



PROFILE. QUALITY. MONTANA.

**PRODUCT RANGE
ALUMINIUM AND STEELPROFILES AS SANDWICH PANELS
FOR ROOFS, FLOORS AS FAÇADES**

MONTANA BUILDING SYSTEMS

TAKING ADVANTAGE OF KNOW-HOW LOCALLY AS A COMPANY OF TATA STEEL

Tata Steel is an international metal company offering products and services relating to steel and aluminium. The workforce of over 80,000 employees in over 50 countries combines a huge amount of know-how

about metal. As a member of a group, we have access to collective knowledge within the concern. We can take advantage of this valuable asset locally with you.

Montana Bausysteme AG, Villmergen (CH)



LOGISTICS

Well-organised logistics ensure fast delivery to the worksite within the desired deadlines.



QUALITY

Montana Building Systems Ltd. is certified according to SN EN ISO 9001 and EPAQ Quality Label.





MONTANA. MADE IN SWITZERLAND!

Montana Building Systems Ltd. is a Swiss company specialising in the profile sheeting segment since 1964. The trend towards rapid, lightweight and modern construction has been considerably influenced by Montana's products. The name "Montana" is partly responsible for the production of profile sheets for roofs, ceilings and façades constantly growing in importance. Montana Building Systems Ltd. has extensive know-how in the production of trapezoidal, corrugated and cladding profiles, liner trays, composite floor slabs and sandwich panels made of steel and aluminium.



COLOURS AND SHAPES

With the MONTACOLOR® colour collection, we offer architects, planners and builders new and varied design possibilities. Our range of metal profiles is suitable for industrial, administrative and residential buildings.

THE ENTIRE PROCESS CHAIN

Montana Building Systems Ltd. provides everything, from documentation and production to logistics and delivery on the construction site. Our customers appreciate the competent sales advice and comprehensive after sales service.

TECHNOLOGY

In addition to our products, we provide construction specialists with a large number of technical aids from structural calculation tables to design drawings and installation instructions. These non-binding working aids make the work of planners and architects easier and contribute their share to each successfully completed structure.

Please take note of the pictograms accompanying each product. They give you a general overview of what documentation and technical aids are available to you.



Technical
informations



Load tables

ROOFS, CEILING, FAÇADES

EVERYTHING THAT BELONGS TOGETHER

With Montana products, you can design your structure in an integrated manner. From the outer roof and supporting shell to cladding profiles and roof soffits, as well as external façades and interior walls – with elements available for different construction philosophies, such as rear-ventilated façades, sandwich constructions and curtain-type façades. Coordinated elements enable freedom of design and open up (virtually) unlimited possibilities.




Montana Building Systems Ltd. offers an economical assortment which is simply begging to be taken maximum advantage of by highly imaginative planners, architects and builders.



Pala Ferroli, San Bonifacio (I)

Pala Ferroli

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SWISS PANEL®

THE ECONOMICAL ALL-ROUNDERS IN THE MONTANA PROGRAM

SWISS PANEL® trapezoidal and corrugated profiles are suitable for universal use. On the façade or in the roof, with or without perforation. Single or combined colours from among the MONTACOLOR® colour collection. Although SWISSPANEL® profiles are mainly fitted to industrial and

commercial premises, more and more architects, planners and builders are using the elegant profile sheets on administrative buildings and private houses. Thanks to their sinusoidal form, SWISS PANEL® corrugated profiles produce a soft, smooth surface appearance.

Adolf-Kolping Berufsschule, München (D)





Brütisch Rüegger Toolcenter, Urdorf (CH)

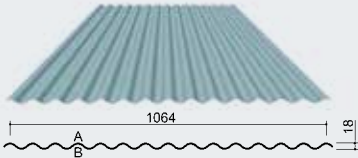
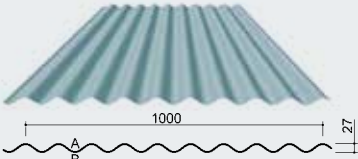
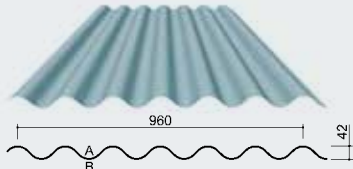
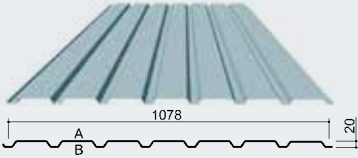
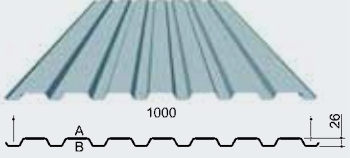
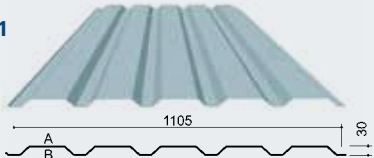
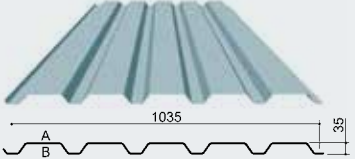
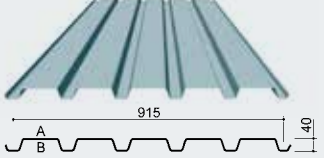


SSIC, Gordola (CH)

SWISS PANEL®

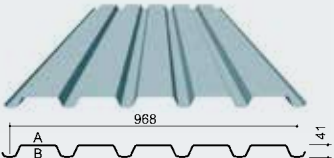

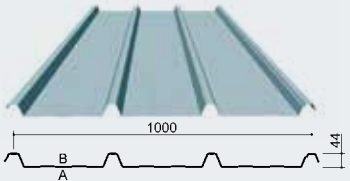
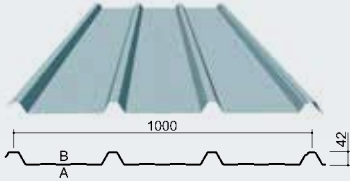
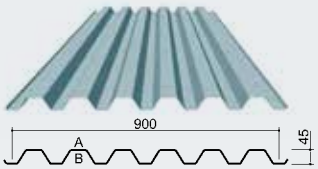

PROFILES FOR FAÇADES AND ROOFS IN ALUMINIUM AND STEEL

Trapezoidal and corrugated profiles can be supplied also with felt coating or with acoustic perforation

PROFILE		ACOUSTIC	FELT COATING	THICKNESS mm	0.70	0.75	0.80	0.88	1.00	1.25
● SP 18/76		● SP 18/76 A	●	STEEL kg/m ²	6.58	7.05	7.52	8.27	9.40	11.75
				ALUMINIUM kg/m ²	2.26		2.58		3.23	
● SP 27/111		● SP 27/111 A	●	STEEL kg/m ²	7.00	7.50	8.00	8.80	10.00	12.50
				ALUMINIUM kg/m ²	2.41		2.75		3.44	
● SP 42/160		● SP 42/160 A	●	STEEL kg/m ²	7.29	7.81	8.33	9.17	10.42	13.02
				ALUMINIUM kg/m ²	2.51		2.86		3.58	
● SP 20/154		● SP 20/154 A	●	STEEL kg/m ²	6.49	6.96	7.42	8.16	9.27	11.59
				ALUMINIUM kg/m ²	2.23		2.55		3.19	
● SP 26/143		● SP 26/143 A	●	STEEL kg/m ²	7.00	7.50	8.00	8.80	10.00	12.50
				ALUMINIUM kg/m ²	2.41		2.75		3.44	
● SP 30/221		● SP 30/221 A	●	STEEL kg/m ²	6.34	6.79	7.24	7.96	9.05	11.31
				ALUMINIUM kg/m ²	2.18		2.49		3.11	
● SP 35/207		● SP 35/207 A	●	STEEL kg/m ²	6.76	7.25	7.73	8.50	9.66	12.08
				ALUMINIUM kg/m ²	2.32		2.66		3.32	
● SP 40/183		● SP 40/183 A	●	STEEL kg/m ²	7.65	8.20	8.74	9.62	10.93	13.66
				ALUMINIUM kg/m ²	2.63		3.01		3.76	

PROFILES FOR FAÇADES AND ROOFS IN ALUMINIUM AND STEEL

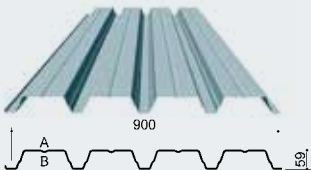
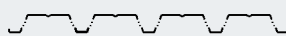
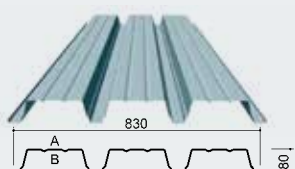
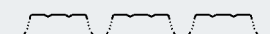
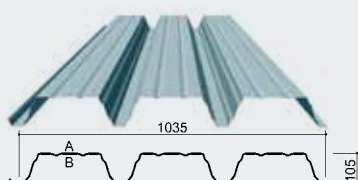
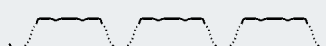
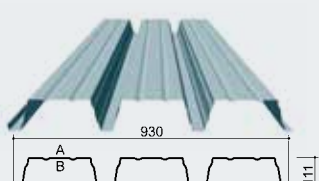
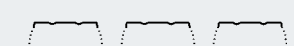
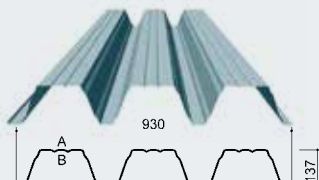

Trapezoidal profiles can be supplied also with felt coating or with acoustic perforation

PROFILE		ACOUSTIC	FELT COATING	THICKNESS mm						
				0.70	0.75	0.80	0.88	1.00	1.25	
● SP 41/193.5		● SP 41/193.5 A	●	STEEL kg/m ²	7.23	7.75	8.26	9.09	10.33	12.91
				ALUMINIUM kg/m ²	2.49		2.84		3.55	
● SP 44/333 suitable to MTD TL			●	STEEL kg/m ²	7.00	7.50	8.00	8.88	10.00	12.50
				ALUMINIUM kg/m ²	2.41		2.75		3.44	
● SP 44/333 S with support			●	STEEL kg/m ²	7.00	7.50	8.00	8.88	10.00	12.50
				ALUMINIUM kg/m ²	2.41		2.75		3.44	
● SP 45/150		● SP 45/150 A	●	STEEL kg/m ²	7.78	8.33	8.89	9.78	11.11	13.89
				ALUMINIUM kg/m ²	2.67		3.06		3.82	

SWISS PANEL®

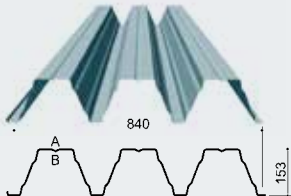

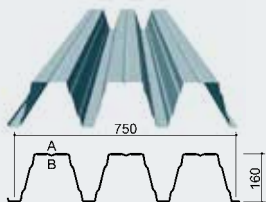

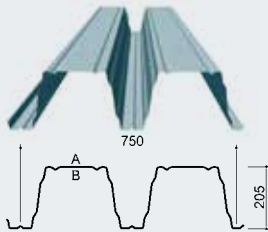

ROOF PROFILES

Trapezoidal profiles can be supplied also with felt coating or with acoustic perforation

PROFILE	ACOUSTIC	FELT COATING	THICKNESS mm																												
<div>● SP 59/225</div> <div></div>	<div>● SP 59/225 A</div> <div></div>	<div>●</div>	<div>STEEL kg/m²</div> <div>ALUMINIUM kg/m²</div> <table><tr><td>0.70</td><td>0.75</td><td>0.80</td><td>0.88</td><td>1.00</td><td>1.25</td><td>1.50</td></tr><tr><td>7.78</td><td>8.33</td><td>8.89</td><td>9.78</td><td>11.11</td><td>13.89</td><td></td></tr><tr><td>2.67</td><td></td><td>3.06</td><td></td><td>3.82</td><td></td><td></td></tr></table>								0.70	0.75	0.80	0.88	1.00	1.25	1.50	7.78	8.33	8.89	9.78	11.11	13.89		2.67		3.06		3.82		
0.70	0.75	0.80	0.88	1.00	1.25	1.50																									
7.78	8.33	8.89	9.78	11.11	13.89																										
2.67		3.06		3.82																											
<div>● SP 80/277</div> <div></div>	<div>● SP 80/277 A</div> <div></div>	<div>●</div>	<div>STEEL kg/m²</div> <div>ALUMINIUM kg/m²</div> <table><tr><td>0.70</td><td>0.75</td><td>0.80</td><td>0.88</td><td>1.00</td><td>1.25</td><td>1.50</td></tr><tr><td>8.43</td><td>9.04</td><td>9.64</td><td>10.60</td><td>12.05</td><td>15.06</td><td>18.08</td></tr><tr><td>2.90</td><td></td><td>3.31</td><td></td><td>4.14</td><td></td><td></td></tr></table>								0.70	0.75	0.80	0.88	1.00	1.25	1.50	8.43	9.04	9.64	10.60	12.05	15.06	18.08	2.90		3.31		4.14		
0.70	0.75	0.80	0.88	1.00	1.25	1.50																									
8.43	9.04	9.64	10.60	12.05	15.06	18.08																									
2.90		3.31		4.14																											
<div>● SP 105/345</div> <div></div>	<div>● SP 105/345 A</div> <div></div>	<div>●</div>	<div>STEEL kg/m²</div> <div>ALUMINIUM kg/m²</div> <table><tr><td>0.70</td><td>0.75</td><td>0.80</td><td>0.88</td><td>1.00</td><td>1.25</td><td>1.50</td></tr><tr><td></td><td>8.70</td><td></td><td>10.20</td><td>11.59</td><td>14.49</td><td>17.39</td></tr><tr><td></td><td colspan="6">Aluminium on request!</td></tr></table>								0.70	0.75	0.80	0.88	1.00	1.25	1.50		8.70		10.20	11.59	14.49	17.39		Aluminium on request!					
0.70	0.75	0.80	0.88	1.00	1.25	1.50																									
	8.70		10.20	11.59	14.49	17.39																									
	Aluminium on request!																														
<div>● SP 111/310</div> <div></div>	<div>● SP 111/310 A</div> <div></div>	<div>●</div>	<div>STEEL kg/m²</div> <div>ALUMINIUM kg/m²</div> <table><tr><td>0.70</td><td>0.75</td><td>0.80</td><td>0.88</td><td>1.00</td><td>1.25</td><td>1.50</td></tr><tr><td></td><td>9.68</td><td></td><td>11.35</td><td>12.90</td><td>16.13</td><td>19.35</td></tr><tr><td></td><td colspan="6">Aluminium on request!</td></tr></table>								0.70	0.75	0.80	0.88	1.00	1.25	1.50		9.68		11.35	12.90	16.13	19.35		Aluminium on request!					
0.70	0.75	0.80	0.88	1.00	1.25	1.50																									
	9.68		11.35	12.90	16.13	19.35																									
	Aluminium on request!																														
<div>● SP135/310</div> <div></div>	<div>● SP 135/310 A</div> <div></div>	<div>●</div>	<div>STEEL kg/m²</div> <div>ALUMINIUM kg/m²</div> <table><tr><td>0.70</td><td>0.75</td><td>0.80</td><td>0.88</td><td>1.00</td><td>1.25</td><td>1.50</td></tr><tr><td></td><td>9.68</td><td></td><td>11.35</td><td>12.90</td><td>16.13</td><td>19.35</td></tr><tr><td></td><td colspan="6">Aluminium on request!</td></tr></table>								0.70	0.75	0.80	0.88	1.00	1.25	1.50		9.68		11.35	12.90	16.13	19.35		Aluminium on request!					
0.70	0.75	0.80	0.88	1.00	1.25	1.50																									
	9.68		11.35	12.90	16.13	19.35																									
	Aluminium on request!																														

ROOF PROFILES

Trapezoidal profiles can be supplied also with felt coating or with acoustic perforation

PROFILE	ACOUSTIC	FELT COATING	THICKNESS mm																					
<ul style="list-style-type: none">SP153/280 	<ul style="list-style-type: none">SP 153/280 A 	<ul style="list-style-type: none">	<table><tr><td>STEEL kg/m²</td><td>0.75</td><td>0.88</td><td>1.00</td><td>1.13</td><td>1.25</td><td>1.50</td></tr><tr><td></td><td>10.71</td><td>12.57</td><td>14.29</td><td></td><td>17.86</td><td>21.43</td></tr><tr><td>ALUMINIUM kg/m²</td><td colspan="6">Aluminium on request!</td></tr></table>	STEEL kg/m ²	0.75	0.88	1.00	1.13	1.25	1.50		10.71	12.57	14.29		17.86	21.43	ALUMINIUM kg/m ²	Aluminium on request!					
STEEL kg/m ²	0.75	0.88	1.00	1.13	1.25	1.50																		
	10.71	12.57	14.29		17.86	21.43																		
ALUMINIUM kg/m ²	Aluminium on request!																							
<ul style="list-style-type: none">SP 160/250 	<ul style="list-style-type: none">SP 160/250 A 	<ul style="list-style-type: none">	<table><tr><td>STEEL kg/m²</td><td>0.75</td><td>0.88</td><td>1.00</td><td>1.13</td><td>1.25</td><td>1.50</td></tr><tr><td></td><td>12.00</td><td>14.08</td><td>16.00</td><td></td><td>20.00</td><td>24.00</td></tr><tr><td>ALUMINIUM kg/m²</td><td colspan="6">Aluminium on request!</td></tr></table>	STEEL kg/m ²	0.75	0.88	1.00	1.13	1.25	1.50		12.00	14.08	16.00		20.00	24.00	ALUMINIUM kg/m ²	Aluminium on request!					
STEEL kg/m ²	0.75	0.88	1.00	1.13	1.25	1.50																		
	12.00	14.08	16.00		20.00	24.00																		
ALUMINIUM kg/m ²	Aluminium on request!																							
<ul style="list-style-type: none">SP 200/375 	<ul style="list-style-type: none">SP 200/375 A <p>Perforation Ø 3 mm/Tg 5.5 mm</p> 	<ul style="list-style-type: none">	<table><tr><td>STEEL kg/m²</td><td>0.75</td><td>0.88</td><td>1.00</td><td>1.13</td><td>1.25</td><td>1.50</td></tr><tr><td></td><td></td><td>14.08</td><td>16.00</td><td>18.08</td><td>20.00</td><td>24.00</td></tr></table>	STEEL kg/m ²	0.75	0.88	1.00	1.13	1.25	1.50			14.08	16.00	18.08	20.00	24.00							
STEEL kg/m ²	0.75	0.88	1.00	1.13	1.25	1.50																		
		14.08	16.00	18.08	20.00	24.00																		

MONTANA FELT COATINGS

For the reduction of dripping condensation, to minimise the noise of rain and to optimise room acoustics

ANTI-CONDENSATION FELT

Self-adhesive felt for cold roofs. It absorbs condensation and releases the moisture back into the surrounding area.

NOISE ABSORPTION FELT

Self-adhesive felt for deadening the noise of rain and for noise absorption on metal roofs, as well as for absorbing condensation.

ACOUSTIC FELT

Self-adhesive felt for improving acoustics and to prevent trickling of insulation in combination with perforated profiles in wall- and roof structure.

MOLTEN FELT

For the SWISS PANEL SP 80 – 160 it is possible to have the felt already molten ex works.



www.montana-ag.ch



Detail
brochure



Technical
informations



CAD



Load tables



Calculation-
software



Colour
chart



Certificates and
approvals

MONTAWALL®

SUCCESSFUL AND ECONOMICAL IN WALL AND CEILING CONSTRUCTION

The MONTAWALL® liner tray program from Montana comprises a variable system of supporting coffers in different designs, dimensions and lengths. The height and depth of the coffers are optional. MONTAWALL® liner trays enable simple, economical construction with very good insulation values. Perforated liner trays guarantee high sound ab-

sorption values in technically important frequency ranges and are used very successfully to ensure economical compliance with noise protection stipulations. MONTAWALL® liner trays have also proven successful as wall and ceiling elements in the building of stadiums.

Centre d'Impression Edipresse, Bussigny (CH)



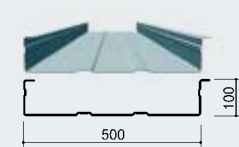
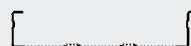
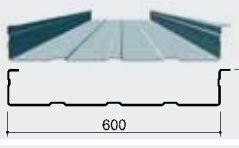

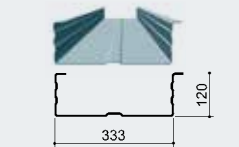

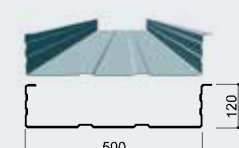
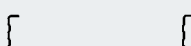
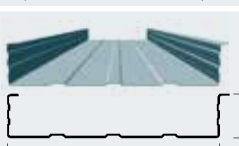


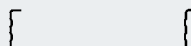
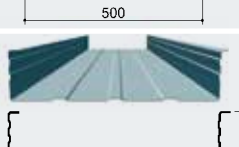
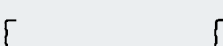
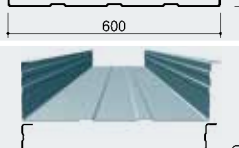
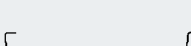
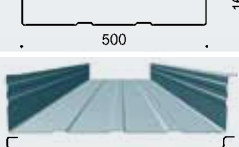
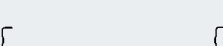
LINER TRAYS IN STEEL

Structural protections on request with integrated waterproof strip and / or with acoustic perforation $\varnothing = 4 \text{ mm}$ / pitch 7 mm

PROFILE		ACOUSTIC		THICKNESS mm				
				0.75	0.88	1.00	1.25	
● MK 60/333		● MK 60/333 A		STEEL kg/m ²	● 9.01	● 10.57	● 12.01	● 15.01
● MK 80/333		● MK 80/333 A		STEEL kg/m ²	● 9.73	● 11.41	● 12.97	● 16.21
● MK 80/500		● MK 80/500 A		STEEL kg/m ²	● 8.52	● 10.00	● 11.36	● 14.20
● MK 100/333		● MK 100/333 A		STEEL kg/m ²	● 10.45	● 12.26	● 13.93	● 17.42

LINER TRAYS IN STEEL

Structural protections on request with integrated waterproof strip and / or with acoustic perforation $\varnothing = 4$ mm / pitch 7 mm

PROFILE		ACOUSTIC		THICKNESS mm				
				0.75	0.88	1.00	1.25	
● MK 100/500		● MK 100/500 A		STEEL kg/m ²	9.00	10.56	12.00	15.00
● MK 100/600		● MK 100/600 A		STEEL kg/m ²	8.53	10.01	11.37	14.22
● MK 120/333		● MK 120/333 A		STEEL kg/m ²	11.17	13.11	14.89	18.62
● MK 120/500		● MK 120/500 A		STEEL kg/m ²	9.52	11.17	12.69	15.86
● MK 120/600		● MK 120/600 A		STEEL kg/m ²	8.96	10.51	11.95	14.93
● MK 140/500		● MK 140/500 A		STEEL kg/m ²	10.03	11.77	13.38	16.72
● MK 140/600		● MK 140/600 A		STEEL kg/m ²		10.98	12.48	15.60
● MK 160/500		● MK 160/500 A		STEEL kg/m ²		12.29	13.97	17.46
● MK 160/600		● MK 160/600 A		STEEL kg/m ²		11.45	13.01	16.27

MONTANATHERM®

ECONOMIC EFFICIENCY, FUNCTIONALITY, AESTHETICS MADE FROM STEEL AND ALUMINIUM

MONTANATHERM® sandwich panels are very light with a high degree of rigidity. These qualities enable large spans and easy installation. The outer skin absorbs the tensile and compressive forces that occur and is





also resistant to atmospheric corrosion. MONTACOLOR® colours, different surface textures and the elegant wall element with hidden fastening system open up a large number of design possibilities for the customer.

Rino Weder, Oberriet (CH)



SANDWICH ELEMENTS IN STEEL AND ALUMINIUM

Wall elements with CFC and HCFC-free PIR high-resistance foam with visible or concealed fasteners

TYPE	PROFILE	TECHNICAL DATA	M kg/m ²	d mm	L max m	U ₁ W/(m ² K)	U ₂ W/(m ² K)	λ ₀ W/(m K)	S P items/pack	EI 30	SURFACES			SHEET THICKNESS	A mm	I mm
											LL	ML	NL			
● WALL ELEMENTS WITH VISIBLE FASTENERS	● MTW LL 80/1150	STEEL	12.48	80	17	0.27	0.28	0.023	13		●	●			0.63	0.45
		ALUMINIUM	7.35	80	12	0.27	0.28	0.023	13		●	●			0.70	0.70
● WALL ELEMENTS WITH HIDDEN FASTENING	● MTW V ML 80/1000	STEEL	13.34	80	17	0.27	0.30	0.023	13		●	●	●		0.63	0.45
		ALUMINIUM	7.68	80	12	0.27	0.30	0.023	13		●	●	●		0.70	0.70
	● MTW V ML 100/1000	STEEL	14.15	100	17	0.22	0.24	0.023	11		●	●	●		0.63	0.45
		ALUMINIUM	8.49	100	12	0.22	0.24	0.023	11		●	●	●		0.70	0.70
	● MTW V ML 120/1000 	STEEL	14.96	120	17	0.19	0.20	0.023	9		●	●			0.63	0.45
		ALUMINIUM	9.30	120	12	0.19	0.20	0.023	9		●	●			0.70	0.70
	● MTW V ML 140/1000 	STEEL	15.75	140	17	0.16	0.17	0.023	8	●	●	●			0.63	0.45
		ALUMINIUM	10.10	140	12	0.16	0.17	0.023	8		●	●			0.70	0.70
	● MTW V ML 160/1000 	STEEL	16.56	160	17	0.14	0.15	0.023	7	●	●	●			0.63	0.45
		ALUMINIUM	10.91	160	12	0.14	0.15	0.023	7		●	●			0.70	0.70
	● MTW V ML 180/1000 	STEEL	17.37	180	17	0.13	0.13	0.023	6	●	●	●			0.63	0.45
		ALUMINIUM	11.71	180	12	0.13	0.13	0.023	6		●	●			0.70	0.70



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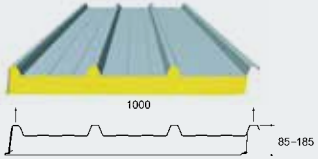
Certificates and
approvals


MONTANATHERM®


COMPOSITE PANELS IN ALUMINIUM AND STEEL

Roof panels with CFC and HCFC-free PIR foam

TYPE	PROFILE	TECHNICAL DATA	SURFACES				SHEET THICKNESS	
		M kg/m ² d mm L max m U ₁ W/(m ² K) U ₂ W/(m ² K) λ ₀ W/(m K) S P items/pack	TL	A mm I mm				
● ROOF ELEMENTS	● MTD TL 85/1000	STEEL	●	●				
		ALUMINIUM	●	●				
	● MTD TL 125/1000	STEEL	●	●				
		ALUMINIUM	●	●				
	● MTD TL 145/1000	STEEL	●	●				
		ALUMINIUM	●	●				
	● MTD TL 165/1000	STEEL	●	●				
		ALUMINIUM	●	●				
	● MTD TL 185/1000	STEEL	●	●				
		ALUMINIUM	●	●				







TECHNICAL DATA

M Element weight
d Element thickness
L Max. element length
U₁ Heat transition coefficient without factor of the joint
U₂ Heat transition coefficient with factor of the joint
λ₀ declared and certified lambda value
S Standard packaging

SHEET THICKNESS

A Outer shell
I Inner shell

SURFACE TREATMENTS

LL = Ribbed
ML = Microribbed
NL = Grooved and microribbed

TL = Trapezoidal

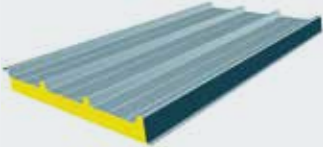
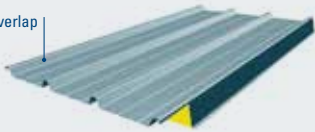
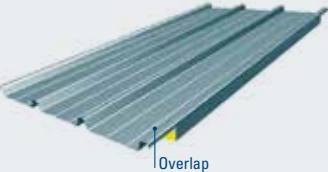
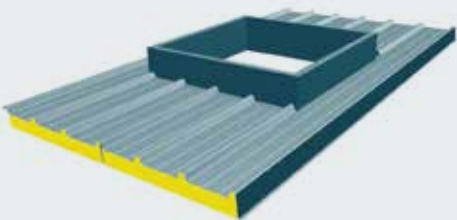
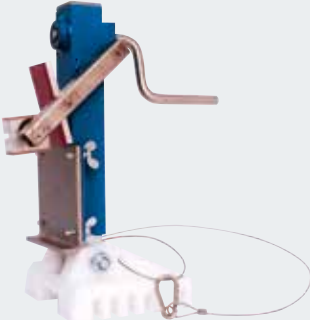

● MONTANA/SOLON-SOLbond



The MONTANA/SOLON-SOLbond system contains two matching components: MONTANATHERM® sandwich elements or SWISS PANEL® trapezoidal profiles with a 50 µm Colorcoat Prisma® coating, as well as frameless photovoltaic modules made by SOLON. Both components are combined to form a high performance system using weather and UV-resistant silicone-based adhesive made by SIKA. It comes with a comprehensive system guarantee for up to 25 years to maximize your investment security.

Thanks to the adhesive, the system can be installed reliably, quickly and without any critical penetration of the roof. What is more, the reduced sur-face weight (less than 10 kg/m²) means minimum additional static load on the roof. The high performance solar modules ensure a surface area efficiency of up to 155 Wp/m², making them an ideal solution not only from an environmental but also from a financial point of view.

TECHNICAL INFORMATION

DESCRIPTION		EXECUTION	Standard	Foam core notch	OVERLAP	Left	Right
● A PANELS			●			●	
● B PANELS				●		●	
● C PANELS				●			●
● ADJUSTMENT BASE		<ul style="list-style-type: none">● ADJUSTMENT BASE MATCHING MONTANATHERM® ROOF ELEMENTS The adjustment base is produced from the same material as MONTANATHERM® roof panels. The side walls are insulated with 60 mm mineral wool. The internal height of the Montana adjustment base is 350 mm. ADVANTAGES The adjustment base is completely assembled in the factory and delivered to the construction site using special transport and storage equipment. Two MONTANATHERM® roof panels are always bolted together. Delivery in Switzerland only!					
● FITTING EQUIPMENT		<ul style="list-style-type: none">● Fitting equipment for the installation of MONTANATHERM® wall elements. Easy handling thanks to the telescopic tube and clamping mechanism. 2 fitting equipments including accessories packaged in a handy plastic box. Weight approx. 16 kg Please ask for our detailed brochure! Suitable to all MONTANATHERM® wall elements					
● LOAD DISTRIBUTION BOARD		<ul style="list-style-type: none">● Load distribution boards, matching MONTANATHERM® wall elements with concealed fasteners<ul style="list-style-type: none">• For the safe discharge of high bolt forces resulting from wind suction into the sandwich joint• Material S320GD + AZ185 according to DIN EN 10346• Thickness 1.5 mm					
● COMPOSITE PANELS WITH FIRE RESISTANCE		<ul style="list-style-type: none">● From MTW V ML 140 to MTW V ML 180 with PIR foam and EI 30 certificate.● Panels with core of mineral wool on request.					

MONTALINE®

OR: CAN A FAÇADE LOOK MORE EXPENSIVE THAN IT IS?

MONTALINE® cladding profiles form the basis for an elegant façade with no fastening or securing devices visible. MONTALINE® cladding profiles are also available with bent ends on both sides. This gives the façade the look of a highly expensive flat panel façade. The various

overall widths up to 400 mm and the use of high-performance solar modules combined with metal or concave/convex rounded MONTALINE® profiles produce interesting design possibilities for architects and planners.

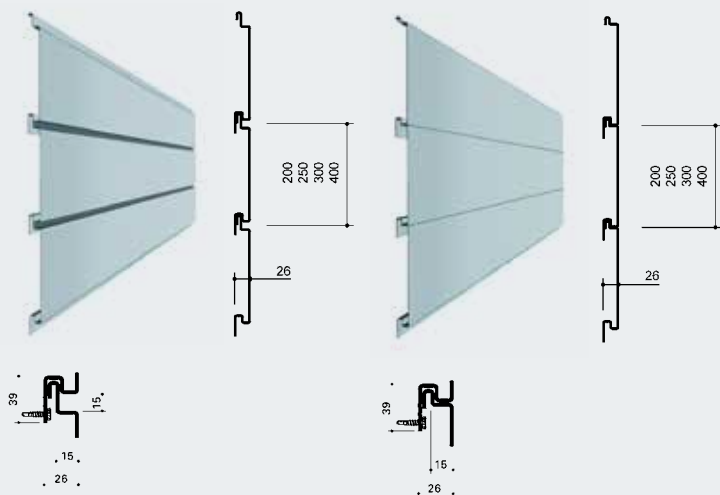


CLADDING PROFILES IN STEEL AND ALUMINIUM

With hidden fasteners, smooth visible side, with microprofilation on request

PROFILE

● ML F PROFILE WITH OPEN JOINT AND ML G PROFILE WITH CLOSED JOINT



TYPE

THICKNESS mm

		0.70	0.75	0.80	1.00	1.20
● ML 26/200 F ML 26/200 G	STEEL kg/m ²	8.60	9.21	9.82		
	ALUMINIUM kg/m ²	2.95		3.38		
● ML 26/250 F ML 26/250 G	STEEL kg/m ²	8.06	8.64	9.22		
	ALUMINIUM kg/m ²	2.77		3.17		
● ML 26/300 F ML 26/300 G	STEEL kg/m ²				10.80	
	ALUMINIUM kg/m ²				3.71	4.45
● ML 26/400 F ML 26/400 G	STEEL kg/m ²				10.10	
	ALUMINIUM kg/m ²				3.47	4.16



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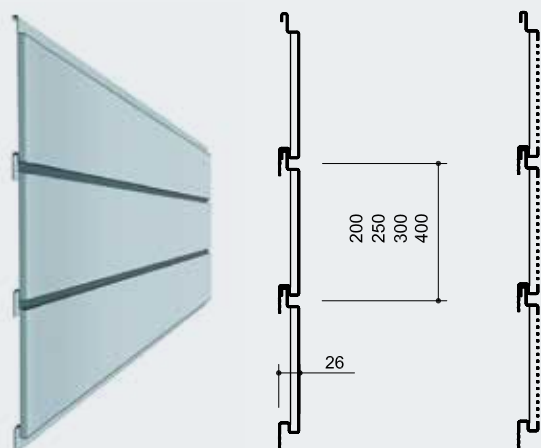
CLADDING PROFILES IN STEEL AND ALUMINIUM WITH BENDED ENDS

With hidden fasteners, smooth visible side, with microprofilation on request

PROFILE

● ML F-K PROFILE WITH OPEN JOINT AND DOUBLE-SIDED BENDED ENDS

Perforated finish only in aluminium and on request



TYPE

● ML 26/200 F-K

● ML 26/250 F-K

● ML 26/300 F-K

● ML 26/400 F-K

THICKNESS mm

	0.70	0.75	0.80	1.00	1.20
STEEL kg/m ²	8.60	9.21	9.82		
ALUMINIUM kg/m ²	2.95		3.38		
STEEL kg/m ²	8.06	8.64	9.22		
ALUMINIUM kg/m ²	2.77		3.17		
STEEL kg/m ²				10.80	
ALUMINIUM kg/m ²				3.71	4.45
STEEL kg/m ²				10.10	
ALUMINIUM kg/m ²				3.47	4.16

● MONTAFIX®



The fastening system for MONTALINE® cladding profiles is suitable for both new buildings and renovation projects.

Fast, economical fitting times through simply hooking the MONTALINE® cladding profiles into the aluminium holders. Fitting is carried out from the bottom upwards.

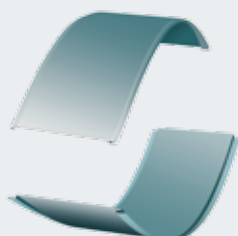
● MONTALINE® SOLAR



MONTALINE® SOLAR – the sustainable and, at the same time, aesthetic addition to the MONTALINE® system. MONTALINE® SOLAR is easily hooked onto the holders of the MONTAFIX® securing system by means of the appropriately formed suspension device and can be combined with ML 26/400 F in steel or aluminium.

Finish with open joint only.

● CONVEX AND CONCAVE ROUNDING



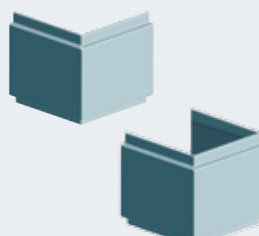
MONTALINE® profiles are available with concave and convex bends, without or without joints, only in aluminium.

Radius (r) ≥ 1500 mm

Angle (α) ≤ 90 °

Maximum sheet length (b): 4500 mm

● CORNER AND DOUBLE CORNER FORMATION



Execution is carried out by means of mitre cut and edging.

The trimmed edges are not welded.

Overall length max. 1200 mm

Standard angle 90°

MONTASTEP®

REBATED FAÇADE PROFILES WITH HIDDEN FASTENING SYSTEM

MONTASTEP® rebated façade profiles are suitable for rear-ventilated façades on new and renovated buildings on liner trays or masonry or as complete system installations with heat insulation and correspond-

ing spacers. MONTASTEP® rebated façade profiles are available in steel and aluminium. The rollformed MS 25/250 profile can be combined with all MONTALINE® cladding profiles.

Jazz-Parc, Vienne (F)



REBATED FAÇADE

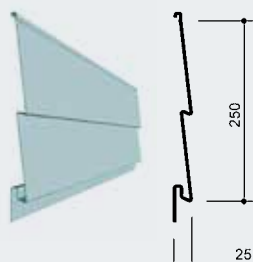
Smooth surface, in aluminium and steel

PROFILE

● MS 25/250

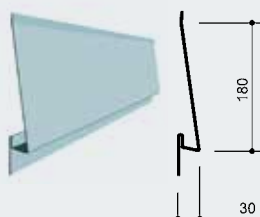
EXECUTION ROLLFORMED

The groove joining is compatible with MONTALINE®-cladding profiles



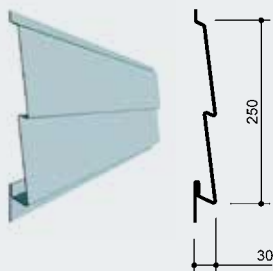
● MS 30/180

EXECUTION BY BENDING



● MS 30/250

EXECUTION BY BENDING



THICKNESS mm

0.70 0.80 1.00

STEEL

kg/m²

8.33 9.52 11.90

ALUMINIUM

kg/m²

2.86 3.27 4.09

STEEL

kg/m²

9.65 11.02 13.78

ALUMINIUM

kg/m²

3.79 4.74

STEEL

kg/m²

9.18 10.50 13.12

ALUMINIUM

kg/m²

3.16 3.61 4.51



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MONTAFORM®

FILIGREE PROFILES WITH VISIBLE FASTENING

MONTAFORM® façade profiles are the finest in the Montana range. With a recommended maximum span of 160 cm, they are predestined for residential buildings and small area façades. MONTAFORM® façade profiles were the first "designer profiles" from Montana and have proved themselves over a period of decades.

Do you have a vision?

Recently you cannot only choose between the types of metal and colours, you can also define the shape of the profile!

Under the brand MONTAFORM®-DESIGN, we offer to architects and planners the possibility to realize their own ideas!

Wohnüberbauung Widmi, Lenzburg (CH)

CLADDING PROFILES IN ALUMINIUM AND STEEL

With visible fastening system, smooth surface

PROFILE		THICKNESS mm		
		0.70	0.80	1.00
● MF 7-8/1148		STEEL kg/m ²	●	●
		ALUMINIUM kg/m ²	●	●
● MF 7-11/1135		STEEL kg/m ²	●	●
		ALUMINIUM kg/m ²	●	●
● MF 25-6/1050		STEEL kg/m ²	●	●
		ALUMINIUM kg/m ²	●	●
● MF 25-8/985		STEEL kg/m ²	●	●
		ALUMINIUM kg/m ²	●	●



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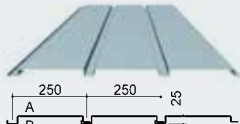
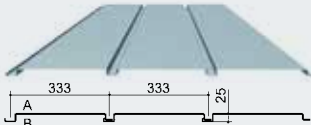
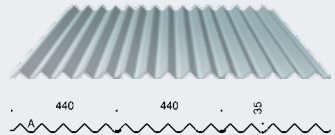
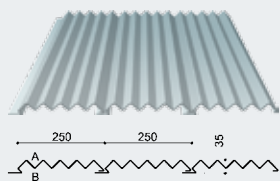
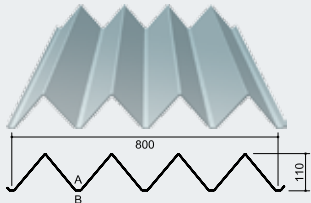
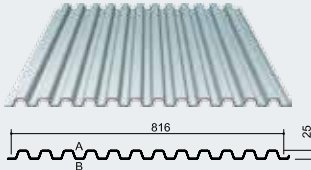
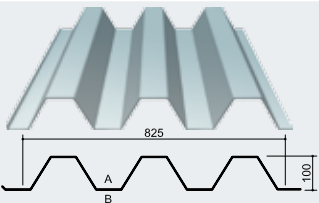
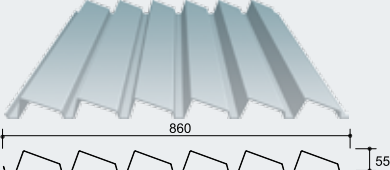
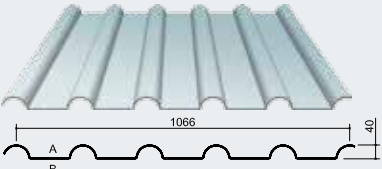
CAD



Colour
chart

CLADDING PROFILES IN ALUMINIUM AND STEEL

With visible fastening system, smooth surface

PROFILE		THICKNESS mm		
		0.70	0.80	1.00
● MF 25/250		STEEL kg/m ² ALUMINIUM kg/m ²	● 8.45 ● 2.90	● 10.56 ● 3.63
● MF 25/333		STEEL kg/m ² ALUMINIUM kg/m ²	● 9.84 ● 3.39	● 11.09 ● 3.81
● MF DESIGN 35-5/440		STEEL kg/m ² ALUMINIUM kg/m ²	● 7.76 ● 2.67	● 8.87 ● 3.05
● MF DESIGN 35-5/250 with hidden fastening system		STEEL kg/m ² ALUMINIUM kg/m ²	● 9.16 ● 3.15	● 10.47 ● 3.60
● MF DESIGN 110-4/800		STEEL kg/m ² ALUMINIUM kg/m ²	● 8.68 ● 2.98	● 9.92 ● 3.41
● MF DESIGN 25-13/816		STEEL kg/m ² ALUMINIUM kg/m ²	● 8.51 ● 2.93	● 9.73 ● 3.34
● MF DESIGN 100-3/825		STEEL kg/m ² ALUMINIUM kg/m ²	● 7.94 ● 2.73	● 9.08 ● 3.12
● MF DESIGN 55-6/860		STEEL kg/m ² ALUMINIUM kg/m ²	● 8.07 ● 2.77	● 9.22 ● 3.17
● MF DESIGN 40-6/1066 SINUS		STEEL kg/m ² ALUMINIUM kg/m ²	● 7.45 ● 2.56	● 9.31 ● 3.20

To avoid visible bumps when screwed to the roof plate, MONTAFORM® panels should be mounted with the visible side A (side exposed to the weather) facing outwards.

MONTATWIN®

UNIQUE THANKS TO THE "TWIN FORM"

MONTATWIN® façade profiles differ considerably from traditional trap-ezoidal and corrugated profiles. The additional micro-lining in the bottom flange and the closing up of the profile ribs to produce the "TWIN" form result in technically perfect rigidity of the MONTATWIN® façade

profiles. The special arrangement of the profile ribs gives the façade an unmistakable character, setting new architectural emphases in façade technology.

Bormuth & Stumpf, Heppenheim (D)

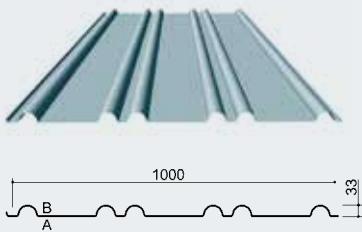


CLADDING PROFILES IN ALUMINIUM AND STEEL

With visible fastening system, surface with microprofiling, on request with acoustic perforation Ø = 3 mm / pitch 5.5 mm

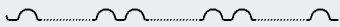
PROFILE

● MT 33/333



ACOUSTIC

● MT 33/333 A



THICKNESS mm

	0.70	0.80	1.00
STEEL kg/m ²	7.00	8.00	10.00
ALUMINIUM kg/m ²		2.75	3.44



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Detail
brochure



Technical
informations



CAD



Load tables



Assembly
recommendation



Colour
chart

MONTACLIP®

EASY FITTING INSTALLATION VIA CLIP-ON CONNECTIONSORS

MONTACLIP® – these surface area of the roof system comprises just one component part. Unlike other metal roof covering systems, no further accessories or attachments like holding clips, brackets etc. are

needed. This means that MONTACLIP® is not only particularly easy to fit; it can also be installed very quickly.



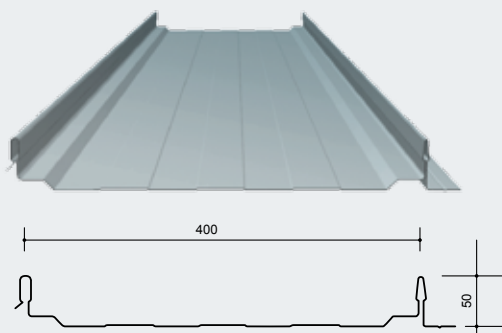
Ropa Maschinenbau, Herrngiersdorf (D)

ROOF SYSTEM IN STEEL

Surface ribbed

PROFILE

● MC 52/400



THICKNESS mm

	0.63	0.75
STEEL	●	●
kg/m ²	7.70	9.20



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Detail
brochure



Technical
informations



CAD



Load tables



Assembly
recommendation



Colour
chart



Certificates and
approvals

HOLORIB® / SUPERHOLORIB®

CASING, REINFORCEMENT, FIRE PROTECTION ALL IN ONE

The HOLORIB® composite floor slab is generally approved under the building regulations for predominantly dead and dynamic loads and is fire-resistant without the need for additional insulation. The dove-tail

shape makes it possible to install decorative ceilings, light fittings, ventilation pipes, etc. with simple fastening elements.

Technology-museum, Berlin (D)



FLAT SHEETS AND FLASHINGS

(NEARLY) ALL THE SHAPES IN THE WORLD IN ALUMINIUM AND STEEL

Montana flashings are available in the most diverse shapes and finishes according to the customer's wishes. Different connectors and ends for façades and roofs, as well as corresponding substructures, spac-

ers and reinforcing profiles can be supplied thanks to industrial production techniques using folding and double-bending presses. You have a special need? Please let us help you!

Gäupark, Egerkingen (CH)



FLAT SHEETS

FLAT SHEETS

● IN SHEETS

Lengths: 2 up to 10 m



● AS COILS

Lengths: from 10 m



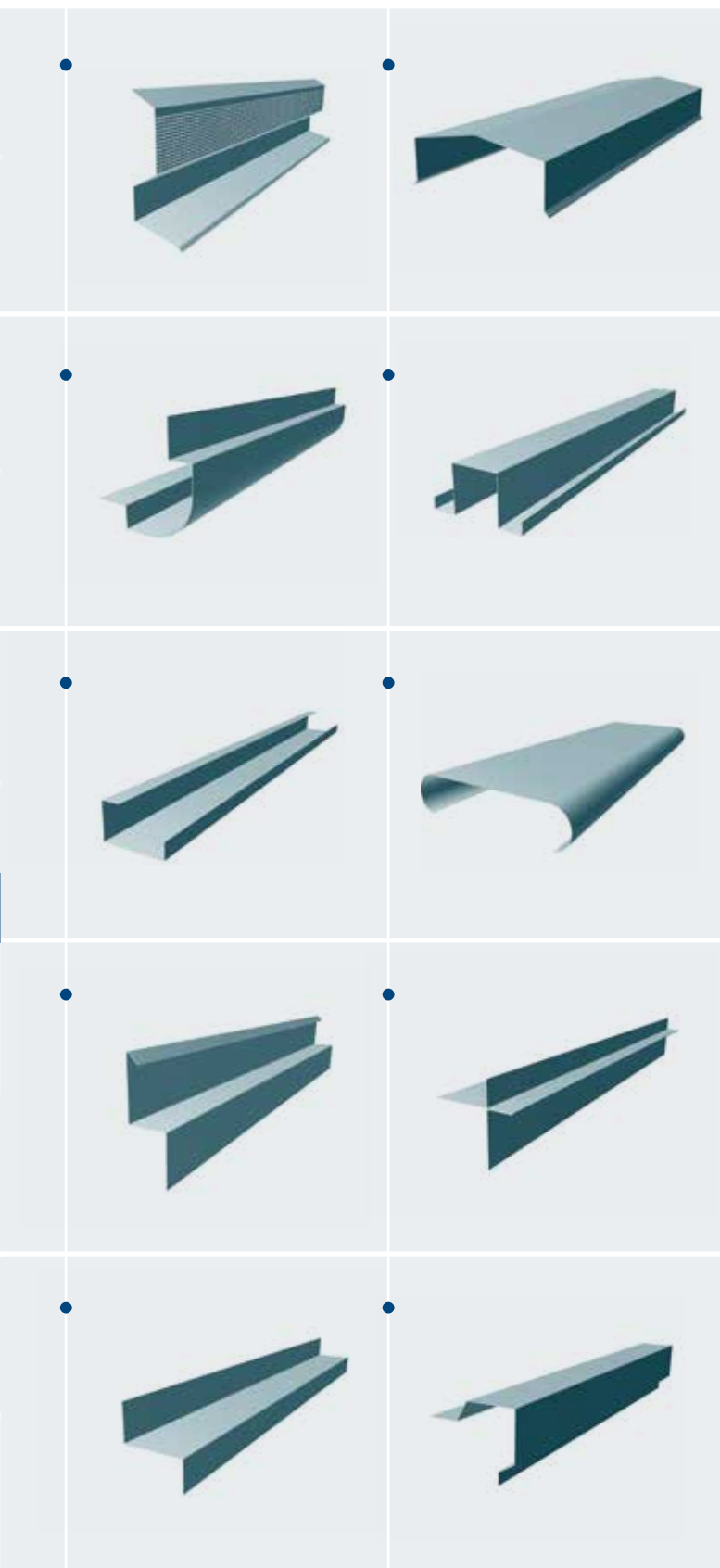
www.montana-ag.ch



Colour
chart

FLASHINGS IN ALUMINIUM AND STEEL

on request with acoustic perforation



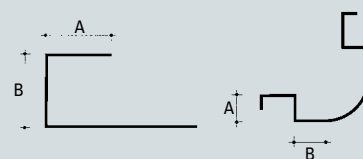
A number of important limitations of the bending press have to be observed with regard to processing the shaped parts. You must present a sketch of the shaped parts with full details of dimensions and angles!

- **MEASUREMENT B**

At least 5 mm greater than A

- **RADIUS**

Min. 80 mm

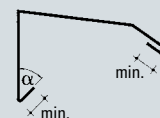


- **FOLD OR DOUBLE FOLD**

Min. 15 mm

- **CLOSED ANGLE**

Must be at least 45°



- **MEASUREMENT A**

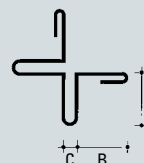
Min. 30 mm / max. 60 mm

- **MEASUREMENT B**

Min. 50 mm / max. 120 mm

- **MEASUREMENT C**

Double fold normally closed
Can be supplied also with 2 mm
or 9 mm open



- **LENGTHS**

0.20–8.00 m

- **MATERIAL THICKNESSES**

0.70–3.00 mm

- **DEVELOPMENTS**

30–1250 mm

COLOUR	RAL 1001	RAL 1013	RAL 1015 ¹⁾	RAL 1019	RAL 3004	NCS 2710-B02G	NCS 3020-R90B
Available in	Beige Steel	Oyster white Steel	Light ivory Steel	Grey beige Steel	Purple red Steel	Blue grey Steel	Blue pale Steel



COLOUR	RAL 5002 ^{1) 5) 6)}	RAL 6011	RAL 6020	RAL 7016 ¹⁾	RAL 7021	METALLIC BLACK ^{2) 3) 5)}	RAL 7032
Available in	Ultramarine Blue Aluminium	Reseda green Steel	Chrome green Aluminium, Steel	Anthracite grey Aluminium, Steel	Black gray Aluminium	Aluminium	Pebble grey Steel



COLOUR	RAL 7035 ¹⁾	RAL 7045 ⁵⁾	RAL 8011 ¹⁾	RAL 8012	RAL 8014	RAL 9002 ¹⁾	RAL 9006 ^{1) 2)}
Available in	Light grey Aluminium, Steel	Telegrey 1 Steel	Nut brown Steel	Red brown Steel	Sepia brown Steel	Grey white Aluminium, Steel	White aluminium Aluminium, Steel



COLOUR	RAL 9007 ^{1) 2)}	ELOXAL OPTIC ^{2) 3) 4) 5) 6)}	TITAN OPTIC ^{2) 3) 4) 5) 6)}	RAL 9010 ¹⁾	GOLD BRUSHED ^{5) 6)}	LIGHT COPPER ^{4) 5) 6)}
Available in	Grey aluminium Aluminium, Steel	Aluminium	Aluminium	Pure white Aluminium, Steel	Aluminium	Aluminium



COLORCOAT PRISMA® 50 µm

COLOUR	SIRIUS ^{2) 6)}	ORION ^{2) 6)}	ZEUS ^{2) 6)}	AQUARIUS ^{2) 6)}	RAL 3020 ^{5) 6)}	RAL 5010 ⁶⁾	RAL 8017 ^{2) 6)}
Available in	Steel	Steel	Steel	Steel	Traffic red Steel	Gentian blue Steel	Chocolate brown Steel



1) Colour shade only similar to RAL; matching of colour not guaranteed within a delivery, either.

2) Rear protective lacquer provided with arrow marking! Colour differences can occur with the use of metallic paints due to the metal pigments.

3) Matching of colours not guaranteed within a delivery, either!

4) Clear lacquer

5) Limited storage, longer terms of delivery

6) Additional charge

The colour samples are printouts of the original colours, they represent the colour only similar.



HOW TO CHOOSE THE RIGHT COATING

Choosing the right coating for a façade profile is an important part of good building.

Depending on where the building is constructed, different demands are made on the outer shell. The most important component is deemed to be the composition of the ambient air.

Surrounding commercial and industrial operations with emissions can require a corresponding coating, for example, but proximity to the coast or foreseeable mechanical loads also have an influence on the choice of this. Ask the Montana Building Systems specialist. He will help you.

BASIC MATERIALS

Steel

S320GD zinc coating both sides Z275 or ZA255 according to DIN EN 10346 or Magnesium-Zinc according to the permission. On demand with additional coating available to increase the corrosion protection class.

Aluminium

EN AW-3005 [AlMn1Mg0.5] or EN AW-3105 [AlMn0.5Mg0.5] according to DIN EN 485-2 On demand with additional coating available.

Stainless steel

Corrosion-resistant stainless steel 1.4526 to EN 10088-2 High gloss surface Tolerances to EN ISO 9445 Yield strength approx. 300 MPa

GLOSS ACCORDING TO GARDNER (60°)

Prepainted steel

Polyester 30–60 %

PVDF 25–40 %

Colorcoat Prisma® 30–40 %

Prepainted aluminium

Polyester 35 %, PVDF 30 %

HEAT RESISTANCE

Polyester up to 80° C, PVDF up to 110° C (values by experience for inconstant temperatures)

CORROSION PROTECTION CLASS

Steel prepainted, according to DIN 55634

Polyester 25 µm until C4-L possible PVDF 25 µm until C5-L possible

Prisma 50 µm to C5-M possible (RC5 corrosion-resistance category)

THIN COATING (DU)

Thin coating is polyester-based and applied with a thickness of approx. 15 µm.

The colour is similar to RAL 9002 or RAL 9010. The rear is provided with light-coloured lacquer. In view of the low layer thickness, we cannot guarantee evenness of colour under the coils.

The thin coating is mainly used on the inside of buildings as the inner skin of sandwich elements, coffers or bearing profiles.

Thin coating is not suitable for outside use by virtue of weathering and corrosion signs occurring within a short period of time.

POLYESTER

Polyester coating is a smooth layer based on polyester resins and can only be used in a non-aggressive environment. We supply this coating with a layer thickness of approx. 25 µm as standard, with the rear always provided with a protective lacquer.

A special type with a layer thickness of 25 µm on both the front and rear is also possible on request.

PVDF

PVDF is a coating based on polyvinyl difluorides and other bonding agents. The properties of this coating are determined mainly by the number of polyvinyl difluorides. Our PVDF coating contains at least 70–80% polyvinyl difluorides.

The PVDF coatings supplied by Montana Building Systems Ltd. are elastic and (mechanically) hardwearing.

They are equally durable and resistant to solvents, chemicals and UV radiation.

The PVDF coatings are supplied with a layer thickness of approx. 25 µm as standard, with the rear always provided with a protective lacquer.

COLORCOAT PRISMA®

Colorcoat Prisma® 50 µm is designed around a thick-film coating formulation, providing a higher UV and corrosion resistance than PVDF. A high-performance primer provides excellent corrosion resistance, complemented by a robust top-coat with good scratch and abrasion resistance for easier handling and processing. Colorcoat Prisma® is a technically and aesthetically advanced product, allowing flexible colour choice with outstanding colour and gloss retention.

CORROSION GUARANTEE

COLORCOAT PRISMA®

Wall and roof components up to 30 years. The guarantee depends on the local situation and requires analysis beforehand.

AVOIDING COLOUR DIFFERENCES

The so-called metallic finishes (such as RAL 9006 and RAL 9007) require special attention, with aluminium particles providing for a special gloss and colour effect which differs according to the material batch. When using this coating, Montana Building Systems Ltd. recommends that the façade areas be taken into account in the order specifications so that these can be produced from a single batch of material.

The metallics have arrow marking on the B side or on the protective foil so as to clearly indicate the texture direction for perfect fitting.

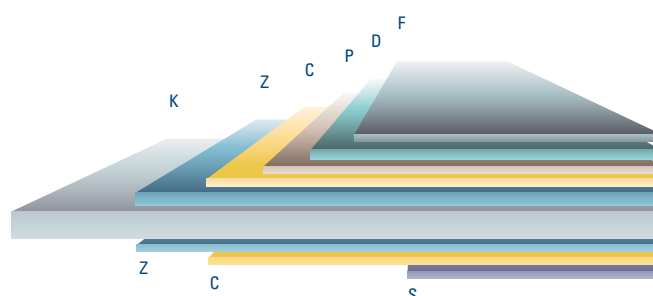
Please note that all colours may be subject to deviations due to different material batches within defined tolerances; these must be accepted. To avoid this, please have the order manufactured from a single batch.

DELIVERY OPPORTUNITIES

You could check the standard colours, material thicknesses, developments and profiles in our colour chart MONTACOLOR®!

MINIMUM QUANTITIES FOR SPECIAL PURCHASES

1250 mm: Steel 7 t / Aluminium 2 t
1500 mm: Steel 15 t / Aluminium 7 t



- K Core steel or aluminium
- Z Galvanisation Z 275 (steel core only)
- C Chemical surface pretreatment
- P Primer 5 µm
- D Polyester and PVDF prepainting 20 µm
- F Protective sheet (optional)
- S Protective paint on back

PREBENDING

CURVES IN ARCHITECTURE

The prebending of Montana SWISS PANEL® profiles stimulates the imagination of architects and construction designers alike. Thanks to its top technology, Montana Building Systems Ltd. is able to deliver select-

ed SWISS PANEL® profiles on site with concave or convex prebending for façades or roofs.



Grühegarage, Kleinandelfingen (CH)



www.montana-ag.ch

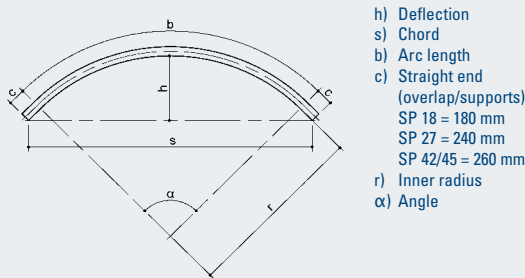


Technical
informations

PREBENDING IN FACTORY SWISS PANEL® SP 18 / 27 / 42 / 45 IN ALUMINIUM AND STEEL

CONCAVE		CONVEX		THICKNESS mm				
● SP 18/76				STEEL	●	●	●	●
				ALUMINIUM	●		●	●
● SP 27/111				STEEL	●	●	●	●
				ALUMINIUM	●		●	●
● SP 42/160 Only suitable for roofs				STEEL		●	●	●
				ALUMINIUM	●		●	●
● SP 45/150 Only suitable for roofs and only with grooves				STEEL	●	●	●	●
				ALUMINIUM			●	●

PREBENDING IN FACTORY
SWISS PANEL® SP 18 / 27 / 42 / 45



PREBENDING NOTES

For technical production reasons, there is a straight section on the ends of the profiles. The transition from the straight end section to the radius is visible in the form of a slight curve (the smaller the radius, the greater the visible curve).

In the case of radii < 3 m, it is advisable to order the profile sheets approx. 500 mm longer because there is a gap in the overlaps as

a result of the straight end section (see Mass C illustration above). These profile sheets have to be adjusted in length and cut to size on site.

In the case of rounded roofs comprising several segments, this end section is to be included in the overlap and distribution of the supports. Depending on the material and length of the sheets, attention has to be paid to the necessary

expansion and appropriate waterproofing. For horizontal assembly on façades, the type of overlap and the external side of the profile have to be determined in advance. The requirements are generally stricter for rounded façades. In this case, it is essential to take account of the overall width tolerances and calculation for more difficult installation, including additional fastening elements at the ends of the profiles, as

well as for corners, vertical joints, seals and overlaps. The prebending of profiled panels can provide a means of making modifications to the useful width in relation to straight panels. To enable these different tolerances to be better compensated for, we recommend that assembly be carried out by placing a straight panel and a bent panel together in one operation.

PREBENDING BY SNAPPING

ELEGANTLY AROUND THE CORNER WITH A SMALL RADIUS

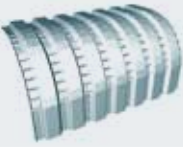

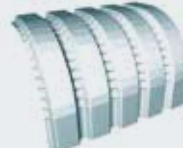



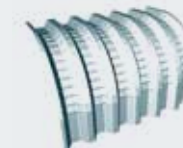
Prebending by snapping is a tried-and-tested and technically perfected method for corner and roof finishing. Façades and roofs can be finished elegantly by virtue of being able to achieve minimum radii of as

little as 30 cm. Buildings with buckled edges has a softer effect, which can be of decisive advantage in connection with the volume of the structure.

Gewerbehaus, Meyrin (CH)



PREBENDING BY SNAPPING SWISS PANEL® SP 26 / SP 41 / SP 44 / SP 45

SIDE A		SIDE B		THICKNESS mm				
				0.70	0.75	0.80	0.88	1.00
● SP 26		● SP 26		STEEL	●	●	●	●
				ALUMINIUM	●	●	●	●
● SP 41		● SP 41		STEEL	●	●	●	●
				ALUMINIUM	●	●	●	●
		● SP 44		STEEL	●	●	●	●
				ALUMINIUM	●	●	●	●
● SP 45		● SP 45		STEEL	●	●	●	●
				ALUMINIUM	●	●	●	●

PREBENDING BY SNAPPING SWISS PANEL® SP 26 / SP 41 / SP 44 / SP 45

TECHNICAL SPECIFICATIONS

INNER RADIUS

$r = \text{min. } 300 \text{ mm}$ for SP 26, SP 41,
SP 44
 $r = \text{min. } 400 \text{ mm}$ für SP 45

DISTANCE BETWEEN FOLDS

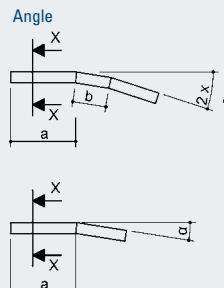
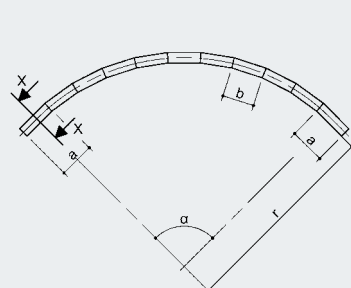
$b = \text{min. } 45 \text{ mm}$

START / END

$a = \text{min. } 200 \text{ mm}$

ANGLE OF INCLINATION

$\alpha = \text{min. } 3 \text{ degrees/fold}$
 $\text{max. } 8 \text{ degrees/fold}$
 $\text{min. } 12 \text{ folds for } 90^\circ \text{ angle}$

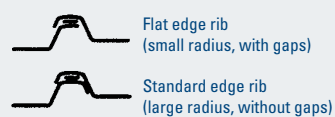


SHEET LENGTHS

Max. 6–7 m

To define the exact length, add
at least an additional mesure per
fold of:

- SP 26, SP 41 3 mm
- SP 44 5 mm
- SP 45 4 mm



FINISHING OF INNER RIBS

$b = \text{less than } 200 \text{ mm}$ (for small
radius/blind boxes): flat edge rib
 $b = 200 \text{ mm}$ or more (curved roofs,
etc.): standard edge rib

NOTES

- Bent profiles always require a protective sheet.
- Depending on the length of the sheets, the radius or deflection, transversal overlaps should be used because of production, handling and transport requirements.

- A waterproof strip should be used on the longitudinal overlaps of bent profiled sheets.
- The location of the profile or the prepainting side A or B must appear on the order (see diagram).
- For bent profiled sheets, a straight sheet and a bent sheet should be placed simultaneously.



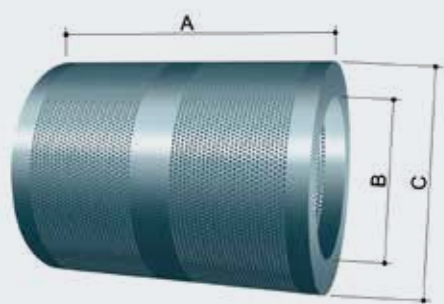
PERFORATION

FROM ACOUSTIC TO VISUAL APPLICATION

Perforation is a technique from the area of noise protection and it is still mainly used in that segment. In addition to attaining excellent noise absorption values in industrial acoustics and for traffic installations, more and more architects are experimenting with the optical qualities of per-

forated Montana profiles, with special attention paid to the selective translucency of the profile sheets: the inward effect of daylight or the outward effect of artificial light at night.

My Stop Raststätte, Affoltern (CH)



COIL MATERIAL

min. lengths = 15 m

MAX. WEIGHT

steel 10 t
aluminium 2.5 t

MEASUREMENT

A = min. 300 mm (Aluminium: 360 mm)
max. 1500 mm
B = min. 500 mm / max. 600 mm
C = max. 1200 mm

ON REQUEST

The perforated coils can be cut to flat sheets and bend until max. 8 m!

Flat sheets cannot be perforated!



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Detail
brochure



Technical
informations

PERFORATION OF STEEL, STAINLESS STEEL AND ALUMINIUM

DIAMETER mm	PITCH (Tg) mm	ARRANGEMENT staggered in-line	OPEN AREA WITH FULL PERFORATION %	MATERIAL mm Steel	Aluminium	Stainless steel	MAX. WIDTH OF COILS mm	MIN. MARGIN OF THE EDGE mm	TOLERANCES mm Distance of the edge with special perforation	Pitch	CIRCULAR PERFORATIONS SCALE 1:1
3.0	5.0		32.0	0.70–1.00	0.70–1.00		1500	8.00	+/- 3.0	+/- 0.30	
3.0	5.5		23.4	0.70–0.80	0.70–1.00		1500	5.00	+/- 3.0	+/- 0.30	
4.0	6.0		40.3	0.70–1.00	0.70–1.00	0.80	1500	5.00	+/- 3.0	+/- 0.30	
4.0	7.0		29.6	0.70–1.25	0.70–1.00	0.80	1500	5.00	+/- 3.0	+/- 0.30	
5.0	8.0		35.4	0.70–1.25	0.70–1.20	0.80	1500	5.00	+/- 3.0	+/- 0.30	
8.0	12.0		40.3	0.70–1.25	0.80–1.50		1500	7.00	+/- 3.0	+/- 0.30	
11.0	14.0		64.3		0.80–1.50		1250	8.00	+/- 3.0	+/- 0.30	

SYSTEM ELEMENTS

IMPORTANT RATHER THAN TRIVIAL

Who only notice what system elements you should actually have when something is missing. That is why Montana Building Systems Ltd. has developed a range of accessories with a system. From fillers to snow

and ice stops and dome lights, everything is optimally coordinated with Montana's profiles and elements.



Kletterhalle, Uster (CH)

SYSTEM ELEMENTS

SYSTEM ELEMENTS

● DOME LIGHTS



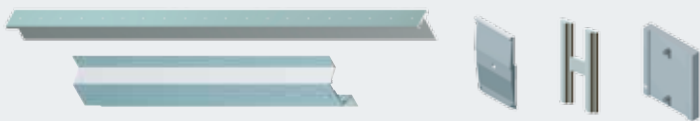
Suitable for all MONTANATHERM® roof panels
Double or triple acrylic glass including adjustment base
made of glass fibre reinforced polyester
Available with different opening systems
The SUVA guidelines for fall and falling trough protection have to be consider!

● TRANSLUCENT PANELS AND ELEMENTS



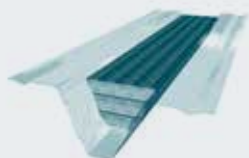
Suitable for SWISS PANEL® trapezoidal profiles SP 26–SP 59 and SWISS PANEL® corrugated profiles SP 18, SP 27, SP 42 MONTANATHERM® roof panels MTD TL 85–165
Made of glass fibre reinforced polyester and weather-resistant
The SUVA guidelines for fall and falling trough protection have to be consider!

● MONTAFIX®



Fixing system for MONTALINE® cladding profiles
Extruded aluminium profiles
T-Profile bars of 2970 mm
Omega-Profile bars of 2970 mm
Holder packaging of 100 pieces
Profile connector packaging of 50 pieces
Spacer per piece

● ACOUSTIC FILLERS



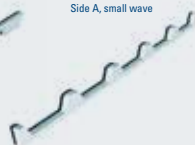
ISOVER Typ PB M R
Density 20 kg/m³
Glass wool grey/black coloured suitable for trapezoidal profiles: SWISS PANEL® SP 41, 45, 59, 80, 105, 111, 135, 153, 160, 200

● SYNTHETIC FILLERS

Side B, large wave



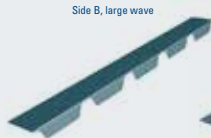
Side A, small wave



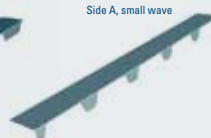
Polyethylene PE, colour anthracite/white (exception SP 27 colour grey)
B2 according to DIN 4102, normally flammable
Suitable for all SWISS PANEL® profiles and MONTANATHERM® roof panels
Side B roof ridge or side A gutter

● METAL FILLERS

Side B, large wave



Side A, small wave



Made of steel or aluminium
Suitable for all SWISS PANEL® profiles and MONTANATHERM® roof panels
Side B roof ridge or side A gutter
straight or folded

● CROWNS



Aluminium with EPDM seal suitable for use with
Corrugated profiles: SWISS PANEL® SP 18, 27, 42
Trapezoidal profiles: SWISS PANEL® SP 26, 30, 35, 40, 41, 44, 45, 59, 80
Sandwich panels: MONTANATHERM® MTD TL 85–185

● SNOW AND ICE STOP SE 88



L profile: Galvanised steel 40 x 45 x 3–4000 mm
Retention clips: Galvanised steel 1,50 mm, L = 75 mm
Waterproof seal: EPDM 40 x 60 x 4 mm, Rolls of 500

● SNOW AND ICE STOP IN ALUMINIUM



Useable for all MONTANATHERM®-roof panels
T-Profile: Aluminium mill finish 60 x 40 x 4–3000 mm, preperforated
Seal: PVC 40 x 60 x 4 mm
In addition also for the SWISS PANEL® profiles SP 27, 30, 35, 40, 41, 42, 45, 59, 80 in the adapted lengths, not perforated.

01 IMPORTANT NOTES

ORDERS

Your orders must contain the following information:

- type of profile
- material
- thickness
- colour
- painting side
- number of parts
- lengths
- deadline and address for delivery

Our order confirmations must be checked very carefully, in particular as regards the types of profiles, thicknesses, materials, paint quality, painting side, colour, dimensions and number of parts. Any disagreements must be notified to us at the latest 3 working days following the date of confirmation of the order. At the time of delivery, the goods must be checked to ensure that they are complete.

Any complaints must appear on the signed delivery note and must be transmitted in writing to the relevant sales office according to the general conditions of sale and delivery.

STORAGE ON THE WORKSITE

The sheets must be stored in a dry and ventilated place. Do not cover them with a sheet as internal condensation may cause the appearance of white rust.

Store the sheets at a slight angle to eliminate any water that may be deposited. Our steel or aluminium sheets must not be stacked without spacers.

GENERAL SECURING AND FITTING INSTRUCTIONS

Securing must be carried out in accordance with the latest DIN, SIA and SZS-B7 norms as well as the general IFBS guidelines. This means after measuring wind suction and pressure forces as well as snow loading depending on the form of the building, dimensions and location.

The roof and wall sections are secured using approved and normal commercially available fasteners. These include self-tapping fasteners and threaded screws, the correct length of which must be chosen depending on whether the substructure is timber or steel. When selecting the measurement, attention must be paid to the stripping values stated by the manufacturer. Only corrosion-free fasteners and washers with seals are to be used on the outside skin. The drill screw setter must have a depth-control stop. The correct setting of the depth-control stop is essential for clean fastening with sealing washers and to prevent visible pressure marks.

The side sheet overlaps are to be screw-fastened about every 50–66 cm or according to the distance between the purlins or crosspieces in the roof and wall.

The structural strength of the different section types can be seen from our calculation tables. The substructure must be perfectly flat and level. For thin-walled sections, it is advisable to choose a metal substructure, and this is absolutely essential for aluminium profiles. Please

also consult our general documentation and the various design details in this regard. Depending on the choice of material and sheet lengths, allowance must be made for expansion of the sections, especially in the case of long aluminium sections in the roof area (> 6 m). In practice, this is carried out in part by means of fixed screw fastening in the middle as well as large holes and, possibly, additional spherical caps. The best solution, however, is the one with matching sliding elements to prevent “clicking noise” or screws stripping. The connections and surrounds should therefore also be executed as sliding elements using additional retaining clips or strips.

Detailed planning, correct handling of the metal sections, good knowledge of the material and the choice of suitable tools are essential for faultless installation.

USE ON THE ROOF

Trapezoidal sections are laid in the roof in a negative position as an outer shell, i.e. side B to the exterior. This means that the overlapping point is on the crest, thus preventing water penetration.

According to the information given by the screw suppliers, high or low-bead installation is possible in the roof with trapezoidal sections. This also applies to sandwich elements if the correct screw type is chosen. For low-bead installation, the “state of the art” is a drill fastener with a supporting

thread (e.g. SPEDEC-SXC or SXCW). Aluminium sandwich elements may only be secured on the crest by means of spherical caps. The wave or sinusoidal sections are secured in the roof on the crest, referred to as exterior side A.

The bearing sheets for flat roofs and the inner shell of double-layer roofs are generally laid in a positive position, i.e. side B to the inside. This forms a good support for the vapour seal and heat insulation. The inner shell is normally gunned onto the steel substructure in the low bead, but can also be secured using screws.



Lateral butt joints on the outer skin of the sectional sheets must always be adapted to local conditions, i.e. they must be sealed appropriately, as must the longitudinal overlaps in the case of minimum roof pitch.

To what extent the structure can be walked on depends on the thickness of the sections, material and sheets as well as the bearing distance chosen. In the case of high aesthetic requirements concerning the bottom view of the roof, only 0.80 or 1.00 mm thick sheets are chosen in some cases. The rule of thumb here for steel sheets with a sectional height of 40 mm and

0.70–0.75 mm thick is accessibility of approximately 1.20–1.85 m though not in excess of 2 m (see limit bearing spans). In the case of aluminium sections in the roof, a minimum thickness of 0.80 or, better still, 1.00 mm is recommended, otherwise appropriate safety measures must be taken during installation.



02 IMPORTANT NOTES

USE ON THE WALL

On façades, the trapezoidal sections are normally laid in the positive position, i.e. Side A to the outside. Securing is therefore carried out in the low bead or rib. This also applies to sinusoidal sections correspondingly. As a rule of thumb, securing is executed on each support in every second rib. This profile position has a more aesthetic effect and also provides for optimum rear ventilation. In the case of a trapezoidal section layout with Side B to the outside, there is normally a slight "dent" apparent in the flat area

at the securing points, so this is not really recommended for façades.

Trapezoidal and sinusoidal sections can be overlapped in a vertical position in the case of lateral butt joints. This is to be avoided for sinusoidal sections in a horizontal section layout for aesthetic reasons. For this purpose, the lengths of wave sections should have corresponding intermittent joints or pilaster strips. This allows the sections the necessary dilatation for expansion and avoids four-fold overlapping points on the cross joint, which otherwise have to be partly mortised in a concealed manner on façades for aesthetic reasons.

Special fasteners with ring nuts are available for anchoring the scaffolding and these must be continuously replaced when

dismantling the scaffold. Our general instructions and the IFBS guidelines otherwise apply.

INSTRUCTIONS FOR ASSEMBLY AND USE FOR ALUMINIUM AND METALLIC SURFACE TREATMENTS

The manufacture of metallic paints requires the addition of aluminium pigments or (according to a new process) mica pigments to the base material. The metallic effect is obtained by the reflection of rays of light on the aluminium or mica particles and depends on the direction of application. In order to obtain uniform façade surfaces, we recommend you order not only the profile, but also the corresponding finishing elements or flat sheet so that we can supply you with identical material for the entire façade. Trap-



ezoidal profiles, corrugated elements, covering profiles and finishing elements must be assembled in the same direction to ensure that the aluminium pigments are also in the same direction (to avoid colour variations!). Our packs have an arrow to indicate the direction of profiling. In addition, the protective film helps identify this direction. The arrow or the protective film of the same surface must always be pointing in the same direction!

PROTECTIVE FOIL

Sections and flat sheets with

colour protection films must be installed or processed within 4 weeks of delivery or the foil removed within such period! The colour protection foils must be protected against ultraviolet rays. Removal of the foil requires greater effort at temperatures over +25° C or below +1° C!

RETOUCHING OF PAINTED SURFACES

The surfaces must be retouched to cover any scratches that may occur during assembly.

1. Check the type of paint (polyester, PVDF, PVF Tedlar, etc.).
2. First clean the places to be retouched. They must be clean, dry and free from grease.
3. Best colour conformity will be obtained if you use the original paint.

CLEANING OF PAINTED SURFACES

Occasional soiling of the surfaces cannot always be avoided, which means that further cleaning will be required. To limit additional costs, the following instructions should be followed at the time of assembly:

1. Work carefully, taking care not to dirty or scratch the paintwork, especially when cutting sheets.
2. The protective sheet can be left on during assembly, but remove it immediately after the completion of the work.
3. Eliminate any filings immediately, preferably by blowing. This will prevent corrosion due to humidity.

4. Eliminate any stains, if possible before they dry, especially stains containing tar or bitumen.
5. When carrying out any cleaning, a small surface should first be tested.





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