

DECLARATION OF PERFORMANCE

No. 21/2021

1. Unique identification code of the product-type:

Gränges_Konin_5086

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. Harmonized 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 EN AW-5086 cold rolled

Essential characteristics	Performance	Harmonized technical specification																																																																																																				
Dimensional tolerances IDT EN 485-4	Thickness tolerances <table border="1" data-bbox="370 1162 1198 1756"> <thead> <tr> <th colspan="2" data-bbox="370 1162 647 1323" rowspan="2">Specified thickness [mm]</th> <th colspan="4" data-bbox="647 1162 1198 1196">Thickness tolerances [mm]</th> </tr> <tr> <th data-bbox="647 1196 783 1323">Up to and including 1000mm</th> <th data-bbox="783 1196 919 1323">Over 1000mm up to and including 1250mm</th> <th data-bbox="919 1196 1054 1323">Over 1250mm up to and including 1600mm</th> <th data-bbox="1054 1196 1198 1323">Over 1600mm up to and including 2000mm</th> </tr> <tr> <th data-bbox="370 1323 505 1373">Over</th> <th data-bbox="505 1323 647 1373">Up to and including</th> <th data-bbox="647 1323 783 1373">mm</th> <th data-bbox="783 1323 919 1373">mm</th> <th data-bbox="919 1323 1054 1373">mm</th> <th data-bbox="1054 1323 1198 1373">mm</th> </tr> </thead> <tbody> <tr><td data-bbox="370 1373 505 1402">0,20</td><td data-bbox="505 1373 647 1402">0,4</td><td data-bbox="647 1373 783 1402">±0,02</td><td data-bbox="783 1373 919 1402">±0,04</td><td data-bbox="919 1373 1054 1402">±0,05</td><td data-bbox="1054 1373 1198 1402">-</td></tr> <tr><td data-bbox="370 1402 505 1431">0,4</td><td data-bbox="505 1402 647 1431">0,5</td><td data-bbox="647 1402 783 1431">±0,03</td><td data-bbox="783 1402 919 1431">±0,04</td><td data-bbox="919 1402 1054 1431">±0,05</td><td data-bbox="1054 1402 1198 1431">±0,06</td></tr> <tr><td data-bbox="370 1431 505 1460">0,5</td><td data-bbox="505 1431 647 1460">0,6</td><td data-bbox="647 1431 783 1460">±0,03</td><td data-bbox="783 1431 919 1460">±0,05</td><td data-bbox="919 1431 1054 1460">±0,06</td><td data-bbox="1054 1431 1198 1460">±0,07</td></tr> <tr><td data-bbox="370 1460 505 1489">0,6</td><td data-bbox="505 1460 647 1489">0,8</td><td data-bbox="647 1460 783 1489">±0,03</td><td data-bbox="783 1460 919 1489">±0,06</td><td data-bbox="919 1460 1054 1489">±0,07</td><td data-bbox="1054 1460 1198 1489">±0,08</td></tr> <tr><td data-bbox="370 1489 505 1518">0,8</td><td data-bbox="505 1489 647 1518">1,0</td><td data-bbox="647 1489 783 1518">±0,04</td><td data-bbox="783 1489 919 1518">±0,06</td><td data-bbox="919 1489 1054 1518">±0,08</td><td data-bbox="1054 1489 1198 1518">±0,09</td></tr> <tr><td data-bbox="370 1518 505 1547">1,0</td><td data-bbox="505 1518 647 1547">1,2</td><td data-bbox="647 1518 783 1547">±0,04</td><td data-bbox="783 1518 919 1547">±0,07</td><td data-bbox="919 1518 1054 1547">±0,09</td><td data-bbox="1054 1518 1198 1547">±0,10</td></tr> <tr><td data-bbox="370 1547 505 1576">1,2</td><td data-bbox="505 1547 647 1576">1,5</td><td data-bbox="647 1547 783 1576">±0,05</td><td data-bbox="783 1547 919 1576">±0,09</td><td data-bbox="919 1547 1054 1576">±0,10</td><td data-bbox="1054 1547 1198 1576">±0,11</td></tr> <tr><td data-bbox="370 1576 505 1606">1,5</td><td data-bbox="505 1576 647 1606">1,8</td><td data-bbox="647 1576 783 1606">±0,06</td><td data-bbox="783 1576 919 1606">±0,10</td><td data-bbox="919 1576 1054 1606">±0,11</td><td data-bbox="1054 1576 1198 1606">±0,12</td></tr> <tr><td data-bbox="370 1606 505 1635">1,8</td><td data-bbox="505 1606 647 1635">2</td><td data-bbox="647 1606 783 1635">±0,06</td><td data-bbox="783 1606 919 1635">±0,11</td><td data-bbox="919 1606 1054 1635">±0,12</td><td data-bbox="1054 1606 1198 1635">±0,14</td></tr> <tr><td data-bbox="370 1635 505 1664">2</td><td data-bbox="505 1635 647 1664">2,5</td><td data-bbox="647 1635 783 1664">±0,07</td><td data-bbox="783 1635 919 1664">±0,12</td><td data-bbox="919 1635 1054 1664">±0,13</td><td data-bbox="1054 1635 1198 1664">±0,15</td></tr> <tr><td data-bbox="370 1664 505 1693">2,5</td><td data-bbox="505 1664 647 1693">3,0</td><td data-bbox="647 1664 783 1693">±0,08</td><td data-bbox="783 1664 919 1693">±0,13</td><td data-bbox="919 1664 1054 1693">±0,15</td><td data-bbox="1054 1664 1198 1693">±0,17</td></tr> <tr><td data-bbox="370 1693 505 1722">3,0</td><td data-bbox="505 1693 647 1722">3,5</td><td data-bbox="647 1693 783 1722">±0,10</td><td data-bbox="783 1693 919 1722">±0,15</td><td data-bbox="919 1693 1054 1722">±0,17</td><td data-bbox="1054 1693 1198 1722">±0,18</td></tr> <tr><td data-bbox="370 1722 505 1751">3,5</td><td data-bbox="505 1722 647 1751">4,0</td><td data-bbox="647 1722 783 1751">±0,15</td><td data-bbox="783 1722 919 1751">±0,20</td><td data-bbox="919 1722 1054 1751">±0,22</td><td data-bbox="1054 1722 1198 1751">±0,23</td></tr> <tr><td data-bbox="370 1751 505 1780">4,0</td><td data-bbox="505 1751 647 1780">5,0</td><td data-bbox="647 1751 783 1780">±0,18</td><td data-bbox="783 1751 919 1780">±0,22</td><td data-bbox="919 1751 1054 1780">±0,24</td><td data-bbox="1054 1751 1198 1780">±0,25</td></tr> </tbody> </table> <p data-bbox="370 1733 1198 1756">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]																																																																																																		
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Essential characteristics	Performance										Harmonized 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 IDT EN 485-2	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				
	0,20	3,0	+3 0	+4 0	+6 0	+8 0	+10 0	+0,2% of specified length			
	3,0	6,0	+4 0	+6 0	+8 0	+10 0	+10 0				
	6,0	20	+6 0	+8 0	+10 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					

Essential characteristics	Performance										Harmonized technical specification		
Mechanical properties IDT EN 485-2	Temper	Specified thickness		Tensile strength R _m		Yield strength R _{p0,2}		Elongation A50 mm		Bend radius		EN 15088:2005	
		[mm]		[MPa]		[MPa]		[%]		180°	90°		
	Over	Up to and including	min	max	min	max	min	max					
	H14	0,2 0,5 1,5 3,0 6,0 12,5	0,5 1,5 3,0 6,0 12,5 20,0	300 300 300 300 300 300	360 360 360 360 360 360	240 240 240 240 240 240		2 3 3 3 4	3				
	H16	0,2 0,5 1,5 3,0	0,5 1,5 3,0 4,0	325 325 325 325	385 385 385 385	270 270 270 270		1 2 2 2					
	H18	0,2 0,5 1,5	0,5 1,5 3,0	345 345 345		290 290 290		1 1 1					
	H22	0,2 0,5 1,5 3,0 6,0 12,5	0,5 1,5 3,0 6,0 12,5 20,0	275 275 275 275 275 275	335 335 335 335 335 335	185 185 185 185 185 185		5 6 7 8 10	9	2,0t 2,0t 2,0t	0,5t 1,5t 2,0t 2,5t 3,5t		
	H32	0,2 0,5 1,5 3,0 6,0 12,5	0,5 1,5 3,0 6,0 12,5 20,0	275 275 275 275 275 275	335 335 335 335 335 335	185 185 185 185 185 185		5 6 7 8 10	9	2,0t 2,0t 2,0t	0,5t 1,5t 2,0t 2,5t 3,5t		
	H24	0,2 0,5 1,5 3,0 6,0 12,5	0,5 1,5 3,0 6,0 12,5 20,0	300 300 300 300 300 300	360 360 360 360 360 360	220 220 220 220 220 220		4 5 6 7 8	7	2,5t 2,5t 2,5t	1,0t 2,0t 2,5t 3,5t 4,5t		
	H34	0,2 0,5 1,5 3,0 6,0 12,5	0,5 1,5 3,0 6,0 12,5 20,0	300 300 300 300 300 300	360 360 360 360 360 360	220 220 220 220 220 220		4 5 6 7 8	7	2,5t 2,5t 2,5t	1,0t 2,0t 2,5t 3,5t 4,5t		
	H26	0,2 0,5 1,5 3,0	0,5 1,5 3,0 4,0	325 325 325 325	385 385 385 385	250 250 250 250		2 3 3 3					
	H36	0,2 0,5 1,5 3,0	0,5 1,5 3,0 4,0	325 325 325 325	385 385 385 385	250 250 250 250		2 3 3 3					
	Weldability IDT EN 1999-1-1	Class I											
Bendability	Alloy												
	O H111	Temper											
		H12 H22 H32	H14 H24 H34	H16 H26 H36	H18								
EN AW-5086	-	-	-	-	-	-							

Essential characteristics	Performance	Harmonized technical specification
Fatigue strength	NPD	EN 15088:2005
Dangerous substances IDT EN 573-3	NO	
Durability rating IDT EN 1999-1-1	Class A	

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

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Director of Development & Investment


Paweł Rutecki