

Micro-perforated duct for Air Treatment  
also certified for Smoke Extraction in case  
of fire.

**SINGLE COMPARTMENT- DUAL PURPOSE**

**ONE DUCT FOR TWO SYSTEMS**

- Smoke and Heat Evacuation Systems
- Air Treatment - Hot/Cold

**MICRO  
FIRE**



**SMOKE & HEAT  
EXTRACTION**



**AIR TREATMENT**



Micro-perforated duct for HVAC systems (Air Treatment - Hot/Cold) also  
certified for use in case of smoke and heat extraction systems

## REFERENCE STANDARDS

Air treatment UNI 16798; Smoke and heat control system (DIN 18232) UNI 9494-2

**CLASSIFICATION:** E 600 120 (HO) S 1000 MONO

**Fire Rated Ductwork E 600 °C 120 min.**  
Operating pressure of +500 to - 1000 Pa.



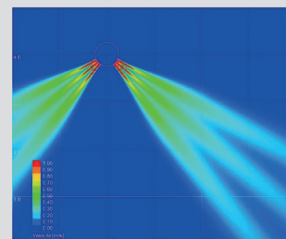
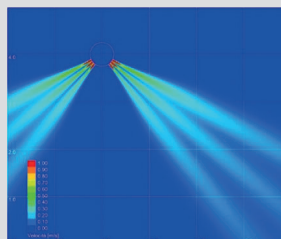
The smoke extraction ducts are provided with CE marking according to the UNI EN 12101-7:2011 standard and tested according to the EN 1366-9:2008.

MICRO FIRE ducts can be used in Single Compartment Smoke and Heat Evacuation Systems, where smoke is drawn from a single fire compartment before reaching the outside of the building.

**Quick selection of the diameter with dedicated datasheet (HVAC flow – Smoke Extraction flow).**

Using a MICRO FIRE software, it is possible to size the system and view the air diffusion in the treated room.

Graphs produced allow for a detailed analysis of both the penetration of the treated air in the volume of the environment, and the isometric lines of speed.



Air diffusion in the environment is more homogeneous compared to traditional systems with diffusers or nozzles.

In addition, by drastically reducing stratification, the start-up and maintenance times of the system are reduced.

MICRO FIRE ducts do not require insulation.

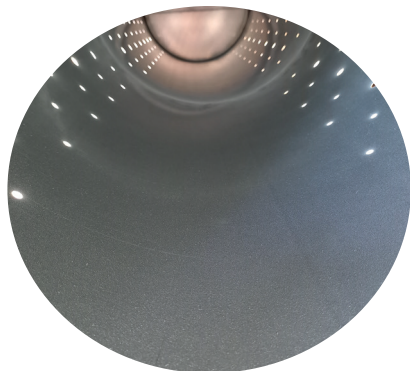
# I NEW SOLUTION

## HVAC&SMOKE EXTRACTION ALL IN ONE

**MICRO  
FIRE**



### HVAC



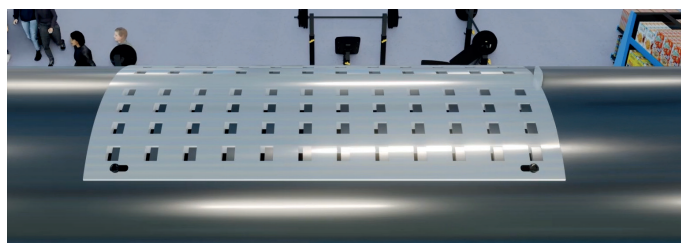
By means of special micro-perforation  
it is possible to make air treatment

### HVAC&SMOKE EXTRACTION

**Dedicated Adjustable Grids** are equipped on the top.

In normal conditions it is possible to take the air from the environment  
for recirculation (HVAC).

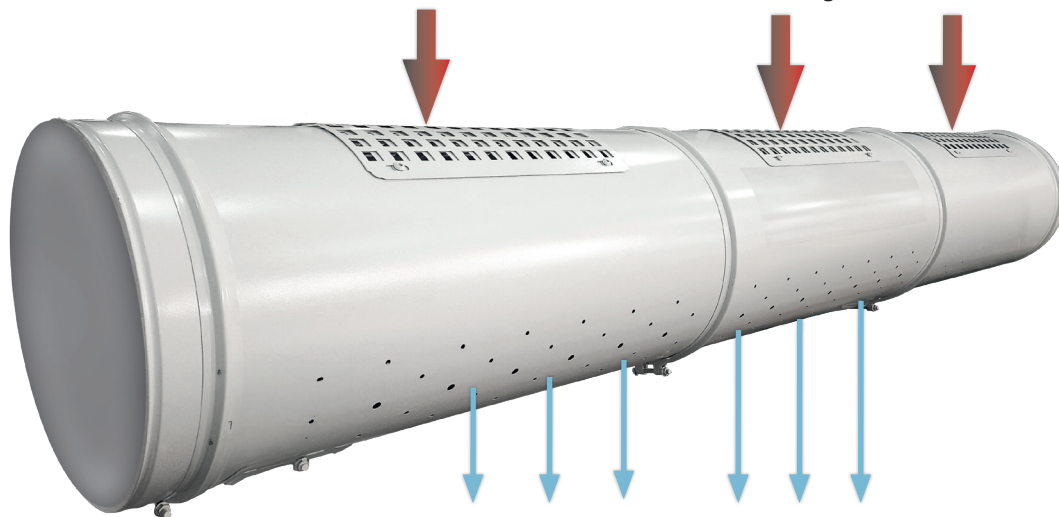
**In case of fire from the Grids it is possible to extract the smoke.**



### SMOKE EXTRACTION

#### IN CASE OF FIRE

Hot smoke is extracted with the correct flow rate (m<sup>3</sup>/h) from each grids located on the duct



Air treatment HVAC

### NEW DESIGN

Special V-band clamps are used  
between ducts, without flanges  
and bolts.

New design connection is more  
aesthetic and also certified for  
tightness at 600°C for 120min.



#### TYPICAL APPLICATION

- Shopping centers
- Conference rooms
- Theaters
- Cinema
- Warehouses
- Production departments



### The three functions of MICRO FIRE:

1. Supply Air for HVAC
2. Return Air for HVAC
3. Smoke Extraction in case of Fire

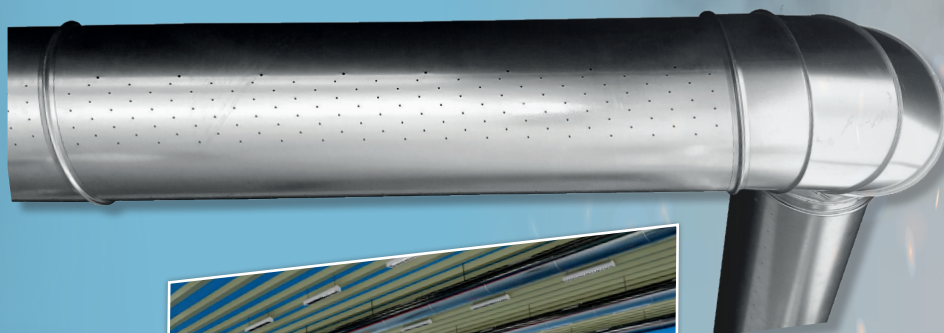


## ADVANTAGES OF THE DUAL-PURPOSE SYSTEM

A new system for air treatment with induction technology,

### Without the insulation!

- There is no stratification of the air
- It can be used for both Hot and Cold air
- Quick and easy to install
- Optimized ceiling spaces, with **reduction of costs**
- In case of fire, **from the same duct can be extracted hot smokes at 600°C for 120min – CE Marked.**



[www.micro-fire.com](http://www.micro-fire.com)

