FB Air Transfer Vent – Fire Damper

The FB Air Transfer Vent is a passive fire damper designed for use in fire resistance rated partition walls. The vent does not contain any moving parts, detector activating system or cabling. The vent prevent fire spread by combining a steel grille blocking flames during the first minutes and an intumecent material that swells and blocks the opening when the vent is exposed to flames or hot smoke gases.

Available sizes: 100x100 up to 600x600mm.

Fire rating:
EI30 and EI60

Tested and certified according to:
NS-EN 1366-3:2009

Product Documentation from RISE Fire Research AS:
SPFR 030-0277

Approved louvers:
OVA from Trox Auranor

Steel louver and flap-valve from Flexit
Air flow rate at different air pressures

<table>
<thead>
<tr>
<th>FBO</th>
<th>Dimension</th>
<th>5 Pa</th>
<th>10 Pa</th>
<th>15 Pa</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>135x135</td>
<td>22</td>
<td>32</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>500x100*</td>
<td>83</td>
<td>119</td>
<td>144</td>
</tr>
<tr>
<td></td>
<td>500x150*</td>
<td>122</td>
<td>173</td>
<td>212</td>
</tr>
<tr>
<td></td>
<td>600x450*</td>
<td>486</td>
<td>680</td>
<td>787</td>
</tr>
</tbody>
</table>

*OVA louver at both sides.

Table 1 Air flow rate at different air pressures.

Special conditions for use
In cases in which it is important to prevent smoke spread, it must be taken into consideration that the FB Air Transfer Vent will not block cold smoke spread during the «open state». Contact the supplier for more information concerning alternative solutions when required.

Maintenance
The FB Air Transfer Vent does not contain any moving parts and does not need special maintenance in order to function in case of fire. To ensure the requested air flow a visual inspection of the vents should be performed regularly to prevent that the perforated steel plates are blocked with dust, insects etc. Hence, it is recommended to carry out inspection and necessary cleaning each fifth year. The louvers must then be removed and if necessary the FB Air Transfer Vent must be cleaned by a vacuum cleaner or by blowing.

Order number

Product code
B = Width from 100, max 600mm
H = Height from 100, max 600mm

Dimensions given at order should be wall opening. The vent will be somewhat smaller to ensure correct installation with 5mm gap at each side for fire resistant sealant.

Example: FBO-500-150 will be delivered as 490x140.
Installation
The images below shows the installation of a FB Air Transfer Vent 150 x 150 mm. The vent is available in different standard sizes and can also be custom made upon request. The FB Air Transfer Vent should always be made somewhat smaller than the opening in the wall to ensure correct installation with 5 mm fire resistant sealant around the vent.

1. The FB Air Transfer Vent installed in minimum 100mm thick wall with gypsum boards or in concrete walls, with louvers. See figure 1.
2. Center the vent and fix with stainless screws in the brackets.
3. Use fire resistant sealant around the vent.
4. Louvers must be installed at both sides of the wall. Approved louvers are shown in table 2.
5. Approval mark is placed so everyone can see there is a FB Air Transfer Vent installed.
Table 2. Type of louvers that can be used in combination with the FB Vent.

<table>
<thead>
<tr>
<th>Louver</th>
<th>Image</th>
<th>Fire resistance</th>
</tr>
</thead>
</table>
| Flexit, steel louver  
For outdoor use  
100-225mm | ![Image] | 60 min |
| Flexit, flap valve, plastic.  
For indoor use.  
128-178mm. | ![Image] | 60 min |
| Trox Auranor, OVA.  
For indoor use.  
100-600mm | ![Image] | 60 min |

Figure 1. Installation principle for the FB Vent in walls with gypsum boards.

Declaration of Content

FB Air Transfer Vents consist of perforated steel plates (AISI304) and Therm A Flex intumescent material (Graphite in PVA binder).
Environment
Waste should be recycled.

FB Air Transfer Vents are made of stainless steel and can be sold as scrap iron. This recycling makes the vents environmental friendly alternative. The intumescent material can be disposed as residual waste.