

TESTING PERFORMANCE OF RVK WETNESS PROOF DOOR LEAF

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Assignment	Testing RVK wetness proof door leaf according to EN 16580
Sample details	Samples were delivered to Eurofins Expert Services Oy at 25.5.2026. Samples: Door Leaf RVK (appendix 1) Sample size: 840-841 mm x 2049-2050 mm Sample quantity: 3 pcs
Methods	Wetness resistance, flatness, height, width, thickness, and squareness. Samples were visually inspected and stored in conditioning room for 8 days on 25.5-2.6.2026 Temperature $23\pm 2^{\circ}\text{C}$ and Relative Humidity of $50\pm 5\%$. After conditioning the samples were measured according to standards EN 16580[1] EN 951[2] and EN 952 [3]. Mechanical measurements: - Width and height of the samples were measured with measuring tape. Measuring lines are shown in figure 1. - Thickness of the samples was measured with micrometer. Thickness was measured according to EN 16580 (7 points) and EN 951 (6 points). Measuring points are shown in figure 1 and 2. - Squareness of the samples was measured with measurement instrument according to EN 951. - General flatness measurement of twist was measured so that three corners of the sample were in contact to reference plane and deviation of the fourth corner was measured with feeler gauges. - General flatness measurement of bow and cup was measured positioning straight reference bar along the face of the door leaf and measuring the maximum deviation of the face of the door leaf from the reference bar.

The results are only valid for the tested sample(s).

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Spraying test:

- Spraying was done to class W (Wetness door leaf). Test consisted of 48 cycles in total. Each cycle consisted of 0,5 min of spraying and 29,5 min of no-spraying time. Water temperature was 19 °C and performance of per nozzle was 1l/min (2bar). The samples were mounted to test rig vertically and two nozzles was deployed 500mm from lower edge of each specimen and 350mm from the face of each specimen. Distance between the nozzles was 600mm.

Immediately after the spraying the mechanical measurements were done second time and then the samples were stored back to the conditioning room for 24h. After this the mechanical measurements were done third and final time.

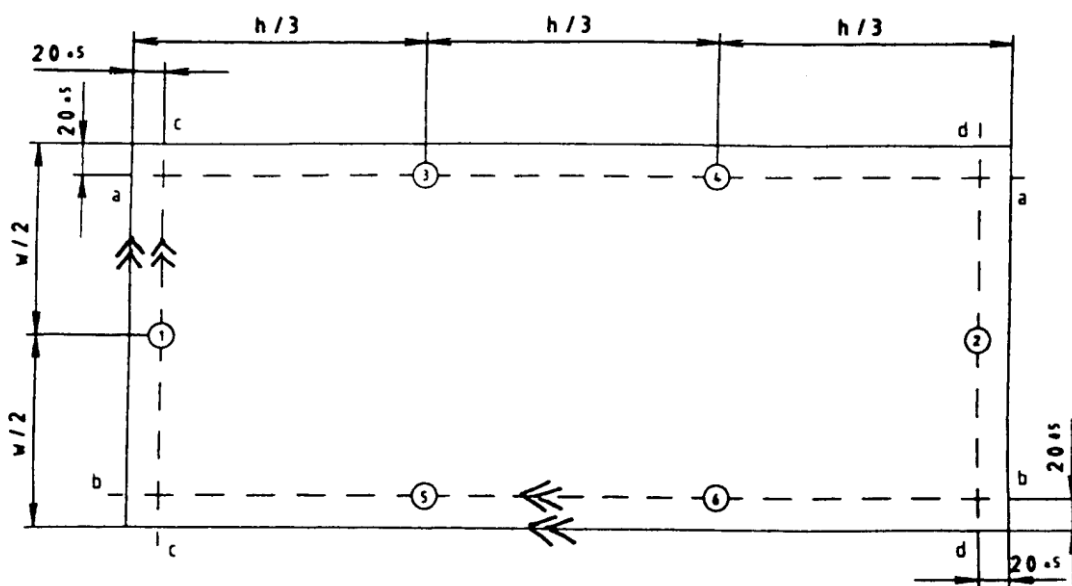


Figure 1. Measuring points and lines according to EN 951.

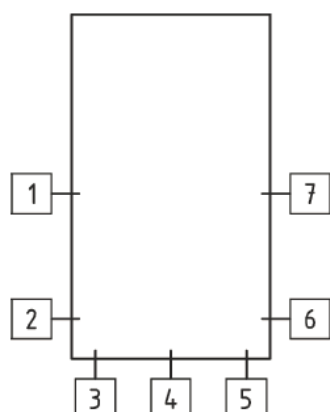


Figure 2. Thickness measurement points according to EN 16580

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Results Summary of results and classification is shown in table 1.

Table 1. Summary and classification

	Door leaf 1	Door leaf 2	Door leaf 3
Load Class, EN 16580	W (Wetness door leaf)	W (Wetness door leaf)	W (Wetness door leaf)
Thickness swell at the measuring points, EN 16580. Max. 0,5 mm	Max. 0,4 mm	Max. 0,4 mm	Max. 0,4 mm
Deviation in width and height, EN 951. Classification EN 1529	Max. 0,0 mm (Class 3)	Max. 0,9 mm (Class 3)	Max. 1,0 mm (Class 3)
Thickness swell at the measuring points, EN 951. Classification EN 1529	Max. 0,4 mm (Class 3)	Max. 0,4 mm (Class 3)	Max. 0,4 mm (Class 3)
Squareness, EN 951. Classification EN 1529	Max. 1,1 mm (Class 2)	Max. 1,0 mm (Class 3)	Max. 0,8 mm (Class 3)
General flatness twist, EN 952. Max. 4,0 mm EN 12219 (Class 2)	Max. 0,9 mm (Class 3)	Max. 3,0 mm (Class 2)	Max. 2,45 mm (Class 2)
General flatness bow, EN 952. Max 4,0mm EN 12219 (Class 2)	Max. 1,5 mm (Class 3)	Max. 3,05 mm (Class 2)	Max. 1,05 mm (Class 3)
General flatness cub, EN 952. Max 2,0 mm EN 12219 (Class 2)	Max. 0,5 mm (Class 3)	Max. 0,9 mm (Class 3)	Max. 0,45 mm (Class 3)
Local flatness, EN 952.	Max. 0,05 mm	Max. 0,1 mm	Max. 0,05 mm
Visual assessment	No apparent damage	No apparent damage	No apparent damage
Classification	P(W)		

Espoo, 18.6.2026

Mika Lojander
Senior Expert

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References

- [1] *SFS-EN 16580:2015 - Windows and doors. Wetness and splash water proof door leaves. Test and classification*
- [2] *SFS-EN 951:1999 - Door leaves. Method for measurement of height, width, thickness and squareness*
- [3] *SFS-EN 952:1999 - Door leaves. General and local flatness. Measurement method*
- [4] *SFS-EN 1529:1999 - Doors leaves. Height, width, thickness and squareness. Tolerance classes*
- [5] *SFS-EN 12219:2000 - Doors. Climatic influences. Requirements and classification*

Appendices

Appendix 1, General drawing

Appendix 2, Detailed drawings

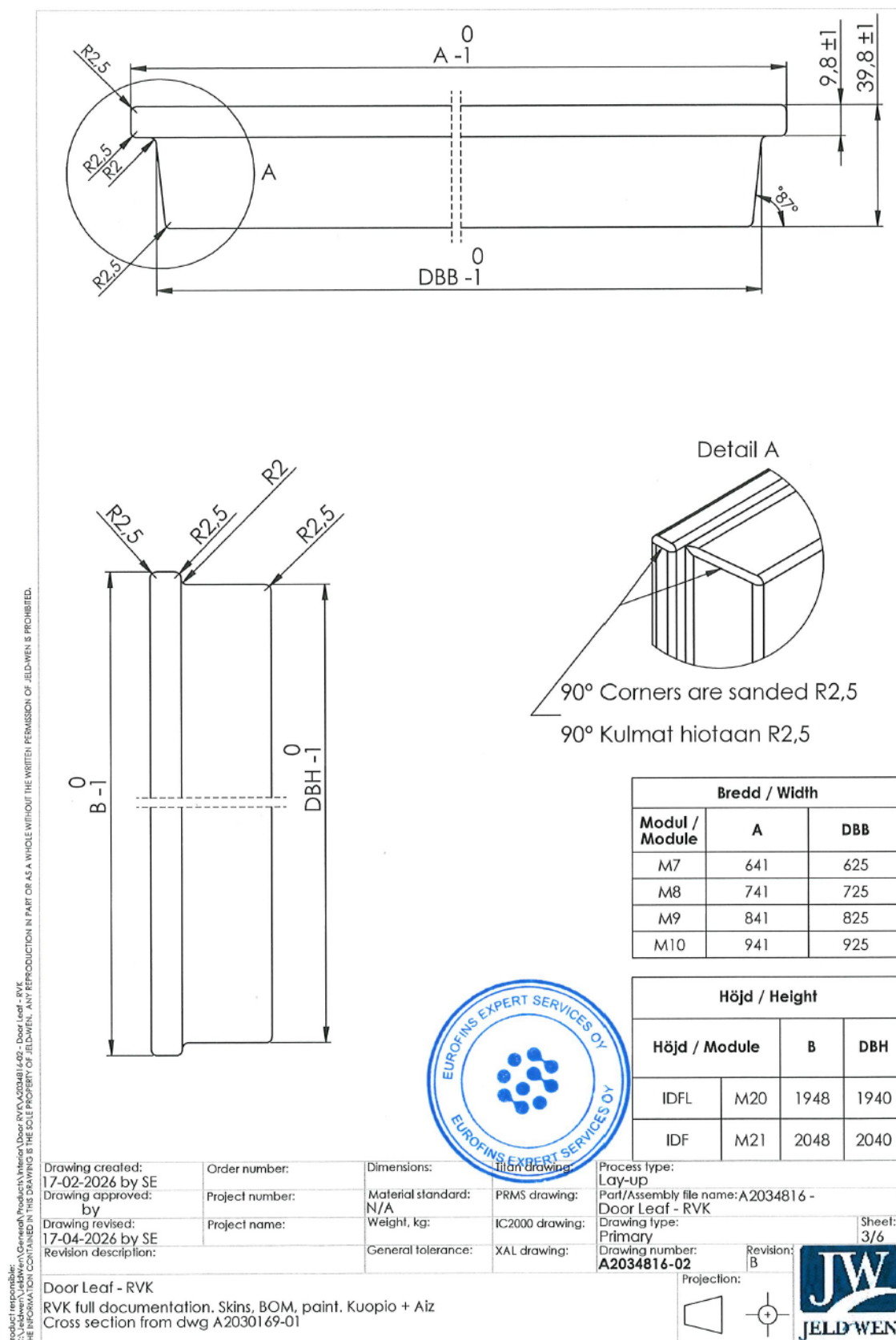
NOTE ! Appendix 2 is separate document

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