

# MiniTec

NOISE REDUCTION

*...save time!*



# MINITEC - NOISE REDUCTION SYSTEM

## *NOISE CAUSES HEALTH PROBLEMS*

Depending on the intensity and duration of noise exposure, there can be acute and long-term damages to health, capacity and general well-being to your employees.

- Psychological effects such as lapses of concentration, nervousness, irritability, and aggressiveness.
- Physiological damage such as hearing disorder, high blood pressure, hypertension, cardiovascular disease and headaches.
- Loss of efficiency and higher risk of injuries, impaired communication, incorrect decisions due to misunderstandings, higher error rate and demotivating working environment.

*Because of the rising costs of occupational health and the consequential production downtimes, it is important to think about noise reduction. Improvements made to reduce noise in the working environment often increase productivity.*



## THE MINITEC NOISE REDUCTION SYSTEM

*For the safety of employees the European Health and Safety regulation regarding noise ( 2033/10/EG ) has been implemented in law from March 6th 2007. According to this new regulation 80 dB(A) is the new trigger point, a reduction of 5 dB(A).*

One solution for passive noise protection is to provide hearing protectors, but that effects other things such as difficult communication, unable to recognise audible warning signals and can be uncomfortable to wear. An active noise protection solution such as noise emission or guard units at the source provide a better solution for everyone. There are guidelines regulated by law for prevention of noise exposure and for employers to take appropriate actions according to the newest standards.

The new system for enclosures and noise reducing guard units were developed in cooperation with noise control specialist, Scharenberg, situated in Tarmstedt, Germany. This new system is based on the well proven MiniTec profile system combined with 20 mm thick noise reducing mats and 34 mm thick noise reducing panels. An excellent design makes it easy to assemble and give you easy access to the machines. If the guard unit in layout p34 is used properly you can reach a noise reduction of 25 dB(A) on a regular basis.





## KEY BENEFITS OF **MiniTEC** NOISE REDUCTION SOLUTIONS

- efficient noise reduction
- cost-effective due to the use of the MiniTec profile system
- standard panels provide simple and assembly construction
- optimal accessibility through doors, lift gates, control windows
- easy removable walls
- optional also working with heat rejection



## EXAMPLES OF **MiniTEC** NOISE REDUCTION SOLUTIONS

### ...outdoors

noise reduction at an exhaust system  
including weather-proof roof-construction



### ...indoors

noise reduction at an automatic saw

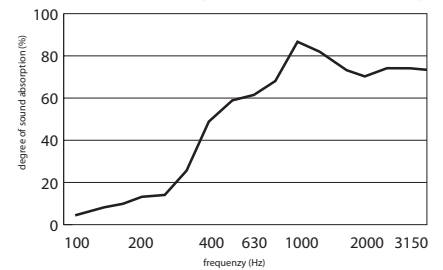
# NOISE REDUCTION COMPONENTS

## Layout "p20"

- base frame using MiniTec aluminium profiles
- panel element
- sound-absorbing panel, PU-foam 20 mm thick, black, part nr. 21.1879/0, for bonding and sealing on panel elements
- weight approx. 650 g/m<sup>2</sup>
- heat resistance: - 40° C to + 100° C
- **options for panel elements:**
  - aluminium panel 2 mm, anodized, part nr. 21.1011/0
  - built-in with Insert seal 2, part nr. 22.1083/0
  - steel panel 1 to 2 mm, varnished or zinc-plated, built-in with Insert seal 2, part nr. 22.1083/0
  - chipboard 8 mm, double-coated white, part nr. 21.1815/2
  - chipboard 8 mm, double-coated light-grey, part nr. 21.1855/0

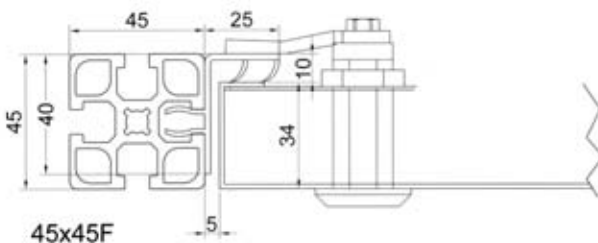


Degree of sound absorption measurement (DIN-EN-ISO 103534-2)



## Layout "p34"

- base frame using MiniTec aluminium profiles
- noise reduction strip, part nr. 22.1130/1
- noise reduction panel 34 mm thick
- internal side perforated plate
- filling: premium mineral wool
- exterior sheet panel zinc-plated optional varnished in RAL colour

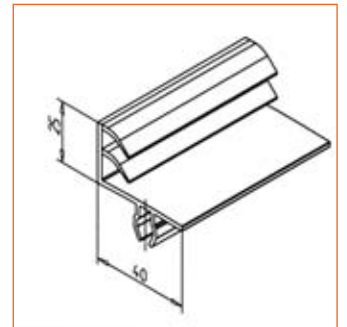


# AND LAYOUT

## Noise reduction strip

part nr. 22.1130/1

- material: ABS grey
- with two side-fed sealing lips
- weight: 0,232 kg/m
- no tools and screws needed for attachment
- backfitting/retrofitting possible
- easy handling and easy removal
- less assembly-time
- sealed panels, door catches
- no mitre-cut necessary



## Noise reduction panel " p34"

- Thickness 34 mm
- 1,5 mm steel panel zinc-plated, optional finish in RAL
- Insulation: mineral fibre, laminated, approx. 90 kg/m<sup>3</sup>
- 1,0 mm perforated plate inside, zinc-plated. approx. 35 % holes
- sound insulation certified according to ISO 140-3
- weight of panel 27 kg/m<sup>2</sup>

## Layout

- panel firmly bolted together
- panel fixed with bolt lock
- door with handle



panel firmly bolted together



panel fixed with bolt lock



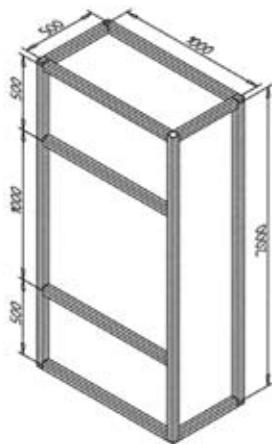
door with handle



## Options

- windows, single or double
- finished according RAL
- panel sound absorber
- conduit sound absorber
- ventilator with thermostat
- sliding doors
- rain cover/shield

# ASSEMBLY WITH STANDARD NOISE REDU



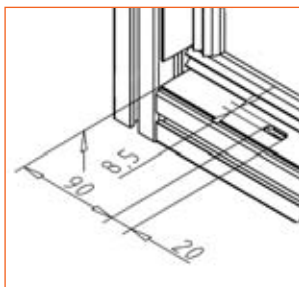
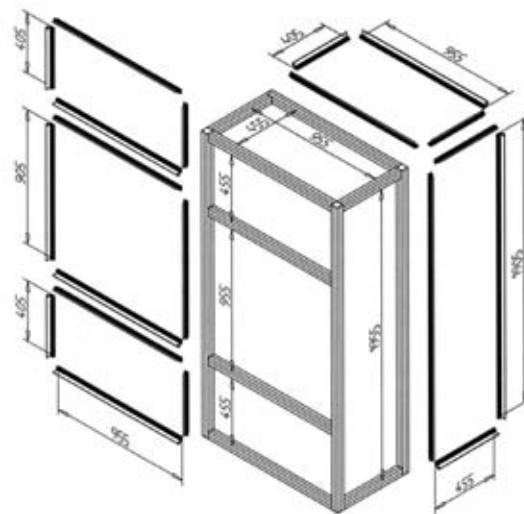
## Example for a base frame

### 1. construction

- Please use the standard groove centre distance N from 250 to 2000 mm for constructing the carrier framework

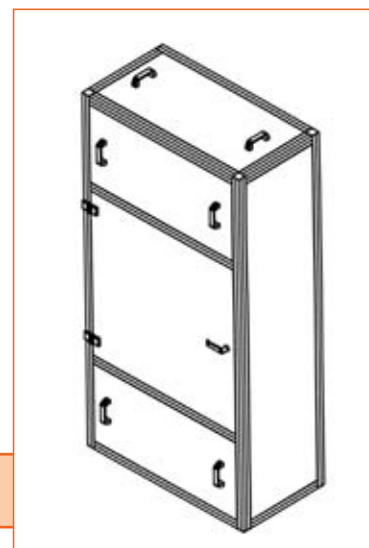
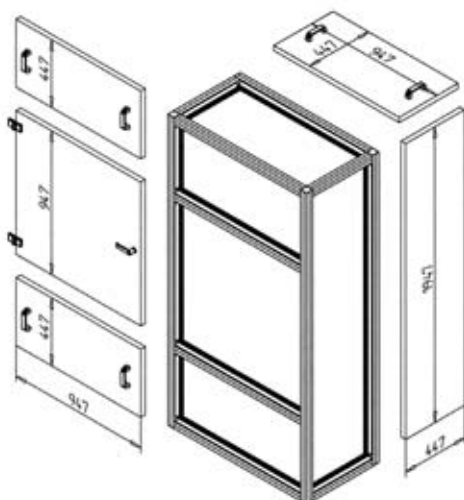
### 2. Insertion of noise reduction strip

- calculation of length for noise reduction strip  
Horizontal N -45 mm, vertical N -95 mm
- cutting strips and inserting strips
- When using removable elements use an additional one on the bottom drill 2 long holes diameter 8,5x20, use snap bolt 25, part nr. 21.1758/0, put together with square-nuts



### 3. Insertion and fastening of the noise reduction elements

- firmly bolted elements to be fixed from the backside
- removable elements will be inserted into snap bolts from underneath, then swivel it into the base frame and secure it
- door elements and shutter to be fixed from the front

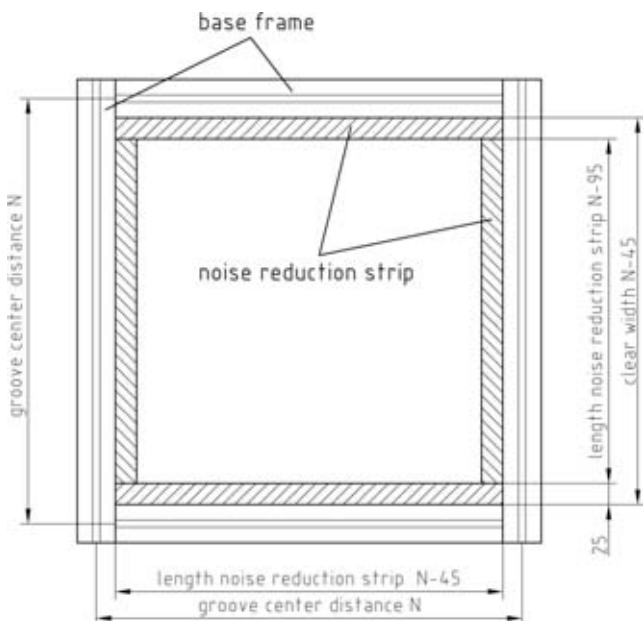


# CTION PANEL P34

## Preferential noise reduction panel sizes p34

groove centre distance N	panel size	panel firmly bolted together	panel fixed with bolt lock	door
		part nr.	part nr.	part nr.
250 x 250	197 x 197	560011/0	560012/0	560013/0
500 x 250	447 x 197	560021/0	560022/0	560023/0
1000 x 250	947 x 197	560031/0	560032/0	560033/0
250 x 500	197 x 447	560041/0	560042/0	560043/0
500 x 500	447 x 447	560051/0	560052/0	560053/0
1000 x 500	947 x 447	560061/0	560062/0	560063/0
250 x 1000	197 x 947	560071/0	560072/0	560073/0
500 x 1000	447 x 947	560081/0	560082/0	560083/0
1000 x 1000	947 x 947	560091/0	560092/0	560093/0
250 x 2000	197 x 1947	560101/0	560102/0	560103/0
500 x 2000	447 x 1947	560111/0	560112/0	560113/0
1000 x 2000	947 x 1947	560121/0	560122/0	560123/0

### Calculation of length for noise reduction strip and panel size:



### Enquiry

We are looking forward to discuss a solution for your noise problem. Please fill out the questionnaire and send it back via fax.

- Dimensions of the machine

Width: \_\_\_\_\_ mm Length: \_\_\_\_\_ mm

Height: \_\_\_\_\_ mm

- Machine type \_\_\_\_\_

- Requirement for accessibility to doors, fixed elements, window ( please attach a sketch)

- current noise emission \_\_\_\_\_ dB(A)

- Noise reduction you are looking for?

\_\_\_\_\_ dB(A)

- Heat rejection required?  yes  no

**MiniTec** GmbH & Co. KG  
MiniTec Allee 1 · D-66901 Schönenberg-Kbg.  
Tel. +49(0) 6373/8127-0 · Fax +49(0) 6373/8127-20  
e-mail: info@minitec.de · url: www.minitec.de

**MiniTec** S.N.C.  
2, rue Charles Desgranges · F-57214 Sarreguemines  
Tel. +33(0) 3 8727 6870 · Fax +33(0) 3 8727 6877  
e-mail: info@minitec.fr · url: www.minitec.fr

**MiniTec** Z.I. Nord  
Village PMI 4, cellule n°5 · Allée Alain Ducamp  
Avenue Roger Dumoulin · F-80000 Amiens  
Tel.: +33(0) 3 2222 2490 · Fax: +33(0) 3 2222 2499  
e-mail: info@minitec.fr · url: www.minitec.fr

**MiniTec** Slovakia s.r.o.  
ul. Rabicicka 332 · 029 44 RABCA  
Tel. +421/ 43 552 435 - 0 · Fax +421/ 43 552 435 - 2  
e-mail: info@minitec-slovakia.sk  
url: www.minitec-slovakia.sk

**MiniTec** Framing Systems LLC  
100 Rawson Road, Suite 228 · Victor Business Centre  
Victor, NY 14564 - USA  
Tel. +1 585 924 4690 · Fax +1 585 924 4821  
e-mail: sales@minitecframing.com  
url: www.minitecframing.com

**MiniTec** GmbH & Co KG  
Fürther Str. 33 · D-90513 Zirndorf  
Tel. +49(0) 911/27 89 00-0 · Fax +49(0) 911/27 89 00-99  
e-mail: zirndorf@minitec.de · url: www.minitec.de

**MiniTec** (Schweiz) AG  
Industriestrasse 19 · CH-8112 Otelfingen  
Tel. +41(0) 44 575 15 00 · Fax +41(0) 44 575 15 01  
e-mail: info@minitec.ch · url: www.minitec.ch

**MiniTec** UK Ltd.  
Unit 1 Telford Road · Houndmills Estate  
RG21 6YU Basingstoke/Hampshire GB  
Tel.: +44(0) 1256 365 605 · Fax: +44 (0) 1256 365 606  
e-mail: info@minitec.co.uk · url: www.minitec.co.uk

**MiniTec** España S.L.U.  
C/ Carlos Jiménez Díaz, 7. Pol. Ind. La Garena  
28806 Alcalá de Henares, Madrid  
Tel.: +34 91 656 26 52 · Fax: +34 91 677 53 04  
e-mail: info@minitec.es · url: www.minitec.es

**MiniTec** Slovenia d.o.o.  
Grize 24a · 3302 Grize  
Tel. +386/ 59 071 390 · Fax +386/ 59 071 399  
e-mail: info@minitec.si · url: www.minitec.si

