Catalogue of Gypsum Board

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One of Osman Ahmed Osman Company's

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About US

OSMABOARD, established in 2010 by Eng. Ibrahim Osman Ahmed Osman, was the first Gypsum board factory in Egypt. In the Osman Group tradition of leading the construction sector, OSMABOARD was a step towards shifting the Egyptian market to light weight fast construction aiming to provide the Egyptian and African market with a local high-quality product.

OSMABOARD production capacity was doubled in 2011 to reach 10 million m2 per year and its exports reach more than 12 countries. OSMABOARD cater to the diversified needs of the local and African markets with its product range. Whether it is for residential, commercial, or industrial venues, OSMABOARD provides reliable high-quality products that enable the execution of intricate functional designs with ease.

Today, OSMABOARD maintains its leadership as a token of quality in the Egyptian market throughout continuous R&D and strict quality control measures.

Our Mission

OSMASON COMPLEX is committed to build long term relationships through extra ordinary service and products that consistently meet our customers highest standards. We provide solutions based on innovation and delivered by the most qualified people.

Our Vision

To become recognized as the industry leader for superior services and high-end products that exceed our customers' expectations.



Manufacturing of Gypsum Boards

A Gypsum board panel is made of a paper liner wrapped around an inner core made primarily from gypsum plaster. The calcined gypsum, (CaSO4½ H2O), (Sina Gips: holder of the international Gold Star for quality TQM CC100 certificate). This is then formed by sandwiching a core of wet gypsum between two sheets of heavy paper. When the core sets and is dried in a large drying chamber, the sandwich becomes rigid and strong enough for use as a building material.



Partitions

OSMABOARD is used for non load-bearing partitions formed by fixing gypsum boards to a steel frame made up of lightweight studs and channels.

Wall Linings

Wall can be lined with OSMABOARD gypsum boards mounted on furring. Insulation materials can be inserted between the gypsum boards where required.

Ceilings

OSMABOARD gypsum boards and metal grid.

Shaft Walls

OSMABOARD Fire Resistant Gypsum Boards are suitable for Shaft wall systems that are attached to a steel frame made up of OSMABOARD studs and channels.



Why OSMABOARD Gypsum Board?

- Non-Combustibility
- Sound Isolation
- Heat Insulation
- Workability
- Dimensional Stability



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Non-Combustibility

OSMABOARD no combustion performance adheres to building codes and does not emit any toxic gas if heated.

Fire protection/ Fire resistance

Their non-combustible core restraints chemically combined water around 21%. As a result, when heat is high, it releases steam that will not exceed 100 degree Celsius providing under normal atmospheric pressure. This characteristic helps retard the transfer of heat and spread of fire.





Sound Isolation

Installing OSMABOARD system can be key in preventing the transfer of unwanted sound and noise to adjoining areas in situations where noise is considered as a kind of "pollution" like walls of hotels, condominiums, hospitals, etc.



Heat Insulation

OSMABOARD has relatively low thermal conductivity. It does not let indoor warmth escape to the outdoors in winter, and in the summer, it prevents outside air from entering, thus enhances the efficiency of both air conditioning and heating.

Workability

OSMABOARD is easy to cut, nail, screw, fasten with clip and glue. Cutting can be easily done with a regular office-use cutter without requiring special tools. It can accommodate a wide range of finishing methods such as wall paint, wallpaper, or cloth.





Dimensional Stability

OSMABOARD exhibits almost no deformation due to the influence of temperature and humidity. It will not warp or create gaps in joints after construction as it has excellent dimensional stability.

Fire Retardant

Regular

Moisture Resistant



OSMABOARD Pro Regular Board (Type A)

used for decoration purposes as well as lightweight construction in residential projects, hotels, hospitals and renovation of existing buildings typically:

- Drywall partitions using metal frames.
- Suspended ceilings using metal frames.
- Wall linings and furring.

Properties



Light weight.

Easy, fast and dry application.





Good sound insulation performance compared to other lightweight construction material.

Good fire protection performance.







OsmaBoard pro type A (REGULAR BOARD)

Technical Data: Board Dimension: Thickness: 9.5, 12.5, 15 mm" ±0.5 Width: 1200 mm Length: 2400, 3000 mm Special sizes are available upon request

Board Weight (average value):

9.5mm ≈ __≥6.5 ___ kg/m2 12.5mm ≈ __≥8.5__ kg/m2 15mm ≈ __≥10.2__ kg/m2 Density: ≥ 680 kg/m3

Flame Spread Index:

According to EN 520 Specifications Nail Pull Resistance ≈100 lbf

Edge Details: Square Edge Tapered Edge

Board Type DIN 18180 EN 520 ES 2002/2015

Breaking Load

Thickness (mm) Breaking Load across fiber	of surfacing (N) Breaking load parallel to fiber	of surfacing (N)
9.5	450	150
12.5	610	210
15	735	250

Storage and Packing

Store on pallets in a dry warehouse

OSMABOARD typeA 9.5 x 1200x2400 = 80 pcs/pallet OSMABOARD typeA 9.5 x 1200x3000 = 80 pcs/pallet OSMABOARD typeA 12.5 x 1200x2400 = 60 pcs/pallet OSMABOARD typeA 12.5 x 1200x3000 = 60 pcs/pallet OSMABOARD typeA 15 x 1200x2400 = 60 pcs/pallet OSMABOARD typeA 15 x 1200x3000 = 60 pcs/pallet

Regular

According to EN520/ ES2002/2015 Appearance: Ivory/grey paper liner

Osma Board Pro Moisture Resistant Plasterboard (Type H)

Moisture Resistant Gypsum boards are ideal for construction in areas with high humidity and exposure to moisture.

Usages

• OSMABOARD Gypsum Boards are used for cladding areas with exposure to humidity and moisture.

- Drywall partitions using metal frames in kitchens and bathrooms.
- Partitions with ceramic tiles finish.
- Wall linings and furring in kitchens and bathrooms.
- Partitions in any areas exposed to moisture or humidity.

Properties



Light weight constructions.

Easy, fast and dry application.



Good sound insulation performance compared to other lightweight construction material.

Good fire protection performance.



High resistance to absorption of moist.

Board Type EN 520 Type H DIN 18180-type H1 ES 2002/2015

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OSMA BOARD Moisture Resistant

OSMABOARD pro type H (MOISTURE RESISTANT)

Technical Data: Board Dimension: Thickness: 12.5 , 15 mm"± 0.5 Width: 1200 mm Length: 2400, 3000 mm Special sizes are available upon request

Board Weight (average value):

 $12.5mm \approx _\geq 8.5__kg/m2$ $15mm \approx _\geq 10.2_kg/m2$ Density: $\geq 680 \text{ kg/m3}$

Flame Spread Index: According to DIN 18180 Specifications

Surface Water Absorption \leq 1.6 % Water Resistance \leq 5 % Nail Pull Resistance \approx 120 lbf

Edge Details:

Square Edge Tapered Edge



Moisture Resistant

Storage and Packing Store on pallets in a dry warehouse

OSMABOARD type H 9.5 x 1200x2400 = 80 pcs/pallet OSMABOARD type H 9.5 x 1200x3000 = 80 pcs/pallet OSMABOARD type H 12.5 x 1200x2400 = 60 pcs/pallet OSMABOARD type H 12.5 x 1200x3000 = 60 pcs/pallet OSMABOARD type H15 x 1200x2400 = 60 pcs/pallet OSMABOARD type H15 x 1200x3000 = 60 pcs/pallet

> **Appearance:** Green paper liner

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OSMABOARD Pro Fire Retardant Plaster Board (Type F)

Fire Resistant Gypsum boards ideal for construction in areas where high resistance to fire is essential to safety i.e. shafts encasement.

Usages

• OSMABOARD Gypsum Boards are used for cladding areas where resistance to fire is required.

- Fire rated drywall partitions Using metal frames.
- Fire rated suspended ceilings.
- Fire rated wall linings and furring.
- Fire rated shaft walls.
- Encasement of beams and columns in areas with high risk of fire exposure.

Properties



Light weight constructions.

Easy, fast and dry application.



Good sound insulation performance compared to other lightweight construction material.

Good fire protection performance.





Maintains the integrity of the board for longer periods when exposed to fire.

Board Type DIN 18180- type F ES 2002/2009



OSMABOARD pro type F (FIRE RETARDANT)

Technical Data: Board Dimension: Thickness: 12.5 , 15 mm"± 0.5 Width: 1200 mm Length: 2400, 3000 mm Special sizes are available upon request

Board Weight (average value):

Flame Spread Index:

According to DIN 18180 Specifications Nail Pull Resistance ≈ 101 lbf according to the DIN 18180 Specifications

Edge Details:

Square Edge Tapered Edge

Storage and Packing

Store on pallets in a dry warehouse

OSMABOARD type F 9.5 x 1200x2400 = 80 pcs/pallet OSMABOARD type F 9.5 x 1200x3000 = 80 pcs/pallet OSMABOARD type F 12.5 x 1200x2400 = 60 pcs/pallet OSMABOARD type F 12.5 x 1200x3000 = 60 pcs/pallet OSMABOARD type F 15 x 1200x2400 = 60 pcs/pallet OSMABOARD type F 15 x 1200x3000 = 60 pcs/pallet

Fire Retardant

Appearance: Red paper liner



Fire Retardant



OSMABOARD Pro Fire Retardant Gypsum Board System

Fire resistance rating is a property of the system and not the individual board. OSMABOARD Type F gypsum board is a gypsum board that provides:

• 60 minute fire endurance rating for a 15 mm (5/8") thickness when applied in a single layer and properly fastened to each side of 90mm (3 5/8") steel framing members.

• 2 hour fire resistant rating for a 12.5mm (1/2") thickness when applied in a double layer and properly fastened to each side of 70mm (2 1/2") steel framing members.

Fire Resistant One Hour Rating

Board Thickness 15 mm double side single layer on 9 cm UW/CW steel mount system







Fire Resistant Two Hour Rating

Board Thickness 12.5 mm double sides double layers on 9 cm UW/CW steel mount system



Fire Resistant Two Hour Rating

Board Thickness 15 mm double sides double layers on 7 cm UW/CW steel mount system







Fire Resistant Three Hour Rating

Board Thickness 12.5 mm double sides three layers on 5 cm Uw/CW steel mount system



OSMABOARD Pro Fire Resistant Board (Type F) Reaction to Fire (Thickness 12.5mm):

Exposure Time (sec)	Flame Spread (mm)	Time (sec)	Class
30	129	60	D

OSMABOARD Pro Fire Resistant Board (Type F) Core Cohesion at High Temperature (Thickness 12.5mm):

Temperature (0c)	Load (g)	Time (min)	Observation
1000	300	15	No break

Metal Section for Drywall Installation and Suspended Ceilings

OSMABOARD Metal sections for drywall

OSMABOARD Metal sections for drywall are used in construction of lightweight walls and in furring and cladding as frames for gypsum boards walls.

Specifications:

Pre-galvanized steel



Metal section for drywall installion and suspended ceilings

Types	Dimensions (mm)	Size (mm)	Length (mm)
Runners	38	0.5	3000
	50	0.6	3000
	70	0.6	3000
	100	0.9	3000
Furring (Omega)	64	0.5	3000
Studs	50	0.6	3000
	70	0.6	3000
	100	0.9	3000
Angles	20	20	3000



Drywall partition system using CW, UW and angles

Gypsum board ceiling furring (Omega 64, CW 38 and angle)

Dry Wall Partition System/ Requirements

Types	Approximately Requirement for 100 m2 partition 3m high	Application
Runners 38 to 100 mm	66 LM	Forms head & base perimeter frame of partition
Studs 50 to 100 mm	200 LM	Forms vertical component of partition

OSMA BOARD Gypsum Ceiling Tiles

OSMABOARD Gypsum Ceiling Tiles

OSMABOARD PVC laminated Gypsum tiles are suitable for concealing mechanical and electrical pipes and cabling as well as air condition ducts. The elegant designs are eye catching and offer a wide variety for decoration. OSMABOARD ceiling tiles have an aluminum foil laminated back that protects the tiles from moisture and dew. OSMABOARD Ceiling Tiles are ideal for hotels, hospitals, universities, schools and shopping venues.

Application Areas

- Offices
- Hospitals
- Shopping Malls
- Hotels
- Residential Projects
- Exhibition Halls and Convention Centers
- Any area where high levels of acoustic absorption are required



Installation

T-32/38 grids with 0.30-0.45 mm thickness Technical Specifications: Board dimension:

Thickness: 7.5, 9.5 mm" \pm 0.5 Width: 600 mm \pm 1 Length: 600, 1200 mm" \pm 1 Weight: 7.5 mm \approx 5.7 kg/m2 Lengthways & lateral ruptures load 7.5mm \leq 110 N Fire resistant property: not flammable in accordance with DIN 18-180

Advantages

Easy, fast installation Easy maintenance and repair Easy access to ducts, services and installations wide variety of design

Storage and Packing

OSMABOARD Gypsum Tiles 7.5x600x600= 8Pcs/Pack Max Loaded details 704/ 1350/ 1400 cartons, 3239.4 square meters, 23.5 tons, loaded in one 20 fcl

OSMABOARD Metal Sections for Suspended Ceilings

OSMABOARD Metal sections for drywall are used as supporting frames for suspended ceilings.

Specifications:

Pre-galvanized steel

Types	Dimensions (mm)	Size (mm)	Length (mm)
Main Ceiling Channel Big T	38x24	0.5	3650
Ceiling Channel Small T	26x24	0.5	1200
	26x24	0.5	600
Perimeter angle white	20	20	3000



20	20	23	20
22.			
2			
20			
201			





Suspended Ceiling System/ Requirements

Types	Approximately Requirement 2 per 100m (LM)	Application	
Main Ceiling Channel Big T	135	Main support for furring channels	
Ceiling Channel small T 26x24 x1200 mm	135	Support section where plaster board	
Ceiling Channel small T 26x24 x600 mm	22.5		
Perimeter angle white	25	Fixed round the perimeter to receive ends of furring channels and outer edges of plaster board	





OSMABOARD

Storage Yard

Storage Regulations for OSMABOARD

- Store in a warehouse where it's not exposed to weather or temperatures that exceed 50°C, nor in areas of excessive humidity.
- Boards shall be stored supported evenly on a firm, dry, level, and structurally sound floor.
- Boards shall never be stacked on its edge and left unattended or unsecured that could cause toppling.
- Boards shall always be stored flat.
- Stacks of gypsum board shall be limited to a maximum height of 5 Metres.
- Store in non heavy-traffic areas, if unavoidable, corner protection and other safety devices are recommended to protect the sheets of gypsum board.

• Plastic covering is typically provided for product protection during shipment on rail flatcars or flatbed trucks, this plastic is not suitable for storage of gypsum board in rain and other high moisture levels areas. Failure to remove this plastic covering can result in damage to the gypsum board due to moisture, condensation, wet product, water stains, discoloration, paper delamination, sag, and mold.

• Gypsum boards shall not be stored outdoors without complete protection from the weather.

• Use riser properly to prevent sagging.





Handling of OSMABOARD

- Work in pairs whenever possible for boards are heavy.
- Boards shall be carried, not dragged. This will protect the corner edges .
- When moved the panels manually, they shall be supported by the edges and shall never be carried flat.
- Lift carefully with good techniques by using the legs and not your back.
- A drywall cart is recommended for large quantities of drywall.
- Stack gypsum panels flat, not on edge or end.
- Wear a dust mask when conditions warrant.
- Protect eyes with safety glasses when necessary.
- Wear proper personal protective equipment (PPE).



Installation Precautions

• Before installing the drywall, everyone involved should be wearing safety glasses, steel toed footwear and hardhats, knee pads, gloves, and if necessary fall protection. Ensure that all equipment, tools, and cords are in working order.

• Ensure that all floor openings are either covered or secured with a proper railing before starting work.

• Use elevated work platform for ceilings. Three point contact is necessary for ascending and descending any type of elevated platforms.

• Drywall "stilts" are not allowed for installing drywall.

• Workers fastening the drywall should be aware of the potential of trip hazards with their cords, and should also be mindful of their co-workers hands holding the drywall in place.

• While the drywall is being installed, it is necessary to keep the construction free and clear of debris, cut-offs, and loose fasteners. Cords will have to be continually moved around to avoid entanglement.

• If you decided to use a drywall router to cut in the electrical boxes once the drywall is partially fastened, it is imperative that the power is shut off.

• When applying the drywall mud wear safety glasses and gloves.

• Use scaffolding when practical as opposed to working off of a ladder to lessen the strain on your legs.

• When sanding, most experienced installers use a hand held light to help see deficiencies.



Installation Guide

PPE Recommended

Helmets Safety Vests Goggles Safety Gloves Safety Shoes



- OSMABOARD Gypsum Board
- Jointing

- Paper Joint Tape
- Gypsum Screw
- Power Drill
- Wall Track
- C-studs
- T-square
- Steel Tape Measure
- Pencil and Cutter
- 4" and 6" Taping Knife



Calculate Your Needs

It is easy to calculate your needs by calculating the area of the walls (Area= Length * width). It takes some planning to reduce the number of joints though.



Attach the Frame

- Check that your materials have the correct dimensions.
- Check if your metal frames are evenly spaced.

• Remember safety and preparedness come first. Before starting, make sure that you have the right personal protective equipment on-site, including helmets, safety vests, goggles, safety gloves, and safety shoes.







Cut Panels to Size

• Lay your drywall sheets/gypsum boards out on a dry, level surface.

• Measure the length you'll need for your project and use a pencil to mark where you'll be cutting.

• Using a T-square as a guide, cut the board along the marks.





OSMABOARD



Install OSMABOARD Gypsum Board

• Ensure that all materials have been measured correctly and that the frames are properly aligned.

• Fasten the tapered edge with a distance of 10mm from the edge of the board. Make sure the screw heads are flashed with the gypsum board.

- Space screws at 200mm on centers, max at board edges.
- Stagger board joints.
- Repeat until one side of the wall is completed.
- Screw the center part of the board no more than 300mm apart from each other.
- Fill in the spaces between the boards with the compound.



Install OSMABOARD Ceiling Tiles

A suspended ceiling can cover a lot of flaws and obstructions, including pipes, wiring, and ductwork. It works, however, only where you can afford to lose some ceiling height. Suspended ceiling panels are sold in 60 X 60-cm and 60 X 120-cm sizes. Use the smaller size for smaller rooms. To install a

suspended ceiling:

- Measure the ceiling and plot it out on graph paper.
- Mark the exact locations of all windows and doors.
- Mark the direction of ceiling joists.
- Mark the joists on the ceiling itself, using a pencil or chalk to draw the joist lines across the ceiling.
- Plan the layout for the ceiling, figuring full panels across the main ceiling and evenly trimmed partial panels at the edges.

• Mark the level the new ceiling will hang at, allowing at least 10 cm clearance between the panels and the old ceiling.

• Snap a chalk line at this height across each wall, using a level to keep it straight. Make sure the lines meet exactly at the corners of the room.

• Nail wall angle brackets along the chalk line all around the room, with the bottom leg of the L-angle facing into the room and flush along the chalk line.



- Use 6d common nails to fasten the brackets, setting them every 50-60 cm.
- Cut the bracket to the required lengths with tin snips or a hacksaw.

• Install screw eyes following the ceiling layout diagram. The long panels of the ceiling grid are set parallel to the ceiling joists, so the T-shaped main runner must be attached at right angles to the joists, every 120cm across the ceiling.

 Hanger wire threaded through screw eyes in the joists suspends the main runners of the grid system.

• For each screw eye, cut a length of hanger wire that is long enough to fasten securely through the screw eye. Extend the wire down to the stretched runner string, and fasten the runner.

• Thread a wire through each screw eye and twist the end firmly around the dangling wire. Exactly at the point where the wire crosses the string beneath it, bend the wire sharply with pliers to a 90-degree angle.

- Set the main runners into place.
- Cut T-shaped main runner sections to required lengths with tin snips or a hacksaw.

• Lift each long main runner and set one end into place on the wall angle bracket at one side of the ceiling, with the single leg of the "T" facing up. Swing the other end up and position the runner exactly along the marker string and under the screw eyes in the joists.

• Thread the bent end of each hanging wire through a hole in the runner leg; bend the end of the wire up and secure it. Check each runner with a level, and adjust the length of the hangers if necessary.

Repeat until all main runners have been installed.

SCARD





OSMABOARD, part of OSMASON COMPLEX, is established in 2010 and located in Ismailia. OSMABOARD is the market leader and the pioneer company in producing different types of gypsum boards and vinyl laminated gypsum tiles.

Using the finest gypsum powder, extracted from our sister company's quarries "SINA GIPS" (Awarded the International Quality Crown London 2009), enables OSMABOARD to develop and sustain high quality standards throughout the entire manufacturing process.

Products

OSMABOARD Gypsum Board Pro

A wide range of gypsum boards is produced in various sizes and thicknesses according to the international standards:

- OSMABOARD type A (Regular) board for standard applications.
- OSMABOARD type H (Moisture Resistant).
- OSMABOARD type F (Fire Resistant).

OSMABOARD Metal Section

Galvanized steel profiles used for the substructure of OSMABOARD partitions, wall linings and ceilings.

OSMABOARD Ceiling Tiles

OSMABOARD Ceiling Tiles are gypsum based, 600 x 600 mm tiles with PVC laminated front side and/or aluminum foil laminated backside.

OSMABOARD Usages



Partitions
Wall lining
Ceilings
Shaft walls







OSMABOARD ISO Certificate



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