Plasterboard Interiors
Drywalls and Ceilings

USGBoral Plasterboards

USGBoral Range of Platerboards

Plasterboards	Properties	Selection Criteria
Standard **Standard Type**	Standard Board is an interior wall and ceiling product, with significant properties of durability and stability. Standard Board is composed of standard gypsum plaster core encased in heavy-duty face and backing liner paper. The product is environment friendly and non-hazardous to work with.	Suitable for normal condition.
MoistBloc™ **Moisture Resistant Type**	MoistBloc is a moisture resistant gypsum board suitable for use in internal wet areas, often used as a substrate for tiles. Its core is treated with special additives which gives it the ability to retard moisture.	Tested as per BS1230 Part:1,1985 for performance under humid conditions.
FireBloc™ **Fire Resistant Type**	FireBloc is a fire resistant gypsum board for internal applications where a particular area needs to be protected for a certain period of time in case of fire. Its core has special properties which makes it last longer in case of fire and blocks the flame from spreading to the surrounding areas.	Fire resistance systems can provide fire rating up to 4 hours.
HeatBloc™ **Aluminum Foil Laminated Type**	HeatBloc is a special gypsum board with polyester metallised film bonded at the back side which reflects thermal radiation, reducing heat transmission.	HeatBloc provides thermal resistance (R) of 0.41 m2 K/W when used with a 25mm cavity (foil side should face the cavity).
EchoBloc™ **Sound Absorption Control Type**	EchoBloc is a specially designed gypsum board with the capability of reducing echo in wide spaces by absorbing sound through round and square holes on to the glass fibre matt bonded at the back.	EchoBloc can provide NRC value up to 0.85.
ImpacBoard™ **ImpacBoard**	ImpacBoard is a specially formulated gypsum board to offer greater resistance to abrasion, rubbing, scraping, gouging and indentation on the surface and to reduce damage and maintenance costs.	ImpacBoard provides better strength, sound insulation partitions as compared to standard board partitions.

Application Areas	Dimensions	Thickness
Suitable for ceilings and interior walls.	Metric : 1220 X 1830mm	Metric : **12.5mm**
All kinds of Wet Areas including bathrooms, restrooms, pantry or kitchen area, etc.	Metric : 1220 x 1830mm 1220 x 2440mm	Metric : **12.5mm** **16mm**
High traffic areas like airports, hospitals, educational institutes. Areas having valuable data like server rooms. Emergency escape areas like emergency stairs and elevators. All types of shafts and column and beam structures.	Metric : 1220 x 1830mm 1220 x 2440mm	Metric : **12.5mm** **15mm**
Areas where better work environment is required without spending money on air conditioning setup like Textile/ garments factory. Areas where heat needs to be blocked like generator rooms.	Metric : 1220 x 1830mm	Metric : **12.5mm**
Areas where better speech quality is required like Conference or Seminar Rooms. Areas where reverberations or noise needs to be reduced like Airports, Railway stations, Offices and Hospitals.	Metric : 1200 x 2400mm	Metric : **12mm**
High Traffic Areas where partitions and wall linings are prone to damage like Hospitals, Educational Institutes and Gymnasiums. Areas where there is a combined requirement of strength, sound insulation and fire resistance.	Metric : 1220 x 1830mm	Metric : **12.5mm**

*Non Standard sizes are available subject to minimum order quantity

Fiberock®

Aqua Tough™   Abuse Resistant Panels

Fiberock® Performance Interior Lining Systems

A unique Aqua Tough™ & Abuse Resistant Product for interior linings with unique 3 in 1 advantages

Superior Strength

High Performance

Multiple Finishing Options

(Hard Laminates; Wood Veneer; Tiles; Wall Paper; Paints)

Product Features

Aqua-Tough™: FIBEROCK® AT AR (Aqua-Tough & Abuse Resistant) panels open up a whole new possibility of substrate performance.

Fiberock's innovative composition provides effective water, mold and indentation resistance that no other drywall solution can match.

- **Water Resistant:** FIBEROCK® AT AR is water resistant and suitable for use in wet areas, showers and tub surroundings. When tested as per BS 1230 for water absorption, Fiberock achieves less than 5% water absorption. With no paper face to delaminate, tear or scratch, Fiberock maintains its integrity even when wet.

- **Mold Resistant:** FIBEROCK® AT AR earns the highest score, 10 , when tested as per ASTM D3273 (Standard Test Method for Resistance to growth of mold on the Surface of Interior Coatings in an Environmental Chamber).

Abuse Resistant: FIBEROCK® AT AR is engineered to provide increased resistance to abrasion, indentation and penetration for interior walls and ceilings. They resist denting, breaking, and puncturing even in high-traffic areas.

Strength :

- **Flexural strength:** When tested as per ASTM C473 the Flexural Strength for a 12.7mm thick FIBEROCK® AT AR panel scores 490 Newton (either directions). When tested as per BS 5234, the FIBEROCK® AT AR panel assemblies qualify for Severe Duty ratings.

- **Load carrying Capacity:** FIBEROCK® AT AR has a tough core. 13mm thick FIBEROCK® AT AR linings can take loads of up to 15kg per screw at the screw head, (16 mm can take 16kg and 9.5 mm board can take 10kg).

- Nail Head Pull resistance is 535 Newton's when tested as per ASTM C474.

Acoustics: FIBEROCK® AT AR is very effective at reducing sound transmission, as it combines high mass with very high stiffness. FIBEROCK® AT AR systems provides Sound insulation from 39 Rw to up to 56 Rw.

Fire Resistance: The absence of a paper surface combined with the mineral core results in surface fire resistance properties, apart from being an effective room to room fire barrier. It meets the ASTM standards when tested as per E84 for Surface Burning Characteristics.

Installation

Easy to Cut & Fix : FIBEROCK® AT AR Panels can be cut to size by score and snap process using a paper cutting knife.

It has factory formed tapers to long edges.

If desired, additional tapers can be formed on off-cuts and sheet ends on site.

Fixing can be easily carried out on Aluminum framework, GI frame or timber studs.

Repair & Maintenance: Repair of Fiberock interior linings is an easy task.

Fiberock interior linings have no surface paper to scuff, tear or delaminate.

In Fiberock linings the risk of damage is minimal, unless the impact is extreme; the failure region still maintains its integrity behind the plane of the wall. The repair operation is economical to carry out.

FIBEROCK® AT AR does not shed particles.

Finishing

FIBEROCK® eliminates virtually all surface finish compatibility constraints. It is the ideal substrate for the following finishing options-

Painting: For paint finishes FIBEROCK® AT AR provides stronger and flatter joints creating the necessary foundation for a quality finish. The pre-sealed surface provides even suction for the paint resulting in even coverage and smooth finish.

Lamination: Most hard & soft laminates can be bonded to FIBEROCK® as there is no risk of delamination. Also for wallpaper and vinyl laminates the pre-sealed surface enhances removal capability when renovating.

Tiling: For tile finishes the pre-sealed surface gives excellent adhesive bonding and the high dimensional stability reduces any risk of grout or tile popping or cracking.

FIBEROCK® AT AR panels are finished with a factory baked clear sealer. The surface is very smooth & ideal for finishing systems.

Performance

	Abuse Resistance	Fire Resistance	Water Resistance	Aesthetics	Mold Resistance	Sustain ability Recycled Content	
		UL Classification	Aqua-Tough Formulation	Finises Like Dry wall	Score 10 when tested per ASTM D3273	Post-Industrial	Post-Consumer
Interior walls and ceilings							
Wet and Dry Areas							
FIBEROCK®AT 6.6mm and 9.5mm — Interior panels are designed for wall and ceiling assemblies in high-traffic areas where resistance to moisture, mold and fire is especially important. These panels can be tiled, painted and used in interior wet applications.	Very Good	FRX-G	YES	YES	10	85	10
High-Traffic Areas							
FIBEROCK®AT AR 12.7mm and 15.9mm — In addition to above these Panels are engineer to resist denting, breaking, and puncturing even in high-traffic areas reducing maintenance and life-cycle costs.	Very Good	FRX-G	YES	YES	10	85	10

Product Data

Property	Test Method	UoM	6.6 mm	9.5 mm	12.7 mm	15.9 mm
Weight		Kg/sqm	7.3	9.3	11.7	15.1
Density		Kg/cum	1060	960	930	960
K Value	ASTM C518	W/mk	0.14	0.14	0.14	0.14
Surface water absorption	ASTM C473	gms	1.6	1.6	1.6	1.6
Water absorption	ASTM C473	%	≤10*	≤10*	≤5	≤5
Linear Variation with Moisture Change	ASTM D1037	%	0.02	0.02	0.03	0.03
Coefficient of thermal expansion	ASTM E831		14.4	14.4	14.4	14.4
Mold Resistance	ASTM D3273		10	10	10	10
Flame Spread	ASTM E84		5	5	5	5
Smoke Development	ASTM E84		0	0	0	0
Compressive strength	Internal	Kg/sqm	88	70	35	35
Flexural strength (min)	ASTM C473	N	175	310	490	690
Nail Head Pull-Through Resistance (min)	ASTM C474	N	310	400	535	645
Alkalinity		pH value	7	7	7	7

Note: Compliance with Standards Meets ASTM C1278.
Edge Configuration: Long Edges tapered; ends cut square for Fiberock® AT AR 12.7 & 15.9 mm as well as Fiberock® AT 9.5 mm. Square edges for Fiberock® AT 6.6 mm
Size : 6' x 4' (1830 mm x 1220 mm) and 8'x 4' (2440 mm x 1220 mm)
*Manufacturing specs

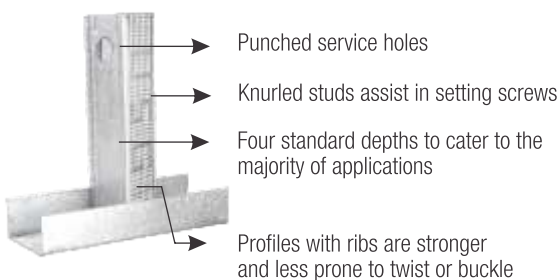# SHEETROCK® Brand ST 55™ Steel for Drywalls & Gypsum Ceiling

SHEETROCK® Brand ST 55™ Steel for Drywalls & Gypsum Ceilings offers a practical and economical solution for screw attached gypsum boards. It is suitable for internal use in ceilings, non-load bearing partitions, fire and acoustic rated walls, stairwells and bulkheads.

Dimensionally stable, the SHEETROCK® Brand ST 55™ Steel for Drywalls & Gypsum Ceilings stays straight and true saving time, material and labor. The Sheetrock system is strong, lightweight, easy to handle and requires few tools for installation.

For fire protection and safety, the SHEETROCK® Brand ST 55™ Steel for Drywalls & Gypsum Ceilings can provide a number of different fire resistant ratings in combination with the appropriate gypsum board panel thickness.

- **0.55 mm thick profiles**
- **Minimum yield strength 250 MPa**
- **Zinc galvanizing of 120 g/sqm**
- **Dimensionally stable**

- **Flexibility - Unlimited design options**
- **Punched service holes for utilities**
- **Screw Penetration test as per ASTM C645**

Punched service holes

Knurled studs assist in setting screws

Four standard depths to cater to the majority of applications

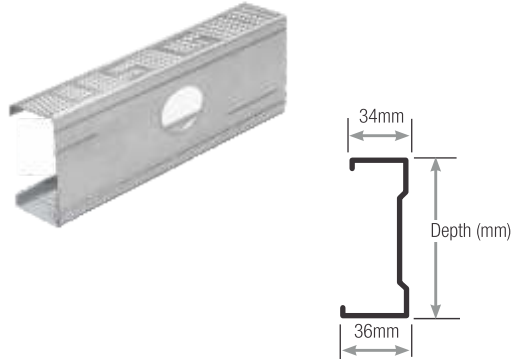Profiles with ribs are stronger and less prone to twist or buckle

Load bearing capacity of 24 kg/sqm when spaced at 1220 mm on center and supported at 1220 mm on center.

Wide and angular lips for strong grip of furring channel with main channel
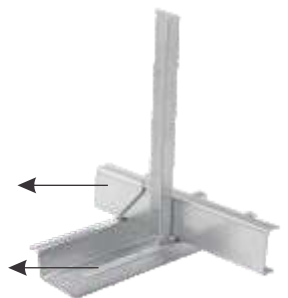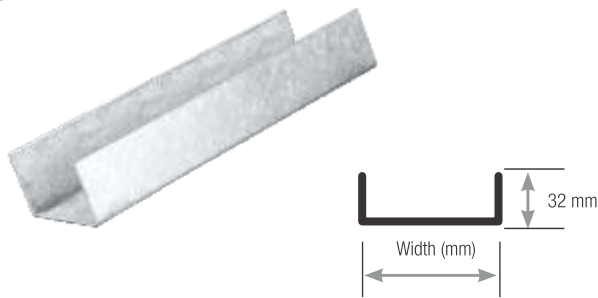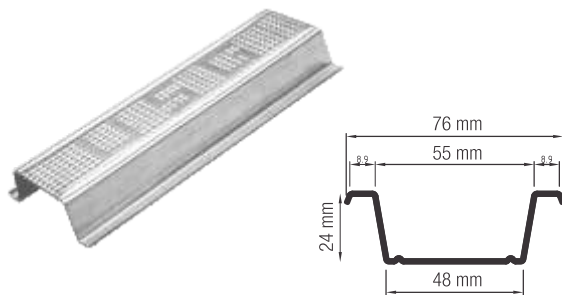
System Components

Wall Stud

BMT (mm)	Depth (mm)	Length (mm)
0.55	48	2440
0.55	48	3050
0.55	48	3660
0.55	64	2440
0.55	64	3050
0.55	64	3660
0.55	92	2440
0.55	92	3050
0.55	92	3660
0.55	150	2440
0.55	150	3050
0.55	150	3660

Floor and Ceiling Channel

BMT (mm)	Width (mm)	Length (mm)
0.55	50	3660
0.55	66	3660
0.55	94	3660
0.55	152	3660

Ceiling Section

BMT (mm)	Flange 1 (mm)	Flange 2 (mm)
0.55	24	24

Web (mm)	Length (mm)
48	3660

Perimeter Channel
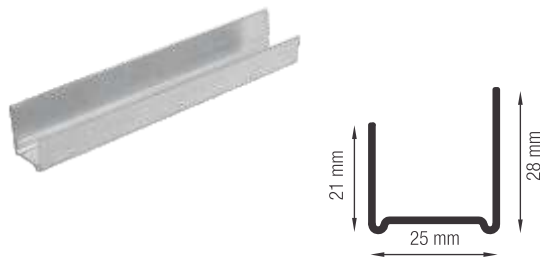
BMT (mm)	Flange 1 (mm)	Flange 2 (mm)
0.55	21	28

Web (mm)	Length (mm)
25	3660

Intermediate Channel
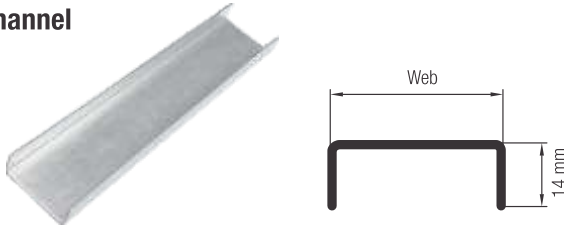
BMT (mm)	Flange 1 (mm)	Flange 2 (mm)
0.9	14	14
0.9	14	14

Web (mm)	Length (mm)
38	3660
45	3660

Ceiling Angle
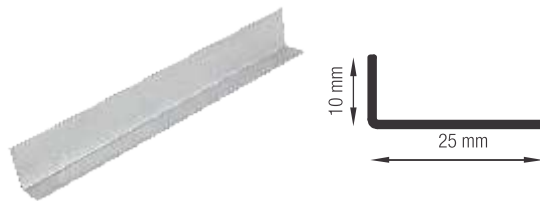
BMT (mm)	Flange 1 (mm)	Flange 2 (mm)
0.55	10	25

Length (mm)
3660

Expansion Fastener

Outer Dia (mm)
8

Length of hole 24 to 30 mm
Standard pack: 50 pieces

Soffit Cleat

BMT (mm)	Leg 1 (mm)	Leg 2 (mm)
1.5	25	35

Standard pack: 50 pieces

Width (mm)
25

Drywall Screws

Bugle Head
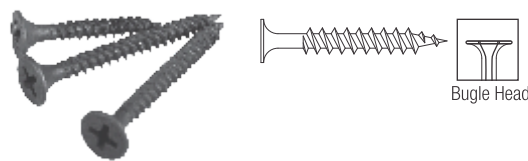
Length (mm)
25
32
41
51

Standard pack: 1000 pieces

Connecting Clip

| Thickness (mm)	For Use With
2.5	INTERMEDIATE CHANNEL

Standard pack: 100 pieces

Installation
1. If the wallboard is applied horizontally and it is a fire rated assembly, the attachment is with #6 Type S Bugle head screw at 8" on center on edges and field of the board.
2. If the wallboard is applied vertically and it is a fire rated assembly, the attachment is with #6 Type S Bugle head screw at 8" on center on edges and 12" in field of the board.
3. If the wallboard is not a fire rated assembly, then regardless of direction of the wallboard application, the attachment is with #6 Type S Bugle head screw at 12" on center on edges and field of the board.

USGBoral Ultraframe Concealed Ceiling System

METAL SYSTEMS

The Ultraframe Concealed Ceiling System manufactured is specially engineered to provide solutions for a range of technical and aesthetical ceiling requirements. High quality components and selection of right system specifications from the Technical Manual ensure the perfect ceiling solutions to meet your requirements.
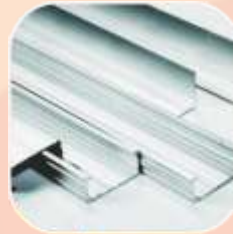
Application

Ultraframe Concealed Ceiling System finds application in new and existing structures where there is need to lower the height of rooms, from void for services and ducting, provide fire protection and sound insulation.

- Standard ceiling system with specific design requirements

- Acoustic ceiling applications

- Fire rated ceiling applications

- Aesthetic ceiling applications like stepped ceilings, curved ceilings, decorative ceilings using EchoBloc.
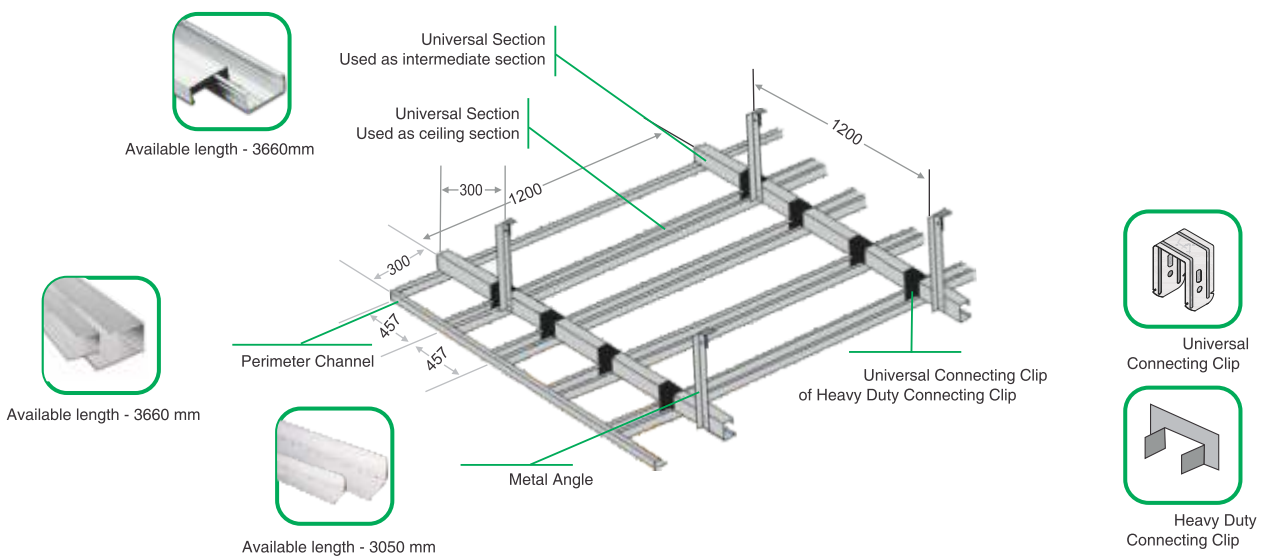
Description

Ultraframe Concealed Ceiling System is engineered to deliver high performance concealed ceiling solutions. Efficient to install and easily align to deliver flat surfaces for gypsum board. Ultraframe Concealed Ceiling System is a high performance choice for concealed ceiling applications.

All the components of the Ultraframe Concealed Ceiling System are made from high quality cold rolled steel with a galvanization of 120g/sqm in accordance with IS 277:2003 galvanized steel sheets (plain and corrugated) specification to prevent rusting.

System Illustration

Illustration is done using Ultraframe Concealed Ceiling System with one layer of 12.5mm Standard board
(Please refer to the Technical Manual for full range of ceiling specifications)

Available length - 3660mm

Available length - 3660 mm

Available length - 3050 mm

Universal Section
Used as intermediate section

Universal Section
Used as ceiling section

300

1200

1200

300

457

457

Perimeter Channel

Metal Angle

Universal Connecting Clip
of Heavy Duty Connecting Clip

Universal
Connecting Clip

Heavy Duty
Connecting Clip

Note: To find exact specification for desired ceiling system requirements like fire rated ceilings please refer the Technical Manual.

Other Accessories

Universal Connector

Cross Connector

Soffit Cleat

Sofffit Expansion
Fixing (Hilti)

Safely Message: In a Concealed Ceiling System the strength at the connection points is critical to ensure the safely of your ceilings. Unique accessories design and branded components of Ultraframe Metal System along with the on site inspection tools will help you to always ensue you use complete USGBoral branded accessories for a quality and safe ceiling.

Advantages

Prominent design features for enhanced efficiency

Universal Section is specially engineered to replace the main and ceiling channel. This feature not only simplifies the installation but also reduces inventory and wastage on site.

Specially designed Connecting Clip helps a fast and easy connection of the two Universal Sections and the "click" sound helps to ensure rigid connection.

Efficient click fix system
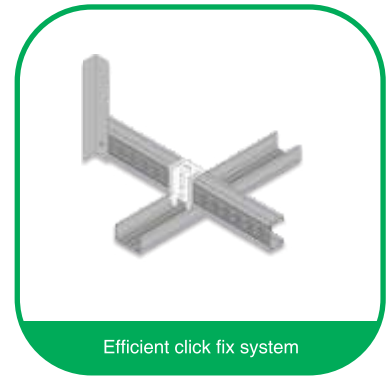
Strong & safe

- Manufactured from high quality, cold-rolled galvanized steel following the Indian (IS) and International standards (BS and ASTM)

- Roll formed by using USGBoral engineered equipment controlled by the manufacturing expertise

Engineered Strength

- Engineered profile designs to optimize section strength, rigidity and weight

- Clip and hanger designs that deliver critical loading performance

Engineering strength tested for system

Easy & fast installation

- Ink printed alignment marking for fast alignment and fixing

- Ink printed markings allow easy inspection by QA teams

- Clip and attachment systems designed for simple fast clip together action and leveling adjustment

- Manufacturing expertise ensures high manufacturing precision ensuring easy and faster installation than traditional systems

Screw position mentioned on metal stud

Flexibility in design with standard accessories

- Multiple components as part of the proposed system allow easy and safe installation of ceilings even with complex designs

Durability

- Hot dipped galvanized steel as per IS 277 standard with 120 g/sqm of zinc ensures protection from rusting making it suitable for humid climates


Complex designs possible with advanced accessories

Common Questions & Answers about quality and safety of a concealed ceiling

Q1

How does the profile and raw material of Univers al Section affect the quality of concealed ceiling?

- By engineering specific knurling, lipped edges and radius curves, superior strength performance can be achieved as compared to sections with similar overall dimensions.
- Consistent mild steel and uniform anti-rust coatings provide long term loading performance.

Q2
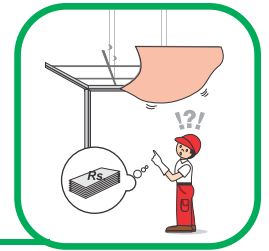
What are the factors that affect the ceiling's loading capacity?

- Loading capacity is affected by a combination of detailed section designs, consistency of the base material and the design of connectors and clip systems.
- Correct installation of Ultraframe Ceiling System specifications taking care of spacing of hanging sets, main runner and cross runners.
- Spacing of screw fasteners to the correct depth and not over driving or under driving into the board surface.

**Always use branded accessories for ensuring safe ceilings.**

Q3

Why should we be especially concerned that metal profiles may rust since it is an internal structure of the ceiling and not exposed?

Moisture above the ceiling can easily increase due to the following reasons:

- The air above the ceiling is not well ventilated.
- Water pipes and air conditioning systems can create water leakages.

Q4
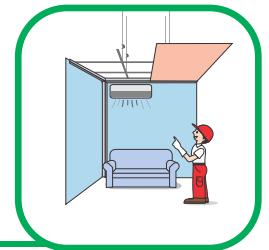
Does the reduction of the metal profile thickness affect the finished ceiling system and performance?

- The number one priority of USGBoral is safety.
- Ultraframe Ceiling System is engineered firstly to meet ceiling safety requirements. This means resistance to deformation under normal working load and attachment clip designs that work reliably with safety factor.
- Even better than that a safe ceiling also means a flatter more beautiful ceiling - Ultraframe Metal System's minimum thickness delivers resistance to deformation and holds screw fasteners correctly - unlike some thinner, inferior metal products.

**Always use standard engineered and tested Systems for safe ceilings.**
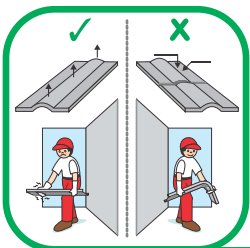
Q5

What is the required thickness of Universal Section that can support human weight?

- Ultraframe Metal System is not a trafficable ceiling solution.

  For specific trafficable designs, please consult USGBoral Technical Center for advice.

- All trafficable ceiling solutions need to be designed specific to the project.

Q6
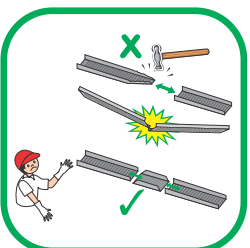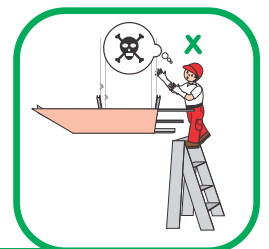
Is it correct to connect metal profiles together by simply forcing the sections together and fixing with rivets?

NO! This will create a weak point that could result in system failure, cracking and deformation. Instead always use the specially designed Ultraframe Universal Connector to do the job.

METAL SYSTEMS

Ultraframe Partition System is engineered to provide a simple and effective solution for all kinds of interior partition applications.

Application

Ultraframe Partition System is specially engineered to allow high level of performance across a broad range of domestic, commercial and industrial applications. This system provides a pre engineered solution to the assembly of non load bearing interior partitions.

Ultraframe Partition System provides one of the safest and most efficient solutions for building standard partitions as well as partitions that require technical properties such as:

Fire rating up to 4 hours

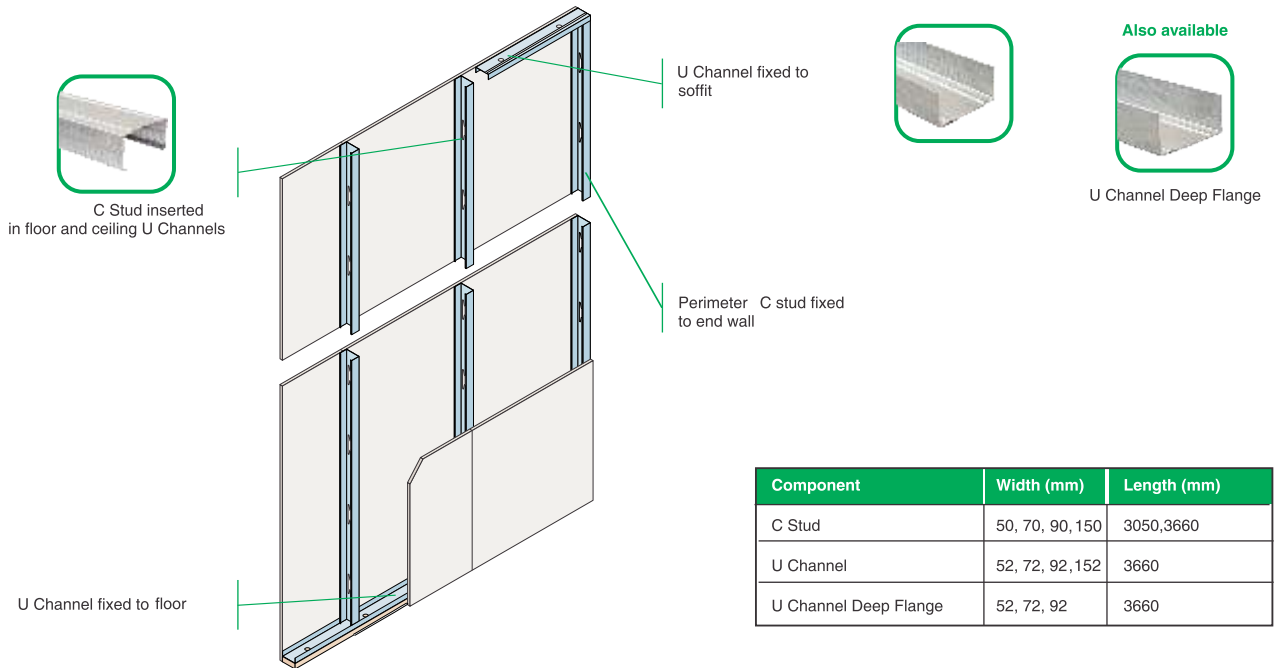Acoustic insulation up to an Rw of 67 db

Partitions up to 12m height

Description

Ultraframe Partition components deliver high perf ormance partition systems for acoustic and fire rated systems, wet areas, and specialty partition applications like in cinemas. Please refer to the Technical Manual for full range of Partition specifications.

All the components of the Ultraframe Partition System are made from high quality cold rolled steel with galvanization of 120g/sqm in accordance with IS277:2003 galvanized steel sheets (plain and corrugated) specification to prevent rusting.

System Illustration

U Channel fixed to soffit

Also available

U Channel Deep Flange

C Stud inserted in floor and ceiling U Channels

Perimeter C stud fixed to end wall

Component	Width (mm)	Length (mm)
C Stud	50, 70, 90, 150	3050,3660
U Channel	52, 72, 92,152	3660
U Channel Deep Flange	52, 72, 92	3660

U Channel fixed to floor

Fix appropriate U Channels to the floor and ceili ng as per specification mentioned in the Techni cal Manual.

Insert appropriate C Stud into th e U Channel at a distance as per the s pecification given in the Technical Manual.

Safety note: Always use the appropriate U and C channel and maintain spacing as per technical specifi cations for proper strength and rigidity, depending on your partition height. Your safety is our priority and thus we invite you to contact Technical Center for advice on selecting the correct Ultraframe Partition System that can meet your technical requirements.
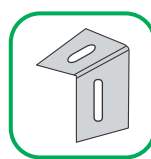
Other Accessories

Bracket

Screws (as appropriate)

Deflection Head Bracket

Flat Strap (for fire stops)

Fixing Channel

Advantages

Ultraframe Partition System is strong and efficient system which is designed by experts to achieve the desired performance. This makes Ultraframe the best choice in terms of quality and safety. Ultraframe Partition System is:

Strong & safe

- Manufactured from high quality, cold-rolled galvanized steel to meet Indian as well as international standards

- Roll formed using engineered equipments and controlled by the manufacturing expertise

Easy & fast installation

- C-Studs are easily placed into U-Channels with a "twist to lock motion, but can still be adjusted to accommodate fixing of gypsum board

- C-Stud's asymmetrical design allows studs to be boxed which is helpful for extending studs in height or when extra strength is required around door and window openings

- Fast and simple noggin systems for additional mechanical loadings or for hanging items like televisions, cupboard etc.

- Pre punched service holes designed to hold various M&E and plumbing services
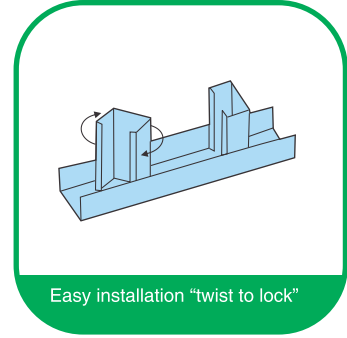
Engineered Strength

- Engineered profile designs to optimize section strength, rigidity and weight

- Fire and acoustically rated systems to meet various standards such as ASTM, British Standard and IS. Please consult the Technical Center for full specifications

Durability

- Hot dipped galvanized steel as per IS 277 standard with 120 g/sqm of zinc prevents rusting making it suitable for humid climates

Cost Efficient

- Faster to install as compared to other traditional solutions which reduces build time and labour cost

- Lower weight on the structure reduces overall building cost as compared to the traditional heavy masonry solutions

- Standard solutions offer a competitive option as compared to other traditional solutions without comaromise on quality and safety


Specific features ensure authenticity

Easy installation "twist to lock"

Boxing of LaGyp C stud for extra strength

Hard body impact test

Soft body impact test

Common Questions & Answers about quality and safety of a partition system

How does the profile & raw material of USGBoral U & C Stud affect the quality of partitions?

Q1

- USGBoral C & U stud profile designs are engineered to optimize section strength, rigidity and weight

- Consistent mild steel and uniform anti-rust coatings provide long term performance even in humid conditions.

?
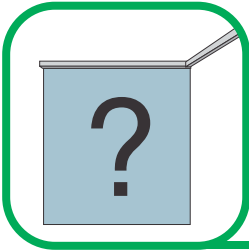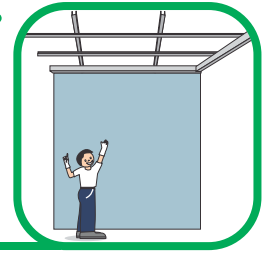
On what factors the appropriate Partition System should be selected ?

Partition System selection depends on height of the partition, fire rating, acoustic requirement as well as restriction on partition width. Appropriate Partition System should be selected from the Technical Manual.

Q2

Q3

What is the maximum height that can be achieved with Partition System?

- A height of 11.6 meter can be achieved, as defined in the Technical Manual.

- Asymmetrical design of C Stud allows boxing of the stud to extend the height. For specific solutions, please contact Technical Center.

Is there any specific requirement for fixing U Channel on floors & ceilings?

Yes, following factors should be considered while fixing U Channel:

- U Channels of 52, 72, 92 & 152mm should be fixed on the floor with appropriate fixings at maximum 610mm centers and the first & the last fixing point not greater than 50mm. For 152mm U Channel, two lines of screws are required.

- In special conditions where the concrete floor is not fully dried out, it is important to use damp proof membrane.

Q4

Q5

Is it possible to hang/fix objects on Partitions?

Yes, it is possible to hang/fix objects on the Partitions using anchor and other specially designed accessories to hang loads from picture frames to LCD screens or even wall mounted sanitary ware.
For appropriate fixing and more details contact the Technical Center.

USGBoral Ultraframe Wall Lining System

METAL SYSTEMS

Ultraframe Wall Lining System is an innovative way of using gypsum boards that can be us ed to correct irregularities in dry masonry substrates. This system is typically used in commercial projects as it is fast to install and can easily accommodate electrical services and pipes. It also offers particular benefits in refurbishment projects where walls are out of alignment.

Advantage

Ultraframe Wall Lining is fixed directly to the existing background, allowing a cavity width between wall and gypsum board ranging from 30mm to 100mm.

The system can therefore be used for all common lining applications with the following advantages:

Providing space for hidden services like electric wiring etc. without chiseling into brick walls

Effective in avoiding cracks & level out uneven substrates to give perfectly smooth surface

Naturally provides good thermal insulation, acoustic performance and reduces risk of damp penetration. These can further be increased using insulation and other innovative products
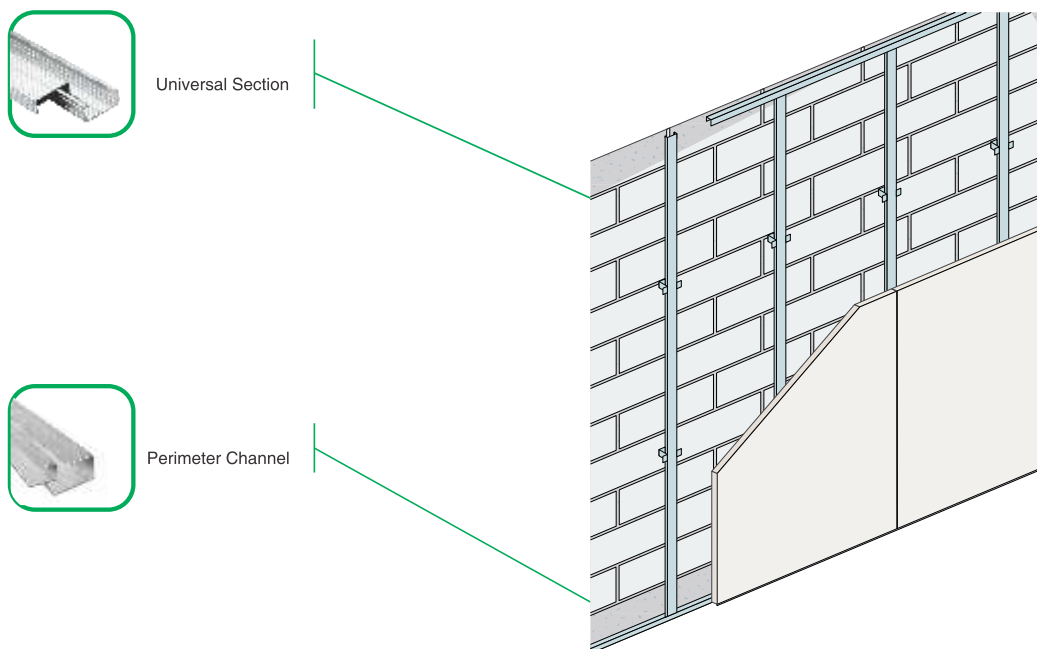
Provides economical and time saving (up to 5 times) solutions as compared to cement & POP finish

Description

Ultraframe Wall Lining System complements the Ultraframe Partition and Ceiling System.

All the components of the Ultraframe Wall Lining System are made from high quality cold rolled steel with galvanization of 120g/sqm in accordance with IS 277:2003 galvanized steel sheets (plain and corrugated) specification to prevent rusting.

System Illustration

Step 1
Fix the Bracket on wall at appropriate distances

Step 2
Fix Perimeter Channel on top & bottom

Step 3
Fix the Universal Section

Step 4
Fill insulation (optional)

Universal Section

Perimeter Channel

The Ultraframe Wall Lining System is easily installed by fixing the Universal Channel and Bracket at appropriate spacings as specified in the Technical Manual.

For further advice contact our Technical Center.

Other Accessories

Bracket

Universal Connector

USGBoral Ultraframe Close-Concealed Ceiling System

METAL SYSTEMS

Ultraframe Close-Concealed Ceiling System is essentially for commercial and domestic applications where loss of room height must be kept to a minimum. The metal frame ceiling system is fixed directly to concrete soffits providing either standard or fire rated ceilings.
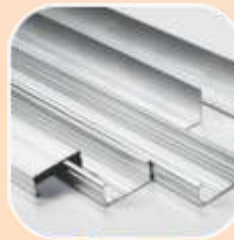
Advantage

The Ultraframe Close-Concealed Ceiling System has all the advantages of the Ultraframe Concealed Ceiling System with the following additional advantages:

Fixed directly to the concrete soffit allowing cavity ranging from 30mm-100mm. This cavity further allows space for conduits, electric & insulation purposes

Ideal for renovating old ceilings, keeping loss of room height to a minimum

Can be used with Ultraframe Ceiling System & EchoBloc to create aesthetic & innovative designs

Faster & drier process as compared to POP ceilings.

Description

Ultraframe Close-Concealed Ceiling System complements the Ultraframe Ceiling System.

All the components of the Ultraframe Close-Concealed System are made from high quality cold rolled steel with galvanization of 120g/sqm in accordance with IS 277:2003 galvanized steel sheets (plain and corrugated) specification to prevent rusting.

System Illustration

Universal Section -
used as ceiling sections

Concrete soffit

Bracket

Perimeter
Channel

Bracket

Universal
Section

Perimeter Channel

Flat Strap used as a
fire stop behind gypsum board
joints on fire rated ceilings.
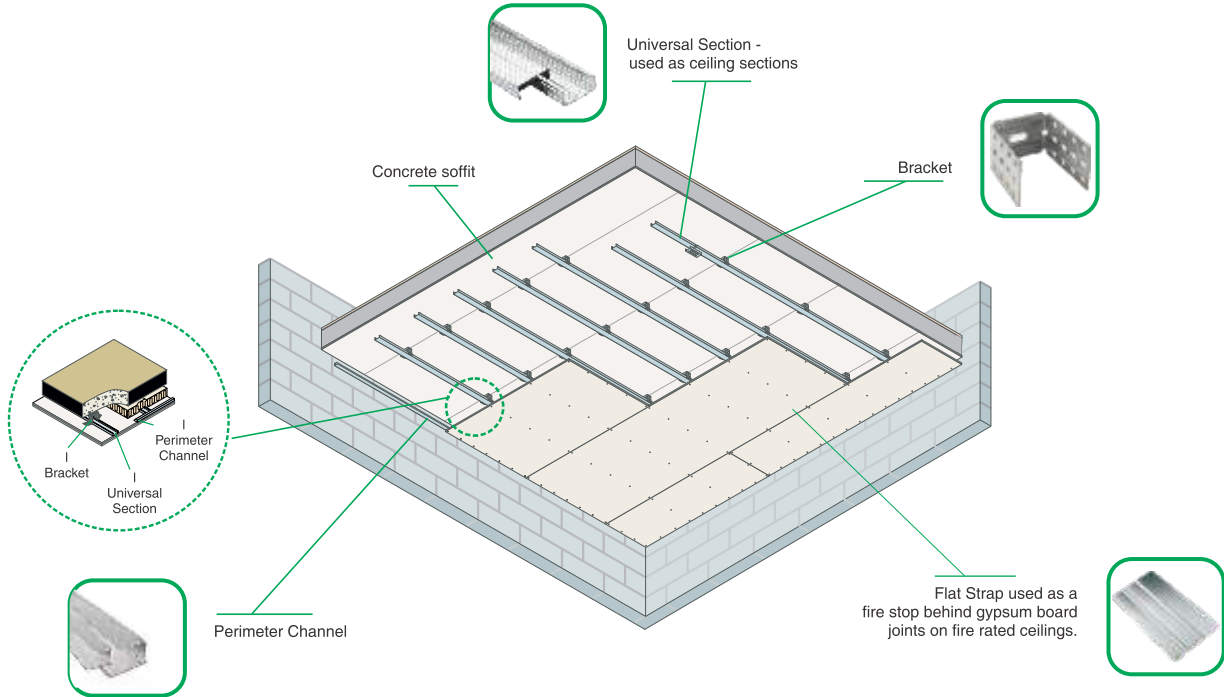
Ultraframe Close-Concealed Ceiling System is installed using the Bracket and Universal Section at appropriate intervals as per the specification given in the Technical Manual.

Other Accessories

Universal Connector

Cross Connector

100X50X100mm

Bracket

Soffit Expansion
Fixing (Hilti)

Safety Message: Always use branded accessories while building the Ultraframe Close-Concealed Ceiling in order to ensure safe and quality ceilings. Non branded accessories can create sagging or even give way under the load of the ceiling. For any enquiry on the safety of your ceiling we invite you to contact our Technical Sales Team or Technical Center.

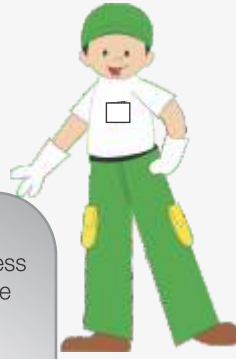# EKO⁺Frame™

A HIGH QUALITY CEILING SYSTEM

STRONGER   DURABLE   ECONOMICAL

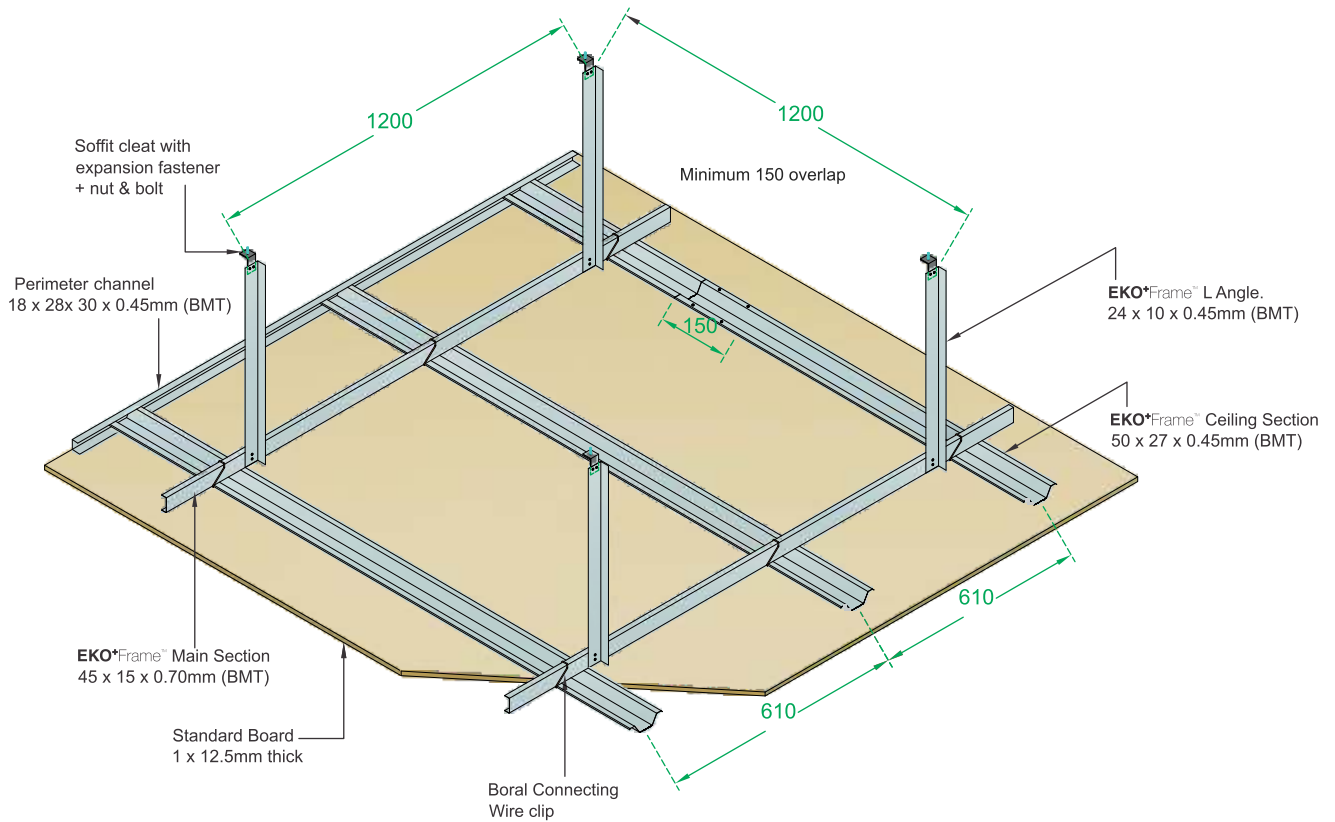# Why to use EKO⁺Frame™
instead of other ceiling system ?

✤ **Made from 1st grade steel.**
Procured directly through steel mill .The consistency of thickness and vital parameters are checked (chemical/mechanical) before making into channels.

✤ **Self manufacturing of Channels.**
The roll forming line is situated at Boral's, Khushkhera plant where these channels are made under strict quality control.

✤ **Coating of minimum 120 GSM maintained.**
The Zinc coating on steel is maintained at minimum 120 GSM (inclusive of both the sides) to prevent rusting.

✤ **Line Knurling on Ceiling Section.**
Special line knurling design which helps to improve the rigidity of frame and also increases the screw holding capacity.

✤ **Printing of EKO⁺Frame™ on channels.**
This ensures genuineness of the channels and prevents usage of duplicate at the job site channels in installation. This also helps in easy identification and inspection of the system.

✤ **As per conventional system.**
The U shaped Intermediate section and Inverted Hat shaped Ceiling section ensures ,ease of use in installation of frame. This is effectively connected by Wire Connect Clip to ensure rigid and strong connection .

✤ **Certification and Testing.**
EKO⁺Frame™ ceiling system is designed and tested with a pull out load of at least 3 times more than the safety factor for which it is being intended to use.

✤ **Central Line in Furring section.**
The sight line is prominent in EKO⁺Frame™ Ceiling section which enables the installer to properly align the Gypsum Board during screw fixing.

✤ **Change in ceiling level can be done easily with EKO⁺Frame™ with minimum effort.**
The step ceiling and other design can be done using these frames.

EKO⁺Frame™ Vs OTHER METAL AVAILABLE IN MARKET

Quality	Galvanisation	Manufacturing	Base Raw Material	Knurling
EKO⁺Frame™	120 GSM	Own manufacturing with strict quality control.	Grade 1 hot dipped galvanised coils as per IS277:2003 is used.	Line Knurling on the ceiling section.
Other Brand	60-100 GSM	Dubious manufacturing with less quality control.	Raw Material quality is inconsistent and does not adhere to any standards.	Knurling is very less or invisible.
Advantage of EKO⁺Frame™	Better rust resistant due to more galvanisation.	Precision of dimensions Straightness of profiles.	Basic Raw material quality is confirmed.	Screw holding capacity due to uniform knurling.

EKO⁺Frame™ CEILING SYSTEM

Soffit cleat with expansion fastener + nut & bolt

1200

1200

Minimum 150 overlap

Perimeter channel
18 x 28x 30 x 0.45mm (BMT)

150

EKO⁺Frame™ L Angle.
24 x 10 x 0.45mm (BMT)

EKO⁺Frame™ Ceiling Section
50 x 27 x 0.45mm (BMT)

610

EKO⁺Frame™ Main Section
45 x 15 x 0.70mm (BMT)

610

Standard Board
1 x 12.5mm thick

Boral Connecting
Wire clip

PROFILE OF THE SECTION

Ceiling Section
Thickness : 0.45mm
Length : 3660mm

26mm

50mm

Main Section
Thickness : 0.7mm
Length : 3660mm

15mm

45mm

Perimeter Section
Thickness : 0.45mm
Length : 3660mm

18mm

30mm

28mm

Metal L Angle
Thickness : 0.45mm
Length : 3050mm

10mm

90°

24mm

EKO⁺Frame™ CEILING SYSTEM COMPONENTS

EKO⁺Frame™

EKO⁺Frame™ Ceiling system has a wide range of application including both commercial and residential. It is ideally suited where services are accommodated . It can be used to both upgrade and protect existing ceiling structures.

All ceiling profiles are manufactured as per IS 277: 2003 from pre galvanized material to 120 GSM of coating.

Key benefits :-

- Quick and simple to construct and install.
- System is suitable for any type of plasterboard.
- Products can be easily cut to required length using cutting tools.
- Insulation for improved sound and thermal properties is easy to install.
- Can be used to create a perfect finish to receive different types of decorative finishes.

CEILING SECTION

1 | 4

MAIN SECTION

PERIMETER SECTION

2 | 5

METAL L ANGLE

CONNECT WIRE CLIP
(2.5 MM DIA SPRING STEEL WIRE)

3

SOFFIT CLEAT

SHEETROCK®*Brand* *ST 45* Steel

Steel Profiles for Stability & Reliable Ceiling System

These steel profiles are best suitable for Gypsum ceiling applications in plain and curved designs.

Features

- 0.45 mm thickness
- Easy handling & installation
- Galvanizing 120 GSM
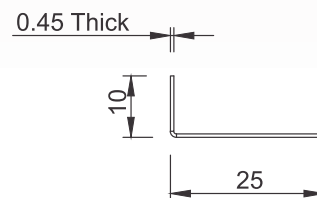- Dimensionally stable
- Consistent quality

49

Knurled Face

22   0.45   22

Ceiling Section

23

22   0.45

26

Perimeter Channel

15

0.70

45

15

Intermediate Section

0.45 Thick

10

25
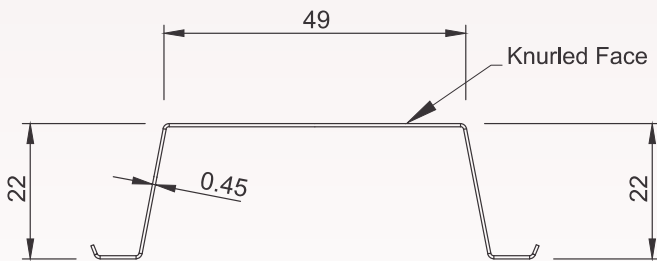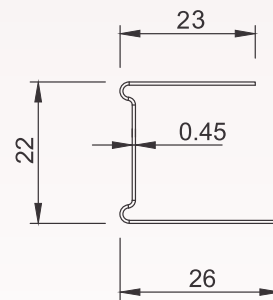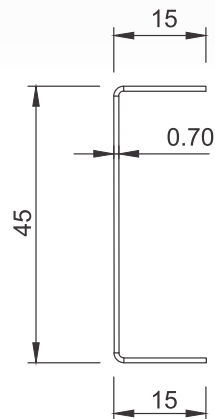
Ceiling Angle

GYPSUM CEILING TILES

Vinyl Touch · Texture Touch · Colour Touch · Acoustic Touch
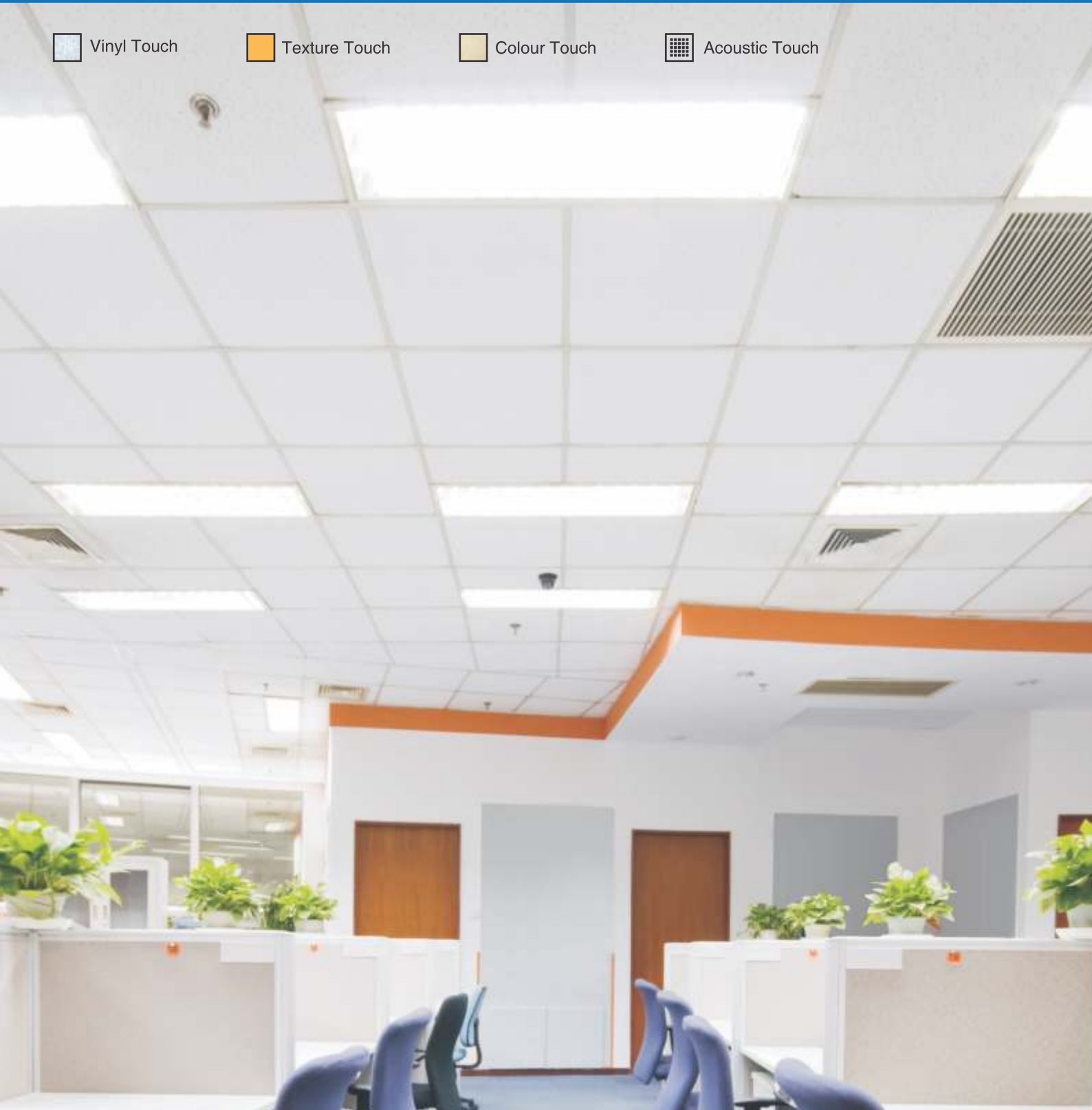
Product Description

Gypsum Ceiling Tiles is a factory finished decorative product which can be applied with T Bar Section without any additional adjustments.

With a variety of surfaced designs and usability, Gypsum Ceiling Tiles can be perfectly applied to match with a wide range of application purposes.

Properties of Gypsum Tiles

Fire Resistance	Withstands High Humid Conditions	High Light Reflectance

Selection Attributes

Aesthetics	Contemporary designs Range of patterns Factory made - Uniform finish
Efficient	Standard system - Easy to install No need for additional paint Easy to align with USGBoral ceiling components
Long Life	Sag resistant Easy to clean Low maintenance
Performance	Excellent light reflectance Excellent performance under moist conditions Fire resistance

To avoid these common problems with exposed ceiling - use Ceiling Tiles

Stains	Broken Edges	Misalignment
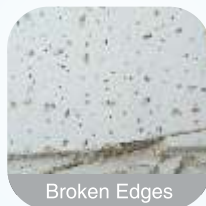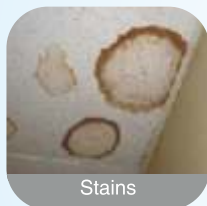
Vinyl Touch

Vinyl Ceiling Tiles is finished with an attractive and durable coating that is applied to the face liner paper increasing the ceiling tiles overall performance. Vinyl Ceiling Tiles are easy to clean and save maintenance costs.
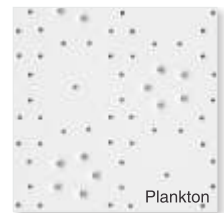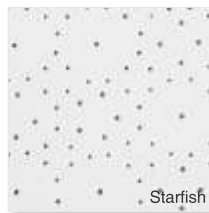
Available Patterns

White Sand

Recommended Usage Area
Offices, Hospitals, Kitchen, Factories, Departmental Stores, Restaurants, Administrative Blocks, Computer Centres, Lab Areas.

Texture Touch

Gypsum Tiles with Texture design. It comes with a well decorated surface which provides high light reflection performance.

Available Patterns

Balloonfish   Starfish   Plankton

Recommended Usage Area
Lobby Areas, Offices, Convention Halls, Hospitals, Kitchen, Factories.

Colour Touch

Painted with special paint. Tile can be promptly applied, which saves cost and time to paint tiles on site.
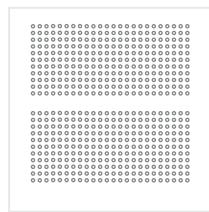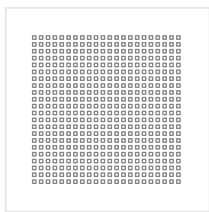
Available Patterns

Pearl

Recommended Usage Area
Lobby Areas, Offices, Convention Halls, Hospitals, Kitchen, Factories.

Acoustic Touch

Perforated Gypsum Tiles which helps to increase sound quality by absorbing surrounding sound and decrease echo sound in big spaces.

Available Patterns

Echotone C10N1   Echotone R10N2   Echotone C10N4
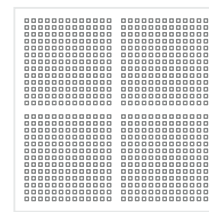
Recommended Usage Area
Movie Theatre, Hotel, Shopping Center, Conference Room, Restaurant, Office, Library, Hospital, Airport, Exhibition Hall and other large open spaces.

Select what suits best to your needs

	VISUAL SELECTION					PERFORMANCE SELECTION	
TYPE	PATTERN	THICKNESS (MM)	EDGE	SIZE (MM)	BACK	FIRE RESISTANCE[*]	LIGHT REFLECTION[**]
Vinyl Touch	White Sand	9		595 X 595	With Foil	Class 0	89%
Texture Touch	Balloonfish	9		595 X 595	Without Foil	Class 0	91%
Texture Touch	Starfish	9		595 X 595	Without Foil	Class 0	91%
Texture Touch	Plankton	9		595 X 595	Without Foil	Class 0	91%
Colour Touch	Pearl	9		595 X 595	Without Foil	-	80%
Acoustic Touch	Echotone[#] C10N1	12.5		595 X 595	Non Woven Cloth	-	NA
Acoustic Touch	Echotone[#] R10N2	12.5		595 X 595	Non Woven Cloth	-	NA
Acoustic Touch	Echotone[#] C10N4	12.5		595 X 595	Non Woven Cloth	-	NA

*Fire Resistance - Class 0 refers to the highest fire resistant performance of the product to be applied on the area that requires high fire resistant capability, for example fire escape area.

**Light Reflection - Rated from 0% to 100%. A high light reflection ceiling makes lighting systems, especially indirect lighting more effective.

#Tested with National Physical Labrotary with 50mm glasswool backing 48Kg density
NRC:- Echotone C10N1 - 0.65 and Echotone R10N2 - 0.80

USGBoral Plasto XP

Xtreme Strength • Xpress Application • Xtra Smooth Finish

PLASTER

The 2 In 1 Universal Plaster

PLASTO XP is a gypsum based single coat plaster that can be directly applied on brick, stone masonry or concrete surfaces. It is characterized by its white appearance, extra strength and single application on even or rough surface. PLASTO XP requires zero maintenance with compatibility on all type of paints and thus providing universal solution for plastering and finishing of interior walls.

Introduction

PLASTO XP consists of calcium hemihydrate mixed with additives and light weight aggregates. The addition of all these constituents into the plaster enhances the strength and bonding characteristic of plaster that ultimately improves the performance and workability of product.

Features

- Direct application on Brick / Block or Concrete
- No water curing
- Easy to mix and apply
- No shrinkage cracks
- Excellent strength on setting
- Excellent adhesion with the surface
- Thermal resistance up to 13mm
- Compatible with all type of paints & decorative range
- Smooth finish

Technical Specifications

Colour of Finished Surface	Superior Whiteness
Bulk Density	1020 kg/m^3
Setting Time	30 - 35 minutes
Coverage of 25 kg bag (13mm thickness)	21 sq. ft.
Compressive Strength	60-70 kg/cm^2

Product Benefits

	DIRECT APPLICATION	LINE & LEVEL	SMOOTH FINISH	TIME SAVING	QUALITY ASSURANCE	WATER CURING	SHRINKAGE CRACKS	CONSUMPTION OF PAINT
SAND CEMENT PLASTER	✓	✗	✗	✗	✗	✓	✓	High
PLASTO XP	✓	✓	✓	✓	✓	Doesn't Require	Doesn't Appear	Low

USGBoral Plasto P.O.P.

Premium quality Plaster of Paris for designer ceilings and walls

PLASTER

PLASTO

PLASTO offers you a flawless
Plaster of Paris with consistent quality.
The stringent quality norms have given it
an edge over others with more whiteness, less wastage and more coverage area.
PLASTO offers the unique advantage of ideal setting time that reduces the
wastage of plaster mix. Apart from this the gradual setting time also means longer
life of finished Plaster.

Quality assurance

The manufacturing set up for POP is located at Bikaner, Rajasthan procuring gypsum from Bikaner itself which has India's finest raw gypsum mines. Stringent quality norms is followed to produce India's finest Plaster of Paris. Our Quality team closely monitors every batch during the manufacturing process to produce POP that is totally flawless.

Key features

- Premium quality
- Ideal setting time (Saves cost)
- Higher adhesive ability
- High strength
- Smooth finish
- Fire resistant
- Easy to spread and level
- Mixes easily with water

Packaging

- Excellent strength - easy to handle
- Moisture proof packaging
- Laminated for glossy white appearance
- Quality printing to avoid duplicacy

Available in 20 kg and 25 kg pack sizes

USG BORAL
INNOVATION INSPIRED BY YOU.™

USG SHEETROCK® Brand
All Purpose Joint Compound

JOINTING COMPOUND

- Strong bond with USG Sheetrock® Brand Paper Tape
- Ideal for skim coat

Professional Grade

For embedding USG Sheetrock® Brand Paper Joint Tape and for filling and finishing coats in interior gypsum board applications. Also for covering corner bead, fasteners, trim, skim coating entire gypsum board surfaces, and hand-applying simple textures. Complies with ASTM C475.

Tools

Use USG Sheetrock® Paper Joint Tape, three wide-blade application knives, 127 mm (5 in.), 203 mm (8 in.), 254 mm (10 in.) and sanding sponge.

Preparation for READY-MIXED formulation

Store joint compound in 13-35 °C temperatures for at least 24 hours before using. Stir contents lightly prior to application. May be used directly from container for covering fasteners and corner bead. For taping and finishing joints (especially for use in mechanical tools), thinning by adding water may improve application and performance. Add water in the increments listed below

Package size	Incremental water addition
5 kg	25 ml
25 kg, 30 kg	200 ml (0.20L)

Remix lightly and test apply after water addition until desired consistency is reached. Over-dilution causes abnormal shrinkage, poor bond etc. Do not mix with any other material.

Preparation for Powder formulation

In a clean container mix USG Sheetrock® Brand All Purpose Joint Compound powder into the prescribed amount of clean, drinkable water until thoroughly wet. Let this initial mix soak for approximately 15 minutes, then mix until smooth, creamy and lump-free. Do not re-temper mix or intermix with other wet or dry joint compounds. Mechanical mixing is recommended for smooth consistency. Note: Excessive water causes abnormal shrinkage, edge cracking, poor bond, lack of hide and other problems.

Water Proportions per 20 kg Bag

For USG Sheetrock® All Purpose Joint Compound in powder form

Filling approximately 11.5 L per 20 kg bag

Taping approximately 13 L per 20 kg bag

Finishing or skimming approximately 12.5 L per 20 kg bag

Application

Apply over thoroughly dry surfaces only. Allow each coat to dry before applying another coat. Maintain minimum air, joint compound and surface temperature of 13 °C within working area until joints are completely dry.

Joint Finishing

Fill space between boards with compound (use 127 mm knife). Center and press in paper joint tape. Tightly embed tape with knife. Remove excess compound and apply as a thin coat over the tape. Apply compound to fasteners. When thoroughly dry, apply second coat (203 mm knife for joints, 127 mm for fasteners) smooth out 50 mm (2 in.) beyond first coat, and let dry. Apply thin finish coat to joints (254 mm knife) and fasteners (124 mm knife). When dry, use a wet sanding sponge to smooth, if needed.

To Finish Inside Corners

Apply compound to both sides (127 mm knife). Fold paper joint tape along center crease. Press into position. Embed tape with knife. Remove excess compound and apply as a thin coat over the tape. Let dry and apply second coat on one side. Let dry, then cover other side. When dry, sponge to smooth, if necessary.

To Finish Outside Corners

Fasten corner bead. Apply compound. Allow to dry between coats and smooth with wet sanding sponge if necessary. Extend first coat 102 to 152 mm (4-6 in.) onto gypsum board (use 203 mm knife). Let dry. Feather second coat 50 mm (2 in.) beyond first coat. If third coat is required, feather it beyond second coat (254 mm knife).

Drying Time

At 24 °C, 50% relative humidity, allow approximately 24 hours between coats.

Sanding

Avoid sanding whenever possible. If fully dried compound requires sanding, use a 120-grit (or finer) sandpaper or use a damp sponge. Avoid scuffing gypsum board face paper.

Decorating

All surfaces (including joint compound) must be dry, dust free and not glossy. Apply an undiluted latex flat wall paint, as a prime coat, before painting or texturing. Strictly follow directions of painting and decorating material manufacturers. Consult them regarding decorating problems.

Limitations

Not intended for use in high moisture areas.

Cleanup

Wash tools with warm, soapy water. Wipe tools dry to prevent rusting.

Storage

Store at room temperature, between 13-35 °C, in a dry location. Protect from freezing, extreme heat, and exposure to direct sunlight. Keep tightly sealed. Dispose of any unused material that has been mixed with water.

Standard Packaging

READY-MIXED   : 5 kg and 30 kg pail
READY-MIXED   : 25 kg carton
POWDER   : 20 kg bag

USGBoral EasyPlus

USGBoral EasyPlus is a high performance Air drying compound used for treating gypsum board joints and fixing points.

JOINTING COMPOUND

EasyPlus provides excellent tape bonding strength, is exceptionally smooth to work with and the easy mixing saves time. EasyPlus is relatively easy to sand, giving a high level of finish.

Product Usage Data :

Air Drying Compound	
Mixing Ratio	2 parts of compound to 1 part of water (in kg.)
Storage	The product must be kept in dry conditions, away from moisture. The bag should be stored at an elevated position. Part open bags should be sealed, as moisture can accelerate the setting time.

Mixing procedure :

1. Always use clean water, tools and containers. Using dirty containers / tools may affect setting time.

2. Slowly add powder to water.

Tapered Edge Joints (3 easy steps) :

1st Coat

Apply EasyPlus of 150 mm width for joint reinforcement.
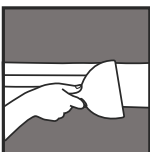
2nd Coat
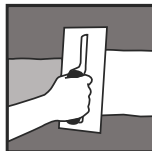
Apply an even coat of EasyPlus of 200 mm width.
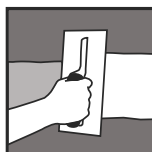
3rd Finishing Coat
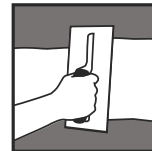
Apply an even coat of **EasyPlus** of 300 mm width for finishing.
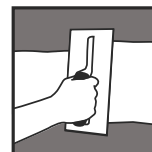
Square Edge Joints (3 easy steps) :

Apply EasyPlus of 300 mm width for joint reinforcement.

Apply an even coat of **EasyPlus** of 400 mm width.

Apply an even coat of **EasyPlus** of 500-600 mm width for finishing.

Note : All Gypsum board Joints require light sanding before painting.

*Available in 25 kg bag

USGBoral EasyJoint

USGBoral EasyJoint is a setting type compound used for treating gypsum board joints and fixing points.

JOINTING COMPOUND

Easyjoint provides excellent tape bonding strength, is exceptionally smooth to work with and the easy mixing saves time. Easyjoint has a consistent setting time and is relatively easy to sand, giving a high level of finish.

Product Usage Data :

Setting Time	180 minutes.
Mixing Ratio	2 parts of compound to 1 part of clean water (in kg.)
Coverage	One bag can cover approximately 65 sqm.
Storage	The product must be kept in dry conditions, away from moisture. The bag should be stored at an elevated position. Part open bags should be sealed, as moisture can accelerate the setting time.

Mixing procedure :

1. Always use clean water, tools and containers. Using dirty containers / tools may affect setting time.
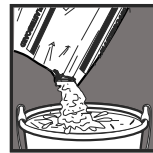
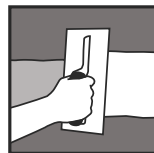2. Slowly add powder to water and mix for 2-3 minutes.
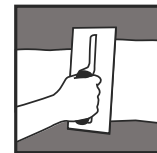
Tapered Edge Joints (3 easy steps) :

1st Coat
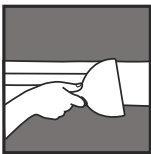Apply Easyjoint of 150 mm width for joint reinforcement.

2nd Coat
Apply an even coat of Easyjoint of 200 mm width.
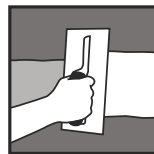
3rd Finishing Coat
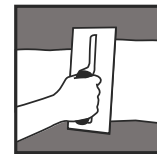Apply an even coat of Easyjoint of 300 mm width for finishing.

Square Edge Joints (3 easy steps) :

Apply Easyjoint of 300 mm width for joint reinforcement.

Apply an even coat of Easyjoint of 400 mm width.

Apply an even coat of Easyjoint of 500-600 mm width for finishing.

Note : All Gypsum board Joints require light sanding before painting.

*Available in 20kg bag

USGBoral Screws

High efficiency screws for Gypsum Board installation

SCREWS

Features

- Designed for fast installation
- Sharp thread & point
- Bugle Head No.2 Philips Recess
- Comply with ASTM C 1002-01
- Yellow zinc coated and salt spray tested against rust

Benefits

- Low wastage - Saves cost
- Saves time
- Better holding to Clutch Attachment
- Compliance with International Standards
- Rust free

Product Specification

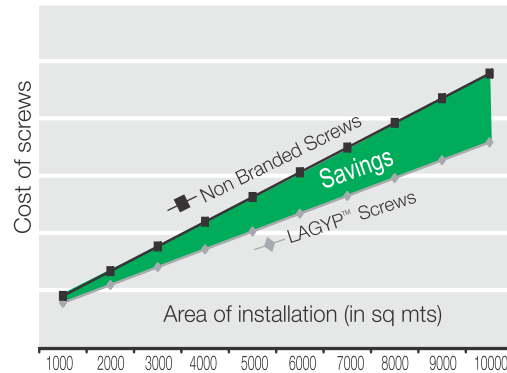| Length (mm)	Guage	Qty (per box)
9.5*	6	1000
13#	8	1000
25**	6	1000
32**	6	1000
38**	6	1000
50	6	1000

*Pan Head Screw (self tapping & self drilling type) - Used for channel to channel fixing

#Wafer Head Screw (self tapping & self drilling type) - Used for connecting metal components beneath gypsum board

**These Sizes are also available in black phosphate coating

Screw cost per sqm

USGBoral vs non-branded screws)

Cost of screws

Non Branded Screws

Savings

LAGYP™ Screws

Area of installation (in sq mts)

1000 2000 3000 4000 5000 6000 7000 8000 9000 10000

Your savings increase with every sq mtr

USGBoral Tapes

For the seamless jointing fo Gypsum Boards

TAPES

Paper Tape

Dimensions - 50mm × 75m

Product Description - A paper reinforcing tape for strengthening and finishing joints of interior drywall panels

Features
- High strength and resists tearing
- Superior center crease
- No stretch and wrinkles
- Easier corner finish

Metal Corner Tape

Dimensions - 50mm × 30.88m

Product Description - An exclusive product from USGBoral this is a paper tape with galvanized steel strips designed effectively to protect corners

Features
- Excellent for working curves, arches and unusual angles
- Easy to apply and store
- Cost effective as compared to edge beads, angle beads
- Excellent adhesion with compound & paint
- High quality paper with laser perforation for good air permeability

Fiberglass Tape

Dimensions - 50mm x 90m

Product Description - A Fiberglass Tape is used for reinforcement of plastered finishes to plasterboard joints.

Features - High strength and Self-adhesive Ideal for reparing cracks and holes

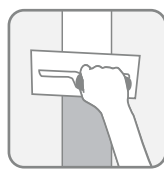# Application procedures for Paper Tape

Tapered Edge Joint

1 Apply first coat of
  Jointing Compound
  (150mm)*

2 Apply tape
3 Remove excess compound
4 Cut the tape
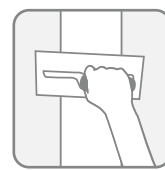
Dry
(Should be hard)

5 Apply second
  coat of 200mm

Dry
(Should be hard)
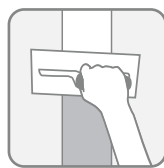
6 Apply third/final
  coat of 300mm

Square Edge Joint

1 Apply first coat of
  Jointing Compound
  (150mm)*

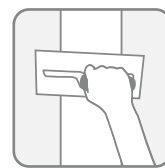2 Apply tape
3 Remove excess compound
4 Cut the tape

Dry
(Should be hard)

5 Apply second
  coat of 300mm

Dry
(Should be hard)

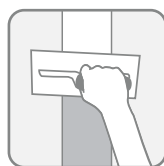6 Apply third/final
  coat of 500-600mm

Internal Angles

1 Apply first coat of
  Jointing Compound
  (150mm)*

2 Apply tape
3 Remove excess compound
4 Cut the tape

Dry
(Should be hard)

5 Apply second coat

Dry
(Should be hard)
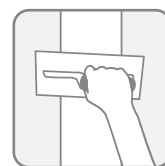
6 Apply third/final coat

Application procedures for Metal Corner Tape

1 Cut the tape
2 Bed the tape on both sides

3 Apply 50mm wide layer
  of Jointing Compound on
  both sides
4 Remove excess compound
  using taping knife

Allow to set hard

50mm

5 Apply a further
  50mm Jointing
  Compound beyond
  the edges of first coat

Allow to set hard

6 Wide, galvanized steel
  strips act as a guide
  to ensure straight,
  reinforced angles for
  both "inside" and
  "outside" corner needs

USGBoral Access Panel

USGBoral Access panel is a low cost, simple to install product that provides sublime finish and saves a lot of time

Traditional way of Access Panel

Access Panel

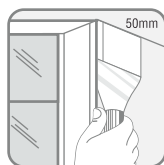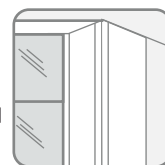## Characteristics

- Ease of Application
- Better finish
- Time saving
- High Durability
- Made of Gypsum board
- Can be painted
- Customized sizes

Access Panels are commonly used in areas where access to stop cocks, pipes, electrical cables and other utilities is required while at the same time concealing them. Though traditional methods of making an access panel on site serves the basic utility, they end up consuming a lot of time in installation and are no t quite up to the mark when it comes to finishing.

With Access Panel, no longer one needs to compromise with the aesthetics or depend upon a third party workman or carpenter. It can be installed by anyone who is skilled enough to install a gypsum ceiling. Its unique design offers a sublime finish; simultaneously it saves a lot of time as it is a ready to install product. All edges of the panel are reinforced with aluminium profiles and all the corners are reinforced with stainless steel to increase strength and prevent damages, thus making it a highly durable solution.

USGBoral Access Panel
Installation Details

Installation Details

1 After determining and marking the right position, install Ultraframe Ceiling Metal section in square shape with same dimension (center-to-center) as the selected Access Panel frame size

2 Add additional L-angles for extra strength

3 Fix the Access Panel Frame to the Ultraframe Ceiling Metal Section with screws at every 100 mm along the frame

4 Install Gypsum Board around the frame and lay the Access Panel pane on the frame

5 Seal the joints with jointing tape and coat the joint with EasyJoint compound

6 Apply paint or other surface finishes together with the ceiling.

Use Access Panel manufactured from Standard Gypsum Board or use MoistBloc (for Moisture resistance) applicable with 12.5 mm concealed ceiling without visible joints and frames.

Installed with Ultraframe metal section, produced from 0.55 mm thickness, high quality hot-dip galvanized steel, with propriety accessories