



# OPTIMA

## The gear for today and future systems

A high quality window system with high fabrication speed



Reynaers created a flexible accessory-concept, which can be applied for all types of windows and doors in different constructions. The concept is built exclusively for the Reynaers' new generation of window & door systems and is innovative on different levels:

- flexibility
- high performance and quality
- high productivity

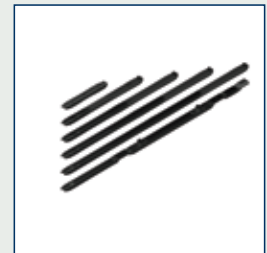
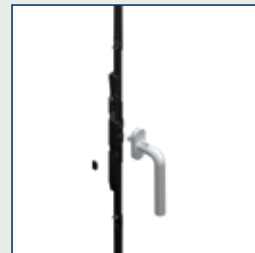


## FLEXIBILITY

Due to the symmetrical accessories groove in the vent profile the Optima allows for one basic set of accessories to accommodate all inward opening window types: Turn, Turn-Tilt, Tilt-Turn, Bottom Hung and double casement.

By way of two easy manual operations, you can switch the Turn-Tilt position easily to the Tilt-Turn position. Even left and right windows can be built with the same gear articles. With a restrictor for the handle on 90° the window will only be Turn or Tilt for bottom hung solutions.

Flexibility doesn't mean more stock and logistic issues. On the contrary, components have been reduced from 50 to approximately 20 items which also minimizes the risk of mistakes.

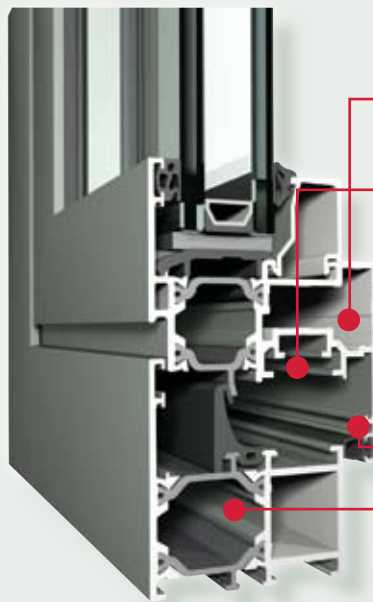


## HIGH PERFORMANCE AND QUALITY

The standard gear has been designed to carry up to 150 kg vent weight by using much stronger hinges. Its weight-bearing capacity makes it ideal to support larger and heavier glass. This is further strengthened by the high quality double casement solution as the second vent can take multiple closing points, even at the top and bottom of the vent. An anti-burglar solution, compliant with European WK2 anti-burglar standards, is also offered. This is achieved with only a few additional components.

## HIGH PRODUCTIVITY

Fabricators will appreciate the productivity of the new Optima gear. Due to the reduced number of parts and the ease of mounting, the risk of errors is minimized enhancing productivity and efficiency. Mounting of the gear is as simple as sliding the components into the specially designed groove in the vent: all the elements easily click in place. This groove is optimized for the internal locking case, eliminating the time consuming milling. In addition, the acoustic gasket doesn't need to be cut anymore, reducing the mounting time of the gear by at least 20%. Moreover, the Optima is compatible with all standard square pin handles offering end-customers more choice in design. To improve productivity even more the gear comes specially packaged to store and assemble the components easily.



**High level corner connection for stable window fabrication**

**Improved double groove for gear**

- minimal milling of profiles required
- ease of gear mounting
- symmetrical detail in vent and frame:
  - reduction of different parts
  - left-right position is identical
- no mistakes in fabrication

**Improved acoustical gasket**

**High insulation level**

**Affordable anti-burglar solution**

**Higher weights → Larger windows**

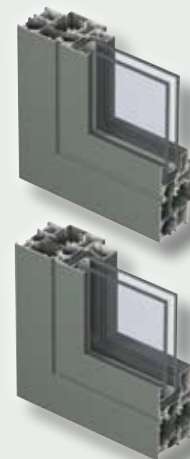
## AUTOMATION FOR INCREASED PRODUCTIVITY

With a specially designed mounting machine all accessories can be mounted on the aluminium vent at very high speed. The parts are slit into the special groove on the vent by the machine, using a fully automated rotating table. Mounting time is reduced to approximately 2 minutes. It has been attuned for CE marking in terms of process control.

## REYNAERS WINDOW SYSTEMS

New vents were designed for integration of the gear in the existing Reynaers Eco system and CS 68, re-using all outer frames, transoms, glazing beads and other components. The WK II safety solution is also applicable with a minimum of extra components.

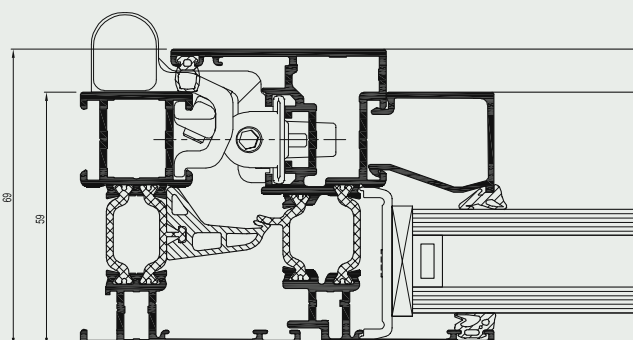
In Eco system an additional feature allows the fabricator to glue the glass to the vent increasing the stability of the vent and decreasing production time. There is no need to install the glass and adjust the vent on site. No glazing beads are necessary. All of this is achieved with the assistance of a dedicated glass gluing robot.



## TECHNICAL CHARACTERISTICS SYSTEMS

CS 68: Building-in depth: CS 68 : outer frame = 59 mm, vent = 69 mm

Eco system: Building-in depth Eco system: outer frame = 50 mm, vent = 60 mm





## TECHNICAL CHARACTERISTICS AND PERFORMANCES

Technical characteristics gear:

- Quick assembly:
  - Special optima groove
- Minimal and maximal dimensions
  - Width: min. 500mm, max. 1400mm
  - Height: min. 500mm, max. 2500mm
- High load bearing capacity
  - Maximal vent weight: up to 150 kg
  - RAL approved at 150kg with 7 locking points
- Mishandling device integrated in internal locking device
- Window types:
  - Inward opening side hung window
  - Turn-tilt window
  - Tilt before turn window
  - Inward opening bottom hung window
  - Double casement window
- WK II burglary proof