meTecno

SANDWICH SYSTEMS | ROOF & WALL

WWW.METECNO.DE

since 1961

meTecno
A GLOBAL COMPANY


Metecno is an international company specialized in the production of sandwich panels. The group was founded in Italy in 1961.

As a joint-venture of DLW AG in Bietigheim-Bissingen (GER) and Metecno S.p.A. in Tribiano (I) a modern production facility was set up in Jena-Blankenhain to serve the German and European market.

By merging into the internationally oriented Metecno Group and by the know-how developed over the years a constant increase of the market share was secured.

Together with regular product innovation, our technology and production process are always kept on the latest level to ensure the highest possible standard for current and future production.

Over 300 million square meters of sandwich panels have been produced and sold to the most remote countries in the world since Metecno Group was established.

Our most important products include roof and wall panels, perfectly apt for industrial and agricultural use as well as for sports venues and plant construction.

Due to increasing requirements for thermal insulation and fire protection the sandwich construction method has come to stay. The great variety of different profile geometries and vast choice of available colours makes architecturally sophisticated solutions possible.

An extensive range of accessories such as colour-matched flashings, filler blocks, sealing tapes or pilaster strips made of aluminium complement the Metecno product range.

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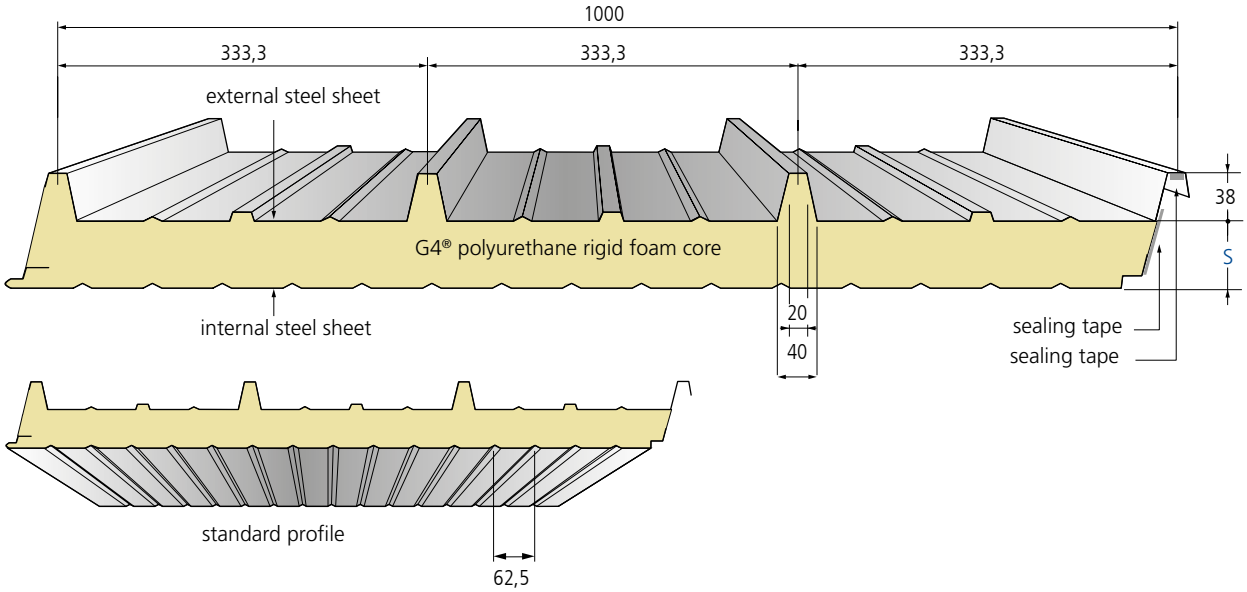
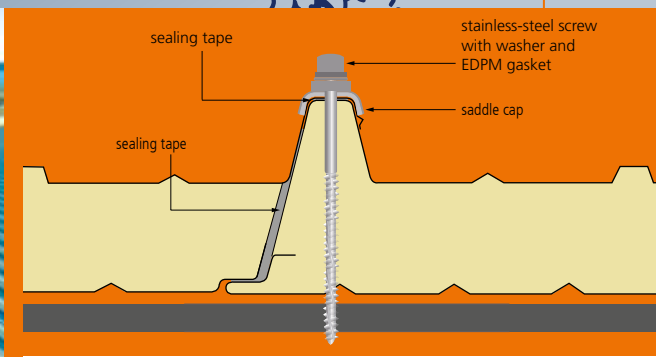
This sandwich panel with highly heat-insulating CFC-and HCFC-free polyurethane rigid foam core is suited best for today's requirements for thermal insulation and moisture protection. Besides that it may also be used as a visual design element for facades. The sloped element joint with integrated sealing closes during installation without any additional working steps. Thus, one single operation produces a reliable connection without any thermal bridge.

The G4® panel ensures a very high installation speed and is therefore THE product of choice for many professional installation companies. The optional stucco-embossing on the internal steel sheet reduces the mirror effect on the surface. Depending on the application, a minimum roof slope of 5° is recommended. For additional information please refer to our detailed technical manual.




| type of element | core thickn. s | total-thickn. D | external steel sheet $t_N$ | internal steel sheet $t_N$ | weight | thermal resistance | thermal conductivity (Ψ– joint effect) | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | R | U without Ψ | U with Ψ |
| | mm | mm | mm | mm | kg / m² | m² K / W | W / m² K | W / m² K |
| G4® | **30** | **68** | 0,60 | 0,45* | 11,1 | 1,21 | 0,773 | 0,798 |
| | **40** | **78** | 0,60 | 0,45* | 11,5 | 1,62 | 0,584 | 0,598 |
| | **50** | **88** | 0,60 | 0,45* | 11,9 | 2,04 | 0,489 | 0,499 |
| | **60** | **98** | 0,60 | 0,45* | 12,3 | 2,46 | 0,393 | 0,399 |
| | **80** | **118** | 0,60 | 0,45* | 13,1 | 3,29 | 0,296 | 0,299 |
| | **100** | **138** | 0,60 | 0,45* | 13,9 | 4,12 | 0,237 | 0,240 |
| | **120** | **158** | 0,60 | 0,45* | 14,7 | 4,96 | 0,198 | 0,199 |
| | **150** | **188** | 0,60 | 0,45* | 15,9 | 6,20 | 0,159 | 0,160 |

*with stucco-embossing (also available without stucco)




## PRODUCTION AND LABELING

Production according to applicable European Building Product Regulation as per sandwich norm DIN EN 14509 label-marking in accordance with EC certificate of conformity 0769-CPR-VAS-00420-1

## APPROVAL

DIBt-APPROVAL Z-10.49-516,
valid until September 20, 2019
and Z-10.4-583 (for self-supporting sandwich elements valid until April 16, 2019

## REACTION TO FIRE

Building material classified as B-s3,d0 low flammable according to DIN EN 13501-1
G4® roof panels are rated as "hard roofing" - resistant to airborne fire and radiating heat according to DIN EN 14509

## THERMAL CONDUCTIVITY

$\lambda$ = 0.024 W / mK according to DIN 4108 and DIN EN 13165
Insulation values are regularly monitored by external bodies and may be applied without any further reduction.

## SOUND INSULATION

$R_w$ = 25 dB

## STANDARD COATING

External steel sheet: 25 µm polyester
Internal steel sheet: ≈ 15 µm thin coating (DU)
For standard colours and different coating systems please refer to our colour chart

## STANDARD LENGTHS

> 2,00 m to 25,00 m, greater lengths on request

## CORROSION PROTECTION

Tested to DIN EN 10169
External sheet: Class RC3
Internal sheet: Class RC2

According to DIN EN ISO 12944-2:
External sheet: corrosivity category C3 corresponding to average duration of protection for urban and industrial environments with moderate exposure to sulphur dioxide

Internal sheet: corrosivity category C2 for dry indoor rooms and buildings with occasional probability of minor condensation
Other coating systems are available for more sophisticated demands such as for buildings near the sea, farm buildings with high ammonia exposure or moist rooms

## STANDARD STEEL SHEETS

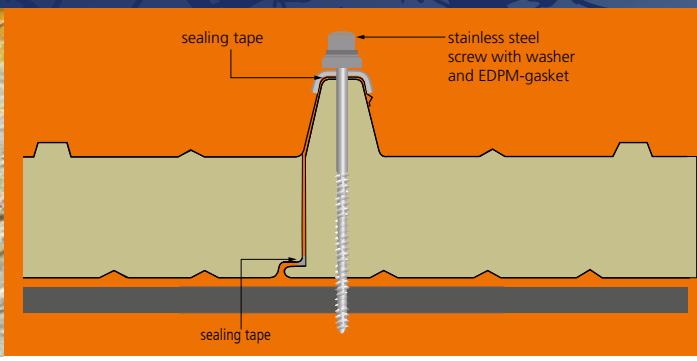
Hot-dip galvanized steel, grade S 320 GD+ Z 275 according to DIN EN 10346

## TABLE OF SPANS

Please refer to our planning folder or visit our website www.metecno.de

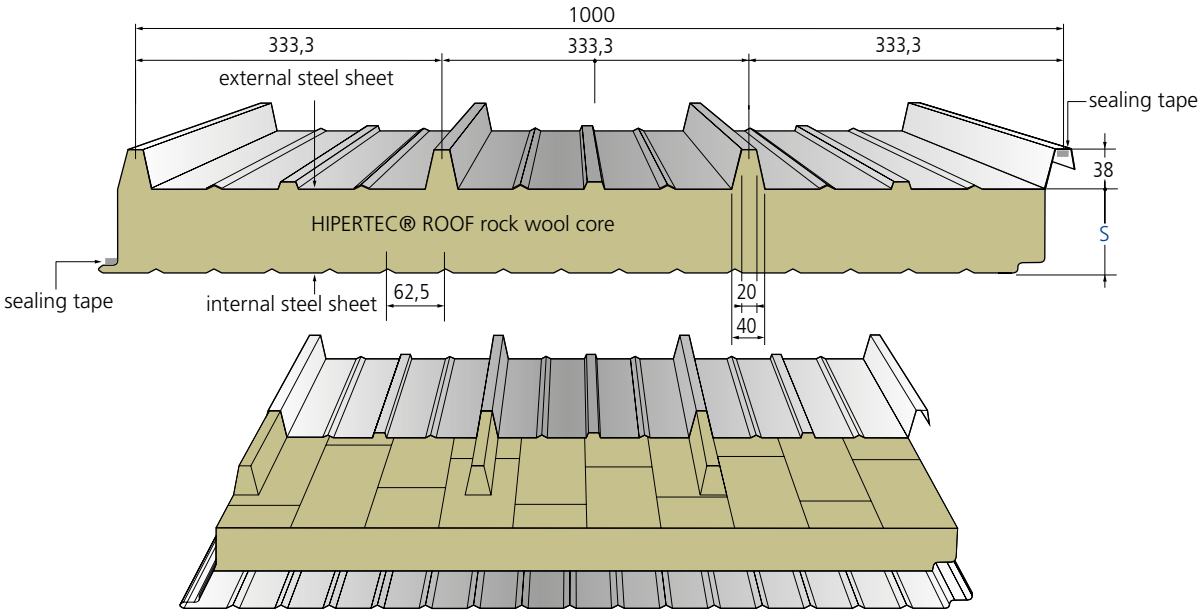
## PACKAGING

External sheet provided with removable protective film, panel packages wrapped with banded plastic foil to protect from soiling




This sandwich panel with non-combustible insulation core of rock wool meets today's high demands for fire protection. According to the guidelines for industrial construction, non-combustible insulation materials are obligatory, particularly for large-surface and multi-storey buildings. For core thickness of 100 mm and higher a fire resistance up to 90 minutes can be reached. Additionally Hipertec® Roof panels show exceptional acoustic insulation behaviour as well. Thanks to the high quality of the production process the interlocking of the joint is perfect and panels up to 25 meters length can be installed rapidly.

To protect the rock wool core from moisture a cut back and protective flashing at the eaves are recommended. For additional information please refer toourdetailed technical manual.

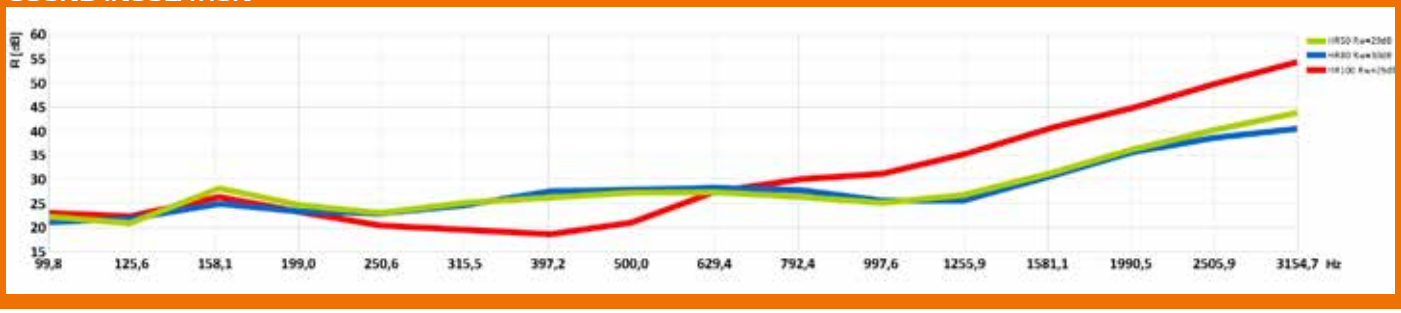



different internal profiles on request, dimensions in mm

| type of element | core-thickn.s | total-thickn. D | external steel sheet $t_N$ | internal steel sheet $t_N$ | weight | thermal resistance | thermal conductivity (Ψ – joint effect) | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | R | U w/o Ψ | U with Ψ |
| | mm | mm | mm | mm | kg / m² | m² K / W | W / m² K | W / m² K |
| HIPERTEC® ROOF | **60** | **98** | 0,60 | 0,45 | 16,8 | 1,34 | 0,705 | 0,707 |
| | **80** | **118** | 0,60 | 0,45 | 19,0 | 1,79 | 0,534 | 0,535 |
| | **100** | **138** | 0,60 | 0,45 | 21,2 | 2,25 | 0,429 | 0,430 |
| | **120** | **158** | 0,60 | 0,45 | 23,4 | 2,70 | 0,359 | 0,360 |
| | **150** | **188** | 0,60 | 0,45 | 26,7 | 3,39 | 0,289 | 0,289 |
| | **200**** | **238** | 0,60 | 0,45 | 32,12 | 4,52 | 0,217 | 0,218 |

** approval pending

## SOUND INSULATION




### PRODUCTION AND LABELING

Production according to applicable European Building Product Regulation as per sandwich norm DIN EN 14509 label-marking in accordance with EC certificate of conformity 0769-CPR-VAS-00420-1

### APPROVAL

German building compliance certificate DIßt Z-10.49-517 valid until November 20, 2019

### REACTION TO FIRE

Building material classified as A2-s1,d0 non-combustible according to DIN EN 13501-1; Hipertec® Roof panels are rated as "hard roofing" - resistant to airborne fire and radiating heat according to DIN EN 14509

### FIRE RESISTANCE

German building compliance certificate DIßt Z-19.52-2096 (see fire resistance table)

### THERMAL CONDUCTIVITY

λ = 0.044 W / mK according to DIN 4108 and DIN EN 13162
The insulation values are regularly monitored by external bodies and may be applied without any further reduction.

### SUPPORT WIDTHS FOR FIRE RESISTANCE CAPABILITY ACCORDING TO FIRE RESISTANCE APPROVAL Z-19.52-2096

| core thickn. s | fire-retardant REI30 | highly fire retardant REI60 | fire resistant REI90 |
|---|---|---|---|
| mm | mm | mm | mm |
| ≥ 100 | 3000 | 3000 | 3000 |

Please note that the maximum spans for roofs are primarily determined by snow and wind loads.

### SOUND INSULATION

$R_w \approx 29 – 30$ dB

### STANDARD COATING

External steel sheet: 25 µm polyester
Internal steel sheet: ≈ 15 µm thin coating (DU)
For standard colours and different coating systems please refer to our colour chart

### STANDARD LENGTHS

> 2,00 m to 25,00 m, greater lengths on request

### CORROSION PROTECTION

Tested according to DIN EN 10169:
External sheet: Class RC3
Internal sheet: Class RC2
According to DIN EN ISO 12944-2: External sheet: corrosivity category C3 corresponding to average protection duration and industrial environments with moderate exposure to sulphur dioxide
Internal sheet: corrosivity category C2 for dry indoor rooms and buildings with occasional probability of minor condensation
Other coating systems are available for more sophisticated demands such as for buildings near the sea, farm buildings with high ammonia exposure or moist rooms

### STANDARD STEEL SHEETS

Hot-dip galvanized steel, grade S 320 GD + Z275 according to DIN EN 10346

### TABLE OF SPANS

Please refer to our planning folder or visit our website www.metecno.de

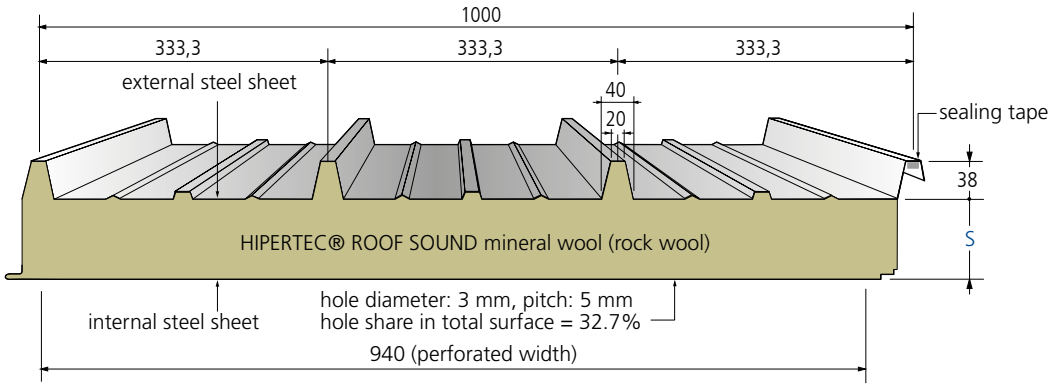
### PACKAGING

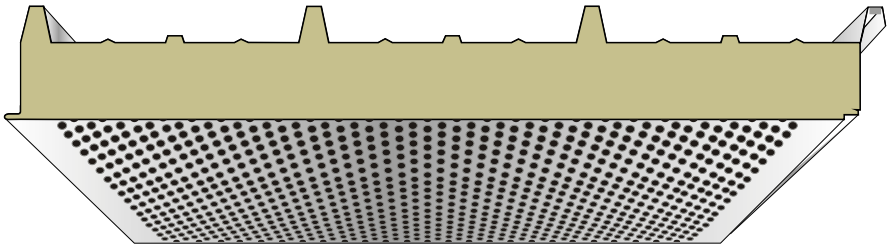
External sheet provided with removable protective film, panel packages wrapped with banded plastic foil to protect from soiling.

With its perforated internal sheet the Hipertec® Roof Sound panel contributes drastically to the improvement of sound insulation and sound absorption where applied. Designed particularly for ceiling application it may also be used as external roof in specific cases, including unheated premises. However for heated or moist areas the use of Hipertec® Roof Sound panels is not recommended since the internal sheet has no vapour barrier.

This system patented by Metecno applies a special fleece as trickle protection between the internal sheet and the mineral wool core.

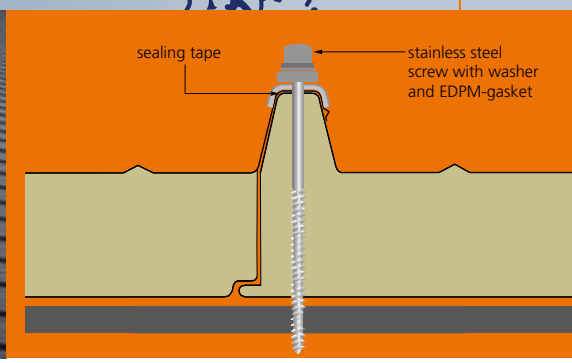
For additional information please refer to our detailed technical manual.



dimensions in mm

| type of element | core-thickn.s | total-thickn. D | external steel sheet $t_N$ | internal steel sheet $t_N$ | weight | thermal resistance | thermal conductivity (Ψ – joint effect) | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | R | U w/o Ψ | U with Ψ |
| | mm | mm | mm | mm | kg / m² | m² K / W | W / m² K | W / m² K |
| HIPERTEC® | **60** | **98** | 0,60 | 0,60 | 16,4 | 1,34 | 0,705 | 0,707 |
| ROOF SOUND | **80** | **118** | 0,60 | 0,60 | 18,6 | 1,79 | 0,534 | 0,535 |
| | **100** | **138** | 0,60 | 0,60 | 20,8 | 2,25 | 0,429 | 0,430 |
| | **120** | **158** | 0,60 | 0,60 | 23,0 | 2,70 | 0,359 | 0,360 |
| | **150** | **188** | 0,60 | 0,60 | 25,2 | 3,39 | 0,289 | 0,289 |
| | **200** | **238** | 0,60 | 0,60 | 27,4 | 4,52 | 0,217 | 0,218 |




## THERMAL CONDUCTIVITY

λ = 0.044 W / mK according to DIN 4108 and DIN EN 13162
The insulation values are regularly monitored by external bodies and may be applied without any further reduction.

## PACKAGING

External and internal sheets provided with removable protective film, panel packages wrapped with banded plastic foil to protect from soiling

## STANDARD COATING

External and internal steel sheet: 25 µm polyester

## STANDARD LENGTHS

> 2,00 m to 25,00 m, greater lengths on request

## SOUND INSULATION

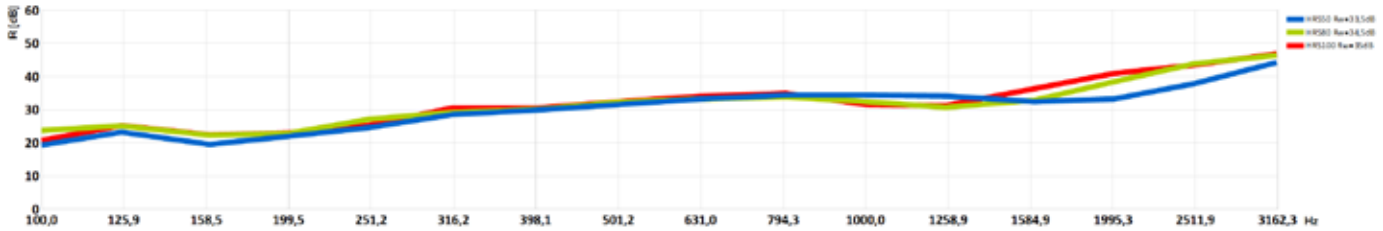
$R_w \approx 33 – 35$ dB

## CORROSION PROTECTION

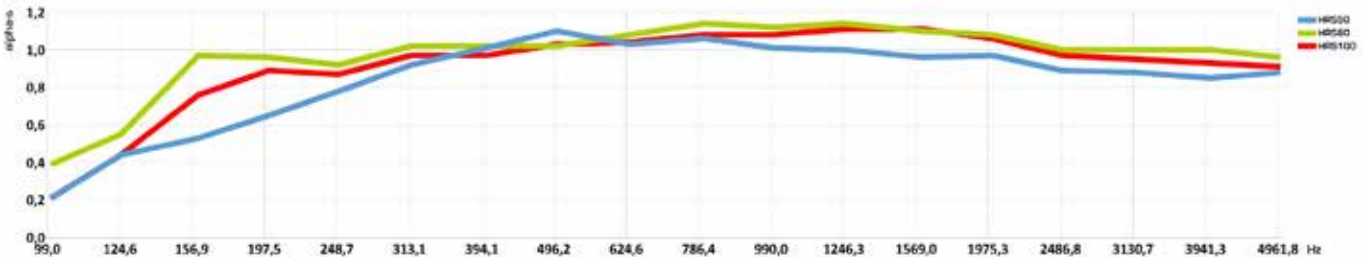
Tested according to DIN EN 10169: External sheet: Class RC3
According to DIN EN ISO 12944-2: External sheet: corrosivity category C3 corresponding to average protection duration for urban and industrial environments with moderate exposure to sulphur dioxide

## SOUND INSULATION

Rated sound damping dimension $R_w$: 50 mm = 33,5 dB, 80 mm= 34,5 dB, 100 mm= 35 dB

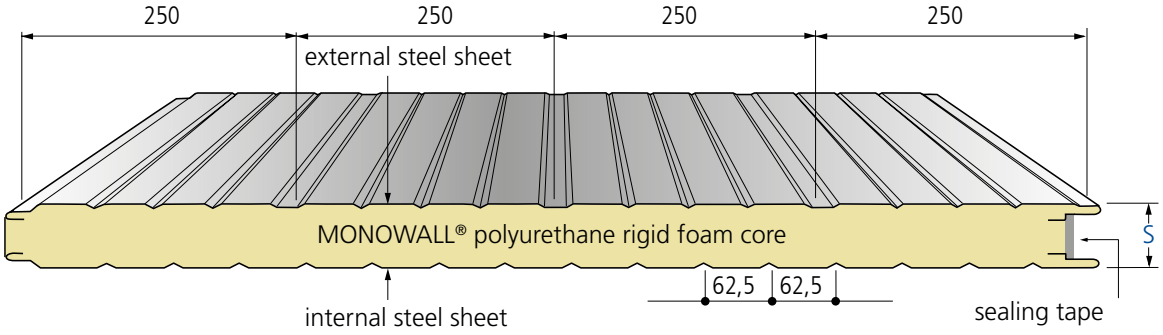



## SOUND ABSORPTION




| frequency Hz | thickness | 125 | 250 | 500 | 1000 | 2000 | 4000 |
|---|---|---|---|---|---|---|---|
| | mm | | | | | | |
| αs | **50** | 0,44 | 0,78 | 1,10 | 1,01 | 0,97 | 0,85 |
| αs | **80** | 0,55 | 0,92 | 1,02 | 1,12 | 1,08 | 1,00 |
| αs | **100** | 0,44 | 0,87 | 1,03 | 1,08 | 1,06 | 0,93 |

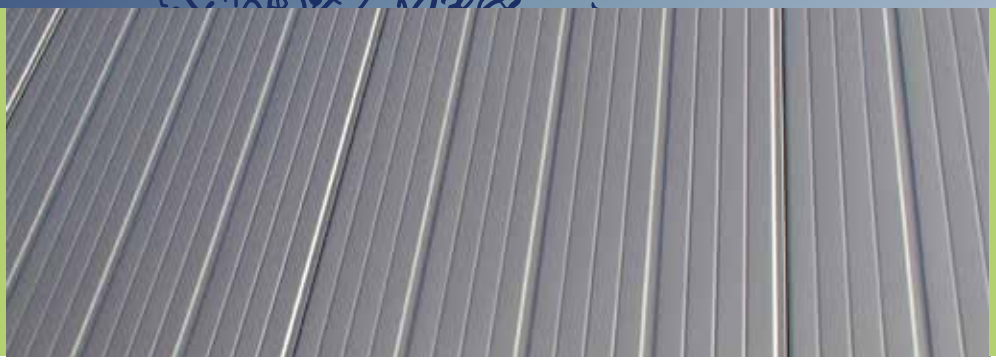
The Monowall® panel with polyurethane insulation core is suitable for both vertical and horizontal installation. Its special surface profile facilitates the installation of the panel without the risk of bulging. The appearance of the external side benefits distinctly from the screw head applied in the recess of the profile.
The internal steel sheet is optionally stucco-embossed which reduces possible mirror effects on the surface. A non-displaceable longitudinal sealing strip produces a joint resistant to driving rain and wind. The organic coating of the steel sheet ensures efficient protection against all kinds of weather. Additional coating systems are available for advanced application. For further information please refer to our detailed technical manual.

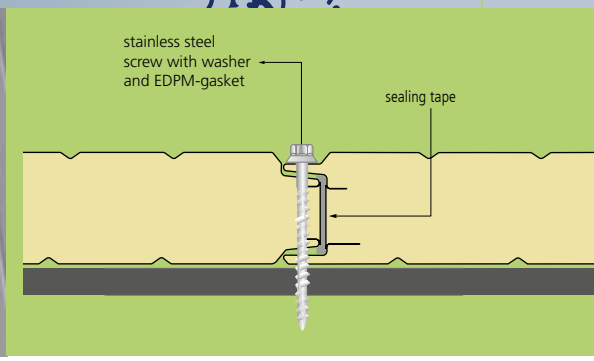



different internal profiles on request, dimensions in mm

| type of element | core thickn. s | external steel sheet $t_N$ | Internal steel sheet $t_N$ | weight | thermal resistance | thermal conductivity (Ψ – joint effect) | |
|---|---|---|---|---|---|---|---|
| | | | | | R | U w/o Ψ | U with Ψ |
| | mm | mm | mm | kg / m² | m² K / W | W / m² K | W / m² K |
| MONOWALL® | **40** | 0,60 | 0,45* | 10,7 | 1,62 | 0,606 | 0,643 |
| | **50** | 0,60 | 0,45* | 11,1 | 2,04 | 0,504 | 0,529 |
| | **60** | 0,60 | 0,45* | 11,5 | 2,46 | 0,402 | 0,415 |
| | **80** | 0,60 | 0,45* | 12,3 | 3,29 | 0,301 | 0,308 |
| | **100** | 0,60 | 0,45* | 13,1 | 4,12 | 0,241 | 0,245 |
| | **120** | 0,60 | 0,45* | 13,9 | 4,96 | 0,201 | 0,204 |

*with stucco-embossing (also available without stucco)






## PRODUCTION AND LABELING

Production according to applicable European Building Product Regulation as per sandwich norm DIN EN 14509 label-marking in accordance with EC certificate of conformity 0769-CPR-VAS-00420-1

## APPROVAL

German building compliance certificate DIBt Z-10.49-516, valid until September 30, 2019

## REACTION TO FIRE

Building material classified as B-s3,d0 low flammable according to DIN EN 13501-1

## THERMAL CONDUCTIVITY

$\lambda$ = 0.024 W / mK according to DIN 4108 and DIN EN 13165
The insulation values are regularly monitored by external bodies and may be applied without any further reduction.

## SOUND INSULATION

$R_w \approx 25$ dB

## STANDARD COATING

External steel sheet: 2 5 µm polyester
Internal steel sheet: ≈ 15 µm thin coating (DU)
For standard colours and different coating systems please refer to our colour chart

## STANDARD LENGTHS

> 2,00 m to 25,00 m, greater lengths on request

## CORROSION PROTECTION

According to DIN EN 10169:
External sheet: Class RC3
Internal sheet: Class RC2

According to DIN EN ISO 12944-2:
External sheet: corrosivity category C3 corresponding to average duration of protection for urban and industrial environments with moderate exposure to sulphur dioxide
Internal sheet: corrosivity category C2 for dry indoor rooms and buildings with occasional probability of minor condensation

Other coating systems are available for more sophisticated demands such as for buildings near the sea, farm buildings with high ammonia exposure or moist rooms

## STANDARD STEEL SHEETS

Hot-dip galvanized steel, grade S 320 GD+ Z 275 according to DIN EN 10346

## TABLE OF SPANS

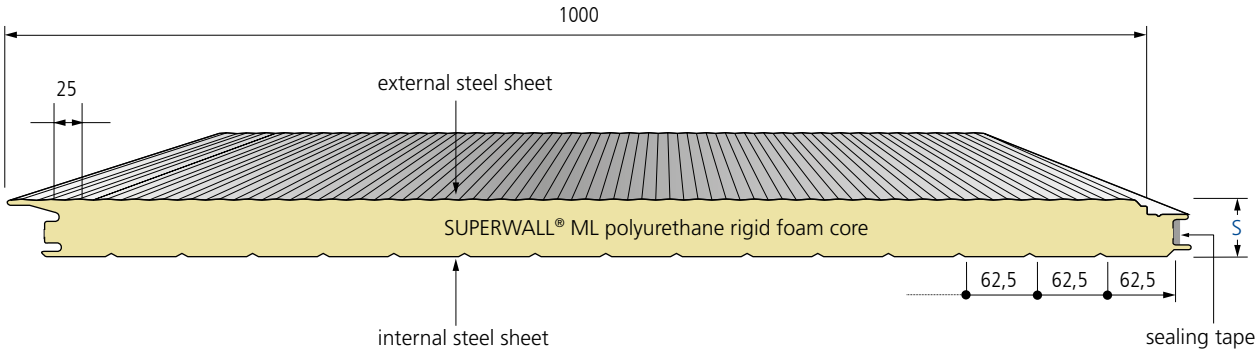
Please refer to our planning folder or visit our website www.metecno.de

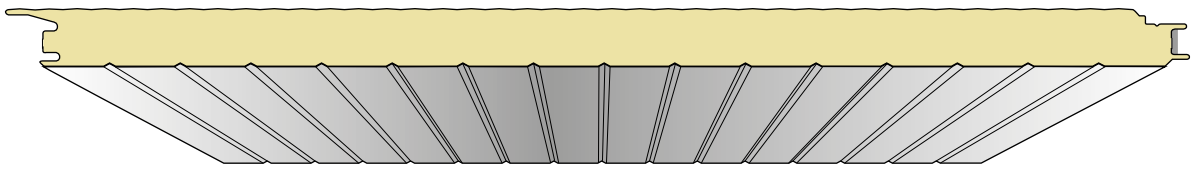
## PACKAGING

External sheet provided with removable protective film, panel packages wrapped with banded plastic foil to protect from soiling

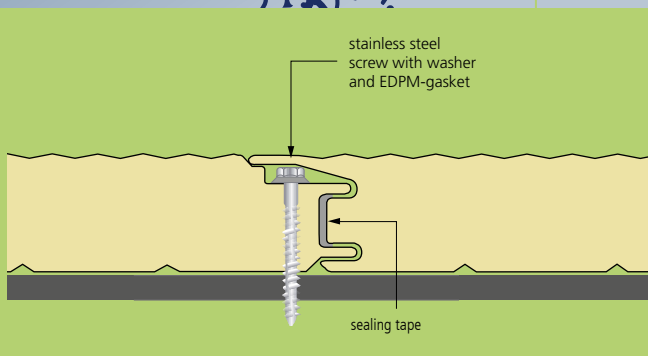
The Superwall® ML sandwich panel with microprofiled external steel sheet and joint-geometry for hidden fixing suits best to meet today's sophisticated requirements for high-quality facades. The shear-resistant connection of the cover sheets together with the compressive strength of the insulation core make large support widths possible for both vertical and horizontal installation.
For buildings exposed to high wind suction, horizontal single span installation is recommended as well as the use of visible fixing screws covered by pilaster profiles.

The internal sheet is optionally stucco-embossed to reduce possible mirror effects on the surface.
A non-displaceable sealing strip foamed into the longitudinal joint procures resistance to driving rain and wind. Together with the organic coating of the steel sheets. This ensures efficient protection against all kinds of weather.
For advanced application additional coating systems are available. Please refer to our detailed technical manual for further information.



different internal profiles on request, dimensions in mm




## PRODUCTION AND LABELING

Production according to applicable European Building Product Regulation as per sandwich norm DIN EN 14509 label-marking in accordance with EC certificate of conformity 0769-CPR-VAS-00420-1

## APPROVAL

German building compliance certificate DIßt Z-10.49-516, valid until November 20, 2019

## REACTION TO FIRE

Building material classified as B-s3,d0 low flammable according to DIN EN 13501-1

## THERMAL CONDUCTIVITY

λ = 0.024 W / mK according to DIN 4108 and DIN EN 13165
The insulation values are regularly monitored by external bodies and may be applied without any further reduction

## SOUND INSULATION

$R_w \approx 25$ dB

## STANDARD COATING

External steel sheet: 25 µm polyester
Internal steel sheet: ≈ 15 µm thin coating (DU)
For standard colours and different coating systems please refer to our colour chart

## STANDARD LENGTHS

> 2.00 m to 25.00 m, greater lengths on request

## STANDARD STEEL SHEETS

Hot-dip galvanized steel, grade S 320 GD+ Z 275 according to DIN EN 10346

## CORROSION PROTECTION

According to DIN EN 10169: External sheet: Class RC3
Internal sheet: Class RC2
According to DIN EN ISO 12944-2:
External sheet: corrosivity category C3 corresponding to average duration of protection for urban and industrial environments with moderate exposure to sulphur dioxide
Internal sheet: corrosivity category C2 for dry indoor rooms and buildings with occasional probability of minor condensation. Other coating systems are available for more sophisticated demands such as for buildings near the sea, farm buildings with high ammonia exposure or moist rooms

## TABLE OF SPANS

Please refer to our planning folder or visit our website www.metecno.de

## PACKAGING

External sheet provided with removable protective film, panel packages wrapped with banded plastic foil to protect from soiling
INTERLOCKING JOINT COMPATIBILITY WITH METFIBER® ECO HF WALL & SUPERWALL® HF

| type of element | core thickn. s | external steel sheet $t_N$ | internal steel sheet $t_N$ | weight | thermal resistance | thermal conductivity (Ψ – joint effect) | |
|---|---|---|---|---|---|---|---|
| | | | | | R | U w/o Ψ | U with Ψ |
| | mm | mm | mm | kg / m² | m² K / W | W / m² K | W / m² K |
| SUPERWALL® ML | **60** | 0,60 | 0,45* | 11,8 | 2,46 | 0,400 | 0,442 |
| | **80** | 0,60 | 0,45* | 12,6 | 3,29 | 0,300 | 0,317 |
| | **100** | 0,60 | 0,45* | 13,4 | 4,12 | 0,240 | 0,250 |
| | **120** | 0,60 | 0,45* | 14,2 | 4,96 | 0,200 | 0,207 |
| | **150** | 0,60 | 0,45* | 15,4 | 6,20 | 0,160 | 0,164 |
| | **160**** | 0,60 | 0,45* | 15,8 | 6,63 | 0,147 | 0,150 |

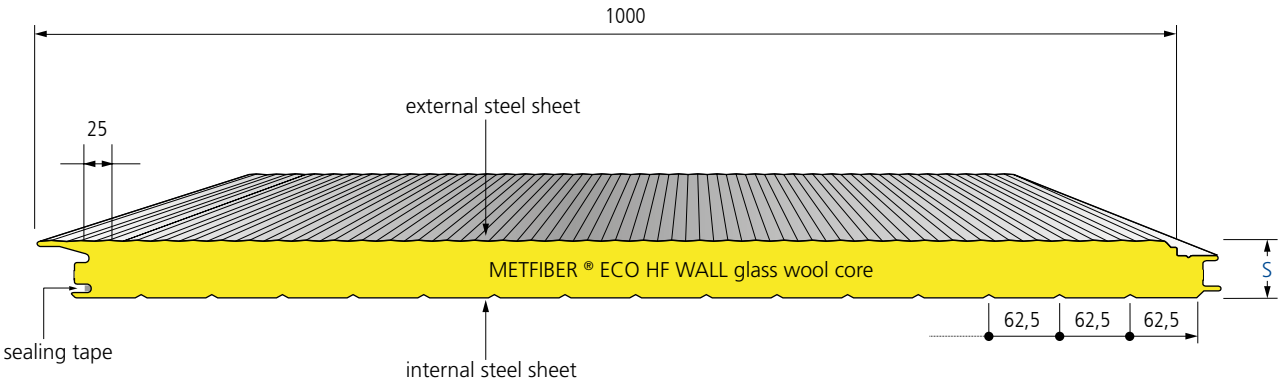
*with stucco-embossing (also available without stucco)
** approval pending

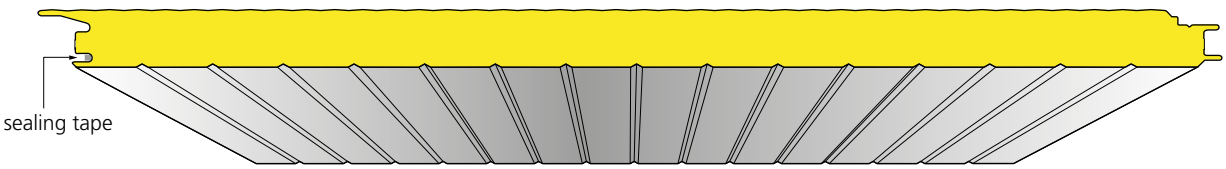
The Metfiber® Eco HF Wall panel with glass wool core and joint geometry for hidden fixing fulfils all the requirements for non-combustible building materials and is excellently suited for both vertical and horizontal installation. The glass wool used in this product consists of 80% recycled material, thus contributing significantly to the saving of natural resources and making the product an ecological building material. The deadweight of the panel is distinctly lower than that of conventional sandwich panels with rock wool insulation core, hence enabling an easier, faster installation and cost reduction, especially for langer panels.

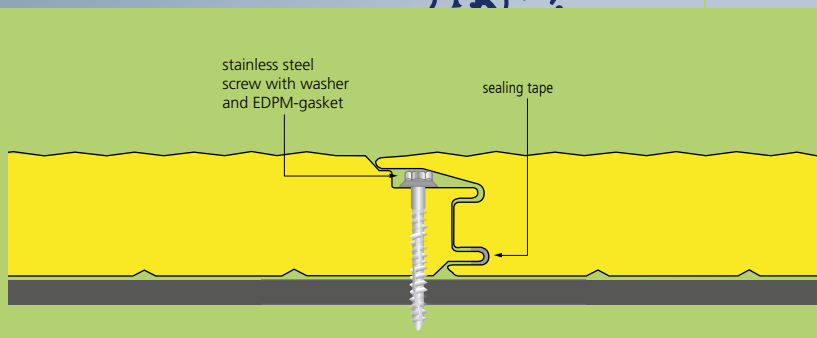
For buildings exposed to high wind suction horizontal single span installation is recommended as well as the use of visible fixing screws covered by pilaster profiles. Due to the large number of combinations with other panels from our portfolio with polyurethane- or rock wool insulation core, it is possible to reach fire, acoustic and thermal requirements at once without any visual impact.

Please refer to our detailed technical manual for further information.

different internal profiles on request, dimensions in mm






## PRODUCTION AND LABELING
Production according to applicable European Building Product Regulation as per sandwich norm DIN EN 14509 label-marking in accordance with EC certificate of conformity 0769-CPR-VAS-00420-1

## APPROVAL
German building compliance certificate Dlßt Z-10.49-613, valid until November 4, 2018

## REACTION TO FIRE
Building material classified as A2-s1,d0 non-combustible according to DIN EN 13501-1; insulation core made of glass wool

## THERMAL CONDUCTIVITY
λ = 0.039 W / mK according to DIN 4108 and DIN EN 13162
The insulation values are regularly monitored by external bodies and may be applied without any further reduction

## STANDARD COATING
External and internal steel sheet: 25 µm polyester
For standard colours and different coating systems please refer to our colour chart

## SOUND INSULATION
$R_w \approx 31$ dB

## STANDARD LENGTHS
> 2.00 m to 25.00 m, greater lengths on request

## CORROSION PROTECTION
According to DIN EN 10169:
External and Internal sheets: Class RC3
According to DIN EN ISO 12944-2:
External and internal sheets: corrosivity category C3 corresponding to average duration of protection for urban and industrial environments with moderate exposure to sulphur dioxide
Other coating systems are available for more sophisticated demands such as for buildings near the sea, farm buildings with high ammonia exposure or moist rooms

## STANDARD STEEL SHEETS
Hot-dip galvanized steel, grade S 320 GD + Z275 according to DIN EN 10346

## TABLE OF SPANS
Please refer to our planning folder or visit our website www.metecno.de

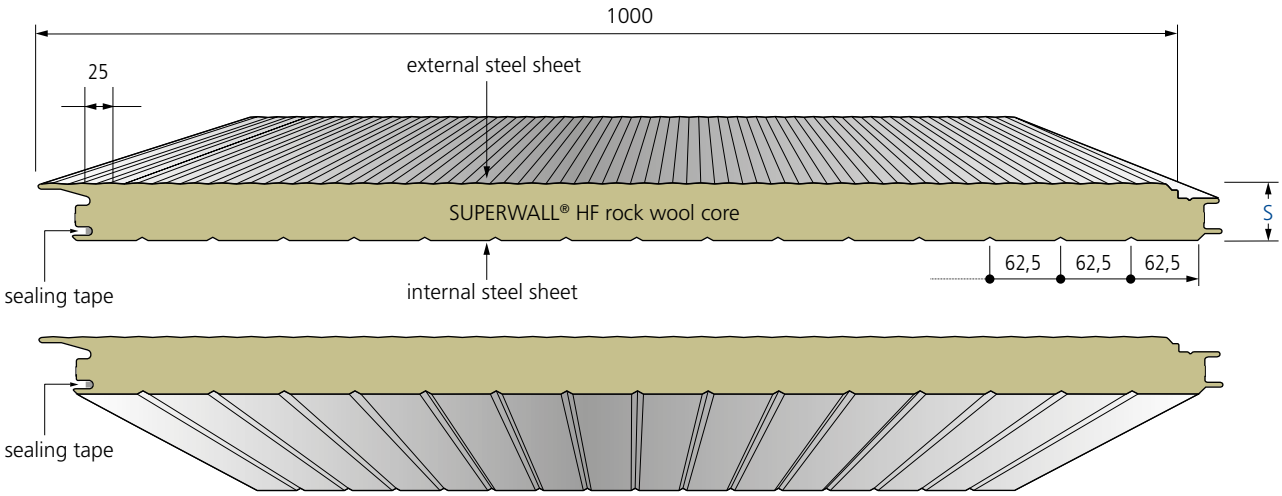
## PACKAGING
External sheets provided with removable protective film, panel packages wrapped with banded plastic foil to protect from soiling

INTERLOCKING JOINT COMPATIBILITY WITH SUPERWALL® ML & SUPERWALL® HF

| type of element | core thickn. s | external steel sheet $t_N$ | internal steel sheet $t_N$ | weight | thermal resistance | thermal conductivity (Ψ – joint effect) | |
|---|---|---|---|---|---|---|---|
| | | | | | R | U w/o Ψ | U with Ψ |
| | mm | mm | mm | kg / m² | m² K / W | W / m² K | W / m² K |
| METFIBER® ECO HF WALL | **100** | 0,60 | 0,60 | 17,16 | 2,54 | 0,385 | 0,400 |
| | **120** | 0,60 | 0,60 | 18,46 | 3,05 | 0,322 | 0,331 |
| | **150** | 0,60 | 0,60 | 20,14 | 3,82 | 0,258 | 0,264 |
| | **200** | 0,60 | 0,60 | 23,66 | 5,10 | 0,194 | 0,197 |
| | **240*** | 0,60 | 0,60 | 26,26 | 6,12 | 0,162 | 0,164 |

* no approval / on request

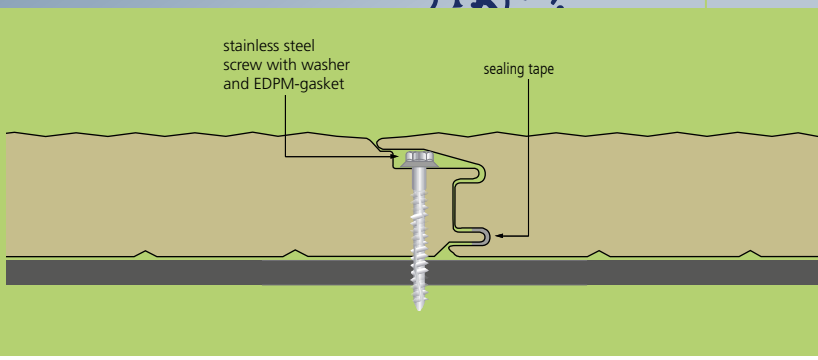
The Superwall® HF sandwich panel with microprofiled external steel sheet, non-combustible rock wool core and joint geometry for hidden fixing is suited best to meet today's sophisticated requirements for high-quality facades. The panels can be placed vertically or horizontally and, depending on the insulation thickness, may reach a fire resistance up to 90 minutes. Additionally Superwall® HF panels show excellent acoustic insulation behaviour as well. For building exposed to high wind suction horizontal single span installation is recommended as well as the use of visible fixing screws covered by pilaster profiles. Due to the large number of combinations with other panels from our portfolio with polyurethane or glass wool insulation core, it is possible to reach fire, acoustic and thermal requirements at once without any visual impact. Please refer to our detailed technical manual for further information.




different internal profiles on request, dimensions in mm

| type of element | core thickn. s | external steel sheet $t_N$ | Inner steel sheet $t_N$ | weight | thermal resistance | thermal conductivity (Ψ – joint effect) | |
|---|---|---|---|---|---|---|---|
| | | | | | R | U w/o Ψ | U with Ψ |
| | mm | mm | mm | kg / m² | m² K / W | W / m² K | W / m² K |
| SUPERWALL® HF | 80 | 0,60 | 0,60 | 19,5 | 1,79 | 0,539 | 0,566 |
| | 100 | 0,60 | 0,60 | 21,7 | 2,25 | 0,433 | 0,499 |
| | 120 | 0,60 | 0,60 | 23,9 | 2,70 | 0,362 | 0,372 |
| | 150 | 0,60 | 0,60 | 27,2 | 3,37 | 0,290 | 0,297 |
| | 200 | 0,60 | 0,60 | 32,7 | 4,52 | 0,218 | 0,222 |
| | 240* | 0,60 | 0,60 | 37,1 | 5,42 | 0,182 | 0,185 |

* no approval / on request




## PRODUCTION AND LABELING

Production according to applicable European Building Product Regulation as per sandwich norm DIN EN 14509 label-marking in accordance with EC certificate of conformity 0769-CPR-VAS-00420-1

## APPROVAL

German building compliance certificate DIßt Z-10.49-517 valid until September 20, 2019

## REACTION TO FIRE

Building material classified as A2-s1 ,d0 non-combustible according to DIN EN 13501-1, rock wool core A1, non-combustible, melting point > 1000°C

## FIRE RESISTANCE

German building compliance certificate DIßt Z-19.52-2096 of July 23, 2013 (see table below)

## THERMAL CONDUCTIVITY

λ = 0.044 W / mK according to DIN 4108 and DIN EN 13162
The insulation values are regularly monitored by external bodies and may be applied without any further reduction.

## SOUND INSULATION

$R_w \approx 30$ dB

## STANDARD COATING

External and internal steel sheet: 25 µm polyester
For standard colours and different coating systems please refer to our colour chart

## STANDARD LENGTHS

> 2.00 m up to 25.00 m, greater lengths on request

## CORROSION PROTECTION

According to DIN EN 10169:
External and internal sheets: Class RC3
According to DIN EN ISO 12944-2: External and internal sheets: corrosivity category C3 corresponding to average duration of protection for urban and industrial environments with moderate exposure to sulphur dioxide Other coating systems are available for more sophisticated demands such as for buildings near the sea, farm buildings with high ammonia exposure or moist rooms

## STANDARD STEEL SHEETS

Hot-dip galvanized steel, grade S 320 GD+ Z 275 according to DIN EN 10346

## TABLE OF SPANS

Please refer to our planning folder or visit our website www.metecno.de

## PACKAGING

External sheets provided with removable protective film, panel packages wrapped with banded plastic foil to protect from soiling

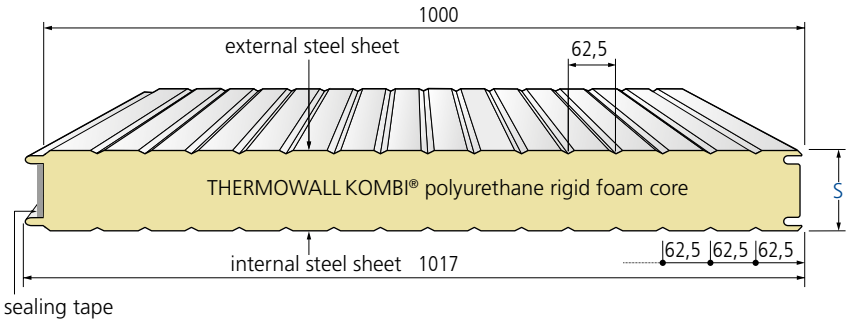
INTERLOCKING JOINT COMPATIBILITY WITH SUPERWALL® ML & METFIBER® ECO HF WALL

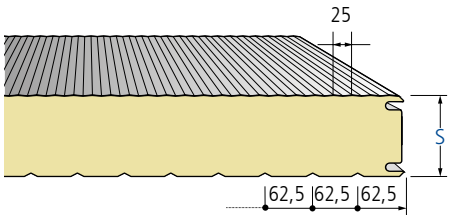
## SPANS ACCORDING TO DIN EN 13501-2

| | VERTICAL INSTALLATION | | | HORIZONTAL INSTALLATION | | |
|---|---|---|---|---|---|---|
| panel thickn. s | fire retardant REI30 | highly fire retardant REI60 | fire resistant REI90 | fire retardant REI30 | highly fire retardant REI60 | fire resistant REI90 |
| mm | mm | mm | mm | mm | mm | mm |
| **100** | 4000 | 3000 | - | - | - | - |
| **≥ 120** | 4000 | 4000 | 3000 | 5000 | 5000 | 5000 |

maximum spans of exterior walls additionally influenced by wind load

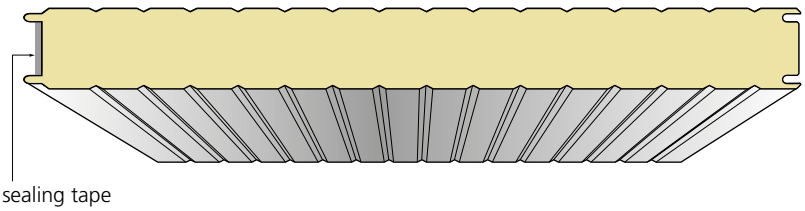
The Thermowall Kombi® panel with CFC and HCFC free polyurethane insulation core was developed as combination element matching the HIPERTEC® Wall panel with both panels having the same joint geometry. Thus, walls with high demands for thermal insulation (Thermowall Kombi®) can be combined with walls having high fire resistance requirements (Hipertec® Wall) without any visual impact. Besides, the symmetric profile geometry of external and internal sheet makes this product an excellent partition wall. A non-displaceable longitudinal sealing strip produces a joint resistant to driving rain and wind. The organic coating of the steel sheet ensures efficient protection against all kinds of weather. Additional coating systems are available for advanced application. For further information please refer to our detailed technical manual.

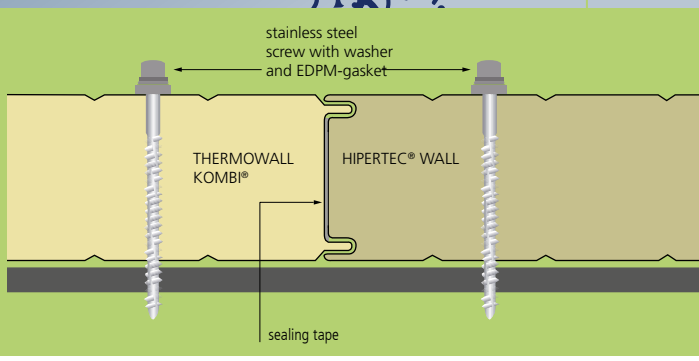



optional: external sheet with microprofile

different internal profiles on request, dimensions in mm






## PRODUCTION AND LABELING

Production according to applicable European Building Product Regulation as per sandwich norm DIN EN 14509 label-marking in accordance with EC certificate of conformity 0769-C PR-VAS-00420-1

## APPROVAL

German building compliance certificate DIßt Z-10.49-516 valid until November 20, 2019

## REACTION TO FIRE

Building material classified as B-s3,d0 low flammable according to DIN EN 13501-1

## THERMAL CONDUCTIVITY

λ = 0.024 W / mK according to DIN 4108 and DIN EN 13165
The insulation values are regularly monitored by external bodies and may be applied without any further reduction

## SOUND INSULATION

$R_w \approx 25$ dB

## STANDARD COATING

External steel sheet: 25 µm polyester
Internal steel sheet: ≈ 15 µm thin coating (DU).
For standard colours and different coating systems please refer to our colour chart

## STANDARD LENGTHS

> 2.00 m to 25.00 m, greater lengths on request

## CORROSION PROTECTION

According to DIN EN 10169:
External sheet: Class RC3
Internal sheet: Class RC2
According to DIN EN ISO 12944-2:
External sheet: corrosivity category C3 corresponding to average duration of protection for urban and industrial environments with moderate exposure to sulphur dioxide
Internal sheet: corrosivity category C2 for dry indoor rooms and buildings with occasional probability of minor condensation
Other coating systems are available for more sophisticated demands such as for buildings near the sea, farm buildings with high ammonia exposure or moist rooms

## STANDARD STEEL SHEETS

Hot-dip galvanized steel, grade S 320 GD + Z 275 according to DIN EN 10346

## TABLE OF SPANS

Please refer to our planning folder or visit our website www.metecno.de

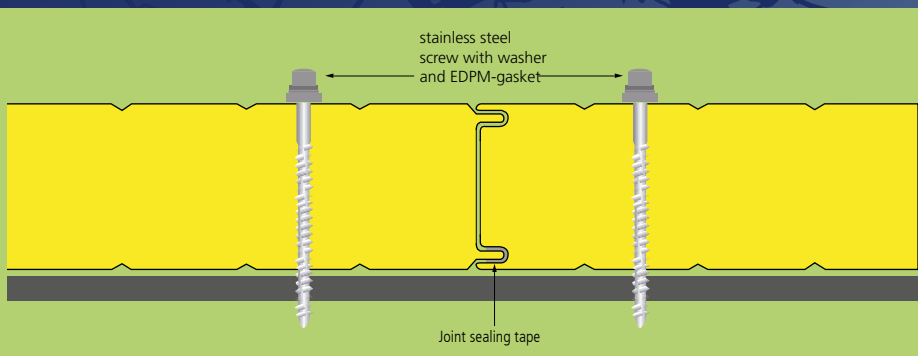
## PACKAGING

External sheet provided with removable protective film, panel packages wrapped with banded plastic foil to protect from soiling
INTERLOCKING JOINT COMPATIBILITY WITH HIPERTEC® WALL & METFIBER® ECO WALL

| type of element | core thickn. s | external steel sheet $t_N$ | internal steel sheet $t_N$ | weight | thermal resistance | thermal conductivity (Ψ – joint effect) | |
|---|---|---|---|---|---|---|---|
| | | | | | R | U w/o Ψ | U with Ψ |
| | mm | mm | mm | kg / m² | m² K / W | W / m² K | W / m² K |
| THERMOWALL KOMBI® | **60** | 0,60 | 0,45* | 11,5 | 2,46 | 0,398 | 0,413 |
| | **80** | 0,60 | 0,45* | 12,3 | 3,29 | 0,299 | 0,307 |
| | **100** | 0,60 | 0,45* | 13,1 | 4,12 | 0,239 | 0,244 |
| | **120** | 0,60 | 0,45* | 13,9 | 4,96 | 0,200 | 0,203 |
| | **150** | 0,60 | 0,45* | 15,1 | 6,21 | 0,160 | 0,162 |
| | **200**** | 0,60 | 0,45* | 17,1 | 8,29 | 0,120 | 0,121 |

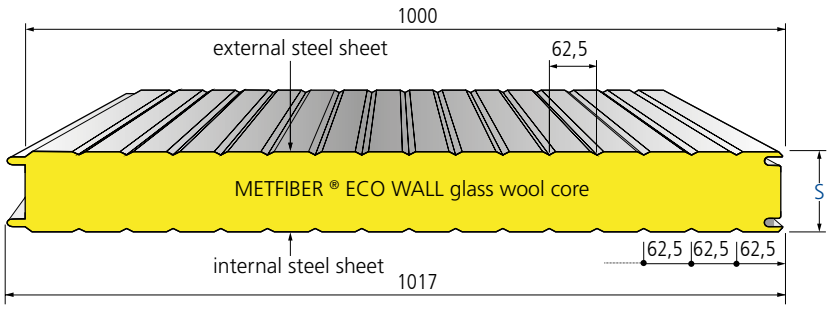
*with stucco-embossing (also available without stucco)

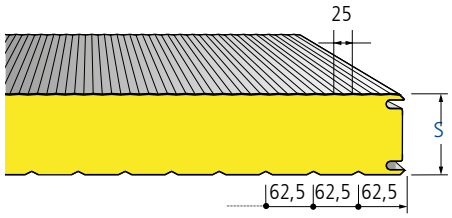
**approval pending

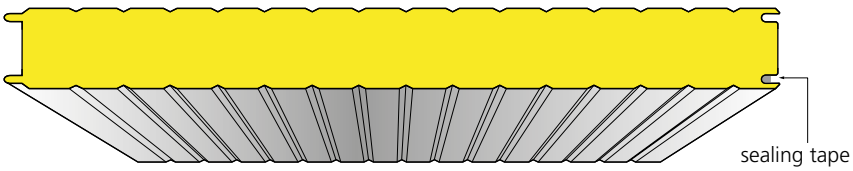



The Metfiber® Eco Wall panel with glass wool core fulfils all the requirements for non-combustible building materials. The glass wool used in this product consists of 80% recycled material, contributing significantly to the saving of natural resources and making the product an ecological building material. The deadweight of the panel is distinctly lower than that of conventional sandwich panels with rock wool insulation core, hence enabling an easier, faster installation and cost reduction, especially for langer panels. Due to the large number of combinations with other panels from our portfolio with polyurethane or rock wool insulation core, it is possible to reach fire, acoustic and thermal requirements at once without any visual impact.

Please refer to our detailed technical manual for further information.




different internal profiles on request, dimensions in mm

| type of element | core thickn. s | external steel sheet $t_N$ | internal steel sheet $t_N$ | weight | thermal resistance | thermal conductivity (Ψ – joint effect) | |
|---|---|---|---|---|---|---|---|
| | | | | | R | U w/o Ψ | U with Ψ |
| | mm | mm | mm | kg / m² | m² K / W | W / m² K | W / m² K |
| METFIBER® ECO WALL | **100** | 0,50 | 0,50 | 15,14 | 2,54 | 0,384 | 0,390 |
| | **120** | 0,50 | 0,50 | 16,44 | 3,05 | 0,321 | 0,325 |
| | **150** | 0,50 | 0,50 | 18,39 | 3,82 | 0,257 | 0,260 |
| | **200** | 0,50 | 0,50 | 21,64 | 5,10 | 0,194 | 0,195 |
| | **240*** | 0,50 | 0,50 | 24,24 | 6,12 | 0,161 | 0,162 |

* no approval / on request

## PRODUCTION AND LABELING

Production according to applicable European Building Product Regulation as per sandwich norm DIN EN 14509 label-marking in accordance with EC certificate of conformity 0769-CPR-VAS-00420-1

## APPROVAL

German building compliance certificate DIBt Z-10.49-613, valid until November 4, 2018

## REACTION TO FIRE

Building material classified as A2-s1,d0 non-combustible according to DIN EN 13501-1; insulation core made of glass wool

## FIRE RESISTANCE

EI 45 vertical installation (100mm core thickness)
EI 60 horizontal installation (100mm core thickness)

## THERMAL CONDUCTIVITY

λ = 0.039 W / mK according to DIN 4108 and DIN EN 13162
The insulation values are regularly monitored by external bodies and may be applied without any further reduction.

## SOUND INSULATION

$R_w \approx 31$ dB

## STANDARD LENGTHS

> 2.00 m to 25.00 m, greater lengths on request

## STANDARD COATING

External and internal steel sheet: 25 µm polyester
For standard colours and different coating systems please refer to our colour chart

## CORROSION PROTECTION

According to DIN EN 10169:
External sheet: Class RC3
Internal sheet: Class RC3
According to DIN EN ISO 12944-2:
External and internal sheets: corrosivity category C3 corresponding to average duration of protection for urban and industrial environments with moderate exposure to sulphur dioxide
Other coating systems are available for more sophisticated demands such as for buildings near the sea, farm buildings with high ammonia exposure or moist rooms

## STANDARD STEEL SHEETS

Hot-dip galvanized steel, grade S 320 GD + Z275 according to DIN EN 10346

## TABLE OF SPANS

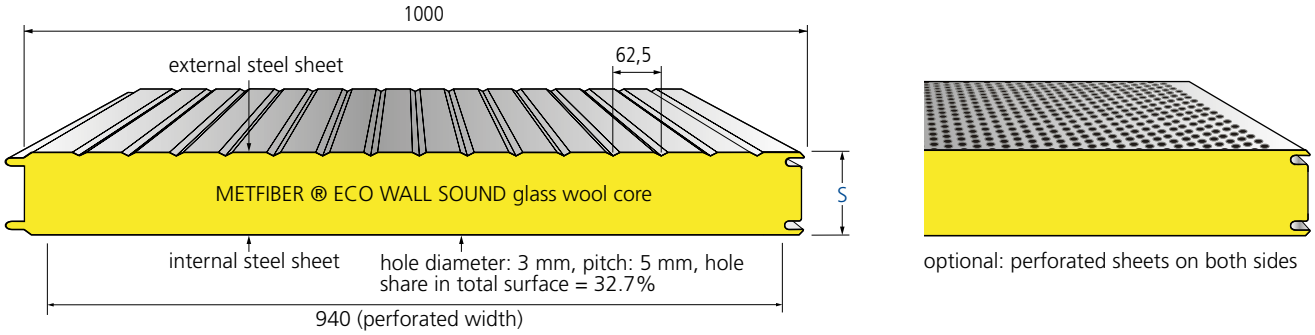
Please refer to our planning folder or visit our website www.metecno.de

## PACKAGING

External sheets provided with removable protective film, pa-nel packages wrapped with banded plastic foil to protect from soiling

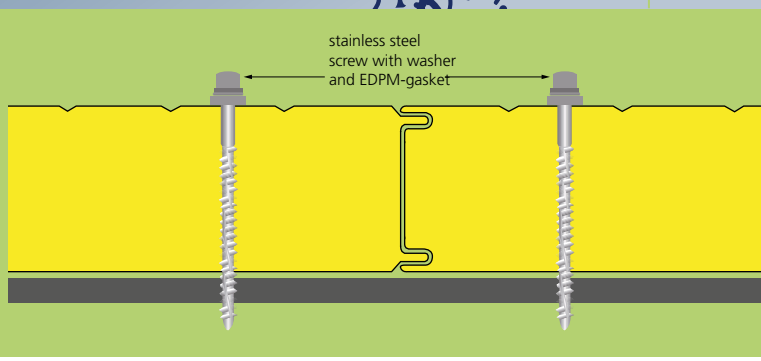
INTERLOCKING JOINT COMPATIBILITY WITH THERMOWALL KOMBI® & HIPERTEC® WALL

Metfiber® Eco Wall Sound is a sandwich panel with an insulation core of glass wool and steel cover sheets.
It's THE solution for buildings with high requirements for noise insulation and sound absorption. The design of the perforated internal sheet improves room acoustics substantially. This system patented by Metecno applies a special fleece material as trickle protection between the internal sheet and the glass wool core. In addition to its outstanding acoustic properties, the glass wool used in this product consists of 80% recycled material, thus contributing significantly to the saving of natural resources and making the product an ecological building material. Generally used as ceiling or partition wall Metfiber® Eco Wall Sound may also be used as external wall in specific cases, though it is generally not recommended to apply this panel in heated buildings or buildings with high moisture. For additional information please refer to our detailed technical manual.




dimensions in mm

| type of element | core thickn. s | external steel sheet $t_N$ | internal steel sheet $t_N$ | weight | thermal resistance | thermal conductivity (Ψ – joint effect) | |
|---|---|---|---|---|---|---|---|
| | | | | | R | U w/o Ψ | U with Ψ |
| | mm | mm | mm | kg / m² | m² K / W | W / m² K | W / m² K |
| METFIBER® ECO WALL SOUND | **100** | 0,60 | 0,60 | 14,7 | 2,54 | 0,37 | 0,38 |
| | **120** | 0,60 | 0,60 | 15,9 | 3,05 | 0,31 | 0,32 |
| | **150** | 0,60 | 0,60 | 17,7 | 3,82 | 0,25 | 0,26 |
| | **200** | 0,60 | 0,60 | 20,7 | 5,10 | 0,19 | 0,20 |
| | **240** | 0,60 | 0,60 | 23,1 | 6,12 | 0,161 | 0,162 |




## THERMAL CONDUCTIVITY

λ = 0.039 W / mK according to DIN 4108 and DIN EN 13162
The insulation values are regularly monitored by external bodies and may be applied without any further reduction

## STANDARD LENGTHS

> 2,00 m to 25,00 m, greater lengths on request

## STANDARD COATING

External and internal steel sheet: 25 µm polyester

## SOUND INSULATION

$R_w \approx 34$ dB

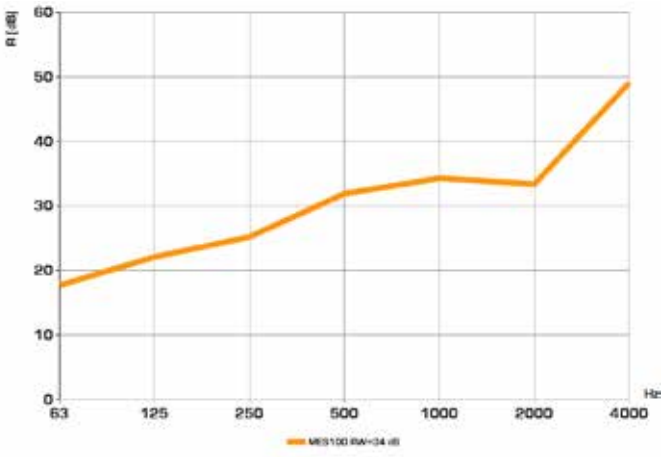
## CORROSION PROTECTION

Tested according to DIN EN 10169: External sheet: Class RC3
According to DIN EN ISO 12944-2: External sheet: corrosivity category C3 corresponding to average protection duration for urban and industrial environments with moderate exposure to sulphur dioxide

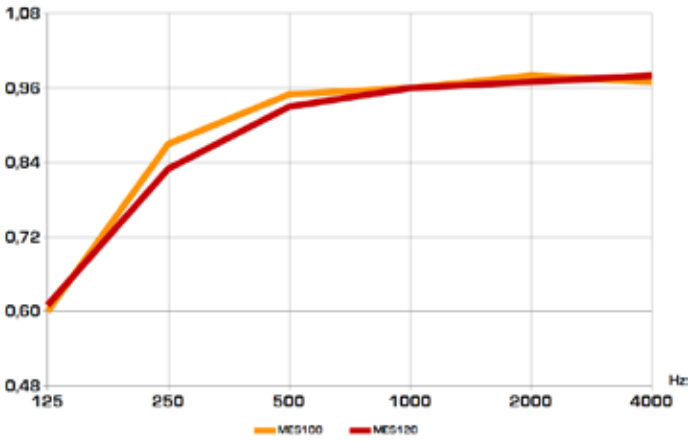
## PACKAGING

External and internal sheets provided with removable protective film, panel packages wrapped with banded plastic foil to protect from soiling

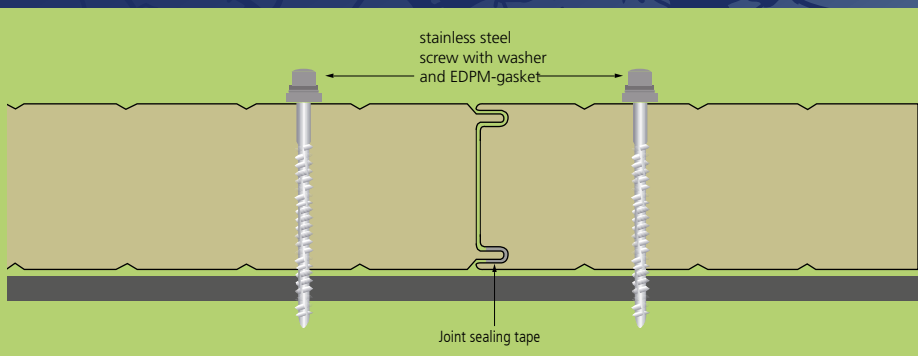
## SOUND INSULATION



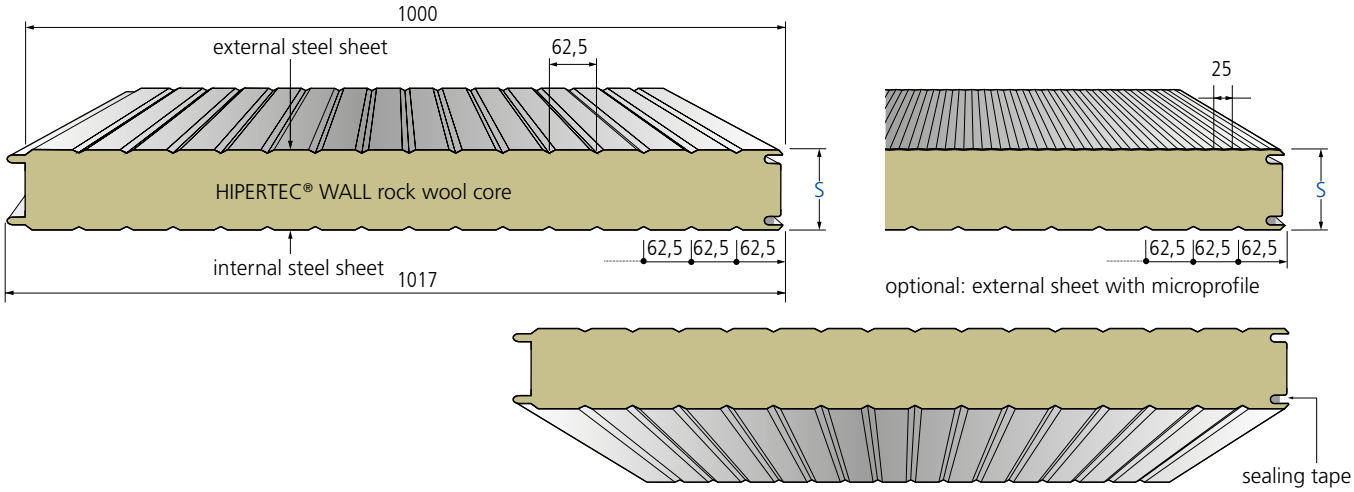

## SOUND ABSORPTION




| frequency Hz | thickness | 63 | | 125 | | 250 | | 500 | | 1000 | | 2000 | | 4000 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | mm | R | αs | R | αs | R | αs | R | αs | R | αs | R | αs | R | αs |
| | **100** | 17,7 | | 22,1 | 0,6 | 25,2 | 0,87 | 31,9 | 0,96 | 34,3 | 0,96 | 33,4 | 0,98 | 49,1 | 0,97 |
| | **120** | | | | 0,61 | | 0,83 | | 0,96 | | 0,96 | | 0,97 | | 0,98 |




Hipertec® Wall is a sandwich panel with non-combustible insulation core of rock wool and suits best to meet today's high requirements for fire protection and sound insulation. Depending on the core thickness the fire resistance may reach up to 120 minutes. High support widths and an easy installation -both vertical and horizontal- make this product very cost effective, perfectly apt for application as separation wall or external wall. Due to the large number of combinations with other panels from our portfolio with polyurethane or glass wool insulation core, it is possible to reach fire, acoustic and thermal requirements at once without any visual impact. Please refer to our detailed technical manual for further information.

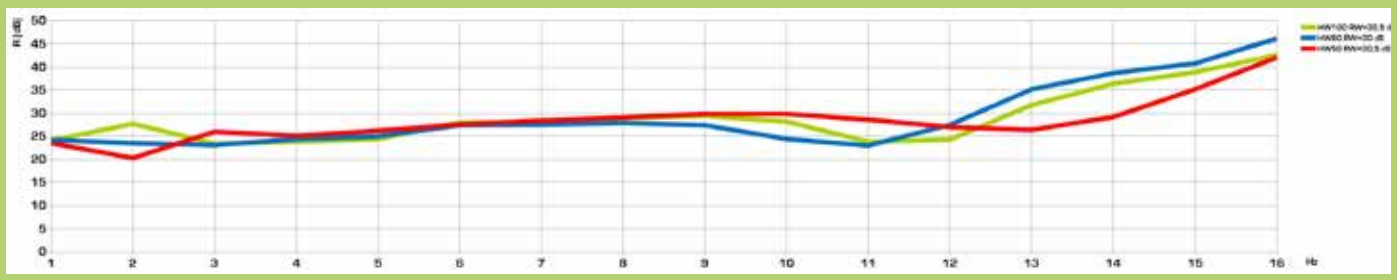



different internal profiles on request, dimensions in mm

| type of element | core thickn. s | external steel sheet $t_N$ | internal steel sheet $t_N$ | weight | thermal resistance | thermal conductivity (Ψ – joint effect) | |
|---|---|---|---|---|---|---|---|
| | | | | | R | U w/o Ψ | U with Ψ |
| | mm | mm | mm | kg / m² | m² K / W | W / m² K | W / m² K |
| HIPERTEC® WALL | **60** | 0,60 | 0,60 | 17,0 | 1,34 | 0,711 | 0,731 |
| | **80** | 0,60 | 0,60 | 19,2 | 1,79 | 0,537 | 0,548 |
| | **100** | 0,60 | 0,60 | 21,4 | 2,25 | 0,432 | 0,438 |
| | **120** | 0,60 | 0,60 | 23,6 | 2,70 | 0,361 | 0,365 |
| | **150** | 0,60 | 0,60 | 26,9 | 3,38 | 0,290 | 0,292 |
| | **200** | 0,60 | 0,60 | 32,4 | 4,52 | 0,218 | 0,219 |
| | **240*** | 0,60 | 0,60 | 36,8 | 5,42 | 0,182 | 0,183 |

* no approval / on request

## SOUND INSULATION



### PRODUCTION AND LABELING
Production according to applicable European Building Product Regulation as per sandwich norm DIN EN 14509; label marking in accordance with EC certificate of conformity 0769-CPR-VAS-00420-1

### APPROVAL
German building compliance certificate DIBt Z-10.49-517, valid until November 20, 2019

### REACTION TO FIRE
Building material classified as A2-s1,d0 non-combustible according to DIN EN 13501-1, rock wool core A1, non-combustible, melting point > 1000°C

### FIRE RESISTANCE
German building compliance certificate DIBt Z-19.52-2096 (see table below)

### THERMAL CONDUCTIVITY
λ = 0.044 W / mK according to DIN 4108 and DIN EN 13162
The insulation values are regularly monitored by external bodies and may be applied without any further reduction

### SOUND INSULATION
$R_w \approx 31$ dB

INTERLOCKING JOINT COMPATIBILITY WITH METFIBER® ECO WALL & THERMOWALL KOMBI®

### STANDARD COATING
External and internal steel sheet: 25 µm polyester
For standard colours and different coating systems please refer to our colour chart

### STANDARD LENGTHS
> 2,00 m to 25,00 m, greater lengths on request

### CORROSION PROTECTION
According to DIN EN 10169:
External and internal sheet: Class RC3
According to DIN EN ISO 12944-2:
External and internal sheet: corrosivity category C3 corresponding to average duration of protection for urban and industrial environments with moderate exposure to sulphur dioxide. Other coating systems are available for more sophisticated demands such as for buildings near the sea, farm buildings with high ammonia exposure or moist rooms

### STANDARD STEEL SHEETS
Hot-dip galvanized steel, grade S 320 GD + Z 275 according to DIN EN 10346

### TABLE OF SPANS
Please refer to our planning folder or visit our website www.metecno.de

### PACKAGING
External sheets provided with removable protective film, panel packages wrapped with banded plastic foil to protect from soiling

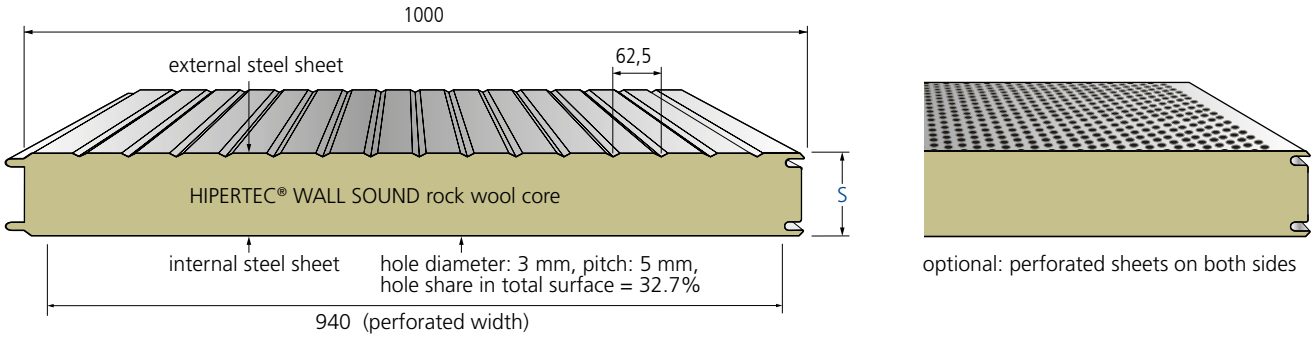
### SPANS ACCORDING TO DIN EN 13501-2

| | vertical installation | | | | horizontal installation | | | |
|---|---|---|---|---|---|---|---|---|
| panel thickn. s | fire retardant EI 30 | highly fire retardant EI 60 | fire resistant EI 90 | highly fire resistant EI 120 | fire retardant EI 30 | highly fire retardant EI 60 | fire resistant EI 90 | highly fire resistant EI 120 |
| mm | mm | mm | mm | mm | mm | mm | mm | mm |
| **60** | 4000 | - | - | - | - | - | - | - |
| **80** | 5000 | 3000** | - | - | - | - | - | - |
| **100** | 5000 | 5000 | 4000 | 3000** | 5000 | 5000 | 5000 | - |
| **120** | 5000 | 5000 | 5000 | 4000 | 6000 | 6000 | 5000 | 5000** |
| **150** | 5000 | 5000 | 5000 | 5000 | 6000 | 6000 | 6000 | 5000** |
| **200** | 5000 | 5000 | 5000 | 5000 | 6000 | 6000 | 6000 | 5000** |
| **240** | 5000 | 5000 | 5000 | 5000 | 6000 | 6000 | 6000 | 5000** |

maximum spans of exterior walls additionally influenced by wind load ** not for application in Germany

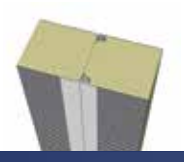
Hipertec® Wall Sound is a sandwich panel with an insulation core of mineral wool and steel cover sheets, the internal sheet being perforated. This panel is perfectly apt for buildings with high requirements for noise insulation and sound absorption. The design of the internal sheet improves room acoustics substantially. This system patented by Metecno applies a special fleece as trickle protection between the internal sheet and the rock wool core.

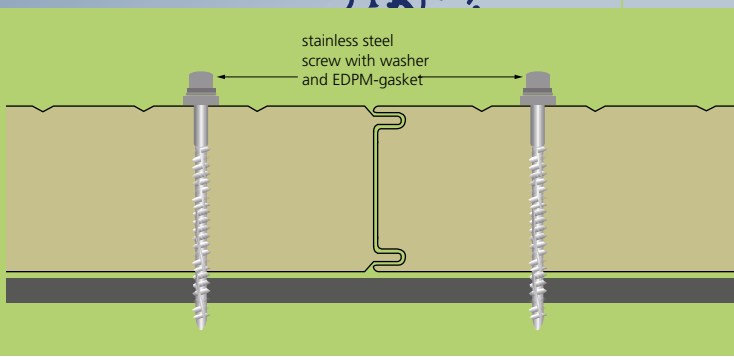
Generally used as ceiling or partition wall, Hipertec® Wall Sound may also be used as external wall in specific cases, though it is generally not recommended to apply this panel in heated buildings or buildings with high moisture. For additional information please refer to our detailed technical manual.




dimensions in mm

| type of element | core thickn. s | external steel sheet $t_N$ | internal steel sheet $t_N$ | weight | thermal resistance | thermal conductivity (Ψ – joint effect) | |
|---|---|---|---|---|---|---|---|
| | | | | | R | U w/o Ψ | U with Ψ |
| | mm | mm | mm | kg / m² | m² K / W | W / m² K | W / m² K |
| HIPERTEC® WALL SOUND | **60** | 0,60 | 0,60 | 15,3 | 1,34 | 0,711 | 0,731 |
| | **80** | 0,60 | 0,60 | 17,5 | 1,79 | 0,537 | 0,548 |
| | **100** | 0,60 | 0,60 | 19,7 | 2,25 | 0,432 | 0,438 |
| | **120** | 0,60 | 0,60 | 21,9 | 2,70 | 0,361 | 0,365 |
| | **150** | 0,60 | 0,60 | 25,2 | 3,38 | 0,290 | 0,292 |
| | **200** | 0,60 | 0,60 | 30,7 | 4,52 | 0,218 | 0,219 |
| | **240** | 0,60 | 0,60 | 35,1 | 5,42 | 0,182 | 0,183 |






## THERMAL CONDUCTIVITY

λ = 0.044 W / mK according to DIN 4108 and DIN EN 13162
The insulation values are regularly monitored by external bodies and may be applied without any further reduction

## STANDARD LENGTHS

> 2,00 m to 25,00 m, greater lengths on request

## STANDARD COATING

External and internal steel sheet: 25 µm polyester

## SOUND INSULATION

$R_w \approx 31 – 33$ dB

## CORROSION PROTECTION

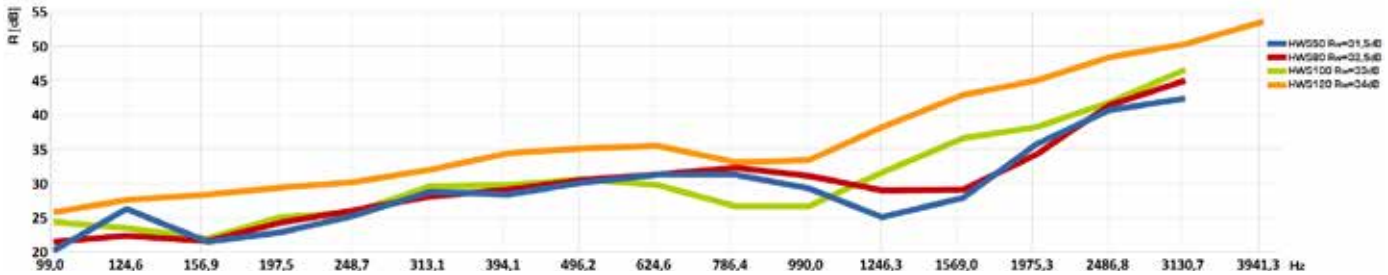
Tested according to DIN EN 10169:
External sheet: Class RC3
According to DIN EN ISO 12944-2:
External sheet: corrosivity category C3 corresponding to average protection duration for urban and industrial environments with moderate exposure to sulphur dioxide

## PACKAGING

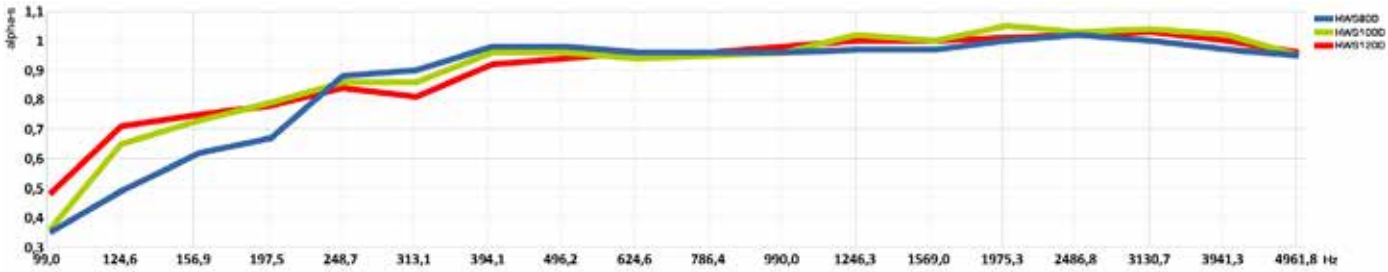
External and internal sheets provided with removable protective film, panel packages wrapped with banded plastic foil to protect from soiling

## SOUND INSULATION

Rated sound damping dimension $R_w$: Core thickn. 50 mm = 31,5 dB, 80 mm= 32,5 dB, 100 mm= 33 dB



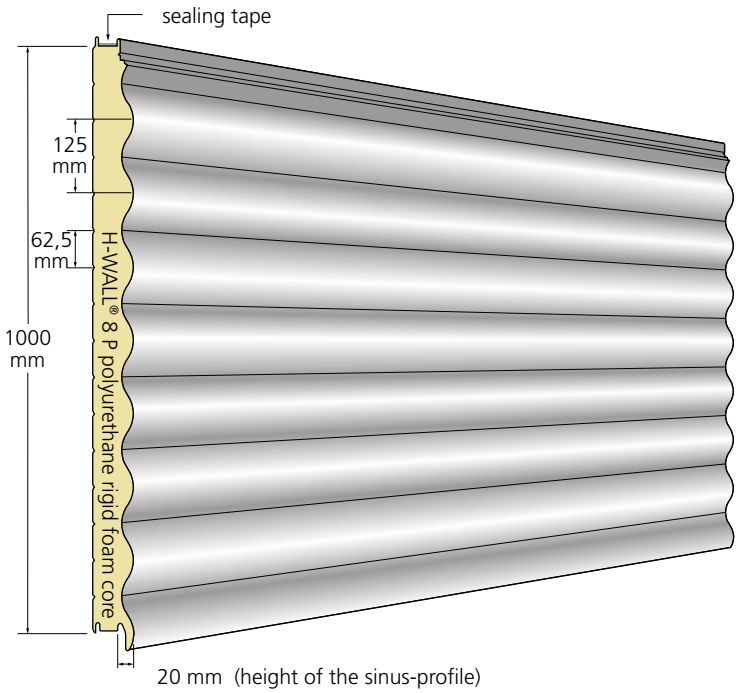

## SOUND ABSORPTION

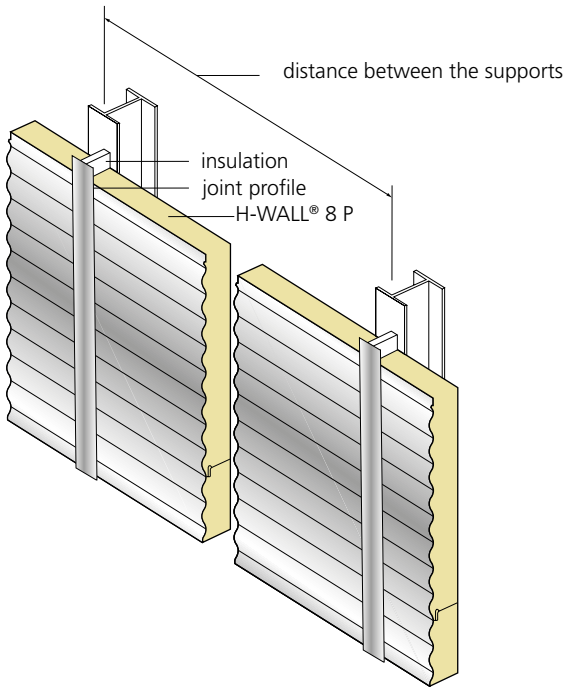



| frequency Hz | thickness | 125 | 250 | 500 | 1000 | 2000 | 4000 |
|---|---|---|---|---|---|---|---|
| | mm | | | | | | |
| αs | **50** | 0,31 | 0,71 | 1,03 | 1,01 | 0,95 | 0,88 |
| αs | **80** | 0,46 | 0,86 | 0,99 | 1,03 | 0,91 | 0,77 |
| αs | **100** | 0,58 | 0,76 | 0,93 | 0,94 | 0,96 | 0,85 |

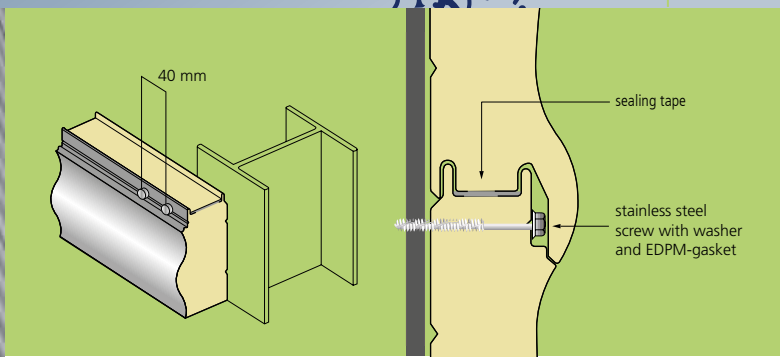
This sandwich panel with sinus corrugated external sheet and hidden fixing is a great esthetical option for modern facades by giving them a lively touch with its original wave design. The highly heat insulating CFC and HCFC free polyurethane rigid foam core suits best for today's requirements for thermal insulation and moisture protection. A non-displaceable sealing strip foamed into the longitudinal joint procures resistance to driving rain and wind. Together with the organic coating of the steel sheets this ensures efficient protection against all kinds of weather. The internal sheet is optionally stucco-embossed to reduce possible mirror effects on the surface. For advanced application additional coating systems are available.

Please refer to our detailed technical manual for further information.




different internal profiles on request, dimensions in mm




## PRODUCTION AND LABELING

Production according to applicable European Building Product Regulation as per sandwich norm DIN EN 14509 label-marking in accordance with EC certificate of conformity 0769-C PR-VAS-00420-1

## APPROVAL

German building compliance certificate Dißt Z-10.49-516 valid until November 20, 2019

## REACTION TO FIRE

Building material classified as B-s3,d0 low flammable according to DIN EN 13501-1

## THERMAL CONDUCTIVITY

λ = 0.024 W / mK according to DIN 4108 and DIN EN 13165
The insulation values are regularly monitored by external bodies and may be applied without any further reduction

## SOUND INSULATION

$R_w \approx 25$ dB

## STANDARD COATING

External steel sheet: 25 µm polyester;
Internal steel sheet: ≈ 15 µm thin coating (DU); For standard colours and different coating systems please refer to our colour chart

## STANDARD LENGTHS

> 2,00 m to 25,00 m, greater lengths on request

## CORROSION PROTECTION

According to DIN EN 10169:
External sheet: Class RC3
Internal sheet: Class RC2
According to DIN EN ISO 12944-2:
External sheet: corrosivity category C3 corresponding to average duration of protection for urban and industrial environments with moderate exposure to sulphur dioxide
Internal sheet: corrosivity category C2 for dry indoor rooms and buildings with occasional probability of minor condensation
Other coating systems are available for more sophisticated demands such as for buildings near the sea, farm buildings with high ammonia exposure or moist rooms

## STANDARD STEEL SHEETS

Hot-dip galvanized steel, grade S 320 GD+ Z 275 according to DIN EN 10346

## TABLE OF SPANS

Please refer to our planning folder or visit our website www.metecno.de

## PACKAGING

External sheet provided with removable protective film, panel packages wrapped with banded plastic foil to protect from soiling

| type of element | core thickn. s | total thickn. D | external steel sheet $t_N$ | internal steel sheet $t_N$ | weight | thermal resisitance | thermal conductivity (Ψ – joint effect) | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | R | U w/o Ψ | U with Ψ |
| | mm | mm | mm | mm | kg / m² | m² K / W | W / m² K | W / m² K |
| H-WALL® 8 P | **50** | 70 | 0,60 | 0,45* | 12,2 | 2,04 | 0,408 | 0,438 |
| | **80** | 100 | 0,60 | 0,45* | 13,4 | 3,29 | 0,270 | 0,281 |
| | **100** | 120 | 0,60 | 0,45* | 14,2 | 4,12 | 0,221 | 0,227 |

*with stucco-embossing (also available without stucco)

## METCOLOR STANDARD COLOUR SHADES I POLYESTER

### COLOR GROUP 1

MC 9002 grey white

MC 7035 light grey

MC 9001 cream

MC 1015 light ivory

MC 9010 pure white

### COLOR GROUP 2

MC 6011 reseda green

MC 9006 white aluminum

MC 9007 grey aluminum

Metecno colours are oriented on RAL colours. Variations in colour may occur due to the printing process. Coloured steel samples are available for precise matching.
It is recommended to check availability of colours and coating systems with sales department prior to order.
Design of inner surfaces may vary with the product itself (see product data sheets)

### COLOR GROUP 3

MC 3000 flame red

MC 3009 oxide red

MC 5010 gentian blue

MC 6020 chrome green

MC 7016 anthracite grey

MC 7037 dusty grey

MC 8004 copper brown

MC 8011 nut brown

### INNER SURFACES

MC 9002 with stucco

MC 9002 without stucco

## METCOLOR COATING SYSTEMS

### STANDARD COATING FOR EXTERNAL APPLICATION 25 µm POLYESTER

Corrosivity category RC3 in accordance with DIN EN 10169:2010-2

UV resistance category RUV2 in accordance with DIN EN 10169:2010-2

Temperature exposure -20° to 80°C

The well-proven polyester-coating is a modern and costeffective coating system, adapting well to different colour finishes. Polyester-coatings show good corrosion- and weather resistance under normal conditions for industrial application within the Central European region, which makes it the most frequently used coating system.

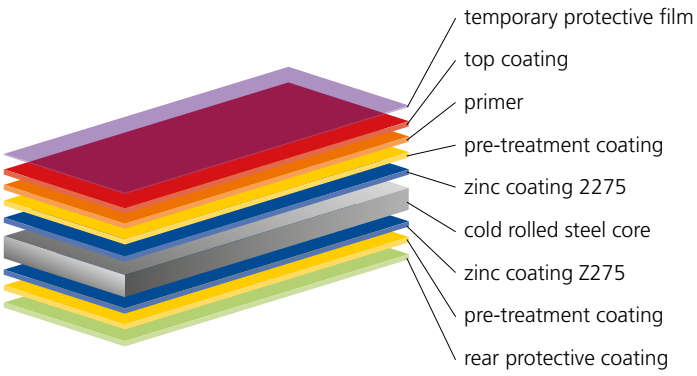
### STANDARD COATING FOR INTERNAL APPLICATION 15 µm DU-POLYESTER

Corrosivity category RC2 in accordance with DIN EN 10169:2010-2

Temperature exposure -20° to 80°C

The polyester-thin-coating (standard colour shade similar to MC 9002) is suitable for conventional industrial buildings for indoor application in rooms with normal room climate and normal relative humidity. The colour shade may not be uniform due to the coating thickness.

### TYPICAL COATING SYSTEM




### 25 µm OR 35 µm PVDF (POLYVINYLIDENFLUORIDE)

Corrosivity category RC3 (25 µm) or RC4 (35 µm) in accordance with DIN EN 10169:2010-2

UV resistance category RUV4 in accordance with DIN EN 10169:2010-2

Temperature exposure -20° to 110°C

This coating shows optimal resistance against UV-radiation and weather and has good ductility. lt is suited particularly weil for high requirements on the colour finish and has been found to be excellent in regions with difficult climatic conditions (e.g., 5-15 km from the sea).

### 50 µm POLYAMIDE MODIFIED POLYURETHANE (PUR-PA)

Corrosivity category RC5 in accordance with DIN EN 10169:2010-2

UV resistance category RUV4 in accordance with DIN EN 10169:2010-2

Temperature exposure -20° to 80°C

By using polyamide this coating system reaches a high surface hardness. lts visibly grained structure is particularly resistant to abrasion and ensures efficient protection against mechanical damage. lt is also widely resistant to strain by animals such as poultry, making it ideally apt for agricultural application. The flexibility and excellent resistance to UV-radiation make this coating also weil suitable for outdoor installation.

## FLASHINGS

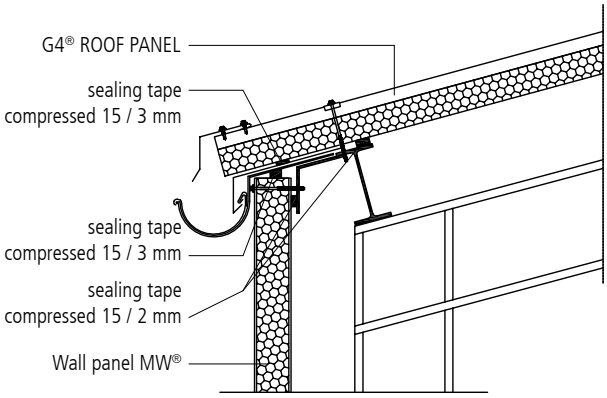
made of galvanized, coated steel
material thickness 0,75 mm; maximum length up to 6.000 mm
side A: 25 µm polyester coating with protective film
side B: RSL protective back coating
available in colours matching the panels cover sheets

production possible on the basis of profile drawings sent by customer or standard drawings from our flashings catalogue
special designs on request


## DESIGN DETAILS

Our planning folder contains detailed application solutions in PDF-and DWG-format (available at www.metecno.de). It also contains text templates for quick preparation of tenders with our sandwich elements and flashings.

## G4® ROOF PANEL eaves detail




source: ATeO-Service

## PRESSING TOOL FOR SANDWICH WALL PANELS

In order to comply with the joint flow rate coefficient of ≤ 0,1m³/(mh/daPa) required by DIN 18542, we recommend the use of pressing tools for the installation of sandwich wall panels in order to ensure the necessary compression of the sealing tapes in the longitudinal joint.

Item No. MET-ADV-WO1

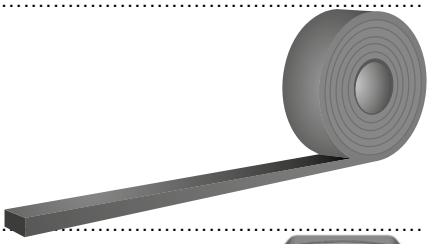
### RIDGED COVER FLASHING FOR G4® AND HIPERTEC® ROOF
Item No. ZB-A38, Z = 120 mm / L = 1000 mm

### RIDGED COVER FLASHING FOR H-WALL® 8 P
Item No. ZB-H8, Z = 50 mm / L = 1000 mm

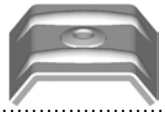
### FILLER BLOCKS FOR G4® AND HIPERTEC® ROOF
Item No. DB-A38-01, W = 30 mm / L = 1000 mm
Item No. DB-A38-02 (self-adhesive)

### FILLER BLOCKS FOR H-WALL® 8 P
Item No. DB-H8, W= 30 mm / L = 1000 mm

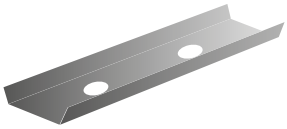
### SELF-ADHESIVE COMPRESSION TAPES
Item No. SDB-E, size 10 / 2-3 mm, 25 m/roll
Item No. SDB-E, size 15 / 2-3 mm, 25 m/roll
Item No. SDB-E, size 15 / 3-6 mm, 13 m/roll



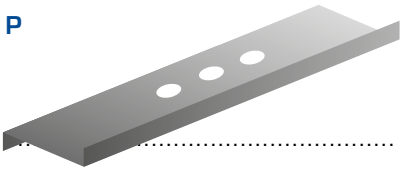
### SADDLE CAPS
Item No. KL colour code -01, made of aluminium with vulcanized sealing



### LOAD DISTRIBUTION PLATE (ML-SADDLE CAP) FOR SUPERWALL® AND H-WALL® 8 P
for hidden fixing
Item No. KL-V2A



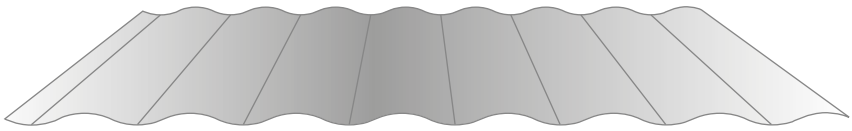
### Z-LOAD DISTRIBUTION PLATE (Z-SADDLE CAP) FOR SUPERWALL® AND H-WALL® 8 P
for hidden fixing with higher tensile forces
Item No. KL-V2A-03



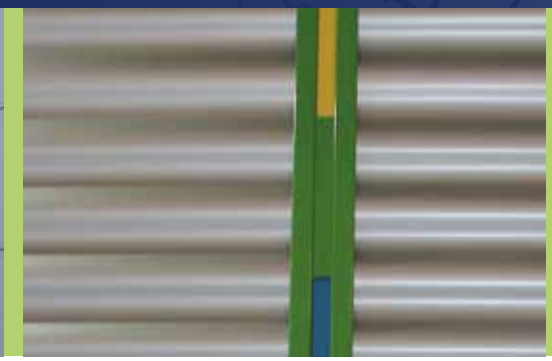
### CORRUGATED PROFILE G4 (38/333/1000)
can be combined with sandwich panel G4® and Hipertec® ROOF
e.g. canopies

Side A: 25 µm Polyester coating with protective film / Side B: RSL-protective lacquer
lengths: 1.500 mm to 15.000 mm (other lengths on request) / sheet thicknesses: 0,50 mm, 0,60 mm, 0,75 mm

### CORRUGATED PROFILE H8 (20/125/875)
Same profile as panel H-Wall® 8 P
e.g. for cladding of solid walls



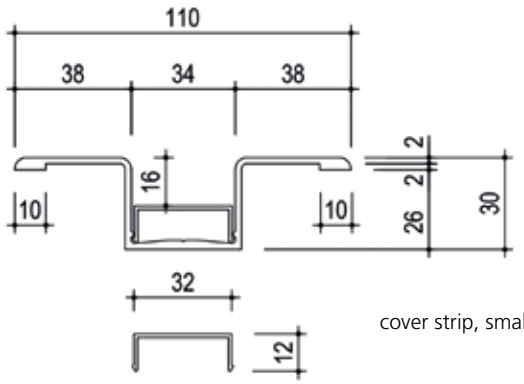
Side A: 25 µm Polyester coating with protective film / Side B: RSL-protective lacquer / lengths: 2.000 mm to 7.500 mm
(other lengths on request) / sheet thicknesses: 0,50 mm, 0,60 mm, 0,75 mm

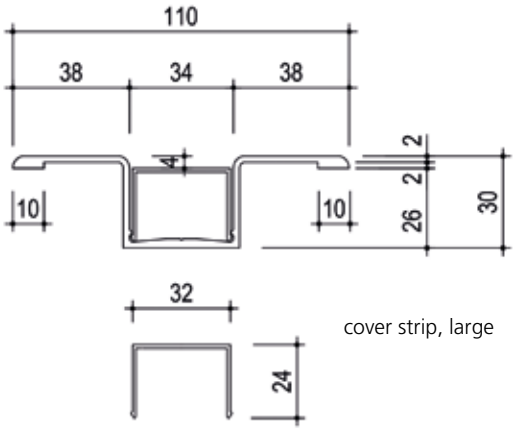

Our aluminium pilaster strips are easy to install and available in two versions, each with two different cover strips. These aluminium profiles are made of EN AW-6060T66 EN 755-9-material with available lengths up to 6.000 mm. The pilaster strips are powder coated and available in any RAL colour finish.

Your benefits at a glance:
+ light-weight construction
+ no displacement after installation due to tight fit
+ rounded edges for uniform joint appearance
+ installation aid to prevent damage

## Pilaster strip 110



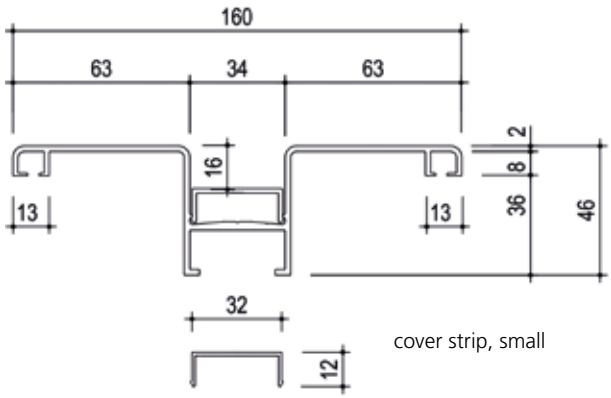

cover strip, small



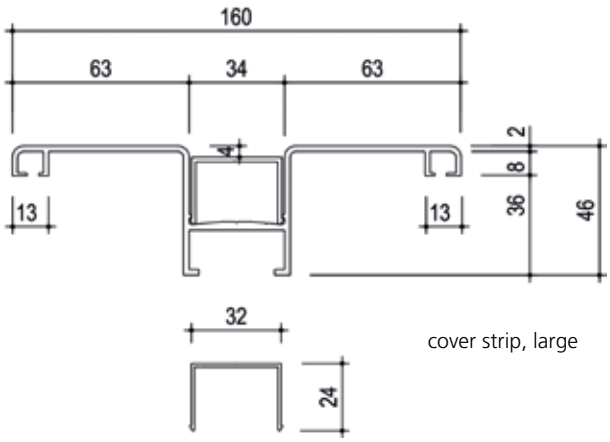

cover strip, large

dimensions in mm

## Pilaster strip 160*




cover strip, small




cover strip, large

dimensions in mm

*EPDM-seal mandatory

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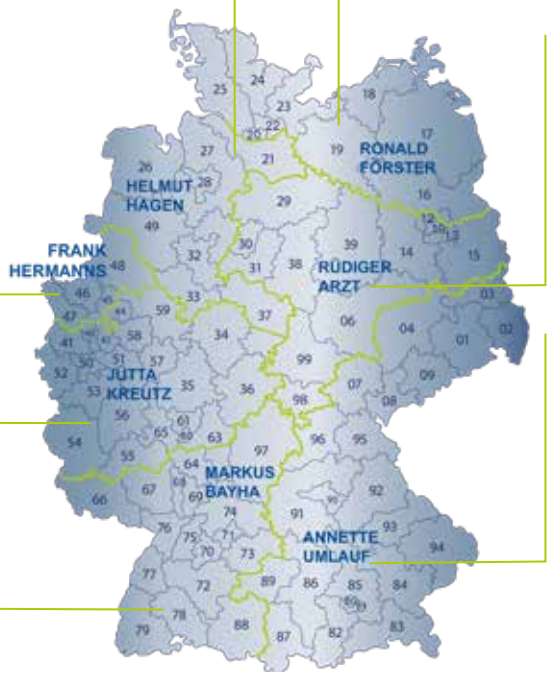


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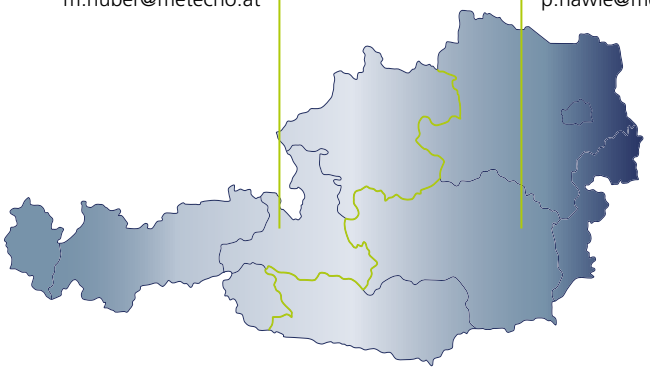

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meTecno

YOUR SPECIALIST FOR ROOFS & WALLS OF COMPOSITE MATERIAL


meTecno

Z-10.4-583

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SCIENCE CITY JENA

meTecno SOUND

meTecno court

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Applicable general terms of sales available on request
Metecno reserves the right to make necessary changes and improvements to the products without prior notice
Metecno is not responsible for errors, including typos.

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