KESPET OY Cladding the future



Sheet Metal Claddings
Sheet Metal Raw Materials
Corrugated Sheet Metals
Technical Insulations
Installation Accessories

Product prices, pack sizes and pricing criteria in our online price list, please visit:

www.kespet.fi/en/catalogue



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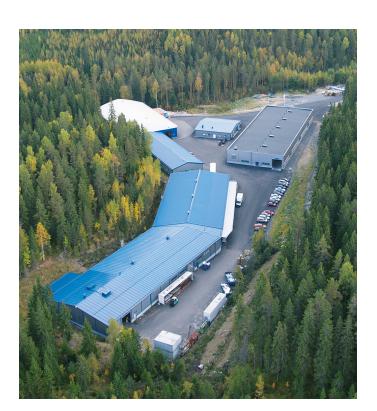
Kespet Oy is a leading international supplier of HVAC and industrial insulation products and accessories in Finland

Kespet Oy was founded in 1977 and in the beginning focused on HVAC building insulation. Later focus was shifted towards industrial insulation, and since 1983 it has been on process industry pipes, tanks, equipment, ducts and boilers and other technical insulation projects in Finland and abroad. In 2007, Kespet decided to focus on industrial manufacturing of protective claddings and base structures and on import, export and resale of various types of insulation and sheet metal products.

In addition to our own production, we also distribute other technical insulation and cladding systems as well as tools and installation accessories. Our partners are long-established, high quality manufacturers. Our partners include companies like Paroc, Rockwool, SSAB, Armacell, Sebald, Goebel, Ovako, Alumeco and Tibnor. Production, design, sales and marketing of Kespet products is certified by ISO9001: 2015 and ISO 14001: 2015 quality and environmental management systems.

Kespet Oy's production and headquarters are located in Vaajakoski, Jyväskylä. In addition to the Vaajakoski sales office, we also serve our customers at the Tattarisuo industrial district in Helsinki. Both sales units are well situated to serve customers in Finland and abroad.

Quality and environmental management standards guide our operations at every level of our organization. We are a responsible company that takes care of customer satisfaction, personnel and financial and environmental responsibility.



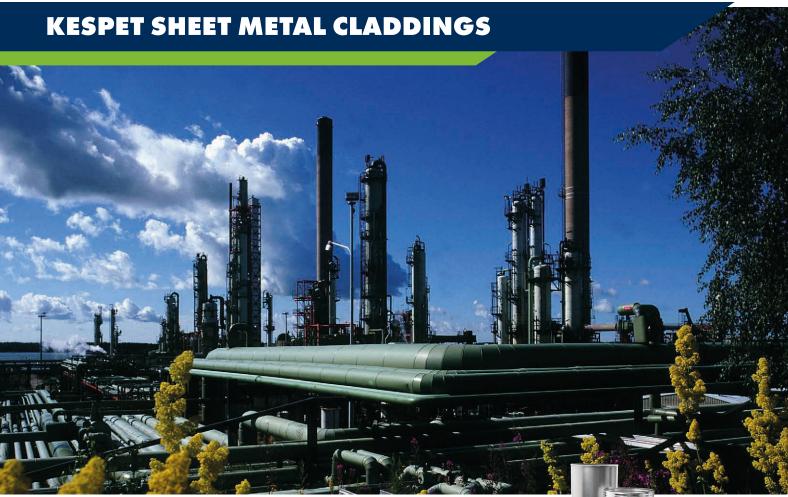




Savings and efficiency with the material service system

Kespet is an expert in HVAC and industrial insulation products. For customers that need insulation project related materials, tools and service, we are the one stop shop.

In addition to material delivery, we also provide expertise and solutions with our services. Our customers can focus on their core business when Kespet takes care for the entire material supply; from planning and dimensioning to target-specific material deliveries. We manufacture high quality, competitively priced products complying with EU and Finnish building regulations. We also manufacture products according to national standards from other countries.



Kespet Sheet Metal Claddings for HVAC, process and ventilation pipings

Ready-to-install cladding and base structure systems are an economical, high-quality solution. Our products are manufactured in quality controlled, standardized processes with modern production lines. Automated production ensures the compatibility of sheet metal claddings and supporting base structure systems.

Our claddings are made of metal and they're therefore non-flammable. The most fireproof cladding solution for HVAC and industrial construction:

- No life-threatening smoke gases.
- Nonflammable.
- Good impact resistance.
- Easy to install.
- Easy to recycle.
- Maintains its value.

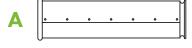
Attention! The cladding dimensions in the catalogue are default values. We also manufacture claddings according to the dimensions supplied by the customer, or according to different types of insulation materials and vaurious insulation manufacturers products .



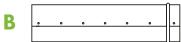
Kespet Sheet Metal Cladding System includes:

- Pipe claddings in standard lengths 1000 mm and 1250 mm.
- Segment elbows for HVAC and process piping.
- Segment elbows for ventilation piping.
- Formed pieces: reducers, t-connections, t-pieces and end caps.
- Insulation boxes.
- Vessel claddings.
- Base structures.

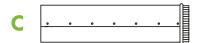
Models



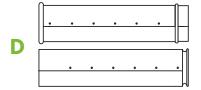
A-model, standard pipe cladding. Beading type P+A.



B-model, overlap pipe cladding. Overlap 50-100 mm. Beading type T. +/- 0 % standard pipe's price.



C-model, pipe cladding. Overlap 20-50 mm. Beading type T+R. +20 % standard pipe's price.



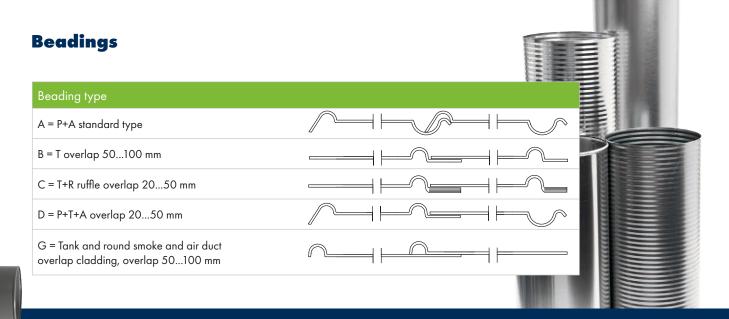
D-model, expansion pipe cladding pair. Overlap 20-50 mm. Pair beading type P+T+A. Price 2 x standard pipe cladding +5 %. Packing in pairs inside standard pipe claddings +10%.



E-model, grooved pipe cladding. +/- 0 % standard pipe's price.



F-model (made on request). without rounding and end beading. -10 % standard pipe's price.

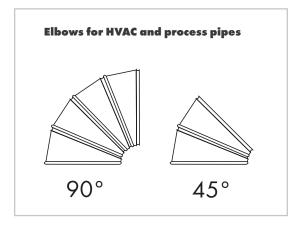


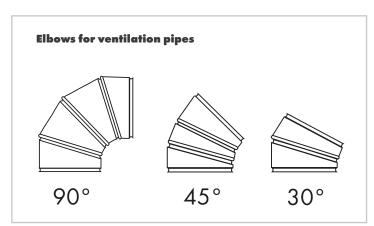
No more useless stumps rolling all over the place!

Easy savings with Kespet fixed size pipe claddings and special pieces. Pricing criteria in our online price list, please visit:

www.kespet.fi/en/catalogue

Models





All pipe sizes of Kespet <u>HVAC standard elbows</u> are manufactured according to the models described above. Ventilation elbow manufacturing radius = 1xD. Divergent amount of segments or manufacturing radius must be indicated on the order, prices according to the offer.

Beadings

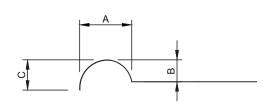




Standard beadings overlap direction for Kespet elbow is A/C and B/D.

Elbow A and B beading overlap direction is manufactured according to order.

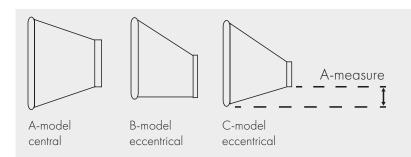
Beading furrow minimum measures			
Outer diameter		b	
70100	3	2	3
101200	4	3	4.5
201500	6	4	6
5011000	10	4.5	7.5
over 1000	12	5	9



Reducers

Reducers are used as a transformer, when the diameter of the cladding changes as the insulation and/or pipe changes. The standard model eccentrical reducer is manufactured with one side being straight. If necessary, it can also be produced according to the indicated line deviation (model C).





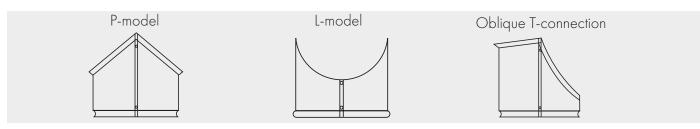
Installed from the larger end to the joining of the cladding and from the smaller end with the connecting collar.

Under- or overlay beadings on both ends available on request.

T-connections

T-connections are used as a starting collar either from larger or equal sized pipe. In the standard model, the seam is on the long side. If necessary, it can also be manufactured with the seam on the short side. T-connections are also available as obliques, the degree of the inner corner must be indicated on the order.

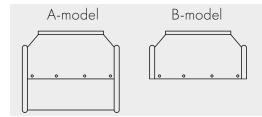




T-pieces

A t-piece is a cladding coupling specially intended for larger ventilation ducts. The t-piece is installed over the close brought claddings. Can also be manufactured without the cladding section (model B).





Installed over pipe claddings, connecting seam with over beading.

Also available as a special product with under beadings.

End Caps, Notch and Expansion Joint

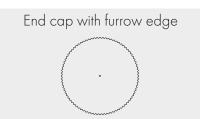
End Caps

End caps are used for pipe ends. The standard model is delivered as a solid two-piece product. End caps can also be manufactured with a hole (suitable for a pipe). One-piece end cap and furrow edge end cap with edge turned about 20 mm over or under the cladding are also available on request.



A-model, standard end cap

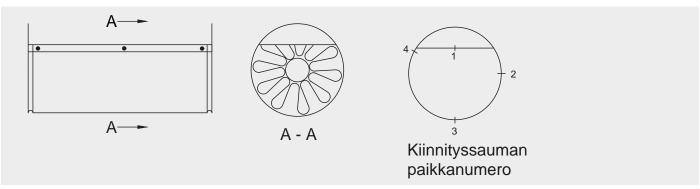
B-model, solid end cap



Notch

A notch is used when insulation has to be thinned for some obstacle in part of the pipe. The obstacle is bypassed with the notch. The notch can be manufactured as an open ended version, or a closed version. The closed version has a flap at the end, enabling a connection with a standard pipe cladding. Fixing seam location can be chosen from the options presented in the picture below.



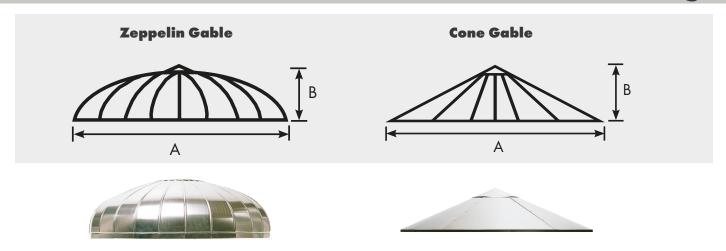


Expansion Joint

An expansion joint is used in long straight pipes every 6 meters to remove the effect of thermal movement. The expansion joint can be installed directly between the standard claddings.



Vessel Claddings



Gable seam options

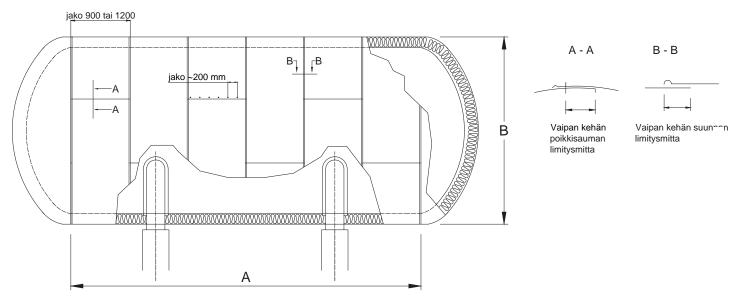
Zeppeli	n gable		Cone gable	
A standard, inside	B inside	A standard, inside	B inside	E inside
~~		<u> </u>		— ^+
C outside	D outside	D outside	C outside	F outside
		—^ lv1	n. 75 mm	

- Gable manufacturing according to standard SFS 3978.
- Assembled as ready-to-install sections or blocks.
- Also available according to the standard gable model.
- AB zeppelin gables and AB cone gables can also be manufactured according to measurements provided by the customer.

Vessel Cladding

Cladding for sections in horizontal or vertical vessels. Manufacturing from all standard materials. Manufactured as ready-perforated and with beadings according to the vessel measurements.

Standard overlap in the cladding's circumferential direction is 100 mm with a 30 mm circumference of the perimeter. Can be manufactured with other overlappings upon request. Circumference direction overlap size is freely selectable. Transverse seam 30, 50 or 100 mm. Transverse seam is manufactured with 20 mm support edge when needed.



Materials



Sheet Metal Cladding Materials

Materials	Steel Class
Hot galvanized steel sheet metal	EN 10346 Dx51 d+z275
Aluminium sheet metal	EN 3103H16
Stainless steel sheet metal	EN 10088-2-1.4301+2B
Acid proof sheet metal	EN 10088-2-1.4404+2B
PVDF 27 µm/10 µm colour coated hot galvanized steel sheet metal	EN 10346 S280GD+z275
NOVA 50 µm/10 µm colour coated hot galvanized steel sheet metal	EN 10346 S280GD+z275
PVC 200 µm/20 µm colour coated hot galvanized steel sheet metal	EN 10346 S280GD+z275
Aluminium galvanized steel sheet metal	EN 10346 Dx51 d+az150 or +az185
Stucco steel sheet metal	EN 3103H16

Material thicknesses (HVAC and process pipes)

Outer diameter ØØ	Aluminium sheet	Hot galvanized steel sheet	NOVA, PVDF and PVC coated hot galvanized steel sheet	Stainless and acid proof sheet
70150	0,5	0,5	0,5	0,4
151500	0,7	0,5	0,5	0,4
501800	1,0	0,6	0,6	0,5
over 800	1,0	0,7	0,7	0,5

Kespet sheet metal cladding material thicknesses are based on standard "SFS 3914 Pipe, tank and device insulations. Claddings and base structures".

Kespet pipe cladding markings indicate the pipe cladding diameter, material, material thickness and manufacturing date. The markings are made on the claddings inner surface with weatherproof ink.

The markings of Kespet segment elbows indicate their diameter, pipe size and insulation thickness (ventilation pipes) or manufacturing radius (HVAC pipes) and beading overlap direction (A/C, B/D, A or B). The markings are done with stickers or weatherproof stickers. Markings of other Kespet products indicate a products measurements and other specific information.

Product markings can also be done according to a customers specifications upon request.



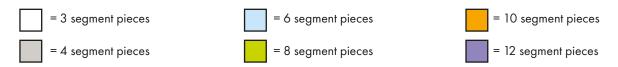


Pipe Claddings

Pipe	Insulation			outer diamet								
DN mm	pipe inner diameter	RR = p	ipe cladding	circle meası	urement (hole	to hole mea						
							ulation thickr					
	40 (45		20	30	40	50	60	80	100	120	140	160
-	12/15	ø = R =	70 220	76 239	96 301	122 383	146 458	185 581				
10	18	ø = R =	70 220	86 270	106 333	133 418	146 458	185 581				
15	22	ø = R =	70 220	86 270	106 333	133 418	146 458	199 625				
20	28	ø = R =	76 239	96 301	106 333	133 418	160 502	199 625				
25	35	ø = R =	76 239	96 301	122 383	146 458	160 502	199 625				
32	42	ø = R =	86 270	106 333	133 418	146 458	173 543	213 669				
40	48	ø = R =	96 301	122 383	133 418	160 502	173 543	213 669	253 794			
-	54	ø = R =	106 333	122 383	133 418	160 502	185 581	225 707	266 835			
50	60	ø = R =	106 383	122 383	146 458	160 502	185 581	225 707	266 835			
-	64	ø = R =	122 383	133 418	146 458	173 543	185 581	225 707	266 835			
65	76	ø = R =	133 418	146 458	160 502	185 581	199 625	238 747	278 873			
80	89	ø = R =	146 458	160 502	173 543	199 625	213 669	253 794	292 917	332 1042		
100	114	ø = R =	173 543	185 581	199 625	225 707	238 747	278 873	318 999	358 1124		
125	140	ø = R =	199 625	213 669	225 707	253 794	266 835	304 955	345 1083	385 1209	424 1331	
150	168	ø = R =	213 669	238 747	253 794	278 873	292 917	332 1042	371 1165	424 1331	464 1457	504 1583
200	219	ø = R =	266 835	292 917	304 955	332 1042	345 1083	385 1209	424 1331	464 1457	517 1623	556 1746
250	273	ø = R =	332 1042	345 1083	358 1124	385 1209	396 1243	436 1369	491 1542	530 1664	568 1784	612 1915
300	324	ø = R =	385 1209	396 1243	411 1291	436 1369	451 1416	491 1542	530 1664	582 1827	622 1953	661 207
350	356	ø = R =	411 1291	436 1369	436 1369	464 1457	491 1542	530 1664	572 1796	612 1915	647 2032	687 215
400	406	ø = R =	464 1457	491 1542	504 1583	517 1623	542 1705	582 1827	622 1953	661 2076	702 2198	742 232
500	508	ø = R =	568 1784	582 1827	612 1915	622 1953	635 1994	687 2157	722 2277	768 2412	802 2518	842 265
600	612	ø = R =	672 2110	687 2157	702 2198	722 2277	742 2324	792 2487	831 2609	872 2735	912 2857	940 298
<i>7</i> 00	714	ø = R =	768 2412	792 2487	802 2518	831 2609	842 2653	882 2773	922 2898	975 3062	1012 3187	105: 331:
800	813	ø = R =	872 2735	882 2773	912 2857	922 2898	940 2983	986 3096	1026 3222	1067 3350	1107 3476	1147 360
900	914	ø = R =	975 3062	986 3096	1012 3187	1026 3222	1052 3313	1092 3426	1132 3551	1172 3696	1212 3806	1252 393
1000	1016	ø = R =	1067 3350	1092 3426	1107 3476	1132 3551	1156 3630	1196 3755	1237 3884	1277 4010	1317 4135	1366 427

Segment elbow 1,5 x D

Pipe	Insulation	ø = elb	ow outer dic	ımeter mm								
DN mm	pipe inner diameter	R = ma	nufacturing r	adius mm								
							ulation thickn	esses mm				
			20	30	40	50	60	80	100	120	140	160
-	12/15	ø = R =	70 55	76 63	96 73							
10	18	ø = R =	70 55	86 68	106 78							
15	22	ø =	70	86	106	133	1					
20	28	R = Ø =	55 76	68 96	78 106	90 133						
25	35	R =	63 76	73 96	78 122	90 146	160	199	1			
23	33	Ø = R =	63	73	86	98	105	135				
32	42	ø = R =	86 68	106 78	133 90	146 98	173 115	213 145	253 160			
40	48	ø = R =	96 73	122 86	133 90	160 105	173 115	213 145	253 160			
-	54	ø =	106	122	133	160	185	225	266			
50	60	R = Ø =	78	86 122	90 146	105 160	125 185	160 225	175 266			
	64	R = Ø =		86 133	98 146	105 173	125 185	160 225	175 266			
		R =		90	98	115	125	160	175	•		
65	76	ø = R =		146 98	160 105	185 125	199 135	238 165	278 180			
80	89	ø = R =		160 105	173 115	199 135	213 145	253 170	292 185	332 210		
100	114	ø = R =		185 155	199 155	225 160	238 165	278 180	318 210	358 240		
125	140	ø = R =			225 190	253 190	266 190	304 200	345 230	385 250	424 270	
150	168	ø = R =			253 230	278 230	292 230	332 230	371 250	424 270	464 280	504 300
200	219	ø = R =			304 305	332 305	345 305	385 305	424 305	464 305	517 310	556 330
250	273	ø =			358	385	396	436	491	530	568	612
300	324	R = Ø =			381 411	381 436	381 451	381 491	381 530	381 582	381 622	381 661
350	356	R = Ø =			457	457 464	457 491	457 530	457 572	457 612	457 647	457 687
		R =				533	533	533	533	533	533	533
400	406	ø = R =				517 610	542 610	582 610	622 610	661 610	702 610	742 610
500	508	ø = R =				622 762	635 762	687 762	722 762	768 762	802 762	842 762
600	612	ø = R =				722 914	742 914	792 914	831 914	872 914	912 914	940 914
700	714	ø = R =				831 1070	842	882	922	975 1070	1012	1052
800	813	κ = Ø = R =				922 1220	940 1220	986 1220	1070 1026 1220	1067	1070 1107	1070 1147 1220
900	914	ø =				1026	1052	1092	1132	1220 1172	1220 1212	1252
1000	1016	R = Ø =				1370 1132	1370 1156	1370 1196	1370	1370 1277	1370	1370 1360
		R =				1525	1525	1525	1525	1525	1525	1525



Aluminium and galvanized sheet metal storage sizes are inside the area with reinforced line.

Segment elbow special sizes thermal procession pipes

Pipe	Insulation	D = e	lbow outer o	diameter mm								
DN mm	pipe inner diameter	R = m	= manufacturing radius mm									
						Insulation	thicknesses i					
			30 40 50 60 80 100 120								160	
60	70	ø = R =	133 90	160 105	173 115	199 135	238 160					
89	102	ø = R =	173 115	199 135	213 145	225 160	266 175					
114	127	ø = R =	199 155	213 160	238 165	253 170	292 185	332 210				
169	178	ø = R =		266 230	292 230	310 230	345 230	385 250	424 270			
219	230	ø = R =		318 305	345 305	358 305	396 305	436 305	478 305			
273	289	ø = R =		385 381	396 381	424 381	464 381	504 381	542 381			
324	356	ø = R =		436 457	464 457	491 457	530 457	572 457	612 457	647 457		
356	371	ø = R =			478 533	504 533	542 533	582 533	622 533	661 533		
406	426	ø = R =			542 610	556 610	595 610	635 610	675 610	712 610	768 610	
508	533	ø = R =			647 762	661 762	702 762	752 762	792 762	831 762	872 762	
612	630	ø = R =			742 914	768 914	802 914	842 914	882 914	922 914	962 914	





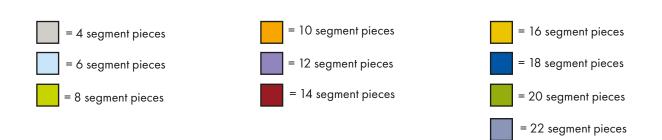
Segment elbow 2,5 x D

Pipe			bow outer	diameter m	nm										
DN mm	pipe inner diameter	R = m	anufacturir	ng radius m											
			30	40	50	60	80	Insulation 100	thicknesse:	140	160	180	200	220	240
25	35	ø =	96	122	146	160	199	100	120	140	100	100	200	220	240
32	42	R = Ø =	90	104	110	105 173	145 213	253							
40	48	R = Ø =	100 122	104 133	110 160	130 173	150 213	160 253							
_	54	R = Ø =	120 122	122 133	120 160	130 185	150 225	160 266							
50	60	R = Ø =	135 122	135 133	135 160	155 185	160 225	175 266							
		R =	150	150	150	155 185	160 225	175							
-	64	Ø = R =	160	160	160	160	160	266 175							
65	76	ø = R =	146 190	160 190	185 190	199 190	238 190	278 190	318 210						
80	89	ø = R =	160 223	173 223	199 223	213 223	253 223	292 223	332 223	385 250	424 270				
100	114	ø = R =	185 285	199 285	225 285	238 285	278 285	318 285	358 285	411 285	451 290	491 320	530 340		
125	140	ø = R =	213 350	225 350	253 350	266 350	304 350	345 350	385 350	424 350	478 350	517 350	556 355	592 375	635 400
150	168	ø = R =	238 420	253 420	278 420	292 420	332 420	371 420	424 420	464 420	504 420	542 420	582 420	622 420	661 430
200	219	ø = R =	292 547	304 547	332 547	345 547	385 547	424 547	464 547	517 547	556 547	592 547	635 547	675 547	712 547
250	273	ø =	345	358	385	396	436	491	530	568	612	647	687	722	768
300	324	R = Ø =	682 385	682 411	436	682 451	682 491	530	682 582	682	682	702	682 742	682 792	682 831
350	356	R = Ø =	810 424	810 436	810 464	831 491	810 530	810 572	810 612	810 647	810 687	810 722	810 768	810 802	810 842
400	406	R = Ø =	890 470	890 491	890 517	890 542	890 582	890 622	890 661	890 702	890 742	890 778	890 831	890 872	890 912
500	508	R = Ø =	1016 582	1016 612	1016 622	1016 635	1016 687	1016 722	1016 768	1016 802	1016 842	1016 882	1016 922	1016 962	1016 1012
		R =	1270	1270	1270	1270	1270	1270	1270	1270	1270	1270	1270	1270	1270
600	612	ø = R =	687 1530	702 1530	722 1530	742 1530	792 1530	831 1530	872 1530	912 1530	940 1530	986 1530	1026 1530	1067 1530	1112 1530
700	714	ø = R =	792 1780	802 1780	831 1780	842 1780	882 1780	922 1780	975 1780	1012 1780	1052 1780	1092 1780	1132 1780	1172 1780	1212 1780
800	813	ø = R =	882 2033	912 2033	922 2033	940 2033	986 2033	1026 2033	1067 2033	1107 2033	1147 2033	1196 2033	1237 2033	1277 2033	1317 2033
900	914	ø = R =	986 2290	986 2290	1026 2290	1052 2290	1092 2290	1132 2290	1172 2290	1212 2290	1252 2290	1294 2290	1334 2290	1374 2290	1422 2290
1000	1016	ø = R =	1092	1107 2540	1132 2540	1156 2540	1196 2540	1237 2540	1277 2540	1317 2540	1360 2540	1396 2540	1436 2540	1476 2540	1516 2540



Segment elbow 5 x D

Pipe			ow outer di	ameter mm											
DN mm	pipe inner diameter	R = mai	nufacturing	radius mm											
									thicknesses						
			30	40	50	60	80	100	120	140	160	180	200	220	240
25	35	ø = R =	96 175	122 175	146 175	160 175	199 175								
32	42	ø = R =	106 210	133 210	146 210	173 210	213 210	253 210							
40	48	ø = R =	122 240	133 240	160 240	173 240	213 240	253 240							
-	54	ø = R =	122 270	133 270	160 270	185 270	225 270	266 270							
50	60	ø = R =	122 300	133 300	160 300	185 300	225 300	266 300							
-	64	ø = R =	133 320	146 320	173 320	185 320	225 320	266 320							
65	76	ø = R =	146 380	160 380	185 380	199 380	238 380	278 380	318 380						
80	89	ø = R =	160 445	173 445	199 445	213 445	253 445	292 445	332 445	385 445	424 445				
100	114	ø = R =	185 570	199 570	225 570	238 570	278 570	318 570	358 570	411 570	451 570	491 570	530 570		
125	140	ø = R =	213 700	225 700	253 700	266 700	304 700	345 700	385 700	424 700	478 700	517 700	556 700	592 700	635 700
150	168	ø = R =	238 840	253 840	278 840	292 840	332 840	371 840	424 840	464 840	504 840	542 840	582 840	622 840	661 840
200	219	ø = R =	292 1095	304 1095	332 1095	345 1095	385 1095	424 1095	464 1095	517 1095	556 1095	592 1095	635 1095	675 1095	712 1095
250	273	ø = R =	345 1365	358 1365	385 1365	396 1365	436 1365	491 1365	530 1365	568 1365	612 1365	647 1365	687 1365	722 1365	768 1365
300	324	ø = R =	385 1620	411 1620	436 1620	451 1620	491 1620	530 1620	582 1620	622 1620	661 1620	702 1620	742 1620	792 1620	831 1620
350	356	ø = R =	424 1780	436 1780	464 1780	491 1780	530 1780	572 1780	612 1780	647 1780	687 1780	722 1780	768 1780	802 1780	842 1780
400	406	ø = R =	470 2030	491 2030	517 2030	542 2030	582 2030	622 2030	661 2030	702 2030	742 2030	778 2030	831 2030	872 2030	912 2030
500	508	ø = R =	582 2540	612 2540	622 2540	635 2540	687 2540	722 2540	768 2540	802 2540	842 2540	882 2540	922 2540	962 2540	1012 2540
600	612	ø = R =	687 3060	702 3060	722 3060	742 3060	792 3060	831 3060	872 3060	912 3060	940 3060	986 3060	1026 3060	1067 3060	1112 3060
700	714	ø = R =	792 3570	802 3570	831 3570	842 3570	882 3570	922 3570	975 3570	1012 3570	1052 3570	1092 3570	1132 3570	1172 3570	1212 3570
800	813	ø = R =	882 4065	912 4065	922 4065	940 4065	986 4065	1026 4065	1067 4065	1107 4065	1147 4065	1196 4065	1237 4065	1277 4065	1317 4065
900	914	ø = R =	986 4570	986 4570	1026 4570	1052 4570	1092 4570	1132 4570	1172 4570	1212 4570	1252 4570	1294 4570	1334 4570	1374 4570	1422 4570
1000	1016	ø = R =	1092 5080	1107 5080	1132 5080	1156 5080	1196 5080	1237 5080	1277 5080	1317 5080	1360 5080	1396 5080	1436 5080	1476 5080	1516 5080

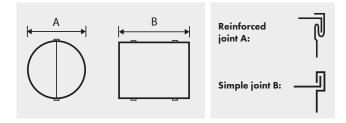


Ready-to-install insulation box for flanges

- Manufacturing according to standard SFS 3978. Joint standard connection B.
- Manufactured from all our materials.
- Pipe section insulation with 50 mm stone wool wired mat AL1 according to standard SFS 3978.
 (Note! Insulation and extra locks for box endings by request. Price according to the offer.)
- The pricing of insulation boxes with holes does not differ from the regular version in our price list.
- Also available as multipart box and vertical box with a cone head. Prices according to the offer.



Flange Box (AB)

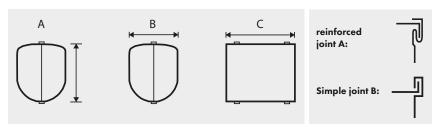


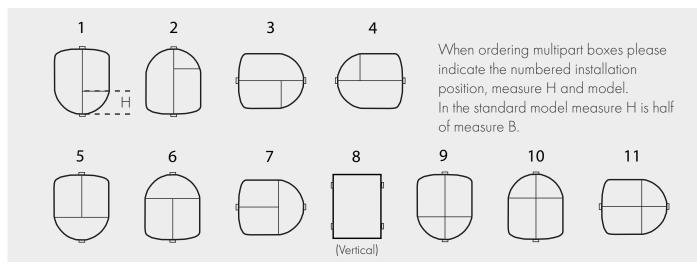
Ready-to-install insulation box for valves

- Manufacturing according to standard SFS 3978. Joint standard connection B.
- Manufactured from all our materials.
- Pipe section insulation with 50 mm stone wool wired mat AL1 according to standard SFS 3978. (Note! Insulation and extra locks for box endings by request. Price according to the offer.)
- Also available as multipart box and vertical box with a cone head. Prices according to the offer.



Valve Box (ABC)





Air Conditioning and Ventilation Pipes

μĘ	ø = pipe	cladding o	uter diame	ter mm								
oute ter m		Insulation thicknesses mm										
Duct outer diameter mm		20	30	40	50	60	80	100	120	140	160	
63	Ø		133	160	173	199	238	278				
80	Ø		160	173	199	213	253	292				
100	Ø	160	173	199	213	238	278	318				
125	Ø	173	199	225	238	266	304	345				
160	Ø	213	238	253	278	292	332	371				
200	Ø	253	270	292	318	332	371	411	451			
250	Ø	304	318	345	364	385	424	464	502	542		
315	Ø	364	385	411	424	451	491	527	567	607		
400	Ø	451	470	491	512	532	572	612	652	692		
500	Ø	567	572	592	612	632	672	712	752	792		
630	Ø	692	702	722	742	762	802	842	882	922	962	
800	Ø	852	872	892	912	932	972	1012	1052	1092	1132	
1000	Ø	1052	1072	1092	1112	1132	1172	1212	1252	1292	1332	
1250	Ø	1302	1322	1342	1362	1382	1422	1462	1502	1542	1582	



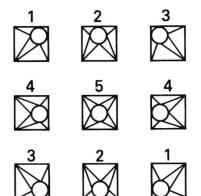
Adaptors for air conditioning and ventilation insulations

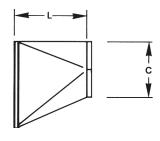
Formula for calculating the adaptor surface area: Circumference length of the larger round or square end x height.

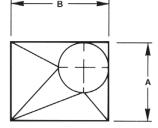
Adaptors for rectangular ducts are dimensioned in the following way: the measurements of sides A and B have the desired insulation thickness and a 10 mm tolerance reserve added. The adaptors can also be manufactured with a round larger head at no extra cost.

From rectangle to round:

The outer diameter size C of the small round head must be indicated when ordering. Also indicate the desired position using the numbered pictures below.

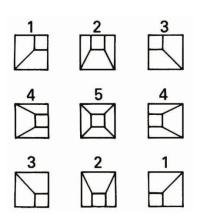


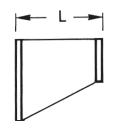


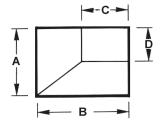


From rectangle to rectangle:

The C and D dimensions of the smaller head have to be indicated when ordering. Also indicate the desired position using the numbered pictures below.









Kespet coils and sheets

We supply small and large coils and sheets from various sheet metal materials straight from our warehouses in Jyväskylä and Helsinki. Coil and sheet widths are 1000 mm and 1250 mm. Slit coil standard width is 610 mm.

Products are available from the following materials:

- Hot galvanized steel sheet metal for coatings NOVA, PVDF and PVC, 18 RR standard colours in stock
- Hot galvanized
- Aluminium galvanized
- Aluminium
- Stainless
- Acid-proof
- Stucco

Kespet coil and sheet materials have been selected as comprehensively as possible for different applications.

On order we also supply all other RR standard colours and RAL colours.

Ask about the bigger coils/slit coils and other materials from our sales!



Stock colour selection:



Perforated, Checker and Rice Grain Plates



PERFORATED PLATES

Material	Size mm	Perforated area	m²/plate
Aluminium EN AW 3103 H16	1,0 x 1000x2000	3mm 15%	2
Hot galvanized DX51D Z275	0,7x1250x2500	3mm 15%	3,125
Hot galvanized DX51D Z275	0,7x1250x2500	3mm 30%	3,125



PERFORATED COILS

Material	Size mm	Perforated area	m²/coil
Aluminium EN AW 3103 H16	1,0 x 1000	3mm 15%	25
Hot galvanized DX51D Z275	0,7×1250	3mm 15%	25
Hot galvanized DX51D Z275	0,7×1250	3mm 30%	25

Perforated plates are also available with other perforation sizes and from other raw materials. Delivery time about two weeks from the order.



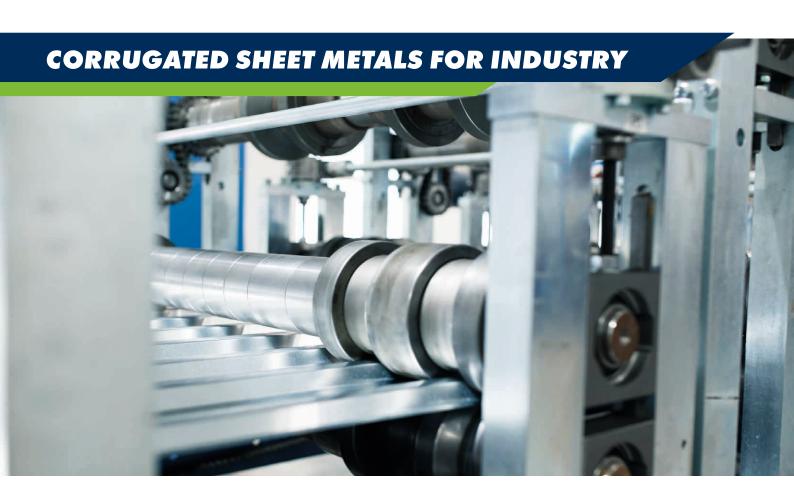
CHECKER PLATES

Size mm	Material	kg/plate
3 × 1250 × 2500	Aluminium	28,10
3 x 1250 x 2500	Stainless	84,40 - 93,75



RICE GRAIN PLATES

Size mm	Material	kg/plate
1,5 × 1250 × 2500	Aluminium	13,6





Kespet Industrial Corrugated Sheet Metals

From Kespet you can get ready-to-install corrugated sheet metal claddings for roof and wall structures. The products meet the requirements of SFS 3914 standard and CE qualifications. Our capable production technology enables us to manufacture products from thicker raw materials. Our selection for 20 and 45 corrugated sheets is the most comprehensive product range available in Finland.

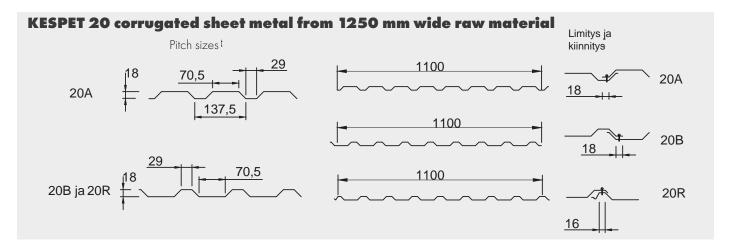
We manufacture corrugated sheets from 1000 and 1250 mm wide raw materials. The sheets are also available with film, on both sides. The effective width of Kespet 20 model corrugated sheet is 825 mm or 1100 mm. For the 45 model sheet the effective width is either 600 mm, 750 mm or 900 mm. We also manufacture corrugated sheets from the customers own raw materials.

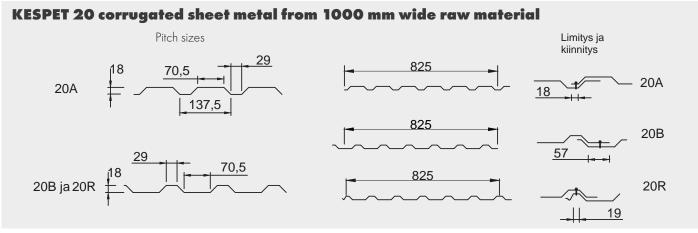
Material sheet thicknesses:

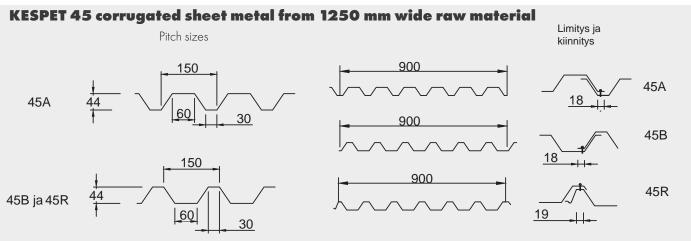
- Plain stainless steel sheet 0,40-0,80 mm
- Plain aluminium sheet 0,50-1,00 mm
- Stucco rolled aluminium sheet 0,50-1,00 mm
- Plain galvanized steel sheet 0,40-1,00 mm
- Plain galvanized and paint coated steel sheet 0,40-1,00 mm

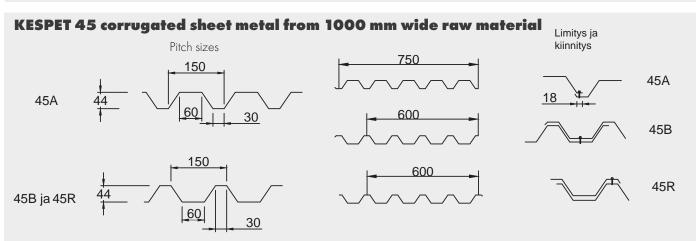


Corrugated Sheet Metal Measurements







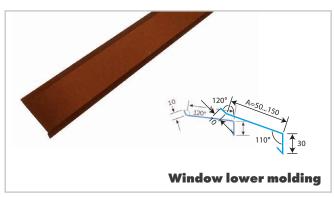


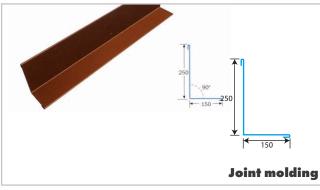
MOLDINGS

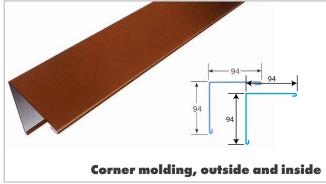
HVAC

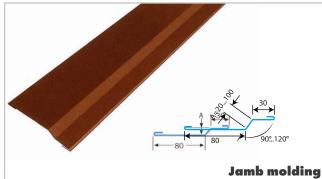
Material thicknesses: NOVA 0,7 mm PVDF 0,7 mm Galvanized 0,7 mm Aluminium 1,0 mm Stainless steel 0,5 mm Acid-proof 0,5 mm Molding standard length 2 m, according to the order up to 8 m.

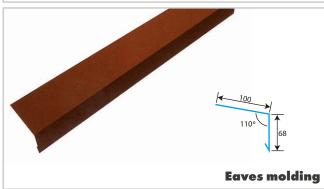
Stainless steel and acid-proof moldings according to the offer.

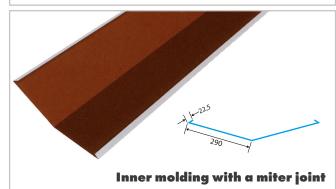


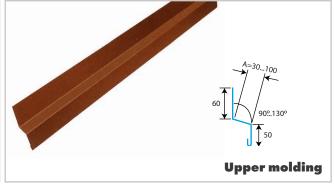


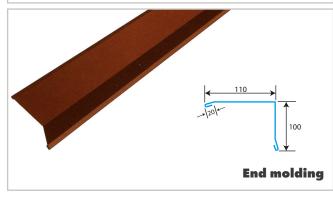


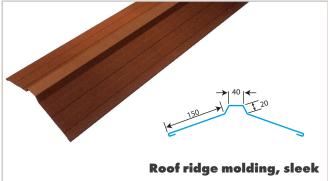










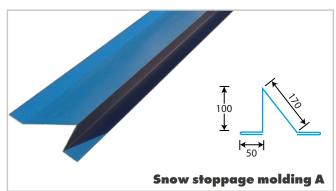


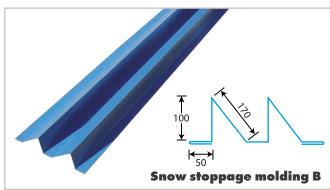
Industry

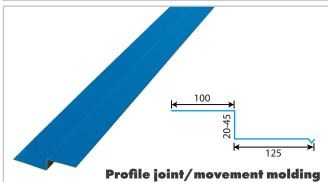
Material thicknesses: NOVA 0,7 mm PVDF 0,7 mm Galvanized 0.7 mm

Galvanized 0,7 mm Aluminium 1,0 mm

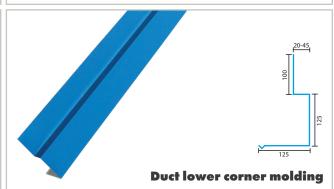
Stainless steel 0,5 mm Acid-proof 0,5 mm Molding standard length 2 m, according to the order up to 8 m.







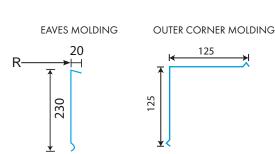




Other models

Rounded according to the specified radius R.

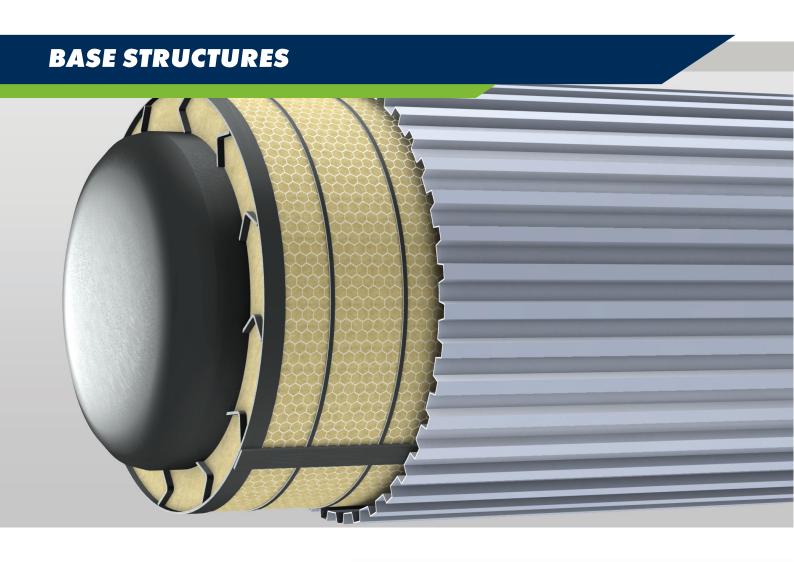






An example of a boiler's frame beam corner movement molding.

Prices according to the model and dimensioning. Ask for our offer!



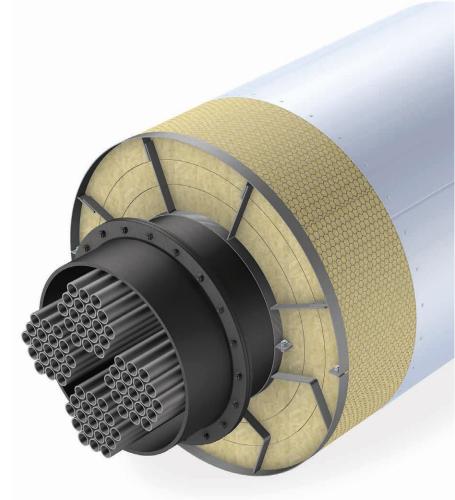
Kespet base structures

Kespet base structures ensure the quality of insulation and protective cladding. From Kespet you can get support rings for HVAC and process pipings and for round ventilation ducts.

We also supply support structures for mat and slab insulations and reducers, support strips for tank reducer cladding, diamond pieces, base structures and insulation fastening spikes.

Materials meet industry standards.

Kespet base structures, insulation materials and protective claddings together ensure the functionality of the process as planned.



Supporting Structures for Mat and Slab Insulations

Choosing the nominal distance, material and supports for a base structure

The nominal distance for support rings is defined according to the table on the right (applies for all products listed on this page). Materials are S235JRG2 (FE) or AISI304 (stainless steel). The supports and the ring may also be of different material.

A distance support is either of the straight or flex type, and selection is done according to the enclosed calculation formula. We also manufacture supporting structures from other materials and according to the customers own measurements.

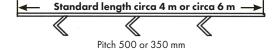
Choosing the distance support type	Insu
X = <u>d x t</u> 100	
d = object diameter (m) t = operating temperature (°C)	
<	
Flex support Straight support is used is used when X>2 when X<2	

Insulation nominal strength	Ring nominal distance
mm	mm
50	60
60	70
80	90
100	110
120	130
140	150
160	170
180	190
200	210

For large tanks and round ducts $\emptyset > 2000 \text{ mm}$

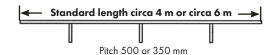
Flex distance support

Standard length circa 4 m or circa 6 m. Quality according to standards SFS 3914 and 3978. Distance ring 30x3 flat, distance support 30x3 flat bent.



Straight distance support

Standard length circa 4 m or circa 6 m. Quality according to standards SFS 3914 and 3978. Distance ring 30x3 flat, distance support 30x3 flat bent.



For small tanks and round ducts

Rounded distance support, tanks and ducts \emptyset < 2000

Quality according to standards SFS 3914, 5744 and 3978. Fastening overlap 100 mm with riveting or welding. Distance ring 30x3 flat, distance support 30x3 flat bent.

STRAIGHT SUPPORT



Pitch 350 mm

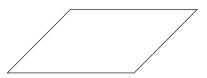
FLEX SUPPORT



Pitch 350 mm

Buttress (diamond piece)

Supporting steel nominal distance is made according to the table above or according to customer's dimensioning. Material 70x5 mm flat either S235JRG2 (FE) or AISI304 (stainless steel).



Support Rings for Mat Insulations







Support ring 120° Horizontal duct



Support ring 240° Horizontal duct



Support ring 360°With inner ring bolt joint



Support ring 360°

Bolt joint

The ends of the support rings (aside from the 120C variant) have 3 mm holes for fastening wire. Distance support spacer distance 200-400 mm. Material S235JRG2 ring 30x3 flat and support 8 mm round. Support ring 360° is also available with overlap fastening (100 mm). Diameter over 1000 mm also in two parts. When operating temperature is below 250 °C, quality according to standards SFS 3914 and 3978. Support rings with flat support and for over 250°C pipes with thermal break are also available on request.

Support rings for HVAC and process piping

DN mm	Pipe outer	ø = Ring o	ø = Ring outer diameter mm							
	diameter mm		Insulation thicknesses mm							
			40	50	60	80	100	120	140	160
125	140	Ø	223	251	264	302	343	383		
150	168	Ø	251	276	290	330	369	422		
200	219	Ø	302	330	343	383	422	462	515	
250	273	Ø	356	383	394	434	489	528	566	
300	324	Ø	409	434	449	489	528	580	620	
350	356	Ø		462	489	528	570	610	645	
400	406	Ø		515	540	580	620	659	700	
500	508	Ø		620	633	685	720	766	800	840
600	612	Ø		720	740	790	829	870	910	938
700	714	Ø		829	840	880	920	973	1010	1050
800	813	Ø		920	938	984	1024	1065	1105	1145
900	914	Ø		1024	1050	1090	1130	1170	1210	1250
1000	1016	Ø		1130	1154	1194	1235	1275	1315	1358

Support rings for round ventilation ducts

Duct	ø = Ring o	uter diamet	er mm						
diameter	Insulation thicknesses mm								
mm		40	50	60	80	100	120	140	160
200	Ø	290	316	330	369	409	449		
250	Ø	343	362	383	422	462	500	540	
315	Ø	409	422	449	489	525	565	605	
400	Ø	489	510	530	570	610	650	690	
500	Ø	590	610	630	670	710	<i>7</i> 50	790	
630	Ø	720	740	760	800	840	880	920	960
800	Ø	890	910	930	970	1010	1050	1090	1130
1000	Ø	1090	1110	1130	1170	1210	1250	1290	1330
1250	Ø	1340	1360	1380	1420	1460	1500	1540	1580

Insulation Fastening Spikes

Wool spikes (weldable and straight spot weldable)

Material 4 mm rounded bar S235JRG2 (FE) and AISI 304 (stainless steel). Straight spot weldable spikes are available only of material S235JRG2 (FE).

Straight	Angled	Straight with straight spot welding socke

Insulation nominal thickness mm	Fastening spike length mm	pieces/box à 10kg/box	Fastening spike length mm	pieces/box à10kg/box
50	80	1250	55	1250
60	90	1111	65	1111
80	110	909	85	909
100	130	769	105	769
120	150	667	125	667
140	170	588	145	588
150	180	555	155	555
160	190	526	165	526
180	210	476	185	476
200	230	435	205	435
220	250	400	225	400
240	270	370	245	370
250	280	357	255	357
260	290	345	265	345
280	310	322	285	322
300	330	303	305	303

Fastening spike length
iengin
85
105
125
145
155
165
185
205



Flat wool spike

Standard length circa 4 m or circa 6 m.

Distance ring 30x3 flat, wool spike \varnothing 4 mm straight, fixing from the ends M8 x 30-50 mm.

Insulation nominal thickness	Wool spike nominal distance
mm	mm
50	55
60	65
80	85
100	105
120	125
140	145
160	165
180	185
200	205

We also supply insulation fastening spikes in special lengths with short delivery time.

Ask for an offer!

Base structures

Quality according to standards SFS 3914, 3978 and 5744.

Round bars

Ø/length mm/m	Material	kg/m
4/5	St37k	0,100
8/5	St37k	0,395
10/5	St37k	0,620
4/3	Stainless steel	0,100
8/3	Stainless steel	0,395
8/3	Acid-proof	0,395



Size/legth mm/m	Material	kg/m
30x3/4	S235JRG2	0,710
70x5/4	S235JRG2	2,750
30x3/4	Stainless steel	0,710
60x5/4	Stainless steel	2,360
30x3/4	Acid-proof	0,710
60x5/4	Acid-proof	2,360

Corner bars

Size/length mm/m	Material	kg/m
30x30x3/6	S235JRG2	1,360
50x50x5/6	S235JRG2	3,770
30x30x3/6	Stainless steel	1,360
50x50x5/6	Stainless steel	3,770
30x30x3/6	Acid-proof	1,360
50x50x5/6	Acid-proof	3,770



Cold rolled U-bars

Size/length mm/m	Material	kg/m
U 40x20x2/4-6	S235JRG2	1,150





Modularity/connectivity

A Kespet elements' standard width is 1100 mm, length max. 7500 mm. The standard structure consists of an aluminium c-cassette and aluminium corrugated sheet, with stone wool insulation inside. Lightweight design makes it easy to handle the element. The elements are connected to each other with profile seams, which ensure correct installation of elements and a finalized result. The installation procedure is quick, as fastening is done using self drilling screws and ready made mounting points.

Applications

The Kespet insulation element is designed specially for paper machine scuttle roofs and walls. The product can also be used as a cladding structure solution in different device and machinery spaces.

Carrying capacity, sealing and insulation

The structure is designed to carry a weight of atleast 200 kg when the support frame spacing takes place every 2500 mm. On the inside, the structure is reinforced using z-moldings. Elements are sealed together with factory-fitted gaskets and seals installed on the frame.

The elements are steam-sealed inside to prevent moisture from penetrating into the insulation. Profile seals are fitted to the ends, so that the insulation is completely protected from dust and possible air flows. Stone wool insulation is used within the element, as it has good moisture resistance and insulation features. Insulation thickness varies between 30-100 mm according to need.

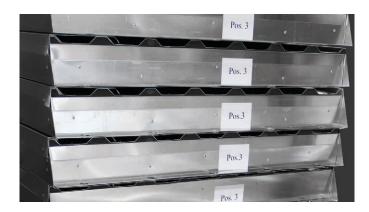
On the side of each element there is a glass fiber ribbon in the form of a thermal break to prevent heat transfer through the body of the element. The design takes thermal movement into account.

Modifications

Sets of elements are planned and manufactured on a target specific basis, according either to a planned or completed frame structure. Usually delivery also includes the needed moldings and installation accessories. Openings for access doors, servicing hatches or other passageways can be manufactured. The surface can also be manufactured from other materials, like stucco aluminium, coloured sheet metal or galvanized sheet metal. In addition, the wall elements can also be made with a plain sheet metal cladding on top.

Package and marking

Elements are delivered in a pallet package, each one numbered. An installation diagram will be provided on delivery, which includes the number, location and progress measurement of each element. Elements are packaged with care into shipping containers, enabling global deliveries.



Our partners



Strength in numbers

Our partners are the best in the field when it comes to manufacturing technical insulation products, raw materials, installation accessories and tools.

Cooperation is one of the key values of our company. We want to be an effective, innovative and upright partner, and promote the development of the industry.























Cladding dimensioning for Paroc Combi

Sheet metal claddings

Insulation	ø = elbow outer diameter mm						
pipe inner diam.	R = manufacturing radius mm						
		Insulation thickness mm					
		20	30	40	50	60	
12-18	ø =	70	86	106	122	146	
	R =	55	68	78	86	98	
22-28	ø =	76	96	106	133	146	
	R =	63	73	78	90	98	
32-38	ø =	86	106	122	146	160	
	R =	68	78	86	98	105	
42-48	ø =	96	122	133	160	173	
	R =	73	86	90	105	115	







Quality and proven reliability

From Kespet Oy you get high-quality technical insulation products from our industry leading partners.

Insulation products are compatible with Kespet sheet metal claddings and suitable for fire, heat, cold, condension and sound insulations.

Our product range covers technical elastomeric insulation, stone wool insulation and ceramic insulation. In practice, everything you need for technical insulation. Our range also covers the required installation accessories.

Paroc HVAC and industrial products and Armacell XG and Ultima products are available straight from our warehouses. Please see the full range of stock products from the online price list.

Product prices, storage products, package sizes and pricing criteria in our online price list, please visit:

www.kespet.fi/en/catalogue



Paroc Technical Stone Wool Insulations



Paroc technical stone wool insulations

When it's about fire safety and insulation, the solutions have to be fire proof. Paroc stone wool products fulfill even the highest fire class requirements.

Fire classifications of all Paroc stone wool products are presented according to standard EN 13501-1.

The products are used as fire, heat, sound and condension insulation in process industry, HVAC and ship building industry as well as in manufacturing of machines and devices.

Stone wool is nonflammable, moisture proof, sound insulating and water vapor permeable.



Kespet Oy supplies the entire range of **Paroc technical insulations:**

HVAC, piping

Paroc HVAC Combi AluCoat T Paroc Hvac Section AluCoat T Paroc Hvac Bend AluCoat T Paroc Hvac Section GreyCoat T Paroc Hvac Bend GreyCoat T

HVAC, AC fireproofing

Paroc Hvac Fire Mat Comfort Paroc Hvac Fire Slab El 30 N1 Paroc Hvac Fire Slab El 60 N1 Paroc Hvac Fire Slab EI 120 N1 Paroc Hyac Aircoat

HVAC, AC heat and condension insulation

Paroc Hvac Mat AluCoat Paroc Hvac Ventmat AluCoat Paroc Hvac Lamella Mat AluCoat Paroc Hvac Lamella Mat GreyCoat Paroc Hvac Slab AluCoat Paroc Hvac Slab GreyCoat Paroc Hvac AirCoat Paroc Hvac AirCoat Bend 45° ja 90°

Paroc Hvac AirCoat T-joint

HVAC, AC acoustic insulation

Paroc Invent 80 N3/N1 Paroc Invent 45 G5/N1 Paroc Invent 80 G5/N1 Paroc Invent 100 N1

Industrial, piping insulation

Paroc Pro Section 100

Industrial, pipe segment insulation

Paroc Pro Bend 100 Paroc Pro Segment 100

Industrial, insulation mats

Paroc Pro Wired Mat 100 Paroc Pro Wired Mat 100 AL1 Paroc Pro Wired Mat 80 Paroc Pro Loose Mat 80

Industrial, insulation slabs

Paroc Pro Slab 40 Paroc Pro Slab 60 Paroc Pro Slab 80 Paroc Pro Slab 120 Paroc Pro Roof Slab 20kPa



Technical elastomeric insulations





Ultima and XG product ranges and installation accessories in our stock selection!

All other Armacell products are delivered by request.

Armacell - Armaflex XG technical information

Brief description Highly-flexible, closed-cell insulation material with high water vapour diffusion resistance and low thermal conductivity.

Material type Elastomeric foam based on synthetic rubber. Factory made flexible elastomeric foam (FEF) according to EN 14304.

Colour Black

Applications Insulation / protection of pipes, air ducts, vessels (incl. elbows, fittings, flanges etc.) of air-conditioning, refrigeration

and process equipment to prevent condensation and save energy as well as insulation of pipes in sanitary and heating

applications.

Remarks Declaration of Permormance is available in accordance with Article 7 (3) of Regulation (EU) No 305/2011 on address

www.armacell.com/DoP

Property	Value/Assessment				Super- vision*4	Special Remark
Temperature Range						
Temperature Range	max. service temperature +1	10 °C	(+85 °C if sheet or tape is glued to the object with its whole surface.)	EU 5702	0/●	Tested acc.to EN 14706, EN 14707 EN 14304 and
	min. service temperature ¹ -50 °C				DIN EN 14304	
Thermal Conductivity						
Thermal Conductivity	ϑ _m +/-0 °C		λ=	EU 5702	0	Declared acc. to EN ISO 13787
Conductivity	tubes λ ≤ 0,035 6-19 mm	W/(m·K)	$[35 + 0.1 \cdot \vartheta_{\rm m} + 0.0008 \cdot \vartheta_{\rm m}^2]/1000$			Tested acc. to EN 12667
	sheets $\lambda \leq 0.035$ 6-25 mm, tape	W/(m·K)	$[35 + 0.1 \cdot \vartheta_{m} + 0.0008 \cdot \vartheta_{m}^{2}]/1000$			EN ISO 8497
	tubes $\lambda \leq 0.036$ 25-40 mm	W/(m·K)	$[36 + 0.1 \cdot \vartheta_{m} + 0.0008 \cdot \vartheta_{m}^{2}]/1000$			
	sheets λ ≤ 0,036 32-40 mm	W/(m·K)	$[36 + 0,1 \cdot \vartheta_{m} + 0,0008 \cdot \vartheta_{m}^{2}]/1000$			
Water vapour diffusio	n resistance					
Water vapour diffusion resistance	sheets 6-25 mm; µ tubes 6-19 mm	2	10.000	EU 5702	0	Tested acc. to EN 12086
	sheets 32-40 mm; µ tubes 25-40 mm	2	7.000			EN 13469
Fire performance				_		
Building material classification ²	tubes	B_L -s3, d	0	EN 13501-1		
	sheets B-s3,d0					Tested acc. to EN 13823
	tape	B-s3, d0)			EN ISO 11925-2
Practical Fire Behaviour	Self-extinguishing, does not drip, do	oes not spread flames				
Other technical featur	es			_		
Dimensions and tolerances	In accordance with EN 14304, table 1			EU 5702	0	Tested according to EN 822, EN 823, EN 13467
UV resistance	Protection against UV-radiation is necessary. See disclaimer.					
Storage & Shelf life	Self-adhesive tapes, self-adhesive sheets, self-adhesive tubes: 1 year					Can be stored in dry, clean rooms at normal relative humidity (50-70 %) and ambient temperature (0 °C – 35 °C).

 $^{1. \ \} For temperatures below \ -50\ ^{\circ}C\ please\ contact\ a\ sales\ representative\ to\ request\ for\ the\ corresponding\ technical\ information\ properties of the corresponding\ technical\ information\ properties of the corresponding\ technical\ properties of the\ properties of the\ to\ properties of the\ properties of the\ properties of the\ properties of the\ properties of\ p$

All data and technical information are based on results achieved under typical application conditions. Recipients of this information should, in their own interest and responsibility, clarify with us in due time whether or not the data and information apply to the intended application area. Installation instructions are available in our Armaflex installation manual. Please consult our sales representatives before insulating stainless steels. For outside use, Armaflex should be protected with Armafinish Paint or Arma-Chek covering within 3 days of installation. For some refrigerants the discharge temperature may exceed +110 °C, please consult our sales representative for further information.

^{2.} Building material classification is valid on metal or solid mineral surfaces.

^{*1} Further documents such as test certificates, approvals and the like can be requested using the registration number given.

^{*2 •:} Official supervision by independent institutes and /or test authorities o: Own in-factory quality monitoring

Armacell - Armaflex Ultima Technical Insulations

Brief description Flexible elastomeric foam on the basis of patented synthetic rubber composition with improved fire retardant properties, low smoke generation

and closed-cell material structure. For use in HVAC, refrigeration and process equipment applications.

Material type Elastomeric foam based rubber; Manufactured with Armaprene® Patented Technology US Patent no. 8,163,811, EU patent no. 2 261 305.

Factory made flexible elastomeric foam (FEF) according to EN 14304.

Colour Dark blue

Insulation / protection of pipes, air ducts, vessels (incl. elbows, fittings, flanges etc.) to prevent condensation and save energy. Armaflex Ultima tape should also be used to fully secure self-adhesive tube seams. **Applications**

Special features Low smoke performance

Safety end environment Meets the requirements for sustainable construction in combination with Armaflex Ultima SF990 adhesive such as LEED or DGNB.

Type III Environmental Product Declaration (EPD): Declaration number "EPD-ARM-20150109-IBB1-DE", Institut Bauen und Umwelt e.V. (IBU)

Remarks Declaration of Permormance is available in accordance with Article 7 (3) of Regulation (EU) No 305/2011 on address www.armacell.com/

DoP

Property	Value/Assessment		Test*1	Special Remarks
Temperature Range				
Temperature Range	Max. service temperature +110 °C Min. service temperature -50 °C	(+ 85 °C if sheet or tape is glued to a flat object)	EU 5846	Tested acc. to EN 14706 EN 14707 and EN 14304
Thermal Conductivity				217 1100 1
Thermal	ϑ _m ±0 °C	λ=	EU 5846	Declared acc. to
Conductivity	λ ≤ 0.040	$[40 + 0,1 \cdot \vartheta_{m} + 0,0009 \cdot \vartheta_{m}^{2}]/1000$	_	EN ISO 13787 Tested acc. to EN 12667 EN ISO 8497
Water vapour diffusion	n resistance			EN 130 0497
Water vapour diffusion resistance	μ	≥ 7,000	EU 5846	Tested acc. to EN 12086 EN 13469
Fire performance				
Building material classification ²	Tubes, Tubes self-adhesive Sheets, sheets self-adhesive Sheets, sheets self-adhesive with cladding Tape	B _L -s1,d0 B-s2,d0 (Can be used with BL-s1, d0 pipes with insulation B-s1,d0 max. Pipe Diameter Ø300mm acc. EN13501-1) B-s1,d0	EU 5846	Classified acc. to EN 13501-1 Tested acc. to EN 13823 and EN ISO 11925-2
Other fire class	Ship Building	Bureau Veritas, Det Norske Veritas, Lloyds Register	D 5243 D 5244 D 5245	Classified acc. to MED 96/98/EC MODULE D Tested acc.to IMO Resolution
Practical fire behaviour	Self-extinguishing, does not drip, does not spread fla	ames; low smoke density		
Fire resistance of structural element		EI 30 - EI 120	EU 5846 EU 5584	Classified acc. to EN 13501-2 Tested acc. to EN 1366-3
Other	FM-approved up to 25 mm		D 5192	FM: Tested according to UBC26-3, Class No.4924
Other technical featur	es			
Dimensions and tolerances	In accordance with EN 14304, table 1		EU 5846	Tested acc. to EN 822, EN 823, EN 13467
UV resistance	Protection against UV necessary using cladding sy Okatherm for indoor applications.	ystems such as Okabell for outdoor applications and	D 5813	Tested acc. to EN ISO 4892-1
Storage & Shelf life	self-adhesive tubes, self-adhesive sheets, self-adhesinormal relative humidity (50-75 %) and ambient temp	sive tape: 1 year, can be stored in dry, clean rooms at perature (0 $^{\circ}$ C $-$ 35 $^{\circ}$ C).		
Antimicrobial behaviour	No fungal growth observed		D 5184	Tested acc. to ASTM G21

^{1.} For temperatures below -50 °C please contact a sales representative to request the corresponding technical information

All statements and technical information are based on results obtained under typical conditions. It is the responsibility of the recipient to verify with us that the information is appropriate for the specific use intended. Installation instructions are given in our Armaflex installation manual. Please consult our Technical Department before insulating stainless steel. With some refrigerants the discharge temperature may exceed +110 °C, please consult our sales representative for further information.

^{2.} The building materials classification is valid on metal or solid, mineral surfaces

^{*1} Further documents such as test certificates and approvals can be requested using the registration number given.

Armacell Technical Elastomeric Insulations - other products



We also deliver all other Armacell products by request:

AF/Armaflex ArmaComfort
Armafix AF SH/Armaflex
Armaflex Rail HT/Armaflex
NH/Armaflex HT/Armaflex S
Armafix NH Armaflex DuoSolar
Armaprotect DuoSolar 220

Arma-Chek D Tubolit

Arma Chek Silver Armafix VVS

Armaflex LTD ArmaSound Barrier E

ArmaSound RD Arma Gel HT









Prefabricated elastomeric formed pieces



Prefabricated elbows and T-connections are shaped and cut carefully so that they enable perfect installation work and offer significant benefits for insulation.

- ✓ Ready-to-install.
- ✓ Easier and more accurate installation.
- → Working is cleaner and safer.
- ✓ No material waste.

Sewer corners, 45° elbows and ja Y-pieces are also available according to the order. Elastomeric formed pieces are also available of Armaflex Ultima. Ask more from our sales!

Morgan Thermal Ceramics Superwool® Plus





Superwool Plus® is manufactured by International Thermal Ceramics Morgan. Superwool Plus® ceramic insulation is designed for high operating temperatures. Morgan has developed a technology that takes into account the preparation of the technical characteristics of the product, energy consumption and the environment.

The amount of fibres has been maximized with the use of sophisticated technology, while simultaneously the thermal conductivity has been minimized along with energy consumption.

Superwool Plus is a durable product that is available in many different thicknesses and densities. It does not evaporate gases or odors when used at high temperatures. The product is also flexible, easy to cut and shape. Superwool Plus® can be used in a continuous temperature of 1000°C. The tensile strength of the 128 kg/m³ product is 75kPa.

SUPERWOOL® THERMAL CONDUCTIVITY

MEAN TEMPERATURE	64 kg/m³	80 kg/m³	96 kg/m³	128 kg/m³
200	0,06	0,06	0,05	0,05
400	0,11	0,09	0,09	0,08
600	0,18	0,15	0,14	0,12
800	0,29	0,24	0,21	0,18
1000	0,42	0,36	0,29	0,25

SUPERWOOL® PACKAGE SIZES

Thickness mm	64 kg/ m³	80 kg/ m³	96 kg/ m³	128 kg/ m³	160 kg/ m³	Length mm	Width mm
6				Х		4 × 550	610
10			X	X		18500	610
13		X	X	X	X	14640	610
19	X	X	X	X	X	9760	610
25	X	X	X	X	X	7320	610
38	×	X	X	X		4880	610
50	×	X	X	X		3660	610

Ask about other Morgan ceramic products from our sales!



Aluminium foil cladding system/ HVAC

Sebald Ekamat aluminium foil cladding is a safe cladding system for HVAC pipe insulations in hospitals, public buildings and commercial centers. In other words, wherever building materials require fire protection in accordance with environmental impact criteria.

Kespet aluminium foil claddings are metal. They have a fire safety classification of A1, which is the EU classification for "fireproof without need for testing" (EU Commission decision 2000/605/EY).

- Suitable for all insulation materials.
- Quality according to standard SFS 3914 P2.1.
- Fire safe.
- Environmental friendly.
- 100 % recycleable.
- Easy to install.





PVC claddings

A compact, light gray plastic coating protects the insulated piping, bends and other pipe sections as well as valves against mechanical stress, abrasion and moisture.





All you need for insulation installations!

The tools in our retail range have been selected due to successfull long-term performance. With the right kind of high-quality accessories and hand tools, you can ensure the quality of your work and save time during installation.

In our selection:

- GOEBEL and Würth rivets
- GOEBEL screws
- GOEBEL toggles
- Accessories for technical insulations
- Accessories for claddings
- Hand tools
- Electric tools
- Site and protective equipment



Product prices, storage products, package sizes and pricing criteria in our online price list, please visit:

www.kespet.fi/en/catalogue





Rivets

Sockets

Sheet metal screws

Toggles

Drill head screws

Goebel Rivets and Drill Head Screws



Pull rivet round head		
Code	Size	pieces/box
Aluminium/Steel		
7070132800	3,2 × 8	1000
7070132100	3,2 x 10	1000
7070132120	3,2 x 12	1000
7070140120	4,0 x 12	1000
7070148120	4,8 x 12	500
Steel/Steel		
<i>7</i> 080132800	3,2 × 8	1000
<i>7</i> 080132100	3,2 x 10	1000
<i>7</i> 080132120	3,2 x 12	1000
<i>7</i> 080140120	4,0 x 12	1000
<i>7</i> 080148120	4,8 x 12	500
A2/A2 = Stainless ste	el	
<i>7</i> 030132600	3,2 × 6	1000
<i>7</i> 030132800	3,2 × 8	1000
7030132100	3,2 x 10	1000
<i>7</i> 030132120	3,2 × 12	1000
<i>7</i> 030140120	4,0 x 12	500
<i>7</i> 030148120	4,8 × 12	500
A4/A4 = Acid-proof	steel	
<i>7</i> 044132800	3,2 × 8	1000
<i>7</i> 044132100	3,2 x 10	1000
7044148120	4,8 x 12	500





Two-headed pop-rivets					
Code	Size	pieces/box			
9013250000	3,25	10			
9013300000	3,3	10			
9014100000	4,1	10			
9014900000	4,9	10			



A2 stainless

steel



A2 stainless steel silver GL-coating



A4 acid-proof silver GL-coating



Aluminium/ Steel



Aluminium

Goebel Screws

Sheet metal screws with hexagon head groove						
Code	Additional information	Material	Size	pieces/box	Head	
5010142130	solid ground plate	galvanized	4,2 x 13	1000	SW 1/4"	
5030142130	solid ground plate	A2	4,2 x 13	1000	SW 7	
5063142130	solid ground plate, GL-coating	AISI 410	4,2 x 13	1000	SW 1/4"	

Drill head screws with hexagon head groove					
Code	Drill screws	Material	Size	pieces/box	Head
4010142130	solid ground plate	galvanized	4,2 x 13	1000	SW 7
4010142160	solid ground plate	galvanized	4,2 × 16	1000	SW 7
4010142190	solid ground plate	galvanized	4,2 x 19	1000	SW 7
4010148190	solid ground plate	galvanized	4,8 x 19	1000	SW 8
4066142190	solid ground plate, GL-coating	AISI 410	4,2 x 19	1000	SW 7
4066148160	solid ground plate, GL-coating	AISI 410	4,8 x 16	500	SW 8
4066148190	solid ground plate, GL-coating	AISI 410	4,8 x 19	500	SW 8
4066148250	solid ground plate, GL-coating	AISI 410	4,8 × 25	500	SW 8
8881042160	solid ground plate, GL-coating	A2 (BI-metal)	4,2 × 16	1000	SW 7
8881048250	solid ground plate, GL-coating	A2 (BI-metal)	4,8 × 25	500	SW 8
Drill screws with weath	nerstrip				
4010348190	galvanized ground plate, EPDM-strip	galvanized	4,8 x 19	500	SW 8
4062448160	GL-coating, stainless steel ground plate, EPDM-strip	AISI 410	4,8 × 16	500	SW 8
4062448190	GL-coating, stainless steel ground plate, EPDM-strip	AISI 410	4,8 × 19	500	SW 8
4062448250	GL-coating, stainless steel ground plate, EPDM-strip	AISI 410	4,8 × 25	500	SW 8
8990042160	GL-coating, stainless steel ground plate, EPDM-strip	A2 (BI-metal)	4,2 × 16	500	SW 7
8990048190	GL-coating, stainless steel ground plate, EPDM-strip	A2 (BI-metal)	4,8 x 19	500	SW 8
8890148200	GL-coating, stainless steel ground plate, EPDM-strip, no groove	A2 (BI-metal)	4,8 × 20	250	SW 8
8890048250	GL-coating, stainless steel ground plate, EPDM-strip	A2 (BI-metal)	4,8 × 25	500	SW 8





Sockets		
Code	Product name	Size
5000405507	Spring socket	AW 7
5000405508	Spring socket	AW 8
5000400014	Magnet socket	AW 1/4
5000400007	Magnet socket	AW 7
5000400008	Magnet socket	AW 8



Goebel Toggles

Stock products are underlined.

Code	Toggle model	pieces/box
	0/40	
<u>5543001040</u>	galvanized	100
<u>5544512040</u>	stainless steel A2	100
5577533040	aluminium	100
	0/40F	
<u>5543011040</u>	galvanized	100
<u>5544502040</u>	stainless steel A2	100
	1/60	
<u>5543001160</u>	galvanized	100
<u>5544502160</u>	stainless steel A2	100
5577533160	aluminium	100
	1/60F	
5543011160	galvanized	100
5544512160	stainless steel A2	100
	2/55/60	
<u>5543001255</u>	galvanized	100
<u>5544512256</u>	stainless steel A2	100
<u>5577533250</u>	aluminium	100
	2/55/60F	
<u>5543011255</u>	galvanized	100
554451225 <u>5</u>	stainless steel A2	100
	3/70	
5543001370	galvanized	100
5544512370	stainless steel A2	100
5577533370	aluminium	100
	3/70F	
5543011370	galvanized	100
5544502370	stainless steel A2	100
	4/80	
<u>5543001480</u>	galvanized	50
5544502480	stainless steel A2	50
	4/80F	
<u>5543011480</u>	glavanized	50
5544512480	stainless steel A2	50
	50	
5543011500	galvanized	100







Goebel Toggles

Stock products are underlined.

Code	Toggle model	pieces/box
	42SP	
5543010042	galvanized	100
5544510042	stainless steel A2	100
	42SPPC	
5543020042	galvanized	100
5544520042	stainless steel A2	100
	44PC	
5543011044	galvanized	50
5544511044	stainless steel A2	50
5577511044	aluminium	50
	44SP	
5543010044	galvanized	50
5544510044	stainless steel A2	50
	44SPPC	
5543020044	galvanized	50
5544520044	stainless steel A2	50
	65F	
5540044650	galvanized	10
5588544650	stainless steel A2	10
	80F	
5540044800	galvanized	10
5588544800	stainless steel A2	10
	701\$	
5543312701	galvanized	10
5544512744	stainless steel A4	10
	702S	
5543312702	galvanized	10
5544512702	stainless steel A4	10
	703S	
5543312703	galvanized	10
5544512703	stainless steel A4	10
	2/50	
5543012500	galvanized	100
<u>5544522500</u>	stainless steel A2	100
5544532500	stainless steel A4	100
	2/100	
<u>5544522100</u>	stainless steel A2	50



Elastomeric Insulation Accessories

Product	Quantity
Armaflex EL elastomeric insulation tape	roll
Armaflex Ultima elastomeric insulation tape	roll
Armaflex Ultima adhesive 700	11
Armaflex general adhesive 520 with brush	0,25
Armaflex general adhesive 520	0,5
Armaflex general adhesive 520	11
Armaflex general adhesive 520	2,5
Armaflex special cleaning agent	11



Product	Quantity
Neofix 1065 contact adhesive	1000 ml
Neofix 1065 R spray adhesive	1000 ml
Neofix 1065 R spray adhesive	3000 ml
Brush 13 mm	piece
Brush 30 mm	piece
Brush 70 mm	piece
Brush 11 mm for adhesive can	piece
Brush 17 mm adhesive can	piece
Brush 25 mm adhesive can	piece
Adhesive can (17 mm brush) with short tip	piece
Adhesive can (17 mm brush) with long tip	piece
Seam tape 38 mm x 33 m, black pvc	roll
Seam tape 50 mm x 33 m, black pvc	roll
Ceramic knives	
Foldable knife in holster, blade 7,5 cm	piece
Knife in holster, blade 10 cm	piece
Knife in holster, blade 12,5 cm	piece





PVC and Aluminium Foil Cladding Accessories

Aluminium foil claddings



Product	Package unit
Rivets, galvanized	1000 pieces
Rivet tool	piece
Aluminium tape 50 mm x 100 m	roll

PVC claddings



Product	Package unit
PVC rivets, white and gray	1000 pieces
PVC rivet tool straight/angle	piece
PVC rivet tool straight	piece
PVC rivet tool angle	piece
Seam tape 25 mm x 33 m, gray	roll
Seam tape 30 mm x 33 m, gray	roll

Sebald end mountings



Width mm	m/roll	m/box
20	10	50
30	10	50
40	10	50
50	10	50
60	10	50
80	10	50
100	10	50

Also available in colours.



Cutting table for PVC claddings

Cutting table makes working on a site easier.
On the table you can cut up to 1200 mm wide PVC cladding. Working height is 93 cm. The table has a measuring scale and a cutting drill.

Ask for an offer!

Roofing screws





4,8 x 25, spiked roofing screw 250 pieces/box

RR20 white RR21 light gray RR23 dark gray RR29 red RR32 dark brown RR33 black RR40 silver RR750 brick red

Rivets



AL/ST 3,2 x 8, 500 pieces/box round head AL/ST

RR20 white RR21 light gray RR23 dark gray RR29 red RR32 dark brown RR33 black RR40 silver

Colour range









40 Silver

750 Brick red

NB! For print-technical reasons, the colors do not exactly match the correct color tones.



5 section tool box

Size $530 \times 195 \times 200$ mm.



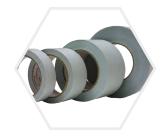
Tool box

Removable tool section covered with fibre board. Size $830 \times 440 \times 340$ mm.



Marker pen Textmark 700

Colours: red and black. Available colours according to the order: blue, green, yellow, brown, orange and violet.



Coroplast aluminium tape

Pure aluminium tape. 50 mm x 25 m 54 rolls/box

50 mm x 50 m 24 rolls/box

50 mm x 100 m 24 rolls/box

75 mm x 100 m 16 rolls/box



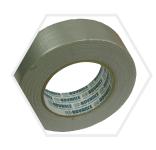
Tape for tape machine

Plastic based aluminium tape. 50 mm x 100 m, 54 rolls/box 75 mm x 100 m, 36 rolls/box



Tape machine

A handy tool for taping. Spare blades are also available.



AC tape

50 mm x 50 m.



Galvanized steel wire

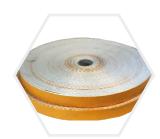
Thickness 0,9 mm, weight 170 g. 100 rolls/box.

Stainless steel wire. Thickness 0.9 mm.



Handle

Stainless steel. Total length 160 mm.



Glass fibre strip

 $2 \text{ mm} \times 30 \text{ mm} \times 50 \text{ mm}$ with adhesive surface.



Piano hinge

Stainless steel length 3,5 m x width 40 mm, thickness 0,7 mm.



Matt hooks

 2×115 mm, 100 pieces/bag.



Lock plates

Diameter 40 mm, fastening spike Ø 4 mm. 6000 pieces/box.

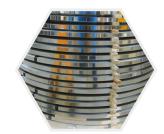
Galvanized steel, stainless steel.



Climatech adhesive spikes

Round fastening plate 2,7 mm for adhesive spikes. Includes fastening plate. 100 pieces/box.

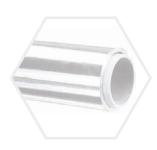
Lengths mm: 19, 25, 32, 42, 51, 63, 89, 114, 125, 140.



Binding bands

Galvanized 16 x 0,5 mm. ca. 25 kg/coil.

Stainless steel 16 x 0,5 mm. ca. 20 kg/coil.



Aluminium foil

Width x thickness: 1000×0.05 mm.

Width x thickness: 1000 x 0,08 mm.

According to standard SFS 3914.P4.



Ceramic knives

Foldable knife in holster, blade 7,5 cm.

Knife in holster, blade 10 cm.

Knife in holster, blade 12,5 cm.



Multipurpose knife

Carbon steel blade 2,5 mm. Quenching 58-60 HRC. Plastic handle and case with belt holder/hanger.



HVAC knife

Matte chromed blade. File for trimming. Carbon steel blade 2,5 mm. Quenching 58-60 HRC. Plastic handle and case with belt holder/hanger.



Wool knife, wooden handle

Blade lengths 150, 200 and 280 mm.



Wool shears

Straight basic scissors.

Cut length 230 mm

Total length 570 mm



Wool shears with long handles

Long-armed scissors enable ergonomic working position. Cut length 200 mm, total length 970 mm.



Insulators wool shears

Cut length: 180 mm Total length: 520 mm



Forged wool shears

Forged wave blade. Total length 570 mm.



Angle rule

Sizes: 150 x 200 mm 200 x 400 mm



Sheet metal tensioners

DS 3 sheet metal clip, compatible with 3,2 mm hole.

DS 4 sheet metal clip, used with pliers.

Pliers.



Installers angle

Lengths 200, 300 and 500 mm.



Compass

Lengths 200, 250 and 300 mm.



Sheet metal shears Erdi 118

Designed for long straight cuts. Lenght 300 mm, right and left.



Sheet metal shears Erdi 116

Stainless steel, for straight and form cuts. Length 280 mm, right and left.



Sheet metal shears, Isolier-Perfekt

Excellent for cutting small roundings and curves. Round holes and straight cuts can be cut. Max. sheet metal strength 1 mm stainless steel. Length 280 mm, right and left



Bahco® sheet metal shears

Traditional sheet metal workers scissors. Large jaw opening angle enables also specific cuttings. Length 280 mm, right and left.



Sheet metal shears Erdi 29 ASS

Lever operated sheet metal scissors for straight and form cuts. Cuts very easily. Length 280 mm, right and left.



Bending pliers

Bended 42° D392-160 jaw width 160 mm

Straight D391-160 jaw width 160 mm



Molding pliers

Straight, jaw width 60 mm.

Bent 45°, jaw width 60 mm.



Knipex combined pliers

Manufactured from special steel for tools. Pliers are efficient in cutting and with gripped jaws. Chrome plated, handles with multicomponent thick grips.

Lengths 160 and 180 mm



Vise-Grip® locking pliers

Manufactured from high-grade heat treated alloy steel for maximum durability. Classic trigger release designed to provide maximum locking force. 7"/175 mm



Knipex side cutters

Side cutters manufactured from special steel for tools. Single joint. Handles with multi-component thick grips.

Lengths 160 and 180 mm.



Fiskars scissors

Ergonomic classic model, right and left handed.



Fiskars knife sharpener

Fiskars Roll-Sharp sharpener. Usable by left or right hand. Regular sharpening of a knife extends the knife's life. Suitable for sharpening knives and axes.



Puncher chiesel

Stubai 40 mm blade. Witte 50 mm blade.



Utility knife

Blade width 18 mm. Spare blades 18 mm, 10 pieces.



Single control cladding tightener

For installing sheet metal claddings.



Signode ST strapping tool

Professional hand tool for installing tank sheet metal claddings and large pipe claddings as well as fastening pipe insulation fastening bands. Also suitable for fastening package bands.

Band width 9,5-19,0 mm. Band thickness 0,38-0,63 mm.



Bostitch P-7 staple pliers

Staples 2500 pieces/box.



Steel bender's hook

Wired mat plaiting hook.



Pulley

Wheel size Ø 250 mm.



Cement pistol



Talmeter

Easy to measure inner and outer dimensions, draw arches, diameters and ciscuits.

Sizes: 2,1 m, 3,1 m and 6,1 m.

Spare tapes available.



Barrow for carrying and opening

Extremely useful when handling and opening small sheet metal coils.



PIN WELDER PW-33 welding tool for insulation brackets

Durable welding equipment for insulation brackets Weight 4 kg. Built-in timer for optimal welding time. Metal case included.



CLIM PINS weldable insulation fasteners

Can be weld with PIN WELDER PW-33 equipment or similar. Galvanized. Round fastener plate 2,0 mm for rivets. Hole 1,4 mm. Lengths 19/32/42/51/63/89/114 mm. 1000 pieces/box. 140 mm rivets 500 pieces/box.



Airpower 1

Pneumatic riveter for rivets 2,4-5,0 mm, for all materials. Riveter has a suction that prevents rivets to fall and collects chucks.



Pull-rivet pliers TIOS 4

For 2,4 mm-4,0 mm pop-rivets.



Gesipa battery riveter "Akkubird"

Gesipa 14,4V, pop-rivet diameter up to 5 mm for all materials. Spare parts: Battery, clamping jaws, clamping jaws rivet Ø 6,3 mm mouthpiece, pressure socket, spare cover, nozzle 17/24, nozzle 17/27, nozzle 17/29, nozzle 17/32.



Pop-rivet pliers TT55D

For 2,4 mm-4,0 mm pop-rivets.



Goebel riveter GO-100

Wireles riveter with two batteries 14,4 V. For rivets 2,4-5,0 mm, for all materials.



Dewalt battery bending machine

Max. working thickness aluminium 1,2 mm, hot galvanized 1,0 mm and stainless 0,9 mm. Includes carrying device, quick charging device, 2 x battery 4,0 Ah, 18 V NiMH and roller pairs for beading V4, V6, V8 and V10. Wrinkle and plain roller pairs according to order. Spare parts: spare battery, spare charging device, stopper plate, wrinkle rollers and plain rollers.



5 Chuartmanns ISOLIERMASCHINEN

SMW 50.00



Schwartmanns SMW 50.00 is a light and compact hand beading machine, which is specially designed transitions and on-site work. Versatile mounting options (screw and pipe fasteners) enable fastening in different scaffoldings. The frame is made of aluminium and the beading controllers stay in place on maintenance free wheel bearings. <u>Includes a pipe fastener</u>, roller pairs of beading (V1 and V5) and a key for opening edging rollers. Available additional equipment: support leg, fastening piece for the cutting tool and edge rollers.

Protective Equipment



PETZL helmet

Protective helmet with full strapping. Helmet has an adaptor for eye protection, face visor and head lamp. Helmet fulfills standard EN 397 requirements for impacts, dropping objects and side pressure also in low temperatures. Also available in blue and yellow.



PETZL led light

This forehead worn led light has a high quality optical combination beam, which offers even lighting for close-up work



Protective visor

Models clear/safety.



Glove LH polyurethane

Excellent working feel. (12 pieces/pack).



Respiration masks

With ventilator P2 12 pieces/box

Without ventilator P2 20 pieces/box



Installers glove

Excellent overall glove. (12 pieces/pack).



HI-VIS Winter Glove

Excellent cold protection. Good working touch (12 pieces/pack).



Cut protection glove CUT-4

Good cut protection and work feel. (12 pieces/pack).

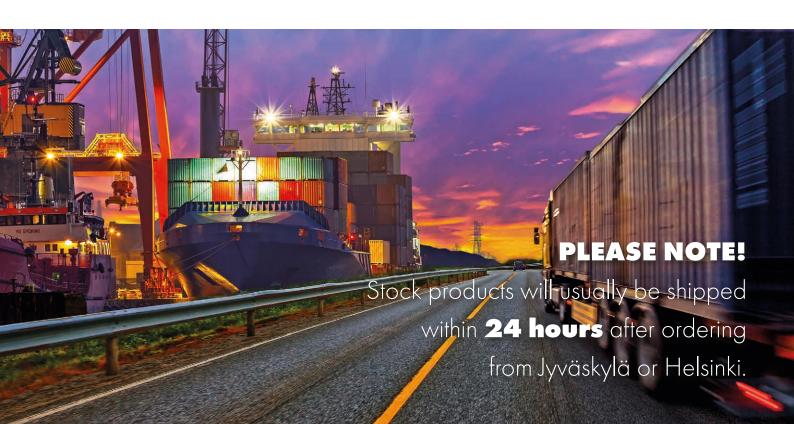
Conditions of Carriage

Conditions of carriage

Foreign freight deliveries by separate offer and contract.

Otherwise we follow the general contract terms NL92 and the general procurement and delivery terms of construction products RYHT 2000.





General Delivery Terms

1. Prices

Prices in our price list are in Euros without VAT, free in our ware-houses

2. Freight, cargo insurance and transportation incidents

Insurances: Deliveries under customer's responsibility, we guarantee delivery only at the buyer's request and expense.

Transport damages: Damages have to be verified by both the purchaser and the transportation company representative. The damage has to be marked in the bill of carriage.

3. Packaging and other extra delivery costs

Packaging, small delivery and small invoice extra costs and paper invoices are charged according to the price list for Freight, packaging and other delivery charges.

4. Returns

When delivery has been accomplished according to the order, the goods cannot be returned.

5. Price list validity

Pricing of goods is carried out according to the valid price catalogue. Kespet Oy has a right to change the price catalogue without advance notice.

6. Delivery times

Stock products will be sent mainly within 24 hours from the order (from Jyväskylä or Helsinki). Products not in stock are normally sent out within 2 weeks or by agreement. Projects and exceptionally large amounts will be agreed separately. Products with less than 5 days of delivery cannot have their orders canceled or modified.

7. Terms of payment

According to agreement, penalty interest of a delayed payment is 11 %.

8. Material certificates

We supply the material certificates on each delivery batch at the customer's request. The request is to be made at the same time with the order. We will charge the costs of the retrieved material certificates.

9. Claims and corrective actions

If the delivery is incorrect, the purchaser should inform the vendor within 7 business days calculated from the day of receiving the goods. The vendor has the right either to correct the error or to deliver a new product.

10. Liability for damages

The vendor's liability for damages is limited to the purchase price of the delivery. The vendor is not responsible for any consequential damages, such as third-party costs.

11. Force Majeure

Kespet Oy reserves all rights to delivery schedule changes or to be fully/partially freed from delivery obligations in such force majeure scenarios such as war, rebellion, strike, worker blockade, material blockade proclaimed by Finland's Employer's General Group, delayed or incomplete deliveries of finished products or machinery, devices, raw materials, or in the case of machinery faults, natural disasters, traffic dislocation or other similiar or comparable supply difficulties

12. Change of ownership

Ownership of the goods is transferred to purchaser when the purchase price is paid in full, unless otherwise agreed. Acceptance is not considered a payment in this context.

13. Transfer of information

Sender is responsible for the correctivity of information that has been sent to other parties.

14. Settling of disputes

Disagreements arising from the interpretation of these terms of delivery shall be settled, unless otherwise agreed, at the vendor's inferior court.

15. Other terms

We are operating in accordance with the General Sales Terms of Steel and Metals of the Technical Trade Union 2010. Otherwise we follow the general contract terms NL92 and the general procurement and delivery terms of construction products RYHT 2000.

Our professional staff is always ready to serve!



Kespet Oy Jyväskylä

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Kespet Oy Helsinki

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Kespet Oy offers a high quality and comprehensive material service for HVAC and industrial construction both in Finland and abroad.

The comprehensive material service speeds up the planning, supervision and implementation of projects and saves time and expenses. Kespet operations are controlled by management system standards ISO 9001 and ISO 14001.

We are a responsible company which takes care of customer satisfaction, our personnel, financial responsibility and environmental responsibility.

FIRE SAFE, DURABLE AND RECYCLABLE

COMPATIBLE AND EASY TO INSTALL

HIGH-CLASS QUALITY, TESTED AND ACCURATE

DEPENDABLE AND APPROVED









KESPET OY Cladding the future





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