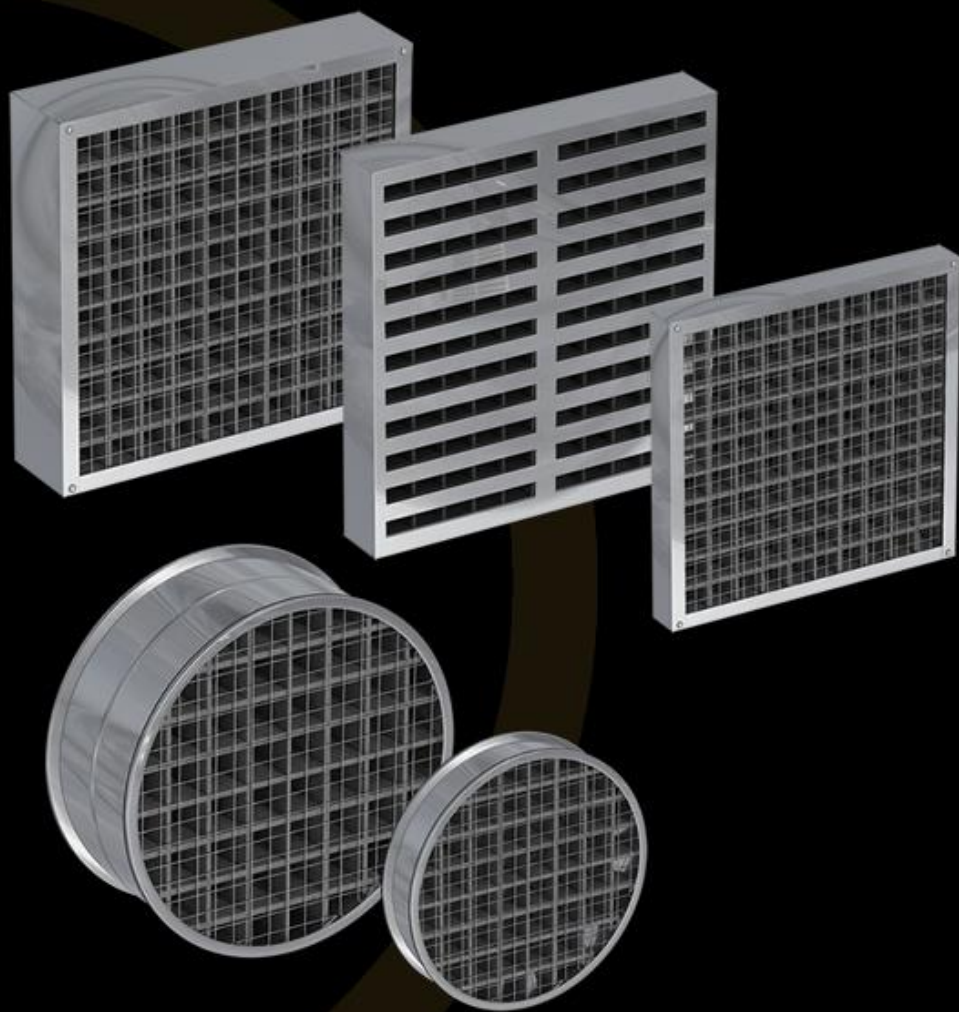


INTU FR GRILLE

Intumescent FR Grille

TDS Technical Data Sheet



•INTUSEAL®
passive fire protection manufacturer

www.intuseal.com

INTU FR GRILLE

Intumescent FR Grille

TDS Technical Data Sheet

INTUSEAL®
passive fire protection manufacturer

→ PRODUCT DESCRIPTION

- 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

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.

→ APPLICATION

INTU FR GRILLES are installed in the ventilation holes in walls and floors. The material swelling during a fire fills the hole completely, preventing flame and smoke from entering adjacent rooms.

Rigid walls:

The wall must be at least 150mm thick and have concrete, cellular concrete structure or masonry structure, with a minimum density of 600kg/m³

Rigid floors:

The floor must be at least 150mm thick and have concrete, cellular concrete structure or masonry structure, with a minimum density of 1700kg/m³

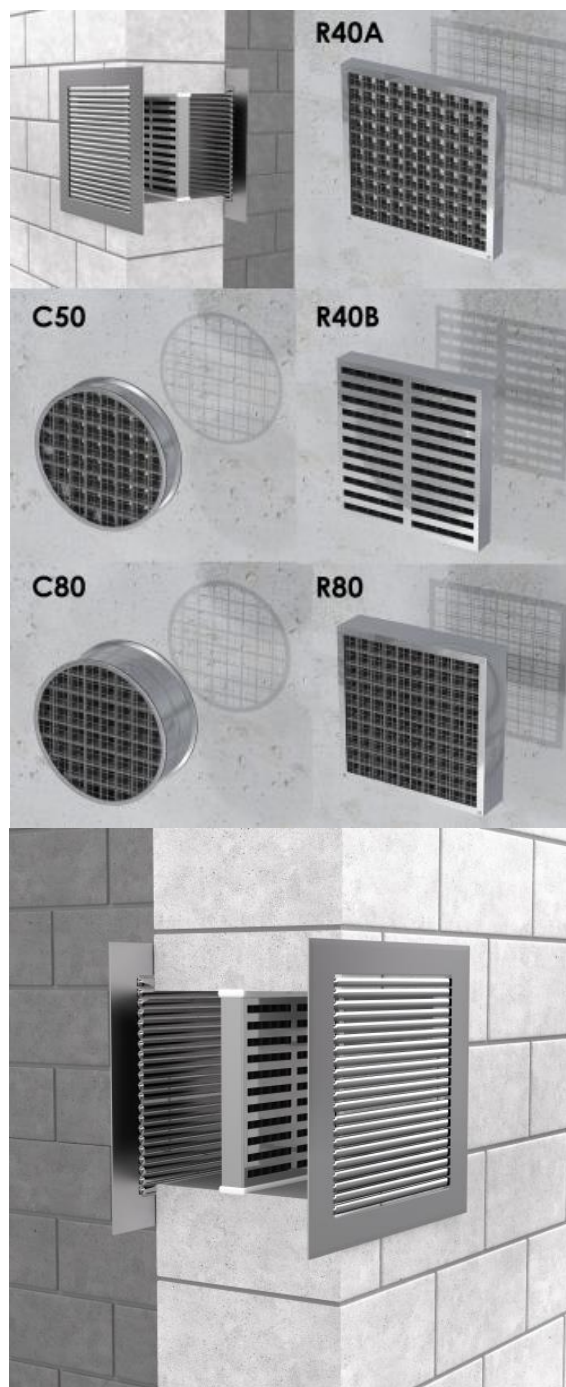
→ APPLICATION CONDITIONS

Maximum ambient temperature:

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

→ COMPLIANCE

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



→ AVAILABILITY, FIRE RESISTANCE CLASS (RECTANGULAR GRILLE)

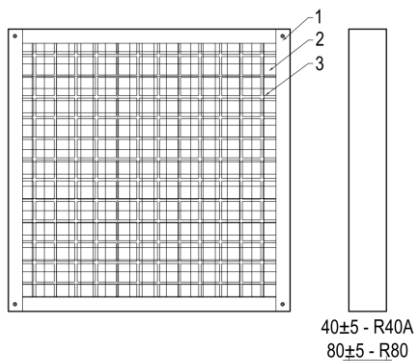


Fig. 1. Rectangular grille R40A, R80

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

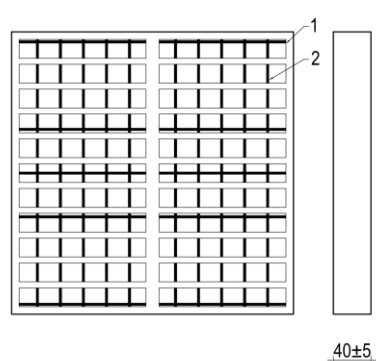


Fig. 2. Rectangular grille R40B

- 1 – metal casing
- 2 – intumescent insert
(dimensions in mm)

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

INTU FR GRILLE

Intumescent FR Grille

TDS Technical Data Sheet

INTUSEAL®
passive fire protection manufacturer

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.

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					INGRR240/250x250	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

➔ AVAILABILITY, FIRE RESISTANCE CLASS (ROUND GRILLE)

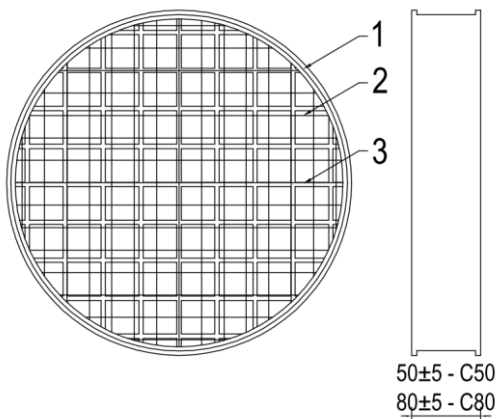


Fig. 3. Round grille C50 / C80

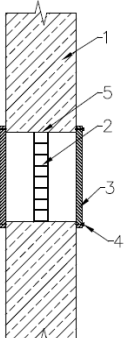
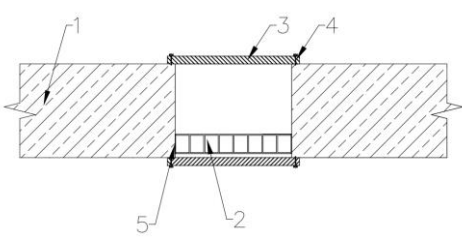
- 1 - metal casing
 - 2 - steel wire mesh
 - 3 - intumescent insert
- (dimensions in mm)

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

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

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

→ SOLUTION DETAILS

	Fig. 4. Wall cross-section 1 – wall 2 – INTU FR GRILLE ventilation grille 3 – masking plate (eg INTU ATP) 4 – steel screws 5 – intumescent acrylic mastic eg INTU FR MASTIC
	Fig. 5. Floor cross-section 1 – floor 2 – INTU FR GRILLE ventilation grille 3 – masking plate (eg INTU ATP) 4 – steel screws 5 – intumescent acrylic mastic eg INTU FR MASTIC

→ INSTALLATION METHOD

1. Adjust the size of the grille to the size of the hole.
2. Apply a small amount of intumescent acrylic mastic eg **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. Fasten the masking plates (eg **INTU ATP**) on both sides of the partition using steel screws.

→ TRANSPORT AND STORAGE

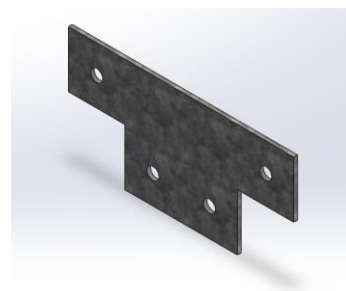
Store in dry and cool conditions at temperatures between +5°C and +25°C.

→ CONNECTOR FOR INTU FR GRILLE

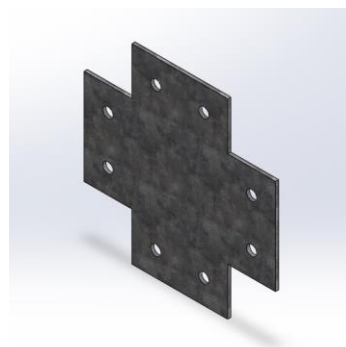
Connectors the model T and model X are used to connect rectangular intumescent firestop ventilation grills INTU FR GRILLE to each other. Connectors should be attached to the metal casing using rivets or steel sheet metal screws.

→ AVAILABILITY

Model connector
Model T
Model X



Connector – **model T**



Connector – **model X**

→ HOW TO CONNECT INTU FR GRILLE

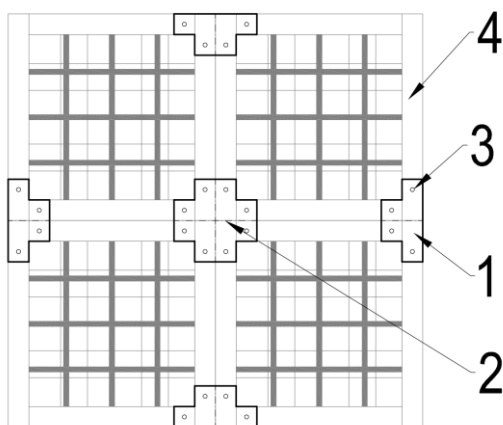


Fig. 6. The method of connection INTU FR GRILLE

- 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 (eg **INTU FR MASTIC**) for a grill along its edge.

Remove all other joints and cavities with intumescent acrylic mastic (eg **INTU FR MASTIC**)