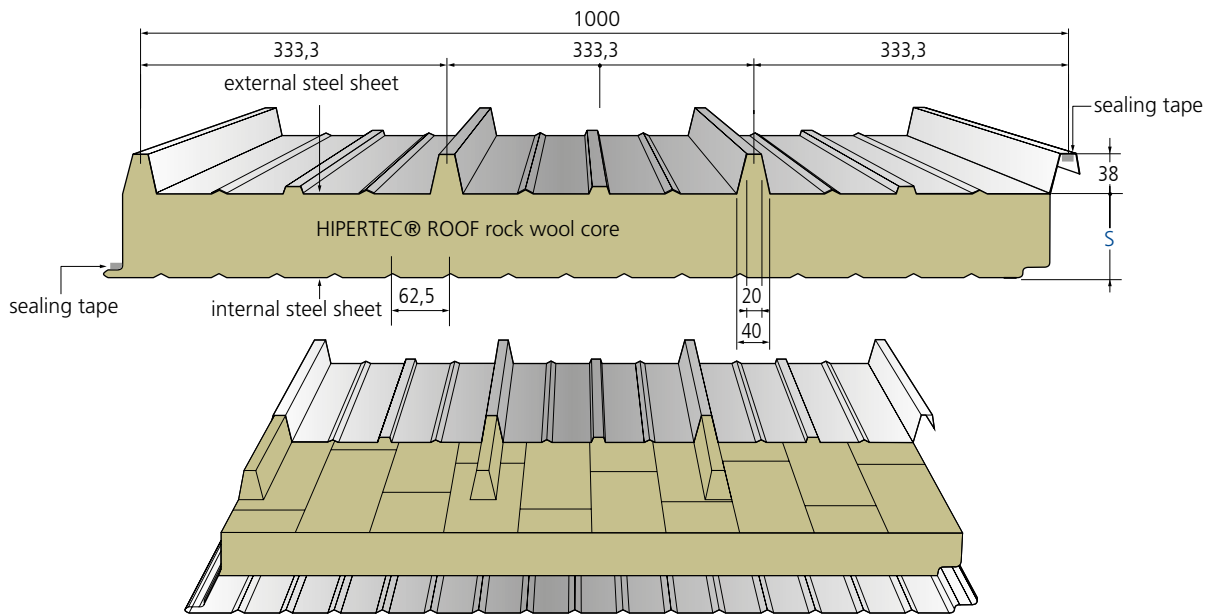


This sandwich panel with non-combustible insulation core made of rock wool meets today's high demands for fire protection. According to the guidelines for industrial construction, non-combustible insulation materials are obligatory, particularly for large-surface and multi-storey buildings. For core thickness of 100 mm and higher a fire resistance up to 90 minutes can be reached. Additionally Hipertec® Roof panels show exceptional acoustic

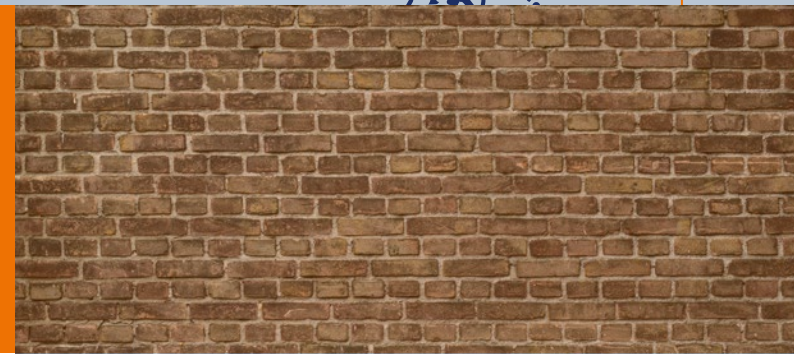
insulation behaviour as well. Thanks to the high quality of the production process the interlocking of the joint is perfect and panels up to 25 meters length can be installed rapidly.

To protect the rock wool core from moisture a cut back and protective flashing at the eaves are recommended. More information is available in the download area www.en.metecno.de.



different internal profiles on request, dimensions in mm

type of element	core-thickn.s mm	total-thickn. D mm	external steel sheet tN mm	internal steel sheet tN mm	weight kg / m ²	thermal resistance R m ² K / W	thermal conductivity (Ψ - joint effect)	
							U w/o Ψ W / m ² K	U with Ψ W / m ² 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



PRODUCTION AND LABELING

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

APPLICATION APPROVAL

Current approvals, certificates and general building permits at www.en.metecno.de/service.

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 Dibt Application Approval Z-19.52-2096 (see table below)

THERMAL CONDUCTIVITY

$\lambda = 0.044 \text{ W / m.K}$ 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

$R_w \geq 29 - 32 \text{ dB}$

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.

STANDARD COATING

External steel sheet: 25 μm polyester
Internal steel sheet: $\approx 15 \mu\text{m}$ 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 visit our website www.en.metecno.de

PACKAGING

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

