

HOTELS

Contract fans

50
Hz

60
Hz






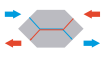







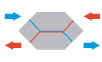




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CONTRACT RECOVERY



Selection chart

	ErP	Euro-vent	Exchanger	Impeller	Motor	Airflow (m³/h)	Configuration	Coil	Control	Bypass	Filters	Efficiency
° OREQA EEC Counter flow heat recovery unit and EC motor for false ceiling. Efficiency 83%												
				Forward		505-4.250			BASIC, EVO COP, EVO CAV	Total	ePM ₁ ≥50%(F7)	
° QUANTICA EEC Vertical counter flow heat recovery unit and EC motor. Efficiency 83%												
				Backward		4.538-13.322			BASIC, EVO COP, EVO CAV	Total	ePM ₁ ≥50%(F7)	



Counter flow exchanger



Electrical coil (BE)



Cold water coil (BAF)



Heating water coil (BAC)

RESIDENTIAL RANGE



◦ Selection chart

	Size	Airflow (m³/h)	Sound dB (A) 3m	Application
◦ LÍDERO Extractor with automatic non-return back draught shutter for wall and ceiling installation				
	100-150	90-335	37,5-46	 
◦ IKHUNA Extractor with automatic non-return back draught shutter for window installation				
	100-150	90-335	37,5-46	 
◦ KUBALIK High airflow rate and silent reversible extractor with automatic non-return back draught shutter for window or wall installation				
	150-300	235-1050	37,5-40,2	  
◦ KUBALIK-CO2 Air renewal and CO2 reduction kit				
	150-300	200-900	-	  
◦ ERELIS Ultra-quiet and slim extractor with back draught damper for ceiling and wall installation				
	100-150	85-335	31-40,1	 
◦ TEKSTÜR High-end extractor with timer and automatic back draught damper for ceiling and wall installation				
	100-120	85-175	33,1-39,1	  
◦ TEKSTÜR PLUS High-end extractor with long life bearings and automatic non-return back draught damper for ceiling and wall installation				
	100-120	90/175	26,9-32,3	   
◦ KUVIO High efficiency in-line mixed flow fan made of fire resistant plastic resin				
	100-315	180-2.750	50-69 50-63 timer	   
◦ KUVIO EEC High efficiency ec in-line mixed flow fan made of fire resistant plastic resin				
	100-315	280-2.630	56-66	   
◦ KUVIO-Q Sound-proof mixed flow extractor fans				
	100-315	260-2.890	44-65 44-60 timer	    
◦ KUVIO-Q EEC Sound-proof energy saving mixed flow extractor fans				
	100-315	300-2.640	50-63	    





• Main goals to accomplish of ventilation in kitchens

Complying with the requirements of safety, energy saving, maintenance, hygiene, comfort and international regulations mentioned above, we conclude that a good extraction and ventilation system in kitchens must meet the following 4 goals:

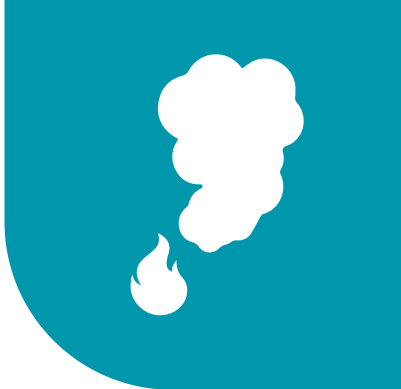
- **1** Extract the dirty and stale air from the inside of the kitchens to the outside of the building, so that the kitchen and the adjacent areas are not contaminated. This way the smells, grease particles and harmful gases are reduced for professionals and assistants inside. It is also important to extract the heat and humidity that occurs due to the different reactions that take place inside the kitchen.
- **2** The clean air must be induced from the outside avoiding that the extracted air reenters the kitchen due to a bad calibration of the system of impulsion and/or extraction. Achieving a comfortable and energy-efficient climatization thanks to the induction of air in the kitchen normally at a lower temperature than the extracted air.
- **3** The necessary requirements for healthy, hygienic, comfortable and safety environments for the professionals and assistants must be maintained therefore the standards are defined by the different international regulations and legislations. It is very important to install good systems to eliminate smells and retain all the grease particles, to avoid the exit of contaminating particles or the inhalation of them inside the installations.
- **4** The air renewal inside the kitchen and adjacent rooms must be maintained at appropriate and specific temperatures according to the specified requirements of each room. It is important that when the air is extracted or inducted, they do not mix, producing an inefficient and harmful air renewal in the different rooms and kitchen.

Other technical data to achieve the goals and requirements of a good ventilation in kitchens.















Always that the installed power of the elements destined to the preparation of food in the professional kitchens is superior to 20kW, they will be classified as special risk areas. The ducts must be independent of any other extraction or ventilation. The mechanical smoke and heat extractors will have a fire classification F400/2 hour. In the case where the total cooking power is higher than 25 kW the extraction will be mandatory and therefore the mechanical supply of air as well, but in the case where the total cooking power is lower than 25kW only mechanical extraction will be required.

The air flow of an extraction will be calculated from a suction speed from the free perimeter respect to the height of the hood. The suction speed of the base of the hood will depend on the open sides. A suction speed of 0.6 m/s is recommended in island-type hoods (four open sides), 0.45 m/s for hoods with 3 open sides, for hoods with 2 open sides 0.35 m/s for the hoods with only one open side 0.25 m/s.














To achieve an adequate thermal comfort Casals Ventilation recommends that the ambient air inside the kitchen oscillates between 18°C and 26°C with humidity levels around 30% to 65% RH. Casals also recommends a maximum acoustic level of 60 dBA within the work area (unit value of the sound level produced by ventilation only) to achieve an adequate acoustic comfort. Hygiene should have a maximum depression of 10% established in the kitchen. As we have mentioned before, the induction of fresh air must be from the outside, it cannot be air recycled from other rooms. Regarding filtration, standard levels recommended according to IDA2 (EN13779) = the average indoor air quality with F8-F9.

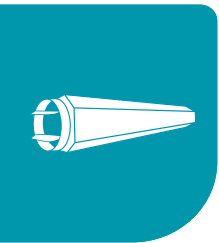


◦ Extracción de humo

◦◦ F400 a trasiego 			◦◦ F400 inmerso 		◦◦ No clasificado 		
							
							
							

◦ Aportación de aire



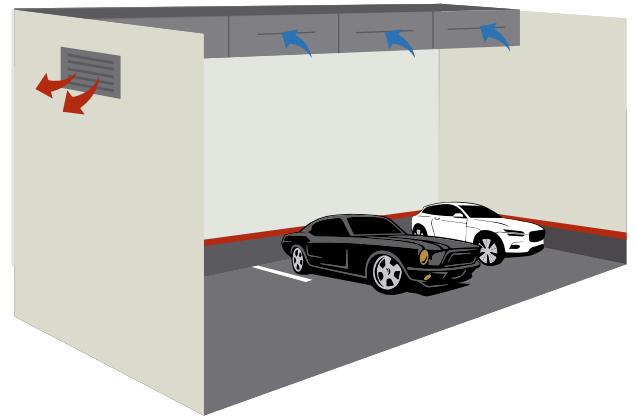
◦ Jet fans

JF CONFORT	JF F400	JF F300
JFC CONFORT	JFC F400	JFC F300
SYBILO CONFORT	SYBILO F400	SYBILO F300



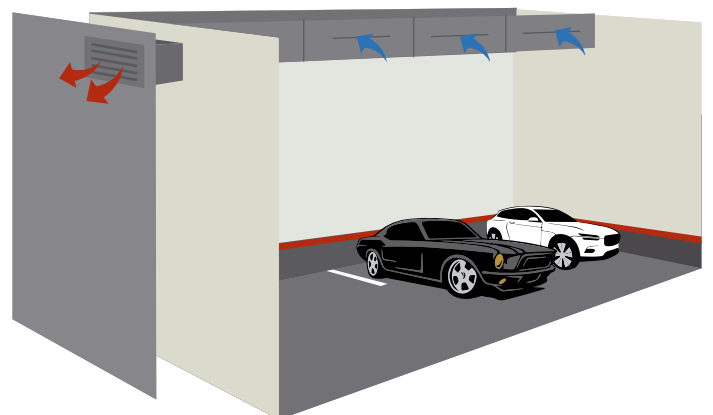
◦ Inside

HBF F400	HBFX F400	HBF F300	HBFX F300	HCF F400
HCFX F400	HCF F300	HCFX F300	HMF F400	HMFX F400
HMF F300	HMFX F300	BOX HBF F400	BOX HBFX F400	BOX HBF F300
BOX HBFX F300	IGNÉO F400	BOX RLF	BOX RLFX	



◦ Outside

CTH3 F400	BVFC F400	DHUMAT F400	BOX BSTB F400



STAIR PRESSURIZATION



Regulations

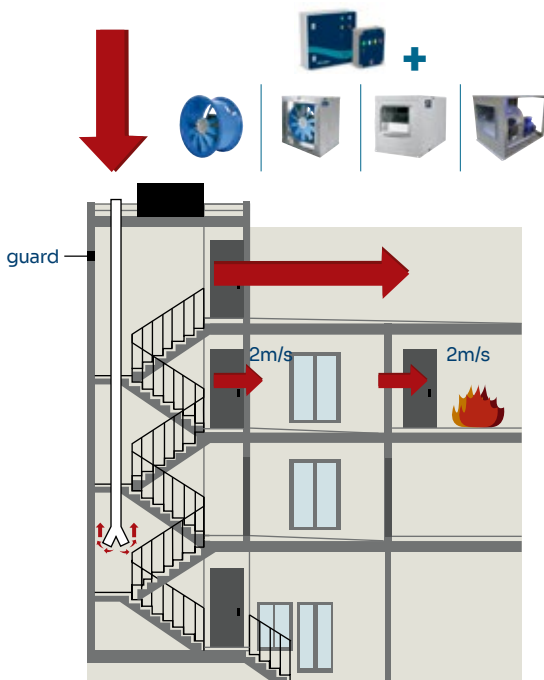
The UNE-EN 12101-6 standard describes the differential pressure systems applied to escape ways, specially in protected stairs. These systems are based on the mechanical injection of outdoor air to the stair box, generating in this way a positive pressure that prevents the products of combustion from getting in the escape ways. In case of fire, the system helps in the evacuation process of the occupants by avoiding or reducing the vertical spread of the fire.

The needed flow will depend on the design conditions of the building. In general terms, an air speed through open sections of 0.75m/s will be used when the stair is used as an es-

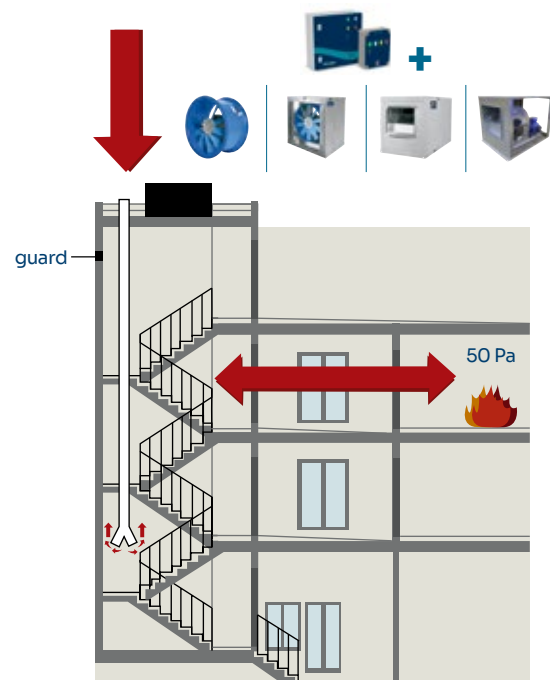
cape way for occupants, and of 2m/s when the stair is used by the fire extinguishing personnel.

The pressurization system must keep a differential pressure of 50Pa and overcome the pressure drop of the installation. An automatic system consisting of a differential pressure probe (KIT-PE) and the right fan according to the needs is recommended.

Air speed criterium



Differential pressure criterium (with all doors closed)



Contract fans

TERTIARY AIR CURTAINS

COURSALIS & COURSALIS E

High performance air curtain for tertiary. Reach up to 3m



Function

° COURSALIS air curtains create an invisible air barrier for businesses adaptable to any size entrance.

° They are an ideal solution to maintain **interior comfort** (heating in winter and air conditioning in summer), maintaining a **clean atmosphere** of odors and insects, as well as dust and pollution coming from outside the premises.

Advantages

° You will **reduce drafts** coming from outside and maintain the temperature inside your business without having to close the door.

In addition, with the **remote control** you can start it, stop it or change the air flow speed as well as the type of air temperature (natural or heat) as needed from anywhere nearby. Exclusive arch design, light and superfine.

Characteristics

- High performance and low sound level.
- Metallic housing with white colour finishing coat.
- Motor 380V 50Hz (COURSALIS and COURSALIS E).
- Motor 110V y 230V 60Hz (COURSALIS).
- Sizes: width 1000, 1500 and 2000mm.
- **COURSALIS**: only low or high speed air.
- **COURSALIS E**: with heating, equipped with electrical coil.
- Includes external remote control.
- Designed for horizontal mural installation.
- Easy adjustable air direction.
- With operating indicator LED (ambient or heating, air speed and start-stop).
- Mounting brackets on wall.
- Reach up to 3m.
- Presence switch available to stop/start the air curtain with the passage of people through the entrance.



Applications

- Schools
- Malls
- Stores
- Supermarkets
- Train stations
- Hotels
- Restaurants
- Pubs
- Offices
- Banks
- Gas stations
- Logistics centers
- Industries, food industries
- Hospitals, clinics, health centers
- Veterinary clinics
- Refrigerated warehouses





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