



DESIGN

AIR CURTAIN UNITS

FOR DISCERNING REQUIREMENTS



TEDDINGTON



TEDDINGTON



Revolving door with a Teddington RONDO air curtain system, SDA design.Forum Allgäu, Kempten.



Save energy and improve user-friendliness

Air curtain systems are used almost everywhere where the inside and outside air is constantly changing because the doors and gates are opened frequently.

The benefits are clear:

- the quality of the climate and comfort in the room are noticeable improved.
- Customers, visitors and employees feel noticeably better.
- The energy costs for heating or air-conditioning the room are minimised. Reduced energy consumption also means fewer emissions and improved climate protection.



Teddington devices are available with energy-saving EC technology motors to allow stepless control. This optimises use and also saves energy.

Top design to suit any style.

Air curtain systems cannot always be built into ceilings so they are invisible. For example, where the entrances are high, the interior design is open plan or there are sliding or revolving doors.

In these cases, the air curtain system needs to be visible and integrate harmoniously into the environment.

Teddington devices are exclusively designs, with refined finishes which can be coloured to suit customer requirements.

Top quality materials, excellent workmanship and low noise levels can be taken for granted.

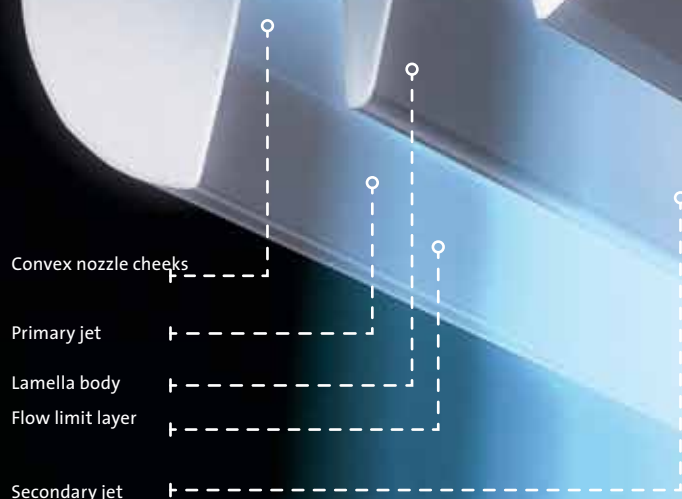
And the patented EVOLVENT® nozzle technology means Teddington is setting the standards when it comes to energy efficiency and effectiveness in air curtain technology.

Compared to unprotected entrance areas, EVOLVENT® units from Teddington allow enormous **energy savings of up to 80 %!**

It's an investment that pays off quickly and also makes an important contribution towards protecting the environment.







It's the nozzle that makes the difference.

The patented EVOLVENT® nozzle system compresses the flow of air in the pressure chamber and distributed it evenly through the nozzle.

This accelerates the flow of air across the width of the outlet to produce a concentrated, low-eddy air curtain with a high penetration depth.

A flow profile splits the consistent

flow of air into a primary jet and a secondary jet.

This means that the front section of the flow area gets a higher impact volume of air flow than the back one. The accelerated primary jet is then supported by the slower secondary jet.

The result is an air curtain with

considerably improved penetration depth and a stable flow direction.

So it also stands to reason that there is an enormous energy saving. Compared to units which use lamella technology, it uses up to 40 % less energy for the same shielding effect.

It depends on the situation.



Swing door system with horizontal air curtains fitted in a row.



Automatic sliding door with vertical air curtain device.



Circular sliding door with vertical air curtain device.



Revolving doors with vertical air curtain systems.

SWING DOORS

Swing doors or door systems have door elements which swing open either inwards or outwards and can be opened either manually or automatically.

The swing movement of the door elements often makes a vertical arrangement of the air curtain units next to the doors either difficult or impossible, as the open door would block the air curtain. So only **horizontally fitted** units are available as standard for swing doors. The devices are mounted above the door so the air curtain is blown downwards.

However, exceptions are possible to suit specific customer requirements. For example, if the swing doors only swing outwards. In such cases, the designer vertical units for automatic sliding doors can also be used.

AUTOMATIC SLIDING DOORS

This includes all doors and door systems where the door elements automatically slide to the side by means of light barriers or movement sensors.

The air curtain devices can be mounted horizontally above **the doors**. The air curtain is then blown downwards. If fitting the units above the doors is either impossible or impractical – for example if the door systems are more than 4 metres high – automatic sliding doors can also easily be shielded using **vertically mounted** air curtains. To do this, attractively designed slimline column units are positioned next to the door to create an air curtain out to the side.

CIRCULAR SLIDING DOORS

As with revolving doors, circular sliding doors are based on a providing a circular air-lock function. However, instead of revolving panels, circular sliding doors have arc-shaped sliding door elements adjusted to the radius of the circle which open automatically to the side. This system is simple to shield using **vertically mounted** units either inside or outside the air-lock.

REVOLVING DOORS

The panels of a revolving door act like a paddle wheel pushing untreated outside air into the building. This produces an unpleasant "sea of cold" in the entrance area.

Air curtains can be **fitted vertically** next to the door to provide effective shielding for revolving doors.

Horizontal fitting is also an option. To do this, the air curtain system is adapted to the radius of the revolving door and fitted into its 'roof'. For technical reasons, EVOLVENT® nozzles cannot be used when units are fitted in this way.



Overview of units

DOOR SITUATION	ASSEMBLY	UNIT SERIES	Page
SWING DOORS	HORIZONTAL	DELTA	8-11
		ELLIPSE	12-15
		SILENT	16-17
AUTOMATIC SLIDING DOORS	HORIZONTAL	DELTA	8-11
		ELLIPSE	12-15
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	VERTICAL	CHARISMA	18-23
		TOPAS	24-25
		SINTRA	26-27
CIRCULAR SLIDING DOORS	VERTICAL	SINTRA	26-27
		SAPHIR	28-31
REVOLVING DOORS	VERTICAL	SAPHIR	28-31
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DELTA devices fitted in series at the Tempelhofer Hafen shopping centre in Berlin.



Modern, dynamic, efficient

Teddington DELTA series designer units have an aerofoil-shaped casing to add a modern touch to all areas where aesthetic impressions count. The devices, which are fitted horizontally, are available in lengths

of 100 cm, 150 cm, 200 cm, 250 cm and 300 cm and can be fitted over swing doors and automatic sliding doors. With three performance classes and the established EVOLVENT® nozzle technology, the

DELTA series devices also set the standards when it comes to efficiency.

The permanently open, generous swing-door entrances to this shop make it inviting to passers-by.

DELTA series devices ensure that cold drafts stay outside and the climate inside is constant and pleasant.



The Communications Museum in Berlin. A special mounting bracket is used to fit the DELTA device to this stylish old swing door without compromising its looks.





DELTA adapts to any style. Whether it's a modern stainless steel look or enamel finished in any colour – whether it's a single unit or fitted in series.



Gentle curves, high technology.

The ELLIPSE series designer air curtains are available in rounded or flat ellipse shapes.

With their gentle curves, both housing styles represent a timeless design which fits perfectly into any room. The devices are also fitted horizontally, available in lengths of

100 cm, 150 cm, 200 cm, 250 cm and 300 cm and can be fitted over swing doors and automatic sliding doors.

For the rounded version ELLIPSE-R, there are two performance classes, while the flat version ELLIPSE-F has two performance classes. The functionality and design of the ELLIPSE series device also include a

coloured enamel or modern stainless steel finish and special options – e.g. built-in halogen spotlights.



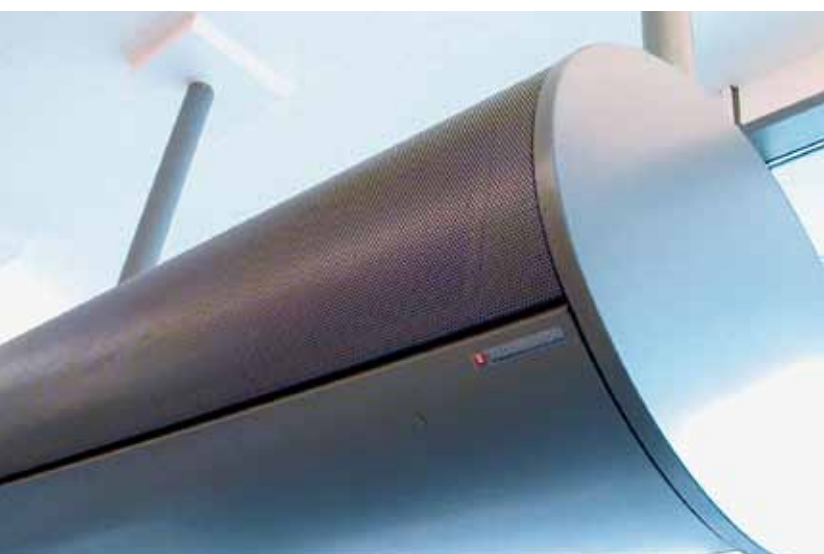
Top left: White ELLIPSE-F units blend in perfectly with the bright, modern ambience of a restaurant chain. Top right: The rounded ELLIPSE-R in a fashion store in Kassel. A clear, modern look and the last word in efficiency. Bottom right: A stainless steel ELLIPSE-F device with built-in halogen spotlights sets the stage the entrance area of a leading store in Lingen perfectly.



ELLIPSE Designer units for horizontal fitting

SWING DOORS

AUTOMATIC SLIDING DOORS



Top: ELLIPSE-F devices fitted in series. Top right: ELLIPSE-R devices in a shopping centre. Right-hand page: ELLIPSE-F device in an exclusive shoe shop in Leipzig.



SILENT

Designer units for horizontal fitting

SWING DOORS

AUTOMATIC SLIDING DOORS

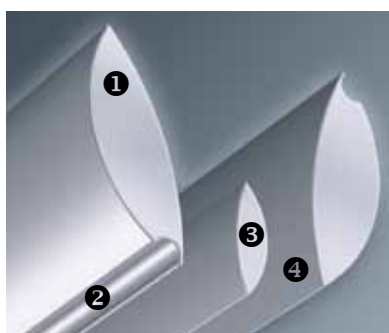




Pure silence.

When absolute silence is key. SILENT. For example, in hotels, in the business sector, in hospitals and in libraries. These units are available in three performance classes and are fitted with whisper-soft motors and highly effective sound insulation. The SILENT devices incorporate the innovative Teddington CONVERGO

nozzle. It has a clever design which achieves effective shielding using very low volumes of air, and thus develops virtually no noise (see diagram below). SILENT is designed to be fitted into suspended ceilings to achieve an additional sound insulation effect.



- ❶ New CONVERGO nozzle for low-turbulence, adjustable air flow spread evenly across the length of the device.
- ❷ Induction brake on the outside to minimise induction of outside air and increase penetration depth.
- ❸ Specially aerofoil-shaped core jet profile to shift the core jet on the outside of the air flow, with additional compression.
- ❹ Inductive inner jet to blend in air from the room.







TON

A clear design statement.

CHARISMA column air curtains add a real stylish touch to any foyer. The clear design transforms the unit in the entrance area to a monolith of modern interior design. For narrow doors, a single column to the right or left of the door can provide sufficient shielding effect. For larger entrance areas with more demanding requirements, we recommend shielding by fitting one unit on either side of the door.

The height at which the devices are fitted can be adapted to the height of the entrance area. There is the option to select either a straight or a diagonal top cover.

Large picture and picture on right: CHARISMA column air curtain with diagonal top cover in a department store in Wuppertal.





CHARISMA column unit in style 4 with dual nozzles and stylish look. Powerful shielding of a large entrance area at Marktkauf Frechen.



Special situations need special solutions. The entrance area of the Hamburg-Eppendorf University Hospital has automatic sliding doors on the inside and outside, but the high numbers of visitors mean they are permanently open and create huge levels of draughts. Using a conventional air curtain device based on lamella technology could not prevent the enormous amount of cold air getting in. The problem was solved by a diagonal arrangement of two CHARISMA devices with dual nozzles. This arrangement creates a circulating flow of shielding air, with the two units supporting each other and providing reliable protection from the cold air.



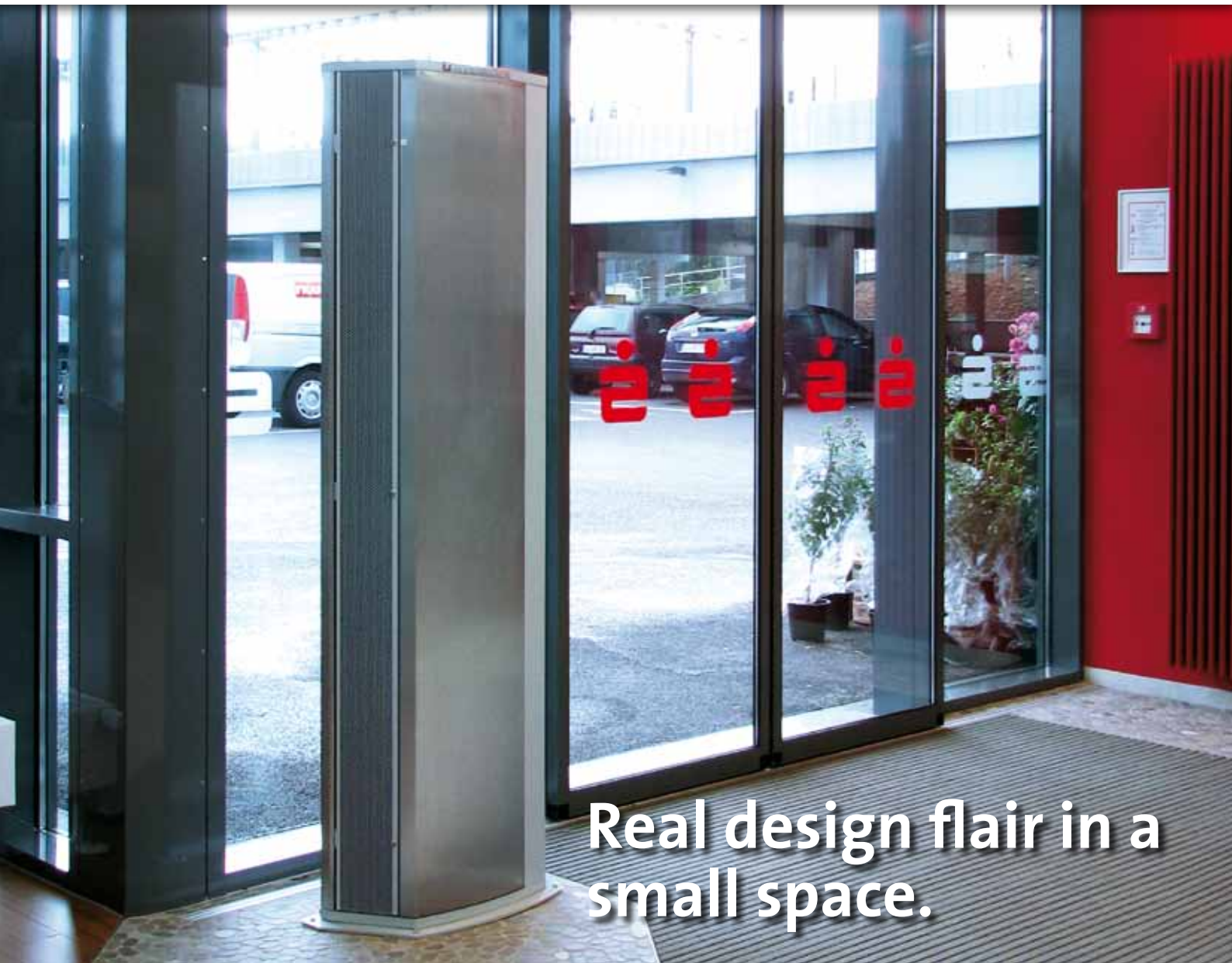


A customised D-shaped version of the CHARISMA column unit is used here for shielding swing doors. The free-standing fitting at a distance to the door opening prevents the swing doors blocking the air flow from the vertical units.



Whether it's in banks, insurance companies or in exclusive boutiques, CHARISMA column units provide a clear designer touch in discerning environments.





Real design flair in a small space.



If there is not much space in the entrance area, the slimline TOPAS vertical designer air curtain is the right choice.

The space-saving column unit fits into the side of the door unit, keeping subtly in the background. It forms a single unit with the sliding door system without taking up much space.

TOPAS units are available in three performance classes for small to large door systems.





In effect, the SINTRA designer air curtains are the same as TOPAS. The difference lies in the 90° angle on the nozzle. This means this slimline unit can be fitted anywhere where there is very little space to the side of the door - for example in corners. This design makes these units perfect for use in circular sliding doors. The units can be positioned inside the circular air-lock, saving space and shielding the entire entrance area at a 90 degree angle.



Bad luck for the corners.

Whether it's to the side of automatic sliding doors or within the air-lock for circular sliding doors - SINTRA always makes a good impression. Combining different unit lengths fitted in series makes it easy to adapt the system to any door system height.



The right twist to make things easier.

The SAPHIR slimline column air curtain has been specially designed to be positioned to the side of revolving doors and circular sliding doors.

The device casing is adapted to the

shape of the circular air-lock, allowing the SAPHIR air curtain to fit snugly against the side of the door system, thus saving space. In revolving and circular sliding doors, the air exchange to be prevented largely

takes place in the lower part of the door. This is why the air speed on the SAPHIR devices is higher near the floor than higher up.

Grand Hotel Esplanade in Berlin. This luxury lifestyle hotel features some pretty impressive architecture. The generous circular sliding doors are shielded against unpleasant draughts using slimline SAPHIR column units.





The black SAPHIR column unit blends into this typical entrance area with a revolving door.

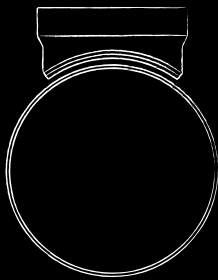
Revolving doors are often used in public buildings, like the Civic Centre in Hamburg here.

Effective shielding against cold air drafts is important for the comfort of employees and visitors alike. It also saves energy and thus protects the environment.

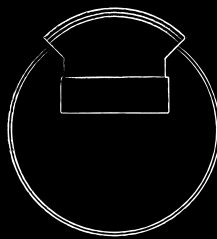




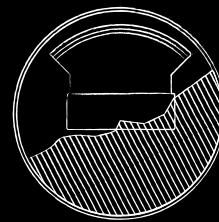
The large revolving doors at Düsseldorf Airport are safely shielded against potentially huge cold air draughts from outside using slimline SAPHIR designer units.



ZDE is a unit which is fitted into a suspended ceiling outside the door system.



SDA is fitted to the top of the revolving door and blows air down in front of the door system.



SDE is fitted to the crown of the revolving door and blows air down inside the door system.



A revolving door with a RONDO SDA air curtain system, at the abba Berlin Hotel.



Right: The "Forum Allgäu" shopping centre in Kempten is accessed via very busy revolving doors. With the high-volume spaces and wide corridors inside, this could produce massive draughts of cold air. The RONDO SDA air curtain devices prevent this unpleasant, expensive loss of energy.

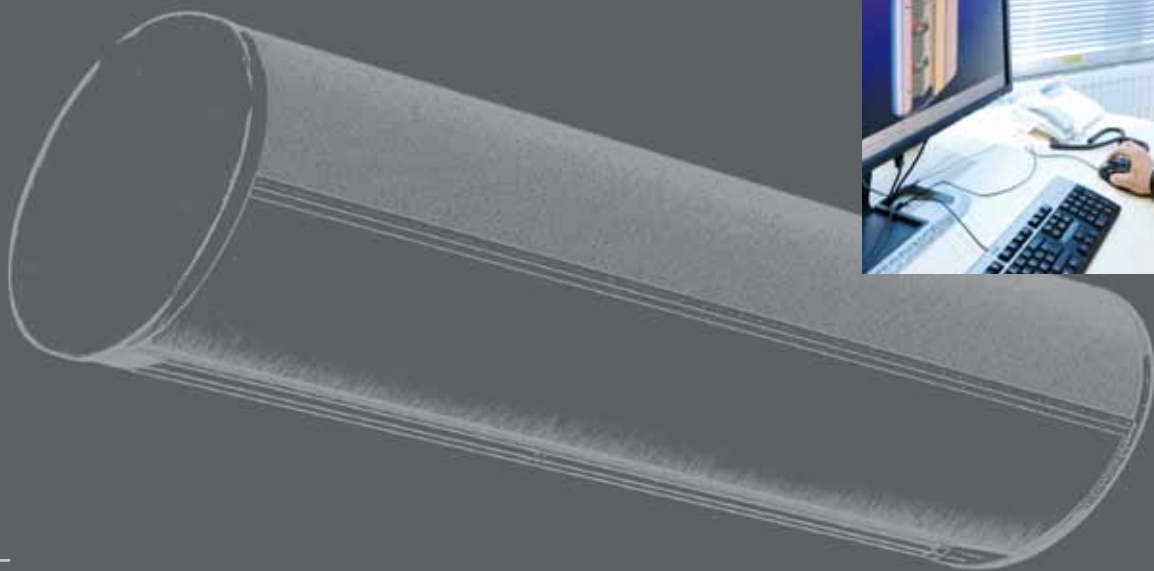
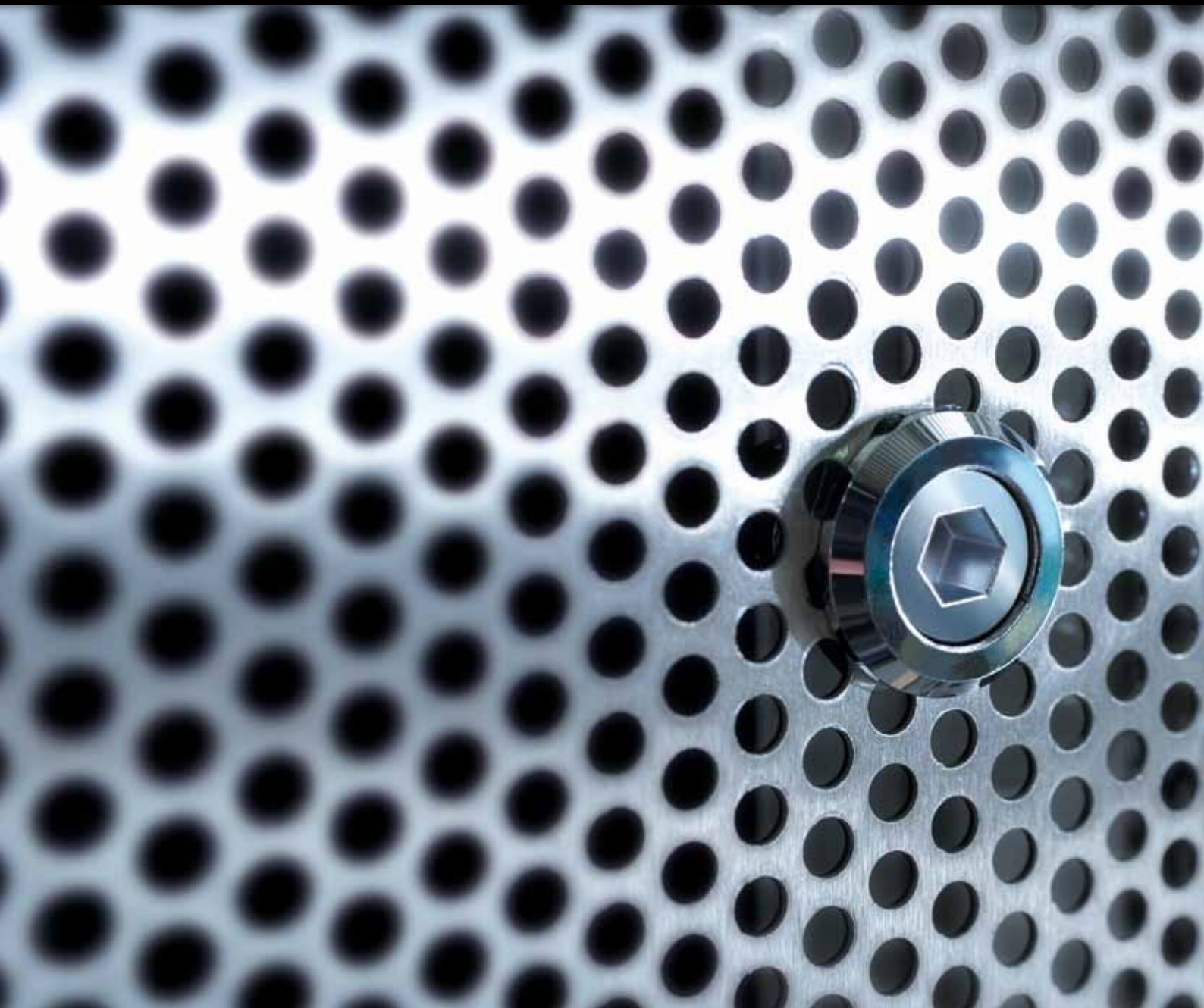


Good all-round.

RONDO is a specialist air curtain which comes in three established designs for horizontal fitting above revolving doors.

RONDO can be fitted into a suspended ceiling above the door or directly into the roof of the revolving door. In this latter case, there are two separate versions to blow air outside or inside the circular air-lock.

In all three designs, the device is virtually invisible and the radius of the blower unit is adapted to that of the revolving door. Although the circular design means that Teddington EVOVENT® nozzle technology cannot be used, RONDO units still work extremely effectively and reliably.





We really put the emphasis on quality when producing our designer air curtain systems.

When designing our units, it is crucial that they are designed well and blend in perfectly in stylish environments.

And the designer claim is rounded off with the best materials and excellent workmanship.

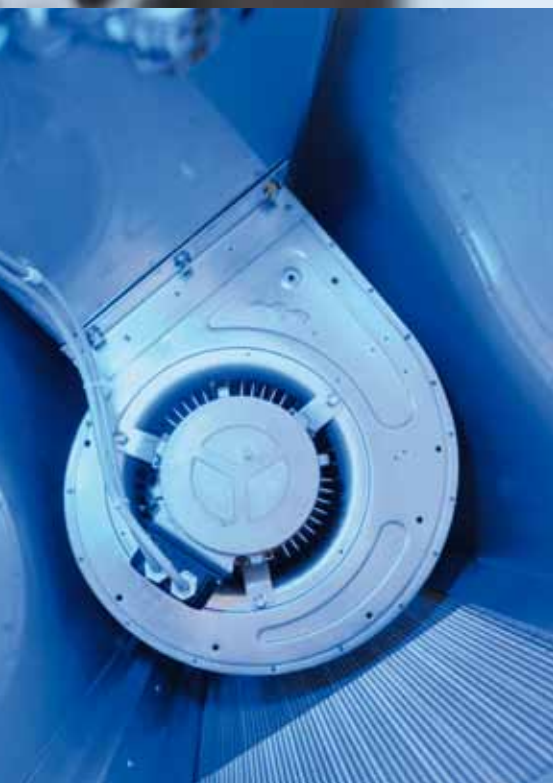
From the sheet metal used through to the flow-promoting air grilles to the last screw.

High-quality components and internal fittings guarantee reliability and low-noise, perfectly effective device operation.

The latest technology in terms of controls and integration into existing buildings electronics systems means the systems are extremely user-friendly. Real care and precision during assembly in the factory and fitting on site is the key to satisfied customers. Our complete package is rounded off with a comprehensive service from planning advice to personal commissioning support.



Quality is our top priority.





Innovative technology



Highest economy



Trendsetting design



Top quality



Perfect service

...that's Teddington.



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