

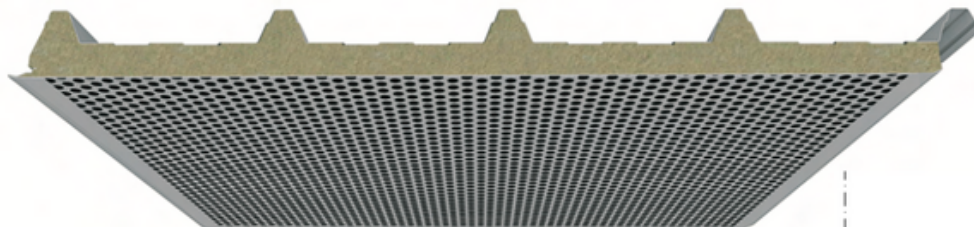
PENTA W.A.

Pannelli copertura acustici
in lana di roccia con lamiera
interna microforata

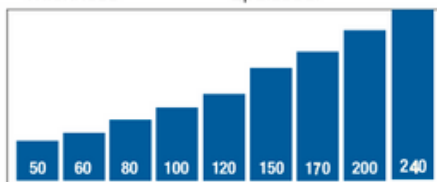
Acoustic roof panels with
rock wool insulation and
internal micro sheet

Dachpaneele, isoliert mit
Mineralwolle, mit inneren
mikrogelochtes
Stahlblechoberfläche

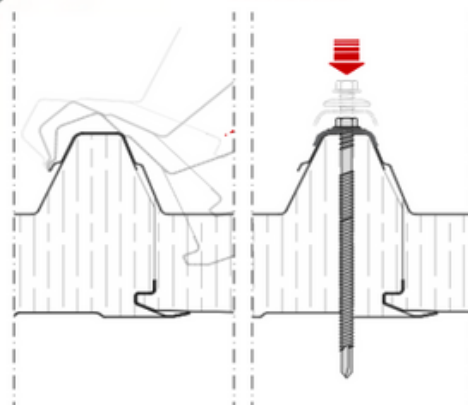
Panneaux de couverture
acoustiques avec isolation
en laine de roche avec tôle
intérieure micro forée



- Spessore (mm)
- Thickness
- Plattenstärke
- Epaisseur



PARTICOLARE DEL GIUNTO
JOINT DETAIL



Caratteristiche Lamiera Forata / Characteristics of micro locked sheet / Eigenschaften des gelochten Stahlbleches / Caractéristiques tôle micro forée

Diametro fori	Holes diameter	Durchmesser der Löcher	Diamètre trous	3 mm
Passo fori	Holes step	Schritt der Löcher	Distance trous	5 mm
% lamiera forata	% micro locked sheet	% des gelochten Stahlbleches	% tôle forée	15 % (32,6%*)

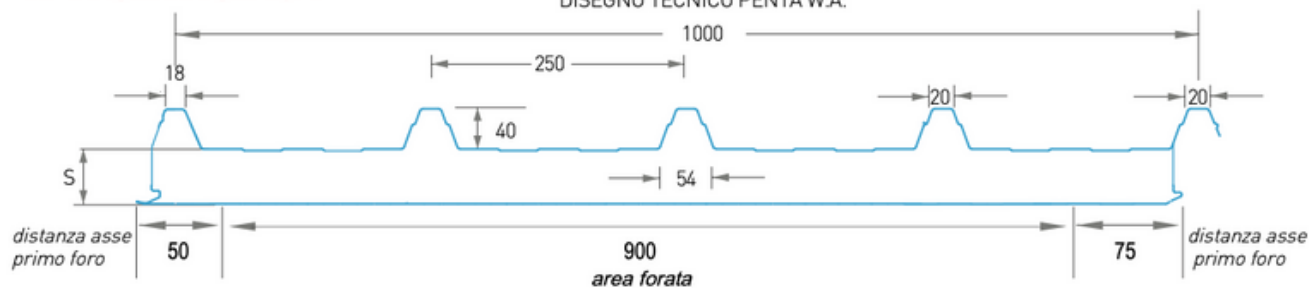
* % Lamiera forata su area forata / % micro locked sheet on micro locked area

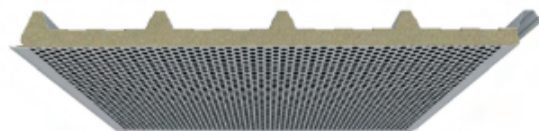
Spessore pannello Panel thickness [mm]	Trasmissione Termica / Thermal Transmittance in accordo / according to UNI EN 14509 A.10 - A.30 $U_{d,s}$ [W/m ² K]	in accordo / according to UNI EN ISO 6946 U^{**} [W/m ² K]	Conduttività termica di progetto / Design thermal conductivity in accordo / according to UNI EN 13162 λ_D [W/mK]
50	0,76	0,62	0,041
60	0,64	0,54	
80	0,49	0,43	
100	0,39	0,35	
120	0,33	0,30	
150	0,27	0,25	
170	0,24	0,22	
200	0,20	0,19	
240	0,17	0,16	

** I valori di trasmissione termica sono calcolati in accordo alla UNI EN ISO 6946, sono stati considerati gli spessori medi della lana di roccia e non includono i ponti termici del giunto longitudinale.

The thermal transmittance values are calculated in accordance with UNI EN ISO 6946, the average thicknesses of the rock wool have been considered and do not include the thermal bridges of the longitudinal joint.

DISEGNO TECNICO PENTA W.A.

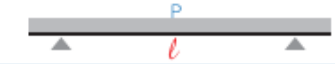




PENTA W.A.
 ACCIAIO/ACCIAIO
 STEEL/STEEL
 STAHL/STAHL
 ACIER/ACIER



TABELLA PORTATE

Spessore pannello (mm)	Spessore Nominale		Peso pannello (Kg/m ²)	Larghezza efficace appoggio: 120 mm																
	Supporto Esterno Acciaio (mm)	Supporto Interno Acciaio (mm)																		
				<i>l</i> =cm	150	175	200	225	250	275	300	325	350	375	400	425	450	475	500	
50	0,60	0,50	14,2	<i>P</i> = kg/m ²	215	180	160	140	125	110	90	75	60	50						
60	0,60	0,50	15,2	<i>P</i> = kg/m ²	245	210	180	160	140	130	110	100	90	70	50					
80	0,60	0,50	17,2	<i>P</i> = kg/m ²	295	250	215	190	170	150	140	130	120	95	85	75	65	60	50	
100	0,60	0,50	19,2	<i>P</i> = kg/m ²	330	280	240	215	190	175	160	145	130	120	100	95	85	75	65	
120	0,60	0,50	21,2	<i>P</i> = kg/m ²	345	295	255	220	200	180	165	150	135	125	120	110	100	95	90	
150	0,60	0,50	24,2	<i>P</i> = kg/m ²	350	300	260	225	205	185	170	155	140	130	125	115	105	100	95	
200	0,60	0,50	29,2	<i>P</i> = kg/m ²	365	310	265	230	210	190	175	160	145	135	130	120	110	105	100	

Calcolo Eseguito in accordo Norma UNI EN 14509 Allegato E:
 • Valori in Nero: Stati Limite Ultimo
 • Valori in Rosso: Stati Limite di Esercizio (freccia = 1/200 Luce)

Calculation performed in accordance to attached E UNI EN 14509 Norm:
 • Values in Black: Ultimate Limit States
 • Values in Red: Serviceability Limit States (deflection = 1/200 span)