

#### Noise reduction

- Single walls up to 42 dB Rw
- Double walls up to 55 dB Rw

#### Noise absorption

- Single wall thickness 50 mm: Class B
- Single wall thickness 80 mm: Class A



**“Tailor made”**

# Wall and ceiling systems for acoustical constructions

Isolamin manufactures wall and ceiling systems in exact compliance with the acoustical specifications of each individual project.

# Acoustical properties

Isolamin AB tests in both its own and external labs, which is in compliance with EN ISO140-3 regarding noise reduction, as well as EN ISO354 and EN ISO11654 regarding noise absorption.

NOTE: Perforated panel sides are supplied with a membrane glued in place between the sheet metal and insulation for avoidance of fibre emissions.

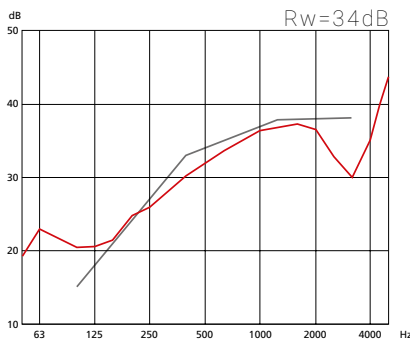
With a change of the sheet metal thickness to 1.0 mm, noise reduction increases at lower frequencies.

Single panel	Noise reduction $R_w$
Isolamin IRP42-50	42 dB
Isolamin 34C-25 mm (1 synlig sida)	34 dB

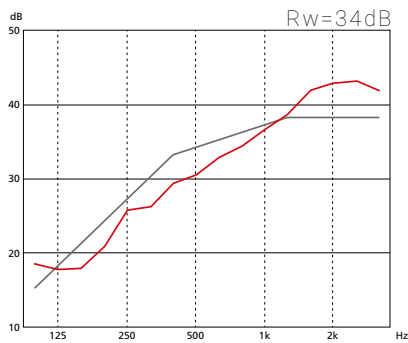
Double panel	
Isolamin 42C - 50 mm	42 dB
50 mm + 10 mm air gap + 50 mm perf. inside	51 dB
50 mm + 50 mm air gap + 50 mm perf. inside	52 dB
50 mm + 60 mm mineral woll + 50 mm perf. inside	57 dB

Noise reduction

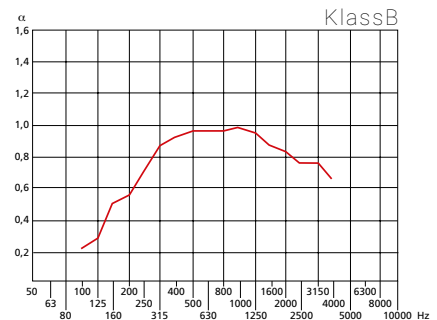
Panel thickness 50 mm



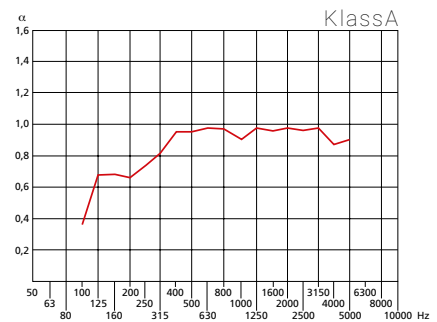
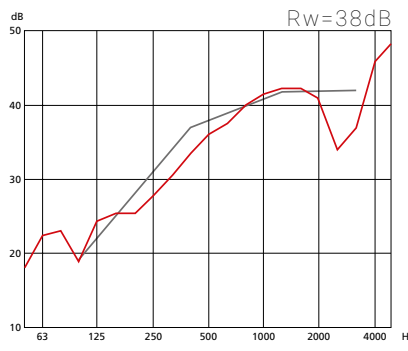
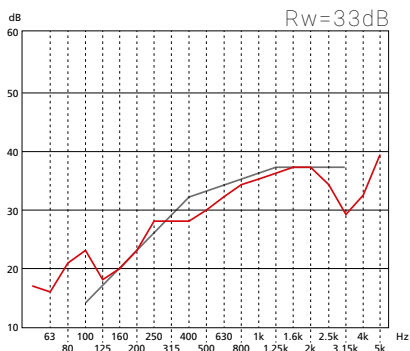
Noise reduction  
one side perforated



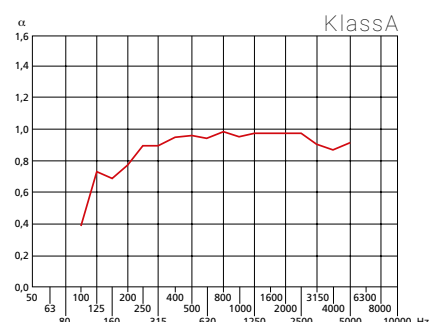
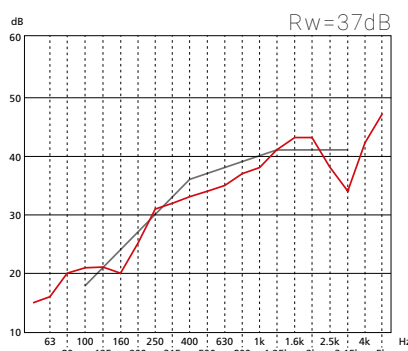
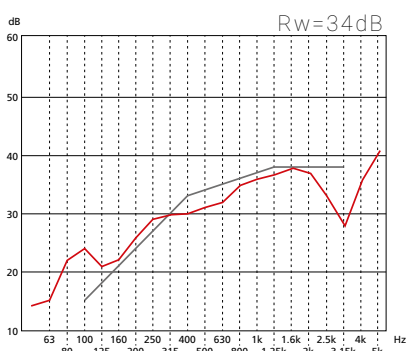
Noise reduction  
on the perforated side



Panel thickness 80 mm



Panel thickness 100 mm

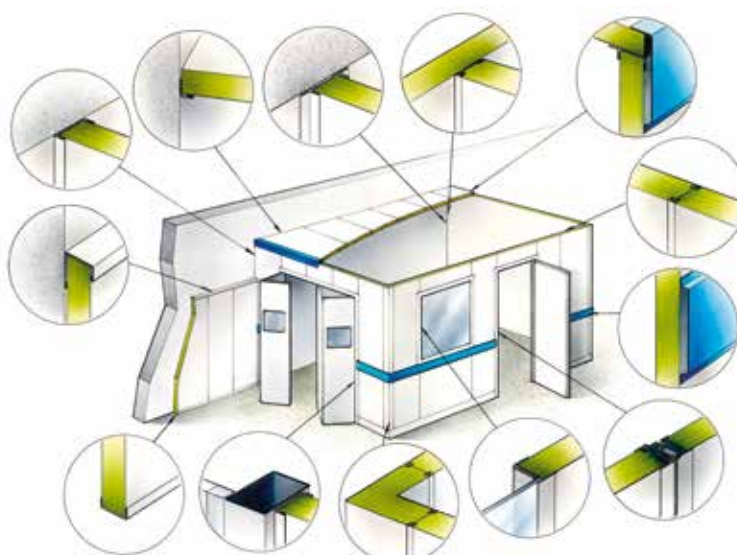




Enclosures/partitions at production facility, Novozymes A/S, Bagsvaerd, Denmark.



Enclosures and noise dampening for machinery at Eden Europé s.r.o, Adamov, Czech Republic.



Isolamin system structure/Modular construction, ISOLAMIN walls, ceilings, windows, doors.



Control room at Tetra-Pac, Sweden.



Staff offices at LKAB's mine, 1365 m beneath the surface, Kiruna, Sweden.





Noise-insulating enclosure, corrugated cardboard machine, SCA, Värnamo, Sweden.



Noise attenuator, fan room, Kista Entre, Stockholm, Sweden.



Noise encapsulation, press line, Renault, Douai, France.



Noise enclosure, automated punching machinery, Bristol, England.



Noise-absorbing firewalls, News International printing press hall, Brouxbourne, England.



Noise enclosure, Teplice, Czech Republic.



Enclosed roller coaster at Djurparken in Klampenborg, Denmark.



Noise enclosure, D J Profiles Ltd, Telford, England.



Noise panels at chemical plant, Luneville, France.

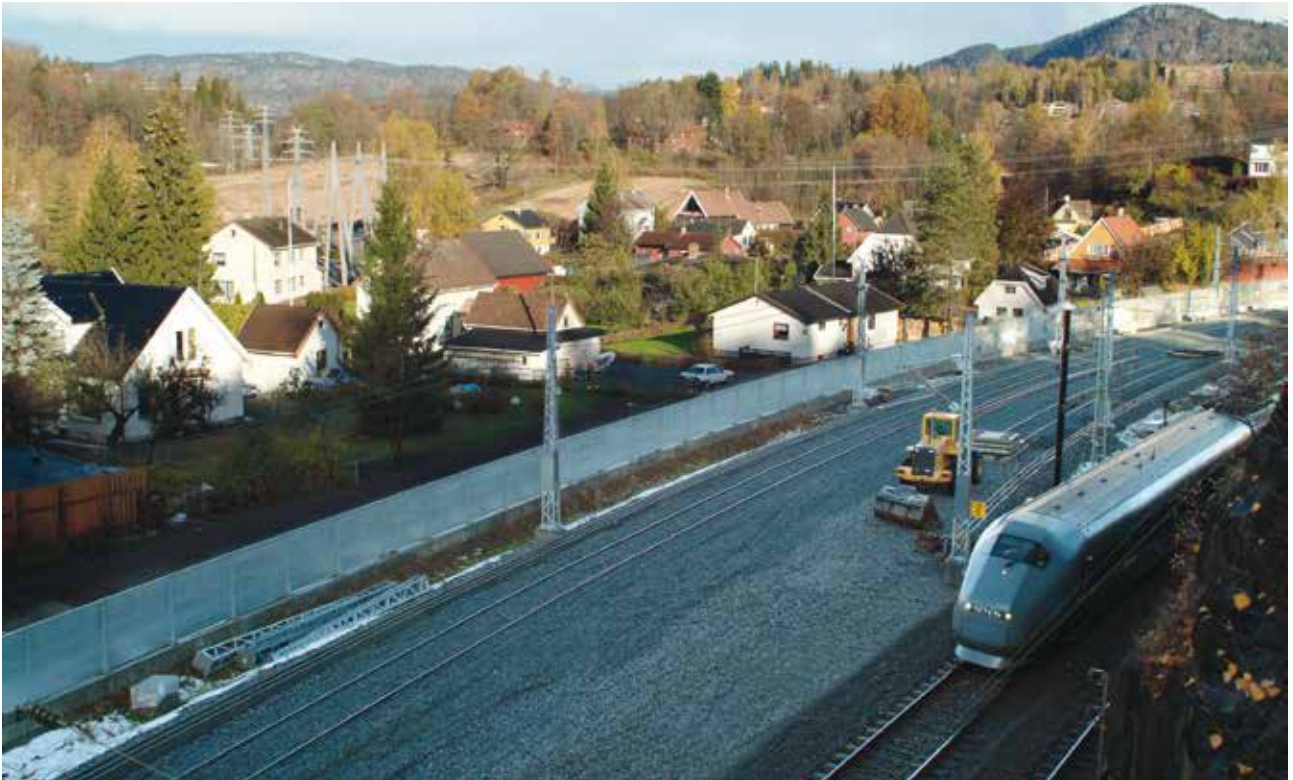


Enclosure and noise dampening for coolant chiller, Stuttgart, Germany.



Noise-dampening for ventilation ducts and shafts. New Karolinska Solna, hospital in Solna, Sweden.





Noise-absorbing panels along railway, Oslo, Norway.



Noise panels at underground descent, Brussels, Belgium.



Noise and privacy panels along railway, Oslo, Norway.



Noise-absorbing panels with glazing, Narvik, Norway.  
(NOTE: 4 m between posts).



Noise screen along road in central Partille, Gothenburg, Sweden.

NOTE: See the manual Isolamin Noise and Privacy Screens for the theory behind noise panels as well as complete engineering information.

Isolamin AB's noise panels comply with the following EN directives:  
EN-1793 Absorption and noise-insulation capabilities  
EN-1794-1 Dead weight, snow clearance loads and static forces  
EN-1991-1, 2, 3, 4 Wind and snow loads  
EN-1317-2 Impact



Absorbent noise panels with screens along highway E18, Oslo, Norway.



Noise panels along highway E10 at discharge station for iron ore, Svappavaara, Sweden.



Aluminium noise panels, resistant to salt, along highway E6, Mossporten, Norway



Powder-lacquered noise panels, Lindö Tunnel, Stockholm, Sweden.

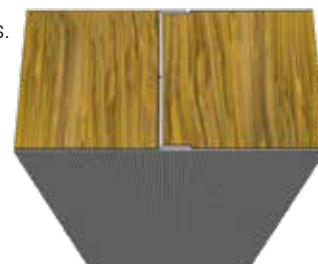
## Isolamin joint system C – the market's most advanced

- Durable construction. Stable assembly with extra strength at the joints.
- Flush mounting. The entire panel surface is at the same height, without projecting joints or profile edges.
- Tolerance-friendly. Each joint can manage tolerance deviations of up to 2 mm, which provides major advantages during installation.
- Each panel can be removed without touching any other panels.
- Pressure-tested and water-tight joint system.
- Smart alternative profile solutions for when smooth wall surfaces are needed.
- Supplied with ready-to-use L-corners and T-corner panels for when there are stringent demands on tightness, smooth surfaces and dust-free environments.



## Isolamin joint system P – flexible tongue and groove system

- Joint system with alternatives for both vertical and horizontal installations.
- Quick installation without joint profiles.
- Supplied with “water traps” in the joints for vertical outdoor installations.
- Grooved panel exterior with P-joint if so desired.



- The wall/ceiling systems are supplied with an optimal acoustical solution for compliance with each project's individual demands.
- Deliveries are tailored with respect to length, width and speed of installation, and with no cutting necessary on site.
- Detailed specification drawings and installation drawings are usually included with deliveries.
- The high strength of the system entails long spans and minimal requirements for steel framing.
- The materials in the panels are fully adapted to the environment where they will be installed.

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# ISOLAMIN

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