



Serie **INVC**



INTUMESCENT CIRCULAR GRILLE



(+34) 91 3235805
(+34) 91 3235703



www.difair.es



info@difair.es



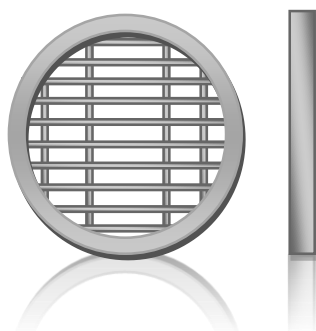
Avd. del Cno de lo Cortao, 28A, Nave 1
28703 San Sebastián de los Reyes, Madrid.

INTUMESCENT FIRE RESISTANT CIRCULAR GRILLE

SERIE INVC



MODELS



INVC 60

Intumescent fire resistant circular grille with 60mm thickness, 120' fire resistance classification according to standards **UNE-EN 1363-1:2012** and **UNE-EN 1364-5:2017**.

DESCRIPTION

The intumescent fire resistant circular grille **INVC** have been developed to allow free circulation of air at ambient temperature through construction elements designed for fire resistance in buildings (walls, partitions, doors, etc.). When the grilles are subjected to fire, they swell under the effect of heat, thus preventing the passage of flames, fumes and gases.

Tested according to standards: **UNE-EN 1363-1:2012** "Fire Resistance tests. Part 1: General requirements" and according to standards: **UNE-EN 1364-5:2017** "Fire resistance tests for non-load bearing elements. – Part 5: Air transfer grilles".

INTUMESCENT FIRE RESISTANT CIRCULAR GRILLE SERIE INVC

FEATURES AND CLASSIFICATION

The intumescent grille Serie VC, have the following characteristics:

- **Fast reaction time:** At 100°C, the frame and the blades that make up the grille begin to expand, which causes the grating to start plugging. They plug quickly, usually in about 5 minutes depending on their exposure to heat.
- **Intumescence quality:** The frame and blades are made of thermoplastic profiles containing the high-end intumescent gasket, PALUSOL® brand.



- **Thermoplastic sleeves:** The intumescent grilles consist of thermoplastic sleeves filled with PALUSOL® intumescent tapes.
- **Simplicity:** Very easy to install.
- **For indoor use:** They should only be applied indoors (avoid contact with water and continuous temperatures above 40°C).

INTUMESCENT FIRE RESISTANT CIRCULAR GRILLE

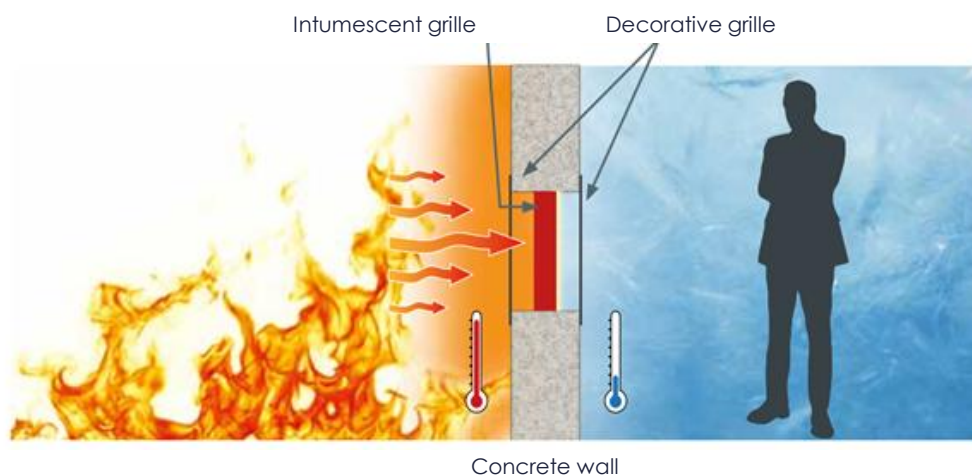
SERIE INVC

	INVC 60
Ø Nominal	From 100 mm to 400 mm (Ø125 mm AVAILABLE)
Espesor	60 mm
Effective air flow	60 % of nominal area
Fire resistane	120 min (*)
Fire resistance with decorative grilles.	120 min (*)

Intumescent grilles have been approved according to the new European standard test: EN1364-5:2017.

Laboratory Note 14-F-122 according to EN1363-1 and EN1363-2. Fire resistance test according to the slow heating curve thermal program (cold smoke).

(*) The fire resistance time also depends on the type of substrate on which the material is installed. The installer must ensure that the installation complies with the regulations in force in his country. The manufacturer is not responsible for improper installation of its intumescent grilles.



INTUMESCENT FIRE RESISTANT CIRCULAR GRILLE

SERIE INVC

APPLICATION

INVC Series intumescent grilles allow ventilation through:

- **Fire-resistant doors**
- **Fire-resistant walls**
- **Fire resistant partitions**

INSTALLATION

PREAMBLE

The applicator has to check the suitability between the material and its application according to current regulations.

The **DIFAIR INVC** intumescent grille used must correspond to the degree of fire resistance required by law. Their size, their characteristics and the support where they are installed will correspond to their certification (refer to the official test report and the technical data sheet of the material).



RECOMENDATIONS



DIFAIR INVC intumescent grilles should not be placed in places susceptible to temperatures exceeding 40°C continuously.

DIFAIR INVC intumescent grilles should not be stored or installed in excessively humid places or in direct contact with water.

DIFAIR INVC intumescent grilles do not perform mechanical functions.



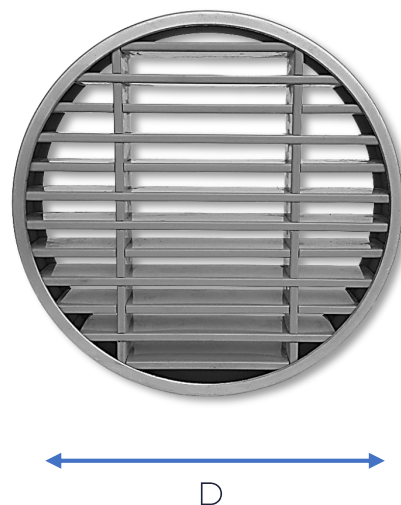
INTUMESCENT FIRE RESISTANT CIRCULAR GRILLE

SERIE INVC

INSTALLATION

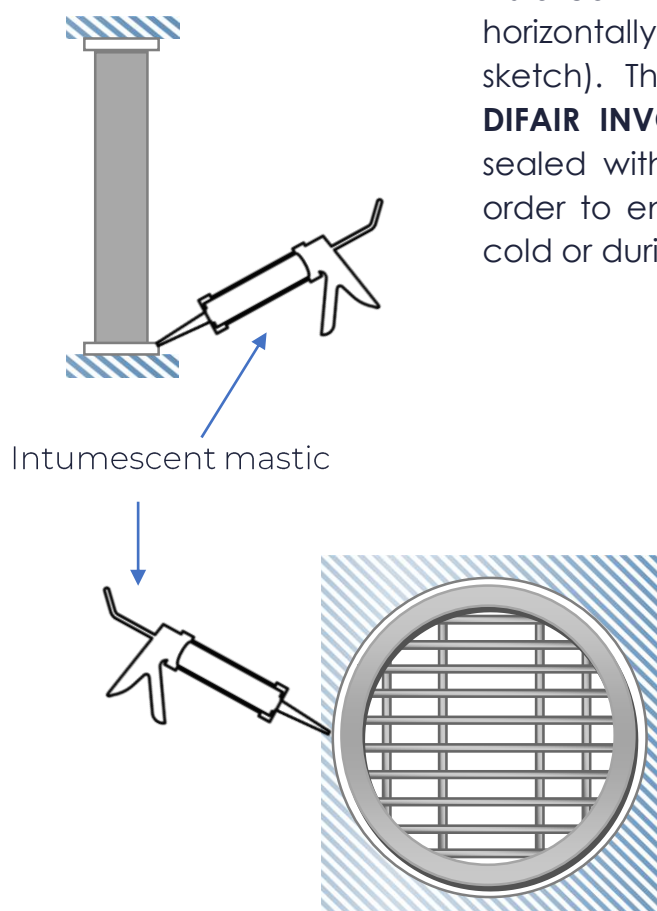
DIFAIR INVC grilles are about 3 mm less than their nominal dimensions (D), so that they can be easily inserted into the hole to be covered.

They should be placed centered in relation to the thickness of the wall, partition or door.



IMPORTANT

Respect the direction in which the grille is installed with the sheets positioned horizontally (according to the enclosed sketch). The gaps (<5mm) between the **DIFAIR INVC** grille and the wall must be sealed with **ACRYL** intumescent mastic in order to ensure total watertightness when cold or during a fire.



INTUMESCENT FIRE RESISTANT CIRCULAR GRILLE

SERIE INVC

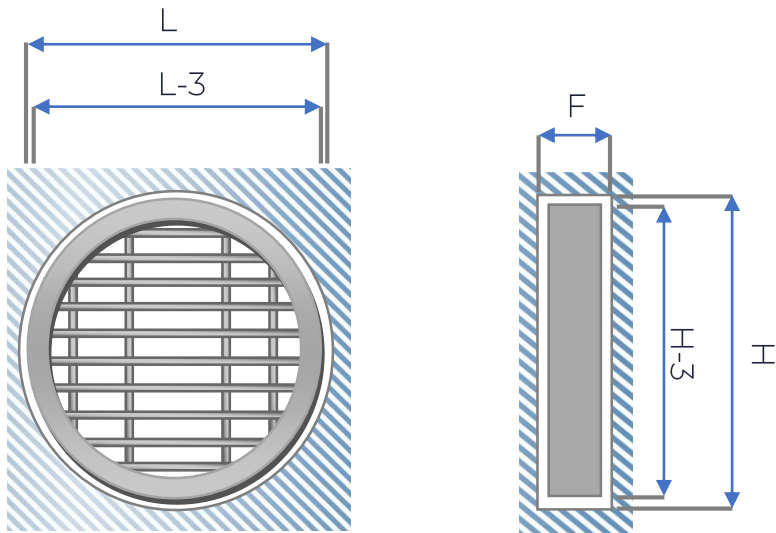
COMPATIBILITY

Intumescent grilles are compatible with all materials used in the manufacture of fire resistant doors, walls, partitions, floors and ventilation ducts. **The tests only contemplate the installation in concrete walls.**

STORAGE

Intumescent grids should be stored in a **dry and ventilated place**, taking into account that it is a **fragile product**.

DIMENSIONS



Model	Nominal	Hole	Background
INVC-60	Ø L	Ø L	60 mm

L = From 100 mm to 400 mm in steps of 50 mm
(Available Ø125 mm)

EFFECTIVE AREA (m²)

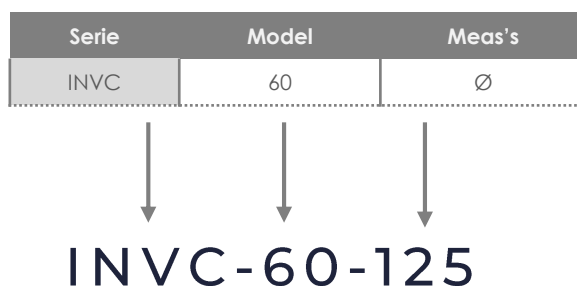
MOD. INVC

Ø	100	125	150	200	250	300	350	400
Área	0,0047	0,0074	0,0106	0,0188	0,0295	0,0424	0,0577	0,0754

INTUMESCENT FIRE RESISTANT CIRCULAR GRILLE

SERIE INVC

GRAPHIC DESCRIPTION



SERIE

- INVC: Intumescent circular grille.

MODEL

- INVC: Intumescent circular grille, 60mm thickness, 120min fire resistance.

MEASUREMENTS (mm)

- Ø: 125 mm.

Order example: INVC60 125

- To order Intumescent circular grille with 120min fire resistance, Ø125mm x 60mm, you should request:

Order	Description
1 Intumescent circular grille INVC60 Ø125mm	Intumescent circular grille, Ø125mm x 60mm with 120min fire resistance.



Any element of this document may be subject to change without notice from Manufacturas Difair-Clima, S.L. CONTAINS INTELLECTUAL PROPERTY. Any partial or total reproduction of the contents without the express authorization of Manufacturas DIFAIR-CLIMA, S.L. is prohibited.

The information contained in this document is based on careful testing and experience. It reflects our knowledge and is for guidance purposes only. It is provided in good faith and the user should satisfy himself that the product is fit for use prior to any application. The values quoted are averages and should not be taken as maximum or minimum values for specific purposes. The manufacturer and distributor are not responsible for any non-recommended use or consequential damage.

THE INFORMATION PROVIDED IN THIS DOCUMENT SUPERSEDES ALL PREVIOUS VERSIONS OF THIS DOCUMENT.



(+34) 91 3235805
(+34) 91 3235703



www.difair.es



info@difair.es



Manufacturas Difair-Clima, S.L.
Avd. del Cno de lo Cortao, 28A, Nave 1
28703 San Sebastián de los Reyes, Madrid.