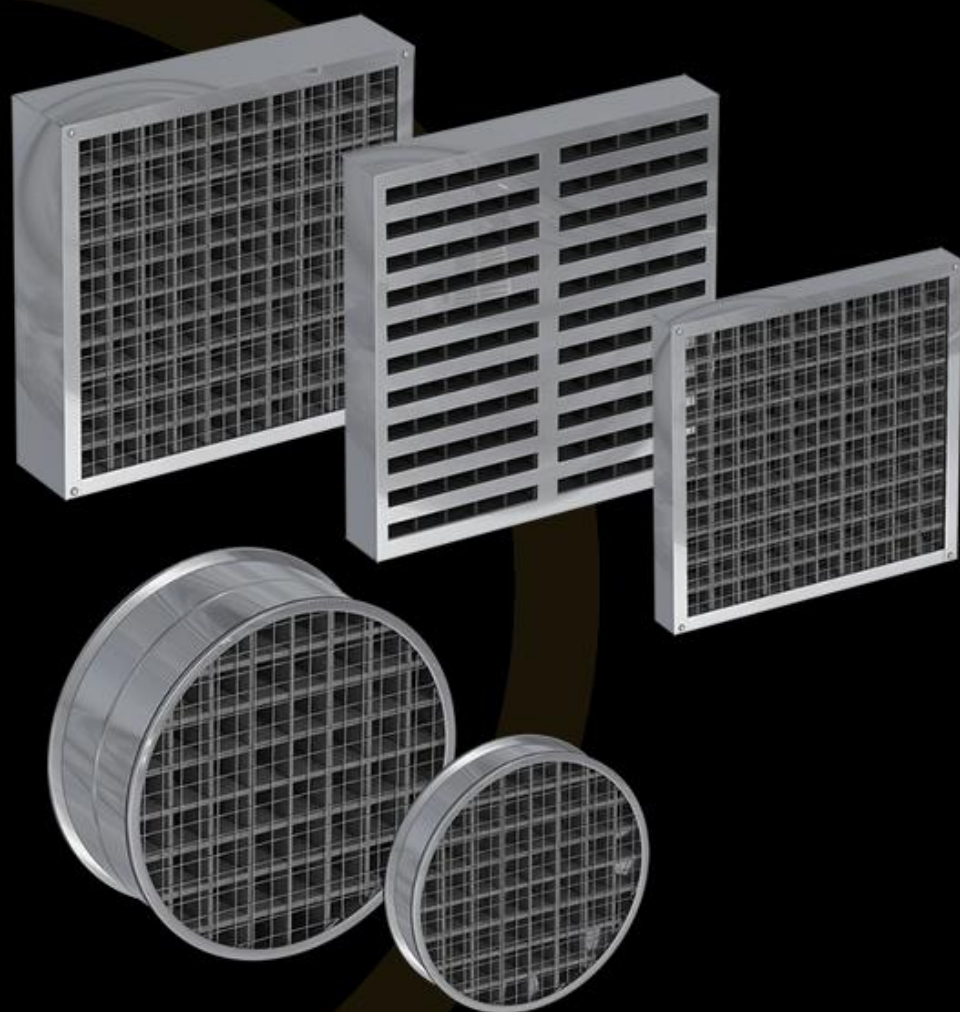


# INTU FR GRILLE

*Intumescent FR Grille*

TDS Technical Data Sheet



**INTUSEAL**®  
*passive fire protection manufacturer*

[www.intuseal.com](http://www.intuseal.com)

# INTU FR GRILLE

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## → PRODUCT DESCRIPTION

Firestop ventilation grilles **INTU FR GRILLE** are made from material that expands under the influence of temperature above 140°C. Intumescent inserts close the ventilation holes during a fire, preventing the spread of flame and smoke.

- fire resistance: 60, 120 and 240 minutes
- air flow up to 80%
- maximum dimensions:
  - single round grille - Ø 400 [mm];
  - single rectangular grille - 600 x 600 [mm]
- not standard sizes

## → APPLICATION

**INTU FR GRILLE** is install in the ventilation holes in walls and floors. The material is swelling during fire fills the hole completely, preventing flame and smoke from entering adjacent rooms.

### Rigid walls:

The wall must be minimum thickness 150 mm. Must have concrete, cellular concrete or masonry structure, with minimum density 600kg/m<sup>3</sup>.

### Rigid floors:

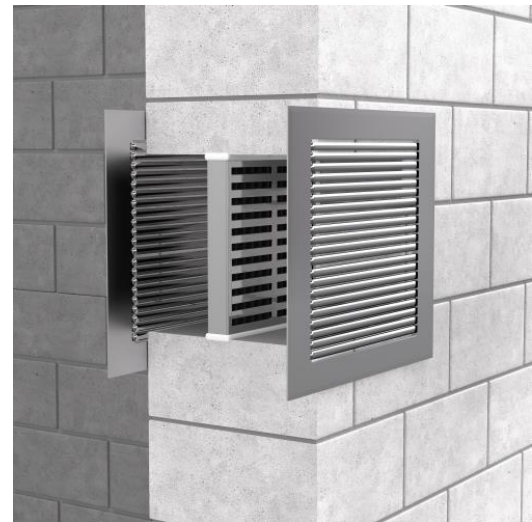
The floor must be minimum thickness 150 mm. Must have concrete, cellular concrete or masonry structure, with minimum density 1700kg/m<sup>3</sup>.

- **Maximum ambient temperature:**

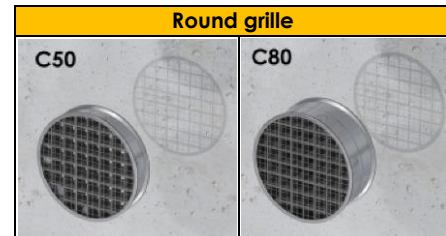
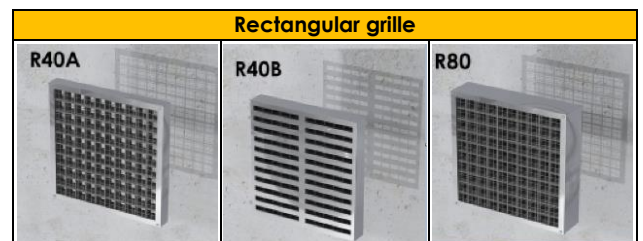
- round grille C50, C80 - 70 °C
- rectangular grille R40A - 70 °C
- rectangular grille R40B - 40 °C
- rectangular grille R80 - 70 °C

## → INSTALLATION METHOD

1. Adjust the size of the grille to the size of the hole.
2. Apply a small amount of intumescent acrylic mastic (e.g. **INTU FR MASTIC**) to the grille along its edge.
3. Push the grille into the hole.
4. Fill the remaining gaps and cavities with firestop acrylic putty.
5. Install masking plates (e.g. **INTU ATP**) on both sides of the partition using steel screws.



## → AVAILABILITY



Connectors for INTU FR GRILLE:	
Model T	Model X

## → TRANSPORT AND STORAGE

Store in dry and cool conditions at temperatures between + 5°C and + 25°C.

## → COMPLIANCE

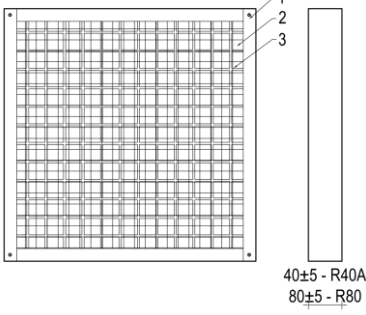
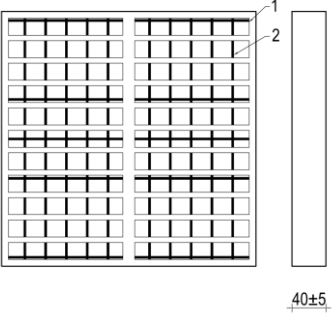
- Reference standard: ETAG 026-4
- Fire classification: 01245/18/Z00NZP
- TDS
- SDS

# INTU FR GRILLE

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## ➔ RECTANGULAR GRILLE - AVAILABILITY, FIRE RESISTANCE CLASS

Rectangular grille R40A, R80	Rectangular grille R40B
<p>1 – metal casing 2 – steel wire mesh 3 – intumescent insert (dimensions in mm)</p>  <p>40±5 - R40A 80±5 - R80</p>	<p>1 – metal casing 2 – intumescent insert (dimensions in mm)</p>  <p>40±5</p>

Grille type	Grille dimensions [mm]	Grille thickness [mm]	Fire resistance class	Scope of application
INTU FR GRILLE R40A	100 x 100 ÷ 300 x 300	40	EI 60	wall and floor
INTU FR GRILLE R40B	100 x 100 ÷ 300 x 300	40	EI 120	wall and floor
INTU FR GRILLE R80	100 x 100 ÷ 300 x 300	80	EI 240	wall
			EI 180	floor
	301 x 301 ÷ 600 x 600	80	EI 90	floor

Height [mm]	R40A / Width [mm] / Art. No.											
	100	150	200	225	250	300	350	400	450	500	550	600
100	INGRR60/100x100	INGRR60/150x100	INGRR60/200x100	INGRR60/225x100	INGRR60/250x100	INGRR60/300x100	INGRR60/350x100	INGRR60/400x100	INGRR60/450x100	INGRR60/500x100	INGRR60/550x100	INGRR60/600x100
150		INGRR60/150x150	INGRR60/200x150	INGRR60/225x150	INGRR60/250x150	INGRR60/300x150	INGRR60/350x150	INGRR60/400x150	INGRR60/450x150	INGRR60/500x150	INGRR60/550x150	INGRR60/600x150
200			INGRR60/200x200	INGRR60/225x200	INGRR60/250x200	INGRR60/300x200	INGRR60/350x200	INGRR60/400x200	INGRR60/450x200	INGRR60/500x200	INGRR60/550x200	INGRR60/600x200
225				INGRR60/225x225	INGRR60/250x225	INGRR60/300x225	INGRR60/350x225	INGRR60/400x225	INGRR60/450x225	INGRR60/500x225	INGRR60/550x225	INGRR60/600x225
250					INGRR60/250x250	INGRR60/300x250	INGRR60/350x250	INGRR60/400x250	INGRR60/450x250	INGRR60/500x250	INGRR60/550x250	INGRR60/600x250
300						INGRR60/300x300	INGRR60/350x300	INGRR60/400x300	INGRR60/450x300	INGRR60/500x300	INGRR60/550x300	INGRR60/600x300
350							INGRR60/350x350	INGRR60/400x350	INGRR60/450x350	INGRR60/500x350	INGRR60/550x350	INGRR60/600x350
400								INGRR60/400x400	INGRR60/450x400	INGRR60/500x400	INGRR60/550x400	INGRR60/600x400
450									INGRR60/450x450	INGRR60/500x450	INGRR60/550x450	INGRR60/600x450
500										INGRR60/500x500	INGRR60/550x500	INGRR60/600x500
550											INGRR60/550x550	INGRR60/600x550
600												INGRR60/600x600

Height [mm]	R40B / Width [mm] / Art. No.				
	100	150	200	250	300
100	INGRR120/100x100	INGRR120/150x100	INGRR120/200x100	INGRR120/250x100	INGRR120/300x100
150	INGRR120/100x150	INGRR120/150x150	INGRR120/200x150	INGRR120/250x150	INGRR120/300x150
200	INGRR120/100x200	INGRR120/150x200	INGRR120/200x200	INGRR120/250x200	INGRR120/300x200
250	INGRR120/100x250	INGRR120/150x250	INGRR120/200x250	INGRR120/250x250	INGRR120/300x250
300	INGRR120/100x300	INGRR120/150x300	INGRR120/200x300	INGRR120/250x300	INGRR120/300x300

It applies to all INTU FR GRILLES:

**Standard** size of grilles:

[WIDTH x HEIGHT]

means:

[LARGER DIMENSION x SMALLER DIMENSION]

You can order **INTU FR GRILLE** in any size – the price is set individually.

# INTU FR GRILLE

Intumescent FR Grille

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Height [mm]	R80 / Width [mm] / Art. No.											
	100	150	200	225	250	300	350	400	450	500	550	600
100	INGRR240/100x100	INGRR240/150x100	INGRR240/200x100	INGRR240/225x100	INGRR240/250x100	INGRR240/300x100	INGRR240/350x100	INGRR240/400x100	INGRR240/450x100	INGRR240/500x100	INGRR240/550x100	INGRR240/600x100
150		INGRR240/150x150	INGRR240/200x150	INGRR240/225x150	INGRR240/250x150	INGRR240/300x150	INGRR240/350x150	INGRR240/400x150	INGRR240/450x150	INGRR240/500x150	INGRR240/550x150	INGRR240/600x150
200			INGRR240/200x200	INGRR240/225x200	INGRR240/250x200	INGRR240/300x200	INGRR240/350x200	INGRR240/400x200	INGRR240/450x200	INGRR240/500x200	INGRR240/550x200	INGRR240/600x200
225				INGRR240/225x225	INGRR240/250x225	INGRR240/300x225	INGRR240/350x225	INGRR240/400x225	INGRR240/450x225	INGRR240/500x225	INGRR240/550x225	INGRR240/600x225
250					INGRR240/300x250	INGRR240/300x250	INGRR240/350x250	INGRR240/400x250	INGRR240/450x250	INGRR240/500x250	INGRR240/550x250	INGRR240/600x250
300						INGRR240/300x300	INGRR240/350x300	INGRR240/400x300	INGRR240/450x300	INGRR240/500x300	INGRR240/550x300	INGRR240/600x300
350							INGRR240/350x350	INGRR240/400x350	INGRR240/450x350	INGRR240/500x350	INGRR240/550x350	INGRR240/600x350
400								INGRR240/400x400	INGRR240/450x400	INGRR240/500x400	INGRR240/550x400	INGRR240/600x400
450									INGRR240/450x450	INGRR240/500x450	INGRR240/550x450	INGRR240/600x450
500										INGRR240/500x500	INGRR240/550x500	INGRR240/600x500
550											INGRR240/550x550	INGRR240/600x550
600												INGRR240/600x600

## → ROUND GRILLE - AVAILABILITY, FIRE RESISTANCE CLASS

**Round grille C50 / C80**

1 - metal casing  
2 - steel wire mesh  
3 - intumescent insert  
(dimensions in mm)

50±5 - C50  
80±5 - C80

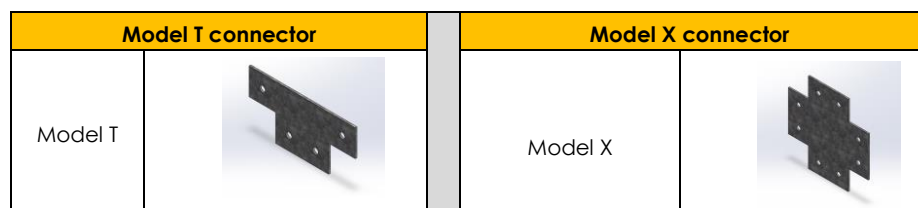
Grille type	Grille dimensions [mm]	Grille thickness [mm]	Fire resistance class	Scope of application
INTU FR GRILLE C50	Ø100 ÷ Ø400	50	EI 60	wall and floor
INTU FR GRILLE C80	Ø100 ÷ Ø400	80	EI 120	wall and floor

There is a possibility to order INTU FR GRILLE in any size - the price is set individually.

Fire resistance class	Diameter [mm] / Art. No.										
	100	125	150	160	200	225	250	300	315	350	400
C50	INGRC 60/100	INGRC 60/125	INGRC 60/150	INGRC 60/160	INGRC 60/200	INGRC 60/225	INGRC 60/250	INGRC 60/300	INGRC 60/315	INGRC 60/350	INGRC 60/400
C80	INGRC 120/100	INGRC 120/125	INGRC 120/150	INGRC 120/160	INGRC 120/200	INGRC 120/225	INGRC 120/250	INGRC 120/300	INGRC 120/315	INGRC 120/350	INGRC 120/400

## → CONNECTOR FOR INTU FR GRILLE

Connectors **model T** and **model X** are used to connect rectangular intumescent firestop ventilation grills **INTU FR GRILLE** to each other. Connectors should be attached to the metal casing using rivets or steel sheet metal screws.

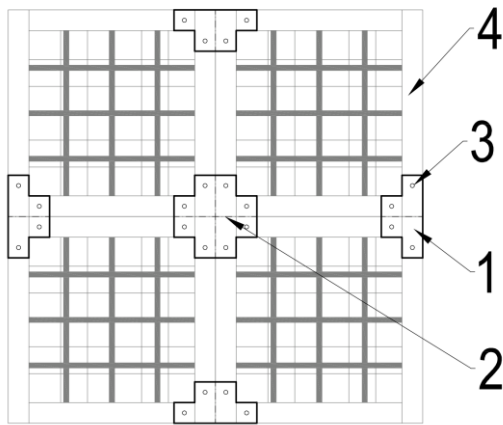


# INTU FR GRILLE

Intumescent FR Grille

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## → HOW TO CONNECT INTU FR GRILLE



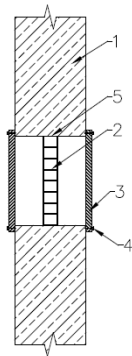
- 1 – Connector – **model T**
- 2 – Connector – **model X**
- 3 – steel rivet –  $\varnothing 3\text{mm}$
- 4 – intumescent grille **INTU FR GRILLE**

Apply a small amount of intumescent acrylic mastic (e.g. **INTU FR MASTIC**) for a grill along edge.

Fill all other joints and cavities with intumescent acrylic mastic (e.g. **INTU FR MASTIC**).

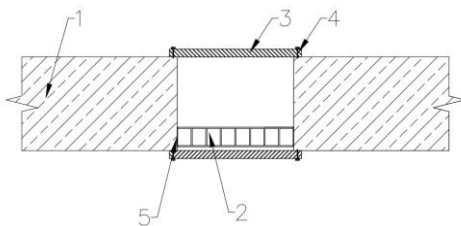
## → SOLUTION DETAILS

### WALL cross-section



- 1 – wall
- 2 – **INTU FR GRILLE** ventilation grille
- 3 – masking plate (e.g. **INTU ATP**)
- 4 – steel screws
- 5 – intumescent acrylic mastic e.g. **INTU FR MASTIC**

### FLOOR cross-section



- 1 – floor
- 2 – **INTU FR GRILLE** ventilation grille
- 3 – masking plate (e.g. **INTU ATP**)
- 4 – steel screws
- 5 – intumescent acrylic mastic e.g. **INTU FR MASTIC**