

DECLARATION OF PERFORMANCE

No. 27/2021

1. Unique identification code of the product-type:

Gränges_Konin_5454

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-5454 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							
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	+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					
Temper	Specified thickness [mm]		Tensile strength R _m [MPa]		Yield strength R _{p0,2} [MPa]		Elongation A ₅₀ mm [%]		Bend radius		
	Over	Up to and including	min	max	min	max	min	max	180°	90°	
O	0,2	0,5	215	275	85		12		0,5t	0,5t	
	0,5	1,5	215	275	85		13		0,5t	0,5t	
	1,5	3,0	215	275	85		15		1,0t	1,0t	
	3,0	6,0	215	275	85		17		1,5t	1,5t	
	6,0	12,5	215	275	85		18		2,5t	2,5t	
	12,5	20,0	215	275	85		16				
H111	0,2	0,5	215	275	85		12		0,5t	0,5t	
	0,5	1,5	215	275	85		13		0,5t	0,5t	
	1,5	3,0	215	275	85		15		1,0t	1,0t	
	3,0	6,0	215	275	85		17		1,5t	1,5t	
	6,0	12,5	215	275	85		18		2,5t	2,5t	
	12,5	20,0	215	275	85		16				



GRANGES

Essential characteristics	Performance										Harmonized technical specification	
Mechanical properties IDT EN 485-2	Temper	Specified thickness		Tensile strength Rm		Yield strength Rp0,2		Elongation A50 mm		Bend radius ^a		EN 15088:2005
		[mm]		[MPa]		[MPa]		[%]				
		Over	Up to and including	min	max	min	max	min	max	180°	90°	
	H12	0,2	0,5	250	305	190		3				
		0,5	1,5	250	305	190		4				
		1,5	3,0	250	305	190		5				
		3,0	6,0	250	305	190		6				
		6,0	12,5	250	305	190		7		6		
		12,5	20,0	250	305	190						
	H14	0,2	0,5	270	325	220		2				
		0,5	1,5	270	325	220		3				
		1,5	3,0	270	325	220		3				
		3,0	6,0	270	325	220		4				
		6,0	12,5	270	325	220		5				
	12,5	20,0	270	325	220				4			
H22	0,2	0,5	250	305	180		5		1,5t	0,5t		
	0,5	1,5	250	305	180		6		1,5t	1,0t		
	1,5	3,0	250	305	180		7		2,0t	2,0t		
	3,0	6,0	250	305	180		8			2,5t		
	6,0	12,5	250	305	180		10			4,0t		
	12,5	20,0	250	305	180				9			
H32	0,2	0,5	250	305	180		5					
	0,5	1,5	250	305	180		6					
	1,5	3,0	250	305	180		7					
	3,0	6,0	250	305	180		8					
	6,0	12,5	250	305	180		10					
	12,5	20,0	250	305	180				9			
H24	0,2	0,5	270	325	200		4		2,5t	1,0t		
	0,5	1,5	270	325	200		5		2,5t	2,0t		
	1,5	3,0	270	325	200		6		3,0t	2,5t		
	3,0	6,0	270	325	200		7			3,0t		
	6,0	12,5	270	325	200		8			4,0t		
	12,5	20,0	270	325	200				7			
H34	0,2	0,5	270	325	200		4		2,5t	1,0t		
	0,5	1,5	270	325	200		5		2,5t	2,0t		
	1,5	3,0	270	325	200		6		3,0t	2,5t		
	3,0	6,0	270	325	200		7			3,0t		
	6,0	12,5	270	325	200		8			4,0t		
	12,5	20,0	270	325	200				7			
H26	0,2	0,5	290	345	230		3					
	0,5	1,5	290	345	230		3					
	1,5	3,0	290	345	230		4					
	3,0	6,0	290	345	230		5					
H36	0,2	0,5	290	345	230		3					
	0,5	1,5	290	345	230		3					
	1,5	3,0	290	345	230		4					
	3,0	6,0	290	345	230		5					
H28	0,2	0,5	310		250		3					
	0,5	1,5	310		250		3					
	1,5	3,0	310		250		3					
H38	0,2	0,5	310		250		3					
	0,5	1,5	310		250		3					
	1,5	3,0	310		250		3					
Weldability IDT EN 1999-1-1	Class I											
Bendability	Alloy	Temper										
		O H111	H12 H22 H32	H14 H24 H34	H26 H36	H28 H38						
	EN AW-5454	B1	-	B2	-	-						

Essential characteristics	Performance	Harmonized technical specification
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

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Director of Development & Investment

Paweł Rutecki