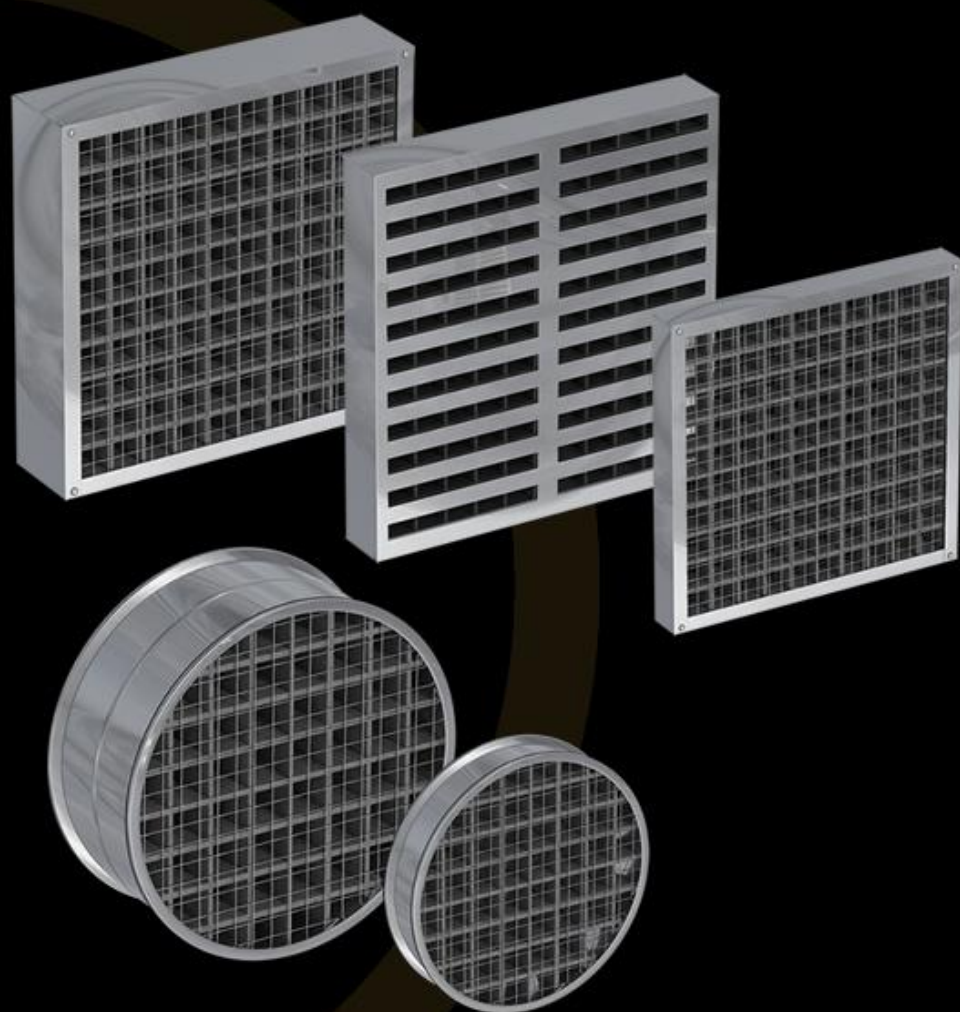


INTU FR GRILLE

Intumescent FR Grille

TDS Technical Data Sheet



INTUSEAL®
passive fire protection manufacturer

www.intuseal.com

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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/m³.

Rigid floors:

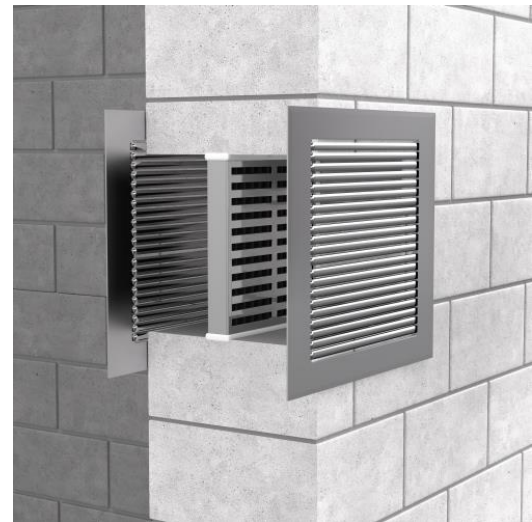
The floor must be minimum thickness 150 mm. Must have concrete, cellular concrete or masonry structure, with minimum density 1700kg/m³.

- **Maximum ambient temperature:**

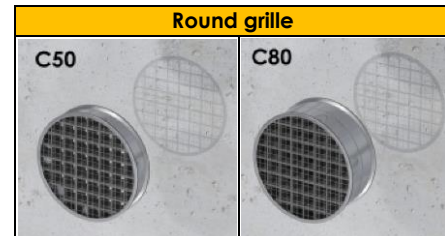
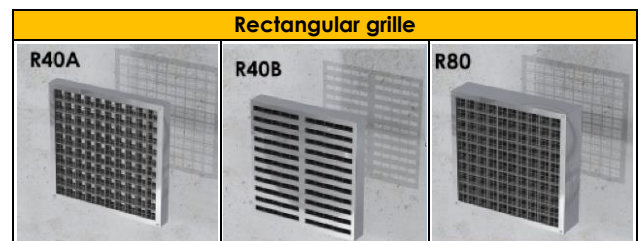
- round grille C50, C80 - 70 °C
- rectangular grille R40A - 70 °C
- rectangular grille R40B - 40 °C
- rectangular grille R80 - 70 °C

→ 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
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→ TRANSPORT AND STORAGE

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

→ COMPLIANCE

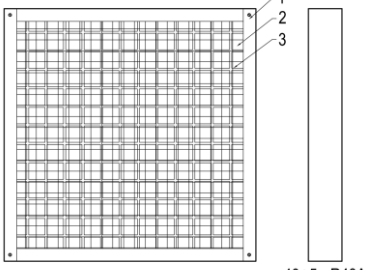
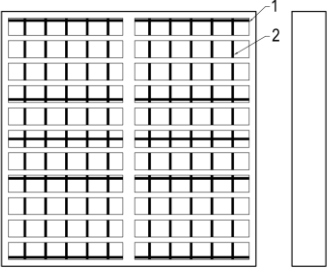
- Reference standard: ETAG 026-4
- Fire classification: 01245/18/Z00NZP
- TDS
- SDS

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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 ÷ 600 x 600	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.

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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	INGRR240/350x250	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)

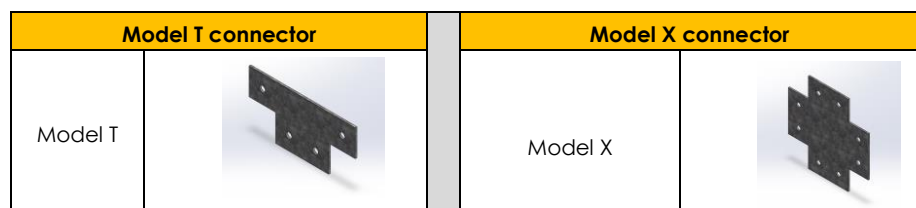
Grille type	Grille dimensions [mm]	Grille thickness [mm]	Fire resistance class	Scope of application
INTU FR GRILLE C50	Ø100 ÷ Ø400	50	EI 60	wall and floor
INTU FR GRILLE C80	Ø100 ÷ Ø400	80	EI 120	wall and floor

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.

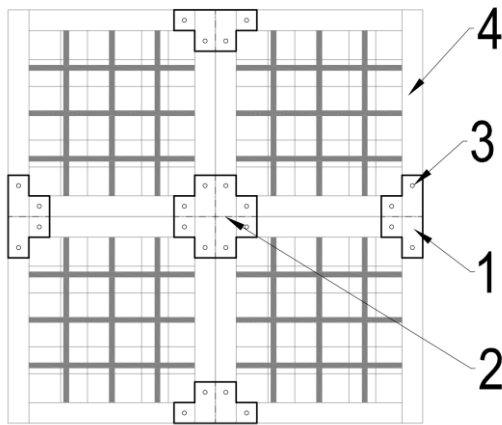


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TDS Technical Data Sheet

➔ HOW TO CONNECT INTU FR GRILLE

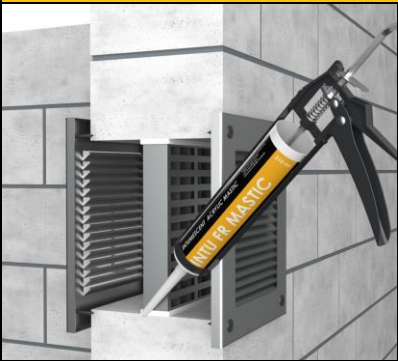
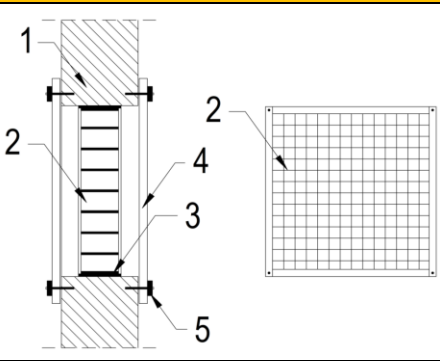

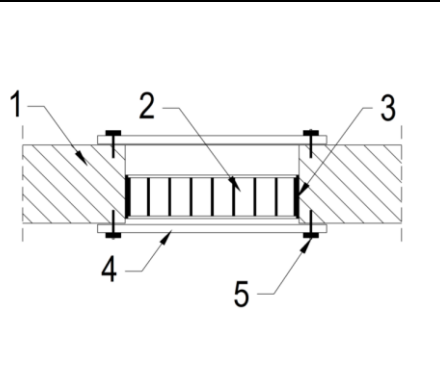


- 1 – Connector – **model T**
- 2 – Connector – **model X**
- 3 – steel rivet – Ø3mm
- 4 – intumescent grille **INTU FR GRILLE**

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

INTU FR GRILLE in rigid walls / rigid floors		
		<p>Fig. 1. Installation of INTU FR GRILLE in the wall</p> <ul style="list-style-type: none">1 – rigid wall2 - INTU FR GRILLE ventilation grille3 - intumescent acrylic mastic e.g. INTU FR MASTIC4 - masking plate (e.g. INTU ATP)5 - steel screws
		<p>Fig. 2. Installation of INTU FR GRILLE in the floor</p> <ul style="list-style-type: none">1 – rigid floor2 - INTU FR GRILLE ventilation grille3 - intumescent acrylic mastic e.g. INTU FR MASTIC4 - masking plate (e.g. INTU ATP)5 - steel screws