

GUSTAFS LINEAR SYSTEM (GLS)
CEILING-CD DEMOUNTABLE
GUSTAFS LINEAR RIBS

A RIB-SYSTEM WITH MANY UNIQUE BENIFITS

Our products are based on a fibre gypsum core which has very good properties regarding both fire safety and acoustics. The gypsum rib is non-sensitive to changes in temperature and humidity which in turn maintains the ribs' linearity over time. All together, this contributes to a RIB-system suited for applications not only in large areas but also in a wide variety of demanding situations.


FIBRE GYPSUM CORE

Our ribs are based on a fibre gypsum core which has excellent properties regarding dimension stability, impact resistance, fire safety and acoustics, qualities which effectively eliminate most traditional wood-based choices. Altogether, this results in a rib suited for large areas and a wide variety of demanding situations.


FORM STABILITY

Gustafs Linear Ribs with a Fibre Reinforced Gypsum Core, in combination with our unique Capax installation system, guarantees real dimension stability, resulting in 100% straight aligned Ribs over their full lifetime, regardless humidity and temperature changes.


UNIQUE INSTALLATION

The patented Ceiling-CD system provides an installation that is quick, concealed and demountable.


STABILITY

Wood based ribs will show bulging or shrinkage when humidity and temperature change. A fiber gypsum rib is considerably less susceptible to these effects. Over time this will result in a planer and more linear installation.


INSTALLATION

All Gustafs Linear solutions are installed with an extremely user-friendliness provided by the Capax Quick-Up concept, with interlocking components, eliminating the need for tools and offering a truly demountable installation.


SUSTAINABILITY

Using a fiber gypsum core naturally results in extremely low emissions and a very high rate of recycled content. Being located in Sweden gives us the opportunity to produce with renewable power sources only.


FIRE

The high density non-flammable core and the surface veneer's strongly bound adhesion to the fiber gypsum rib give our ribs the classification "Reaction to fire B-s1,d0."


ACOUSTICS

The Ceiling-CD system results in absorption class B using a 12 mm and an outstanding class A using 22 mm spacings. The three-dimensional shape of the ribs will also act like a sound diffuser.

GUSTAFS LINEAR RIBS

Surfaces - freedom in design



VENEER

Wood has a natural variation in structure and colour tone which ages in harmony with nature. The fact that wood is a natural material is an intrinsic aspect of its charm and attraction. It goes without saying that we do our utmost to fulfill requests for other veneers. We offer two choices of genuine veneer, NATURE and GEMINI.



LACQUER & GLOSS

Prior to delivery the ribs are given a resilient and attractive surface finish. A clear lacquered finish is by far the most common maintenance-free and durable finish for wooden surfaces. Utilizing a multi-stage lacquering process, our surface finish achieves these demands while aspiring to maintain technical aspects such as our fire retardation and environmental goals.



PIGMENTED

You can also apply pigmented lacquers or stain the veneer to achieve different effects on your wall or ceiling. Different veneers react differently to certain treatments so contact us to guarantee that the final result matches your vision.

A pigment can be used to change the colour tone of the veneer on Gustafs Ribs.



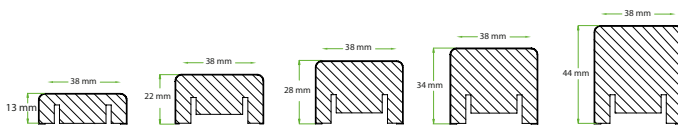
PAINTED

Some surfaces are very highly demanding. Among the many advantages of a Gustafs Rib is its plane and even surface. This enables us to create a painted surface finish which otherwise is extremely difficult to achieve on site. Utilizing our production technology we can produce painted surfaces in a multitude of colors in accordance with for example NCS or RAL codes.

CUSTOMIZED STANDARD

Engineered for endless possibilities

RIB-R THAT CAN BE USED WITH THE CELING-CD SYSTEM

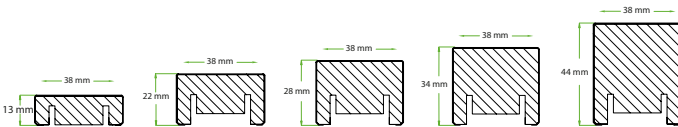


The concept of the Gustafs Linear System is rather to be considered as a customized standard. Many parameters can be adjusted individually before losing the advantages of a standard solution.

YOU CAN VARY

- Core
- Veneer
- Colour
- Spacing
- Dimensions
- Open or closed spacings
- Coloured spacings

RIB-S THAT CAN BE USED WITH THE CELING-CD SYSTEM



Gustafs Linear System can also be used in curved installations. We can assist you with your design wishes and help provide the rib solution with your own personal touch.

The 38 mm wide Gypsum core ribs are available in five thicknesses for use with ceiling-CD; 44 mm, 34 mm, 28 mm, 22 mm and 13 mm. Using our standard installation method, the space between the ribs is 12 or 22mm. You can also combine different rib dimensions.

NOTE: For use with the ceiling-CD system use, the maximum dimension is 44x38 (TxW) for a CC 50 mm installation.

GUSTAFS ACOUSTIC LINEAR RIBS

Type	Rib Spacing	Slott length (D)	Rib Width	Open area	α_w	NRC	Hz						Installation Description			
							125	250	500	1000	2000	4000	Use	Insulation	Air Void	Total Depth
Linear Rib	12 mm	∞	38 mm	24%	0,70-C	0,80	0,30	0,90	1,00	0,75	0,60	0,65	Wall	45 mm	30 mm	103 mm
Linear Rib	12 mm	∞	38 mm	24%	0,65-C	0,70	0,05	0,35	0,90	0,90	0,70	0,65	Wall	17 mm	0 mm	45 mm
Linear Rib	12 mm	∞	38 mm	24%	0,70-C	0,80	0,50	0,95	0,85	0,75	0,60	0,65	Ceiling	45 mm	200 mm	273 mm
Linear Rib	12 mm	∞	38 mm	24%	0,80-B	0,80	0,40	0,80	0,80	0,80	0,80	0,80	Ceiling-CD	15 mm	200 mm	243 mm
Linear Rib	22 mm	∞	38 mm	38%	0,85-B	0,90	0,15	0,60	1,00	1,00	1,00	0,75	Wall	17 mm	30 mm	75 mm
Linear Rib	22 mm	∞	38 mm	38%	0,90-A	0,90	0,40	0,80	0,85	0,90	0,95	0,80	Ceiling-CD	15 mm	200 mm	243 mm
Linear Rib	62 mm	∞	38 mm	62%	0,95-A	1,00	0,35	0,95	1,00	1,00	0,95	0,75	Ceiling	45 mm	200 mm	273 mm

CEILING-CD DEMOUNTABLE



GUSTAFS LINEAR SYSTEM - CEILING CD

DEMOUNTABLE CEILING SYSTEM

EASY ENTRY QUICK INSTALLATION

The snap fixation clips are easily entered into the extra large fixation holes in the BASE-CD profile. Normally 5 clips are used on 2400 mm long ribs, and all 5 clips will easily and simultaneously find the fixation holes.

SIMPLE IN-LINE ADJUSTING

As the fixation holes are 4 times longer than the fixations clips in the same length direction as the ribs, the length position of the rib is easily adjusted for perfect and almost invisible in-line joints.

DEMOUNTING & REMOUNTING

For easy access to the ancillary systems the ribs can be demounted and remounted over and over again, without the need of any tooling. The extra large fixation holes make the re-entering process as easy and quick as the first installation.

No tools needed

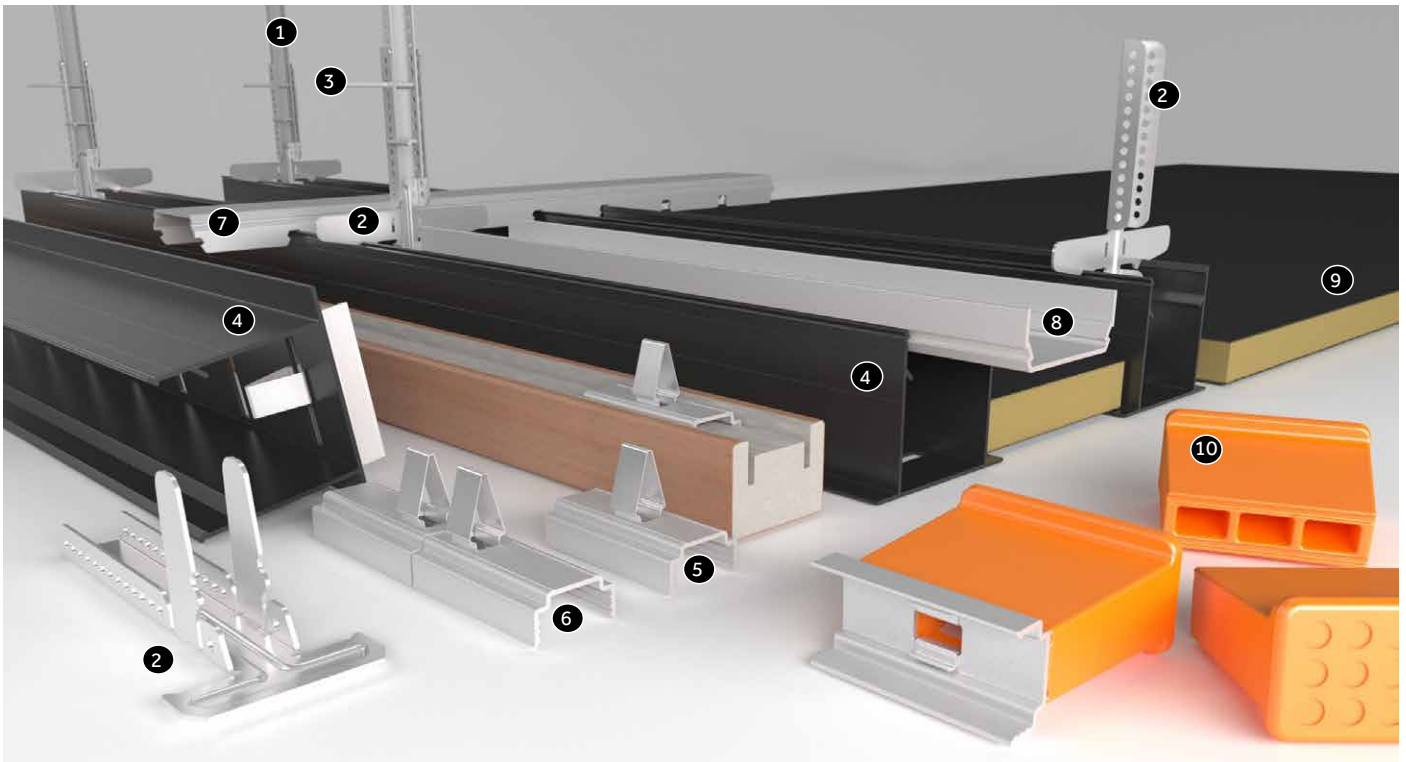
The ribs are simply demounted by either a twisting movement or a shearing movement, or a combination of both. This is done by hand and no tools are needed.

Re-install multiple times

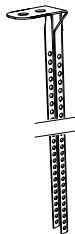
The system is designed for unlimited re-installations over its full life time. This is assured by the design and the materials chosen for the parts providing this unique snap mechanism.



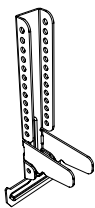
CEILING-CD DEMOUNTABLE



THE PARTS



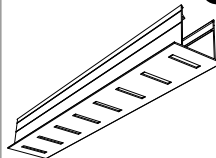
- 1 NONIUS-HANGER**
Ceiling hanger for NONIUS-CD.
Lengths (mm):
200-300-400-500-600-700-
800-900-1000-1500-2000



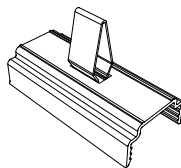
- 2 NONIUS-CD**
Suspension adapter
connecting BASE-CD
to Nonius hangers.



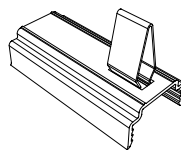
- 3 NONIUS-LOCK**
Locking pin for
NONIUS-CD and
Nonius hangers



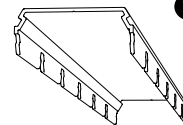
- 4 BASE-CD**
Ceiling carrier profile for
Gustafs Linear Ribs. Black
anodized aluminium
Length 3100 mm



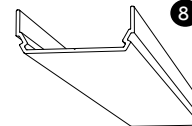
- 5 U-FIX-CD**
Fixing element attaching
ribs to BASE-CD, centre
fixation.
Length 50 mm.



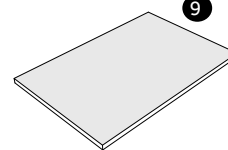
- 6 U-FIX-CDC**
Fixing element attaching
ribs to BASE-CD, end
fixation.
Length 50 mm.



- 7 CAPAX 3262**
Distance profile keeping BASE-CD in
place and at a fixed distance.
Natural aluminium or Black
Length: 3120 mm



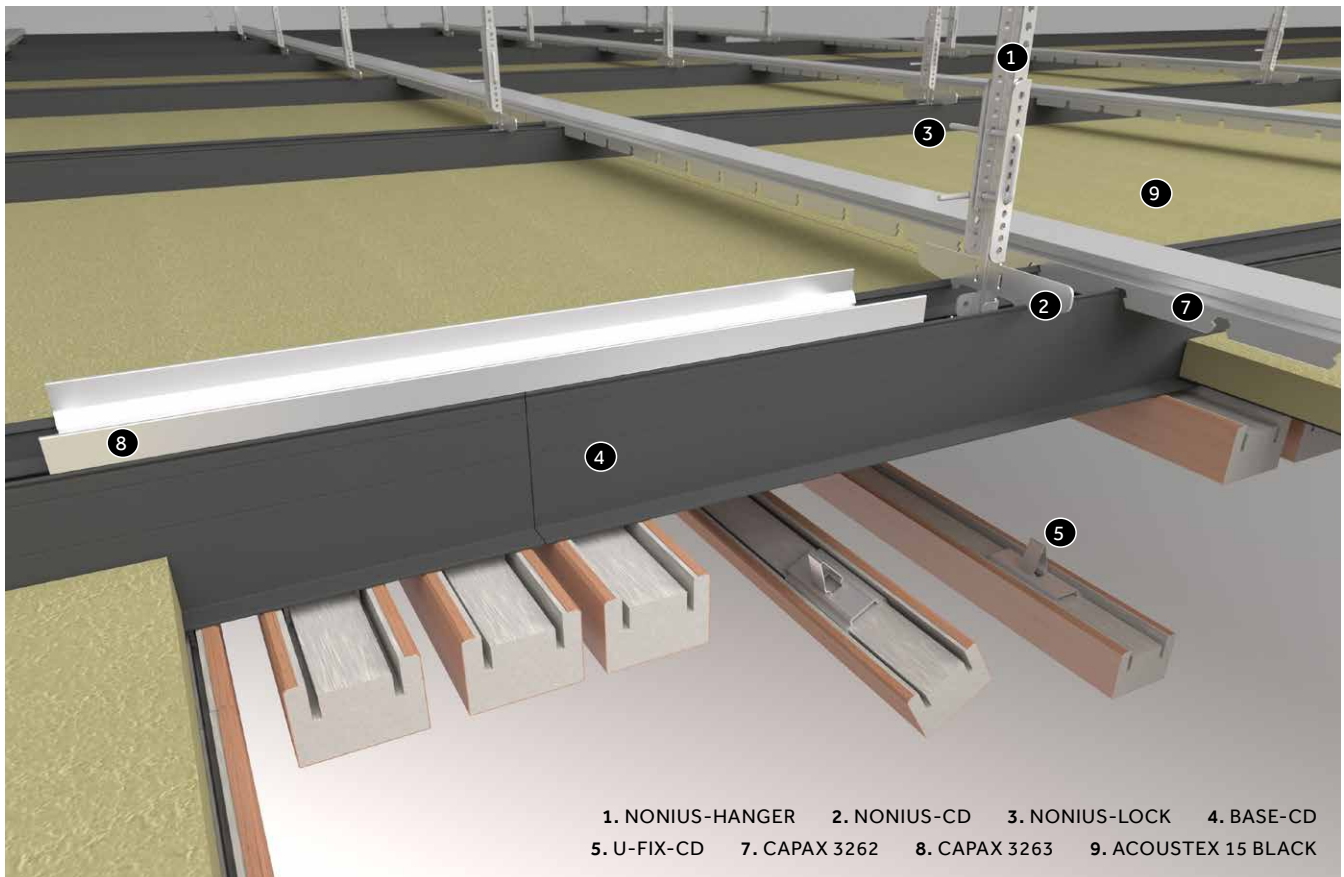
- 8 CAPAX 3263**
Snap-in in-line connector for
BASE-CD.
Natural aluminium
Length 300 mm



- 9 ACOUSTEX 15 BLACK**
Acoustic insulation with on one
side a black acoustic felt. Total
thickness 15mm
600x600 or 1200x600 mm
A2-s1,d0, Sound class A.



- 10 M-BLOCK-CD**
Tool to pre-mount U-FIX-CD or U-FIX-CDC to the backside of the ribs.



GLS - CEILING CD

Easy to install - optimal installation sequence



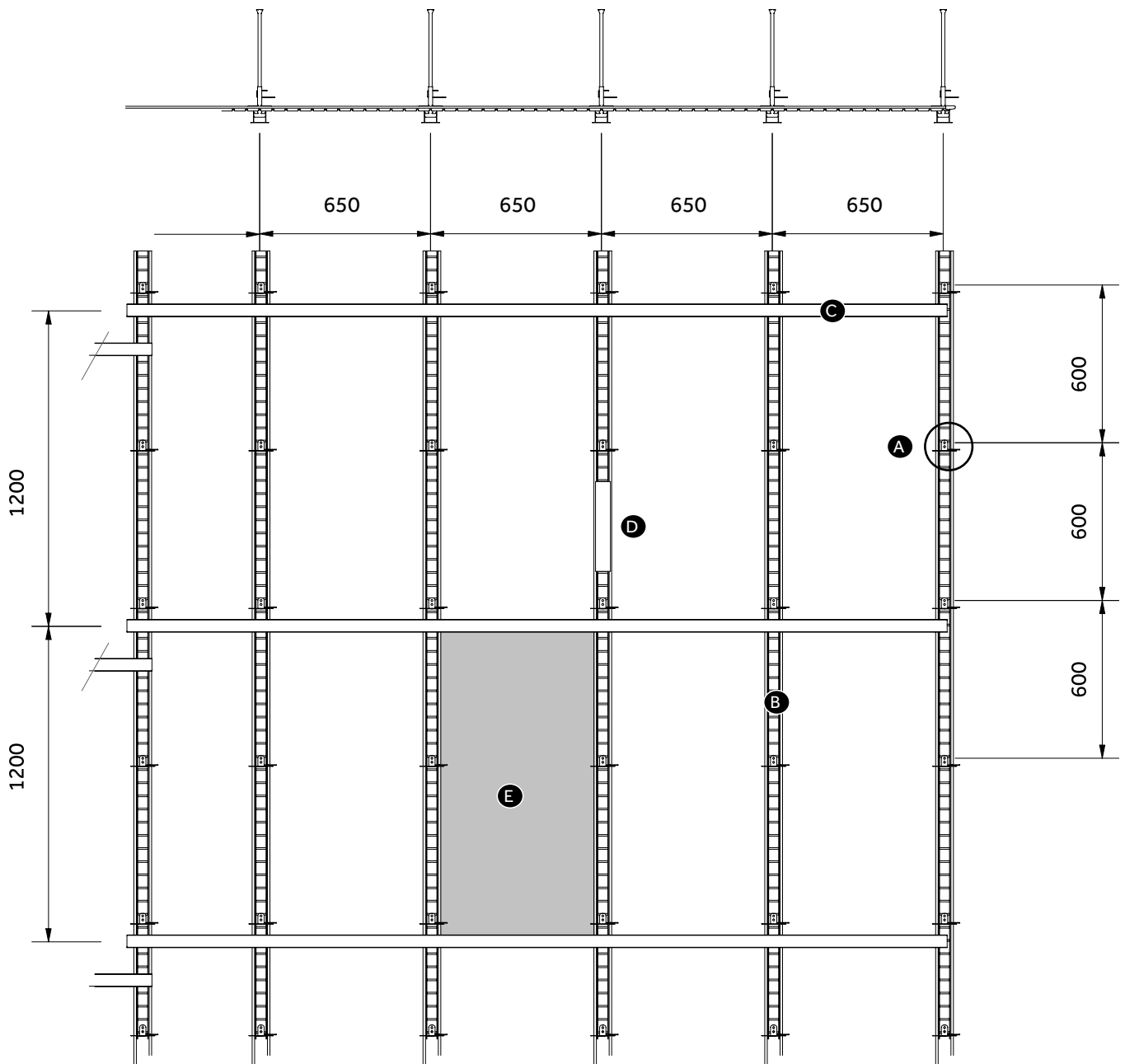
M-BLOCK-CD Tool to pre-mount U-FIX-CD or U-FIX-CDC to the backside of the ribs. Use a hammer.

Previous systems required you to first connect the fixation elements (U-FIX) to the supporting ceiling grid followed by pressing the ribs onto these fixation elements in step 2.

The new GLS Ceiling-CD system still allows you to do it the way described above, but now you can also do it the other way around, by attaching the fixation elements U-FIX-CD to the backside of the ribs first, while standing on the floor and preferably using a working bench. This results in faster, safer and better working ergonomics.

As the fixation holes in the BASE-CD profile are large, the positioning of the U-FIX to the ribs can be done approximately. Then simply click the ribs in place onto the ceiling grid.

CEILING-CD DEMOUNTABLE



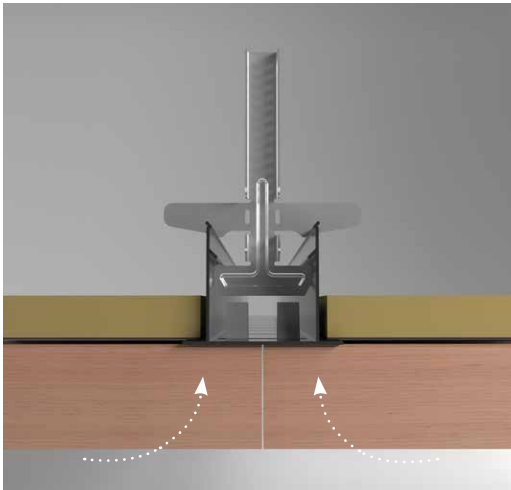
A. Ceiling suspension points B. BASE-CD C. CAPAX 3262 D. CAPAX 3263 E. ACOUSTEX-15

INSTALLATION OF GUSTAFS LINEAR RIBS FOR THE DEMOUNTABLE CEILING-CD SYSTEM

- 1.** Suspend the Capax profiles BASE-CD (B) with 600 mm in between them. If needed, connect in-line with 3263 (D) The connection of BASE-CD to the ceiling has to be made every 600 mm.
- 2.** Use the adapter NONIUS-CD to connect the BASE-CD profile with positions (A) to other NONIUS components.
- 3.** Snap the distance Capax 3262 (C) to the BASE-C profile every 1200 mm.
- 4.** Install Acoustex-15 onto the "T" section of the BASE-CD.
- 5.** Attach the U-FIX-CD clips to the back side of the linear ribs using tool M-BLOCK-CD.
- 6.** Attach the ribs to the carrier BASE-CD by clicking the spring-clips in the rectangular holes in the CEILING-CD profile.

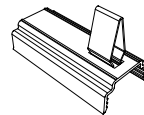
GLS - CEILING CD

Supported In-line joints

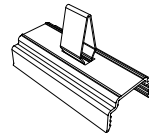


RIB-ENDS FIXED IN THE SAME HOLES

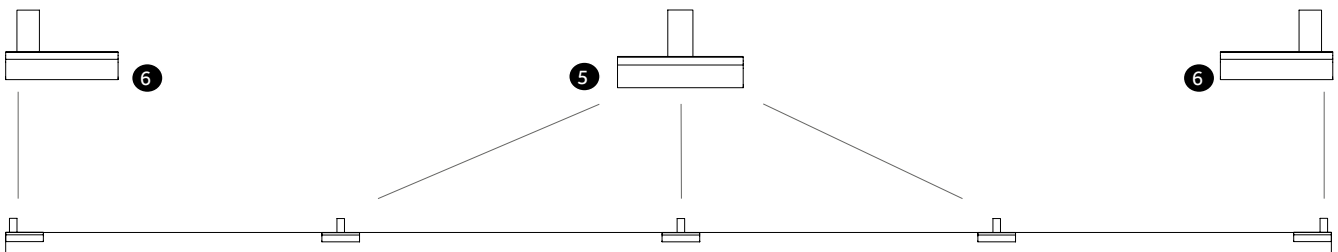
The ends of two ribs can be fixed on the same BASE-CD profile and in the same fixation hole. The rib-ends will be fully fixated for perfect looking and over time lasting connections, still completely demountable.



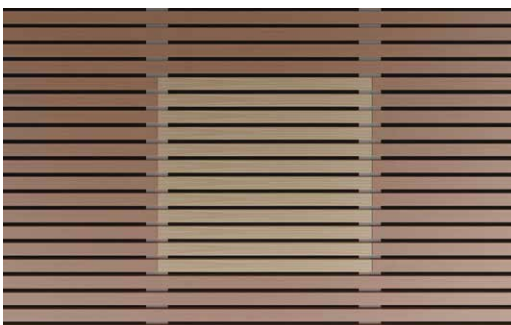
U-FIX-CDC - Fixing element attaching ribs to BASE-CD, end fixation. Length 50 mm. (6)



U-FIX-CD - Fixing element attaching ribs to BASE-CD, centre fixation. Length 50 mm.



5. U-FIX-CD 6. U-FIX-CDC



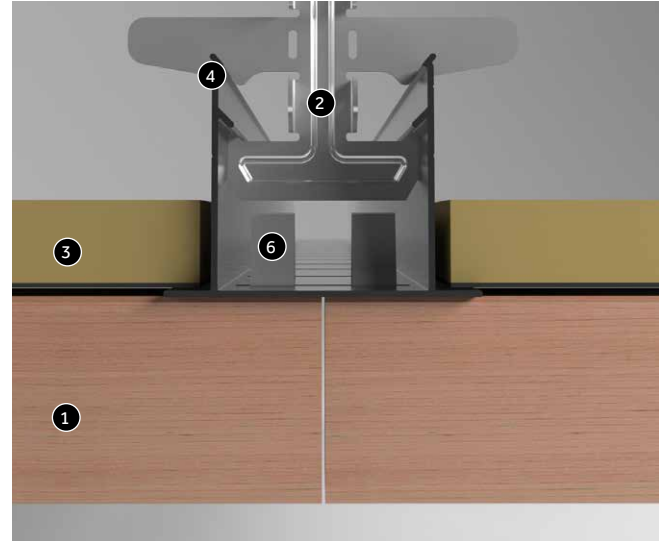
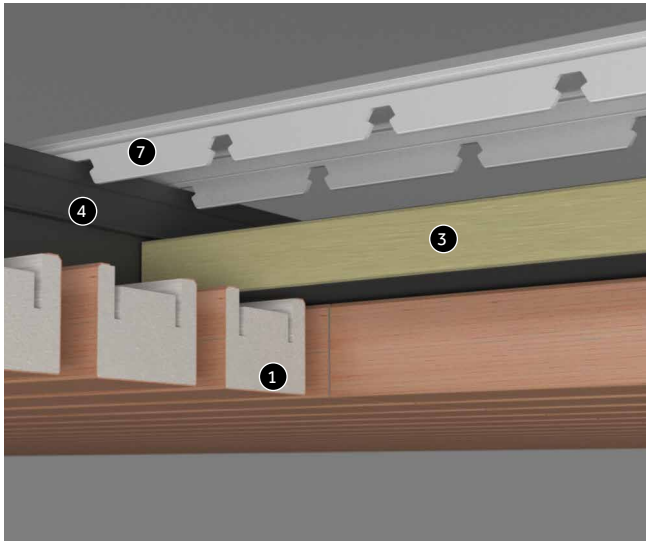
Example of a section with shorter ribs. BASE-CD and the shorter ribs are shown in a deviating colour, just to clarify.

USE SHORTER RIBS TO CREATE "HATCHES"

The ribs are demountable in their full lengths, but shorter ribs are of course easier to handle. In service spots where very frequent access to the ancillary system is required, shorter ribs are simply installed using the principle of fixing two rib-ends on the same supporting BASE-CD profile. This can be compared with creating "hatches".

GLS - CEILING CD

Integral Acoustic Insulation



1. Gustafs Linear Rib
2. NONIUS-CD
3. Up to 15mm thick acoustic insulation boards.
4. BASE-CD
6. U-FIX-CDC
7. CAPAX-3262

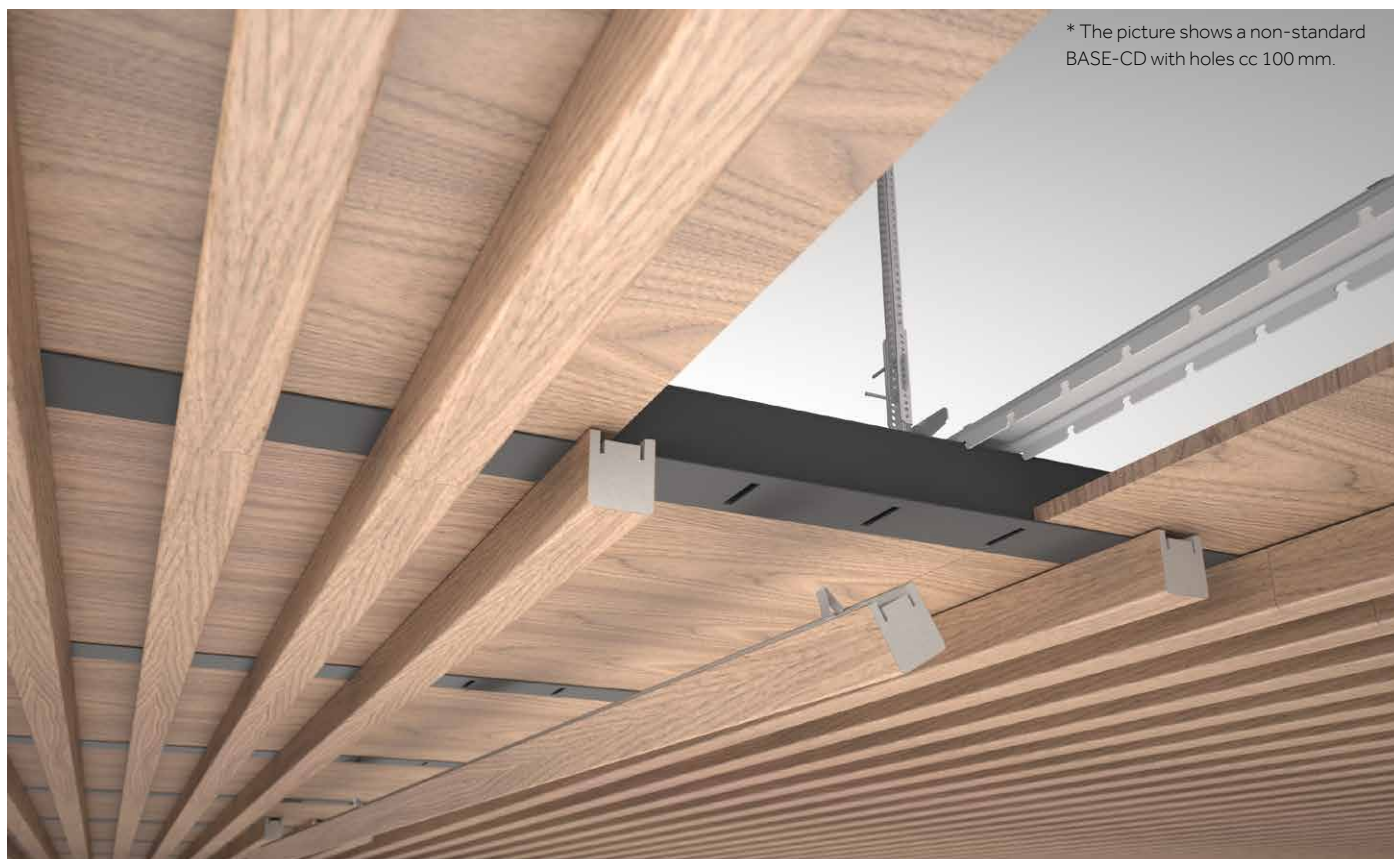
INSULATION FIXATION

Up to 15 mm thick acoustic insulation boards can be installed, entirely demountable and not hiding the fixation holes. The insulation is placed before the ribs are snapped onto the BASE-CD. As both the ribs and the insulation are demountable, access to the ancillary systems will always be available and at any spot in the ceiling.

The system is designed to use insulation dimensions that are standard in the industry, 600x600x15 mm, 1200x600x15 mm, etc.

The insulation is available in many colours but matt black is the standard. Combined with the supporting BASE-CD in black, the installation is really concealed.

Optionally the insulation can be printed with graphics.



* The picture shows a non-standard BASE-CD with holes cc 100 mm.

GLS - CEILING CD

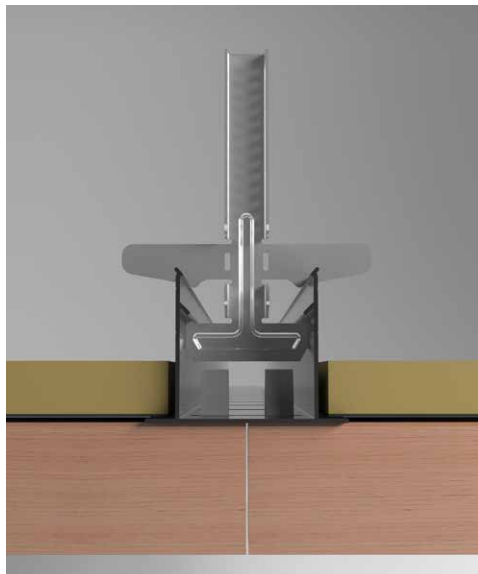
Combine ribs and panels

Instead of insulation the system can also hold plain or acoustic Gustafs Panels behind/above the ribs. The panels will be demountable, but the installation of the panels will not be fully concealed.

Painting the BASE-CD profiles in a colour matching the wood veneer is an option.

GLS - CEILING CD

A sturdy system for heavy gypsum ribs



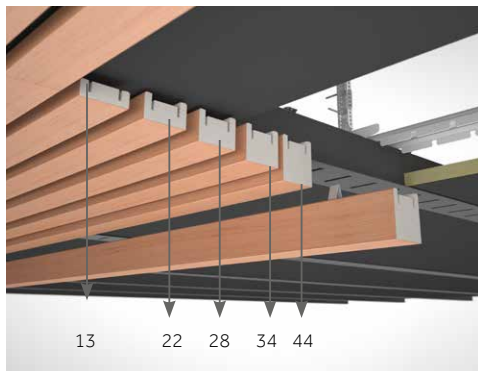
U-PROFILE CARRIER

The 50 mm high U shape of the BASE-CD profile results in a very stable carrier construction and the ceiling system is approved for the following configuration:

High density gypsum ribs up to 44x38 mm (h x w)
Ribs at a minimum interval of cc 50 mm, similar to a 12 mm spacing. Ceiling hangers connected to BASE-CD every 600 mm.

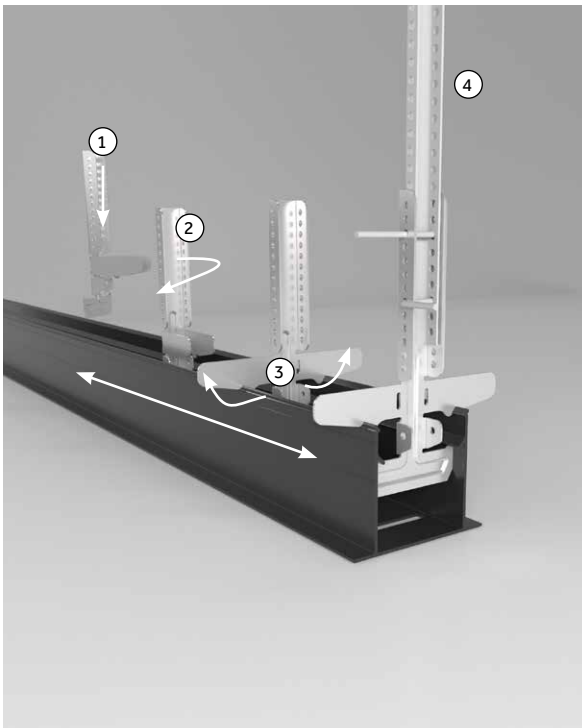
HIGH DENSITY GYPSUM RIBS

13, 22, 28, 34 and 44 mm thick can be used.



GLS - CEILING CD

The best suspension



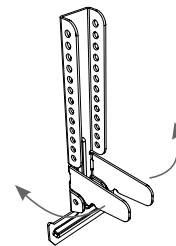
Suspend and create a locked positioning, also upwards.

SIMPLE, SAFE AND FAST

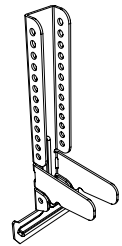
The GLS Ceiling-CD system is compatible with NONIUS components, the world-wide standard for suspended ceilings.

The NONIUS system is well known for its sturdiness, ease of use and being multi purpose, no need to re-invent the wheel, there will always be a solution to solve the challenge. The height position of the ceiling can be precisely adjusted in steps of tenths of mm's.

Gustafs NONIUS-CD is the connection to the world of NONIUS. It's simply locked in place onto the BASE-CD, no need for tools and the positioning in relation to the BASE-CD profile is 100% free, so that you can always find the sweet spot.



NONIUS-CD out of the box

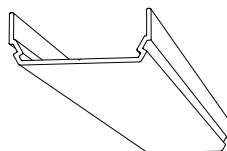


NONIUS-CD unfolded by hand and locked inside BASE-CD

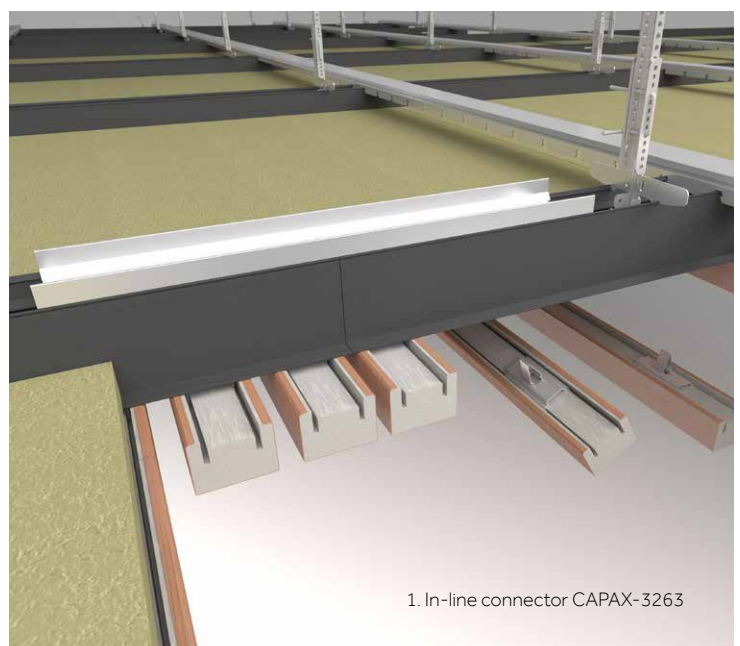
IN-LINE CONNECTIONS OF THE BASE-CD PROFILE

The BASE-CD profile with its fixation holes is the core of system as it defines the spacing between the ribs. Already the smallest deviations in the spacing between the ribs will be noticeable and give a poor visual experience when looking at large ceiling surfaces. The linear design is very revealing.

That's why the in-line joints are such a crucial feature of a linear ceiling system, as also the joints will set the spacing between the ribs.



CAPAX 3263



1. In-line connector CAPAX-3263

SHORT FACTS CEILING -CD

TYPE	Gustafs Linear Rib System for ceiling
CORE	Reinforced fibre gypsum, high density, 1200 kg/m ³
BACKSIDE DESIGN	Grooved for use with the concealed Capax installation system
ACOUSTIC FELT	Black NCS S 9000-N, Gustafs Acoustex 15 mm, fire class A2-s1,d0 Grey NCS S 4005-R50B, Gustafs Acoustex 15 mm, fire class A2-s1,d0 Grey NCS S 6500-N, Gustafs Acoustex 15 mm, fire class A2-s1,d0
STANDARD RIB	13x38x2970 mm
DIMENSIONS (TxWxL)	22x38x2400 / 22x28x2970 mm 22x88x2400 / 22x88x2970 mm 28x38x2400 / 28x38x2970 mm 28x88x2400 / 28x88x2970 mm 34x38x2400 / 34x38x2550 mm 44x38x2400 / 44x38x2550 mm
NON-WARPING	10 years Non-Warping guarantee, free replacement program
INSTALLATION SYSTEM CEILING-CD	Gustafs Capax aluminium profiles and clips, containing: A grid using Capax Base-CD battens installed cc 600 mm perpendicular to the Demountable ribs + a distance profile 3262 every 1200 mm. The ribs are connected to the Base-CD profile by concealed U-FIX-CD clips every 600 mm of rib length (5 pcs U-FIX-CD per 2400 mm rib length and appr. 42 pcs of U-FIX-CD per m ² .) The rib-ends of two separate ribs are connected to one and the same supporting profile BASE-CD for invisible in-line joints. Use the Gustafs Nonius-CD connector to get access to the world of Nonius ceiling hangers.
REACTION TO FIRE	B-s1,d0 (EN 13501-1) (Valid for the whole system, the ribs including the surface, the surface treatment, the installation with a void filled or non-filled with isolation, and allowing all kinds of post treatments like cutting)
FORMALDEHYDE	Class E1 and M1. approved emissions (EN 717-1), No added urea formaldehyde
TVOC	Approved for BREEAM International / LEED / Svanen / Bygghälsöcertifieringen / Sunda Hus approved emissions (EN ISO 16000-9)
RECYCLED MATERIAL	17% Post Consumer
CERTIFIED WOOD	FSC available, Certificate Code: SCS-COC-005137
EPD	Available
PRODUCTION SITE	City: Gustafs / country: Sweden
LIFE TIME	Expected > 50 years

! For more details download our specification text