

DECLARATION OF PERFORMANCE

No. 32/2021

1. Unique identification code of the product-type:

Gränges_Konin_AK4B

2. Intended use or uses:

Intended for internal and external loaded construction elements of buildings

3. Manufacturer:

Gränges Konin S.A., Bolesława Prusa 2 Street, 00-493 Warsaw, Poland
Correspondence address: Hutnicza 1 Street, 62-510 Konin, Poland

4. System or systems of assessment and verification of constancy of performance:

System 2+

5. Harmonised standard:

EN 15088: 2005

Notified body/ies:

Research and Certification Department „ZETOM” prof. F. Stauba in Katowice sp. z o. o.,
Notified Body number 1436

6. Declared performance: Sheet, plate and strip aluminum alloy AK4B cold rolled

Essential characteristics	Performance	Harmonised technical specification																																																																																																				
Dimensional tolerances IDT EN 485-4	Thickness tolerances <table border="1" data-bbox="376 1149 1203 1742"> <thead> <tr> <th colspan="2" data-bbox="376 1149 651 1312" rowspan="2">Specified thickness [mm]</th> <th colspan="4" data-bbox="651 1149 1203 1182">Thickness tolerances [mm]</th> </tr> <tr> <th data-bbox="651 1182 791 1312">Up to and including 1000mm</th> <th data-bbox="791 1182 932 1312">Over 1000mm up to and including 1250mm</th> <th data-bbox="932 1182 1072 1312">Over 1250mm up to and including 1600mm</th> <th data-bbox="1072 1182 1203 1312">Over 1600mm up to and including 2000mm</th> </tr> <tr> <th data-bbox="376 1312 517 1361">Over</th> <th data-bbox="517 1312 651 1361">Up to and including</th> <th data-bbox="651 1312 791 1361">mm</th> <th data-bbox="791 1312 932 1361">mm</th> <th data-bbox="932 1312 1072 1361">mm</th> <th data-bbox="1072 1312 1203 1361">mm</th> </tr> </thead> <tbody> <tr><td>0,20</td><td>0,4</td><td>±0,02</td><td>±0,04</td><td>±0,05</td><td>-</td></tr> <tr><td>0,4</td><td>0,5</td><td>±0,03</td><td>±0,04</td><td>±0,05</td><td>±0,06</td></tr> <tr><td>0,5</td><td>0,6</td><td>±0,03</td><td>±0,05</td><td>±0,06</td><td>±0,07</td></tr> <tr><td>0,6</td><td>0,8</td><td>±0,03</td><td>±0,06</td><td>±0,07</td><td>±0,08</td></tr> <tr><td>0,8</td><td>1,0</td><td>±0,04</td><td>±0,06</td><td>±0,08</td><td>±0,09</td></tr> <tr><td>1,0</td><td>1,2</td><td>±0,04</td><td>±0,07</td><td>±0,09</td><td>±0,10</td></tr> <tr><td>1,2</td><td>1,5</td><td>±0,05</td><td>±0,09</td><td>±0,10</td><td>±0,11</td></tr> <tr><td>1,5</td><td>1,8</td><td>±0,06</td><td>±0,10</td><td>±0,11</td><td>±0,12</td></tr> <tr><td>1,8</td><td>2</td><td>±0,06</td><td>±0,11</td><td>±0,12</td><td>±0,14</td></tr> <tr><td>2</td><td>2,5</td><td>±0,07</td><td>±0,12</td><td>±0,13</td><td>±0,15</td></tr> <tr><td>2,5</td><td>3,0</td><td>±0,08</td><td>±0,13</td><td>±0,15</td><td>±0,17</td></tr> <tr><td>3,0</td><td>3,5</td><td>±0,10</td><td>±0,15</td><td>±0,17</td><td>±0,18</td></tr> <tr><td>3,5</td><td>4,0</td><td>±0,15</td><td>±0,20</td><td>±0,22</td><td>±0,23</td></tr> <tr><td>4,0</td><td>5,0</td><td>±0,18</td><td>±0,22</td><td>±0,24</td><td>±0,25</td></tr> </tbody> </table> <p data-bbox="376 1720 1203 1742">When measuring the thickness, a zone 10mm wide from the edges of the product shall be disregarded.</p>	Specified thickness [mm]		Thickness tolerances [mm]				Up to and including 1000mm	Over 1000mm up to and including 1250mm	Over 1250mm up to and including 1600mm	Over 1600mm up to and including 2000mm	Over	Up to and including	mm	mm	mm	mm	0,20	0,4	±0,02	±0,04	±0,05	-	0,4	0,5	±0,03	±0,04	±0,05	±0,06	0,5	0,6	±0,03	±0,05	±0,06	±0,07	0,6	0,8	±0,03	±0,06	±0,07	±0,08	0,8	1,0	±0,04	±0,06	±0,08	±0,09	1,0	1,2	±0,04	±0,07	±0,09	±0,10	1,2	1,5	±0,05	±0,09	±0,10	±0,11	1,5	1,8	±0,06	±0,10	±0,11	±0,12	1,8	2	±0,06	±0,11	±0,12	±0,14	2	2,5	±0,07	±0,12	±0,13	±0,15	2,5	3,0	±0,08	±0,13	±0,15	±0,17	3,0	3,5	±0,10	±0,15	±0,17	±0,18	3,5	4,0	±0,15	±0,20	±0,22	±0,23	4,0	5,0	±0,18	±0,22	±0,24	±0,25	EN 15088:2005
Specified thickness [mm]				Thickness tolerances [mm]																																																																																																		
		Up to and including 1000mm	Over 1000mm up to and including 1250mm	Over 1250mm up to and including 1600mm	Over 1600mm up to and including 2000mm																																																																																																	
Over	Up to and including	mm	mm	mm	mm																																																																																																	
0,20	0,4	±0,02	±0,04	±0,05	-																																																																																																	
0,4	0,5	±0,03	±0,04	±0,05	±0,06																																																																																																	
0,5	0,6	±0,03	±0,05	±0,06	±0,07																																																																																																	
0,6	0,8	±0,03	±0,06	±0,07	±0,08																																																																																																	
0,8	1,0	±0,04	±0,06	±0,08	±0,09																																																																																																	
1,0	1,2	±0,04	±0,07	±0,09	±0,10																																																																																																	
1,2	1,5	±0,05	±0,09	±0,10	±0,11																																																																																																	
1,5	1,8	±0,06	±0,10	±0,11	±0,12																																																																																																	
1,8	2	±0,06	±0,11	±0,12	±0,14																																																																																																	
2	2,5	±0,07	±0,12	±0,13	±0,15																																																																																																	
2,5	3,0	±0,08	±0,13	±0,15	±0,17																																																																																																	
3,0	3,5	±0,10	±0,15	±0,17	±0,18																																																																																																	
3,5	4,0	±0,15	±0,20	±0,22	±0,23																																																																																																	
4,0	5,0	±0,18	±0,22	±0,24	±0,25																																																																																																	

Essential characteristics	Performance							Harmonised technical specification			
Dimensional tolerances IDT EN 485-4	Width tolerances for sheet and plate							EN 15088:2005			
	Specified thickness [mm]		Width tolerance for specified width [mm]								
	Over	Up to and including	Up to and including 500mm	Over 500mm up to and including 1250mm	Over 1250mm up to and including 2000mm						
	0,20	3,0	+1,5 0	+3 0	+4 0						
3,0	6,0	+3 0	+4 0	+5 0							
6,0	20	+4 0	+5 0	+5 0							
Mechanical properties according to Internal documentation	Length tolerances for sheet and plate										
	Specified thickness [mm]		Length tolerance for specified length [mm]								
	Over	Up to and including	Up to and including 1000mm	Over 1000mm up to and including 2000mm	Over 2000mm up to and including 3000mm	Over 3000mm up to and including 4000mm	Over 5000mm	+0,2% of specified length			
	0,20	3,0	+3 0	+4 0	+6 0	+8 0					
3,0	6,0	+4 0	+6 0	+8 0	+10 0						
6,0	20	+6 0	+8 0	+10 0	+10 0						
	Width tolerances for strip										
Specified thickness [mm]		Width tolerance for specified width [mm]									
Over	Up to and including	Up to and including 100mm	Over 100mm up to and including 300mm	Over 300mm up to and including 500mm	Over 500mm up to and including 1250mm	Over 1250mm up to and including 1650mm					
0,20	0,6	+0,3 0	+0,4 0	+0,6 0	+1,5 0	+2,5 0					
0,6	1,0	+0,3 0	+0,5 0	+1 0	+1,5 0	+2,5 0					
1,0	2,0	+0,4 0	+0,7 0	+1,2 0	+2 0	+2,5 0					
2,0	3,0	+1 0	+1 0	+1,5 0	+2 0	+2,5 0					
3,0	5,0	-	+1,5 0	+2 0	+3 0	+3 0					
	Temper		Tensile strength R _m		Yield strength R _{p0,2}		Elongation A _{50 mm}				
Specified thickness [mm]		[MPa]		[MPa]		[%]					
Over	Up to and including	min	max	min	max	min	max				
O	0,2 0,5 1,5 3,0	120 120 120 120	150 150 150 150	45 45 45 45		13 14 15 17					
H12	0,2 0,5 1,5	130 130 130	170 170 170	110 110 110		2 4 5					
H14	0,2 0,5 1,5	160 160 160	190 190 190	140 140 140		2 2 4					
H16	0,2 0,5	175 175	205 205	160 160		2 2					

Essential characteristics	Performance									Harmonised technical specification EN 15088:2005	
	Temper	Specified thickness [mm]		Tensile strength R _m [MPa]		Yield strength R _{p0,2} [MPa]		Elongation A50 mm [%]			
		Over	Up to and including	min	max	min	max	min	max		
Mechanical properties according to Internal documentation	H18	0,2	0,5	190		180		1			
		0,5	1,5	190		180		2			
		1,5	2,5	190		180		2			
	H22	0,2	0,5	130	170	90		6			
		0,5	1,5	130	170	90		8			
		1,5	3,0	130	170	90		8			
		3,0	4,0	130	170	90		10			
	H24	0,2	0,5	160	190	130		4			
		0,5	1,5	160	190	130		5			
		1,5	3,0	160	190	130		6			
		3,0	4,0	160	190	130		9			
	H26	0,2	0,5	175	205	150		3			
		0,5	1,5	175	205	150		4			
		1,5	3,0	175	205	150		7			
	H28	0,2	0,5	190		170		3			
		0,5	1,5	190		170		4			
		1,5	2,5	190		170		4			
	Weldability IDT EN 1999-1-1	NPD									
	Bendability	NPD									
	Fatigue strength	NPD									
	Dangerous substances according to Internal documentation	NO									
Durability rating IDT EN 1999-1-1	NPD										

The performance of the product identified above is in conformity with the declared performance/s.
This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011,
under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by:

Paweł Rutecki
Director of Development and Investment

Konin, 13 April 2021

Director of Development & Investment

 Paweł Rutecki