

# DOCUMENTATION

## RISEFR 030-0311

With reference to the national code of building regulations of 27 June 2008 with the Norwegian building regulations of 1 July 2017 and belonging guidance, we document, based on test certificates, evaluations and installation instructions, that this product meets the requirements of the Norwegian authorities as to the fire related qualities.

**Product:** FB Air Transfer Grilles (ATG)

**Product responsible:** Flamro Norway AS  
Industrivegen 10, 7652 Verdal, Norge

The documentation is conditional on that the product is in accordance with the specifications given in the appendix and that the product is applied and used in accordance with regulations and all important details in this process follow precisely what is described in an installation manual. Both the installation manual and the RISE Fire Research AS Documentation shall follow the product or be available for the purchaser, user, inspector and the local authority.

The product shall be labeled with **RISEFR 030-0311**, trade name, product responsible and/or manufacturer together with a reference to the production for traceability. The labelling shall have good visibility.

Detailed product design and principle design of installation details are described in "Standard construction details for FB Air Transfer Grilles, belonging to Documentation **RISEFR 030-0311**". The version of the construction details filed at RISE Fire Research AS at any time is a formal part of the approval.

The product must have at least one annual, external inspection related to the internal system for control of quality. The inspection is adjusted to the type of product and other existing inspection arrangements. Details specified in a written agreement with RISE Fire Research AS.

This documentation was first issued **2023-10-18**. A renewal may be issued based on a written application. Termination by the applicant shall be asked for in writing and with 6 months notice. RISE Fire Research AS may withdraw this documentation when irregularities or misuse happens, and written instructions are not respected.

**Issued: 2025-09-30**  
**Valid until: 2029-01-01**

This product documentation ceases to apply when the properties covered by this document are to be CE marked in accordance with CPR (EU) 305/2011.



Asbjørn Østnor  
Discipline Manager Documentation



Erik Westbye Jacobsen  
Project Manager Documentation

**Appendix to Documentation RISEFR 030-0311 , 2025-09-30.**

**1. Holder of the Documentation**

Flamro Norway AS  
 Industrivegen 10  
 7652 Verdal  
 Norge  
<https://flamro.com/no>

**2. Manufacturer**

Flamro Norway AS

**3. Product description**

FB Air Transfer Grilles is a passive vent to be used in fire rated walls. The air transfer grille consists of a casing made by perforated stainless steel sheets. Between the sheets, a layer of intumescent material is applied. The air transfer grille can be made with maximum dimensions 590×590 mm, and with thicknesses 27 mm and 40 mm. The thickness of the intumescent material is 25 mm and 38 mm respectively. Air transfer grille is installed together with louvres.

FB Air Transfer Grilles can be made with an active coating applied on both sides of the perforated steel sheets.

**4. Fields of application**

FB Air Transfer Grilles is used as vent in fire rated walls.

**5. Properties**

Table 1 and 2 on the next page show the fire resistance for different designs of FB Air Transfer Grilles with and without louvres. The fire resistance in minutes is evaluated against the criteria with respect to integrity (E) and insulation (I).

FB Air Transfer Grilles with corresponding fire resistance can be used in constructions where the same EI fire resistance is required. I.e., if an air transfer grille has a fire resistance of 30 minutes or more according to Table 1 and 2, it can be used where fire resistance EI 30 is required.

Performance according to EN 1364-5:2017 Annex A is not documented.

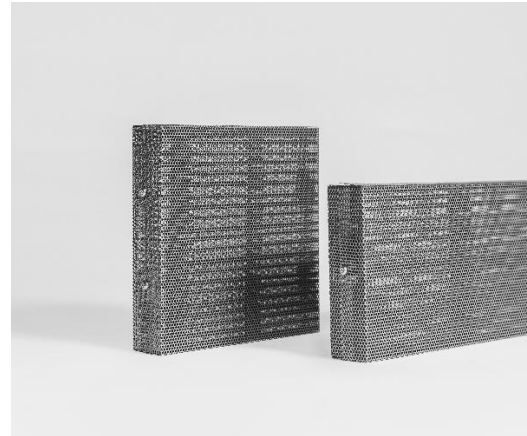


Fig.1 FB Air Transfer Grilles.

**6. Special conditions for use and installation**

FB Air Transfer Grilles shall be installed centric in a gypsum lined aperture in walls with thickness minimum 100 mm. Air transfer grille has fixing brackets on each vertical side, and fire rated sealing compound should be used along the edges. Louvres which cover the aperture should be installed on each side of the wall.

FB Air Transfer Grilles shall be installed according to installation instructions and details shown in "Standard Construction Details for the product, belonging to RISE Fire Research AS documentation RISEFR 030-0311".

Maintenance of FB Air Transfer Grilles is described in information sheet from Flamro Norway AS.

**7. Basis for the documentation**

This documentation is based on the properties that are documented in the following reports:

- Test report LBO-1686/23E dated 2023-09-22 from GRYFITLAB SP.ZO.O. according to EN 1364-5:2017.
- Test report LBO-1704/23E dated 2023-08-30 from GRYFITLAB SP.ZO.O. according to EN 1364-5:2017.
- Drawings from Flamro Norway AS (formerly Securo AS).

## 8. Validity

The validity of this appendix is uniquely linked to the first page of the document with the corresponding requirements and conditions.

## 9. Technical management

Project manager for this approval is Erik Westbye Jacobsen and Discipline Manager Documentation is Asbjørn Østnor, RISE Fire Research AS, Trondheim.

**Table 1**

Fire resistance in minutes for FB Air Transfer Grilles with Palusol Base, evaluated against the criteria for integrity (E) and insulation (I).

Maximum dimension FB ATG (mm)	Type of FB Air Transfer Grilles	Louvre side 1	Louvre side 2	Fire exposure	Fire resistance <sup>5)</sup> (minutes)
140×140 <sup>1)</sup>	Palusol Base, t=38 mm	Flexit Klaff	Flexit Steel	↔ <sup>4)</sup>	75
140×140 <sup>1)</sup>	Palusol Base, t=38 mm	Flexit Klaff	Flexit Steel	Against Flexit Klaff	91
190×190 <sup>1)</sup>	Palusol Base, t=38 mm	OVA	Flexit Steel	↔ <sup>4)</sup>	91
190×190 <sup>2)</sup>	Palusol Base, t=38 mm	Flexit Steel	Flexit Steel	↔ <sup>4)</sup>	91
190×190 <sup>1)</sup>	Palusol Base, t=38 mm	Stretch metal	Stretch metal	↔ <sup>4)</sup>	91
590×590 <sup>3)</sup>	Palusol Base, t=38 mm	OVA	RIA	Against OVA	91

<sup>1)</sup> Lower edge of FB ATG must be between 0,5 m and 2,6 m above floor level.

<sup>2)</sup> Lower edge of FB ATG must be between 0,5 m and 2,2 m above floor level.

<sup>3)</sup> Lower edge of FB ATG must be between 0,5 m and 1,8 m above floor level.

<sup>4)</sup> The fire resistance is independent of the exposure direction.

<sup>5)</sup> FB ATG with fire resistance 60 minutes or more can be used in an EI 60 construction.  
 FB ATG with fire resistance 90 minutes or more can be used in an EI 90 construction.

**Table 2**

Fire resistance in minutes for FB Air Transfer Grilles with Palusol Lined and Coating, evaluated against the criteria for integrity (E) and insulation (I).

Maximum dimension FB ATG (mm)	Type of FB Air Transfer Grilles	Louvre side 1	Louvre side 2	Fire exposure	Fire resistance <sup>4)</sup> (minutes)
190×190 <sup>1)</sup>	Palusol Lined, t=25 mm	OVA	OVA	↔ <sup>3)</sup>	43
190×190 <sup>1)</sup>	Palusol Lined + DG-S Coating t=25 mm	None	None	↔ <sup>3)</sup>	38
190×190 <sup>1)</sup>	Palusol Lined + DG-F Coating t=25 mm	None	None	↔ <sup>3)</sup>	40
190×190 <sup>1)</sup>	Palusol Lined + F-DG Coating t=25 mm	None	None	↔ <sup>3)</sup>	44
590×590 <sup>2)</sup>	Palusol Lined, t=38 mm	OVA	OVA	↔ <sup>3)</sup>	92

<sup>1)</sup> Lower edge of FB ATG must be between 0,5 m and 2,6 m above floor level.

<sup>2)</sup> Lower edge of FB ATG must be between 0,5 m and 1,8 m above floor level.

<sup>3)</sup> The fire resistance is independent of the exposure direction.

<sup>4)</sup> FB ATG with fire resistance 30 minutes or more can be used in an EI 30 construction.  
 FB ATG with fire resistance 90 minutes or more can be used in an EI 90 construction.

# Verification

Document ID 09222115557558480921

## Document

**RISEFR 030-0311\_E-version2**

Main document

3 pages

Initiated on 2025-09-30 11:32:06 CEST (+0200) by Erik Westbye Jacobsen (EWJ)

Finalised on 2025-10-03 10:56:00 CEST (+0200)

## Signatories

Erik Westbye Jacobsen (EWJ)

erik.westbye.jacobsen@risefr.no



Signed 2025-09-30 11:32:23 CEST (+0200)

Asbjørn Østnor (AØ)

asbjorn.ostnor@risefr.no



Signed 2025-10-03 10:56:00 CEST (+0200)

This verification was issued by Scrive. For more information/evidence about this document see the concealed attachments. Use a PDF-reader such as Adobe Reader that can show concealed attachments to view the attachments. Please observe that if the document is printed, the integrity of such printed copy cannot be verified as per the below and that a basic print-out lacks the contents of the concealed attachments. The digital signature (electronic seal) ensures that the integrity of this document, including the concealed attachments, can be proven mathematically and independently of Scrive. For your convenience Scrive also provides a service that enables you to automatically verify the document's integrity at: <https://scrive.com/verify>

