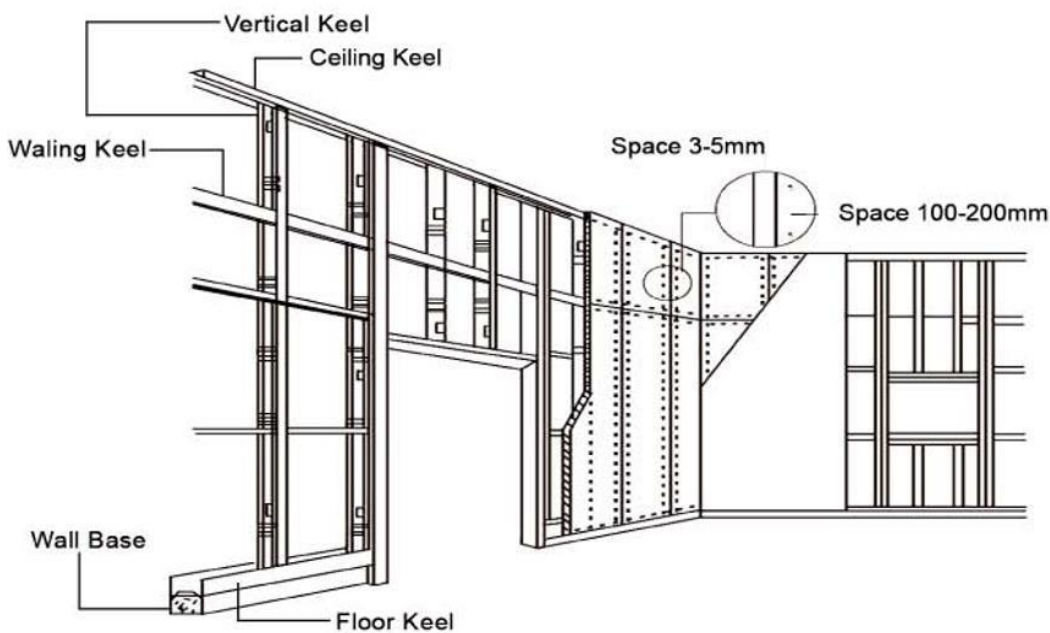
### Overview

No special tools are required to use **ZJGLEADER BOARD**. It can be sawn, drilled, ( DO NOT NAIL THIS PRODUCT) screwed and planed, just like timber. Once in position **ZJGLEADER BOARD** will have an exceptional life span exceeding that of all homes constructed to date using conventional plasterboard, paper lined plaster, or timber lining methods.





## Application Of Partition Wall

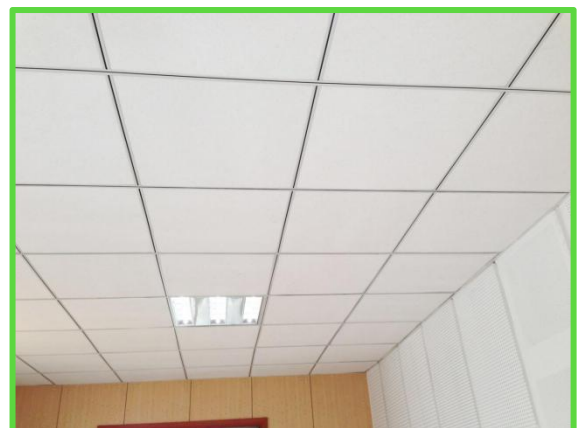


1. **ZJGLEADER MGO BOARD** 8mm-12mm is best for partition, cut into regular size (about 10mm lower than the height of wall)
2. Fix board on the keel with self-tapping screw in staggered way. The interval of self-tapping screws is about 100-200mm and deep into board for 0.5mm.

3. Keep space about 4mm among boards for shrink and expansion.
4. Pack the board from center to surrounding areas, simultaneous is not permitted in order to prevent warping owing to inner stress.
5. Prior to package and fixing of boards, according to real demands, we can lay some Glass fiber or rock wool in the structure to strengthen soundproof and fireproof function.

## Application Of Ceiling

Material Base: *MGO Board*  
 Surface Material: *laminated PVC*  
 Back Material: *superior aluminum foil*  
 Bending Strength: *15Mpa*  
 Absorbing Water Rate *15%*  
 Fireproof characteristic: *A Grade*  
 Safe: *100% does not include such harmful substances as The asbestos and etc.*  
**Thickness:** 5mm 6mm 8mm 9mm  
**Sizes:** 603\*603mm 595\*595mm 600\*1200mm





### Application Of Acoustic Perforated Ceiling

Material Base: *MGO Board*

Surface material: *Emulsion paint of acrylic acid.*

Back material: *laminated PVC*

**Thickness:** 5mm 6mm 8mm 9mm

**Sizes:** 603\*603mm; 595\*595mm; 600\*1200mm

**Perforation Patterns:** Round, Square and Micro

**Hole Diameter**(Round): 6mm; 8mm; 12mm; 15mm

(Square): 5mm\*5mm; 10mm\*10mm

(Micro): 3mm\*3mm



### Application Of SIPS

Basic material: *MGO+EPS/XPS+MGO*

Application: For trailers, for air shaft in buildings, partition wall etc.

Thickness: 20mm, 40mm, 50mm, 75mm, 100mm, 150mm

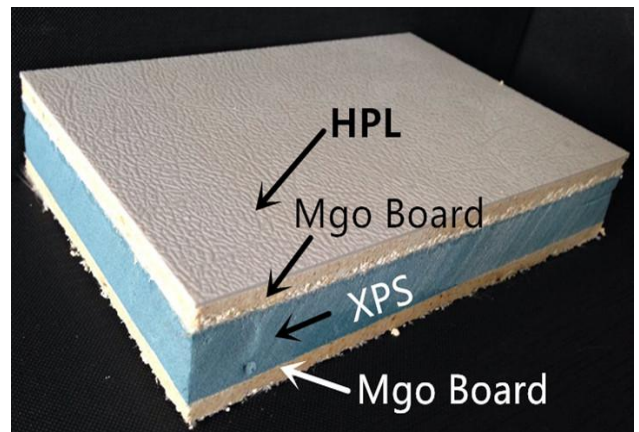
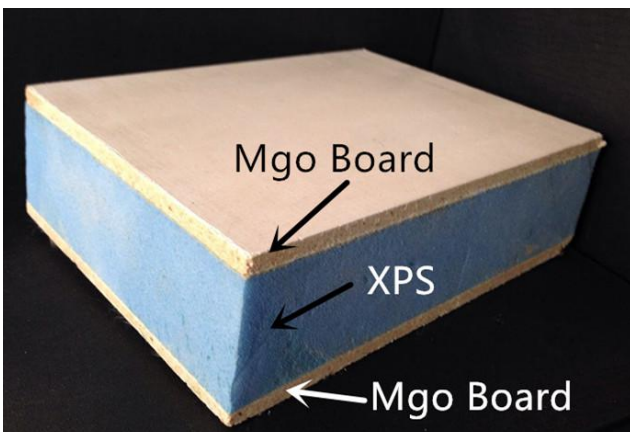
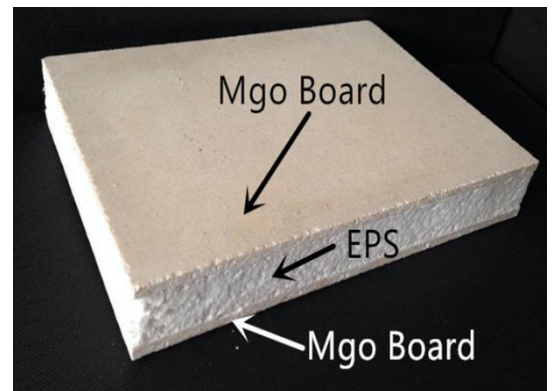
Max Width: 1200mm

Length: can customize dimensions as request by customers.

\*Good performance of sound insulation

\*Fireproof: Both MGO board and Flame retardant-grade EPS/XPS are fire-resistance materials.

\*Green and environment protection

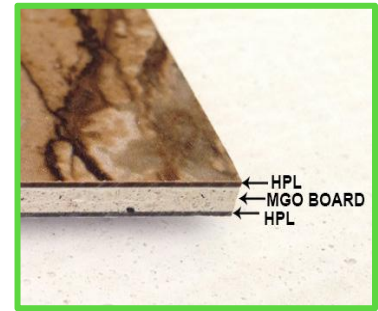
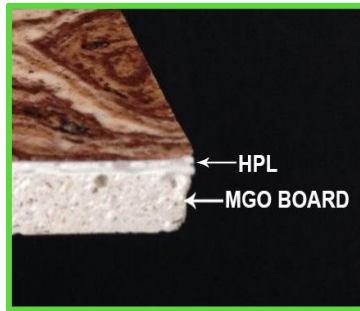


# This is Wood Grain MGO Board

Green/Environmental Protection/Security/Energy Conservation

## Application of HPL MGO Board

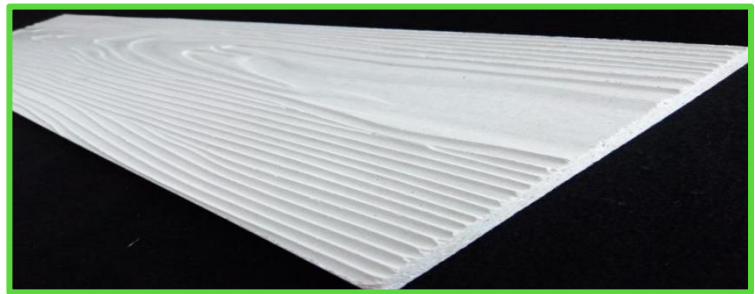
PS:HPL coated MGO Board combines good MGO panel with HPL(High pressure laminates).Widely used for interior decoration,furniture and vessel.More patterns are available,please contact with sales department.



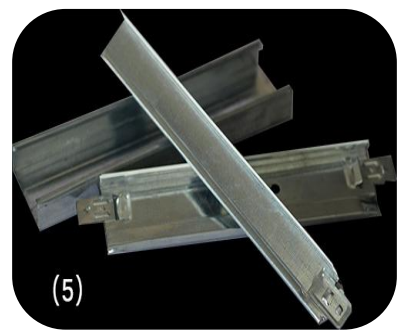
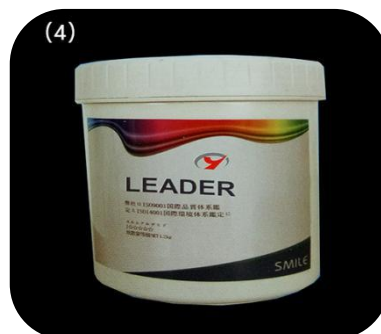
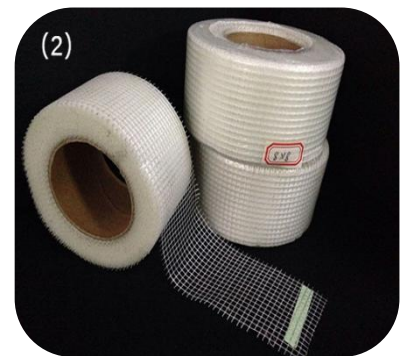
## Wood grain MGO Board

Wood grain MGO board can be used for exterior wall decoration.

Can engrave text and pattern on the MGO board.



## Assistant Material



(1) Nail & Screw

(2) Fiberglass Tape

(3) Paper Tape

(4) Putty for crock

(5) Ceiling T grid



# ENVIRONMENTAL

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## Fire Resistant

*ZJGLEADER Board* is 100% Resistant to Fire Damage.  
Producing the most fire-safe floors, ceilings, walls, decking and external linings.



## Sound Resistant

*ZJGLEADER Board* has a decibel rating of 50Db.  
This means that you can have the TV up nice and high in one room, and be on a conference call in the next, as *ZJGLEADER Board* has in-built sound insulation to Rw+Ctr55 with appropriate insulation bats.



## Termite Resistant

*ZJGLEADER Board* will not be eaten damaged by White Ants termite damage  
Made from a completely unique and non-toxic fiber composite mix, *ZJGLEADER Board* is impervious to termites and the like.



## Flood Resistant

*ZJGLEADER Board* will not degrade in water  
In case of flooding, simply clean off excess dirt and debris, let it dry and continue with your life.



## Impact Resistant

*ZJGLEADER Board*  
Its density is less than 1300kg/m<sup>3</sup> but its bending strength and impact resistance is excellent.



## Mould, Moisture & Bacteria Resistant

*ZJGLEADER Board* is resistant to Mould, won't retain Moisture and repels Bacteria  
Being a Health Safe product, *ZJGLEADER Board* won't warp when re-dried, doesn't degrade in wet areas and does not provide an environment for mould and bacteria spores to spread.



## Environment Friendly

*ZJGLEADER board* has a Green environmental policy and has been determined to reduce CO<sub>2</sub> output in manufacture. *ZJGLEADER board* uses minimal wood in the manufacturing process, leaving the trees to draw back carbon dioxide from the atmosphere in natural form.



## How is ZJGLEADER MGO BOARD different?

- ❖ ZJGLEADER MGO BOARD will not burn and has been tested to 1200°C with no combustion or flame out.
- ❖ ZJGLEADER MGO BOARD does not hold water and so superheated steam will not “blow out” the product as it may do with standard building bricks in fire conditions.
- ❖ ZJGLEADER MGO BOARD is totally fire resistant. It will not burn in a fire storm. ZJGLEADER MGO BOARD is applicable in BAL 12.5 to 40 and FZ flame zone regulation areas when used to protect exposed timber framing eaves joists etc.
- ❖ ZJGLEADER MGO BOARD insulation properties help protect internal furnishing from internal combustion and flash burning from high external temperatures.
- ❖ ZJGLEADER MGO BOARD will not ignite from ember attacks. Bushfire ember attack is the largest single national contributor to home loss.
- ❖ ZJGLEADER MGO BOARD is 8 to 10 times stronger than normal plaster board products and insulates from intense heat and cold.
- ❖ ZJGLEADER MGO BOARD will not degrade or break down in water and resists mould and mildew so is ideal for flood prone areas.
- ❖ ZJGLEADER MGO BOARD is of no interest to insect pests and termites.

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