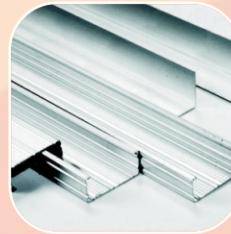


USGBoral Ultraframe Concealed Ceiling System

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.

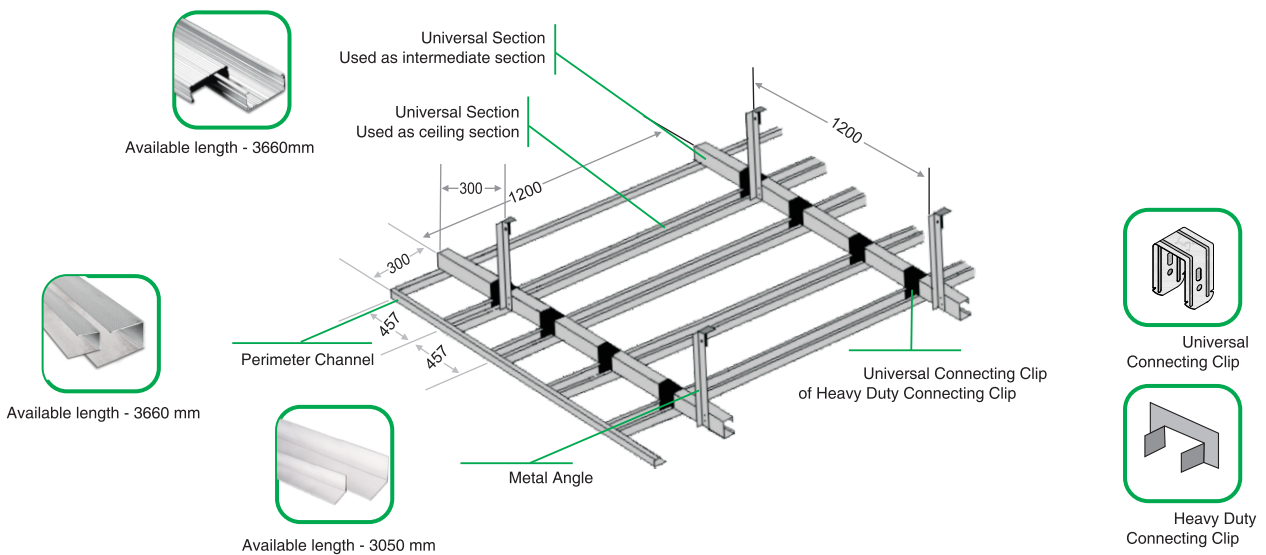
Description

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.

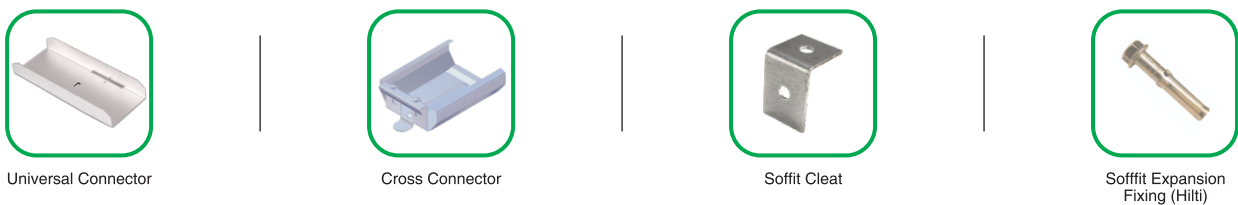
System Illustration

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)



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

Other Accessories



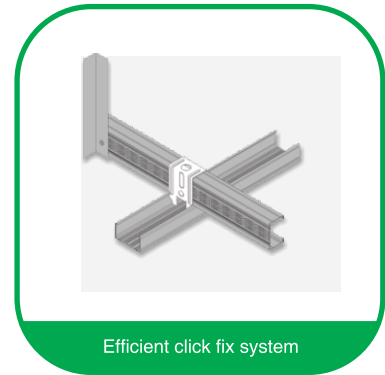
Safely Message: In a Concealed Ceiling System the strength at the connection points is critical to ensure the safety of your ceilings. Unique accessories design and branded components of Ultraframe Metal System along with the on site inspection tools will help you to always ensure you use complete USGBoral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



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

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



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

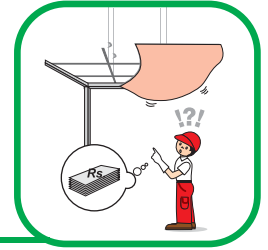


Common Questions & Answers about quality and safety of a concealed ceiling

Q1

How does the profile and raw material of Universal 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.



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.



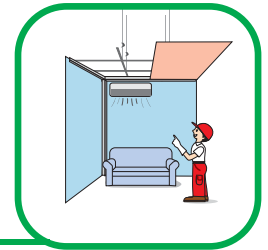
Q2

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:

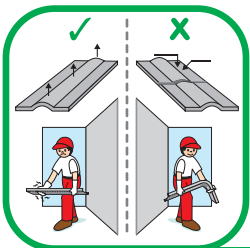
- The air above the ceiling is not well ventilated.
- Water pipes and air conditioning systems can create water leakages.



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.

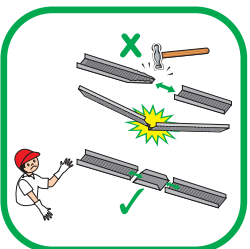
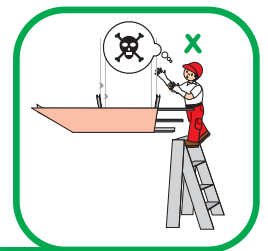


Q4

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.



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.

Q6