

**INSTALLATION  
GUIDE**

# **MODULAR CEILING LAY-IN, CLIP-IN AND CONCEALED SYSTEMS**

©2023 Factory of USG Middle East LTD. Co. All rights reserved.  
VER. 03 2023

**USG ME**   
INNOVATIVE SOLUTIONS. EVERYTIME.



# MODULAR CEILING INSTALLATION PROCEDURE

The original and most widely used acoustical suspension system.

## CONFIDENCE WITH A CLICK

CHOOSING THE BEST CEILING FOR YOUR PROJECT CAN MAKE ALL THE DIFFERENCE. For over 30 years, USG ME has led the industry with innovations that make suspension systems easier, faster, and more reliable to install. With an unparalleled variety of choices, no matter what your ceiling needs, we have you covered.

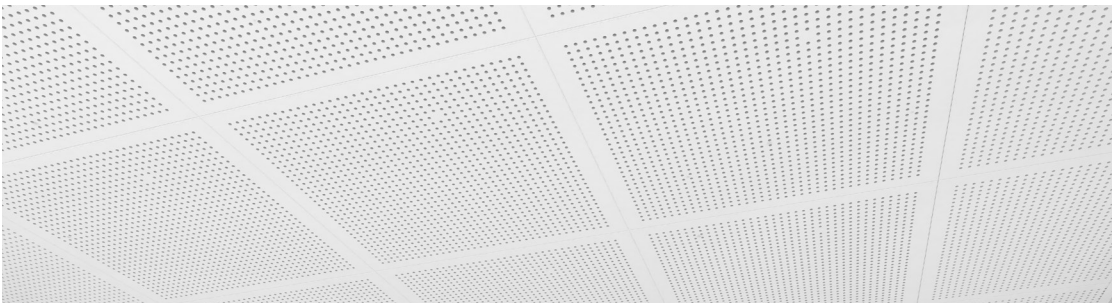
### 1. LAY-IN CEILING INSTALLATION



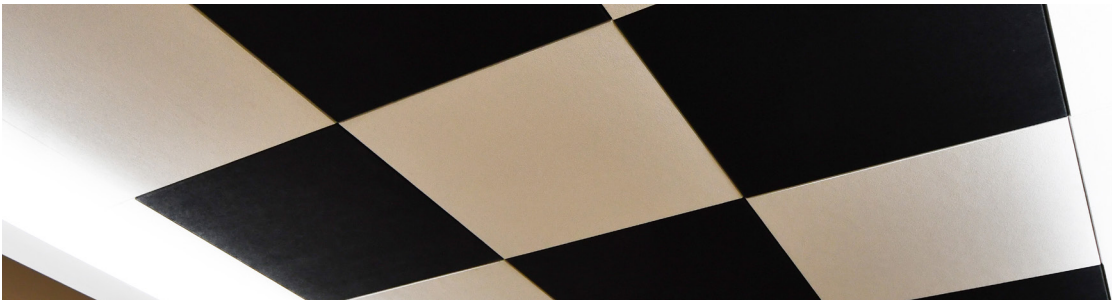
### 2. CLIP-IN CEILING INSTALLATION



### 3. D BESK CONCEALED CEILING INSTALLATION



### 4. S BESK CONCEALED CEILING INSTALLATION



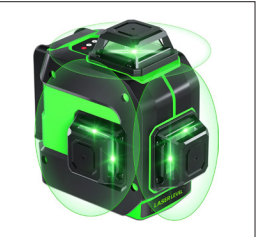
# GENERAL TOOLS REQUIRED FOR ALL CEILING TYPES



Standard Personal Protective Equipment (PPE)



Clean Protective Gloves



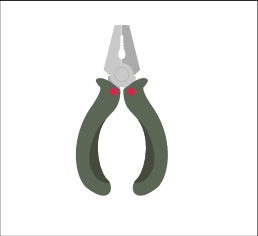
3D Laser Levelling Machine



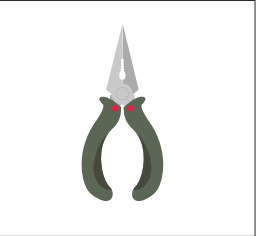
Drill Machine



Wrench Set With Spanners



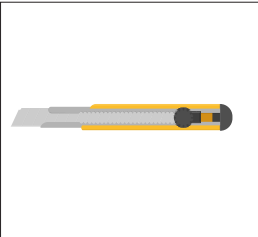
Wire Cutting Pliers



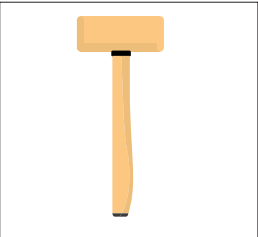
Tin Snips



Wing Compass



Utility Knife



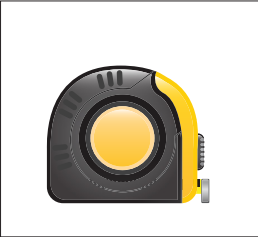
Plastic Hammer



Industrial Work Bench



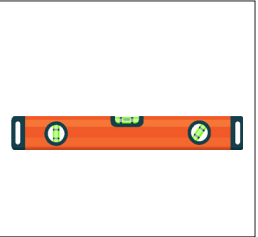
Pencil



Measuring Tape



Measuring Ruler



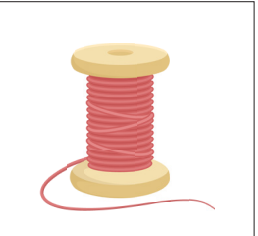
Spirit Level



Chalk Line



Straight Edge



String



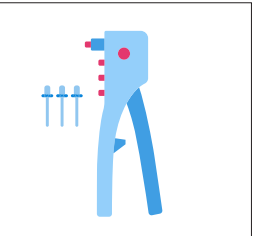
Panel Extraction Tool



Portable Grinding Machine



Nibbler Machine



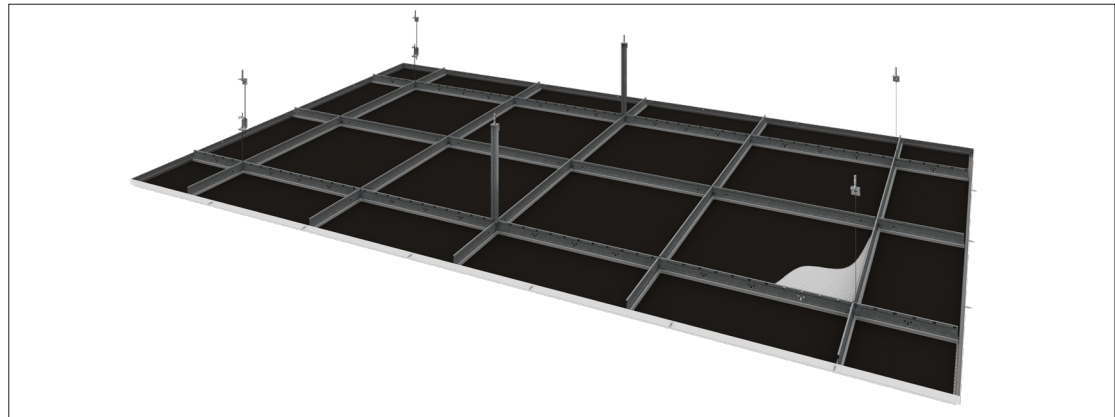
Blind Rivet Gun

## ADDITIONAL TOOLS FOR METAL CEILING INSTALLATION

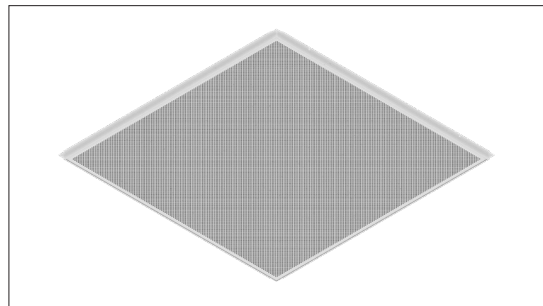
# LAY-IN CEILING INSTALLATION PROCEDURE

## LAY-IN

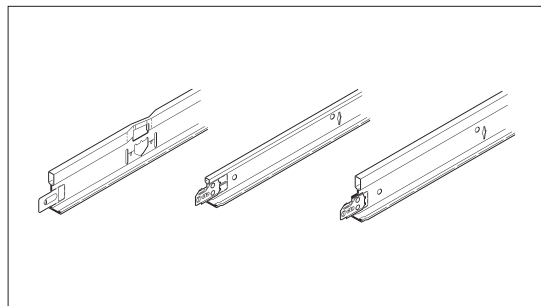
The appearance of a suspended acoustical ceiling is dependent both on the materials used and on the quality of the installation. USG ME manufactures components to meet ASTM C635 assuring that the material, structural and quality standards are as prescribed. Install according to ASTM C636, ASTM E580 and USG ME requirements, assuring proper level and secure attachment as prescribed. To ensure an impeccable installation, it's imperative to maintain cleanliness and dryness of the ceiling elements during transportation and storage, and to have a flat, level surface to prevent any potential damage. It's important to note that USG ME tiles should only be installed once all plaster and screed work is fully completed.



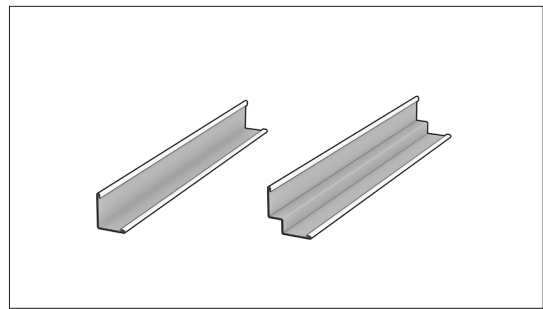
## COMPONENTS



Ceiling Tile



Main Tee, Long Cross Tee, Short Cross Tee



Perimeter Wall Angle (Shadowline Wall Angle, L Angle)

## HANGING OPTIONS



Adjustable Hanger



Suspension Wire



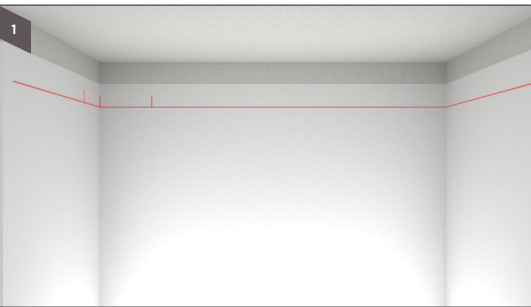
Angle Section



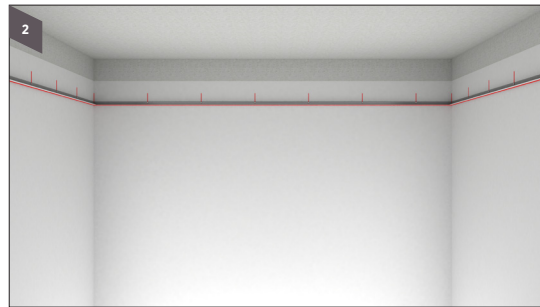
Hanging Bracket

# LAY-IN CEILING INSTALLATION PROCEDURE

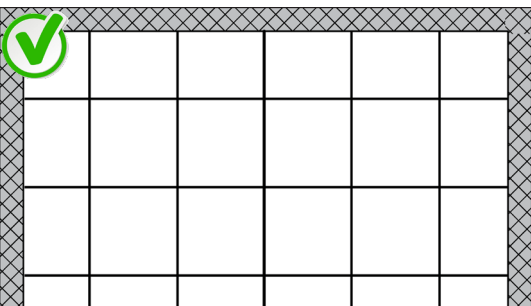
## INSTALLATION



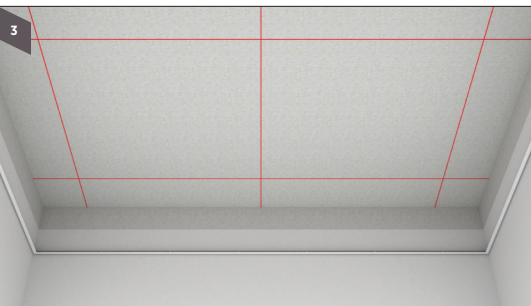
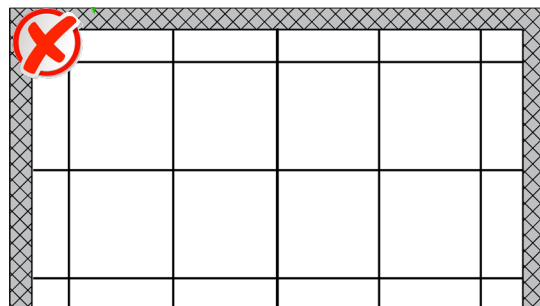
Measure the room & determine the reflected ceiling plan along with the visual layout for the ceiling. Start the layout from the room center, progressing in modules toward the perimeter based on the tile size as shown in figures 4.1 & 4.2.



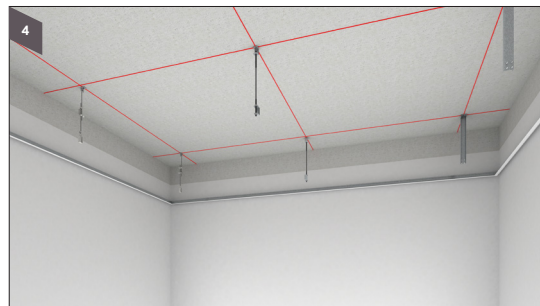
Secure the perimeter wall angle at the specified ceiling height.



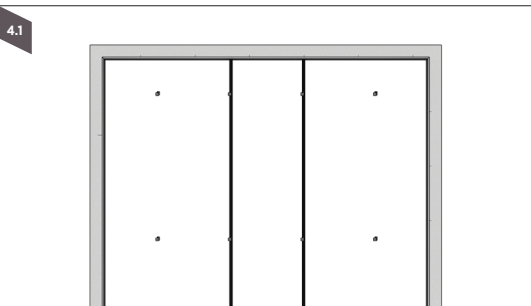
Ensure that none of the cut tiles at the perimeter are smaller than half the tile width or length to maintain an aesthetically pleasing appearance. You might need to move the grid by 1/2 module size to ensure this arrangement.



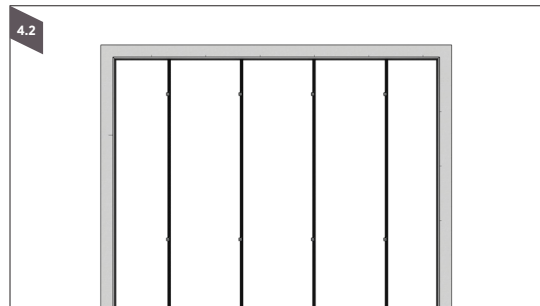
Mark and install hangers for the main profiles on the soffit according to the predetermined reflected ceiling plan spacing maximum at 1200 mm o.c using a laser for accuracy.



Fix hangers at 1200 mm o.c, requiring a minimum hanger height of 100 mm to facilitate tile installation.



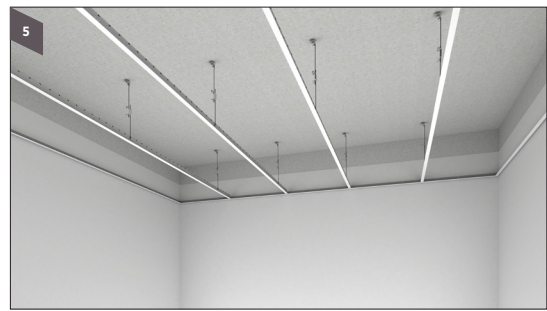
Start the layout from the center.



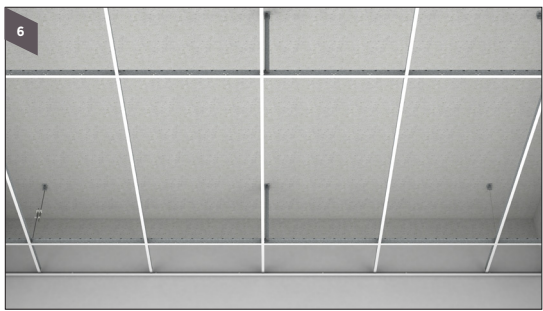
Progressing in modules towards the perimeter.



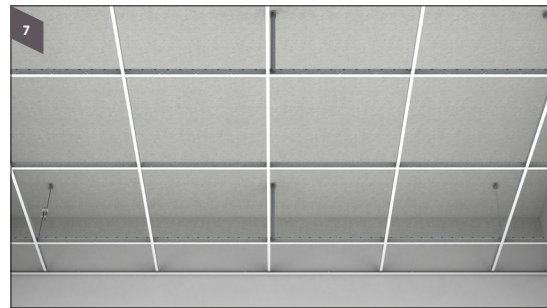
# LAY-IN CEILING INSTALLATION PROCEDURE



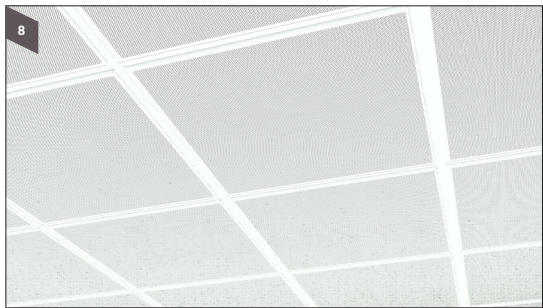
Fix the main tee at 1200 mm spacing and lay it on the wall angle.



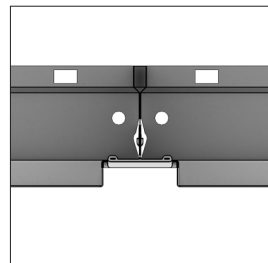
Insert the long cross tee to the main tee in place at 600 mm spacing.



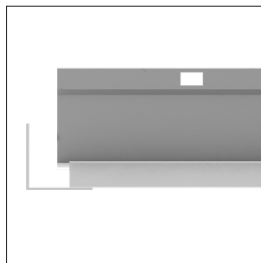
Insert the short cross tee to long tee in place.



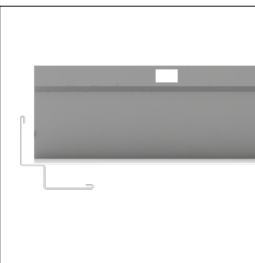
Install the ceiling tile



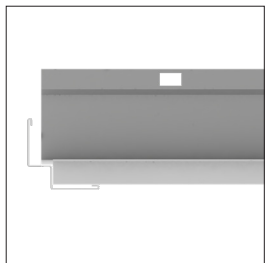
DONN® brand audible click



L-angle



Grid installation at the Shadowline Wall Angel top leg for tapered tile edge

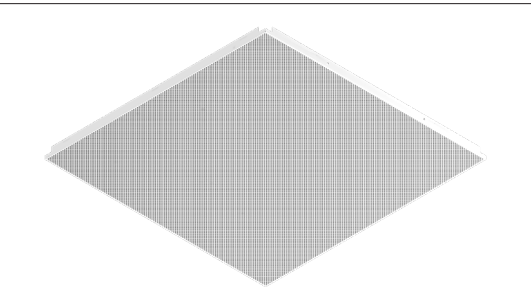


Grid installation at the Shadowline Wall Angel bottom leg for square tile edge

## CLIP-IN

# CLIP-IN CEILING INSTALLATION PROCEDURE

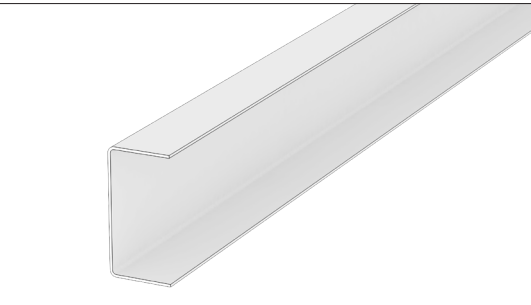
The appearance of a suspended acoustical ceiling is dependent both on the materials used and on the quality of the installation. USG ME manufactures components to meet ASTM C636, 2006 IBC (2007 CBC), Cisca Ceiling Systems Handbook, (UL Design) and any applicable code requirement, assuring that the material, structural and quality standards are as prescribed. Install according to ASTM C636, ASTM E580 and USG requirements, assuring proper level and secure attachment as prescribed. To ensure an impeccable installation, it's imperative to maintain cleanliness and dryness of the ceiling elements during transportation and storage, and to have a flat, level surface to prevent any potential damage. It's important to note that USG ME tiles should only be installed once all plaster and screed work is fully completed.



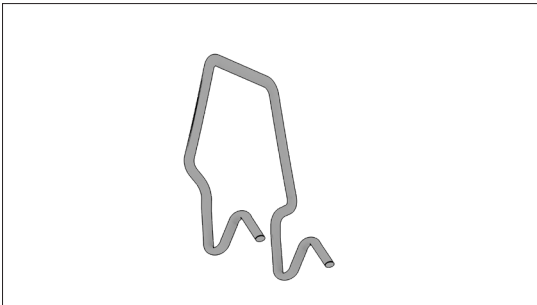
Ceiling Tile



Spring Tee



Primary Channel



Wire Connecting Clip- WCC

## HANGING OPTIONS



Adjustable Hanger



Suspension Wire



Angle Section

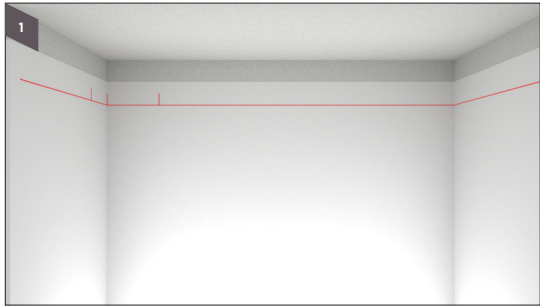


Hanging Bracket

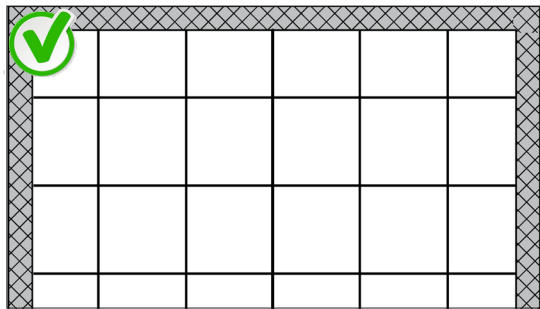


# CLIP-IN CEILING INSTALLATION PROCEDURE

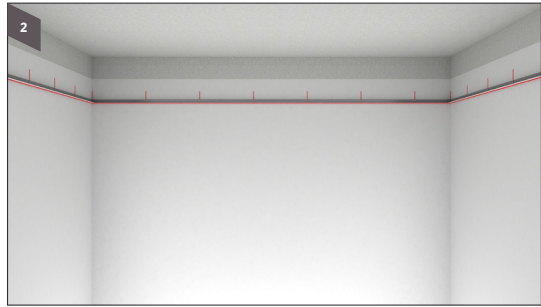
## INSTALLATION



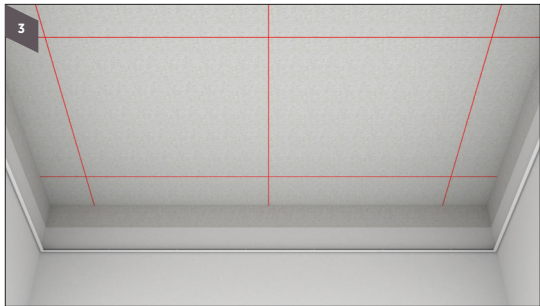
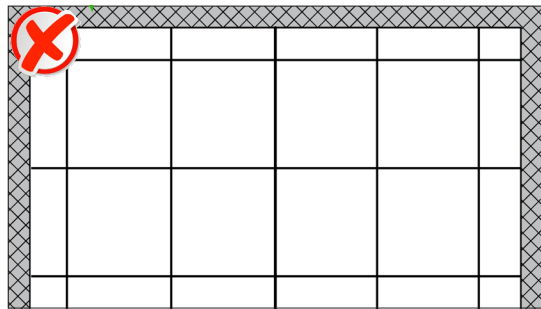
Measure the room & determine the reflected ceiling plan along with the visual layout for the ceiling. Start the layout from the room center, progressing in modules towards the perimeter based on the tile size as shown in figures 4.1 & 4.2.



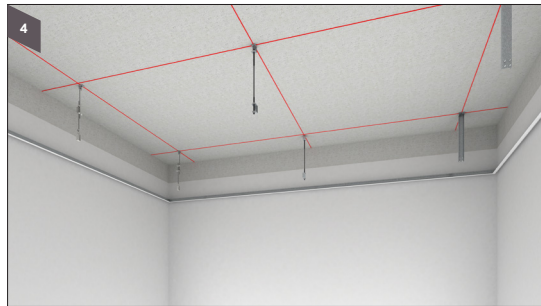
Ensure that none of the cut tiles at the perimeter are smaller than half the tile width or length to maintain an aesthetically pleasing appearance. You might need to move the grid by ½ module size to ensure this arrangement.



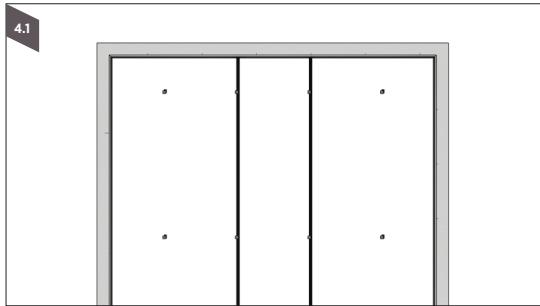
Secure the perimeter wall angle at the specified ceiling height.



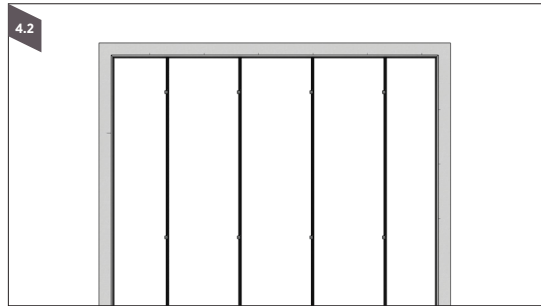
Mark and install hangers for the main profiles on the soffit according to the predetermined reflected ceiling plan spacing maximum at 1200 mm o.c using a laser for accuracy.



Fix hangers at 1200 mm o.c, requiring a minimum hanger height of 100 mm to facilitate tile installation.



Start the layout from the center.



Progressing in modules towards the perimeter.

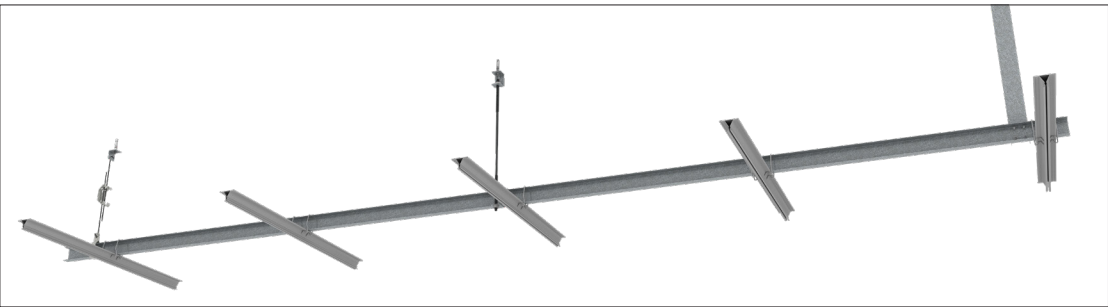
# CLIP-IN CEILING INSTALLATION PROCEDURE



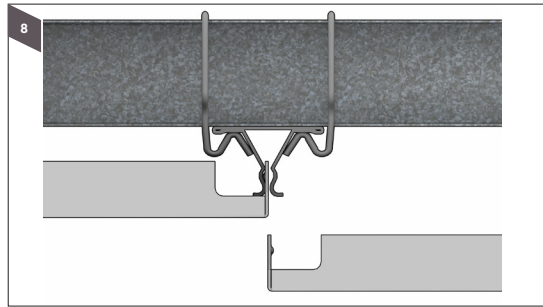
Fix the primary channel at 1200 mm spacing



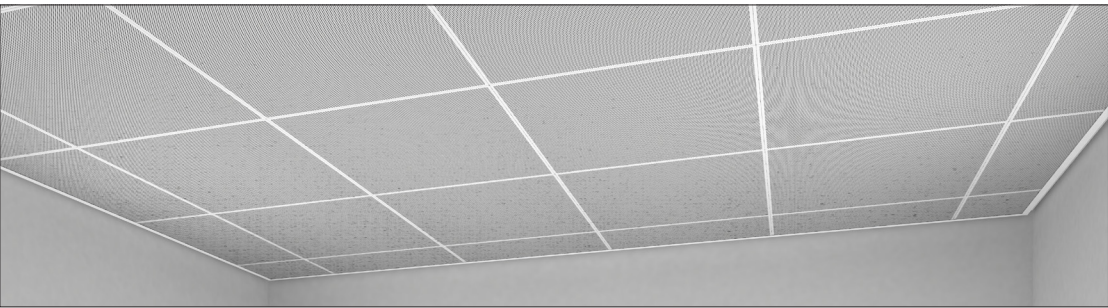
Hang the wire connecting clip WCC to the primary channel



Connect the spring tee to the primary channel at 600 mm spacing using wire connecting clip WCC



Insert the clip-in panel into the exposed spring tee



## Important Tips:

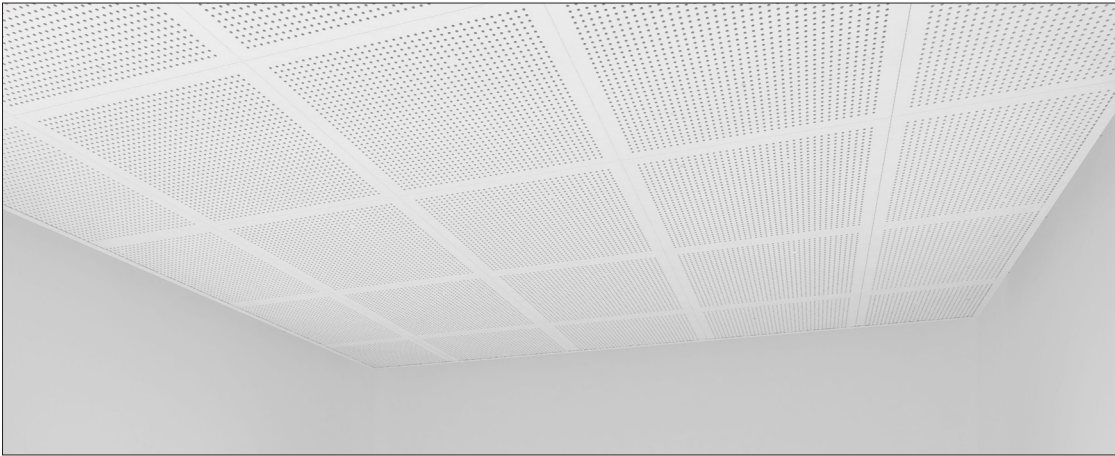
- Ensure that the ceiling grid is level and straight throughout the installation process.
- Always use safety gear such as gloves and eye protection when handling the metal ceiling components.
- Cut the metal ceiling panels with the appropriate tools to ensure clean cuts and prevent damage to the panels.
- Do not apply excessive force when inserting the clip in the panel as this may cause damage to the ceiling components.



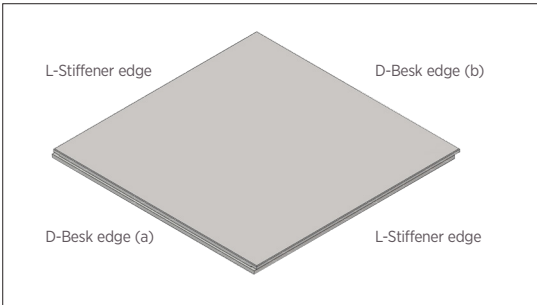
# D BESK CONCEALED CEILING INSTALLATION PROCEDURE

## D BESK CONCEALED

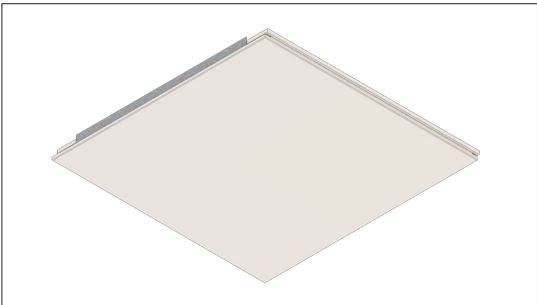
The D Besk concealed system boasts a sleek, monolithic aesthetic achieved through the use of concealed ceiling profiles. The ceiling tiles come in demountable option, catering to various construction preferences. Depending on specific needs, the ceiling void can be made retrospectively accessible or permanently sealed. Every component in USG ME's D Besk concealed system is designed for individual demounting. To ensure an impeccable installation, it's imperative to maintain cleanliness and dryness of the ceiling elements during transportation and storage, and to have a flat, level surface to prevent any potential damage. It's important to note that USG ME tiles should only be installed once all plaster and screed work is fully completed.



## D BESK CONCEALED MINERAL FIBER

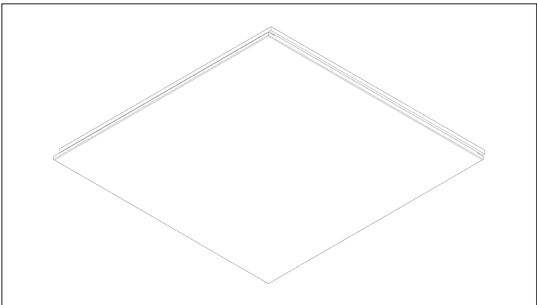


Top view



Bottom view: To preserve tile stability and prevent warping, fix L-Stiffener inside the mineral fiber slot.

## D BESK CONCEALED SOFT FIBER

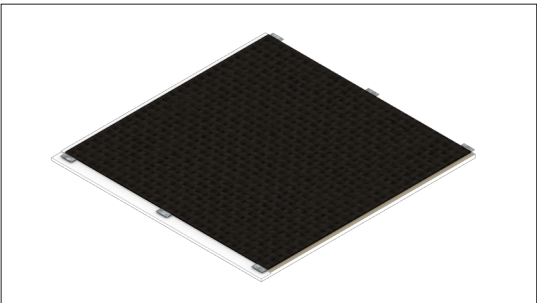


Top view

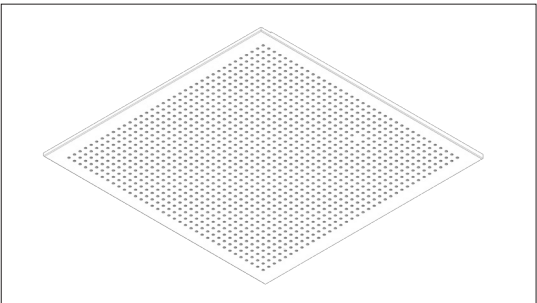


D Besk concealed section.

## CONCEALED GYPSUM TILE



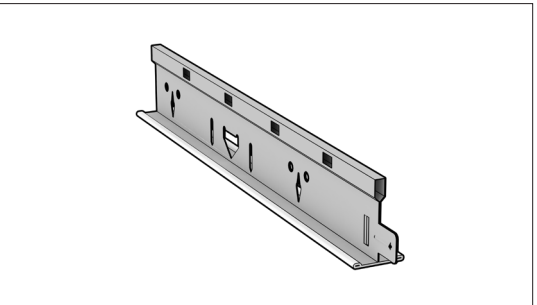
Top view



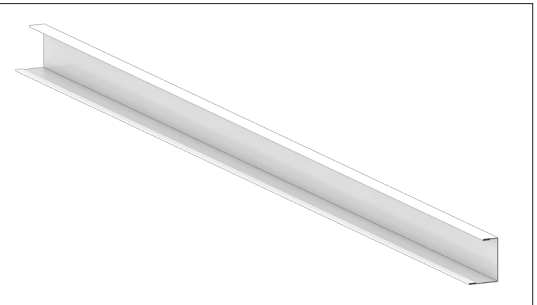
Bottom view

# D BESK CONCEALED CEILING INSTALLATION PROCEDURE

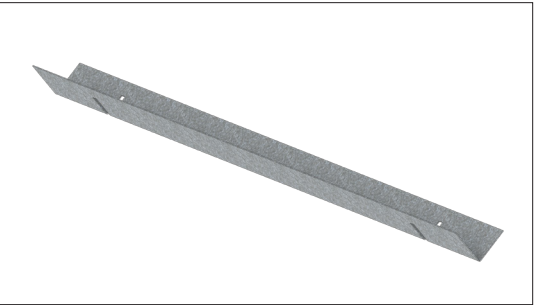
## COMPONENTS



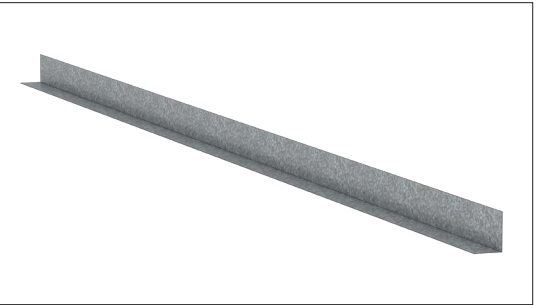
Main Tee



U-trim



Stabilizer Bar



L-stiffener: required for D Besk Mineral Fiber tiles only and is not required for Soft Fiber or Gypsum Tiles.



Butterfly Clip

## HANGING OPTIONS



Adjustable Hanger



Suspension Wire



Angle Section

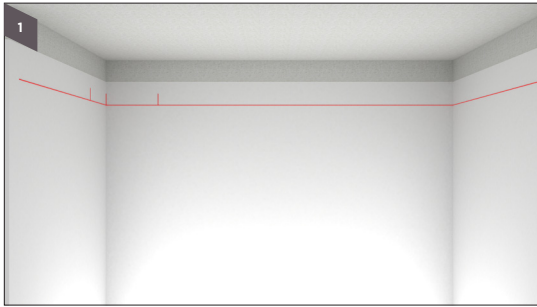


Hanging Bracket

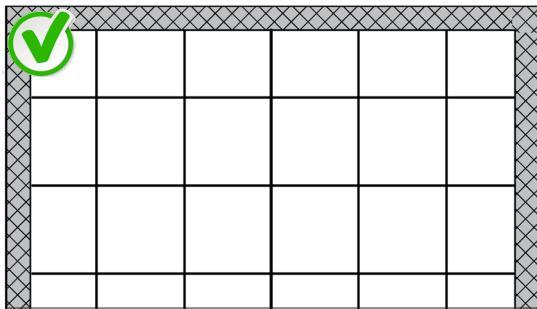


# D BESK CONCEALED CEILING INSTALLATION PROCEDURE

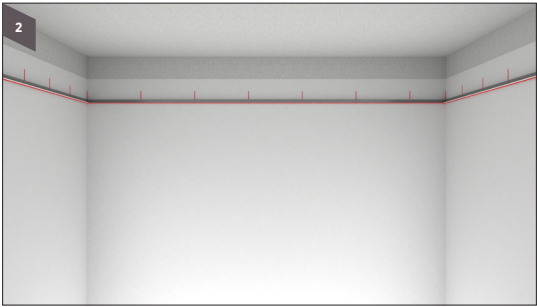
## INSTALLATION



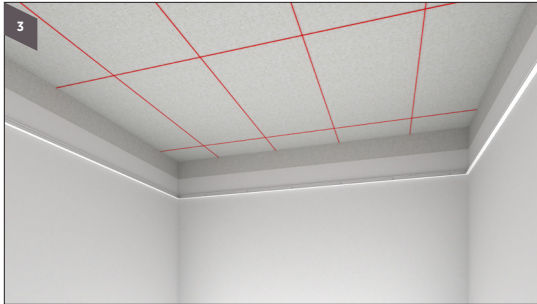
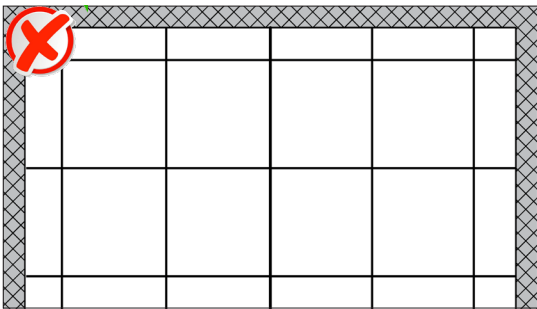
Measure the room & determine the reflected ceiling plan along with the visual layout for the ceiling. Start the layout from the room center, progressing in modules towards the perimeter based on the tile size as shown in figures 4.1 & 4.2.



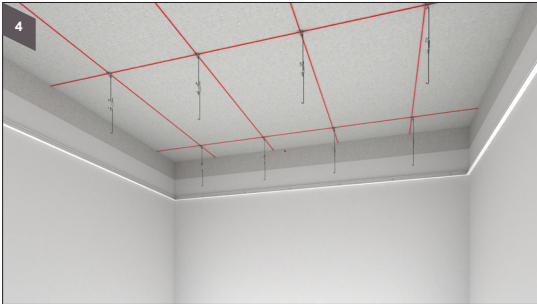
Ensure that none of the cut tiles at the perimeter are smaller than half the tile width or length to maintain an aesthetically pleasing appearance. You might need to move the grid by ½ module size to ensure this arrangement.



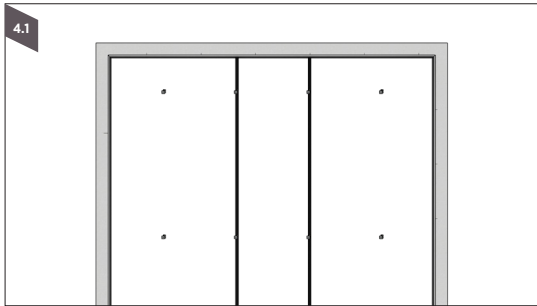
Secure the perimeter wall angle at the specified ceiling height.



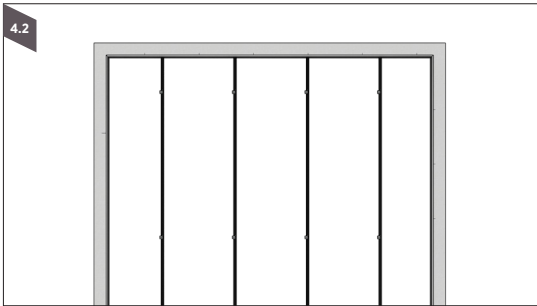
Mark and install hangers for the main profiles on the soffit according to the predetermined reflected ceiling plan spacing maximum at 600 mm o.c using a laser for accuracy.



Fix hangers at 600 mm o.c, requiring a minimum hanger height of 100 mm to facilitate tile installation.



Start the layout from the center.

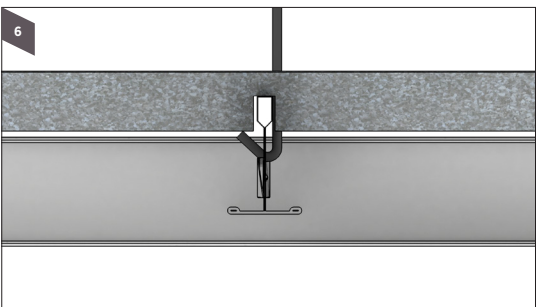


Progressing in modules towards the perimeter.

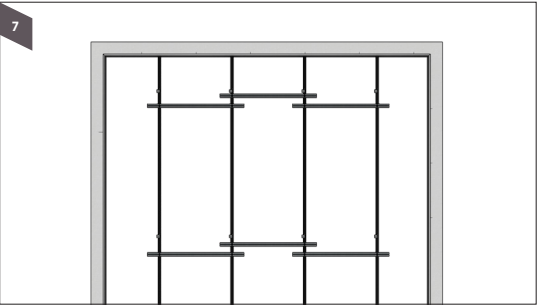
# D BESK CONCEALED CEILING INSTALLATION PROCEDURE



Install the main tee profiles at 600 mm spacing, positioning them higher than the lower leg of the perimeter U trim as shown in diagram #8.



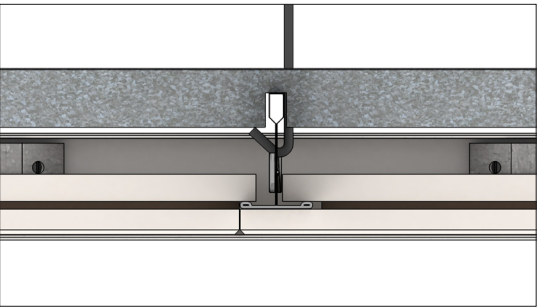
Position the main tee higher than lower leg of the perimeter U trim by 10 mm to perfectly fit the tile inside the U trim for concealed appearance.



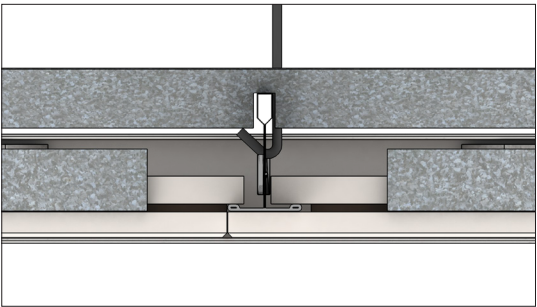
Use a stabilizer bar at intervals of 1200 mm to fix the main runners. Ensure the stabilizer bars are placed adjacent to the hangers, allowing every second tile to remain passable.



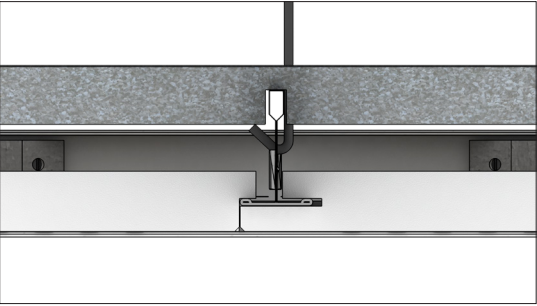
Start tile installation starting from the center of the room towards the perimeter. Progress row by row until the ceiling is fully installed.



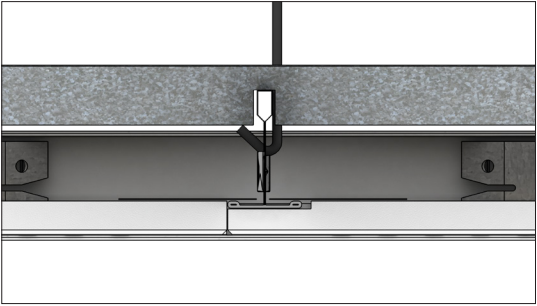
Section of D Besk mineral fiber tiles installation on the U trim without L-Stiffener.



Section of D Besk mineral fiber tiles installation on the U trim with L-Stiffener.



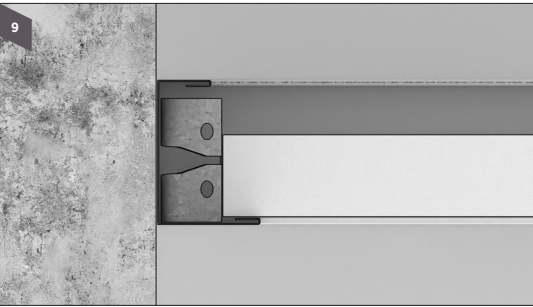
Section of D Besk soft fiber tiles installation on the U trim.



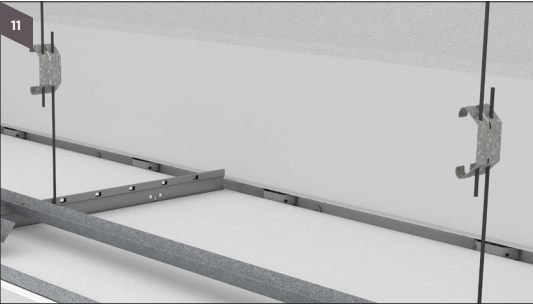
Section of the concealed gypsum tiles installation on the U trim.



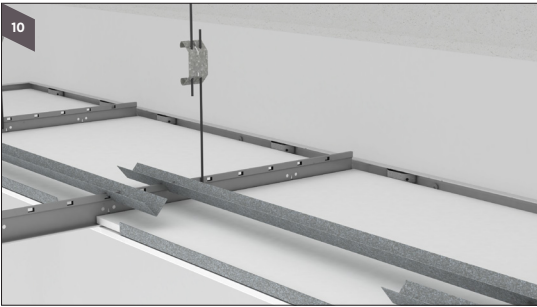
# D BESK CONCEALED CEILING INSTALLATION PROCEDURE



If the room requires cut-tiles at the perimeter, cut the tiles to be 10 mm smaller than the clearance between the tile and the wall.



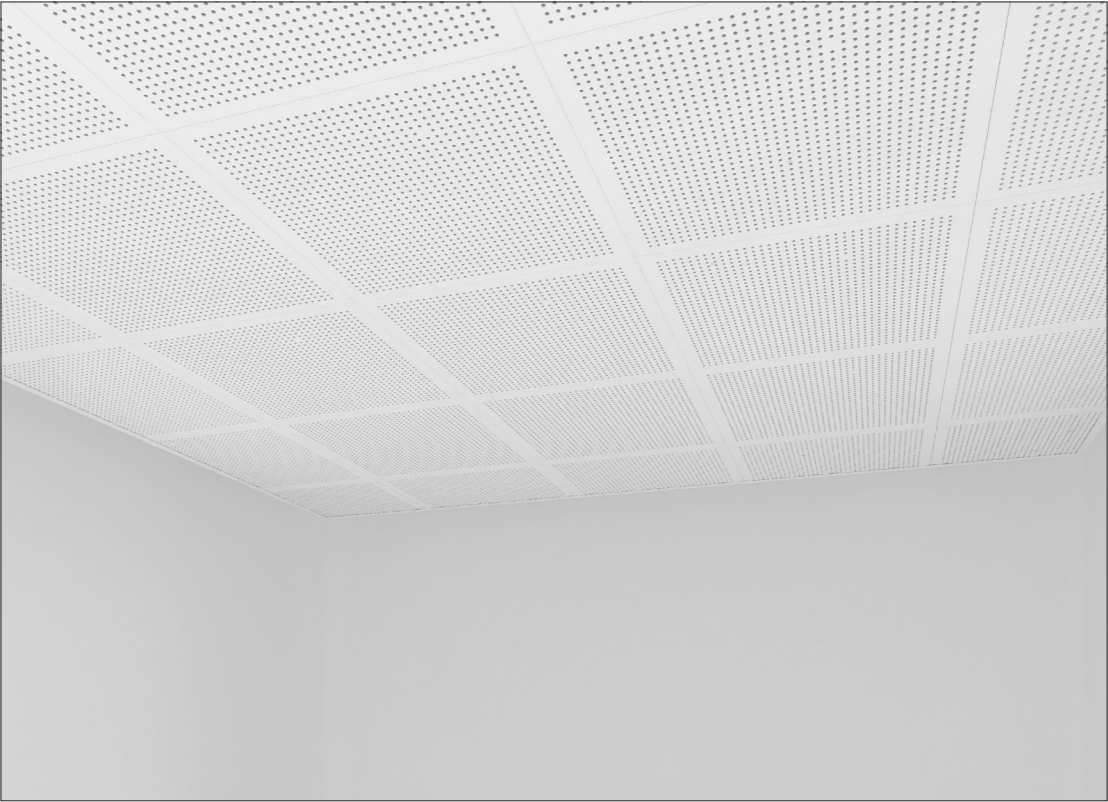
Method of fixing the butterfly clips and the stabilizer bar.



Secure all perimeter tiles with U-Trim using butterfly clips, which will function as springs to push the tiles towards the grid.



Individually demount each tile in this system for maintenance. To remove any tile, slightly raise the tiles on one side until they can be slid off the main profile.

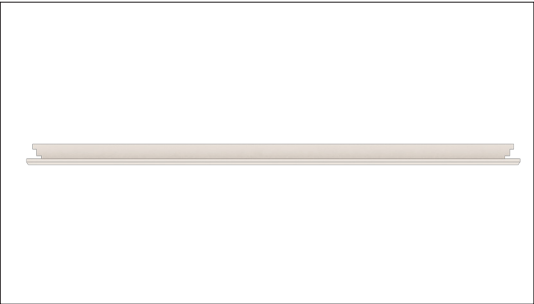
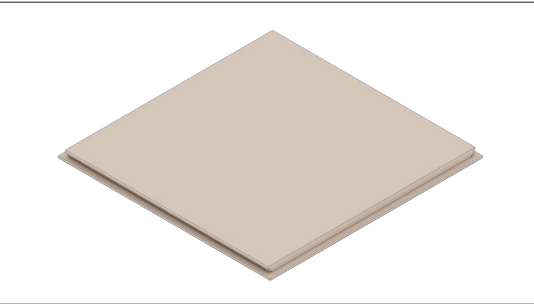


# S BESK CONCEALED CEILING INSTALLATION PROCEDURE

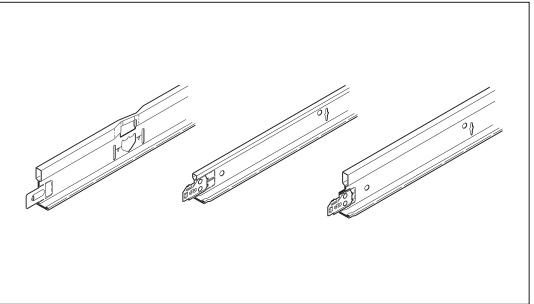
## S BESK CONCEALED

The S Besk concealed system boasts a sleek, monolithic aesthetic achieved through the use of concealed ceiling profiles. The ceiling tiles come in demountable option, catering to various construction preferences. Depending on specific needs, the ceiling void can be made retrospectively accessible or permanently sealed. Every component in USG ME's S Besk concealed system is designed for individual demounting. To ensure an impeccable installation, it's imperative to maintain cleanliness and dryness of the ceiling elements during transportation and storage, and to have a flat, level surface to prevent any potential damage. It's important to note that USG ME tiles should only be installed once all plaster and screed work is fully completed.

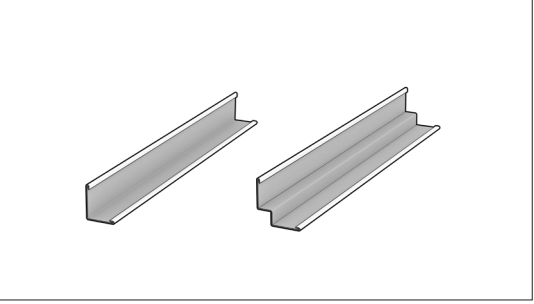
## COMPONENTS



S BESK tiles are available in Soft Fiber, which come in a standard size of 600x600 mm with a thickness of 25 mm, and installed using the Donn® T24 grid system.



Main Tee, Long Cross Tee, Short Cross Tee



Perimeter Wall Angle (Shadowline Wall Angle, L Angle)

## HANGING OPTIONS



Adjustable Hanger



Suspension Wire

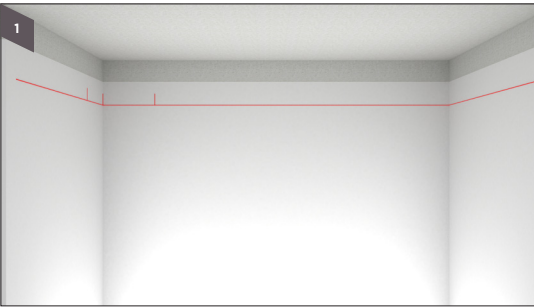


Angle Section

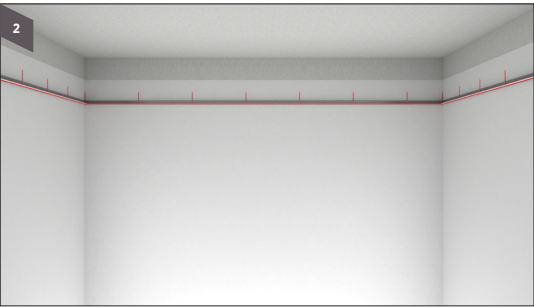


Hanging Bracket

## INSTALLATION



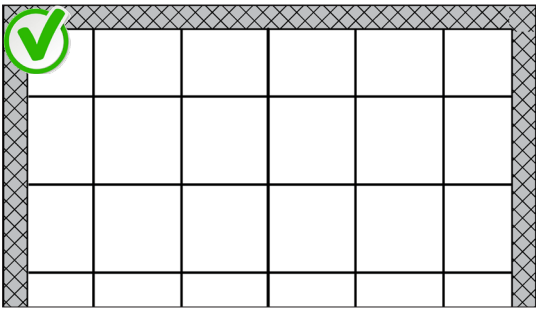
Measure the room & determine the reflected ceiling plan along with the visual layout for the ceiling. Start the layout from the room center, progressing in modules towards the perimeter based on the tile size as shown in figures 4.1 & 4.2.



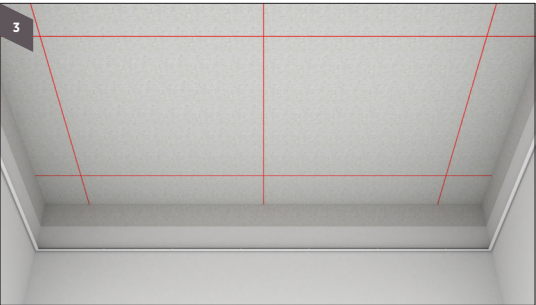
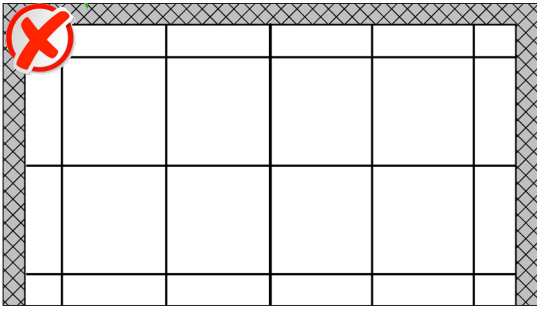
Secure the perimeter wall angle at the specified ceiling height.



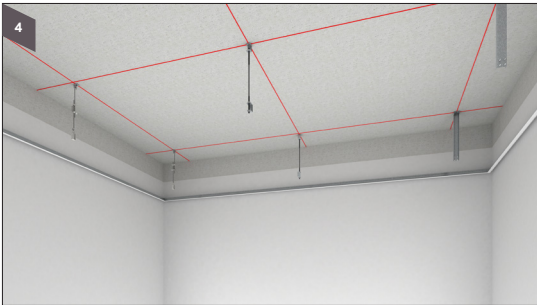
# S BESK CONCEALED CEILING INSTALLATION PROCEDURE



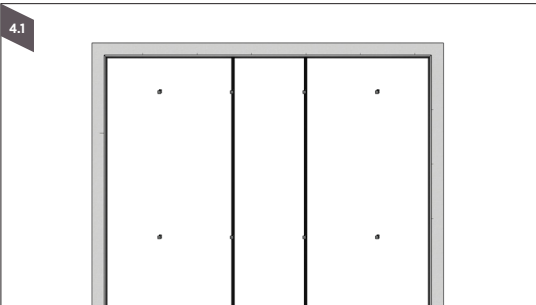
Ensure that none of the cut tiles at the perimeter are smaller than half the tile width or length to maintain an aesthetically pleasing appearance. You might need to move the grid by ½ module size to ensure this arrangement.



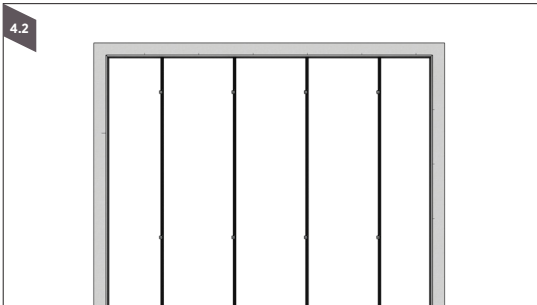
Mark and install hangers for the main profiles on the soffit according to the predetermined reflected ceiling plan spacing maximum at 1200 mm o.c using a laser for accuracy.



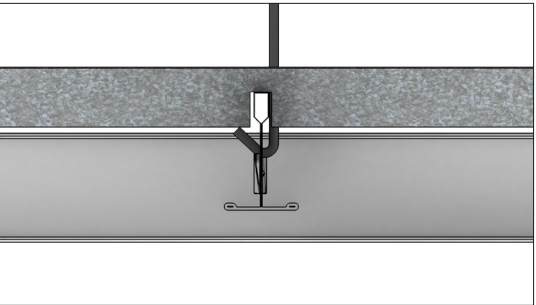
Fix hangers at 1200 mm o.c, requiring a minimum hanger height of 100 mm to facilitate tile installation.



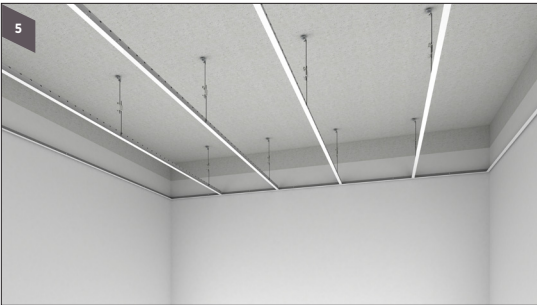
Start the layout from the center.



Progressing in modules towards the perimeter.

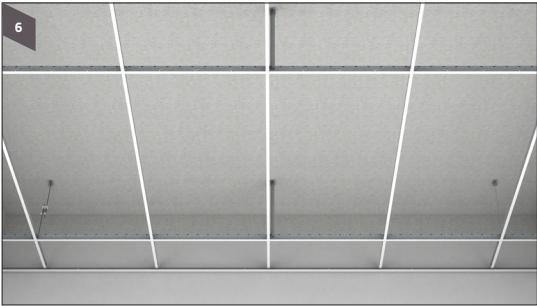


Position the main tee higher than lower leg of the perimeter wall angle.



Fix the main tee at 1200 mm spacing and lay it on the wall angle.

# S BESK CONCEALED CEILING INSTALLATION PROCEDURE



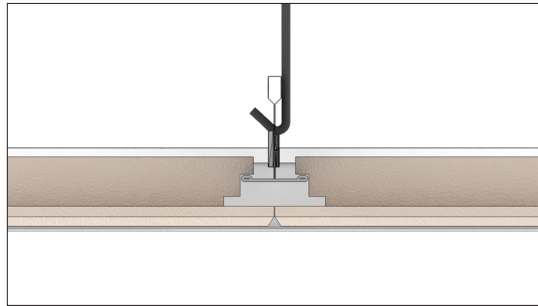
Insert the long cross tee to main tee in place at 600 mm spacing.



Insert the short cross tee to long tee in place.



Install the S Besk tile.  
Individually demount each tile in this system for maintenance.  
To remove any tile, slightly raise the tiles on one side until they can be slid off the main profile.



S Besk section.







**SEE US ON LINKEDIN**  
[/usgme](#)



**FIND US ON FACEBOOK**  
[/usgme](#)



**FOLLOW US ON INSTAGRAM**  
[/usg\\_me](#)



**FOLLOW US ON TWITTER**  
[/usg\\_me](#)



**SEE US ON YOUTUBE**  
[/USG Middle East](#)



**MESSAGE US ON WHATSAPP**  
[/+966 92 003 5672](#)

**FACTORY OF USG MIDDLE EAST LTD. CO.**

7410 (Wasil), Street #23, Cross 76  
2nd Industrial City, Dammam 34326-4201  
Kingdom of Saudi Arabia

**CUSTOMER SERVICE**

t +966 13 812 0995  
f +966 13 812 1029  
[info@usgme.com](mailto:info@usgme.com)  
[www.usgme.com](http://www.usgme.com)

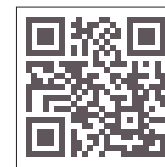
**WEBSITE**

[www.usgme.com](http://www.usgme.com)



**WHATSAPP**

+966 92 003 5672



**USG ME**   
INNOVATIVE SOLUTIONS. EVERYTIME.