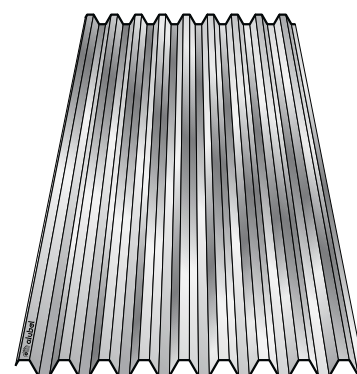
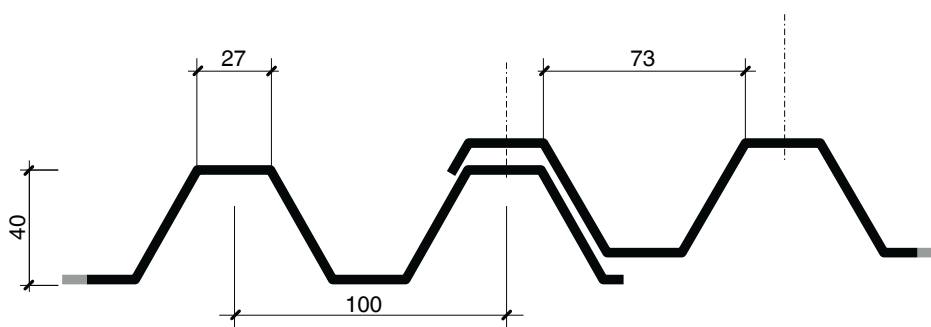
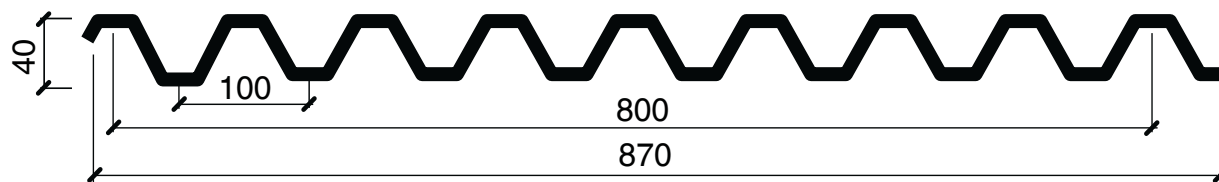


PROFILO
Alubel **44**

Alubel 44 profile

 Made in: **Aluminium**

TECHNICAL DATA SHEET



TECHNICAL SPECIFICATIONS OF THE ALUBEL 44 ALUMINIUM PROFILE

s	p	J	W	EJ	M max	Symbols s = sheet thickness p = unit weight J = moment of inertia W = modulus of bending resistance EJ = bending stiffness M max = permitted bending moment ($\sigma_{perm.} = 6,5 \text{ kN/cm}^2$) i = centre distance between supports $\sigma_{perm.}$ = unit safety load $f_{perm.}$ = maximum permitted straining
[mm]	[kg/m ²]	[cm ⁴ /m]	[cm ³ /m]	[kN cm ² /m]	[kN cm/m]	
0,6	2,41	19,75	8,93	136.077	58,05	
0,7	2,82	23,04	11,41	158.746	74,17	
0,8	3,22	26,33	13,16	181.413	85,54	
1,0	4,02	32,92	16,46	226.819	106,99	

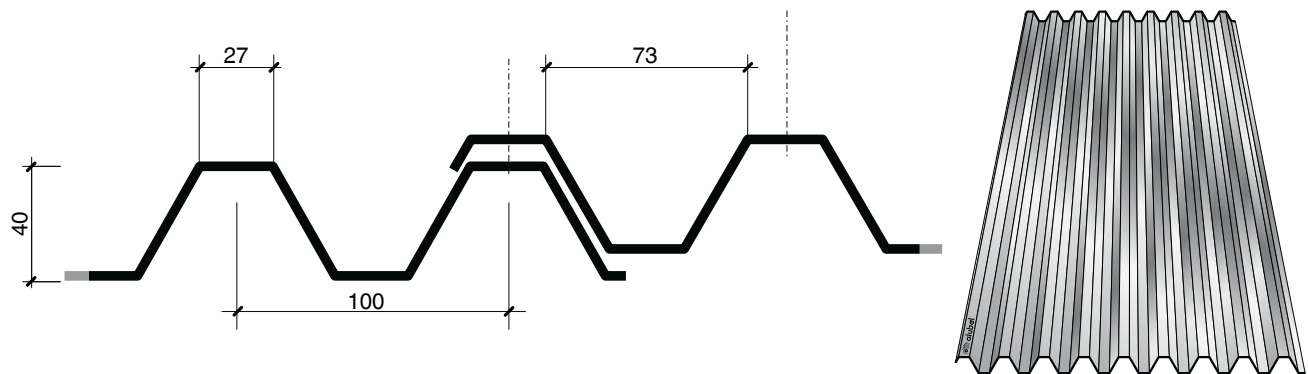
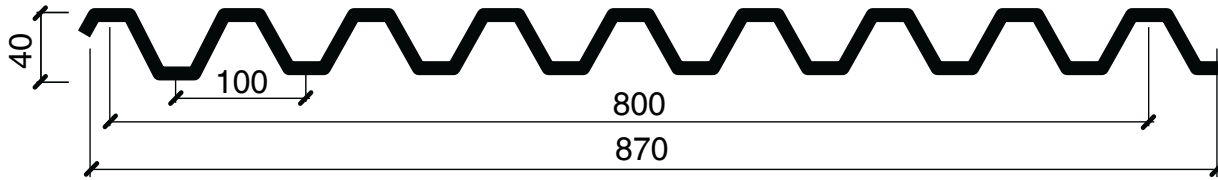
PERMITTED UNIFORM LOAD [kg/m²] ON 4 SUPPORTS*

i [m]	1,00	1,20	1,40	1,60	1,80	2,00	2,20	2,40
s [mm]	$\sigma_{perm.}$ $f_{perm.}$	$\sigma_{perm.}$ $f_{perm.}$	$\sigma_{perm.}$ $f_{perm.}$	$\sigma_{perm.}$ $f_{perm.}$	$\sigma_{perm.}$ $f_{perm.}$	$\sigma_{perm.}$ $f_{perm.}$	$\sigma_{perm.}$ $f_{perm.}$	$\sigma_{perm.}$ $f_{perm.}$
0,6	590 887	409 514	300 324	230 216	181 152	147 111	121 84	102 64
0,7	755 1.035	525 599	385 377	295 252	234 177	189 130	156 97	131 75
0,8	871 1.184	605 685	445 431	340 289	269 202	217 147	180 111	151 86
1,0	1.089 1.480	756 856	555 539	425 361	336 254	272 185	225 139	189 107

*(it is calculated in the dual hypothesis of $\sigma_{perm.} = 6,5 \text{ kN/cm}^2$ and $f_{perm.} = i/200$)

The contents of this calculation table are to be considered approximate and purely indicative. The structural calculation is the task of the designer and/or user in each single case that also has to determine the application design specifications for the roofing in question

Alubel 44 profile

 Made in: **Steel**


TECHNICAL DATA SHEET

TECHNICAL SPECIFICATIONS OF THE ALUBEL 44 STEEL PROFILE

s	p	J	W	EJ	M max	Symbols s = sheet thickness p = unit weight J = moment of inertia W = modulus of bending resistance EJ = bending stiffness M max = permitted bending moment ($\sigma_{perm.} = 13,73 \text{ kN/cm}^2$) i = centre distance between supports $\sigma_{perm.}$ = unit safety load $f_{perm.}$ = maximum permitted strain
[mm]	[kg/m ²]	[cm ⁴ /m]	[cm ³ /m]	[kN cm ² /m]	[kN cm/m]	
0,6	6,89	19,75	8,93	406.850	122,61	
0,7	8,04	23,04	11,41	474.624	156,66	
0,8	9,19	26,33	13,16	542.398	180,69	
0,9	10,34	29,62	14,81	610.172	203,34	
1,0	11,48	32,92	16,46	678.152	225,99	

PERMITTED UNIFORM LOAD [kg/m²] ON 4 SUPPORTS*

i [m]	1,00	1,25	1,50	1,75	2,00	2,25	2,50	2,75	3,00	3,25	3,50
s [mm]	$\sigma_{perm.} f_{perm.}$	$\sigma_{perm.} f_{perm.}$	$\sigma_{perm.} f_{perm.}$	$\sigma_{perm.} f_{perm.}$	$\sigma_{perm.} f_{perm.}$	$\sigma_{perm.} f_{perm.}$	$\sigma_{perm.} f_{perm.}$	$\sigma_{perm.} f_{perm.}$	$\sigma_{perm.} f_{perm.}$	$\sigma_{perm.} f_{perm.}$	$\sigma_{perm.} f_{perm.}$
0,6	1.250 2.654	800 1.359	556 786	408 495	313 332	247 233	200 170	165 128	139 98	118 77	102 62
0,7	1.597 3.097	1.022 1.585	710 917	522 578	399 387	316 272	256 198	211 149	177 115	151 90	130 72
0,8	1.842 3.539	1.179 1.812	819 1.049	602 660	461 442	364 311	295 226	244 170	205 131	174 103	150 83
1,0	2.304 4.424	1.475 2.265	1.024 1.311	752 826	576 553	455 388	369 383	305 213	256 164	218 129	188 103

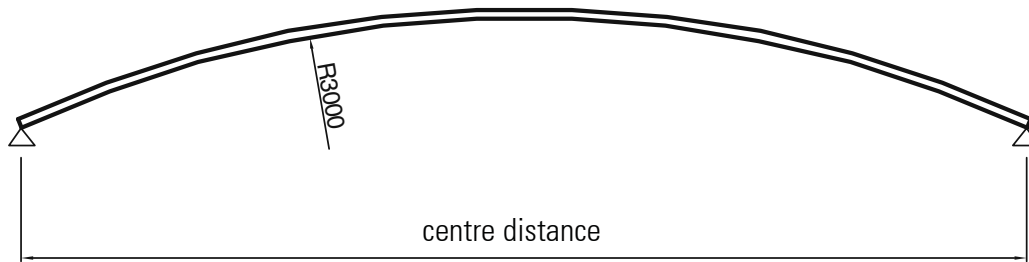
*(it is calculated in the dual hypothesis of $\sigma_{perm.} = 1.400 \text{ kg/cm}^2 = 13,73 \text{ kN/cm}^2$ and $f_{perm.} = i/200$)

The contents of this calculation table are to be considered approximate and purely indicative. The structural calculation is the task of the designer and/or user in each single case that also has to determine the application design specifications for the roofing in question

Alubel 44 profile

TECHNICAL DATA SHEET

LOAD TABLE FOR THE RADIUS 3 CURVED ALUMINIUM ALUBEL 44 PROFILE SHEET



PERMITTED LOADS TABLE FOR A CURVED ALUMINIUM ALUBEL 44 PROFILE R = 3 M

Clear span (m)	2,00		2,50		3,00		3,50		4,00		4,50	
	Load	n	Load	n	Load	n	Load	n	Load	n	Load	n
0,6	185	8	183	8	-		-		-		-	
0,7	216	8	215	8	206	8	202	8	-		-	
0,8	246	8	244	8	336	8	218	8	-		-	
1,0	309	8	307	8	296	8	281	8	216	6	160	5

Uniformly distributed load, expressed in kg/m²

σ perm. = 6,5 kN/cm²

n = number of fixings on each side (to be put on the low part of the corrugation) with 6,3 mm \varnothing steel fixings necessary to support the permitted load

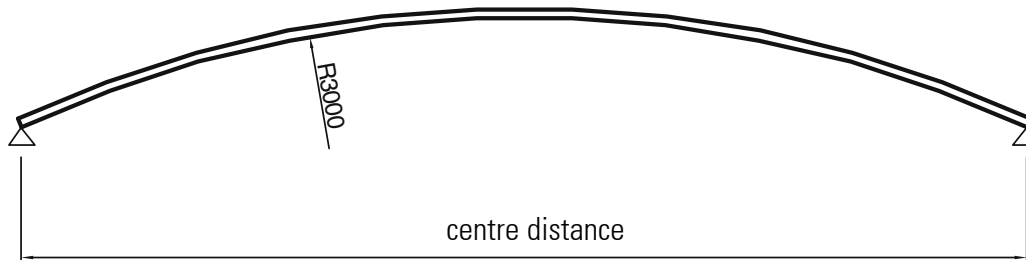
It is mandatory to use the number of fixings indicated in the table; if you only want to exploit part of the permitted load then the number of fixings can be reduced accordingly.

The treadable surface has been verified as per Italian Ministerial Decree 16/01/1996 par. 5.2.

The contents of this calculation table are to be considered approximate and purely indicative. The structural calculation is the task of the designer and/or user in each single case that also has to determine the application design specifications for the roofing in question

Alubel 44 profile

LOAD TABLE FOR THE RADIUS 3 CURVED STEEL ALUBEL 44 PROFILE SHEET



PERMITTED LOADS TABLE **FOR A CURVED STEEL ALUBEL 44 PROFILE R = 3 M**

Clear span (m)	2,00		2,50		3,00		3,50		4,00		4,50		5,00	
Thickness (mm)	Load	n	Load	n	Load	n	Load	n	Load	n	Load	n	Load	n
0,5	268	8	256	8	246	8	-		-		-		-	
0,6	320	8	307	8	297	8	289	8	280	8	-		-	
0,7	380	8	359	8	346	8	338	8	328	8	286	8	-	
0,8	430	8	402	8	396	8	390	8	378	8	330	8	224	5
1,0	545	8	512	8	501	8	492	8	472	8	415	8	283	5

Uniformly distributed load, expressed in kg/m²

σ perm. = 1.400 kg/cm²

n = number of fixings on each side (to be put on the low part of the corrugation) with 6,3 mm \varnothing steel fixings necessary to support the permitted load

It is mandatory to use the number of fixings indicated in the table; if you only want to exploit part of the permitted load then the number of fixings can be reduced accordingly.

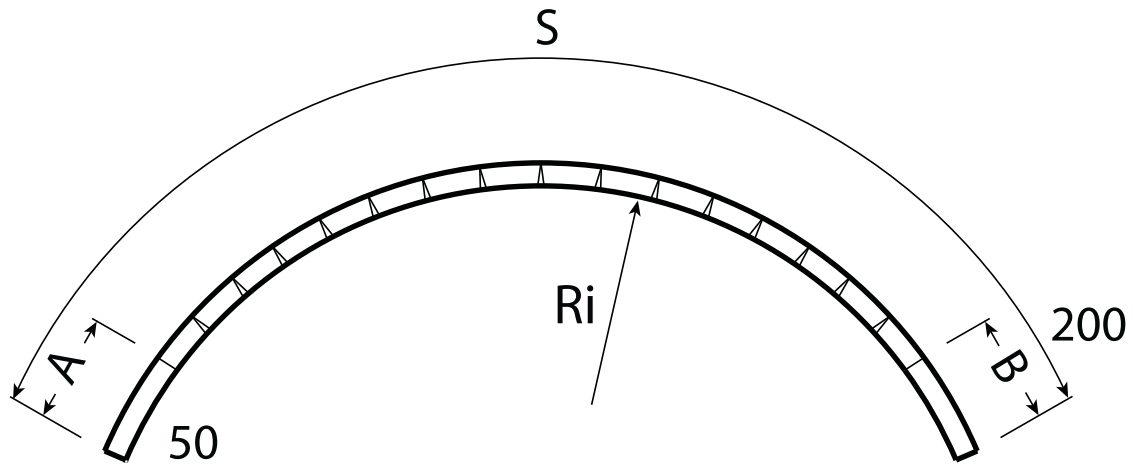
The treadable surface has been verified as per Italian Ministerial Decree 16/01/1996 par. 5.2.

The contents of this calculation table are to be considered approximate and purely indicative. The structural calculation is the task of the designer and/or user in each single case that also has to determine the application design specifications for the roofing in question

Alubel 44 profile

SHEET TOOLING

UNIFORM CURVATURE BY NOTCHING

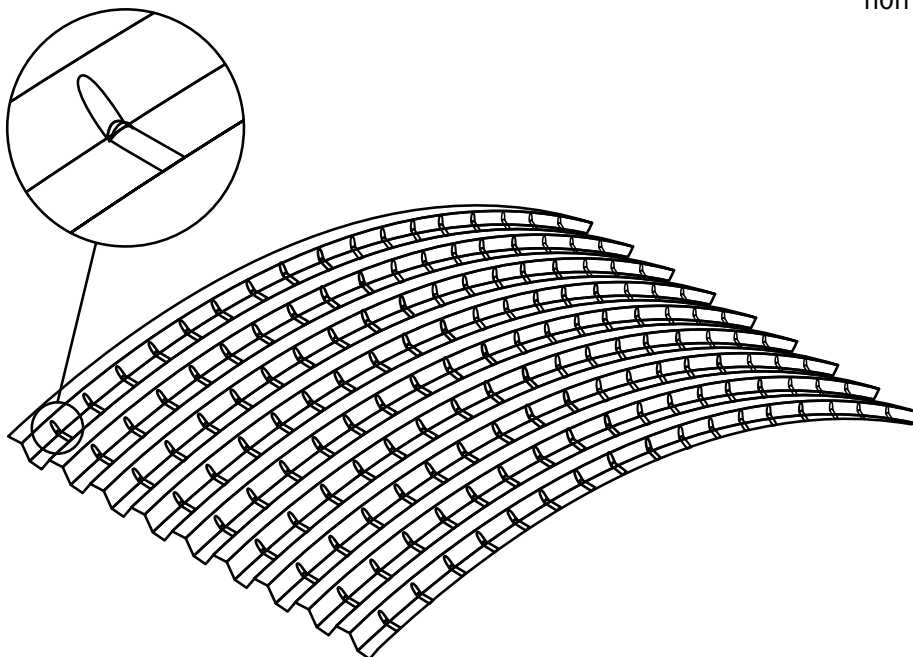


A = min 200 mm
 B = min 50 mm
 or
 A = min 50 mm
 B = min 200 mm

UNIFORM CURVATURE BY NOTCHING

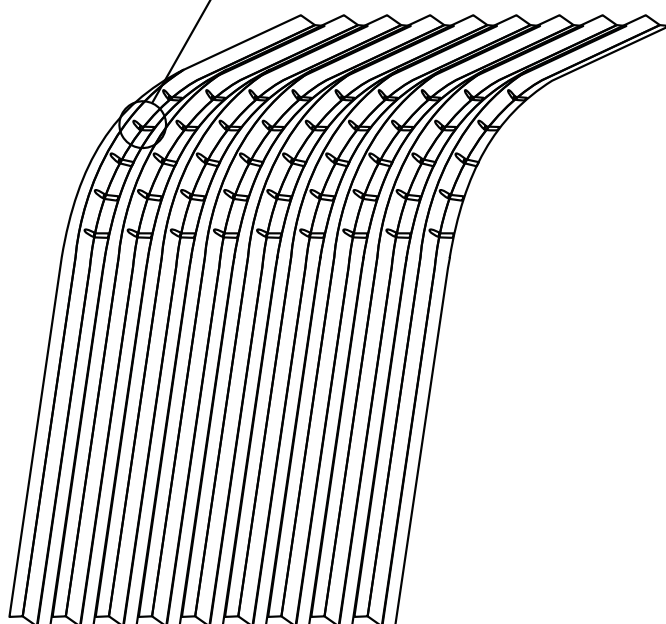
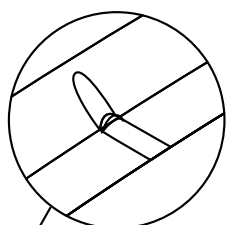
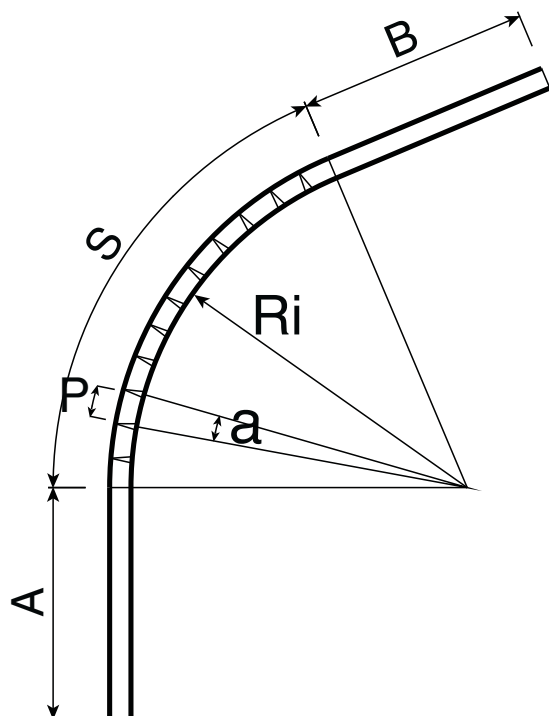
Ri	S max sheet length	
	aluminium	other materials
1 m	max 3 m	max 3 m
from 2 to 3 m	max 4 m	max 4 m
from 3 to 4 m	max 5 m	max 5 m
from 4 to 6 m	max 6 m	max 6 m
from 6 to 7 m	max 8 m	max 8 m*

* non standard toolings



Alubel 44 profile

PARTIAL CURVATURE BY NOTCHING



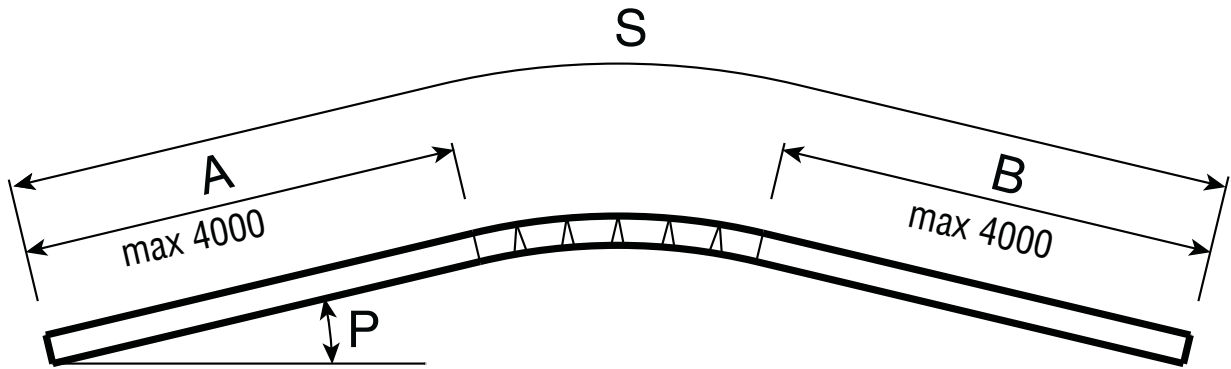
Symbols		
A	initial section	min 50 max 2000 mm
B	end section	min 50 max 2000 mm
S	curve development	min 100 mm
A+B+S	total development (aluminium)	max 5000* mm
A+B+S	total development (other materials)	max 5000* mm
Ri	inside radius	min 1000 mm
P	impression distance	min 30 mm
a	deflection angle	min 1° max 4°

* total variable development based on the inside radius

Alubel 44 profile

NOTCHING IN THE MIDDLE

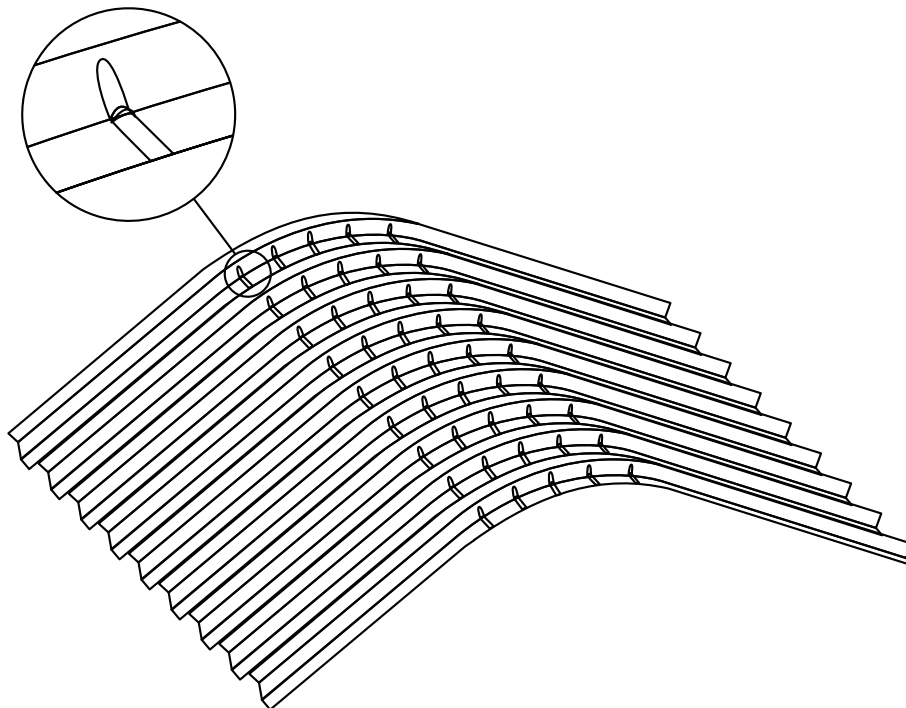
SHEET TOOLING



Sheet curved only in the centre to form the ridge and the joining of two pitches (achieved by means of a set of impressions in the middle of the sheet).

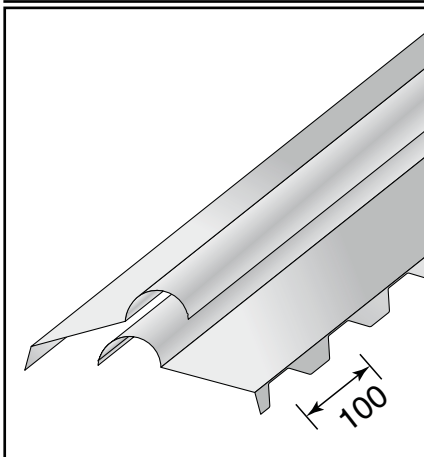
The length of the straight segments A and B varies from a minimum of 50 mm to a maximum of 4000 mm.

P	S max sheet length	
	aluminium	other materials
from 6 to 12%	max 8 m	max 5 m
from 12 to 15%	max 7 m	max 4 m
from 15 to 20%	max 5 m	max 3 m
from 20 to 25%	max 4 m	max 2 m

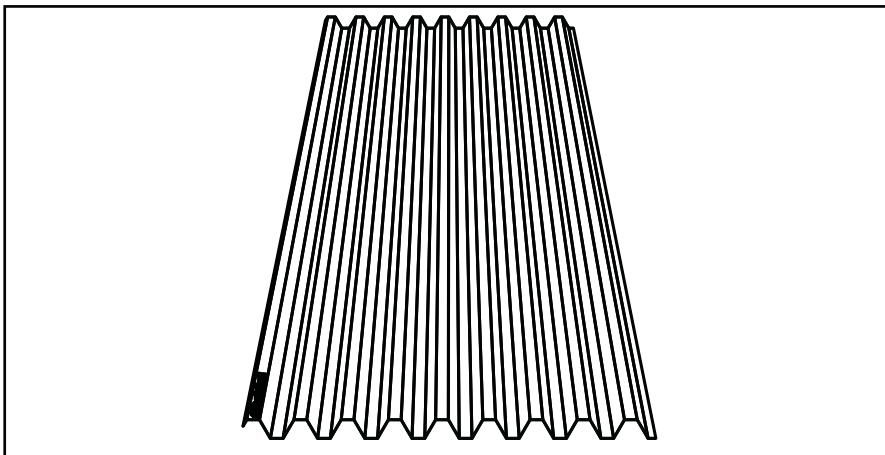
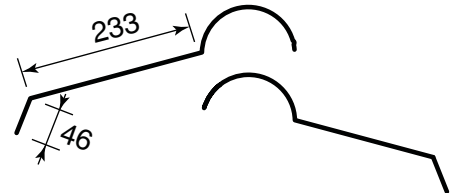


Alubel 44 profile

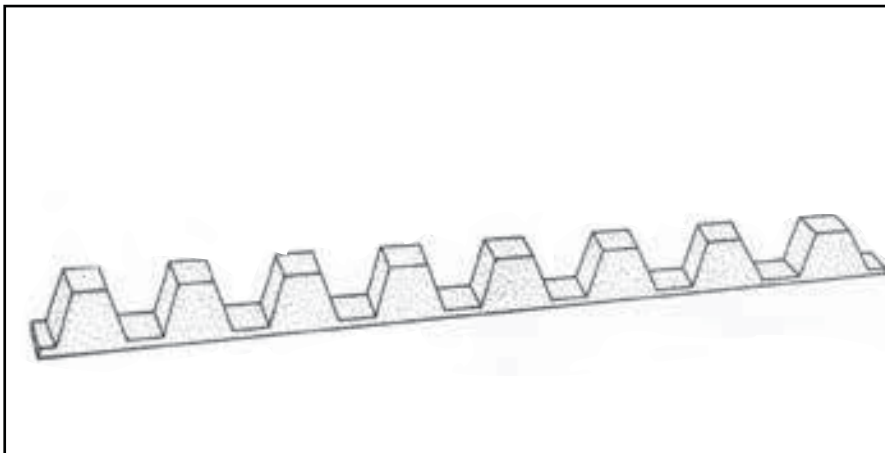
ACCESSORIES



Notched, hinged ridge
development 834 mm
length 2450 mm



**Translucent
fibreglass sheet**



**Under/over corrugation
profile**

Alubel 44 profile

OVERLAPPING VALUES

INSTALLATION INSTRUCTIONS

