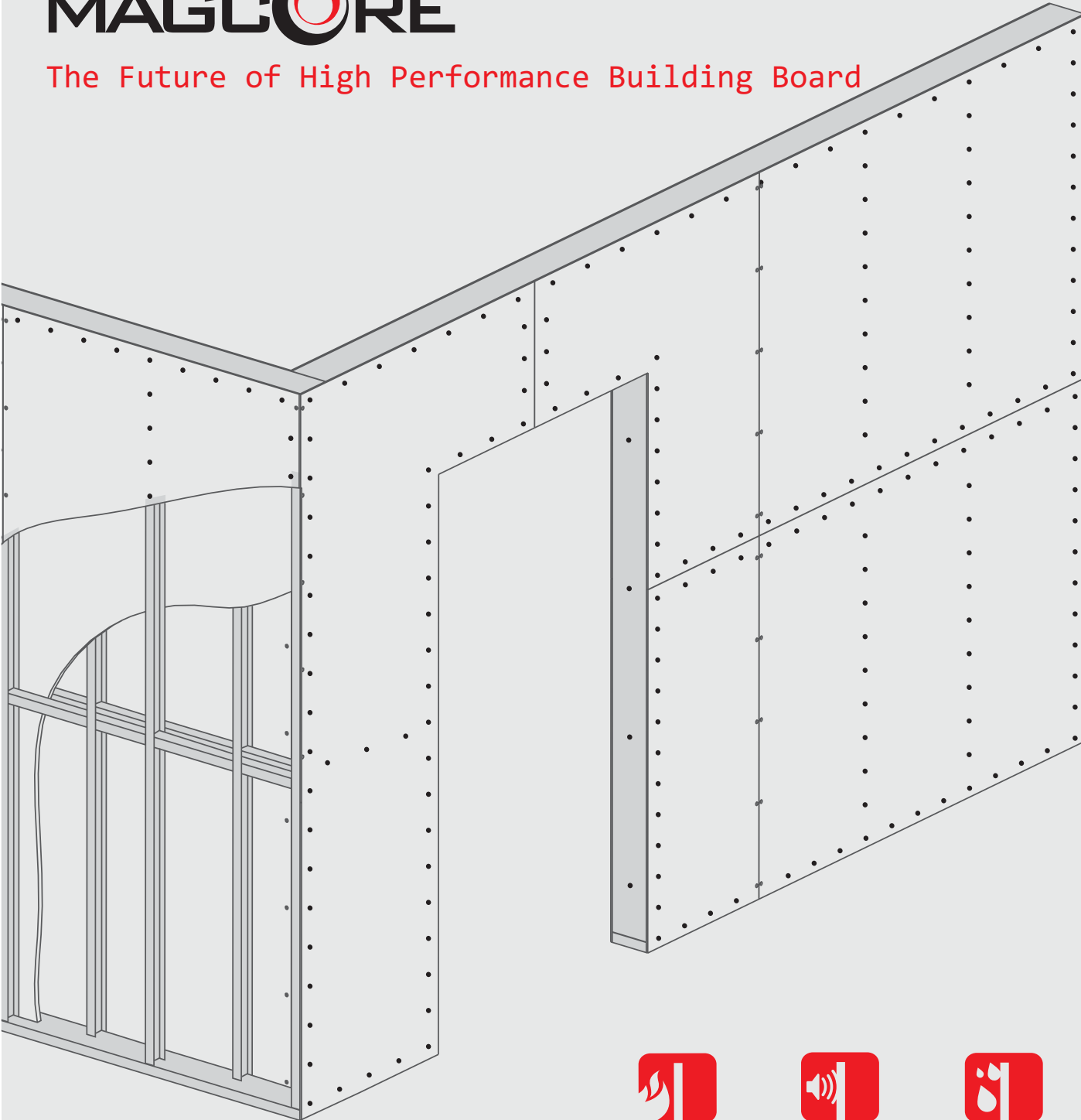


MAGCORE

The Future of High Performance Building Board



**3 Hour
Fire Rated**



**Sound
Insulator**



**Water
Resistant**



**Saves
Energy**



**Natural
Stone**



A VERSATILE CHOICE

MAGCORE is a new generation of lightweight construction systems designed to meet the multifaceted demands of today's new age buildings. Now more than ever, the need for high performance, efficient, cost effective, sustainable and safe building materials is the minimum requirement.

MAGCORE MgO board is a versatile, partition and ceiling board that provides up to three hour fire performance and high levels of sound reduction.

The variety of partition widths, stud, panel and joint / trim options make the system ideal for a wide range of uses, in offices, hospitals, residences and industrial areas.

As you will see within the information provided MAGCORE is the most versatile lightweight internal and external construction system available for today's and tomorrow's generation of buildings.

WHEN BUILDING A PROPERTY HERE ARE SOME OF THE KEY AREAS YOU NEED TO CONSIDER TO MAKE YOUR DESIGN COMPLETE.

- ✓ FIRE SOLUTIONS
- ✓ WET AREA SOLUTIONS
- ✓ ACOUSTIC SOLUTIONS
- ✓ MOISTURE SOLUTIONS

A LEGENDARY CORE

MAGCORE is made with a unique fiber matrix technology of organic materials like Magnesium Oxide and binders to form a monolithic core. This low energy environmentally friendly manufacturing process makes an excellent boards that offers not only superior fire resistance and sound insulation but also exemplary physical strength, robustness and performance.

MAGCORE is off-white in colour. One face is extremely smooth and ready to form a finished surface able to receive almost any form of architectural or finish treatment. The reverse face has a fibre mesh reinforcement for finishing with wallpapers, ceramic tiles or similar pasted material.

MAGCORE is resistant to the effects of moisture and will not physically deteriorate when used in damp or humid conditions. Performance characteristics are not degraded by moisture. A fully saturated MAGCORE retains up to 95% of its physical strength.



- ✓ THERMAL SOLUTIONS
- ✓ IMPACT RESISTANT SOLUTIONS



3 Hour Fire Rated



Sound Insulator



Water Resistant



Saves Energy



Natural Stone

THE MAGÔÛÛÒ DEFENCE

The MAGÔÛÛÒ offers far more than any other board in its category. Don't settle for anything less when you build or renovate.



In the event of a fire, every second counts. MAGCORE helps protect you and your property by delaying the spread of fire. Made from natural stone, MAGCORE products can withstand temperatures up to 2150°F (1177°C) for more than 3 Hours.



When used for walls and ceilings, MAGCORE offers effective and proven sound insulation – improving the acoustic performance of buildings. A steel stud wall, using MAGCORE with can achieve sound insulation values ranging from 43 dB Rw to 64 dB Rw.

MAGCORE repels water, so R-value is not affected. It is also completely resistant to rot, mildew, mold, and bacterial growth – contributing to a safer indoor environment for your premises.



MAGCORE is made from natural stone and recycled material. Its non-directional fiber structure and higher density gives it better dimensional stability and make it an effective barrier against various factors and helps earn LEED® credits.



An energy efficient installation can go a long way in saving the operating costs and protecting the environment. MAGCORE helps keep the outside - outside, to keep your premises warm in the winter, and cool in the summer. That also translates into reduced heating and air conditioning costs.



“MAGCORE is 10x stronger than Gypsum Board”.



3 Hour Fire Rated



Sound Insulator



Water Resistant



Saves Energy



Natural Stone

KEY DESIGN CRITERIA

FIRE PERFORMANCE

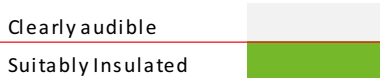
The need to protect the contents of a property are of critical importance and the repercussions of a fire that would destroy the hardware and Information are unthinkable to the clients who rely on them. When creating internal spaces it is therefore of paramount importance to choose a building component that gives you peace of mind that it will protect this essential equipment and information in the event of a fire. MAGCORE's fire resistance credentials will do just that, the combined Wall and Ceiling solution can protect lives and property for up to 4 hours.

HYGIENE & CONSTRUCTION

MAGCORE's unique hygienic crack less jointing creates a sealed surface which can maintain a controlled sterile environment minimizing airborne particles and micro-organisms. These Wall and Ceiling panels are suitable for use in food processing areas, clean rooms, offices, toilets and other amenities, with a temperature ranges of 1° C to 50° C. These partition boards can be finished with anti bacterial paint or laminate as standard when required which crates a consistent, smooth, low maintenance surface finish. MAGCORE partitions are also the preferred product for Chemical labs and hospitals as they are impermeable and do not promote the growth of bacteria.

SOUND INSULATION

Room acoustics relate to the quality of sound with an objective to enhance the quality of desired sound within a room. This involves factors such as speech intelligibility and perception of clarity. The most widely applied solution employed by building designers is the use of a sound insulating system. The issues related to sound insulation involves calculation of airborne sound through - R_w which is the weighted sound reduction index in dB (decibels). It describes the airborne sound insulating power of a building element. It is a laboratory-measured value and can apply to walls, ceiling/ floors. MAGCORE has the highest R_w in the country in comparison to similar configuration of partitions. The higher the number, the greater the sound insulating power of the building element.



STC (R'_w)	Normal speech	Loud speech	Shouting	Music High level	Blaring Noise	Example of rooms
30						Open Offices
35	Green					Office Cabins
40	Green					Class Rooms
44		Green				Meeting Rooms
48		Green	Green			Industrial Cabins
52			Green	Green		Hospitals
56				Green	Green	Auditoriums
60					Green	Hotel Room

R_w is measured over the frequency range 100 to 3150Hz and replaces the old measure STC (Sound Transmission Class) that was measured over 125 to 4000Hz. In many cases the R_w has a value of one point less than the STC value for the same construction.



3 Hour Fire Rated



Sound Insulator



Water Resistant



Saves Energy



Natural Stone

A CONSISTENT PERFORMER

PROPERTIES	DESCRIPTIONS	UNITS	VALUES
The Board	Thickness	mm	6 / 8 / 10 / 12
	Width	mm	1220
	Length	mm	2440
	Weight (approx.)	kg/board	18.5 for 6mm board 25 for 8mm board 31 for 10mm board 37.5 for 12mm board
Density	Nominal Dry Density	kg/m ³	1050 (±10%)
Strength	Flexural Strength	N/	11 (±5%)
	Screw Gripping Strength	N	2450 (±5%)
	Compressive Strength	N/mm ²	27 (±5%)
	Sag when suspended at 600mm span	mm	1.5 for 6mm board 1 for 8mm board 1 for 10mm board 1 for 12mm board
Thermal Performance	Thermal Conductivity	W/m.K	0.117
Fire Performance	Fire Resistance		≥ 180 Minutes at 1200°C
	BS 476 Part 4 Combustibility Test		Non-Combistible
	BS 476 Part 5 Ignitability Test		'P' Not Easily Ignited
	BS 476 Part 6 Fire Propagation Index		1.5
	BS 475 Part 7 Surface spread of flame		Class 1 < 165 mm spread
Tolerances	Length	mm	± 5
	Width	mm	± 5
	Thickness	mm	± 0.5
	Diagonal	mm	± 0.5
Durability	Life Expectancy	Years	≤ 30

*Specifications for 12mm board unless otherwise stated



MgO Boards have been in production since over 2 decades. And have since then, become the obvious choice for building material across Europe and USA for high performance dry lining projects.

Due to its fire resistance and safety ratings, New York and New Jersey were early adopters of MgO boards. Florida has adopted Magnesia boards for mold/mildew resistance. It is hurricane and impact tested and approved in Miami-Dade County.

Combining the strength of solid block work with the flexibility of dry lining, the acoustic, fire, moisture, impact and load hanging performance place MAGCORE in a category of its own, making it truly the

“BEST BOARD EVER”.



3 Hour Fire Rated



Sound Insulator



Water Resistant



Saves Energy



Natural Stone

THE DESIGN APPLICATIONS



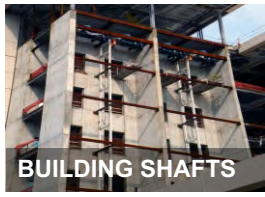
DIRECTOR CABINS



MEETING ROOMS



CLASS ROOMS



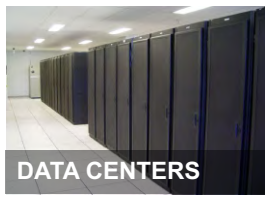
BUILDING SHAFTS



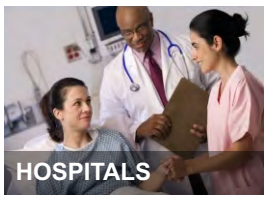
WAREHOUSES



LT PANEL ROOM



DATA CENTERS



HOSPITALS



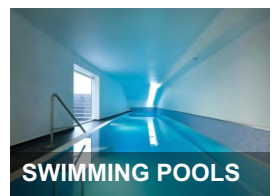
CONTROL ROOMS



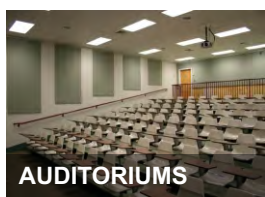
WET AREAS



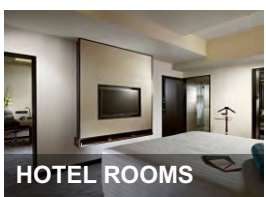
KITCHENS



SWIMMING POOLS



AUDITORIUMS



HOTEL ROOMS



FACTORY OFFICES

	Fire Resistant	Sound Insulation	Water Resistance	Thermal Insulation	Anti Bacterial	Rodent / Mold	Chemical Resistance
DIRECTOR CABINS	✓	✓	✓				
MEETING ROOMS							
CLASS ROOMS							
BUILDING SHAFTS	✓						
WAREHOUSES		✓	✓	✓	✓	✓	
LT PANEL ROOM							
DATA CENTERS	✓	✓	✓	✓	✓	✓	
HOSPITALS							
CONTROL ROOMS							
WET AREAS	✓						
KITCHENS		✓	✓	✓	✓		
SWIMMING POOLS							
AUDITORIUMS	✓	✓					
HOTEL ROOMS							
FACTORY OFFICES			✓				



Indian Green Building Council
MEMBER

MAGCORE



3 Hour
Fire Rated



Sound
Insulator



Water
Resistant



Saves
Energy



Natural
Stone

A Variable
CONFIGURATION



SYSTEM	MGC5008	MGC5010	MGC5012
Channel	50mm	50mm	50mm
Board Configuration	8mm	10mm	12mm
Insulation	None	None	None
Wall Thickness	66mm	70mm	74mm
Fire Rating	1 Hour	1.5 Hours	2 Hours
Sound Insulation	36 Rw (STC)	39 Rw (STC)	42 Rw (STC)



SYSTEM	MGC5008R	MGC5010R	MGC5012R
Channel	50mm	50mm	50mm
Board Configuration	8mm	10mm	12mm
Insulation	50mm - 48kg/m ³	50mm - 48kg/m ³	50mm - 48kg/m ³
Wall Thickness	66	70mm	74mm
Fire Rating	1.5 Hour	2 Hours	2.5 Hours
Sound Insulation	40 Rw (STC)	44 Rw (STC)	47 Rw (STC)



**3 Hour
 Fire Rated**



**Sound
 Insulator**



**Water
 Resistant**

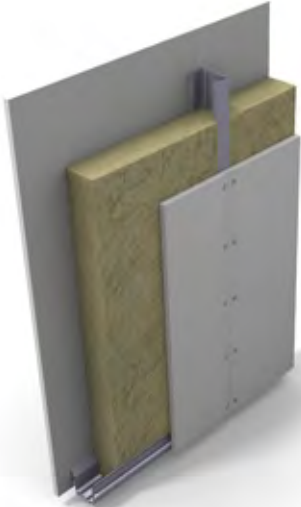


**Saves
 Energy**

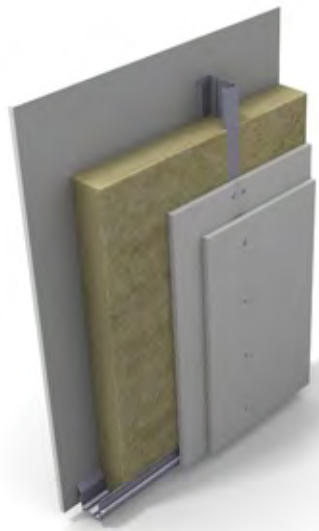


**Natural
 Stone**

A Variable
CONFIGURATION



SYSTEM	MGC7208R	MGC7210R	MGC7212R
Channel	72mm	72mm	72mm
Board Configuration	8mm	10mm	12mm
Insulation	75mm - 48kg/m ³	75mm - 48kg/m ³	75mm - 48kg/m ³
Wall Thickness	88mm	92mm	96mm
Fire Rating	2.5 Hours	3 Hours	3.5 Hours
Sound Insulation	44 Rw (STC)	47 Rw (STC)	51 Rw (STC)



SYSTEM	MGC72810R	MGC72812R
Channel	72mm	72mm
Board Configuration	8+10mm	8+12mm
Insulation	96mm - 48kg/m ³	96mm - 48kg/m ³
Wall Thickness	108mm	112mm
Fire Rating	Exceeds 4 Hours	Exceeds 4 Hours
Sound Insulation	55 Rw (STC)	62 Rw (STC)



3 Hour
Fire Rated



Sound
Insulator



Water
Resistant



Saves
Energy



Natural
Stone

THE EASY HANDLING



MAGCORE can be easily cut on site. Use a fine-toothed saw. For shaped cuts use a pad, keyhole or coping saw. Work fair face up and support the board throughout. A power saw can be used, with a tungsten carbide tipped blade

CUTTING & SAWING



Cracking of joints is a common problem that is addressed by MAGCORE's new age formulation that combines magnesia and silica minerals along with a polysynthetic resin adhesive that provides superior impact resistance along with fire, water and sound insulation with cost and time savings.

CRACK FREE JOINT



Nailing a MAGCORE does not cause it to crack. When nailing, position not less than 12mm from board edge without pre-drilling. Galvanised wire nails are recommended.

NAILING



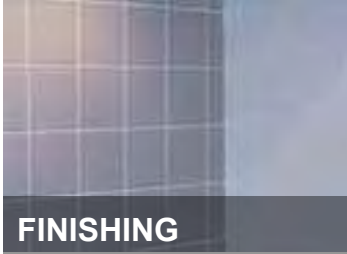
MAGCORE has a unique property which provides a smooth class A finish for quick dry and easy application. Apply a sealing coat of universal primer and allow to dry. Follow with a second coat. Apply plaster and finishing coat as desired.

JOINTING



Use a hand drill or high speed power drill (not hammer type); bits should have HSS tips. When drilling, always provide support to the back of the board to prevent break out.

DRILLING



The fiber glass mesh textured finish on the other side of the board allows for easy pasting of Tiles, Wall Paper or Laminated. Extra cross noggins should be provided in case of tiles. Seal the boards with Countersunk corrosion resistant screws and fix tiles in strict accordance with manufacturers' recommendations.

FINISHING



Boards should be supported at max. 610mm centres and fixed to supports at 300mm centres using self tapping screws. In normal areas, cross noggins are not required but may be provided in areas where increased impact resistance is required,

FIXING



3 Hour Fire Rated



Sound Insulator



Water Resistant

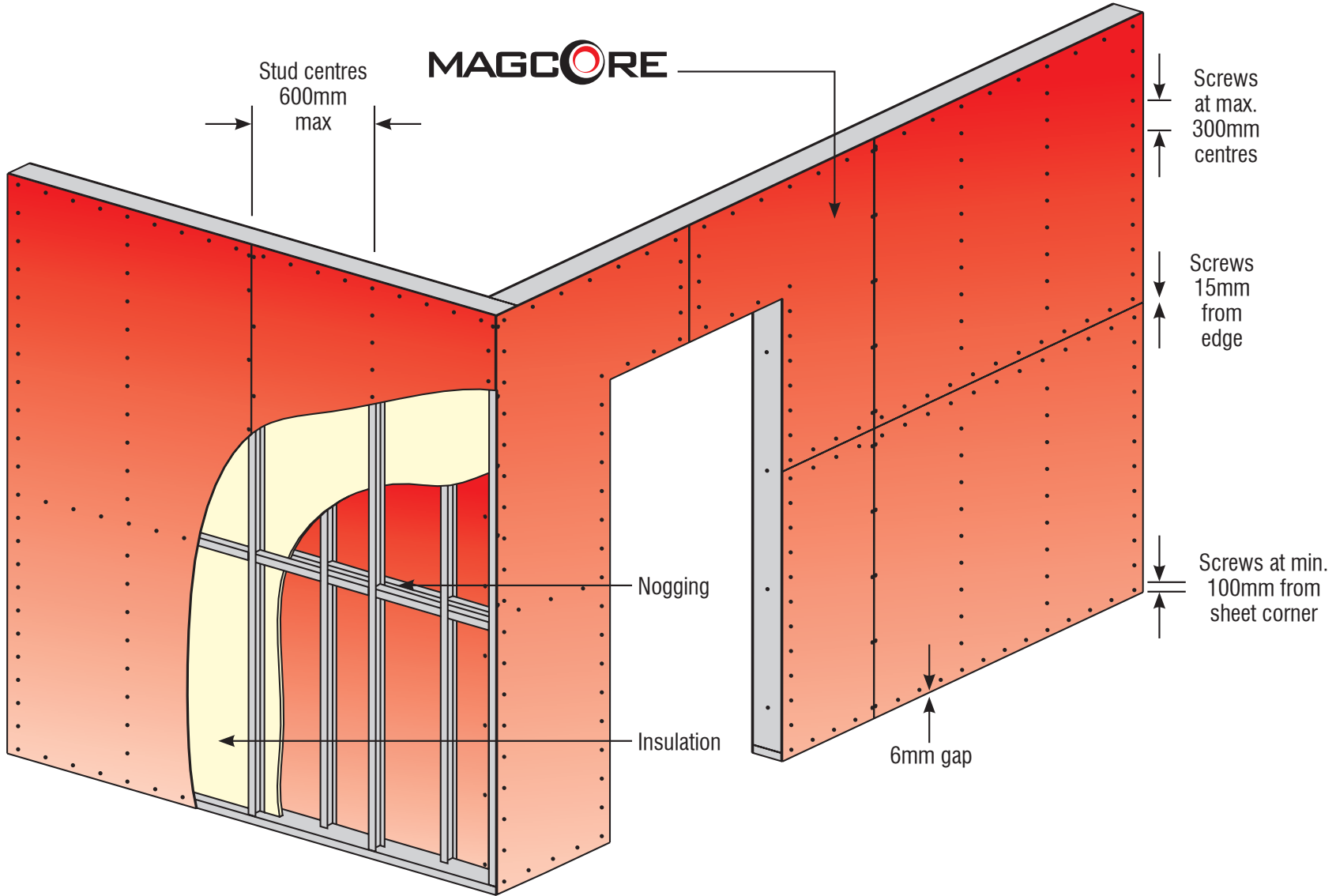


Saves Energy



Natural Stone

A VÝÚŔŔŠ INSTALLATION



MAGCORE



3 Hour
Fire Rated



Sound
Insulator



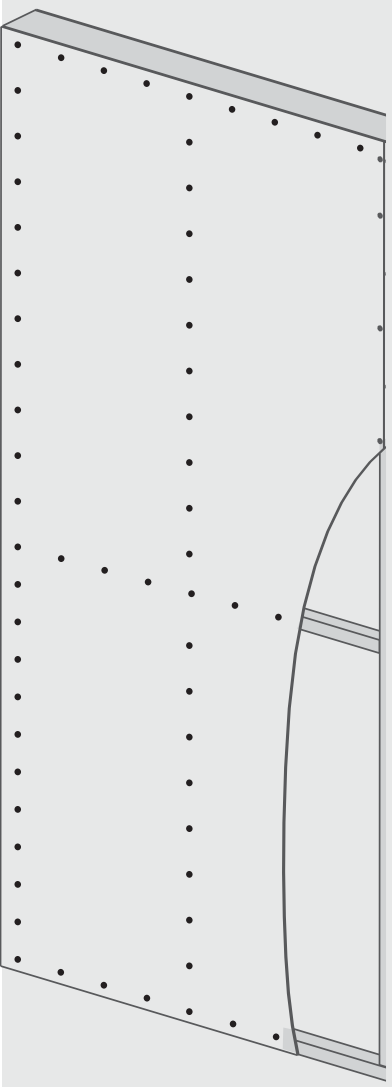
Water
Resistant



Saves
Energy



Natural
Stone



MAGCORE

The Future of High Performance Building Board

Universal Building Products Pvt. Ltd.

Head Office:

K1/17, Second Floor
Main Road, Chittaranjan Park
New Delhi 110019 | India
Tel: 91.11.26272527, 91.11. 26271516
Fax: 91.11.26275297
Email: delhi@ubpindia.com

Branch Office:

442 Laxmi Plaza
Laxmi Industrial Estate
New Link Road □ Andheri (West),
Mumbai, Maharashtra 400053 | India
Telefax: 91.22.26390742, 9920111501
Email: mumbai@ubpindia.com

www.ubpindia.com