

# Parafon® Buller

Make sound. Not noise.



## Healthy acoustics everywhere, every day

The acoustics of a room affects us humans in many different ways. At Parafon, we dedicate each and every day to giving you the tools you need to create a pleasant acoustic environment. We manufacture sound absorbers from stone wool, and we have a wide range of solutions including acoustic ceilings and wall applications for different spaces.



**Sound has an impact. It may be pleasurable or disruptive. At times, we would like to turn it up, at others, shut it out. What is music to your neighbour's ears, may be painful to your own. But one thing is for certain – sounds have an impact on us.**

# Industries, open space venues and arenas - particularly challenging acoustic environments

Nowadays, a lot of environments for congregating large groups of people and that are used for many different kinds of operations are being built. Environments such as open space venues, arenas and indoor play centres have major acoustic challenges.

Not only do expansive spaces with high ceilings generally require effective overhead sound absorbers but also absorbers on the walls for acceptable acoustics, regardless of activity. Sound mitigation is even more important in environments visited by scores of people and people who need to hear each other talk or focus on their work.

## Parafon Buller - a simple, cost-effective solution

For many years we have provided products from the Parafon Buller family. This simple, yet efficient sound absorber has become a classic. Thanks to their rustic, durable design, Buller products are especially good for:

- Demanding acoustic requirements – spacious, high-ceiling spaces with major acoustic challenges.
- Rough environments – noisy activities, moist environments, impact intensive spaces
- Stringent fire safety requirements – fireproof products for areas risking flammable activities or where a lot of people congregate.
- Quick, easy and cost-efficient installation.

Coming up, a few cases in which Parafon Buller transformed noise into sounds.





MOUNTED WITH MT PROFILE SUPPLEMENTED WITH WASHER AND SCREW IN THE CENTRE OF EACH PANEL.

## Manufacturing area

### CASE: Upgrade for Hammar Maskin

Hammar Maskin develops, manufactures and markets mobile, self-loading container cranes under the HAMMAR brand. The company is a world leader in their industry, having sold cranes to over 100 countries on all continents including Antarctica. All manufacturing, development and testing take place in Olsfors outside Borås, Sweden.

During Hammar Maskin's crane manufacturing and testing, there are a lot of slamming and hammering going on. This creates a highly noisy environment. When the company invested in a new manufacturing facility, there were high demands on acoustics. The space is open and flexible with free-flowing transport routes without any partition walls. To get around loud noise levels, they installed Parafon Buller. Now, the working environment is much more pleasant for all employees.

#### What to consider when planning

- Plan for good acoustics early on in the design process.
- Gather all your noisy equipment and activities into one area and focus your noise mitigation efforts there.
- Create high distance attenuation with e.g., Buller 100 mm covering the entire ceiling and efficient absorption panels on the walls.
- Install additional sound absorbers in the middle of the area by using freestanding partition screens, hanging baffles or suspended islands.



PRODUCT: PARAFON BULLER NATURE, 1200 X 1200 X 50 MM  
INSTALLATION: MT PROFILE SUPPLEMENTED WITH WASHER AND SCREW IN THE CENTRE OF EACH PANEL.



PRODUCT: BULLER GREY  
1200 X 600 X 100  
INSTALLATION: INSTALLED WITH PERIMETER TRIM/L PROFILE MOUNTED TO CONCRETE BEAMS, PANELS HANG FREELY BETWEEN THEM

PRODUCT: BULLER BLACK  
200 X 600 X 100  
INSTALLATION: INSTALLED WITH PERIMETER TRIM/L PROFILE AND BLACK CROSS TEE T24 BETWEEN BLACK BEAMS.

MOUNTING BETWEEN BEAMS OFTEN RESULTS IN SPACE BEHIND THE PANELS WHICH GIVES BETTER SOUND ABSORPTION THAN WHEN MOUNTING DIRECTLY ON SOFFIT.

## Modern manufacturing facility, office & showroom

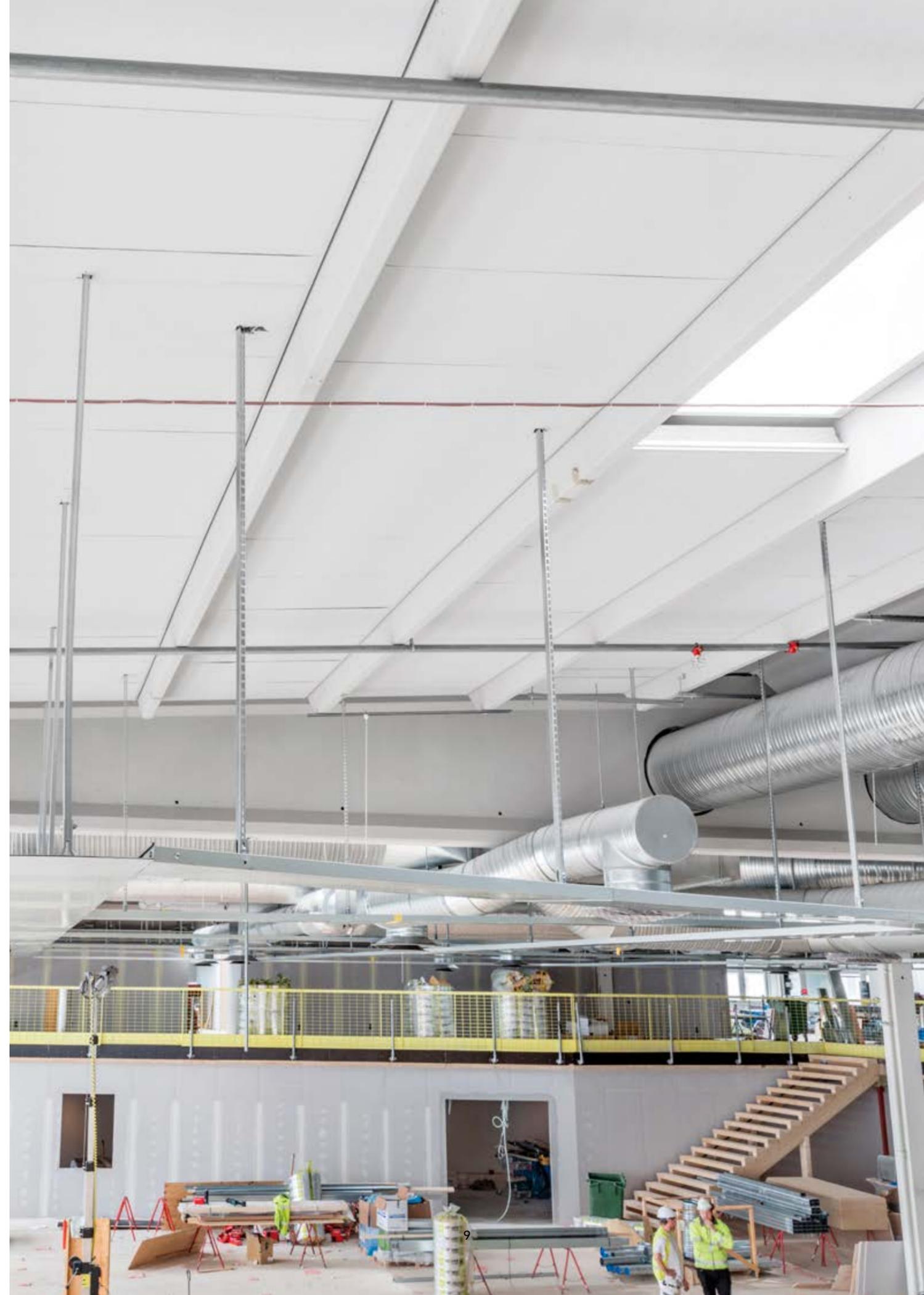
CASE: Good communication from Ericsson to the rest of the world

Ericsson is a world-leading company in information and communication technology. In 2019, they built a new manufacturing facility and showroom close by their head office in Kista, Stockholm.

Though it poses serious challenges, the new premises also offers wonderful opportunities for world-class communications and reduced noise. They chose robust, effective Parafon Buller 100 mm for their noise mitigation. The panels were mounted leaving space behind them between the concrete beams, giving them highly effective sound attenuation and better absorption of low-frequency sounds.

### What to consider when planning

- Early in the design process, plan accordingly to avoid parallel walls and the flutter echo they cause.
- If you cannot avoid parallel walls, cover them with efficient sound absorbers.





PRODUCT: PARAFON BULLER, 1200 X 1200 X 50 MM WHITE  
 INSTALLATION: DIRECTLY MOUNTED WITH WHITE WASHER AND SCREW ON TRP METAL SHEETS.

## Logistics centres

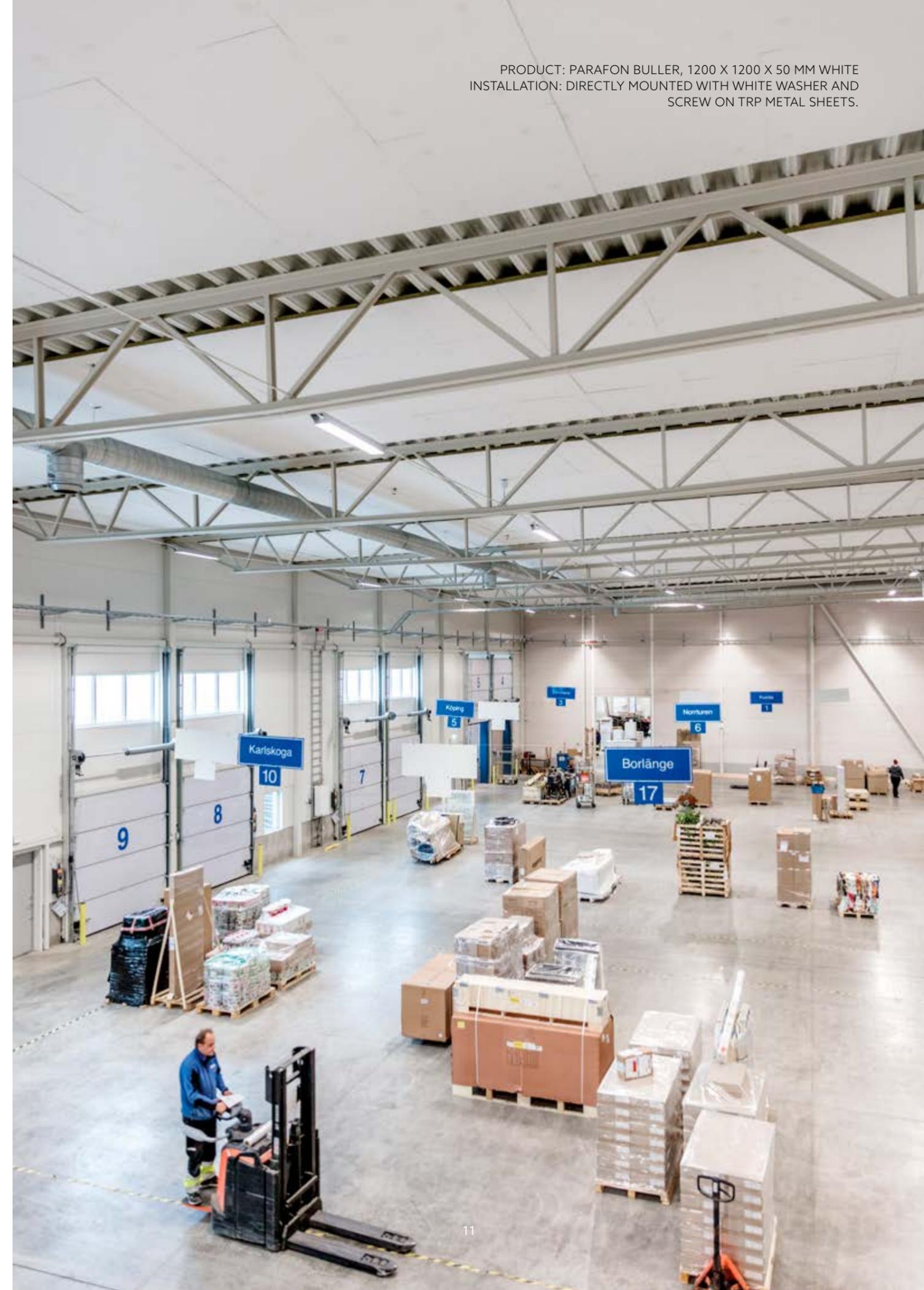
CASE: Närkefrakt on route

Närkefrakt was founded in Örebro in 1936 and today the company has 300 vehicles transporting goods throughout Sweden. Demands are high; their goods need to be transported using the smartest method and arrive at the right place at the right time. Their new logistics centre, the hub of their operations, lies strategically between E20 and E18.

Here, in the logistics centre, employees managed goods smoothly and efficiently. But the acoustics were poor and noise levels were too high. The solution to this was Parafon Buller. The panels were mounted directly against TRP metal sheets, leaving space behind half the surface - considerably more efficient than if mounted tightly against the base material. After the installation, Närkefrakt's working environment improved and their employees became more happy and content in the workplace.

### What to consider when planning

- Use thick, effective sound absorbers on the ceiling.
- Add wall absorption if your premises have high ceilings.
- On walls, metal covered absorbers such as Buller Perform, Buller Mesh and Buller Solid can be installed up to 2.3-3 metres.
- Install them a bit off the floor to avoid damage from impacts and to make cleaning easier.





IMPACT RESISTANT INSTALLATIONS IN SPORT CENTRES, CAN BE MOUNTED USING HAT PROFILES SCREWED DIRECTLY ON TO THE SOFFIT OR BY USING GRIDS WITH FIXED MOUNTING AND FIXED PANELS.

## Sport centres

CASE: At Viktoria and Almby Schools, the future is taking shape

At the newly built Viktoria School, knowledge, modern technology, creativity and health are important building blocks for the future. The same is true for Almby School in Örebro, Sweden, where the old gymnasium has been fully renovated and modernised.

For good acoustics that stand the wear and tear of a gymnasium, the ceiling was equipped with impact-resistant sound absorption panels firmly mounted directly to the beams with hat profiles.

### What to consider when planning

- Early in the design process, plan accordingly to avoid parallel walls and the flutter echo they cause.
- If you cannot avoid parallel walls, try placing stands on one of the long walls of the gym.
- Mount efficient sound absorbers on the walls at ear height, particularly focusing on the short walls.



ALMBY SCHOOL  
PRODUCT: PARAFON SOLID 1200 X 600 X 50 MM  
INSTALLATION: WHITE HAT PROFILES



VIKTORIA SCHOOL  
PRODUCT: PARAFON SLUGGER 1200 X 1200 X 40 MM  
INSTALLATION: GALVANIZED SUSPENDED T35 GRID PROFILES



THE ABSORBERS ON THE ARENA'S SHORT WALLS ARE MOUNTED WITH MT PROFILES LEAVING SPACE BEHIND THE PANELS.

## Arenas

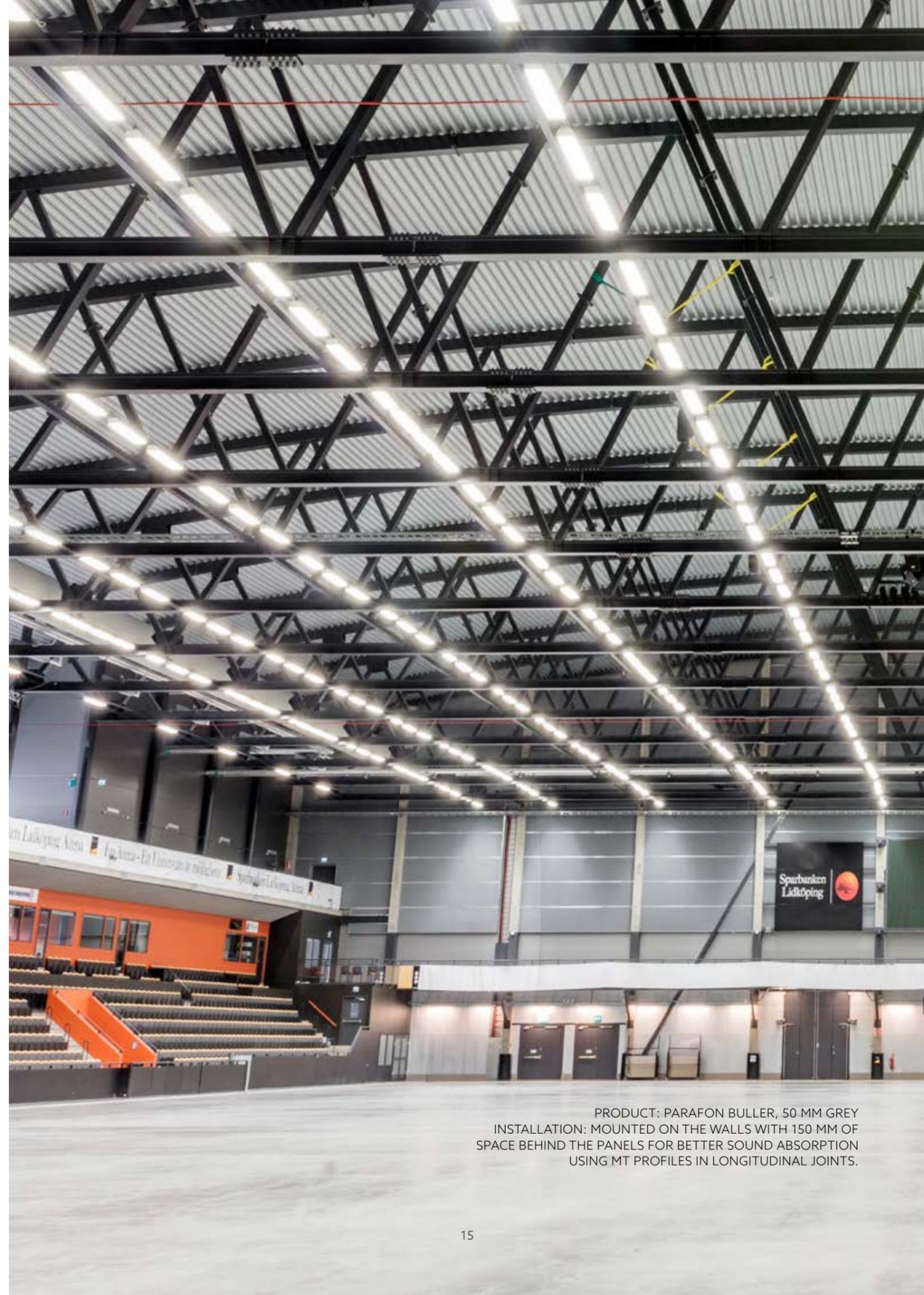
### CASE: Nice sounds at Sparbanken Arena

When Sparbanken Arena was built in Lidköping, Sweden, they were not only improving the conditions for award ceremonies, sports training and developing the local community's bandy clubs. Since its inauguration in 2009, Sparbanken Arena has hosted exhibitions, fairs, banquettes, conferences and also the tunes of Melodifestivalen.

The acoustic challenge of the Sparbanken Arena-project was to come up with a good compromise between cutting down on noise and upholding the energy of sporting events. Sound absorption was concentrated to the short ends of the arena. A 50 mm thick Buller was mounted with 150 mm of space behind the panels for the best effect. The ceiling is perforated TRP sheets with underlying insulation that absorbs sound. This solution not only allows for loud cheers and applauds, but also conversations and music.

#### What to consider when planning

- The acoustics of an arena need to suit all kinds of events, from sports and concerts to fairs and congresses.
- When enhancing sound electronically, the premises should not add its own sounds to the acoustics. This is difficult in expansive spaces.
- A 50 mm Buller panel mounted with space behind it has a somewhat better effect than a 100 mm Buller panel mounted directly to the surface. A 100 mm Buller panel mounted with space behind it is of course the best solution. Thicker absorbers are always better.



PRODUCT: PARAFON BULLER, 50 MM GREY  
INSTALLATION: MOUNTED ON THE WALLS WITH 150 MM OF SPACE BEHIND THE PANELS FOR BETTER SOUND ABSORPTION USING MT PROFILES IN LONGITUDINAL JOINTS.



PARAFON BULLER TILES MOUNTED ONLY PARTIALLY COVERING THE CEILING WHICH MAKES THE INSTALLATION FASTER AND EASIER.

## Sport centres

CASE: Little effort but great results at Squash & Padel Center and Friskis & Svettis

A historical factory building of 1.200 sqm on two floors in Borås, Sweden, is now home to the sports center Friskis & Svettis. The facility was inaugurated in 2018 and is today a living meeting place for anyone wanting to get fit together with others.

One year later, Lidköping Squash & Padel Center opened in Lidköping, Sweden. For you who yet haven't heard of this sport, padel is a mix between tennis and squash.

Both Friskis & Svettis and Squash & Padel Center chose Parafon Buller for sound absorption. This minor effort had great results. Parafon Buller considerably improves the noise levels in the premises.

### What to consider when planning

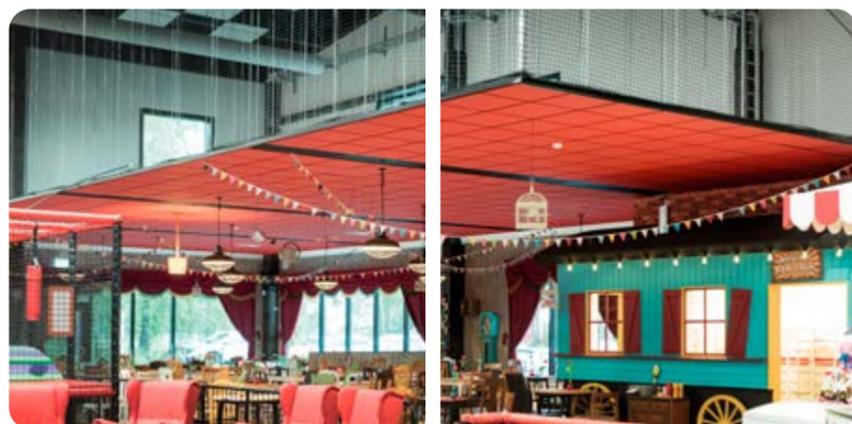
- Adapt your premises to ensure pleasant acoustics for your users.
- Go for thick sound absorbers on the ceiling. Parafon Buller 50 or 100 mm, mounted with washer and screw, is an effective solution.
- Mounting full size panels partly covering the ceiling makes installation even faster and no absorbent material is wasted.
- Install impact-resistant wall absorbers on any available wall space. They work best when placed at ear height.



FRISKIS OCH SVETTIS  
PRODUCT: PARAFON BULLER, 50 MM GREY  
INSTALLATION: DIRECT MOUNTING WITH SCREW AND WASHER.



SQUASH & PADEL  
PRODUCT: PARAFON BULLER, 50 MM WHITE  
INSTALLATION: DIRECT MOUNTING WITH SCREW AND WASHER.



OVER THE CAFÉ AREA AT JECKO & JESSIE'S INDOOR PLAY CENTRE, PARAFON PALETTE IS MOUNTED IN A BLACK SUSPENDED GRID FOR QUIETER ACOUSTICS IN THAT PARTICULAR SPOT.

## CASE: Well-behaved sounds at Jecko & Jessie's indoor play centre

Acrobatic comedy duo Jecko & Jessie have their own indoor play centre in Rörstrand Center in Lidköping, Sweden. The 2.000 sqm venue includes a fort, a 60-meter obstacle course, 14 slides and a multi-arena for ball sports.

Indoor play centres are intense, with high noise levels, a lot of laughter and screaming and occasionally some tears as well. For a more comfortable environment for the kids and the adults who accompany them, Jecko and Jessie's indoor play centre had Parafon Buller installed on the ceiling. Its checkerboard pattern not only brings down rowdy noises, but makes for a more playful and imaginative environment.

### What to consider when planning

- Create special spaces with quieter acoustics for concentrated work, interaction and conversations.
- Improve acoustics in certain areas by using an extra suspended sound absorbing ceiling. This can be done with a ceiling mounted by a suspended grid or directly against a rigid surface. This type of ceiling application benefits both inside and out. Not only does it improve the acoustics for those who are under the recessed ceiling, but also for those around it as it absorbs and screens off noise.

PRODUCT: PARAFON BULLER 1200 X 1200 X 50 MM WHITE AND BLACK  
 INSTALLATION: DIRECTLY MOUNTED WITH BLACK MT PROFILE SUPPLEMENTED WITH WASHER AND SCREW IN THE CENTRE OF EACH PANEL.





PRODUCTS: PARAFON BULLER,  
50 MM GREY AND BLACK  
INSTALLATION: DIRECT MOUNTING  
WITH WASHER AND SCREW.

## Meeting places

CASE: From deserted to lively,  
at Simonsland meeting place

In 2004, the question was asked: How can a town like Borås with its historical textile legacy turn the area of Simonsland, with its abandoned textile factories, into a new and vibrant meeting place? The answer was: with careful renovation. After thirty kilometres of cable, half a million hours of work and 25.000 litres of white paint, Simonsland Business Park was ready.

The industrial setting frames the new modern working environment and its good acoustics. Between beams and pillars there are now discreet panels of Parafon Buller. They fit in with the industrial feel and help the old and historic environment meet the tough demands of today.

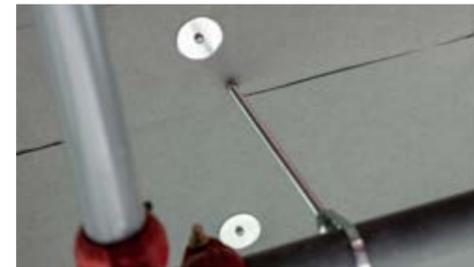
### What to consider when planning

- Modern meeting places are often large and airy, with lots of glass walls and other hard sound-reflecting materials such as concrete, tile and stone floors - a major challenge for the acoustic environment with very few surfaces for sound-absorbing materials.
- Go for thick, effective sound absorbers on the ceiling on as large a surface as possible, preferably 100 mm thick. Mounting them with space behind them further improves sound absorption.
- Use all available wall surfaces for sound absorption.
- Metal covered absorbers such as Parafon Buller Perform and Parafon Buller Mesh are durable wall absorbers that can also give an industrial feel.



	Product overview	Appearance	Thickness	Format
<b>Parafon Buller</b>	Industrial stone wool absorbent panel with a wide range of applications. A proven classic that is reliable and solid. Durable design with a rustic finish.	White Nature Grey Black	30 mm 50 mm 100 mm	1200 x 600 mm 1200 x 1200 mm
<b>Parafon Buller Solid</b>	Impact-resistant stone wool absorber with woven glass fibre surface for industries, sport centres, heated cellars and other spaces with few aesthetic demands to surface finish and evenness.	NEW VARIANT - Now whiter	50 mm	Buller Solid ceiling: 1200 x 600 mm 1200 x 1200 mm  Buller Solid wall: 1800 x 600 mm
<b>Parafon Buller Perform</b>	Impact-resistant sound absorber with perforated sheet metal casing with Buller black inside. For both wall and ceiling. For exposed, demanding environments or as a design element in interiors where you want to create an industrial feel.	Galvanised White	50 mm	1200 x 600 mm
<b>Parafon Buller Mesh</b>	Parafon Buller absorber with protective casing of galvanised expanded metal for exposed walls.	White Nature Grey Black	50 mm	1800 x 600 mm
<b>Parafon Buller FPS fire panel</b>	Fire protection panel with the best sound absorption and prepainted fiberglass surface. Is mounted directly with washer and screw or with welding rivet. Included in type approved ceiling solutions with corrugated sheet metal with fire resistance ratings REI 30 and REI 60.	White Black	40 mm 70 mm	1200 x 600 mm 1200 x 1200 mm

## Installation overview



### SCREW AND WASHER

Quick installation directly against the soffit where joints between the absorbents can be left visible. Use the insulating screws that are intended for the material. Washers available are; galvanised, white and black. Remember not to overtorque the screw and washer to avoid damaging the panel!



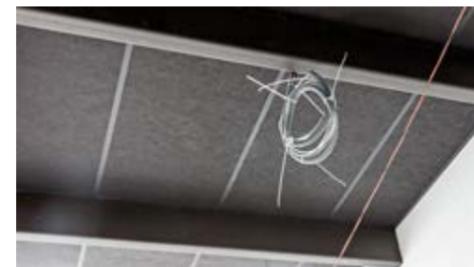
### MT PROFILE

In MT profile installations, the profile covers the longitudinal joints. After measuring, mount the panels with a screw and washer in the centre, and then the profiles. Finish with a MT profile against the wall.



### SUSPENDED GRIDS

Parafon Buller absorbers can also be mounted in suspended grids, T-24 or T-35. T-35 profiles provide wider support for large panels and are available in galvanised finish, suitable for mounting for example Buller Perform, galvanised on the ceiling. We always recommend suspended grids with fire safety punch outs!



### BEAM MOUNTING

Installing between concrete beams is a quick and neat installation method. The panels are held by L-profiles that are screwed against the beams. The joints between the panels can be left visible or covered with a T-profile or hat profile.



### HAT PROFILES

Direct hat profile mounting, combined with impact-resistant absorbers, provides a highly impact-resistant installation. Hat profiles are also stylish as joint profiles panels both on walls and on ceilings.

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