



# T-Bar Ceiling



# Gypsum T-bar Ceiling

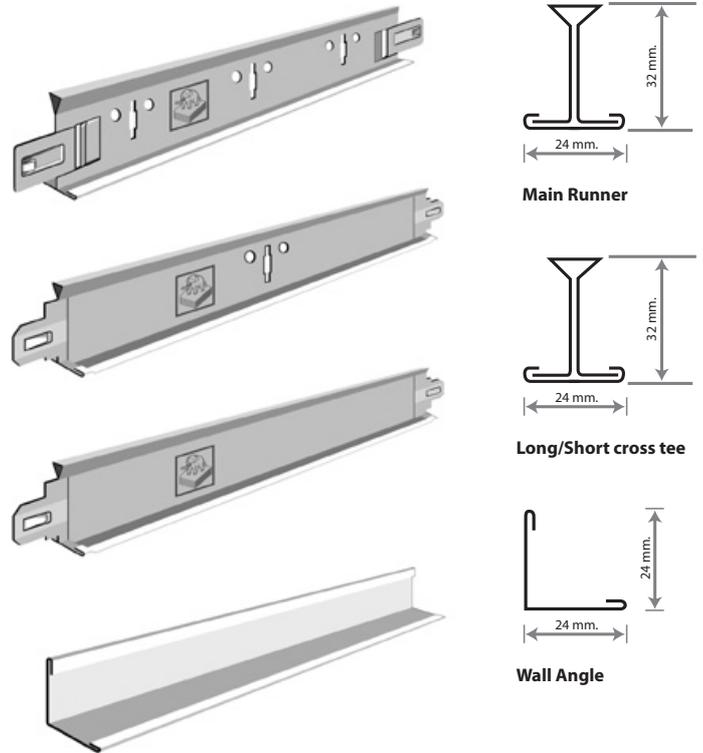
For the building that needs to line system work, such as AC pipe, wire tube, water pipe, air pipe around the ceiling area, T-bar ceiling is commonly used because it has good qualities such as; easy to install and access to the system lined above the ceiling. Also it's easy to replace the damage board or change the board when renovation or changes of the board quality is needed while keeping all the good gypsum board qualities.

The main ornaments of Gypsum T-bar Ceiling are the combination of T-bar Framing and Gypsum Ceiling Tile. Details are as follow:

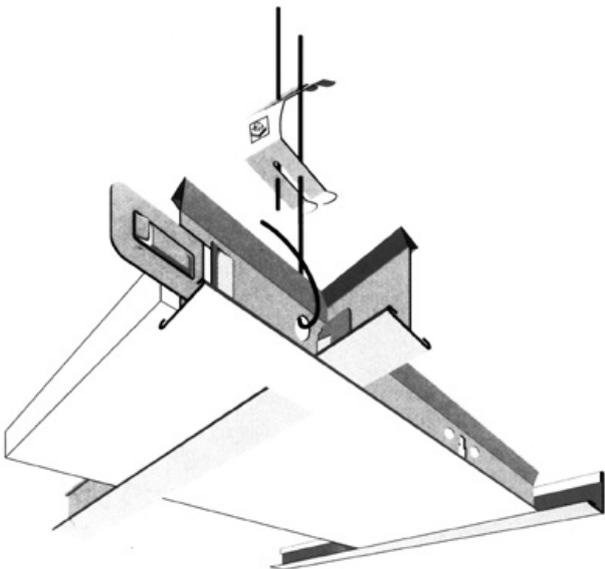
## T-Bar Framing

It is a T shape molded metal frame folded with 2 layers made out of Hot Dip Galvanized Steel. The front side steel is glazed in white for more beautiful finishing. Sizes are various depend on the length and height of frame ridge which will be put together in tabular form for the Gypsum Ceiling Tile installation.

The space between frames is restricted by the size of the tile. In Thailand, there are only 2 types of Gypsum T-bar Ceiling as follow, 60x60 cm. and 60x120 cm. which will have space for placement in 60.5x60.5 cm. and 60.5x121 cm. space as listed.



**Elephant T-Bar Framing:** Frame ridge size 32 mm. in height, 24 mm. in width, 0.35 mm. in thickness, folded twice. It is strong and durable. It's easy to install with interlock system which is the combination of main runner (4.23 m. in length), long cross tee (1.21 m.), short cross tee (0.605 m.) and wall angle (4.0 m.) which is flexible for installation more than other general frames in the market.



## Gypsum Ceiling Tile

Elephant Gypsum Ceiling Tile is made of Standard Gypsum Board cut in to specific size and put through the production process to make pattern and form as desired. The quality is consistent because it is pre - made from the factory. It is easy to use and can be separated in to 5 different types as follow;

Product name	Product Specification	Special Feature
<b>Gypsum Tile Vinyl Touch</b>	A Gypsum Ceiling Tile covered with white vinyl which has 6 beautiful patterns. Available in 2 sizes; 600x600x9 mm. and 600x1200x12 mm.	<ul style="list-style-type: none"> <li>• Easy to clean</li> <li>• Able to maintain a perfect condition at 90% relative humidity</li> <li>• Non-combustible</li> <li>• High light reflection</li> </ul>
<b>Gypsum Tile Dust-Free</b>	A Gypsum Ceiling Tile covers with white vinyl with smooth surface. The back side is glazed with red PVC and the sides are glazed with vinyl emulsion. Available in sizes; 600x600x9 mm. and 600x1200x12 mm.	<ul style="list-style-type: none"> <li>• Easy to clean</li> <li>• Protect against dust or dust built up in all sides of the board</li> <li>• Able to maintain a perfect condition at 90% relative humidity</li> <li>• Non-combustible</li> <li>• High light reflection</li> </ul>
<b>Gypsum Tile Textur Touch</b>	A Gypsum Ceiling Tile with the texture design and white color covered on the surface. Available in 5 different patterns with 2 sizes as follow; 600x600x9 mm. and 600x1200x12 mm.	<ul style="list-style-type: none"> <li>• Non-combustible</li> <li>• High light reflection</li> <li>• Well decorated designs</li> </ul>
<b>Gypsum Tile Color Touch</b>	A Gypsum Ceiling Tile covered with color on the surface from manufacture. Available in 4 different colors with 2 sizes as follow; 600x600x9 mm. and 600x1200x12 mm.	<ul style="list-style-type: none"> <li>• Immediate use without additional painting</li> <li>• Available in various plain color</li> <li>• Non-combustible</li> </ul>
<b>Gypsum Tile Paper Touch</b>	Gypsum Ceiling Tile covered with a paper laminate, printed in a range of design Available in 5 different patterns in size 600x600x7.5 mm.	<ul style="list-style-type: none"> <li>• Available in various patterns and colors</li> <li>• Immediate use without additional painting</li> <li>• Non-combustible</li> </ul>

**Note:** Other than the 5 types of Gypsum Ceiling Tile, there are also other Gypsum Tiles made by cutting the big Elephant Gypsum Board in to small size of 60x60 cm. and 60x120 cm. The tiles were made to put on T- Bar framing from different Gypsum Board types as follow, Gypsum Board Standard, Moisture resistant type Moist Block and Heat resistant type Heat Block.

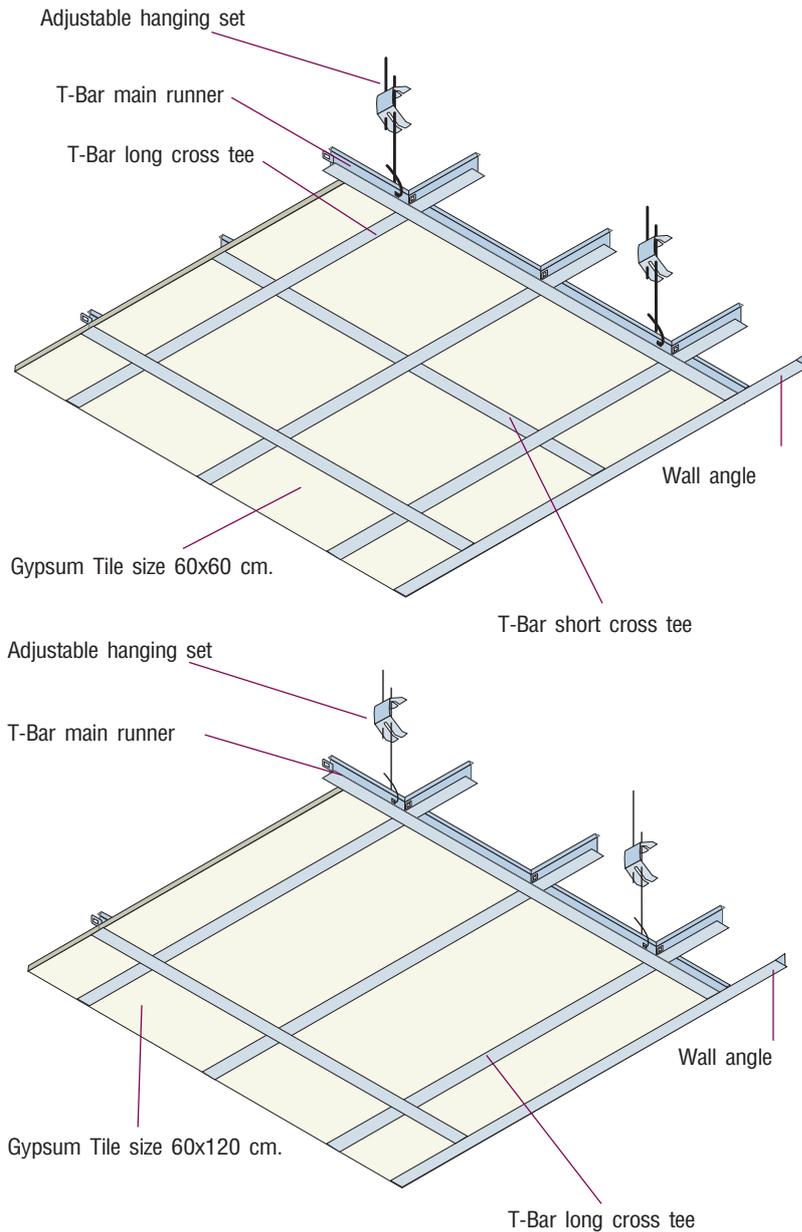
Elephant Gypsum T-Bar Ceiling is available in different system depends on quality of tiles as follow;

Ref.	System Name	Gypsum T-Bar Ceiling Used	Scope of Work
GT01	ELE' STD 9 mm 60x60 CT S#ELE32	Elephant Gypsum Board Standard T-Bar Ceiling thickness of 9 mm. size 60x60 cm. on Elephant T-Bar frame size 60.5x60.5 cm.	Use as general ceiling in any room such as office, Department store, hotel or school
GT03	ELE' STD 12 mm 60x60 CT S#ELE32	Elephant Gypsum Board Standard T-Bar Ceiling thickness of 12 mm. size 60x120 cm. on Elephant T-Bar frame size 60.5x121 cm.	Use as general ceiling in any room such as office, Department store, hotel or school
GT05	HeatBloc 9 mm 60x60 CT S#ELE32	Heat Resistant Gypsum Board T-Bar Ceiling, Heat Bloc thickness of 9 mm. size 60x60 cm. on Elephant T-Bar frame size 60.5x60.5 cm.	Use as Ceiling for room that needs extra heat protection such as room under the roof, attic
GT07	HeatBloc 12 mm 60x120 CT S#ELE32	Heat Resistant Gypsum Board T-Bar Ceiling, Heat Bloc thickness of 12 mm. size 60x120 cm. on Elephant T-Bar frame size 60.5x121 cm.	Use as Ceiling for room that needs extra heat protection such as room under the roof, attic
GT09	MoistBloc 9 mm 60x60 CT S#ELE32	Moisture Resistant Gypsum Board T-Bar Ceiling, Moist Bloc thickness of 9 mm. size 60x60 cm. on Elephant T-Bar frame size 60.5x60.5 cm.	Use as Ceiling for the area that directly face to the moisture such as bathroom, kitchen, food court and eaves
GT11	MoistBloc 12 mm 60x120 CT S#ELE32	Moisture Resistant Gypsum Board T-Bar Ceiling, Moist Bloc thickness of 12 mm. size 60x120 cm. on Elephant T-Bar frame size 60.5x121 cm.	Use as Ceiling tile for the area that often receive moisture such as bathroom, kitchen, food court and eaves
GT13	Paper Touch 7.5 mm. 60x60 CT S#ELE32	Paper Touch thickness of 7.5 mm. size 60x60 cm. on Elephant T-Bar frame size 60.5x60.5 cm.	Use as Ceiling for the area that needs pattern and beautiful decoration such as office, department store, hotel and school
GT15	Texture Touch 9 mm 60x60 CT S#ELE32	Textur Touch thickness of 9 mm. size 60x60 cm. on Elephant T-Bar frame size 60.5x60.5 cm.	Use as Ceiling for the area that needs pattern and beautiful decoration such as office, department store, hotel and school

Ref.	System Name	Gypsum T-Bar Ceiling Used	Scope of Work
GT17	Texture Touch 12 mm 60x120 CT S#ELE32	Textur Touch thickness of 12 mm. size 60x120 cm. on Elephant T-Bar frame size 60.5x121 cm.	Use as Ceiling for the area that needs pattern and beautiful decoration such as office, department store, hotel and school
GT19	Color Touch 9 mm 60x60 CT S#ELE32	Color Touch thickness of 9 mm. size 60x60 cm. on Elephant T-Bar frame size 60.5x60.5cm.	Use as Ceiling for the area that needs pattern and beautiful decoration such as office, department store, hotel and school
GT21	Color Touch 12 mm 60x120 CT S#ELE32	Color Touch on Elephant T-Bar frame size 60.5x121 cm.	Use as Ceiling for the area that needs pattern and beautiful decoration such as office, department store, hotel and school
GT23	Vinyl Touch 9 mm 60x60 CT S#ELE32	Vinyl Touch thickness of 9 mm. size 60x60 cm. on Elephant T-Bar frame size 60.5x60.5 cm.	There are beautiful patterns and it's easy to clean up, suitable for ceiling in the kitchen, food court, bathroom, examination room, laboratory
GT25	Vinyl Touch 12 mm 60x120 CT S#ELE32	Vinyl Touch thickness of 12 mm. size 60x120 cm. on Elephant T-Bar frame size 60.5x121 cm.	There are beautiful patterns and it's easy to clean up, suitable for ceiling in the kitchen, food court, bathroom, examination room, laboratory
GT27	DustFree 9 mm 60x60 CT S#ELE32	Dust-Free thickness of 9 mm. size 60x60 cm. on Elephant T-Bar frame size 60.5x60.5 cm.	Suitable for extra hygienic area with Dust free such as laboratory, manufacture, electronic manufacture, food manufacture
GT28	DustFree 12 mm 60x120 CT S#ELE32	Dust-Free thickness of 12 mm. size 60x120 cm. on Elephant T-Bar frame size 60.5x121 cm.	Suitable for extra hygienic area with Dust free such as laboratory, manufacture, electronic manufacture, food manufacture

## Elephant Gypsum T-Bar Ceiling System

Elephant Gypsum T-bar ceiling system is the combination of Elephant T-bar Framing and Elephant Gypsum Ceiling Tile. By installing T - Bar Framing underneath the roof or underneath the floor in tubular shape follow the size given, then put Gypsum Ceiling Tile on the framing by divided the tubular frame into 2 sizes follow the board size as follow; 60x60 cm. and 60x120 cm.



With the frame ridge height of 32 mm. and use of .35 mm. thickness metals folded 2 layers into T shape which made Elephant T-Bar framing strong, durable and tough. Together with the design of long cross tee size 1.2 m. use with short cross tee size 60 cm. That allows the system to be put apart as much as 1.2 m. in both 60x60 cm. size and 60x120 cm. size. It helps to save time and cost for installation of the main runner and adjustable hanging set. The front panel of the frame glazed in white color for more beautiful. Once installing different type of Gypsum Ceiling Tile on the frame, it creates a various uses and characteristic depend on the specific system.

### Composition of Elephant Gypsum T-Bar Ceiling

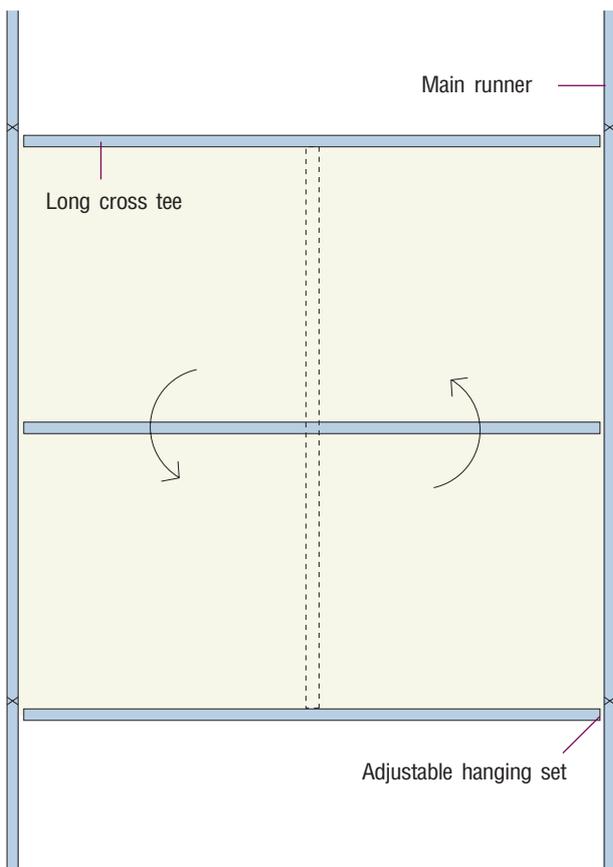
Elephant Main Runner		32x24	0.35 (2 Layer folding)	4.23
Elephant Long Cross Tee		32x24	0.35 (2 Layer folding)	1.21
Elephant Short Cross Tee		32x24	0.35 (2 Layer folding)	0.605
Elephant Wall Angle		24x24	0.45	4.0
Elephant Adjustable Hanging Set		-	-	30-60, 60-100
Expansion Bolt		4x33	-	-
Bolt Angle		27x25x27	1.5	-

## Installing Direction for Elephant T-bar Gypsum Ceiling

Marking T- Bar ceiling level around the perimeter of room and screw in wall angles.

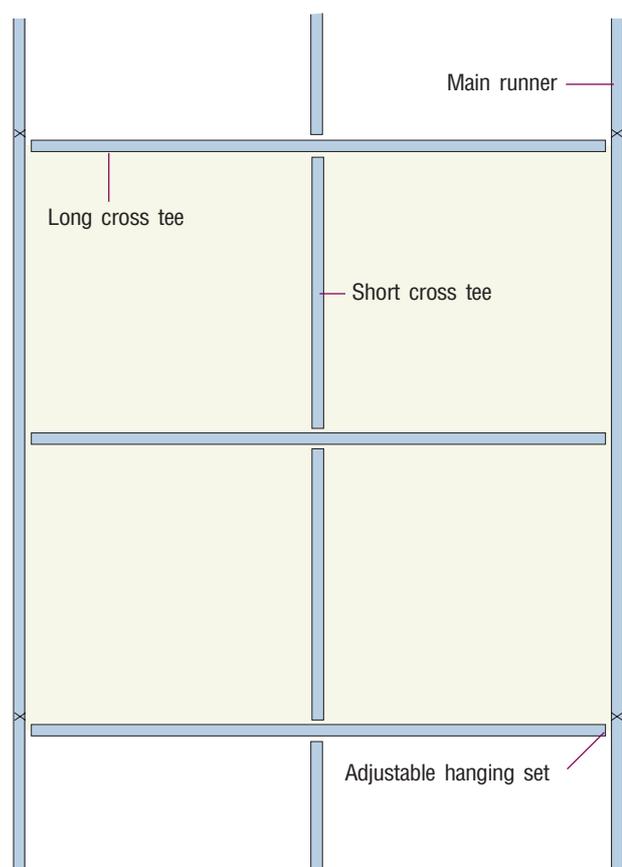
### Size 60x120 cm.

Install bolt angle and expansion bolt underneath the floor or the roof's frame in every 1.21 m. distance. Then hang Elephant Adjustable Hanging Set with the bolt angle. Hang the main runner every 1.21 m. spacing with adjustable hanging set and insert long cross tee into the slot of main runner by interlock system at 60.5 cm. interval. The frame sizing of 60.5x121 cm. will be shown, lay the Gypsum Ceiling Tile size 60x120 cm. on the frame.



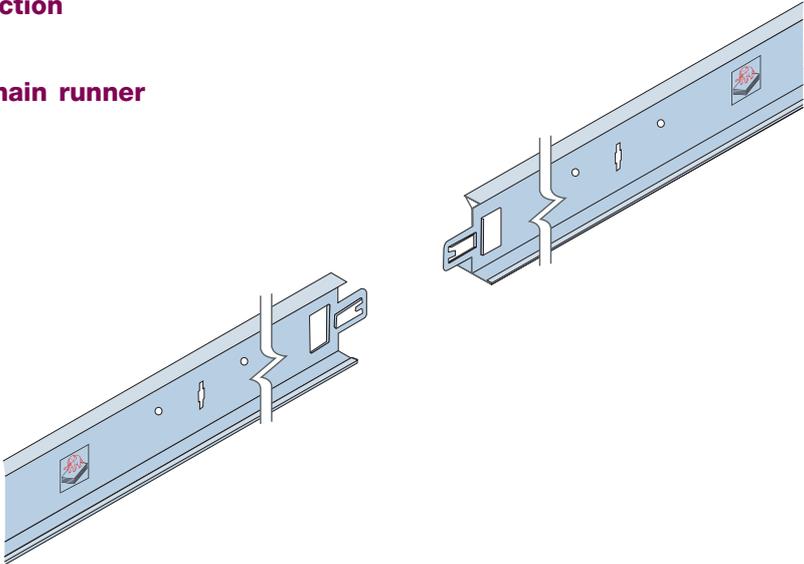
### Size 60x60 cm.

Install bolt angle and expansion bolt underneath the floor or the roof's frame in every 1.21 m. distance. Then hang Elephant Adjustable Hanging Set with the bolt angle. Hang the main runner every 1.21 m. spacing with adjustable hanging set and insert long cross tee into the slot of main runner by interlock system at 60.5 cm. interval. Insert a short cross tee in to the center of a long cross tee. The frame sizing of 60.5x60.5 cm. will be shown, lay the Gypsum Ceiling Tile size 60x60 cm. on the frame.

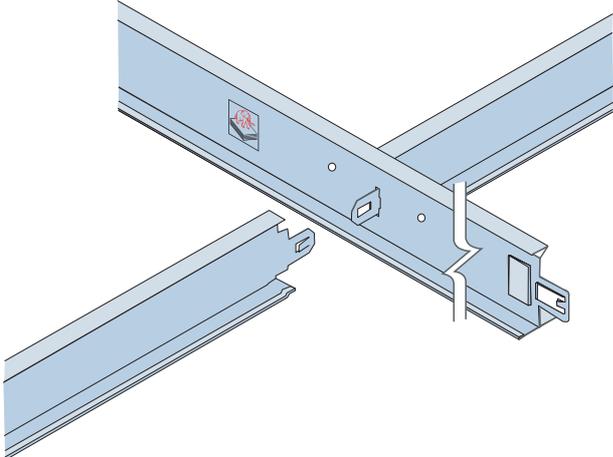


**Installation direction**

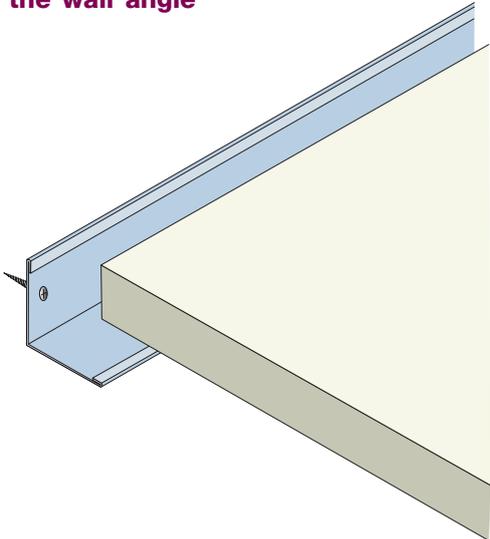
**Extending the main runner**



**Inserting the cross tee**



**Laying gypsum board on the wall angle**



## Technical Information Table

### Elephant Gypsum T-bar Ceiling System size 60x60 cm.

In all framing systems, leave the distance between each main runner at 1.21 m. The distance between each long cross tee is 60.5 cm., then insert short cross tee to the middle of long cross tee.



Ref. Code	System Name	Gypsum Ceiling Tile Used	Weight (Kg/m <sup>2</sup> )	Light Reflection (%)	CAC (dB)
GT01	ELE' STD 9 mm 60X60 CT S#ELE32	Elephant Gypsum Board Standard T-Bar Ceiling thickness of 9 mm. size 60x60 cm.	7.85	Depends on the tile's color	34
GT05	HeatBloc 9 mm 60x60 CT S#ELE32	Heat Resistant Gypsum Board T-Bar Ceiling, Heat Bloc thickness of 9 mm. size 60x60 cm.	7.85	Depends on the tile's color	34
GT09	MoistBloc 9 mm 60x60 CT S#ELE32	Moisture Resistant Gypsum Board T-Bar Ceiling, Moist Bloc thickness of 9 mm. size 60x60 cm.	9.25	Depends on the tile's color	34
GT13	PaperTouch 7.5 mm 60x60 CT S#ELE32	Paper Touch thickness of 60x60 CT thickness of 9 mm. size 60x60 cm.	7.01	80%	34
GT15	TexturTouch 9 mm 60X60 CT S#ELE32	Texture Touch thickness of 9 mm. size 60x60 cm.	7.85	91%	34
GT19	ColorTouch 9 mm 60X60 CT S#ELE32	Color Touch thickness of 9 mm. size 60x60 cm.	7.85	87%	34
GT23	VinylTouch 9 mm 60X60 CT S#ELE32	Vinyl Touch thickness of 9 mm. size 60x60 cm.	7.85	89%	34
GT27	DustFree 9mm 60x60 CT S#ELE32	DustFree thickness of 9 mm. size 60x60 cm.	7.85	89%	34

Remark: GT 27 System had pass the test of Classification of air cleanliness with Class 3 Standard ISO 146441-1 which equivalent to Class 1 in US 209 E standard

### Elephant Gypsum T-bar Ceiling System size 60x120 cm.

In all framing systems, leave the distance between each main runner at 1.21 m. The distance between each long cross tee is 60.5 cm.

Ref. Code	System Name	Gypsum Ceiling Tile Used	Weight (Kg/m <sup>2</sup> )	Light Reflection (%)	ค่า CAC (dB)
GT03	ELE' STD 12 mm 60X120 CT S#ELE32	Elephant Gypsum Board Standard T-Bar Ceiling thickness of 12 mm. size 60x120 cm.	9.53	Depends on the tile's color	37
GT07	HeatBloc 12 mm 60x120 CT S#ELE32	Heat Resistant Gypsum Board T-Bar Ceiling, Heat Bloc thickness of 12 mm. size 60x120 cm.	9.53	Depends on the tile's color	37
GT11	MoistBloc 12 mm 60x120 CT S#ELE32	Moisture Resistant Gypsum Board T-Bar Ceiling, Moist Bloc thickness of 12 mm. size 60x120 cm.	11.35	Depends on the tile's color	37
GT17	TexturTouch 12 mm 60X120 CT S#ELE32	Textur Touch thickness of 12 mm. size 60x120 cm.	9.53	91%	37
GT21	ColorTouch 12 mm 60X120 CT S#ELE32	Color Touch thickness of 12 mm. size 60x120 cm.	9.67	87%	37
GT25	VinylTouch 12 mm 60X120 CT S#ELE32	Vinyl Touch thickness of 12 mm. size 60x120 cm.	9.53	89%	37
GT28	DustFree 12 mm 60x120 CT S#ELE32	Dust-Free thickness of 12 mm. size 60x120 cm.	9.53	89%	37

Remark: GT 28 System had pass the test of Classification of air cleanliness with Class 3 Standard ISO 146441-1 which equivalent to Class 1 in US 209 E standard

**Picture showing steps of installation**



1. Determine the desired ceiling level around the room



2. Fix wall angle to the wall at the desired ceiling level with screws at every 20 cm. interval, and then hang the main runner in every 121 cm. spacing, measuring from its center point.



3. Attach adjustable hanger to upper floor or loft and leave 121x121 cm. spacing.



4. Hang the main runner with adjustable hanger then adjust the height of the main runner to be at the same level.

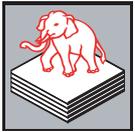


5. Insert 121 cm. long cross tee to the slot of main runner by interlock system at 60.5 cm. interval. The frame of 60.5x120 cm. will be shown.



6. Lay Gypsum Ceiling Tile on the frame, then you will get T-bar Ceiling system size 60x120 cm.

\*\* For Gypsum T-bar system size 60x60 cm., follow the instruction from 1-6 then insert 60.5 cm. short cross tee into the slot of long cross tee. The frame of 60.5x60.5 cm. will be shown and then lay the Gypsum Ceiling Tile sizing 60x60 cm. on the frame. You will get Gypsum T-bar Ceiling system size 60x60 cm.



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