



Creating healthy spaces



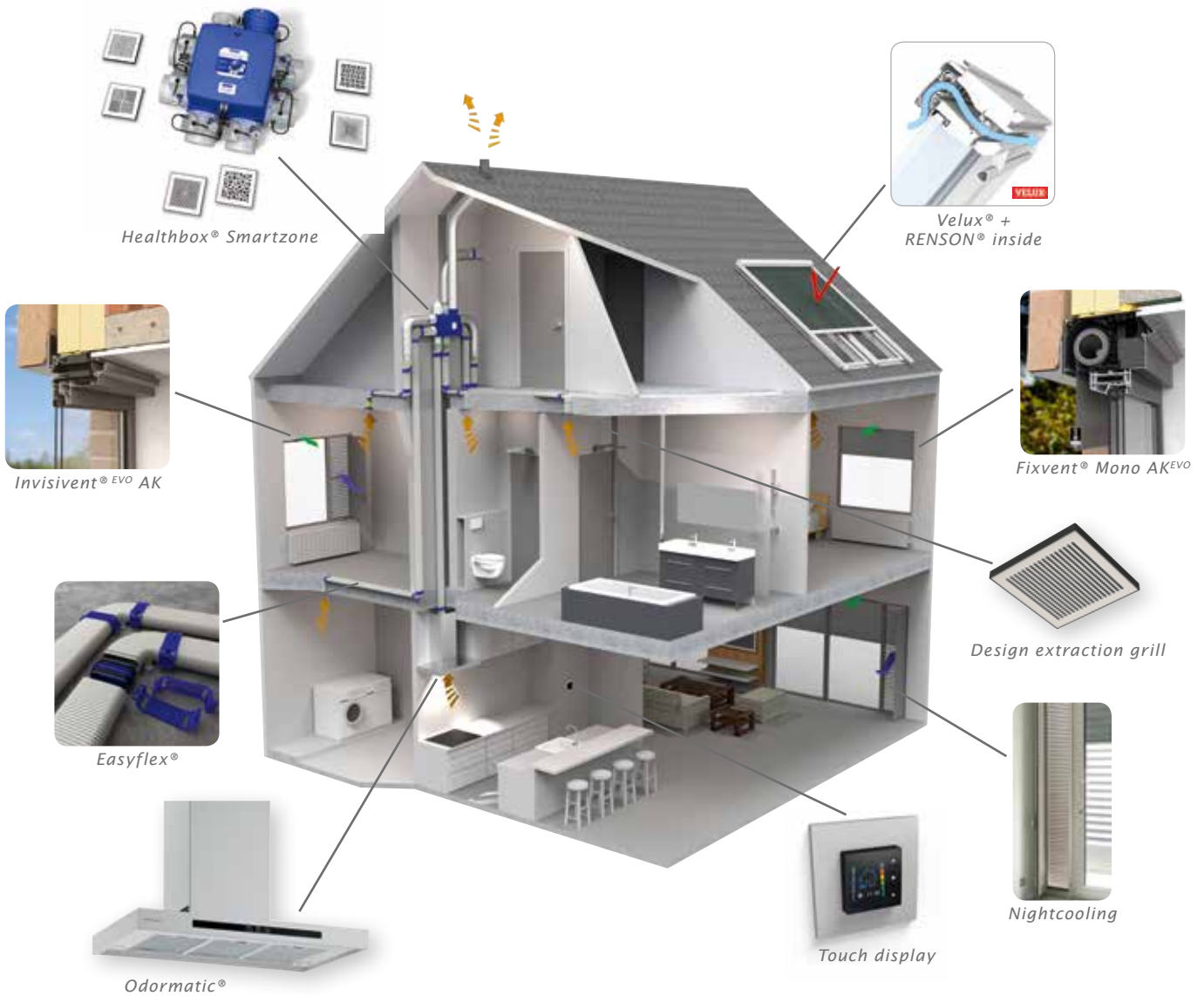
Easyflex®

Your guarantee on airflow, sound & air tightness

Introduction

RENSON® Concept

RENSON® has all the products you need to create a comfortable and healthy indoor climate. Window vents, sun protection, transfer grills, roof outlet, ventilation unit, extraction grills, controls and now also air ducts; are all part of our wide product range. All these products work together to ensure you of an ideal comfort and healthy indoor climate.



To ventilate

Ventilation is an essential part of our current way of living. It protects your home against moisture, mold & unpleasant smells and it allows you to enjoy fresh air in a controlled and safe way.

On the one hand a ventilation system needs to comply with a number of technical demands such as achieving the required airflows per room. On the other hand it also needs to comply with certain comfort demands, e.g. limiting the sound production of the system.

An essential factor in meeting those demands is a well-designed and installed air duct system. The higher the air tightness and the bigger the diameter of the air ducts, the smaller the pressure loss and sound production.

Easyflex is a flexible, flat oval air duct system that has been specially designed with high performance and comfort in mind. Not only comfort for the end user but also for the installer who can install the system very easily.

Your guarantee on airflow, sound & air tightness

Easyflex®

Easyflex is a semi-rigid, corrugated air duct made out of polyethylene with an external diameter of 140x64mm and an equivalent inner diameter of 90mm. The smooth inner surface of the double walled air duct is treated with antistatic and antibacterial additives to prevent dust accumulation and bacteria outbreaks.

Thanks to its size, an airflow of 57m³/h is achieved at a design speed of 2,5 m/s. A high airflow combined with a low air speed guarantees a silent air duct system.

The limited height of the Easyflex air duct allows it to be installed easily into false walls/ceilings, in concrete or screed.



Your guarantee on airflow, sound, air tightness & hygiene

Airtight

The unique linking system ensures an almost perfect airtightness. The connection piece with integrated rubber sealing is pushed into the semi-rigid duct and clamped off with a quick release, making the connection completely airtight. The quick release can be fastened to the surface so that the connection cannot move.

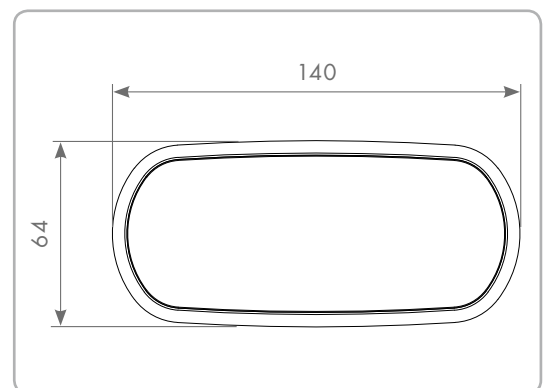
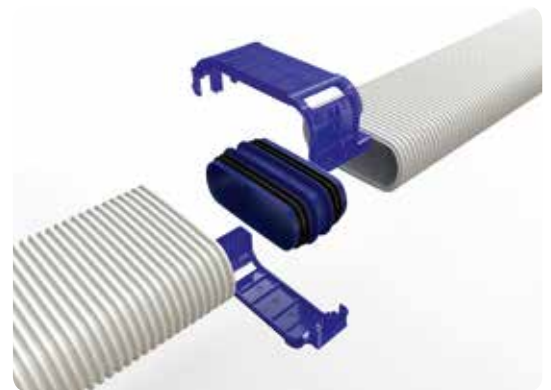
Guarantee on airflow

A large diameter was purposely chosen when designing the Easyflex semi-rigid ducts, allowing the system to transport large airflows (57m³/h) at low air speeds (2,5 m/s). This dimensioning combined with an excellent airtightness ensures you that the designed airflows for each room will be achieved (when the installation instructions are respected).

Acoustic comfort

The big dimensions of the air duct system also impacts the acoustic comfort of the system seeing as the chance on flow noise due to high air speeds is drastically reduced. Furthermore it is possible to equip the extraction grills in rooms with an required airflow of ≤50m³/h with an acoustic damper to limit any possible noise at the level of the extraction grills. The shape of the connection pieces for the extraction grills also contributes to the acoustic comfort. Passing from the flat semi-rigid duct to the extraction grill (Ø90 → Ø125mm) a pressure drop is created, resulting in an extra low air speed over the extraction grill.

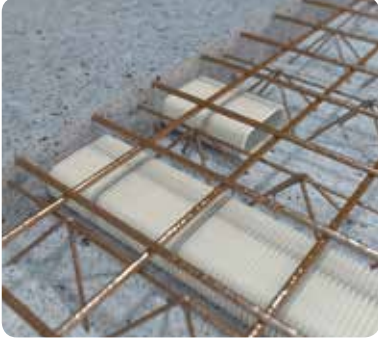
If you combine Easyflex with the Healthbox® II or the Healthbox® Smartzone and you respect the installation instructions, than RENSON® guarantees that the designed airflow will be achieved in every room in a comfortable and quiet way.



Parts

The semi-rigid duct

The semi-rigid Easyflex air duct out of PE can be easily integrated into screed (9 to 10cm thickness) or into a false wall/ceiling thanks to its limited height (64mm). The Easyflex duct can also be poured into concrete. The shape of the air duct spreads the pressure optimally over the duct so that there is nearly no disfiguration when put under a pressure load.



In concrete



In isolation



In false wall

Bends

The flexible character of Easyflex allows you to take bends with a radius of > 400 mm with the duct itself. For sharp bends you can use the horizontal and vertical 90° bend. Obstacles on the floor can easily be worked around thanks to the above solutions.



Bend $r > 400$



Vertical bend 90°



Horizontal bend 90°

Connection piece

Easyflex ensures an excellent air tightness thanks to the unique linking system. A connection piece with integrated rubber seals is used to connect two air ducts or an air duct with a transfer piece. To ensure the airtightness, a quick release is used to put the connection under tension so that the rubber seal performs optimally and the coupling no longer moves.



Round rigid ducts

You can use round rigid ducts to bridge the vertical distance between the flat ducts and the ventilation system. For rooms with an airflow $<50\text{m}^3/\text{h}$ it is best to use a duct in $\text{Ø}80\text{mm}$. for rooms with an airflow $>50\text{m}^3/\text{h}$ it is advised to use a $\text{Ø}125\text{mm}$. You can also use semi-rigid ducts to bridge the distance to the ventilation system.



Fastening

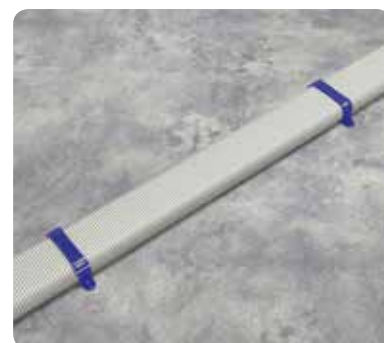
The Easyflex ducts can be fastened to the surface in two ways: the quick releases can be fastened to the ground by means of concrete drive pins or by screws. This makes sure that the coupling will not move. It is also advised to use a fastening bracket every 1,5m to make sure that the ducts do not move.



Concrete pin



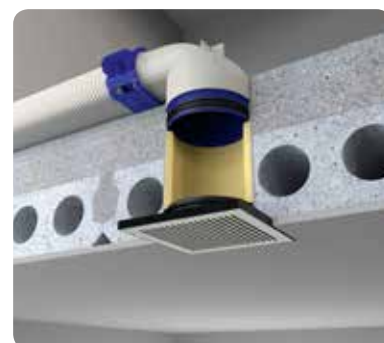
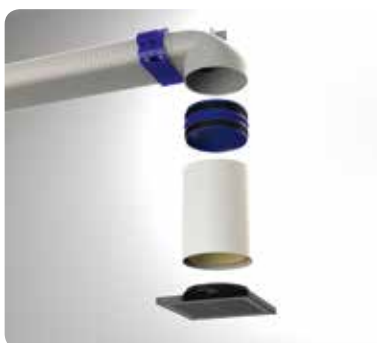
Screws



Fastening bracket

Extraction grill connection

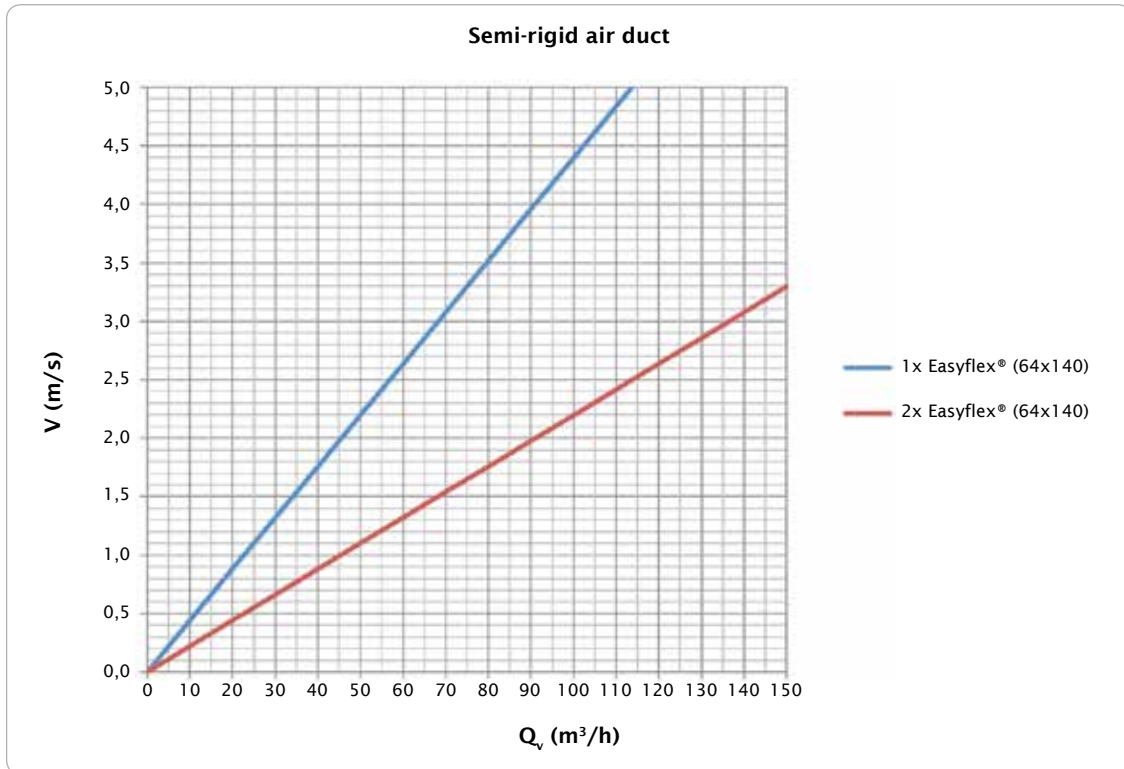
The RENSON® extraction grills can be easily connected to the Easyflex air duct system. The extraction grill connections come in 2 diameters: $\text{Ø}80\text{mm}$ for rooms with an airflow $\leq 50\text{m}^3/\text{h}$ and $\text{Ø}125\text{mm}$ for rooms with an airflow $\geq 50\text{m}^3/\text{h}$. The extraction grills can be installed directly onto the extraction grill connection (false walls) but it is also possible to use an intermediate piece (in concrete).



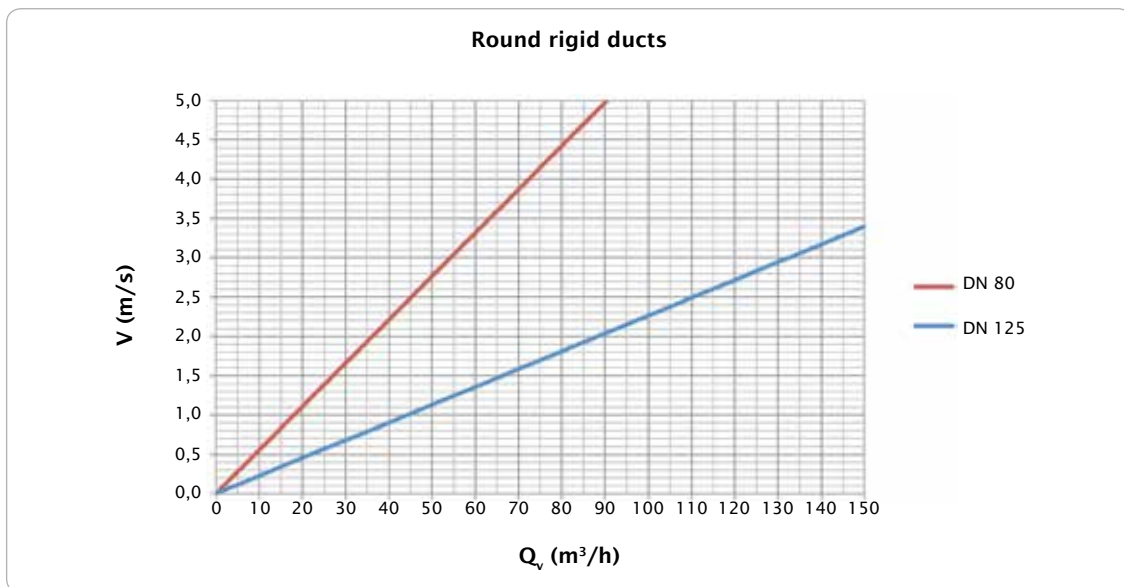
Parts

Technical specifications

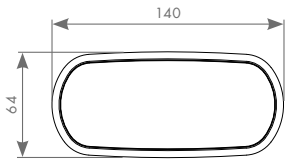
Easyflex®



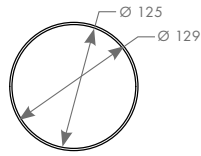
Round rigid ducts



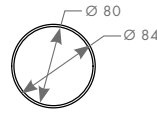
	0 m/s	0,5 m/s	1 m/s	1,5 m/s	2 m/s	2,5 m/s	3 m/s	3,5 m/s	4 m/s	4,5 m/s	5 m/s
1 x Easyflex (m³/h)	0	11,4	22,7	34,1	45,5	56,9	68,2	79,6	91	102,4	113,7
2 x Easyflex (m³/h)	0	22,8	45,4	68,2	91	113,8	136,4	159,2	182	204,8	227,4
round rigid duct Ø80 mm (m³/h)	0	9,0	18,1	27,1	36,2	45,2	54,3	63,3	72,4	81,4	90,5
round rigid duct Ø125 mm (m³/h)	0	22,1	44,2	66,3	88,4	110,4	132,5	154,6	176,7	198,8	220,9



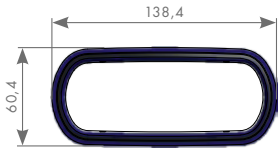
Semi-rigid duct



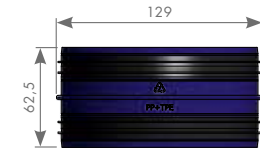
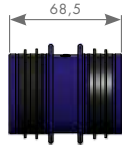
Round rigid duct $\varnothing 125$ mm



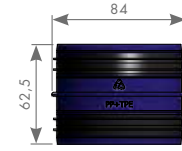
Round rigid duct $\varnothing 80$ mm



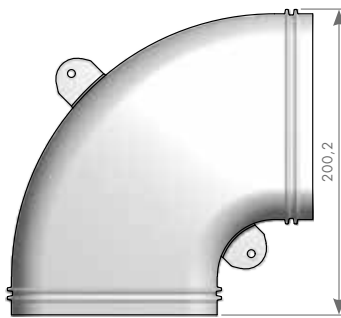
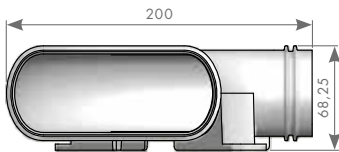
Connection piece oval



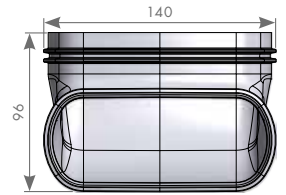
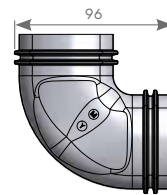
Connection piece $\varnothing 125$ mm



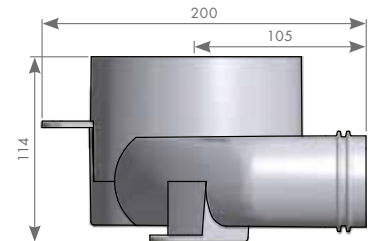
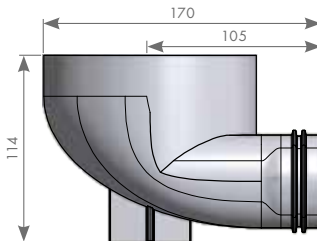
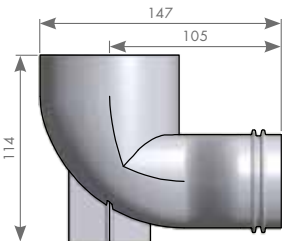
Connection piece $\varnothing 80$ mm



Horizontal bend 90°



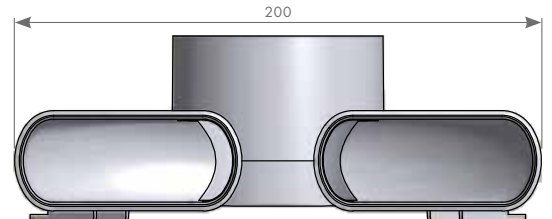
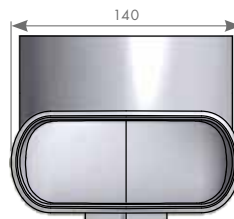
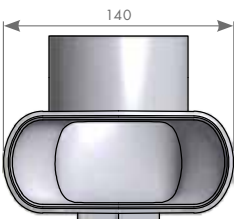
Vertical bend 90°



Extraction grill connection $\varnothing 80$ mm

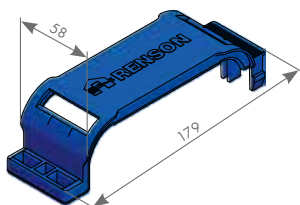
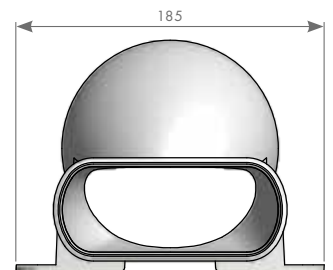
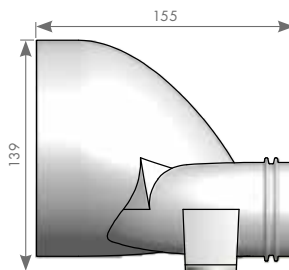
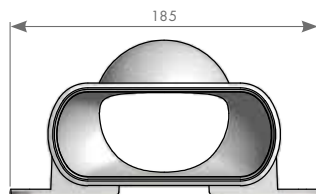
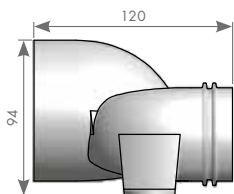
Extraction grill connection $\varnothing 125$ mm

Double extraction grill connection $\varnothing 125$ mm

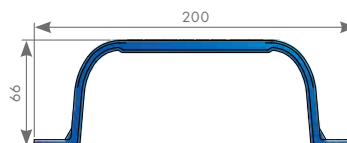


Flat to round $\varnothing 80$ mm

Flat to round $\varnothing 125$ mm



Quick release



Fastening bracket





Creating healthy spaces

RENSON®: your partner in ventilation and sun protection

RENSON®, headquartered in Waregem (Belgium), is a trendsetter in Europe in natural ventilation and sun protection.

- **Creating healthy spaces**

From 1909, we've been developing energy efficient solutions assuring a healthy and comfortable indoor climate.

Our remarkable headquarters - built according to the 'Healthy Building Concept' - is a beautiful example portraying our corporate mission.

- **No speed limit on innovation**

A multidisciplinary team of more than 50 R&D employees continually optimize our products and develop new and innovative concepts.

- **Strong in communication**

Contact with the customer is of the utmost importance. A group of 70 in-the-field employees worldwide and a powerful international distribution network are ready to advise you on site. EXIT 5 at Waregem gives you the possibility to experience our products on your own and provides necessary training for installers.

- **A reliable partner in business**

We can guarantee our customers optimal quality and service thanks to our environmentally friendly and modern production sites (with automated powder coating line, anodisation line, uPVC injection molding machinery and mold making shop) covering an area of 75.000 m².

Dealer

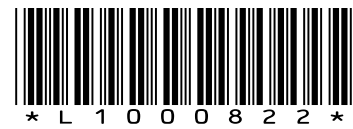


RENSON® reserves the right to make technical changes to the products shown.
The latest brochures may be downloaded from www.renson.eu

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