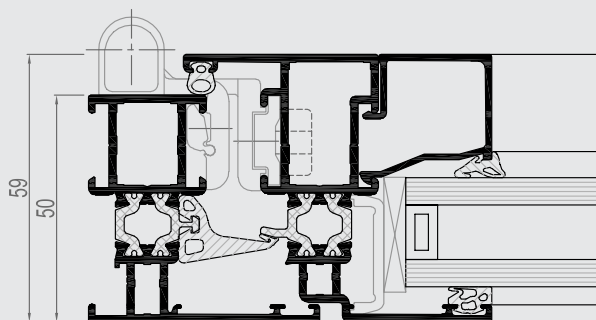




CS 59

Windows & Doors

R
REYNAERS
aluminium



CS 59 is a thermally improved three-chamber system for windows and doors.

The system is available in a variety of aesthetic shapes to match the current architectural styles whilst offering all types of both inward and outward opening windows and doors.

The compact dimensions of the CS 59 system enable the visible width of the aluminium to be kept to a minimum.

Different inner and outer colours are possible.

TECHNICAL CHARACTERISTICS



| Style variants | FUNCTIONAL | RENAISSANCE | SOFTLINE | HIDDEN VENT |
|---|---|-------------|-------------|-------------|
| Min. visible width inward opening window | | | | |
| Frame | 51 mm | 51 mm | 51 mm | 76 mm |
| Vent | 33 mm | 33 mm | 33 mm | not visible |
| Min. visible width outward opening window | | | | |
| Frame | 17.5 mm | - | - | - |
| Vent | 76 mm | - | - | - |
| Min. visible width inward opening flush door | | | | |
| Frame | 67 mm | - | - | - |
| Vent | 77 mm | - | - | - |
| Min. visible width outward opening flush door | | | | |
| Frame | 42 mm | - | - | - |
| Vent | 102 mm | - | - | - |
| Min. visible width T-profile | 76 mm | 76 mm | 76 mm | 126 mm |
| Overall system depth window | | | | |
| Frame | 50 mm | 59 mm | 59 mm | 50 mm |
| Vent | 59 mm | 68 mm | 68 mm | 54.5 mm |
| Rebate height | 25 mm | 25 mm | 25 mm | 18.5 mm |
| Glass thickness | up to 35 mm | up to 35 mm | up to 35 mm | up to 31 mm |
| Glazing method | dry glazing with EPDM or neutral silicones | | | |
| Thermal insulation | 14 mm omega-shaped fibreglass reinforced polyamide strips | | | |

PERFORMANCES

ENERGY

Thermal Insulation⁽¹⁾
EN 10077-2

Uf-value between 3.0 W/m²K and 3.7 W/m²K, depending on the frame/vent combination

COMFORT

Acoustic performance⁽²⁾
EN ISO 140-3; EN ISO 717-1

Rw (C; Ctr) = 35 (-1; -4) dB / 38 (-2; -5) dB, depending on glazing type

Air tightness, max. test pressure⁽³⁾
EN 1026; EN 12207

| 1 (150 Pa) | 2 (300 Pa) | 3 (600 Pa) | 4 (600 Pa) |
|---------------|---------------|---------------|---------------|
| | | | |

Water tightness⁽⁴⁾
EN 1027; EN 12208

| 1A (0 Pa) | 2A (50 Pa) | 3A (100 Pa) | 4A (150 Pa) | 5A (200 Pa) | 6A (250 Pa) | 7A (300 Pa) | 8A (450 Pa) | 9A (600 Pa) | E (750 Pa) |
|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|
| | | | | | | | | | |

Wind load resistance, max. test pressure⁽⁵⁾
EN 12211; EN 12210

| 1 (400 Pa) | 2 (800 Pa) | 3 (1200 Pa) | 4 (1600 Pa) | 5 (2000 Pa) | E _{xxx} (> 2000 Pa) |
|---------------|---------------|----------------|----------------|----------------|---------------------------------|
| | | | | | |

Wind load resistance to frame deflection⁽⁵⁾
EN 12211; EN 12210

| A (≤1/150) | B (≤1/200) | C (≤1/300) |
|---------------|---------------|---------------|
| | | |

SAFETY

Burglar resistance⁽⁶⁾
ENV 1627 - ENV 1630

| WK 1 | WK 2 | WK 3 (doors) |
|------|------|-----------------|
| | | |

This table shows possible classes and values of performances. The values indicated in red are the ones relevant to this system.

- (1) The Uf-value measures the heat flow. The lower the Uf-value, the better the thermal insulation of the frame.
- (2) The sound reduction index (Rw) measures the capacity of the sound reduction performance of the frame.
- (3) The air tightness test measures the volume of air that would pass through a closed window at a certain air pressure.
- (4) The water tightness testing involves applying a uniform water spray at increasing air pressure until water penetrates the window.
- (5) The wind load resistance is a measure of the profile's structural strength and is tested by applying increasing levels of air pressure to simulate the wind force. There are up to five levels of wind resistance (1 to 5) and three deflection classes (A,B,C). The higher the number, the better the performance.
- (6) The burglar resistance is tested by statistical and dynamic loads, as well as by simulated attempts to break in using specified tools.

