

DECLARATION OF PERFORMANCE

No. 28/2021

1. Unique identification code of the product-type:

Gränges_Konin_5754

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-5754 cold rolled

Essential characteristics	Performance						Harmonized technical specification
Dimensional tolerances IDT EN 485-4	Thickness tolerances						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		
When measuring the thickness, a zone 10mm wide from the edges of the product shall be disregarded.							

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							
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	+0,2% of specified length					
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					
Mechanical properties IDT EN 485-2	Temper	Specified thickness		Tensile strength R _m		Yield strength R _{p0,2}		Elongation A _{50 mm}		Bend radius _a	
		[mm]		[MPa]		[MPa]		[%]			
		Over	Up to and including	min	max	min	max	min	max	180°	90°
	O	0,2	0,5	190	240	80		12		0,5t	0t
		0,5	1,5	190	240	80		14		0,5 t	0,5t
		1,5	3,0	190	240	80		16		1,0 t	1,0t
		3,0	6,0	190	240	80		18		1,0 t	1,0t
		6,0	12,5	190	240	80		18		1,0 t	2,0t
		12,5	20,0	190	240	80					
	H111	0,2	0,5	190	240	80		12		0,5 t	0t
	0,5	1,5	190	240	80		14		0,5 t	0,5t	
	1,5	3,0	190	240	80		16		1,0 t	1,0t	
	3,0	6,0	190	240	80		18		1,0 t	1,0t	
	6,0	12,5	190	240	80		18		1,0 t	2,0t	
	12,5	20,0	190	240	80						

Essential characteristics	Performance										Harmonized technical specification		
Mechanical properties IDT EN 485-2	Temper	Specified thickness		Tensile strength R _m [MPa]		Yield strength R _{p0,2} [MPa]		Elongation A50 mm [%]		Bend radius		EN 15088:2005	
		[mm]		min	max	min	max	min	max	180°	90°		
	Over	Up to and including											
	H12	0,2 0,5 1,5 3,0 6,0	0,5 1,5 3,0 6,0 12,5	220 220 220 220 220	270 270 270 270 270	170 170 170 170 170		4 5 6 7 9					
	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	240 240 240 240 240 240	280 280 280 280 280 280	190 190 190 190 190 190		3 3 4 4 5					
	H16	0,2 0,5 1,5 3,0	0,5 1,5 3,0 6,0	265 265 265 265	305 305 305 305	220 220 220 220		2 3 3 3					
	H18	0,2 0,5 1,5	0,5 1,5 3,0	290 290 290		250 250 250		1 2 2					
	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	220 220 220 220 220 220	270 270 270 270 270 270	130 130 130 130 130 130		7 8 10 11 10		1,5 t 1,5 t 2,0 t	0,5t 1,0t 1,5t 1,5t 2,5t		
	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	220 220 220 220 220 220	270 270 270 270 270 270	130 130 130 130 130 130		7 8 10 11 10		1,5 t 1,5 t 2,0 t	0,5t 1,0t 1,5t 1,5t 2,5t		
	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	240 240 240 240 240 240	280 280 280 280 280 280	160 160 160 160 160 160		6 6 7 8 10		2,5 t 2,5 t 2,5 t	1,0t 1,5t 2,0t 2,5t 3,0t		
	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	240 240 240 240 240 240	280 280 280 280 280 280	160 160 160 160 160 160		6 6 7 8 10		2,5 t 2,5 t 2,5 t	1,0t 1,5t 2,0t 2,5t 3,0t		
	H26	0,2 0,5 1,5 3,0	0,5 1,5 3,0 6,0	265 265 265 265	305 305 305 305	190 190 190 190		4 4 5 6			1,5t 2,0t 3,0t 3,5t		
	H36	0,2 0,5 1,5 3,0	0,5 1,5 3,0 6,0	265 265 265 265	305 305 305 305	190 190 190 190		4 4 5 6			1,5t 2,0t 3,0t 3,5t		
	H28	0,2 0,5 1,5	0,5 1,5 3,0	290 290 290		230 230 230		3 3 4					
	H38	0,2 0,5 1,5	0,5 1,5 3,0	290 290 290		230 230 230		3 3 4					
	Weldability IDT EN 1999-1-1	Class I											

Essential characteristics	Performance						Harmonized technical specification
Bendability	Alloy	Temper					EN 15088:2005
		O H111	H12 H22 H32	H14 H24 H34	H26 H36	H28 H38	
	EN AW-5454	B1	-	B2	-	-	
Fatigue strength	NPD						
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

.....
Director of Development & Investment

Paweł Rutecki