

# Ductwork systems **TUBPLA®**



VENTILATION



AEROTHERMY



EXTRACTION

gonal  driving air

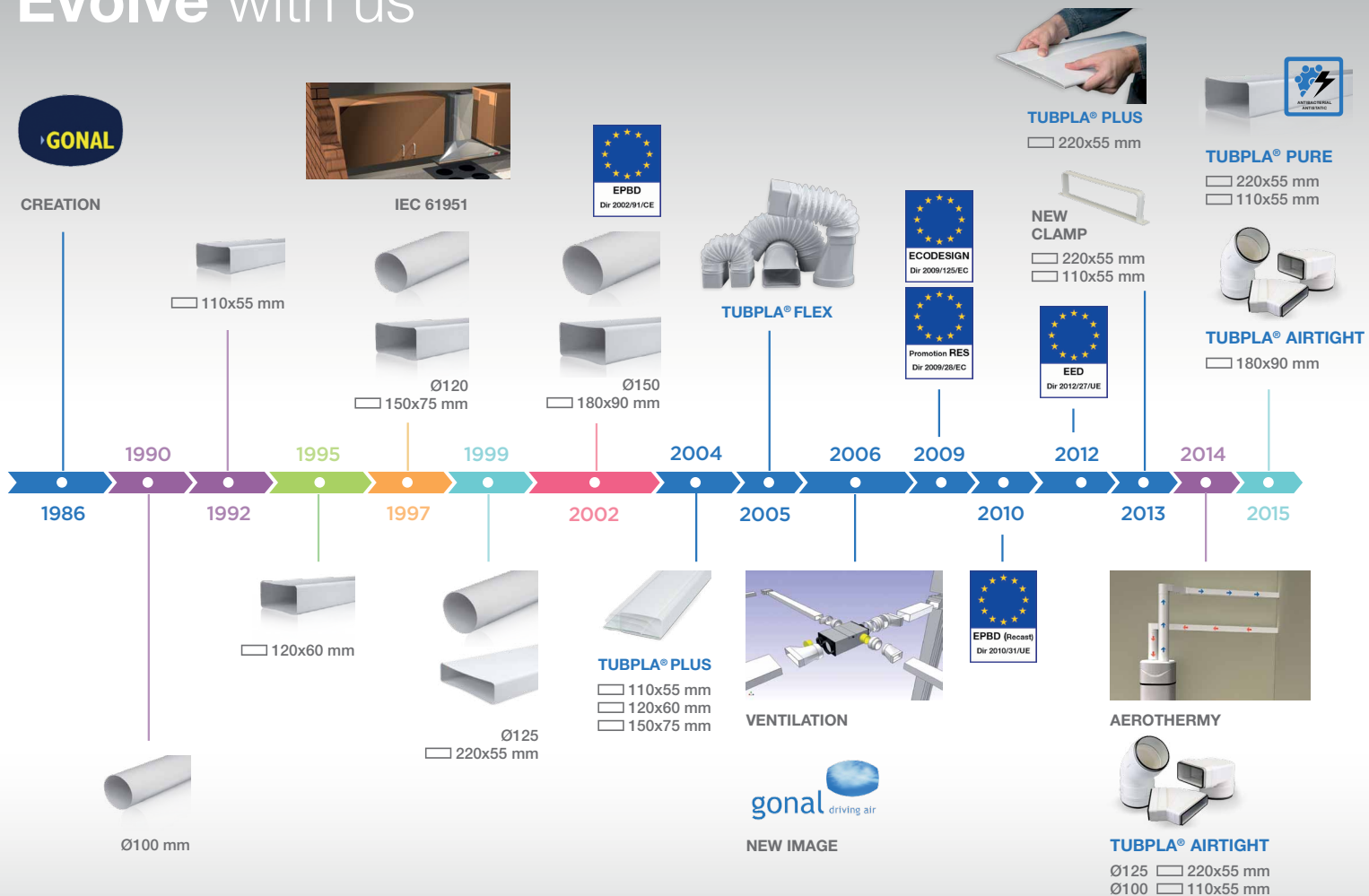


# Index

- 05      **PRESENTATION INDUSTRIAS GONAL HISPANIA SL**
- 06      **APPLICATIONS & REGULATION**
- Complete solutions in ductwork
  - Mechanical controlled ventilation (MCV & HRV)
  - Aerothermy **NEW**
  - Extraction for exhaust hoods
- 12      **SMART SOLUTIONS** **NEW**
- Ductwork:
- **TUBPLA® AIRTIGHT**
  - **TUBPLA® PLUS**
  - **TUBPLA® FLEX**
  - **TUBPLA® AISLAFIX**
  - **TUBPLA® PURE**
- 14      • **TUBPLA® AIRTIGHT Ductwork systems**  
Application and FIT&GO concept. Product and systems
- 22      • **TUBPLA® Ductwork and fittings**  
Product and systems
- 36      • **TUBPLA® FLEX Flexible ducts and bends**
- 38      • **TUBPLA® PLUS The new ductwork generation**
- 40      • **EXPOGONAL®** **NEW**
- 42      **COMPONENTS TUBPLA®**
- 43      • Telescopic systems
- 44      • Soundproof duct
- 44      • Firewall systems
- 45      • Grilles
- 46      **COMPONENTS GONAVEN® FOR (MCV & HRV)** **NEW**
- 47      • Acoustic attenuator duct
- 48      • Supply/extract valve
- 50      • Window inlet
- 51      • Flow regulators



# Evolve with us



# GONAL® driving air

*“change before  
you have to”*

Jack Welch  
American businessman  
and writer



Industrias **GONAL®** is a leader manufacturing company of **TUBPLA®** ductwork thermoplastic systems for Ventilation, Aerothermy and Extraction of Exhaust hoods.

## > OUR EXPERIENCE

More than 30 years of experience guarantee our know how designing, manufacturing and commercialising a wide range of ductwork systems, together with innovative solutions to cover all market needs.

## > PRODUCTION AND LOGISTIC

Due to our production process based on last generation machinery equipment, we can guarantee a fast, secure and reliable response to the needs of our customers.

More than 4.000 m<sup>2</sup> of logistic area able us to stock a big quantity of products to ensure quick deliveries of our own manufactured products.

The ISO 9001 Certification demonstrates the quality level of our activities and procedures.

## > MARKETING AND SALES DEPARTMENT

Our Marketing and Sales department work daily together to offer ideas and solutions specially designed to cover all regulation requirements and all market needs in thermoplastic ductwork systems for Ventilation, Aerothermy and Extraction.

## > R&D / RESEARCH AND DEVELOPMENT

Our vocation to innovation, coupled with a policy of continuous investment in technology, and combined with a highly qualified professional team let us to keep a leading position in our industry, developing during the last years huge developments and projects in utility models and patents.

Examples:

- **TUBPLA® PLUS**  
**Foldable duct.** Savings in transport, storage and handling costs.
- **TUBPLA® AIRTIGHT**  
**Extremely airtight mechanical connections.** Easy and quick to install.
- **TUBPLA® FLEX**  
**Variable angles from 0 to 90°.** Multiple installations.
- **TUBPLA® PURE**  
Antibacterial and antistatic ductwork.

# Integrated solutions in air ductwork **TUBPLA®**

## **BATH / KITCHEN**

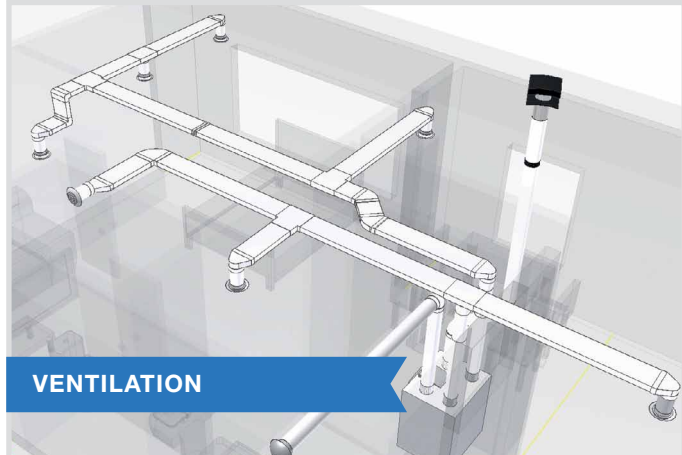
### **Wet rooms.**

Ventilation by extraction through ductwork systems.

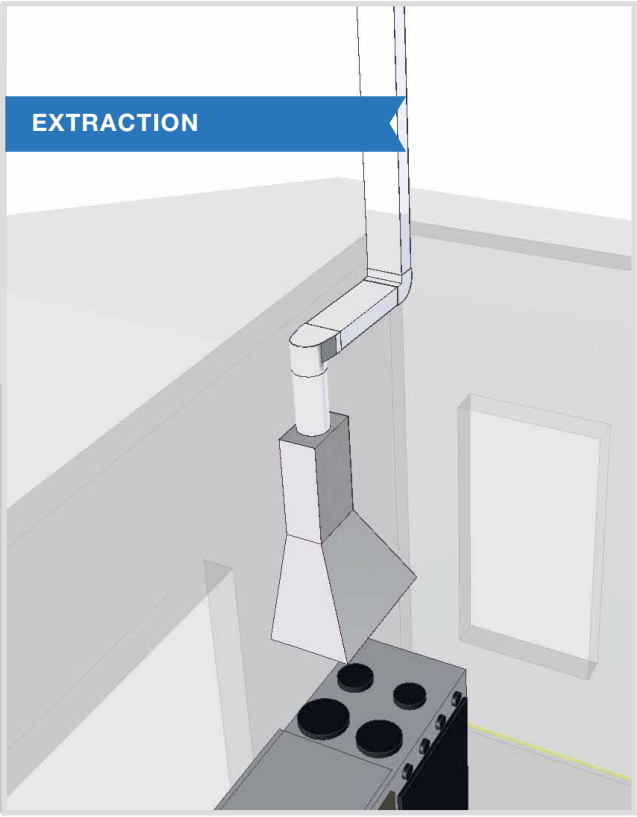
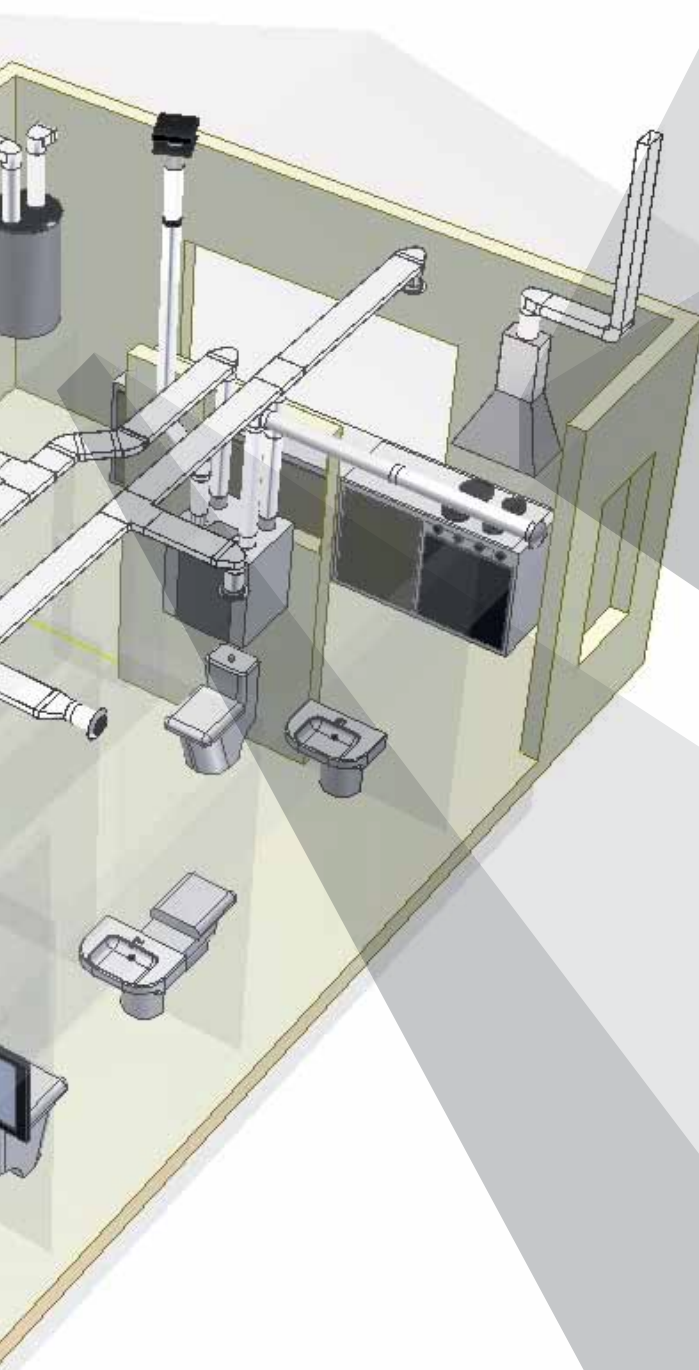
## **DINING ROOM / BEDROOM**

### **Dry rooms.**

Ventilation by insufflation through ductwork system and/or window inlet.

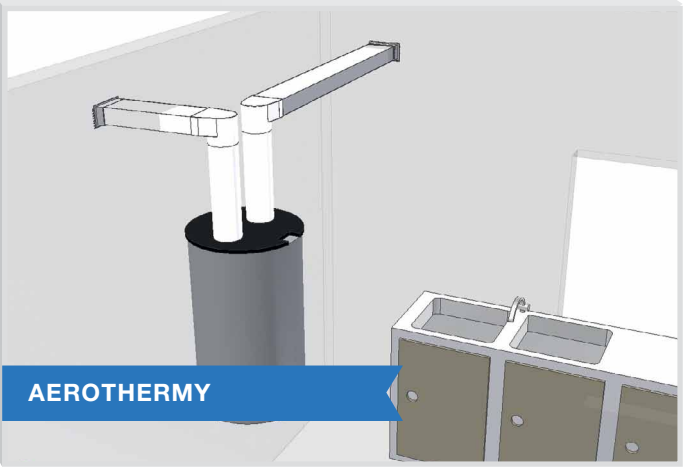


**VENTILATION**



**KITCHEN**

Smoke extraction through ductwork systems.



**LAUNDRY or TECHNICAL ROOM**

Collection and expulsion of the outside through ductwork systems.

# Ductwork Systems **TUBPLA®** for Ventilation (MCV & HRV)

## REGULATIONS

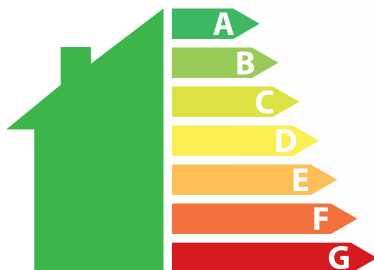
- √ Dir. 2010/31/UE (EPBD)
- √ Dir. 2009/125/EC (Ecodesign)
- √ Dir. 2012/27/UE (EED)

The Energy policy of the European Union, focus an important part of its strategy on saving energy consumption of buildings. Nowadays, this becomes 40%, the biggest part of total energy consumption in EU, and experts forecast that will reach 60% in 2030.

A very important solution which has been considered by the most important regulations of this topic, is Ventilation, which at the same time that preserves the hygiene and salubrity of buildings, contribute to save energy trough heat recovery.

To ensure a correct air distribution according to ventilation needs, it is necessary to count with a complete ductwork system.

**GONAL®** contributes  
to energy efficiency





**NEW**

### GONAL® OFFERS

**TUBPLA®** solutions in ducts, accessories and components to cover all regulation requirements, with the following characteristics:

- Different sizes in circular and rectangular ducts
- Wide range of accessories for all kind of horizontal and/or rectangular installation.
- Smooth internal Wall ducts to reduce pressure loss.
- Ductwork systems with modular, easy and quick connection and installation.
- **TUBPLA® AIRTIGHT** extremely airtight accessories, class D according to EN12237 (Certified).
- Antibacterial, antistatic and environmentally friendly ducts **TUBPLA® PURE**.
- Ductwork systems **TUBPLA® AISLAFIX** to guarantee thermal insulation.



**NEW**

# Ductwork Systems **TUBPLA®** for AEROTHERMY

## REGULATIONS

- √ Dir. 2010/31/EU (EPBD)
- √ Dir. 2009/125/EC (Ecodesign)
- √ Dir. 2012/27/EU (EED)
- √ Dir. 2009/28/EC (Promotion RES)

If reducing energy consumption is a first step to achieve the objective of energetic autonomy, the use of renewable energy helps to consolidate the results. The Directive 2009/28/EC of Promotion of Renewable Energy Sources (RES), recognises the use of the thermal energy contained in the air outside the building (Aerothermy), to produce Domestic Hot Water (DHW), as renewable energy source.

## GONAL® OFFERS

The thermoplastic ductwork systems **TUBPLA®** to drive air from the outside to the heat pump and to exhaust it outside after used.

- Different sizes in circular and rectangular ducts.
- Wide range of accessories for all kind of horizontal and/or rectangular installation.
- Smooth internal Wall ducts to reduce pressure loss.
- Ductwork systems with modular, easy and quick connection and installation.
- **TUBPLA® AIRTIGHT** extremely airtight accessories, class D according to EN12237 (Certified).
- Ductwork systems **TUBPLA® AISLAFIX** to guarantee thermal insulation.



# Ductwork Systems

## TUBPLA®

### for EXTRACTION

#### REGULATIONS

- √ IAQ part at every national building regulation
- √ IEC 61591:1997

The majority of the national building regulations determine that the removed cooking vapours from the exhaust hood, must be expelled through a ductwork system separated from the ventilation system of the building. This ductwork has to meet with some specifications detailed in the norm IEC 61591:1997, according to their extraction capacity, in terms of diameter. Another important point is the requirement of the smooth internal wall of the ductwork, in order to avoid returns, noise and risk of fire by embedded grease.

#### GONAL® OFFERS

Wide range of circular and rectangular TUBPLA® ducts and accessories, approved, recommended and used by the leading manufacturers of Exhaust Hoods, SIEMENS - BOSCH - BALAY - PANDO - FRECAN - CATA - FRANKE, FABER, etc.

- Smooth internal wall ducts to avoid risk of fire by embedded grease
- Ductwork systems of flat wall to prevent pressure loss increasing the exhaust hood performance and ensuring the long-life of the appliance.
- Large diameters, allowing a greater evacuation, no returns, no vibration, no odours, ensuring the health and acoustic comfort.
- Ductwork systems with modular, easy and quick connection and installation.

#### ¿DID YOU KNOW THAT...?

- √ Reduce the exhaust hood Ø can provoke up to 22 extra dB of noise and an increase of 33% of pressure loss.
- √ Exhaust Hood manufacturers require the regulatory compliance to keep their post-service warranty.





**Smart**  
Solutions

# Smart Solutions



## TUBPLA® AIRTIGHT

NEW

Innovative system of ducts and accessories with extremely airtight mechanical connections, **Class D according to EN 12237**. The best solution to prevent leakage, pressure and thermal loss. Easy and quick to install without using tapes or sealants.



## TUBPLA® PLUS

New generation of foldable ducts with same flow than traditional, compatible with all the accessories of the same size, and **improving transport (-60%), storage (-90%) and handling (-50%) costs**.



## TUBPLA® FLEX

Versatile flexible ducts and elbows to go around obstacles realize installations in **variable angle from 0 to 90°**.



## TUBPLA® AISLAFIX *IN DEVELOPMENT*

New evolution of our ductwork systems, both standard and airtight, including an insulation spec with a **thermal conductivity of <math><0,04 W/(m.k)</math>**, to avoid thermic loses and with better soundproofing of the ductwork.



## TUBPLA® PURE *IN DEVELOPMENT*

Newfangled thermoplastic duct with **antistatic and antibacterial properties and environmentally friendly**. It prevents the accumulation of dust along the internal and external ductwork surface and fits with the requirements of alimentary quality standards.



**Smart**  
Solutions



# Ductwork Systems **TUBPLA® AIRTIGHT**



## > ¿WHY IS IT IMPORTANT THE AIRTIGHTNESS?

If the air distribution ductwork is not airtight then leakage replacement must be supported by the ventilation unit through a biggest flow rate.

This would suppose:

- A ductwork and ventilation group oversizing.
- An increase in energetic costs.
- A thermal loss with direct implication for users.
- An increase of noise for users.



## **GONAL® OFFERS**

**TUBPLA® AIRTIGHT** certified for maximum requirement of airtightness (Class D) according to EN 12237.



## > **GENERAL CHARACTERISTICS OF TUBPLA® AIRTIGHT**

- Patented connection system of thermoplastic ducts to avoid leakage and ensuring the maximum level of airtightness.
- Accessories for aerolic ductworks with an EPDM joint incorporated at connections to guarantee the airtightness of ductwork.

## > **TECHNICAL CHARACTERISTICS**

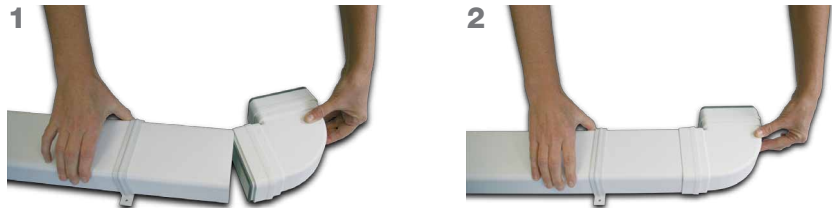
- Thermoplastic ducts and accessories fire resistant: self-extinguish B-S3,d0, according to EN 13501-1:2002.
- Maximum temperature: + 80°C.
- Thermal conductivity ( $\lambda$ ): 0,0544 – 0,0662 W/(m.k).
- Aging resistance: More than 20 years.
- UV resistance and to further chemical substances.

## > **AIR FLOW:**

	SYSTEM 150	SYSTEM 125	SYSTEM 100
<b>SIZES</b> (mm)			
	□ 180x90	∅ 125 □ 220x55	∅ 100 □ 110x55
<b>FLOWS</b> (m³/h)			
maximum*	240	180	90
minimum**	150	100	50

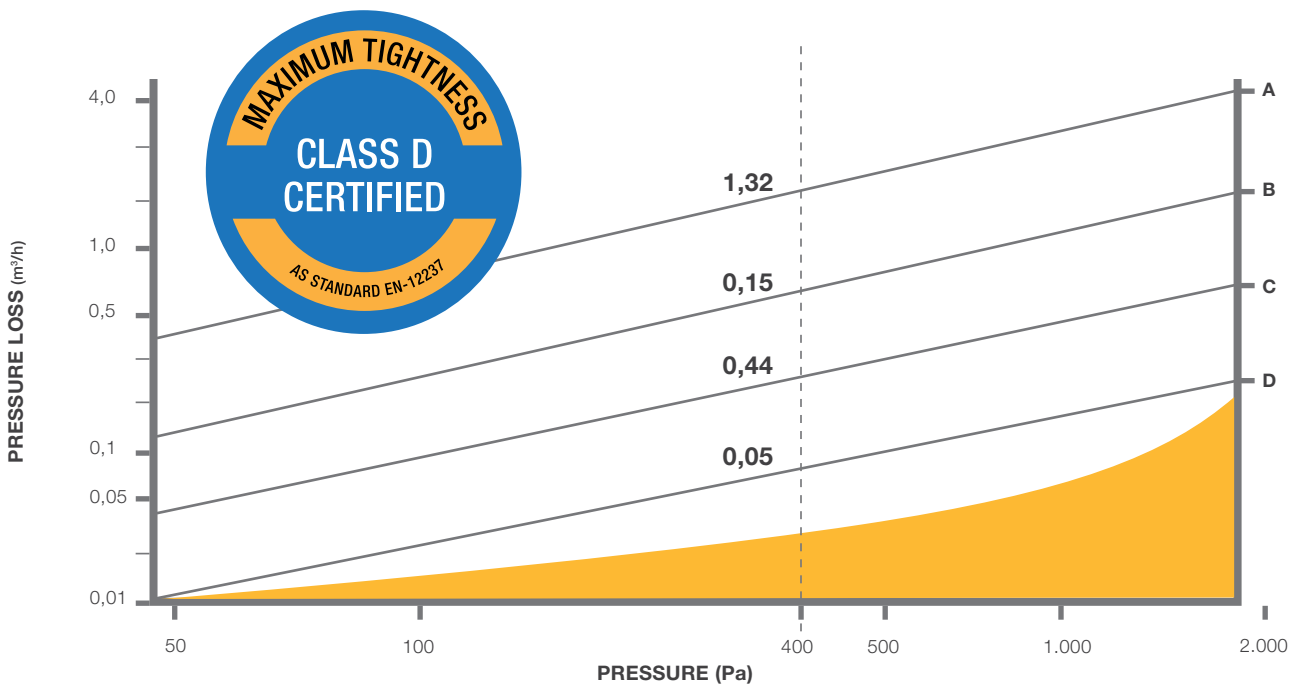
\* Air speed = 4.0 m/s

\*\* Air speed = 2.5 m/s



ADVANTAGES

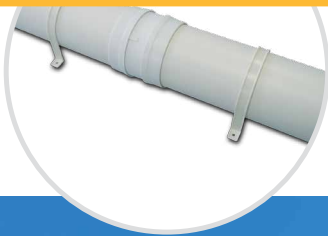
- ✓ Easy and fast installation with time savings over 80%.
- ✓ No tapes/sealants needed to guarantee airtightness.
- ✓ Reduces leakage in the ductwork improving the MCV & HRV unit level of work. This means less noise and less electricity consumption.
- ✓ Simple and discrete integration into the building architecture.
- ✓ Homogeneous section means constant flow.
- ✓ Ductwork fastening guaranteed.



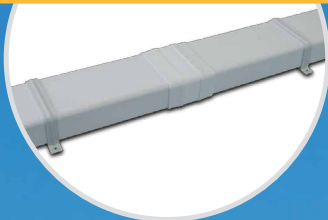
■ VENTILATION WITH **TUBPLA® AIRTIGHT**



**MECHANICAL CONNECTIONS**



**EASY TO INSTALL**



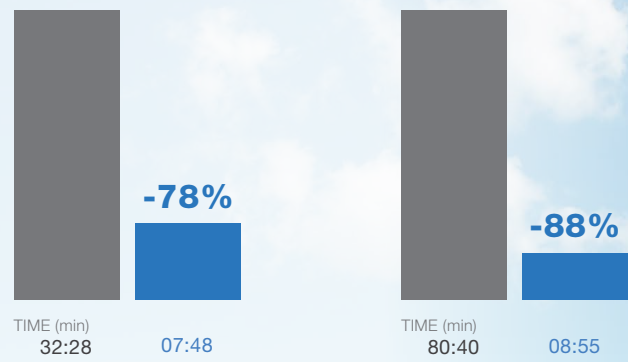
**MODULAR INSTALLATION**



**EXTREMELY AIRTIGHT**



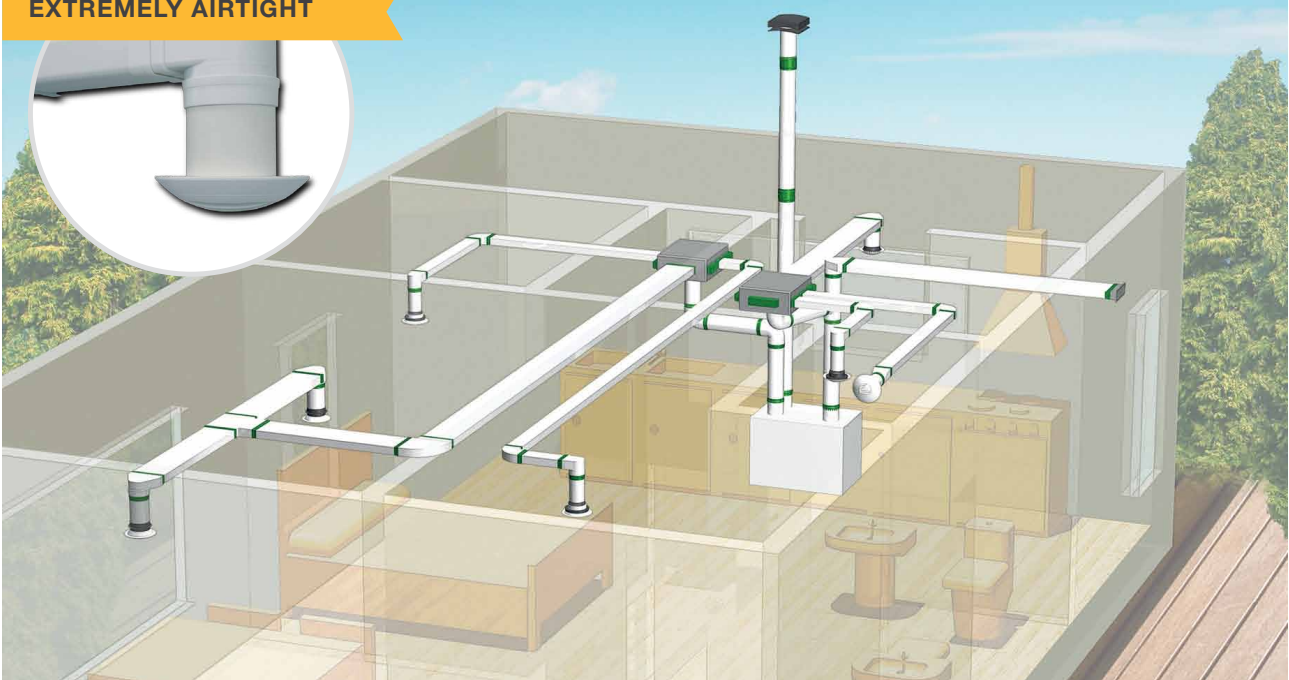
**Savings in time of installation**  
in a ventilation system



MCV SYSTEM  
SIMPLE FLOW

HRV SYSTEM  
DOUBLE FLOW

■ **TUBPLA®** ■ **TUBPLA® AIRTIGHT**



# Ductwork Systems

## **TUBPLA® AIRTIGHT**

**RECTANGULAR DUCT**



**RECTANGULAR FOLDABLE DUCT**



**CIRCULAR DUCT**



**RECTANGULAR CONNECTOR**



**MIXED CONNECTOR**



**VERTICAL MIXED BEND 90°**



SYSTEM 125				Ø125 □ 220x55	SYSTEM 100				Ø100 □ 110x55
CODE	SIZE (mm)	UN	□		CODE	SIZE (mm)	UN	□	
	□					□			
<b>T-P 1002/1</b>	220x55x1.000	mt	9		<b>0501/1</b>	110x55x1.000	mt	12	
<b>T-P 1002</b>	220x55x1.500	mt	13,5		<b>0501</b>	110x55x1.500	mt	15	
<b>T-P 1002/3</b>	220x55x3.000	mt	12		<b>0501/3</b>	110x55x3.000	mt	18	
	□					□			
<b>PL 1002/1</b>	220x55x1.000	mt	9		<b>PL-0501/1</b>	110x55x1.000	mt	12	
<b>PL 1002</b>	220x55x1.500	mt	13,5		<b>PL-0501</b>	110x55x1.500	mt	18	
<b>PL 1002/3</b>	220x55x3.000	mt	27						
	Ø					Ø			
<b>T-P 1005/1</b>	125x1.000	mt	7		<b>0605/1</b>	100x1.000	mt	8	
<b>T-P 1005</b>	125x1.500	mt	10,5		<b>0605</b>	100x1.500	mt	12	
<b>T-P 1005/3</b>	125x3.000	mt	12		<b>0605/3</b>	100x3.000	mt	18	
	□					□			
<b>T-P1020ES</b>	220x55	u	14		<b>0510ES</b>	110x55	u	16	
	Ø □					□ Ø			
<b>T-P1040ES</b>	125 to 220x55	u	7		<b>0520ES</b>	110x55 to 100	u	24	
	Ø □					□ Ø			
<b>T-P1050ES</b>	125 to 220x55	u	10		<b>0525ES</b>	110x55 to 100	u	24	



**VERTICAL**  
RECTANGULAR  
BEND 90°



**HORIZONTAL**  
RECTANGULAR  
BEND 45°



**HORIZONTAL**  
RECTANGULAR  
BEND 90°



**RECTANGULAR "T"**  
JOINT



**CIRCULAR**  
CONNECTOR



**CIRCULAR**  
BEND 90°



SYSTEM 125				Ø125	SYSTEM 100				Ø100
				□ 220x55					□ 110x55
CODE	SIZE (mm)	UN	□		CODE	SIZE (mm)	UN	□	
<b>T-P1060ES</b>	220x55	u	16		<b>0530ES</b>	110x55	u	24	
<b>T-P1075ES</b>	220x55	u	10		<b>0570ES</b>	110x55	u	10	
<b>T-P1070ES</b>	220x55	u	7		<b>0535ES</b>	110x55	u	24	
<b>TT-4ES</b>	220x55	u	6		<b>TT-2ES</b>	110x55	u	6	
<b>T-P1030ES</b>	125	U	15	Ø	<b>0615ES</b>	100	U	10	Ø
<b>T-P1500ES</b>	125	U	8	Ø	<b>0670ES</b>	100	U	10	Ø

**CIRCULAR  
BEND 45°**



**CIRCULAR "T"  
JOINT**



**ACOUSTIC  
ATTENUATOR**



**MIXED "T"  
JOINT**













**ADAPTOR**



**MIXED RECTANGULAR "T"  
JOINT**



SYSTEM 125				SYSTEM 100			
CODE	SIZE (mm)	UN		CODE	SIZE (mm)	UN	
	Ø				Ø		
<b>T-P1545ES</b>	125	u	8	<b>0676ES</b>	100	u	18
	Ø				Ø		
<b>TR-125ES</b>	125	u	4	<b>TR-100ES</b>	100	u	6
							
<b>CA55220ES</b>	220x55x1000	u	4	<b>CA55110ES</b>	110x55x1000	u	8
	 Ø				 Ø		
<b>T-2ES</b>	220x55x300 to 125	u	4	<b>T-1ES</b>	110x55x300 to 100	u	6
							
<b>RP2211ES</b>	220x55 to 110x55	u	6	<b>RP2211ES</b>	220x55 to 110x55	u	6
							
<b>TT-3ES</b>	2x 220x55 1x 110x55	u	5	<b>TT-3ES</b>	2x 220x55 1x 110x55	u	5



**CIRCULAR FLEXIBLE BEND**



**RECTANGULAR FLEXIBLE BEND**



**CLOSED RECTANGULAR MOUNTING CLIP**



**RECTANGULAR MOUNTING CLIP**



**ROUND MOUNTING CLIP**

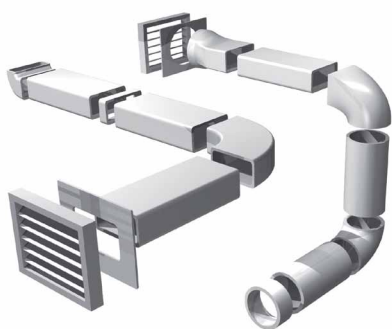


SYSTEM 125				SYSTEM 100			
		Ø125	220x55			Ø100	110x55
CODE	SIZE (mm)	UN	Icon	CODE	SIZE (mm)	UN	Icon
	Ø				Ø		
<b>CRF-125ES</b>	125	u	6	<b>CRF-100ES</b>	100	u	8
	Icon				Icon		
<b>CCF1000ES</b>	220x55	u	4	<b>CCF-500ES</b>	110x55	u	4
	Icon				Icon		
<b>PL-1110</b>	220x55	u	25	<b>PL-0555</b>	110x55	u	25
	Icon				Icon		
	NA			<b>0555</b>	110x55	u	25
					Icon		
<b>0857</b>	125	u	25	<b>0656</b>	100	u	25
	Ø				Ø		



**Smart  
Solutions**

# Ductwork Systems TUBPLA®



## > SPECIFICATIONS

- Made of fireproof and self-extinguishing material.
- Maximum temperature resistance 80°C.
- Smooth internal wall ducts to reduce pressure loss.
- Better performance in Ventilation, Aerothemy and Extraction than the flexible.

	SYSTEM 150	SYSTEM 125	SYSTEM 120	SYSTEM 100	SYSTEM 100
<b>RECTANGULAR DUCT</b>					
SIZE (mm)	180x90	220x55	150x75	120x60	110x55
SECTION (mm <sup>2</sup> )	15399	11284	10584	6669	5565
<b>CIRCULAR DUCT</b>					
SIZE (mm)	Ø 150	Ø 125	Ø 120	Ø 100	Ø 100
SECTION (mm <sup>2</sup> )	17660	12265	11304	7850	7850
<b>FLOWS</b>					
EXTRACTION	> 650	550 a 650	300 a 550	< 300	< 300
VENTILATION AND AEROTHERMY	233*	174*	162*	103*	87*

\*Air speed 4m/s

## > SIMPLE INSTALLATION



- **Quick assembly.** Male-Female connection.
- **Only 55 mm high.** Suitable to any structure due to its low profile. Specially in false ceilings.
- **Circular and rectangular section.** Adaptable to any type of building, even residential and tertiary.
- **Simple fastening of the System.** Rectangular and circular clamps.

## > SAVINGS IN TRANSPORT AND STORAGE

- **Thanks to the foldable ducts TUBPLA® PLUS.** Less space to stock and transport.

## > FIABILITY AND LONGEVITY

- **Recommended installation for humidity sensitive and heat recovery ventilation systems.** Without risk of deterioration by moisture unlike the classical flexible ducts.

Details at page 24

# Ducts **TUBPLA®**

## RECTANGULAR DUCT



## RECTANGULAR FOLDABLE DUCT












## CIRCULAR DUCT



SYSTEM 150				SYSTEM 125				
				Ø150				Ø125
				□ 180x90				□ 220x55
CODE	SIZES (mm)	UN	□	CODE	SIZES (mm)	UN	□	
	□				□			
<b>SU2002/1</b>	180x90x1.000	mt	9	<b>T-P 1002/1</b>	220x55x1.000	mt	9	
<b>SU2002</b>	180x90x1.500	mt	13,5	<b>T-P 1002</b>	220x55x1.500	mt	13,5	
<b>SU2002/3</b>	180x90x3.000	mt	6	<b>T-P 1002/3</b>	220x55x3.000	mt	12	
					□			
	<b>ND</b>			<b>PL 1002/1</b>	220x55x1.000	mt	9	
				<b>PL 1002</b>	220x55x1.500	mt	13,5	
				<b>PL 1002/3</b>	220x55x3.000	mt	27	
	Ø				Ø			
<b>SU2005/1</b>	150x1.000	mt	6	<b>T-P 1005/1</b>	125x1.000	mt	7	
<b>SU2005</b>	150x1.500	mt	9	<b>T-P 1005</b>	125x1.500	mt	10,5	
<b>SU2005/3</b>	150x3.000	mt	6	<b>T-P 1005/3</b>	125x3.000	mt	12	



THE  
WIDEST  
RANGE  
ON THE  
MARKET

SYSTEM 120				SYSTEM 100				SYSTEM 100			
CODE	SIZES (mm)	UN		CODE	SIZES (mm)	UN		CODE	SIZES (mm)	UN	
<b>Ø120</b> 				<b>Ø100</b> 				<b>Ø100</b> 			
<b>0801/1</b>	150x75x1.000	mt	9	<b>0601/1</b>	120x60x1.000	mt	10	<b>0501/1</b>	110x55x1.000	mt	12
<b>0801</b>	150x75x1.500	mt	13,5	<b>0601</b>	120x60x1.500	mt	15	<b>0501</b>	110x55x1.500	mt	18
<b>0801/3</b>	150x75x3.000	mt	12	<b>0601/3</b>	120x60x3.000	mt	18	<b>0501/2</b>	110x55x2.000	mt	12
								<b>0501/3</b>	110x55x3.000	mt	18
											
<b>PL 0801/1</b>	150x75x1.000	mt	9	<b>PL 0601/1</b>	120x60x1.000	mt	10	<b>PL 0501/1</b>	110x55x1.000	mt	12
<b>PL 0801</b>	150x75x1.500	mt	13,5	<b>PL 0601</b>	120x60x1.500	mt	15	<b>PL 0501</b>	110x55x1.500	mt	18
								<b>PL 0501/3</b>	110x55x3.000	mt	30
<b>Ø</b>				<b>Ø</b>				<b>Ø</b>			
<b>0805/1</b>	120x1.000	mt	8	<b>0605/1</b>	100x1.000	mt	8	<b>0605/1</b>	100x1.000	mt	8
<b>0805</b>	120x1.500	mt	12	<b>0605</b>	100x1.500	mt	12	<b>0605</b>	100x1.500	mt	12
<b>0805/3</b>	120x3.000	mt	12	<b>0605/3</b>	100x3.000	mt	18	<b>0605/2</b>	100x2.000	mt	12
								<b>0605/3</b>	100x3.000	mt	18

# Rectangular accessories

## **TUBPLA®**

**STRAIGHT CONNECTOR**



**VERTICAL BEND 90°**



**VERTICAL BEND 45°**



**HORIZONTAL BEND 90°**
























**HORIZONTAL BEND 45°**



**WALL PLATE**



SYSTEM 150				Ø150 180x90	SYSTEM 125				Ø125 220x55
CODE	SIZES (mm)	UN			CODE	SIZES (mm)	UN		
<b>SU2020</b>	180x90	u	16		<b>T-P 1020</b>	220x55	u	24	
<b>SU2060</b>	180x90	u	16		<b>T-P 1060</b>	220x55	u	26	
<b>SU2061</b>	180x90	u	16		<b>T-P 1061</b>	220x55	u	20	
<b>SU2070</b>	180x90	u	14		<b>T-P 1070</b>	220x55	u	12	
<b>SU2071</b>	180x90	u	10		<b>T-P 1075</b>	220x55	u	18	
<b>SU2090</b>	180x90	u	25		<b>T-P 1090</b>	220x55	u	25	

SYSTEM 120				SYSTEM 100				SYSTEM 100			
		Ø120 150x75				Ø100 120x60				Ø100 110x55	
CODE	SIZES (mm)	UN		CODE	SIZES (mm)	UN		CODE	SIZES (mm)	UN	
<b>0810</b>	 150x75	u	27	<b>0610</b>	 120x60	u	56	<b>0510</b>	 110x55	u	66
<b>0830</b>	 150x75	u	38	<b>0630</b>	 120x60	u	52	<b>0530</b>	 110x55	u	70
<b>0831</b>	 150x75	u	50	<b>0631</b>	 120x60	u	20	<b>0531</b>	 110x55	u	20
<b>0835</b>	 150x75	u	24	<b>0635</b>	 120x60	u	45	<b>0535</b>	 110x55	u	48
<b>0875</b>	 150x75	u	36	<b>0671</b>	 120x60	u	20	<b>0570</b>	 110x55	u	20
<b>0840</b>	 150x75	u	25	<b>0640</b>	 120x60	u	25	<b>0540</b>	 110x55	u	25

**WALL  
OUTLET**



\*

**RECTANGULAR  
CLAMP**



**RECTANGULAR  
CLOSED CLAMP**



**“T” JOINT**



**MIXED  
“T” JOINT**





**MIXED  
ADAPTOR**



**COVER  
CAP**











SYSTEM 150				Ø150 180x90	SYSTEM 125				Ø125 220x55
CODE	SIZES (mm)	UN			CODE	SIZES (mm)	UN		
<b>SU2100</b>	180x90	u	9		<b>T-P 1100</b>	220x55	u	20	
*Ask for model.					OTHER AVAILABLE COLOURS:				 
<b>SU2110</b>	180x90	u	25		ND				
NA					<b>NEW</b>				
					<b>PL 1110</b>	220x55	u	25	
<b>TT-6</b>	180x90	u	8		<b>TT-4</b>	220x55	u	12	
NA					<b>TT-3</b>	220x55 (x2) to 110x55	u	10	
NA					<b>RP220110</b>	220x55 to 110x55	u	10	
NA					<b>TPC-2</b>	220x55	u	24	

SYSTEM 120				SYSTEM 100				SYSTEM 100			
		Ø120 □ 150x75				Ø100 □ 120x60				Ø100 □ 110x55	
CODE	SIZES (mm)	UN	□	CODE	SIZES (mm)	UN	□	CODE	SIZES (mm)	UN	□
<b>0850</b>	□ 150x75	u	20	<b>0652</b>	□ 120x60	u	20	<b>0550</b>	□ 110x55 to 100 mixed	u	30
<b>0855</b>	□ 150x75	u	25	<b>0655</b>	□ 120x60	u	25	<b>0552</b>	□ 110x55	u	24
	NA				NA			<b>NEW</b> <b>PL 0555</b>	□ 110x55	u	25
<b>TT-8</b>	□ 150x75	u	10		NA			<b>TT-2</b>	□ 110x55	u	10
	NA				NA			<b>TT-3</b>	□ 220x55 (x2) to 110x55	u	10
	NA				NA			<b>RP220110</b>	□ 220x55 to 110x55	u	10
	NA				NA			<b>TPC-1</b>	□ 110x55	u	25

# Circular accessories

## TUBPLA®

		SYSTEM 150				SYSTEM 125			
				Ø150	180x90			Ø125	220x55
		CODE	SIZES (mm)	UN		CODE	SIZES (mm)	UN	
<b>STRAIGHT CONNECTOR</b>			Ø				Ø		
		<b>SU2030</b>	150	u	12	<b>T-P 1030</b>	125	u	24
<b>BEND 90°</b>			Ø				Ø		
		<b>SU2075</b>	150	u	11	<b>T-P 1500</b>	125	u	10
<b>BEND 45°</b>			Ø				Ø		
		<b>SU2076</b>	150	u	12	<b>T-P 1545</b>	125	u	10
<b>ADAPTOR</b>		<b>NEW</b>	Ø				Ø		
		<b>SU2065</b>	150 to 120	u	16				
		<b>SU2015</b>	200 to 150	u	18	<b>0860</b>	125 to 120	u	22
		<b>0228</b>	150 - 120 - 100	u	16				
<b>ROUND EMBELLISH WALL PLATE</b>			NA				NA		
<b>"T" JOINT</b>			Ø				Ø		
		<b>TR-150</b>	150	u	8	<b>TR-125</b>	125	u	8

SYSTEM 120				SYSTEM 100				SYSTEM 100			
		Ø120 □ 150x75				Ø100 □ 120x60				Ø100 □ 110x55	
CODE	SIZES (mm)	UN		CODE	SIZES (mm)	UN		CODE	SIZES (mm)	UN	
<b>0815</b>	Ø 120	u	24	<b>0615</b>	Ø 100	u	40	<b>0615</b>	Ø 100	u	40
<b>0870</b>	Ø 120	u	22	<b>0670</b>	Ø 100	u	36	<b>0670</b>	Ø 100	u	36
<b>0876</b>	Ø 120	u	22	<b>0676</b>	Ø 100	u	36	<b>0676</b>	Ø 100	u	36
<b>0860</b>	Ø 120 to 125	u	22	<b>0660</b>	Ø 100 - 120 - 125	u	40	<b>0660</b>	Ø 100 - 120 - 125	u	40
<b>0665</b>	100 to 120	u	36	<b>0665</b>	100 to 120	u	36	<b>0665</b>	100 to 120	u	36
<b>SU2065</b>	150 to 120	u	16								
NA				<b>0565</b>	Ø 100	u	24	<b>0565</b>	Ø 100	u	24
NA				<b>TR-100</b>	Ø 100	u	6	<b>TR-100</b>	Ø 100	u	6

**WALL  
PLATE**



**WALL  
OUTLET**



**CIRCULAR  
CLAMP**



**DAMPER**








**METALLIC  
DAMPER**



SYSTEM 150				SYSTEM 125			
		Ø150					Ø125
		180x90					220x55
CODE	SIZES (mm)	UN		CODE	SIZES (mm)	UN	
<b>SU2045</b>	150	u	25	NA			
<b>SU2052</b>	150	u	8	<b>T-P 1200</b>	125	u	10
*Different model by reference, ask.							
<b>SU2056</b>	150	u	25	<b>0857</b>	120	u	25
<b>SU2031</b>	150	u	12	<b>T-P 1031</b>	125	u	8
<b>NEW</b>	Ø			<b>NEW</b>	Ø		
<b>VAR-150</b>	150	u	12	<b>VAR125</b>	125	u	16



<b>SYSTEM 120</b>				<b>SYSTEM 100</b>				<b>SYSTEM 100</b>			
		Ø120 □ 150x75				Ø100 □ 120x60				Ø100 □ 110x55	
CODE	SIZES (mm)	UN		CODE	SIZES (mm)	UN		CODE	SIZES (mm)	UN	
<b>0845</b>	Ø 120	u	25	<b>0645</b>	Ø 100	u	25	<b>0645</b>	Ø 100	u	25
<b>0852</b>	Ø 120	u	18	<b>0550</b>	Ø 100	u	30	<b>0550</b>	Ø 100	u	30
				AVAILABLE COLOURS:				AVAILABLE COLOURS:			
<b>0857</b>	Ø 120	u	25	<b>0656</b>	Ø 100	u	25	<b>0656</b>	Ø 100	u	25
<b>0816</b>	Ø 120	u	8	<b>0616</b>	Ø 100	u	10	<b>0616</b>	Ø 100	u	10
NA				<b>NEW</b> <b>VAR100</b>	Ø 100	u	20	<b>NEW</b> <b>VAR100</b>	Ø 100	u	20

# Mixed accessories

## **TUBPLA®**

**MIXED**  
STRAIGHT  
CONNECTOR



**MIXED**  
BEND 90°



**MIXED**  
BEND 90°  
ORIENTATIVE









**MIXED**  
EMBELLISH  
WALL PLATE



**MIXED**  
"T" JOINT



SYSTEM 150				SYSTEM 125			
		Ø150				Ø125	
		180x90				220x55	
CODE	SIZES (mm)	UN		CODE	SIZES (mm)	UN	
<b>SU2040</b>	150 to 180x90	u	15	<b>T-P 1040</b>	125 to 220x55	u	10
<b>SU2050</b>	150 to 180x90	u	12	<b>T-P 1050</b>	125 to 220x55	u	24
NA				<b>T-P 1025</b>	125 a 220x55	u	10
NA				NA			
NA				<b>T-2</b>	2x 220x55x300 to Ø125	u	9

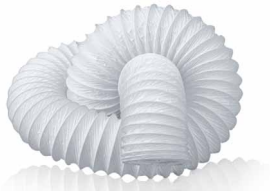
<b>SYSTEM 120</b>				<b>SYSTEM 100</b>				<b>SYSTEM 100</b>			
		Ø120 150x75				Ø100 120x60				Ø100 110x55	
CODE	SIZES (mm)	UN		CODE	SIZES (mm)	UN		CODE	SIZES (mm)	UN	
<b>0820</b>	Ø  120 to 150x75	u	28	<b>0620</b>	Ø  100 to 120x60	u	48	<b>0520</b>	Ø  100 to 110x55	u	36
<b>0826</b>	Ø  120 to 150x75	u	34	<b>0625</b>	Ø  100 to 120x60	u	38	<b>0525</b>	Ø  100 to 110x55	u	45
NA				NA				NA			
NA				NA				<b>0545</b>	 Ø 110x55 to 100	u	24
NA				NA				<b>T-1</b>	 Ø 2x 110x55x300 to Ø100	u	12

# TUBPLA® FLEX

## Flexible ducts and bends



### CIRCULAR FLEXIBLE DUCT



### RECTANGULAR FLEXIBLE DUCT



### RECTANGULAR FLEXIBLE BEND



### CIRCULAR FLEXIBLE BEND



### RECTANGULAR FLEXIBLE MIXED BEND



### CIRCULAR FLEXIBLE MIXED BEND



SYSTEM 150				Ø150 180x90	SYSTEM 125				Ø125 220x55
CODE	SIZES (mm)	UN			CODE	SIZES (mm)	UN		
	Ø					Ø			
<b>0690/1</b>	152x1.000	u	40		<b>0689/1,5</b>	127x1.500	u	60	
<b>0690/3</b>	152x3.000	u	20		<b>0689/3</b>	127x3.000	u	30	
<b>0690/6</b>	152x6.000	u	10		<b>0689/6</b>	127x6.000	u	15	
	NA								
					<b>PR1000/1</b>	220x55x1.000	u	10	
					<b>PR1000/6</b>	220x55x6.000	u	12	
<b>CCF-900</b>	180x90	u	4		<b>CCF-1000</b>	220x55	u	5	
	Ø					Ø			
<b>CRF-150</b>	150	u	3		<b>CRF-125</b>	125	u	8	
	Ø					NA			
<b>CMF-900</b>	180x90 to 150	u	3						
						Ø			
<b>CMF-150</b>	150 to 180x90	u	3		<b>CMF-125</b>	125 to 220x55	u	4	

**APPLICATIONS**


- ✓ Dryers.
- ✓ Vapour evacuation.
- ✓ Toilet and bathroom.
- ✓ Small and secondary installations.

**INSTALLATION AND HANDIWORK**

- ✓ Fast assembly.
- ✓ Easy handling.
- ✓ Full compatibility.

**ADVENTATGES**

- ✓ Going around obstacles.
- ✓ Variable angle from 0 to 90°.

SYSTEM 120				SYSTEM 100				SYSTEM 100							
				Ø120 □ 150x75				Ø100 □ 120x60				Ø100 □ 110x55			
CODE	SIZES (mm)	UN		CODE	SIZES (mm)	UN		CODE	SIZES (mm)	UN					
	Ø				Ø				Ø						
<b>0689/1,5</b>	127x1.500	u	60	<b>0688/2</b>	102x2.000	u	60	<b>0688/2</b>	102x2.000	u	60				
<b>0689/3</b>	127x3.000	u	30	<b>0688/3</b>	102x3.000	u	45	<b>0688/3</b>	102x3.000	u	45				
<b>0689/6</b>	127x6.000	u	15	<b>0688/6</b>	102x6.000	u	30	<b>0688/6</b>	102x6.000	u	30				
	□				NA				□						
<b>PR-800</b>	150x75x1.000	U	10					<b>PR-500</b>	110x55x1.000	u	20				
	□				□				□						
<b>CCF-800</b>	150x75	u	8	<b>CCF-600</b>	120x60	u	4	<b>CCF-500</b>	110x55	u	10				
	Ø				Ø				Ø						
<b>CRF-120</b>	120	u	8	<b>CRF-100</b>	100	u	10	<b>CRF-100</b>	100	u	10				
	□ Ø				□ Ø				□ Ø						
<b>CMF-800</b>	150x75 to 120	u	4	<b>CMF-600</b>	120x60 to 100	u	4	<b>CMF-500</b>	110x55 to 100	u	6				
	Ø □				NA				Ø □						
<b>CMF-120</b>	120 to 150x75	u	4					<b>CMF-100</b>	100 to 110x55	u	6				

# TUBPLA® PLUS

## The new generation of folding rigid ductwork



**GONAL®** technology has developed an innovative solution in ducts for Ventilation, Aerothemy and Extraction of Cooker hoods which solves the occupation of storage space.

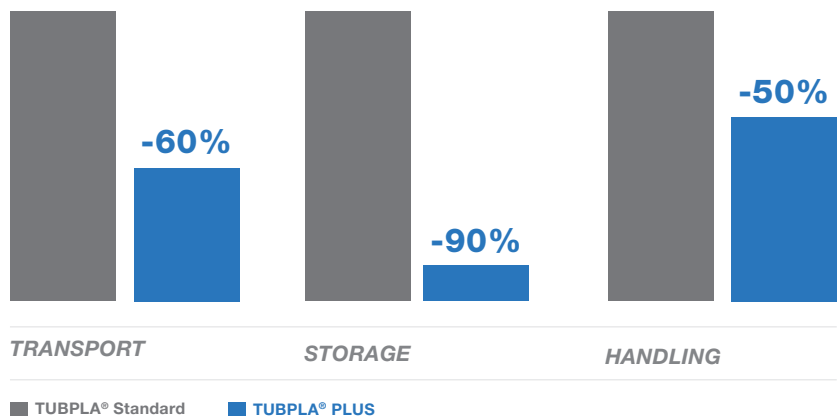
### ADVANTAGES

- ✓ On handling time, 50% less
- ✓ Better joint.
- ✓ Perfect fit with accessories.
- ✓ Less time on wall or ceiling fixing.
- ✓ Higher profitability in transport, 60% less cost.

### LOGISTIC SOLUTION

- Less storage space, 90% less volume of space.
- More units in the same space, reducing out of stock.
- Grow portability advantages to the user level.
- Facilitates transport to the final consumer. "Ready to go".
- Highest offer at the sale point, more range.

The main **innovation** in the sector, for their savings in storage, handling and transport.



**COMPATIBLE  
WITH  
ALL THE  
ACCESSORIES**

	<b>SYSTEM 125</b> □ 220x55	<b>SYSTEM 120</b> □ 150x75	<b>SYSTEM 100</b> □ 120x60	<b>SYSTEM 100</b> □ 110x55
<b>CODE</b>	<b>PL 1002/1</b>	<b>PL 0801/1</b>	<b>PL 0601/1</b>	<b>PL 0501/1</b>
<b>SIZES (mm)</b>	220x55x1000	150x75x1000	120x60x1000	110x55x1000
□ (mt)	28	9	10	12
<b>CODE</b>	<b>PL 1002</b>	<b>PL 0801</b>	<b>PL 0601</b>	<b>PL 0501</b>
<b>SIZES (mm)</b>	220x55x1500	150x75x1500	120x60x1500	110x55x1500
□ (mt)	13,5	13,5	15	18
<b>CODE</b>	<b>PL 1002/3</b>			<b>PL 0501/3</b>
<b>SIZES (mm)</b>	220x55x3000			110x55x3000
□ (mt)	27			30

## New-flanged presentation



**NEW**

### NEW CLAMP

- Fits with all type of rectangular duct.
- Improves the consistence of **TUBPLA® PLUS** ducts.
- Easy and quick to use.
- Available in 110x55 and 220x55 mm.



Details at page 32.

**NEW**

# EXPOGONAL®

An innovative point sales presentation for Ventilation, Aerothermy and Extraction systems.

Less storage space required with **TUBPLA® PLUS** and these new accessories packaging concept BOX PACK.

## ADVANTAGES OF THE NEW PACKAGING BOX PACK

- ✓ Less number of pieces per box.
- ✓ Piece with barcode.
- ✓ Stronger packaging.
- ✓ Functional box for packaging and display.
- ✓ An image of the piece is show in the box.
- ✓ Maximum utilization of space.
- ✓ Assembly details.



> OPTIMIZATION

> BARCODE

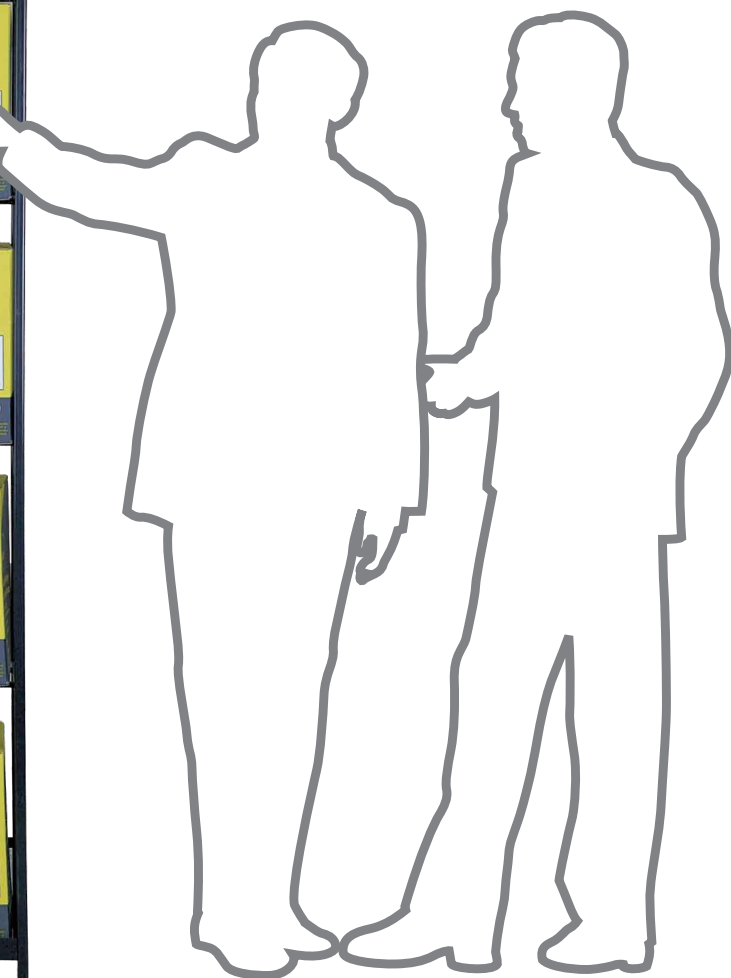
> PRESENCE AT SALES POINT



AVAILABLE  
FOR ALL  
SYSTEMS

WITHIN  
EASY REACH

DIY



> **SIZES** 184 X 117 X 51 mm.

# COMPONENTS TUBPLA®



**IDEAL FOR  
VENTILATION  
IN LAUNDRY  
OR TECHNICAL  
ROOM**

# Telescopic systems



## VENTILATION WALL TELESCOPIC

One direction ventilation system inside/outside containing: Wall outlet with damper (to guarantee no return of exhausted air), telescopic duct 250-450 mm and grille.

**WE SUPPLY TELESCOPIC SYSTEMS ACCORDING TO YOUR NEEDS.  
PLEASE ASK FOR THEM!**

## CONNECTION SYSTEM

	SYSTEM 150	SYSTEM 125	SYSTEM 100
<b>CODE</b>	STT 150	STT 125	STT 100
<b>SIZES</b> (mm) Telescopic duct	Ø 150 250-450	Ø 125 250-450	Ø 100 250-450
<b>FLOW</b> (m³/h)	>650	300-500	<300

## HEIGHT-ADJUSTABLE EXHAUST HOOD *IN DEVELOPMENT* & INTEGRATED RANGEHOODS

### GONAL® OFFERS

Telescopic duct in Ø100-125-150 mm.

### ADVANTAGES

- √ Smooth internal wall ducts to avoid risk of fire by embeded grease.
- √ Ductwork systems of flat wall to prevent pressure loss increasing the exhaust hood performance and ensuring the long-life of the appliance.
- √ Large diameters, allowing a greater evacuation, no returns, no vibration, no odours, ensuring the health and acoustic comfort.



Star light isla of Mepamsa (Spanish company of Franke group)



	SYSTEM 150	SYSTEM 125	SYSTEM 100
<b>CODE</b>	TT 150	TT 125	TT 100
<b>SIZES</b> (mm)	Ø 150 330-600	Ø 125 180-360	Ø 100 180-360
<b>FLOW</b> (m³/h)	>650	650-300	<300

Note: For other lengths, contact us.

**LESS NOISE  
(10 DB APPROX.)**

# Soundproof duct



**Acoustic insulation for ductwork systems for extractions of fumes.**

### TECHNICAL SPECIFICATIONS

- 25 mm / 16 Kg. m<sup>3</sup> fibreglass insulation.
- Reinforced by an external aluminium foil / polyester 25 micras.
- The coating prevents steam.
- Temperatures range -30° C / + 140° C.
- Flame retardant. Euroclass B-s3-d0 according to EN13501-1:2007.

	SYSTEM 150	SYSTEM 125	SYSTEM 120	SYSTEM 100
<b>CODE</b>	AL 150	AL 125	AL 120 AL 800	AL 600
<b>SIZES (mm)</b>	Ø 150x500	Ø 125x500	Ø 120x500 □ 150x75x500	□ 120x60x500



# Firewrap systems

**An effective seal to stop fire.**

### ACTION

Expansion of the self-extinguish filter at 180-200°C with a ratio of 17 times its volume, causing a pressure upon the duct of 10 bar braking it and isolating the remaining areas.

### INSTALATION

The protection must be placed between the duct and the wall. In the event of fire the material expands against the softer part (duct).

### REGULATION

√ Certified according to  
Norm BS476 part 20 to 22

	SYSTEM 150	SYSTEM 125	SYSTEM 120	SYSTEM 100
<b>CODE</b>	FW 150	FW 125 FW 220x55	FW 150x75	FW 100 FW 110x55
<b>SIZES (mm)</b>	Ø 150	Ø 125 □ 220x55	□ 150x75	Ø 100 □ 110x55

# Grilles

## PLASTIC GRILLES SURFACE MOUNTED



## EMBEDED PLASTIC GRILLES



## PLASTIC FIXED GRILLES











## METALLIC GRILLES



## STAINLESS STEEL



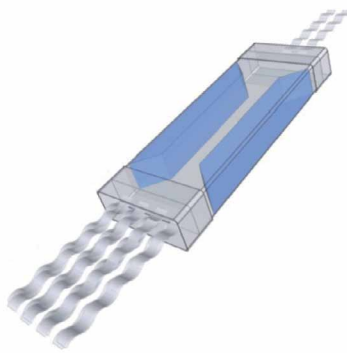
CODE	SIZES (mm)	UN	
<b>0461</b>	 230x230	u	60
<b>0462</b>	 230x430	u	32
<b>0460</b>	 150x200	u	52
<b>0463</b>	Ø int. 96	u	25
<b>0595</b>	Ø int. 121	u	25
<b>0464</b>	Ø int. 156	u	25
<b>0592</b>	Ø 90 to 140	u	25
<b>0593</b>	Ø 125 to 160	u	25
<b>0596*</b>	 183x154	u	20
<b>0465</b>	 150x150	u	15
<b>0466</b>	 170x170	u	15
<b>0467</b>	 200x200	u	15
<b>0402/0</b>	190x190 connection Ø100	u	1
<b>0402/1</b>	190x190 connection Ø125	u	1

# COMPONENTS GONAVEN® for MCV & HRV



**NEW**

# Acoustic attenuator



## WHY DO WE NEED SILENCERS?

The majority of the national building regulations introduce recommendations with reference to limit noise levels, according to EN 12251:2007, to prevent those cases where the building occupants, especially in family houses or apartments tend to reduce the fan speed or even turn off the ventilation in cases of too high ventilation noise.

## GONAL® OFFERS

An effective acoustic attenuator for MCV & HRV systems tested in accordance to the regulations EN 13141 and EN 7235.

## ADVANTAGES

- √ Less noise of the Ventilation unit and between rooms.
- √ More installation oportunities.
- √ More installation options than with metallic silencers.
- √ Lower height. Only 55 mm high!
- √ Absolute compatibility with our ductwork systems.
- √ Maximum airtightness thanks to the connection system.

**TUBPLA® AIRTIGHT.**

## AVAILABLE SIZES (mm)

- 110x55
- 220x55

## LENGHTS (mm)

500, 1.000 and 1.500

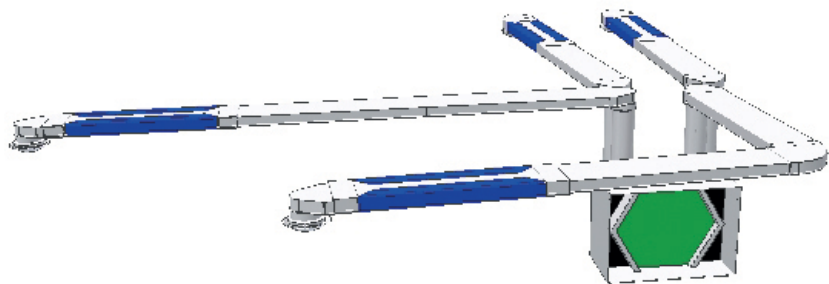
## REGULATIONS

- √ EN 12252:2007
- √ EN 13141
- √ EN 7235

## INSTALATION

**Option 1:** Following the ventilation unit.

**Option 2:** Inmediately before the extract/supply valves.



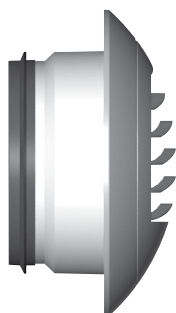
# Extract/Supply valves



## SELF-BALANCED EXHAUST GRILLES

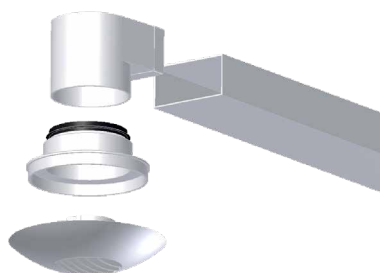
The self-balanced exhaust grilles, with flow regulators included, are designed to keep a constant air flow regardless of their underpressure. They can be used in MCV & HRV systems, for extraction of foul air of **KITCHENS, BATHROOMS** and **TOILETS**. They also can be of simple or double flow.

They are also available with acoustic insulation to ensure compliance with acoustic regulations.



EXTRACT VALVE WITH CONSTANT FLOW	
Self-balanced constant flow	
CODE*	m <sup>3</sup> /h
<b>BE 15</b>	15
<b>BE 30</b>	30
<b>BE 45</b>	45
<b>BE 60</b>	60
<b>BE 75</b>	75
<b>BE 90</b>	90
<b>BE 120</b>	120
<b>BE 150</b>	150

\* Available with acoustic insulation.



## EXTRACT/SUPPLY VALVES

Mechanically adjustable valves for extraction and insufflation of MCV & HRV systems.

The flow regulation can be managed by rotation of the central shutter.





**AVAILABLE  
ANGLE  
ADAPTOR FOR:**

- ✓ PLACEMENT
- ✓ CONNECTORS
- ✓ JOINTS
- ✓ ACOUSTIC INSULATION UNITS



## HUMIDITY SENSITIVE EXTRACT GRILLES

The humidity sensitive extract grilles include a device which is activated depending on the humidity level of the ambience.

HUMIDITY SENSITIVE RANGE			
CODE*	m³/h		REQUIRED COMPLEMENTS
<b>BH 90 CE</b>	6/40	90	Commuter IP 20
<b>BH 135 CE</b>	10/45	135	Commuter IP 20
<b>BH 105 CE</b>	12/45	105	Commuter IP 20
<b>BH 120 CE</b>	10/45	120	Commuter IP 20
<b>BH 10/60</b>	10/60		
<b>BH 15/75</b>	15/75		
<b>BH 15/100</b>	15/100		
<b>BH 05/40</b>	05/40		
<b>BH 10/60-I*</b>	10/60		

\* Presence detector integrated.

\*\* Available with acoustic insulation.



# Window inlets



## SELF-BALANCED AND HUMIDITY SENSITIVE WINDOW INLETS

The principal task of the window inlets is to introduce new air in the main rooms of the house: living room, dining room and bedroom. They are placed on the top of the window or in the outer wall. They are used in simple flow MCV systems. The self-balanced window inlets can be identified by their nominal flows under pressure of 20 Pa. Air inlets of 15, 22, 30 or 45 m<sup>3</sup>/h.

The type and quantity of window inlets will be determined by the national building regulations in application to each building situation.

They are also available with acoustic insulation to ensure compliance with acoustic regulations.

SELF BALANCED		HUMIDITY SENSITIVE		
<b>STANDARD</b>				
CODE	m <sup>3</sup> /h	CODE	m <sup>3</sup> /h	
<b>EA M 15</b>	15	<b>EA AIRA HY</b>	6	45
<b>EA M 22</b>	22			
<b>EA M 30</b>	30			
<b>EA M 45</b>	45			
<b>ACOUSTIC INSULATION</b>				
<b>EA ISO 22</b>	22	<b>EA ISO HY</b>	6	45
<b>EA ISO 30</b>	30			
<b>EA ISO 45</b>	45			



# Flow regulators

**NEW**


The principal task of the flow regulators is to balance the air distribution ductwork when their length generates differences between the flow needs and the real flow. They are also a solution to use when we want to install a decorative grille instead of an extract/supply valve.

## TECHNICAL CHARACTERISTICS

They generate a nominal flow at low pressure (50 to 200 Pa), and at high pressure (100 to 650 Pa), and they are placed inside the duct or the MB connector (LK extract grille) or MTM (TM terminal).

## INSTALLATION

The flow regulator can be installed embedded inside the duct. It includes a joint to guarantee the airtightness.

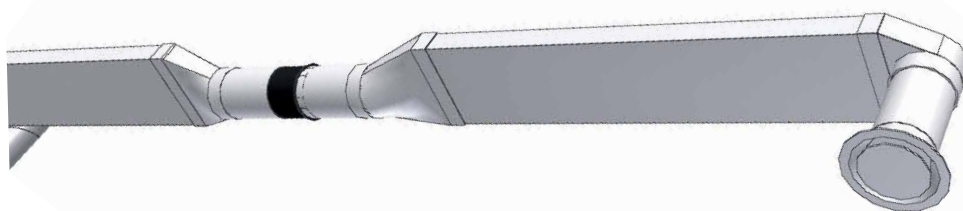
The minimum distance between the flow regulator and the associated extract grille must be less than the diameter in extraction and three times the diameter in insufflation.

It is necessary to keep the flow sense, which is indicated into the flow regulator label for extraction. In insufflation we have to invert the position.



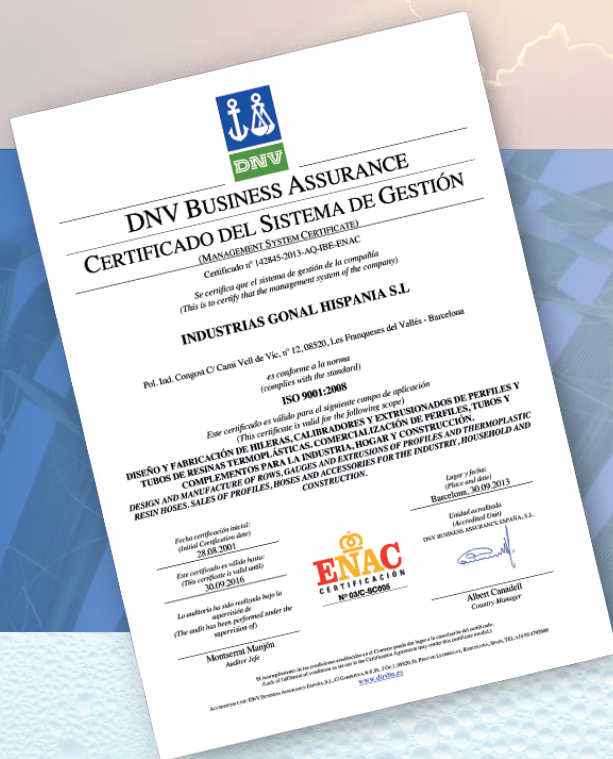
**REGULATOR MAR  
IN EXTRACTION**

CODE	SIZES (mm)
<b>MAR 100</b>	Ø 100
<b>MAR 125</b>	Ø 125
<b>MAR 150</b>	Ø 150



GONAL®  
YOUR RELIABLE PARTNER

[www.gonal.es](http://www.gonal.es)



**GUARANTEE  
OF QUALITY**



## INDUSTRIAS GONAL HISPANIA, S.L.

Pol. Ind. Congost  
C/ Camí Vell de Vic, núm. 12  
08520 Les Franqueses del Vallès  
Barcelona-España

Tel.: 902 889 232  
Tel. Int.: +34 938 616 530  
Fax. 902 889 302  
Fax. Int.: +34 938 402 047

[gonal@gonal.es](mailto:gonal@gonal.es)  
[www.gonal.es](http://www.gonal.es)