

# multi-storey, residential apartment blocks

**CW-75 system**

# CW-75

## The holistic solution for multi-storey residential.

Symonite has collaborated with one of Europe's leading joinery manufacturers to develop exterior facade systems including a sliding door, operable windows and balconies all incorporated into one system.

### DURABLE WITH ENHANCED PERFORMANCE

Reynaers Aluminium is a leading European specialist in the development of innovative and sustainable aluminium solutions for windows, doors, curtain walls, sliding systems and sun screening. Driven by energy-efficiency and the willingness to take responsibility for the environment. Our high-quality systems meet the most stringent demands in terms of comfort, energy, security, architectural design, and energy-efficiency

#### **Thermal Insulation:**

Reynaers systems are designed to meet different levels of thermal insulation. This insulation level is called the U-value. The lower this U-value is, the higher the insulation. This insulation level is realised by a thermal break between the inner and outer aluminium profiles. Profiles of Reynaers also have a unique center seal or gasket and a continuous acoustic seal, to ensure the insulation.

The state-of-the-art insulation technique used by Reynaers, connects the outer chamber and the inner chamber through fiberglass reinforced polyamide strips. These strips provide a thermal break and come in various widths. The wider strips, the higher the insulation factor. The design of these strips is important to guarantee the stability and strength of the assembled profile.

#### **Airtight building connections:**

Air tightness is an absolute requirement for an energy efficient building. Reynaers fabricators can drastically improve the airtightness of the building connection, using ReynaConnect according to strict procedures. Their expertise and knowledge in this field is essential in achieving your passive or low energy project. ReynaConnect duofoil is applied around the window or door frame. In combination with our special elastic foam and compression tape, it guarantees a superior airtight building connection.



## PERFORMANCE

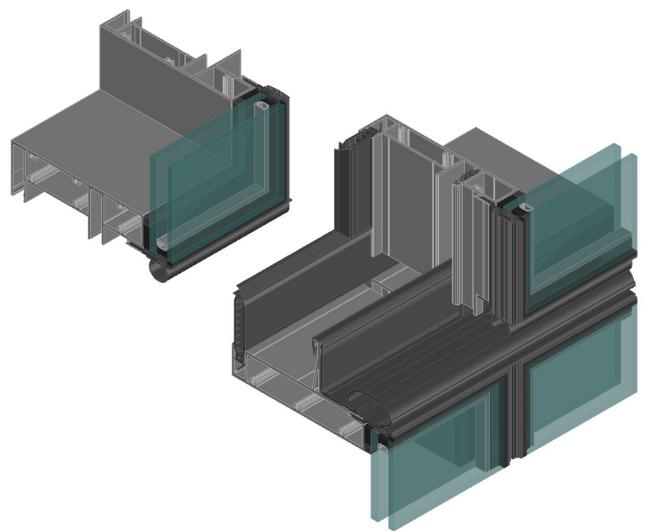
This table shows classes and values of performances, which can be achieved for specific configurations and opening types.

| ENERGY                    |   |   |               |                       |               |
|---------------------------|---|---|---------------|-----------------------|---------------|
| Thermal insulation        | Uf = 2.6 W/m <sup>2</sup> .K (for typical curtain wall mullion / transom) |   |               |                       |               |
| COMFORT                   |   |   |               |                       |               |
| Acoustic performance      | 34 to 47 dB STC , depending on glass thickness                            |   |               |                       |               |
| Air tightness             | NZS4284:2008<br>NZS4211:2008  | Surface:<br>0.32 l/s/m <sup>2</sup>   | <1.60<br>PASS | Joints:<br>0.18 l/s/m | <0.60<br>PASS |
| Water tightness           | NZS4284:2008  | Static up to 700 Pa, cyclic 1.4 kPa incl for inward, outward sash and sliding door insert |               |                       |               |
| Wind load pressure        | NZS4284:2008  | Up to ULS +/- 3.57 kPa @ 3.3m floor span  |               |                       |               |
| Structural deflection     | NZS4284:2008  | Up to SLS +/- 2.40 kPa @ 3.3m floor span  |               |                       |               |
| Seismic inter-storey      | NZS4284:2008  | SLS up to +/- 25mm<br>ULS up to +/- 100mm on 3.3m span                                    |               |                       |               |
| Live load deflection      |   | +15mm/-20mm   |               |                       |               |
| Resistance against impact | NZS2208: 1996   | Incorporated Juliette balconies for C3 occupancy  |               |                       |               |



## CW-75 TECHNICAL CHARACTERISTICS

|                         |                          |
|-------------------------|--------------------------|
| Max dimensions          | 1.600 x 3.600            |
| Interior visible width  | 75 mm                    |
| Exterior visible width  | 16mm joint between glass |
| Depth system            | 183mm                    |
| Depth from floor slab   | 250mm                    |
| Depth mullions          | 150mm                    |
| Depth transom           | 150mm                    |
| Glass thickness         | 24-28mm                  |
| Glass weight            | Up to 40kg/sqm           |
| Max height sliding door | 2700mm                   |
| Max size inward sash    | 1500x1200                |
| Max size outward sash   | 1500x1200                |
| Types of vents          | Inward, outward opening  |



# Reynaers in New Zealand

Reynaers Aluminium is one of the leading European joinery designers and has been active in New Zealand for almost 10 years with both residential and commercial references. A wide variety of systems are developed and tested to New Zealand Standards and our fast-growing list

of references is proof of the excellent quality of the joinery solutions.

Symonite Solutions is the local partner of Reynaers Aluminium in the New Zealand market and offers local design, engineering, fabrication and installation.



Hampden Otahuhu Precinct, Auckland, New Zealand



Justice Precinct Christchurch. Photo: Dennis Lightforge.



## **SYMONITE PANELS**

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The current state of architecture and design requires extensive collaboration and an investigative attitude. We continue to research and develop product technologies and installation techniques