
TEST REPORT



A Z U M A
Design

WIND AND WATER TESTING

CLIENT – BLUETECH WINDOWS

PRODUCT – HINGED DOOR

TESTED BY

AZUMA DESIGN PTY LTD

AZT0017.24

NATA ACCREDITED LABORATORY NO. 15147

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Test results in this report are relevant only to the sample tested.

1 Customer Requirements

Customer requires all applicable tests from AS/NZS 4420.1 to be conducted to the test sample supplied. The tests are Structural deflection, Operating Force, Air infiltration, Water penetration and Ultimate strength.

2 Reference Standard

- AS 2047 – 2014 (+A2) Windows and External Glazed Doors in Buildings
- AS/NZS 4420.1 – 2016 Windows external glazed timber and composite doors - Methods of test - Test sequence, sampling and test methods

3 General Information

Customer	BlueTech Windows Milosz Zawadowski
Address	Wilenska Street 65/1, 95-200 Pabianice, Poland
Date(s) of Test	29/1/2024
Azuma Test Number	AZT0017.24
Window/Door Type	Double Door
Test Sample Description	Double Door with movable Mullion, Plastic, Double Glazed Glass

4 Test Result Summary

Test Method	Figures Recorded	Result
Deflection Test	Positive – 1200 Pa	Pass
	Negative – 1200 Pa	Pass
Operating Force Test	10/3 N	Pass
Air Infiltration Test	Low	Pass
Water Penetration Resistance Test	450 Pa	Pass
Ultimate Strength Test	Positive – 4000 Pa	Pass
	Negative – 3000 Pa	Pass

5 Test Sample Description

Product Name	Veka Softline
Model	70 AD
Dimension of Test Sample	2450 mm (W) x 2450 mm (H)
Dimension of Sashes	Sash 1: 1085 mm x 2175 mm Sash 2: 1085 mm x 2175 mm
Glazing – Size/Type	Sash 1: 906 mm x 1996 mm Sash 2: 906 mm x 1996 mm Glass Thickness/Type: 4 x 16 x 4 mm
Hardware	Donmas DM15
Drawing Identification	EPAA63/T021
Profile Section	70 mm
Drain holes	2 per door
Weep holes	30 x 6 mm 165 mm from ends
Gasket/Seals/Hairs	Rubber seals
Glass Retention	Rubber Glazed
Sub Head and Sub Sill Used	N/A

6 Results

6.1 Deflection Test

Tested in accordance with AS/NZS 4420.1, Clause 3, Deflection test.

Structural Framing Member		Lock Stile			POSITIVE
Structural Framing Span		2010 mm			
Location Trans No.	Top 1 (mm)	Centre 2 (mm)	Bottom 3 (mm)	Net Deflection	
Pressure, Pa					
0	0	0	0		
200	1.98	2.66	1.22	1.06	
400	4.33	5.58	2.61	2.11	
800	6.96	8.62	4.08	3.10	
1200	18.09	20.47	9.94	6.45	
0	2.17	1.62	0.88		
Net Deflection	6.45 mm		Structural Ratio		1/312
Allowable Deflection	21.00 mm		Allowable Ratio		1/100
Result	Pass				

Structural Framing Member		Lock Stile			NEGATIVE
Structural Framing Span		2010 mm			
Location Trans No.	Top 1 (mm)	Centre 2 (mm)	Bottom 3 (mm)	Net Deflection	
Pressure, Pa					
0	0	0	0		
200	2.26	2.85	1.32	1.06	
400	4.97	5.96	2.87	2.04	
800	11.82	13.43	6.61	4.22	
1200	18.51	20.36	10.17	6.02	
0	2.31	1.88	1.19		
Net Deflection	6.02 mm		Structural Ratio		1/334
Allowable Deflection	21.00 mm		Allowable Ratio		1/100
Result	Pass				

The test unit satisfied the requirements of AS 2047 in both the positive and negative deflection at the nominated design pressure.

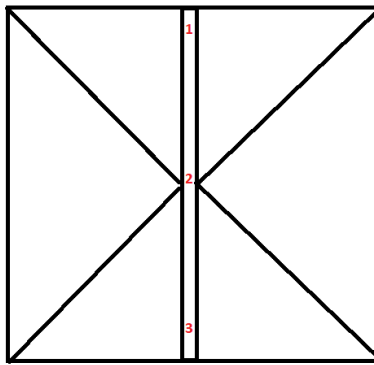


Figure 1 – Transducer Positions

6.2 Operating Force Test

Tested in accordance with AS/NZS 4420.1, Clause 4, Operating force test.

Movement Type	Sash	Opening Force	Closing Force	Result
Initiating	1	10 N	10 N	Pass
Sustaining	1	3 N	3 N	Pass
Initiating	2	10 N	10 N	Pass
Sustaining	2	3 N	3 N	Pass

The test unit satisfied the requirements of AS 2047.

6.3 Air Infiltration Test

Tested in accordance with AS/NZS 4420.1, Clause 5, Air infiltration test.

Air Infiltration Level	Pressure	Direction	Allowable	Actual	Result
Low	75 Pa	Positive and Negative	$< 1.0 \text{ Ls}^{-1}\text{m}^{-2}$	$0.81 \text{ Ls}^{-1}\text{m}^{-2}$ $0.81 \text{ Ls}^{-1}\text{m}^{-2}$	Pass
High		Positive Only	$< 5.0 \text{ Ls}^{-1}\text{m}^{-2}$	$0.81 \text{ Ls}^{-1}\text{m}^{-2}$	Pass

The test unit satisfied the requirements of AS 2047 for a Low Classification.

6.4 Water Penetration Resistance Test

Tested in accordance with AS/NZS 4420.1, Clause 6, Water penetration resistance test.

Maximum Pressure Applied to Sample	450 Pa
Leakages Observed	Nil
Observations	Nil

The test unit satisfied the requirements of AS 2047 at the tested pressure.

6.5 Ultimate Strength Test

Tested in accordance with AS/NZS 4420.1, Clause 7, Ultimate strength test.

Maximum Pressure Applied to Sample	Positive – 4000 Pa Negative – 3000 Pa
Details of Collapse	Nil

The test unit satisfied the requirements of AS 2047 at the tested pressure.

7 Signatories

Tested By: Zac Rozema

Signature: 

Date: 29/01/2024

Checked By: Ash Horne

Signature: 

Date: 29/01/2024

END OF REPORT

5591

Large Work Order

Delivery date: **2023-07-07**

Order Weight:316.7

Order: **EPAA63/T021- 2023-07-07**

windows australia

Weight: 158.4

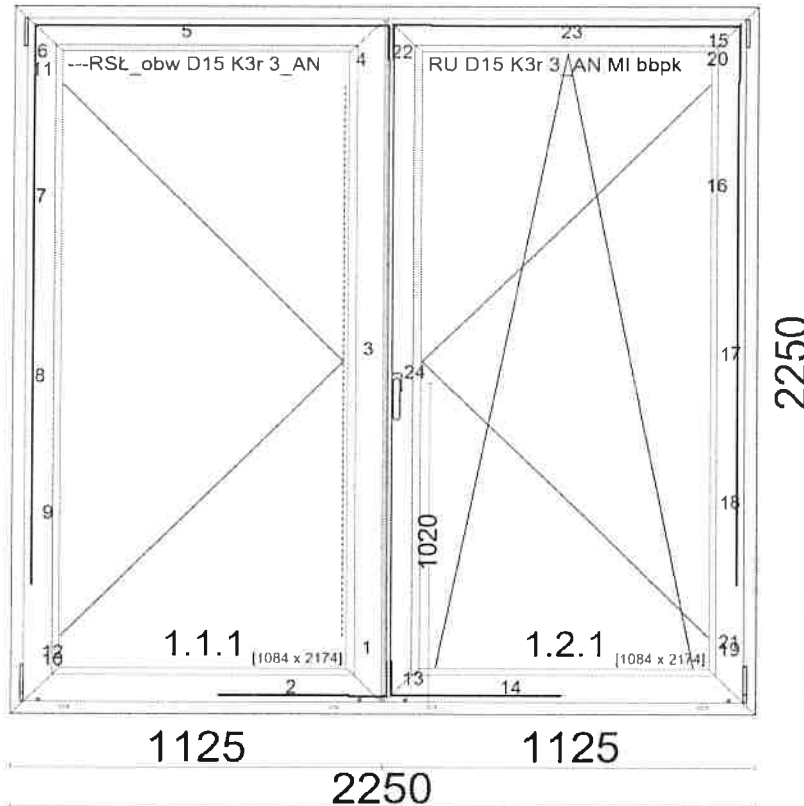
Item. 001 Quantity 1

(2)

2250 x 2250

2250 x 2250

Inside view



1. +Corner NT 1P + UR, 260 277
2. +CLOSE. MIDDLE MV 400 1P+OB, 255 285
3. +NX Espagnolette RU KSR 2090 3S ANS_RSIL, 795 478
4. +Corner NT 1P + AN for RSL, 260 277
5. +v_Sliding stay. NT 500 (1001-1200) 1E + arms, 260 212
6. +Stay corner NT 1P + AN, 260 286
7. +CLOSE. MIDDLE MV 600 1P COMBINED + OB, 622 882
8. +CLOSE. MIDDLE MV 600 1P COMBINED + OB, 622 882
9. +CLOSE. MIDDLE MV 400 1P+OB, 255 285
10. +Bottom hinge bracket K3/100, 258 590
11. +Stay bracket K3/100, 230 177
12. +Lower sash hinge K3/100 with pressure adjustment, 445 170
13. +Corner NT 1P + UR, 260 277
14. +CLOSE. MIDDLE MV 400 1P+OB, 255 285
15. +Stay corner NT 1P + AN, 260 286
16. +CLOSE. MIDDLE MV 600 1P COMBINED + OB, 622 882
17. +CLOSE. MIDDLE MV 600 1P COMBINED + OB, 622 882
18. +CLOSE. MIDDLE MV 400 1P+OB, 255 285
19. +Bottom hinge bracket K3/100, 258 590
20. +Stay bracket K3/100, 230 177
21. +Lower hinge K3/100 with pressure adjustment, 445 170
22. +Corner NT 1P + AN + MI, 260 277
23. +v_Sliding stay. NT 500 (1001-1200) 1E + arms, 260 212
24. +NX Espagnolette tilt&turn KSR 1000/2001-2200 3V D15 S_RSIL+OB, 794 642

System **Veka Softline 70 AD**
 Profile color **White HLM**
 Core color **White HLM VE**
 Frame Frame 67/6K
 Sash Sash Z105/5K
 Movable post Movable post. 64/SL70 AD 1U:
 Glazing strip Straight strip 23,5/21 1U:
 Gasket Grey
 Casings Window colours - R07.2 white; vRoto handle 1-
 slide R07.2 white;
 Handles **+ vHandle P-Line T43/45 R07.2 M5x50**

Glazed glass

Section	Packet	Symbol
1.1.1	24	4-16ar-4LE U=1,1
S 906x1996		TGI_grey
1.2.1	24	4-16ar-4LE U=1,1
906x1996		TGI_grey

Dehydration	VE STD (visible, from the forehead)	Dimension Sash	Fitting	Handle
		1.1	1084x2174	---vRSL - NT, (envelope) 0
Protection class: 3 AV stickers Dormas: DM15 Handle Mounting: Fixed Handle		1.2	1084x2174	vRU - NT, 1020 Micro-ventilation: Micro-ventilation striker Dormas: DM15 Protection class: 3 AV stickers Handle Mounting: Fixed Handle lifting mishandling device: lifting mishandling device

Optional Construction Parameters:

Fitting groove filling
 Bottom mounting strip
 30mm standard

Profiles

Position	Quantity	Length	Cutting angles		Radius (height)
			L/R		
	4	2 256			Gasket 112363 (PVC-P) for Veka SL70 frame (3,5mm), Grey
Level	2	2 256	45,00	45,00	Frame 67/SL70/5K AD U:w/bar, white HLM
Pawn	2	2 256	45,00	45,00	Frame 67/SL70/5K AD U:w/bar, white HLM
Veka mounting strip	1	2 250			Veka mounting strip
	1	2 102			Gasket 112363 (PVC-P) for Veka SL70 frame (3,5mm), Grey
	2	1 125			Filling NP0060 groove fittings. bE, White
	4	2 180			Gasket 112354 (PVC-P) internal Veka (3,5mm), Grey
	4	2 180			Gasket 112353 (PVC-P) Veka SL70 (3,5mm), Grey
Pawn	4	2 180	45,00	45,00	Sash Z105/SL70 U:beige, white HLM
	4	1 090			Gasket 112354 (PVC-P) internal Veka (3,5mm), Grey
	4	1 090			Gasket 112353 (PVC-P) Veka SL70 (3,5mm), Grey

103241-HL-0NOFO. XX-000650XXX	Level	4	1 090	45,00	45,00	Sash Z105/SL70 U:beige, white HLM
102236-HL-0NOFO. XX-1SE650XXX	Pawn	1	2102 [2158]	90,00	90,00	Movable post. 64/SL70 AD 1U:Grey, White HLM
109524 White set		1				End cap movable post. 64/SL70, set White
107214-HL-0NOFO. XX-1SE650XXX	Pawn	4	2 006	45,00	45,00	Glazing strip 23,5/21 1U:Grey, White HLM
107214-HL-0- NOFO. XX-1SE650XXX	Level	4	916	45,00	45,00	Glazing strip 23,5/21 1U:Grey, White HLM

Strengthen

113025-0-600	Reinforcement in frame	1.5mm 30x30 (Ix=2.25 Iy=2.25)	2	2 150
113025-0-600	Reinforcement in frame	1.5mm 30x30 (Ix=2.25 Iy=2.25)	2	2 150
405125-000 (113013-3)	Reinforcement in the movable post	Flat bar 10,0mm 10x50 (ix=10,42 iy=0,42)	1 2 092	
113270-0-600	Reinforcement in the sash	1,5mm 47,9x45 (ix=6,11 iy=4,19)	4	1 995
113270-0-600	Reinforcement in the sash	1,5mm 47,9x45 (ix=6,11 iy=4,19)	4	905

Fittings

770 685	1	Inrun - stulp
260 277	1	Corner tilt&turn/turn NT/1P
260 277	1	Corner tilt&turn/turn NT/1P
260 277	2	Corner tilt&turn/turn NT/1P
795 927	1	NX lifting mishandling device RSIL
795 478	1	NX Espagnolette KSR movement post. 640/2001-2200/3Z + lifting mishandling device
794 642	1	NX Espagnolette tilt&turn KSR 1000/2001-2200/3V
260 212	2	Sliding Stay R NT 500/1090s1001-1200/E
258 042	1	Stay arm NT 500/801-1400 K 12/20-13
258 043	1	Stay arm NT 500/801-1400 K 12/20-13
227 354	2	Stay bolt 71 NT
230 177	2	Stay bracket K3/100 NT
258 590	2	Hinge bottom bracket NT K3/100
338 019	2	Striker tilt&turn/turn NT Veka Topline AD/MD13
364 057	1	Striker micro-ventilation NT VEKA T,ROPL 4K,ALUPL PL
792 178	10	Striker NT EK8.5 Veka/NR211
348 410S	4	NT VEKA Topline striker
260 286	2	Close the stay corner of the NT/1P
255 285	3	Close. middle 1P NT MV400
255 285	1	Close. middle 1P NT MV400
622 882	4	Close. middle 1P NT MV600 combined
445 170	2	Bottom hinge NT K3/100 with reg. Pressure



BlueTech

INSPIRED BY YOU

Order **EPAA63/T021-**

Reference: windows Australia

BlueTech Windows Miłosz Zawadowski

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VAT EU: PL 731 203 65 89
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Position 001 Window 2250 x 2250

Qty

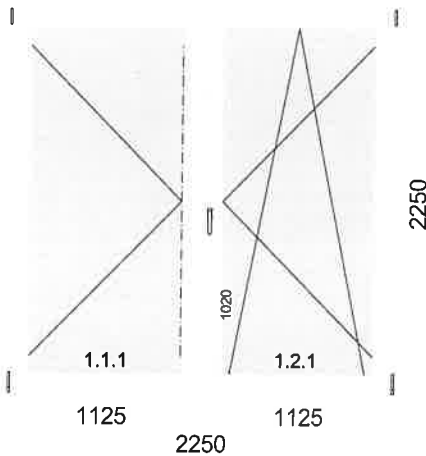
Veka Softline 70 AD

1

Kolor: White HLM Core: white HLM VE

Frame 67/6K / Sash Z105/5K

Interior View



- Post: Słupek ruch. 64/SL70 AD 1U;
- Gasket: Grey
- Hinge covers: Window colors - R07.2 white; vRoto Handles 1-side - R07.2 white;
- Handles: +vHandle P-Line T43/45 R07.2 M5x50
- Uw: 1,4 W/m2K**
- Glass leiste: Square SL70
- Drainage: VE STD (visible, front)
- Expander holes:
- CE-Wind-load resistnace: C2
- CE-Air permeability: 4
- CE-Water resistance: 7A
- CE-Coefficient Rw [dB]: 30(-1;-6)
- CE-Coefficient LT [%]: 82.00
- CE-Coefficient g [%]: 64.00

Glazed glass

- 1.1.1 906x1996 4-16ar-4LE U=1,1 TGI 7040 (31dB)
- 1.2.1 906x1996 4-16ar-4LE U=1,1 TGI 7040 (31dB)

Fittings Handle height

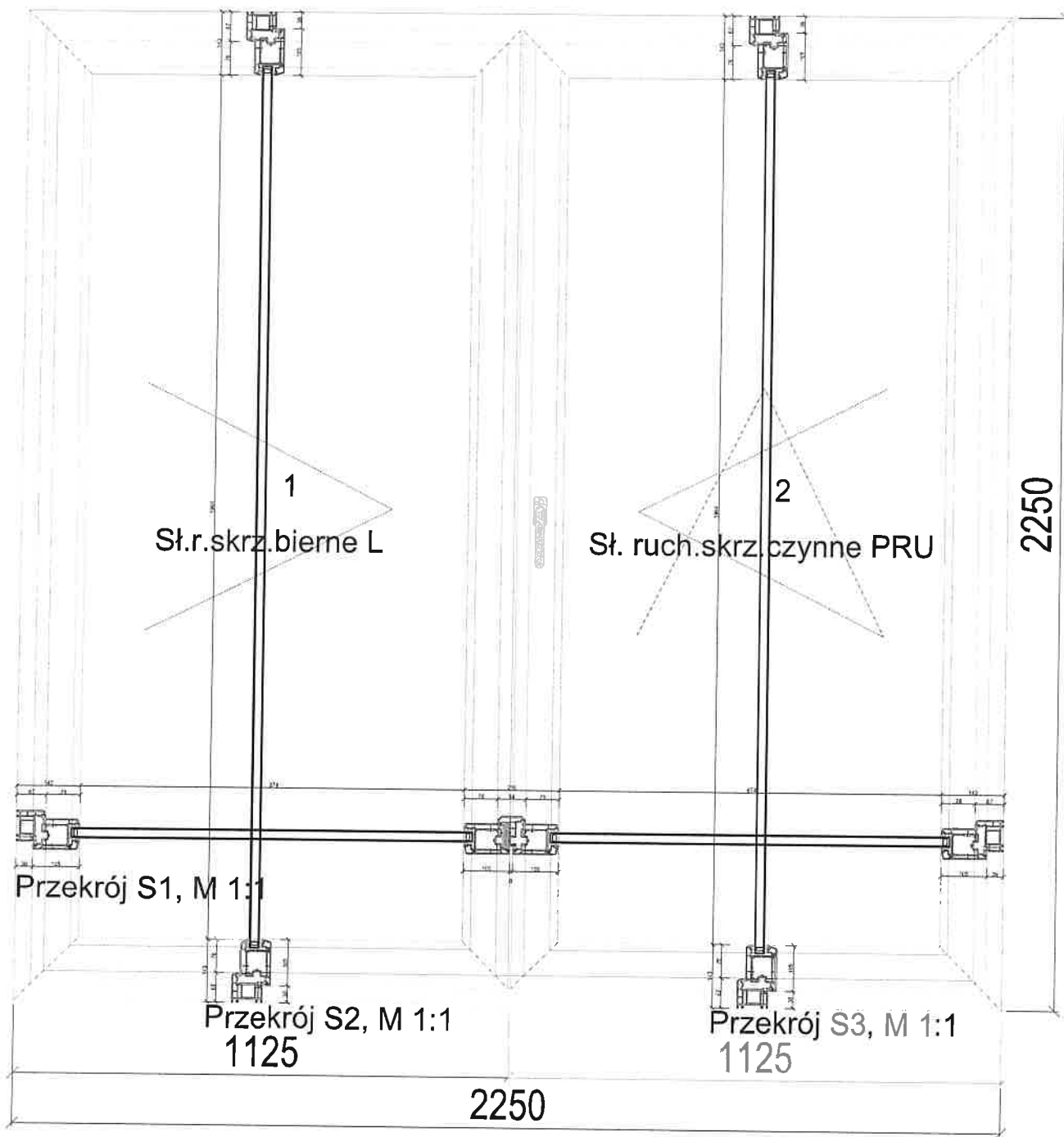
- | | |
|--------------------------------|------------------------------|
| 1.1 | 1.2 |
| 0 ---vRSŁ - NT, (fenestration) | 1020 vRU - NT, |
| 3 strikers AV | Striker of micro-ventilation |
| DM15 | DM15 |
| Fixed handle | 3 strikers AV |
| | Fixed handle |
| | Lifting-mishandl. device |

Optional parametres of the construction:

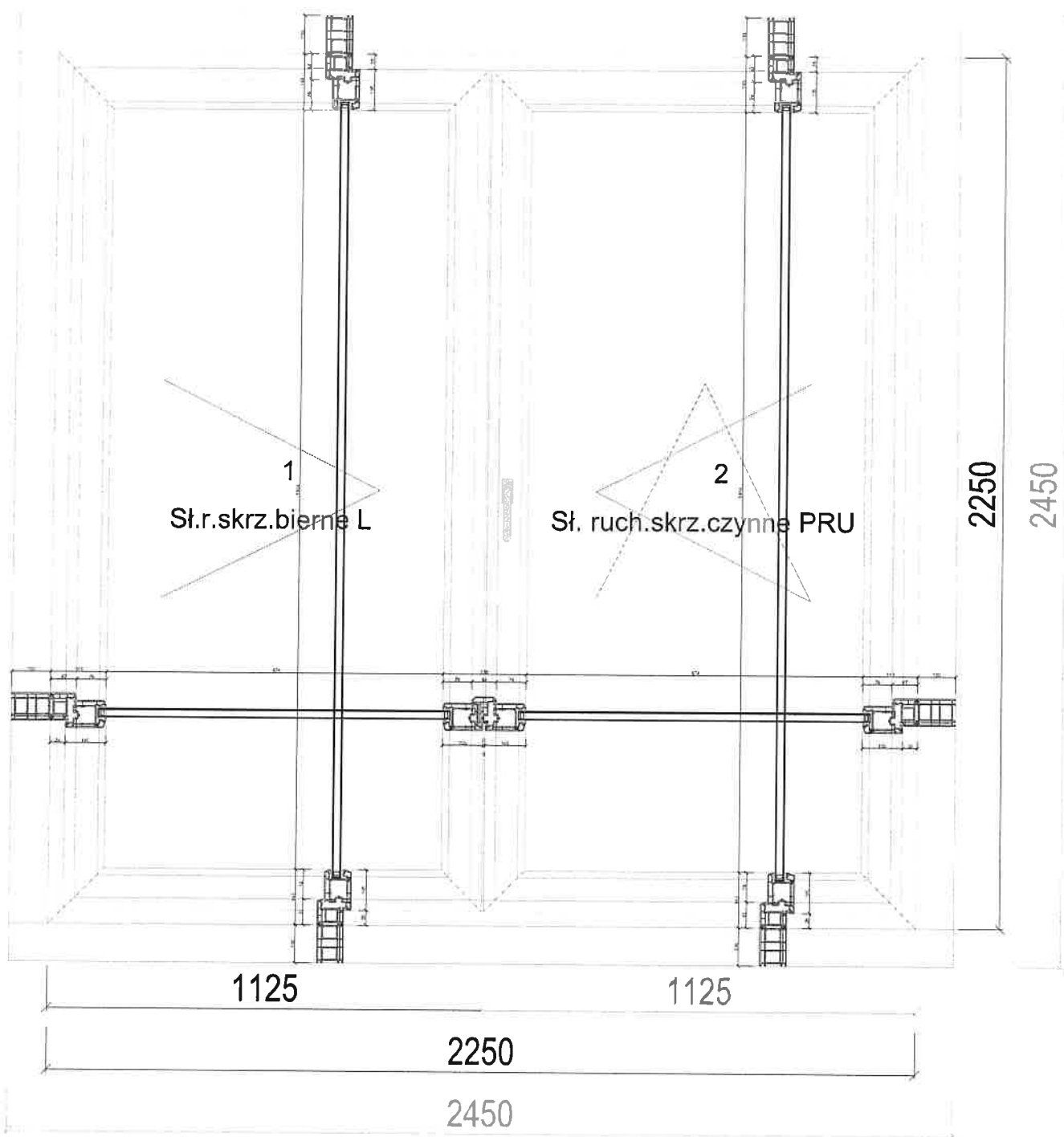
Groove gasket filling: Bottom; Mounting strip: Standard 30mm

Total weight of positions incl. surcharges: **158 kg**

Total circumference of positions: **9 m**



Information supplied by customer



Information supplied by customer