

DECLARATION OF PERFORMANCE

No. 35/2021

1. Unique identification code of the product-type:

Gränges_Konin_AK4M2

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 AK4M2 cold rolled

Essential characteristics	Performance	Harmonised technical specification																																																																																																				
Dimensional tolerances IDT EN 485-4	Thickness tolerances <table border="1" data-bbox="368 1149 1193 1742"> <thead> <tr> <th colspan="2" data-bbox="368 1149 643 1312" rowspan="2">Specified thickness [mm]</th> <th colspan="4" data-bbox="643 1149 1193 1182">Thickness tolerances [mm]</th> </tr> <tr> <th data-bbox="643 1182 786 1312">Up to and including 1000mm</th> <th data-bbox="786 1182 898 1312">Over 1000mm up to and including 1250mm</th> <th data-bbox="898 1182 1010 1312">Over 1250mm up to and including 1600mm</th> <th data-bbox="1010 1182 1193 1312">Over 1600mm up to and including 2000mm</th> </tr> <tr> <th data-bbox="368 1312 504 1357">Over</th> <th data-bbox="504 1312 643 1357">Up to and including</th> <th data-bbox="643 1312 786 1357">mm</th> <th data-bbox="786 1312 898 1357">mm</th> <th data-bbox="898 1312 1010 1357">mm</th> <th data-bbox="1010 1312 1193 1357">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="368 1720 1193 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	Specified thickness		Tensile strength R _m		Yield strength R _{p0,2}		Elongation A ₅₀ mm			
		[mm]		[MPa]		[MPa]		[%]			
		Over	Up to and including	min	max	min	max	min	max		
		0,2	0,5	145	185	50		13	O		
0,5	1,5	145	185	50		14					
1,5	3,0	145	185	50		15					
3,0	4,0	145	185	50		17					
H12	0,2	165	205	145		2	H12				
H12	0,5	165	205	145		4					
H12	1,5	165	205	145		5					
H14	0,2	185	225	165		2	H14				
H14	0,5	185	225	165		2					
H14	1,5	185	225	165		4					
H16	0,2	205	245	185		2	H16				
H16	0,5	205	245	185		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	225		205		1			
		0,5	1,5	225		205		2			
		1,5	2,5	225		205		2			
	H22	0,2	0,5	165	205	120		6			
		0,5	1,5	165	170	120		8			
		1,5	3,0	165	170	120		8			
		3,0	4,0	165	170	120		10			
	H24	0,2	0,5	185	225	140		4			
		0,5	1,5	185	225	140		5			
		1,5	3,0	185	225	140		6			
		3,0	4,0	185	225	140		9			
	H26	0,2	0,5	205	245	160		3			
		0,5	1,5	205	245	160		4			
		1,5	3,0	205	245	160		7			
	H28	0,2	0,5	225		180		3			
		0,5	1,5	225		180		4			
		1,5	2,5	225		180		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