

# DIN EN 12608-2:2024-02 (E)

## Unplasticized poly(vinyl chloride) (PVC-U) profiles for the fabrication of windows and doors - Classification, requirements and test methods - Part 2: PVC-U profiles covered with foils bonded with adhesives

---

<b>Contents</b>	<b>Page</b>
European foreword .....	4
1 Scope.....	5
2 Normative references.....	5
3 Terms and definitions.....	6
4 Classifications .....	6
4.1 General.....	6
4.2 Classification of main base profiles according to the wall thickness of the external walls .	7
4.3 Classification of main base profiles according to the resistance to impact by falling mass	7
4.4 Classification of base profile materials according to the resistance to artificial weathering .....	7
4.5 Classification of foils according to the resistance to artificial weathering.....	7
5 Requirements for base profiles .....	7
5.1 Base profiles in conformance with EN 12608-1.....	7
5.2 Other base profiles .....	7
5.2.1 Materials .....	7
5.2.2 Appearance .....	9
5.2.3 Dimensions and tolerances of main base profiles .....	9
5.2.4 Linear weight of the main base profiles .....	9
5.2.5 Heat reversion .....	10
5.2.6 Resistance to impact by falling mass of the main base profiles.....	10
6 Requirements for foils .....	10
6.1 General.....	10
6.2 Appearance .....	10
6.3 Resistance to artificial weathering.....	10
6.4 Solar direct reflectance.....	11
6.5 Resistance to cross cut (only for lacquered foils) .....	11
7 Requirements for adhesive systems .....	11
7.1 General.....	11
7.2 Adhesion of the foil.....	11
7.3 Adhesion of the foil after hydrolytic/thermolytic storage .....	11
8 Requirements for laminated profiles.....	11
8.1 General.....	11
8.2 Appearance .....	11
8.3 Deviation from straightness of the laminated main profiles.....	12
8.4 Behaviour after heat storage .....	12
8.4.1 General.....	12
8.4.2 Assessment of material properties and extrusion process .....	12
8.4.3 Assessment of the lamination process .....	12
8.5 Peel strength.....	12
8.6 Strength of welded corners and T-joints of laminated main profiles.....	13

<b>9</b>	<b>Test methods .....</b>	<b>13</b>
<b>9.1</b>	<b>Visual inspection.....</b>	<b>13</b>
<b>9.2</b>	<b>Determination of peel strength after hydrolytic/thermolytic storage .....</b>	<b>13</b>
<b>9.2.1</b>	<b>Principle.....</b>	<b>13</b>
<b>9.2.2</b>	<b>Apparatus and materials .....</b>	<b>13</b>
<b>9.2.3</b>	<b>Preparation of the test specimens.....</b>	<b>14</b>
<b>9.2.4</b>	<b>Storage and reconditioning .....</b>	<b>14</b>
<b>9.2.5</b>	<b>Determination of the peel strength.....</b>	<b>14</b>
<b>9.2.6</b>	<b>Test report .....</b>	<b>14</b>
<b>10</b>	<b>Traceability.....</b>	<b>15</b>
<b>Annex A</b>	<b>(normative) Requirements for materials of other base profiles than described in EN 12608-1.....</b>	<b>16</b>
<b>A.1</b>	<b>General .....</b>	<b>16</b>
<b>A.2</b>	<b>Preparation of test specimens .....</b>	<b>18</b>
<b>A.2.1</b>	<b>General .....</b>	<b>18</b>
<b>A.2.2</b>	<b>Preparation of pressed plates.....</b>	<b>18</b>
<b>A.2.3</b>	<b>Material properties.....</b>	<b>18</b>
<b>Annex B</b>	<b>(informative) Guidance for the selection of a suitable class for the foil according to 4.5 based on the climatic condition at the intended installation site.....</b>	<b>19</b>
<b>B.1</b>	<b>General .....</b>	<b>19</b>
<b>B.2</b>	<b>Natural irradiation.....</b>	<b>19</b>
<b>B.3</b>	<b>Köppen-Geiger climate classification.....</b>	<b>22</b>
<b>Annex C</b>	<b>(normative) Determination of the reflection behaviour of foils by spectral analysis.....</b>	<b>24</b>
<b>C.1</b>	<b>Principles.....</b>	<b>24</b>
<b>C.2</b>	<b>Apparatus .....</b>	<b>24</b>
<b>C.2.1</b>	<b>UV/VIS/NIR-Spectrophotometer, used to establish reflection-spectra, with the following specifications: .....</b>	<b>24</b>
<b>C.3</b>	<b>Preparation of test specimens .....</b>	<b>24</b>
<b>C.4</b>	<b>Determination of the solar direct reflectance.....</b>	<b>25</b>
<b>C.5</b>	<b>Test report .....</b>	<b>25</b>
	<b>Bibliography .....</b>	<b>26</b>