



Schüco SoftSlide

# **PVC-U** systems

Windows and doors

# Schüco product performance certificate

In accordance with DIN EN 14351-1:2016-12

No. KS1007820\_EN-01 Valid until 01.02.2025

| System           | Schüco SoftSlide         |  |  |
|------------------|--------------------------|--|--|
| Special features | -/-                      |  |  |
| Product families | 1 Sliding window type 01 |  |  |
| Frame material   | PVC-U                    |  |  |

| Feature                         | s   | Class/value                                  |
|---------------------------------|---|--|
|                                 | Resistance to wind load                     | Up to C2 / B3                                |
| 3                               | Resistance to snow and permanent loads      | Not relevant**                               |
|                                 | Fire behaviour                              | Not relevant**                               |
|                                 | Watertightness                              | Up to 6A                                     |
| 2                               | Hazardous substances                        | In accordance with EN14351-<br>1 section 4.6 |
| •                               | Impact resistance                           | Class 2                                      |
|                                 | Load-bearing capacity of the safety devices | npd  |
| P P                             | Height and width                            | Not relevant**                               |
|                                 | Ability to release                          | Not relevant**                               |
| $\operatorname{Id}(\mathbb{D})$ | Sound reduction                             | npd  |
| 1                               | Heat transfer coefficient                   | *  |
|                                 | Radiation properties                        | CE marking for glazing                       |
| 4                               | Air permeability                            | Class 4                                      |
| <b>₽</b> ‡F                     | Operating forces                            | Class 1                                      |
| F                               | Mechanical strength                         | Class 4                                      |
|                                 | Ventilation                                 | *  |
| F                               | Bullet resistance                           | npd  |
|                                 | Blast resistance                            | npd  |
| 1                               | Mechanical durability test                  | Class 2                                      |
|                                 | Behaviour between different climates        | npd  |
| 1                               | Burglar resistance                          | npd  |

### **PVC-U** systems

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### Basis

EN 14351-1 (2006-03)

Windows and external doors

The Schüco performance certificate shows the performance characteristics of the systems named with their product families as per the specifications of the product standard.

The national building regulations and contractual arrangements apply to the use of the performance characteristics.

### **Publication instructions**

The Schüco International KG license conditions and conditions of use shall apply.

- Project-specific certification if necessary
- Not mandatory for windows (external doors/roof windows
- Only applies to windows with integrated ventilation devices
- Certification in accordance with country of destination

Weißenfels, 28/1/2019

p.p.

M. Herbst Spokesman for the Executive Management Board

C. Fischer Head of Technology

### Performance matrix in accordance with product standard EN 14351-1 1.

| No   | Properties in accordance with EN 14351-1               | Product family 1   | Product family 2                              | Product family 3          |
|------|--|--|---|---------------------------|
|      |  | + - Sliding window type 01   |   |                           |
| 4.2  | Resistance to wind load                                | Up to C2 / B3  |   |                           |
| 4.3  | Resistance to snow and permanent load                  | Not relevant   |   |                           |
| 4.4  | Fire behaviour   | Not relevant   |   |                           |
| 4.5  | Watertightness   | 6A   |   |                           |
| 4.6  | Hazardous substances                                   | See EN 14351-1 section 4.6   |   |                           |
| 4.7  | Impact resistance                                      | Class 2  |   |                           |
| 4.8  | Load-bearing capacity of the safety devices            | npd  |   |                           |
| 4.9  | Height and width (external doors only)                 | Not relevant   |   |                           |
| 4.10 | Ability to release (external doors only)               | Not relevant   |   |                           |
| 4.11 | Sound reduction  | npd  |   |                           |
| 4.12 | Thermal transmittance U <sub>w</sub> (W/(m²K))         | U <sub>w</sub> values must be calculated 1.48 m x 2.18 m or for specif | I based on the standard dimer<br>ic projects. | nsions 1.23 m x 1.48 m or |
| 4.13 | Radiation properties                                   | Must be provided for each p  | roject by means of CE marking                 | s for the glazing.        |
| 4.14 | Air permeability                                       | Class 4  |   |                           |
| 4.16 | Operating forces (with manually operated windows only) | Class 1  |   |                           |
| 4.17 | Mechanical strength                                    | Class 4  |   |                           |
| 4.18 | Ventilation  | Project-specific certification   |   |                           |
| 4.19 | Bullet resistance                                      | npd  |   |                           |
| 4.20 | Blast resistance                                       | npd  |   |                           |
| 4.21 | Resistance to repeated opening and closing             | Class 2  |   |                           |
| 4.22 | Behaviour between different climates                   | npd  |   |                           |
| 4.23 | Burglar resistance                                     | npd  |   |                           |

npd: no performance determined Note 1 Note 2 The numerical data in brackets is for information purposes only.

- 2. System features and performance characteristics of the product families
- Product family 1 2.1
- 2.1.1 Description of system features for product family 1

| Series                          | Schüco SoftSlide  |
|---------------------------------|---|
| Options                         | Sliding window type 01  |
| Frame material                  | PVC-U   |
| Profile depth                   | 74 mm / 50 mm   |
| Frame assembly                  | Outer frame / vent frame mitre-cut and welded   |
| Rebate construction             |   |
| Outer frame gasket, external    | For Panorama 7221, rolled in glazing gasket, mitred, welded   |
| Centre joint                    | Brush seal 24467100 and Q-Lon gasket 24467200 square-cut  |
| Vent gasket, outside and inside | Rolled in brush seal and glazing gasket, mitred, welded   |
| Rebate drainage                 | By means of 5 mm x 35 mm slots in accordance with the fabrication guidelines                            |
| Pressure equalisation           | By means of 5 mm x 35 mm slots or 8 mm drill holes in accordance with the fabrication guidelines        |
| Fittings                        | Tested with:<br>Sliding window type 01<br>ROTO sliding fitting<br>Supplier ROTO Frank AG                |
| Glazing                         | Glass thicknesses from 4 mm to 28 mm  |
| Glazing gasket, outside         | Rolled in 2-component gasket (tèfabloc), mitre-cut and welded   |
| Glazing gasket, inside          | Co-extruded gasket with lips, PVC-P, mitre-cut and joined   |
| Pressure equalisation           | By means of 5 mm $\times$ 35 mm slots or 8 mm drill holes in accordance with the fabrication guidelines |

# 2.1.2 Overview of performance characteristics for product family 1



|      | ct from proc<br>1351-1 | luct standard  | Type, design   | Proof<br>(See 3. for details)  | Value/class   | Area of application  |
|------|------------------------|--|--|--|---|--|
| 4.2  |                        | Resistance<br>to wind load                                     | sliding window, type 01<br>Unit size: 1804 x 2056 mm   | Test report<br>21-002748-PR01<br>ift Rosenheim                                   | C2 / B3   | Transfer to -100% of the frame width and frame height of the test specimen   |
| 4.3  | 1112                   | Resistance<br>to snow and<br>permanent load                    |  |  | Not relevant  |  |
| 4.4  | 2                      | Fire behaviour   |  |  | Not relevant  |  |
| 4.5  |                        | Watertightness   | sliding window, type 01<br>Unit size: 1804 x 2056 mm   | Test report<br>21-002748-PR01<br>ift Rosenheim                                   | 6A  | Transfer to -100% to +50% of the total area of the test specimen, in accordance with the maximum distances between locking points with the same or a similar format (ratio of height to width)   |
| 4.6  | 2                      | Hazardous substances   |  |  | npd   |  |
| 4.7  | <b>4</b>               | Impact resistance  | Sliding window type 01<br>Unit size: 1800 x 2156 mm  | Test report<br>19-004786-PR04<br>ift Rosenheim                                   | 2   |  |
| 4.8  |                        | Load-bearing capacity of the safety devices                    |  |  | npd   |  |
| 4.9  |                        | Height and width<br>(external doors only)                      |  |  | Not relevant  |  |
| 4.10 |                        | Ability to release (external doors only)                       |  |  | Not relevant  |  |
| 4.11 |                        | Sound reduction  |  |  | npd   |  |
| 4.12 |                        | Thermal transmittance U <sub>w</sub><br>(W/(m²K))              | Cross sections with moving/fixed parts<br>(vent/outer frame profile combination and<br>centre joint) | U <sub>r</sub> value certificate<br>in accordance with<br>DIN EN 10077 Part<br>2 | U <sub>1</sub> = 1.4 - 2.3 W/<br>(m <sup>2</sup> K) | The U $_{\rm w}$ values must be calculated based on the standard dimensions 1.23 m x 1.48 m or 1.48 m x 2.18 m or for specific projects in accordance with the processes described in Point 2.12 of this document.    Transfer regulations for standard dimensions: for dimensions 1.23 m x 1.48 m, Uw value for the window $\leq 2.3$ m $^2$ can be used; or for all windows if Ug $\leq 1.9$ W/m $^2$ K   Standard dimensions: 1.48 m x 2.18 m U $_{\rm w}$ value for windows $> 2.3$ m $^2$ |
| 4.13 | <b>*</b>               | Radiation properties   | All test specimens   | See CE marking for glazing   | Project-specific certification                      |  |
| 4.14 | •                      | Air permeability   | sliding window, type 01<br>Unit size: 1804 x 2056 mm   | Test report<br>21-002748-PR01<br>ift Rosenheim                                   | 4   | Transfer to -100% to +50% of the total area of the test specimen, in accordance with the maximum distances between locking points with the same or a similar format (ratio of height to width)   |
| 4.16 | ŀj∓F                   | Operating forces (with<br>manually operated win-<br>dows only) | sliding window, type 01<br>Unit size: 1804 x 2056 mm   | Test report<br>21-002748-PR01<br>ift Rosenheim                                   | 1   | Transfer to -100% of the total area of the test specimen with the same or a similar format (ratio of height to width) when using the same type of fittings and same design   |

|      | ct from product standard<br>4351-1         | Type, design   | Proof<br>(See 3. for details)                  | Value/class | Area of application  |
|------|--|--|--|-------------|--|
| 4.17 | Mechanical strength                        | sliding window, type 01<br>Unit size: 1800 x 2156 mm | Test report<br>19-004786-PR02<br>ift Rosenheim | 4           | Transfer to -100% of the total area of the test specimen with the same or a similar format (ratio of height to width) when using the same type of fittings and same design |
| 4.18 | Ventilation                                |  | Project-specific cer-<br>tification            | If required |  |
| 4.19 | Bullet resistance                          |  |  | npd         |  |
| 4.20 | Blast resistance                           |  |  | npd         |  |
| 4.21 | Resistance to repeated opening and closing | sliding window, type 01<br>Unit size: 1800 x 2156 mm | Test report<br>19-004786-PR03<br>ift Rosenheim | 2           |  |
| 4.22 | Behaviour between different climates       |  |  | npd         |  |
| 4.23 | Burglar resistance                         |  |  | npd         |  |

## 3. Details on listed test documentation

The original test reports serve as verification. You can obtain them via the internet at: www. schueco.de

|      | t report No.<br>t institute | Date       | Valid to      | Type of test  | Underlying standards                 |
|------|-----------------------------|------------|---------------|---|--------------------------------------|
| 19-0 | 004786-PR02                 | 2020-10-16 | Until updated | Mechanical loading  | EN 13115:2001-07                     |
| 19-0 | 004786-PR03                 | 2020-11-10 | Until updated | Resistance to repeated opening and closing                                  | EN 13115:2001-07<br>EN 12400:2002-10 |
| 19-0 | 004786-PR04                 | 2020-11-10 | Until updated | Impact resistance   | EN 13049:2003-04                     |
| 21-0 | 002748-PR01                 | 2021-06-25 | Until updated | Resistance to wind load, watertightness, air permeability, operating forces | prEN14351:2006+A2:2016-09            |

# Appendix 1 Test, calculation and classification standards in accordance with EN 14351-1

| No   |             | Properties in accordance with EN 14351-1               | Test or calculation standard   | Classification standard                       |
|------|-------------|--|--|---|
| 4.2  |             | Resistance to wind load                                | EN 12211   | EN 12210                                      |
| 4.3  | 8 /         | Resistance to snow and permanent load                  | National regulations   |   |
| 4.4  | 2           | Fire behaviour   | EN 13501-1   | EN 13501-1                                    |
| 4.5  |             | Watertightness   | EN 1027  | EN 12208                                      |
| 4.6  | 2           | Hazardous substances                                   | National regulations   |   |
| 4.7  |             | Impact resistance                                      | EN 13049   |   |
| 4.8  | R           | Load-bearing capacity of the safety devices            | EN 14609   | Threshold value                               |
| 4.9  | tH<br>B     | Height and width (external doors only)                 | Measured values  |   |
| 4.10 | *           | Ability to release<br>(external doors only)            | EN 179, EN 1125, EN 1935, prEN 13633, EN 13637   |   |
| 4.11 |             | Sound reduction  | EN ISO 140-3,<br>EN ISO 717-1  | Measured values                               |
| 4.12 | 101         | Thermal transmittance U <sub>w</sub> (W/(m²K))         | EN ISO 10077-1:2006 Table F.1 / Table F.3,<br>EN ISO 10077-2, EN ISO 12567-1, EN ISO 12567-2 | Measured values                               |
| 4.13 | N.          | Radiation properties                                   | EN 410, EN 13363-1, EN 13363-2   | Measured values                               |
| 4.14 | 4           | Air permeability                                       | EN 1026  | EN 12207                                      |
| 4.16 | <b>₽</b> ‡F | Operating forces (with manually operated windows only) | EN 12046-1   | EN 13115                                      |
| 4.17 | <b>₽</b>    | Mechanical strength                                    | EN 14608, EN 14609, EN 12046-1   | EN 13115                                      |
| 4.18 | •           | Ventilation  | EN 13141-1   | Measured values                               |
| 4.19 | F           | Bullet resistance                                      | EN 1523  | EN 1522                                       |
| 4.20 | <b>*</b>    | Blast resistance                                       | EN 13124-1,<br>EN 13124-2  | EN 13123-1,<br>EN 13123-2                     |
| 4.21 |             | Resistance to repeated opening and closing             | EN 1191  | EN 12400                                      |
| 4.22 | KD.         | Behaviour between different climates                   | ENV 13420 window<br>EN 1121 entrance door  | EN 12219 entrance door<br>Pending for windows |
| 4.23 | 1           | Burglar resistance                                     | ENV 1628, ENV 1629, ENV 1630   | ENV 1627                                      |

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