

# Ceiling Diffuser

with Fire Protection Device

Type DLK-Fb



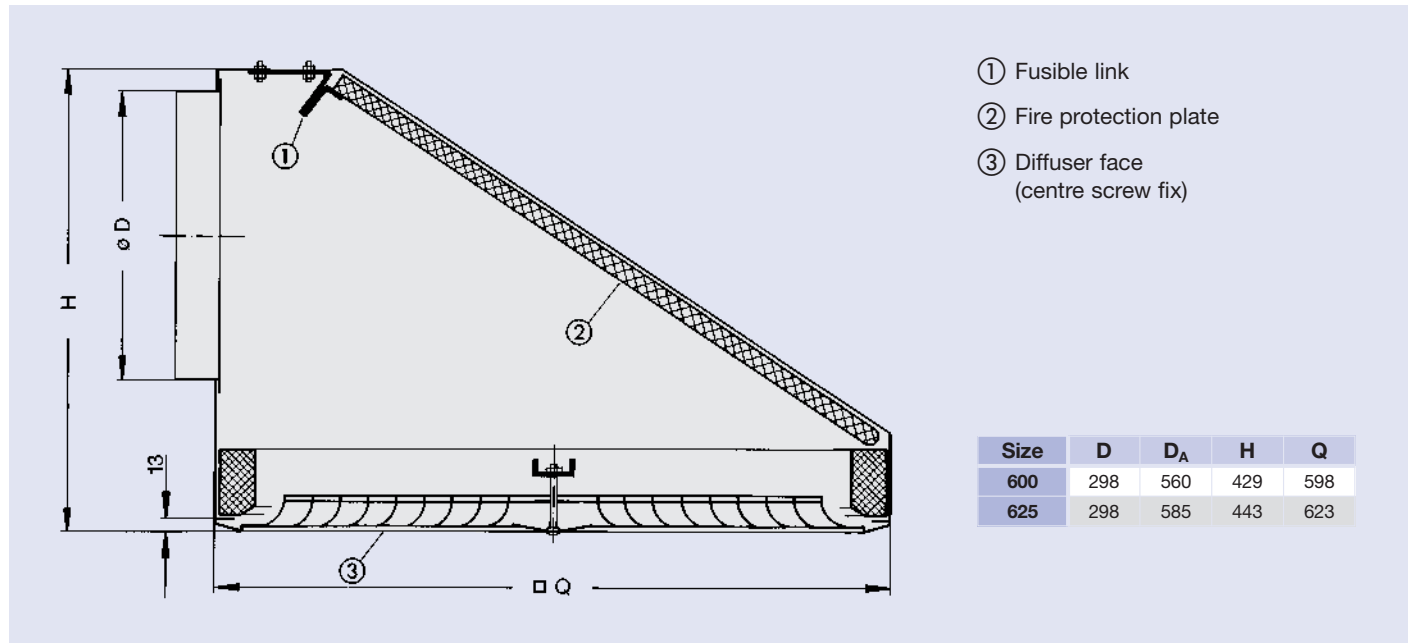
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The square ceiling diffusers with integrated fire protection device are ideal for flush mounting in a mineral fibre false ceiling. They can be used for both supply and extract application.

In connection with Odenwald mineral fibre acoustic ceilings, the diffusers were checked with regard to their behaviour in fire.

The Institut für Baustoffe, Massivbau und Brandschutz (Institute for Building Material, Solid Construction and Fire Protection) granted the test certificate No. 80764-M1/Schu (fire resistance class F 90).

In case of fire, most of the ceiling constructions lose their stability at an early stage and must be protected by suitable false ceilings. Openings in the ceiling system – e.g. for ceiling diffusers – reduce the required fire resistance and are allowed only if, in the case of high temperatures, they are automatically closed by suitable devices. The type DLK-Fb ceiling diffusers meet these fire resistance requirements without their aerodynamic function being impaired.

The DLK-Fb ceiling diffuser consists of a very stylish square diffuser face with centre screw fixing to the plenum box, the screw head is covered by a decorative cap. An angled fire protection plate is inserted in the plenum box, this is held in the open position by means of a fusible link (release temperature 72 °C). Connection between the ducting system and the circular side entry spigot of the plenum box is by means of flexible hose provided by others.

**For aerodynamic and acoustic data please refer to leaflet No. 2/11/EN/..**

## Materials

The diffuser face is made of formed sheet steel.  
 The surface is pre-treated and powder-coated white RAL 9010, gloss level 50 %, optionally powder-coated to RAL 9006, gloss level 30 %, other RAL colours gloss level 70 %. The plenum box is made of galvanised sheet steel lined with a fire protection plate of special insulation material.

## Installation

### Concealed or exposed metal tee bars

Fig. 1 (concealed metal tee bars) and Fig. 3 (exposed metal tee bars) show the installation of ceiling diffusers in the corresponding tee bar systems. This is by means of adjustable support angles fixed to the side of the plenum box.

Figs. 2 and 4 show the connection between the ceiling diffuser – acoustic tile – metal tee bar.

### Channel Grid Ceiling

Fig. 5 shows the installation of ceiling diffusers in a channel grid ceiling.

Suspension is independent from ceiling system by fixing screws at the side of plenum box. Fig. 6 shows the connection between the ceiling diffuser – acoustic tile.

### Installation Arrangement “concealed metal tee bar”

Fig. 1

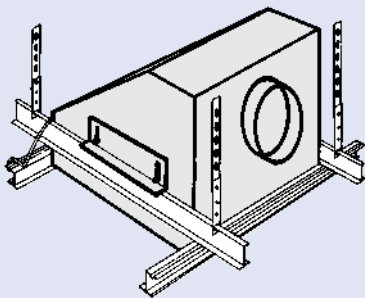
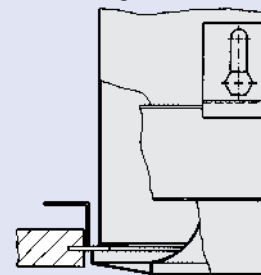


Fig. 2



### Installation Arrangement “exposed metal tee bar”

Fig. 3

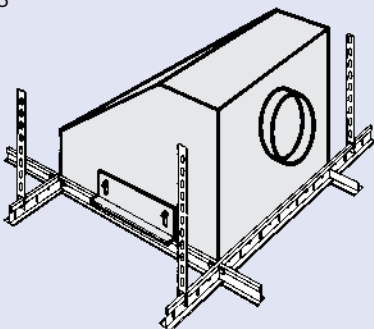
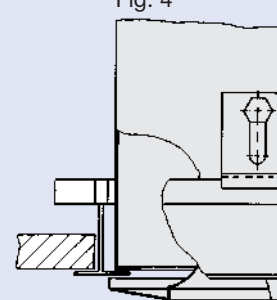


Fig. 4



### Installation Arrangement “channel grid ceiling”

Fig. 5

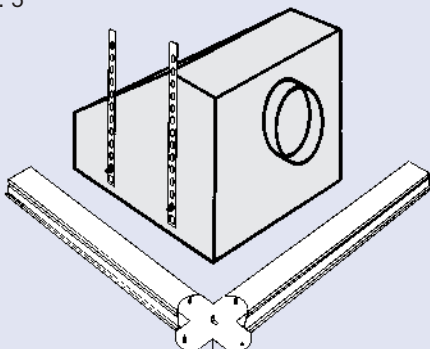
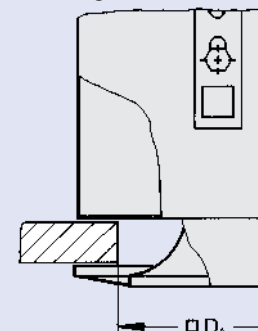


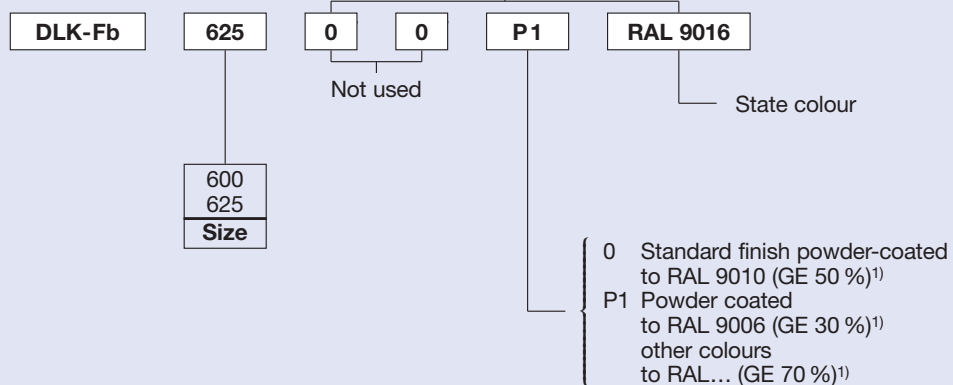
Fig. 6



# Order Details

## Order Code

These codes do not need to be completed for standard products



1) GE = gloss level

## Specification Text

Square ceiling diffuser with integrated fire protection device suitable for use with fire resistant Odenwald mineral fibre acoustic ceilings.

Fire resistance class F 90 as per test certificate from the Institut für Baustoffe, Massivbau und Brandschutz (Institute for Building Material, Solid Construction and Fire Protection). Construction consists of a square diffuser face and rear mounted plenum box with fire protection plate and fusible link, release temperature 72 °C. Plenum box with side entry circular spigot and support angles. Diffuser face is removed by release of centre screw.

## Materials

Diffuser face is made of sheet steel. The surface is pre-treated and powder-coated white RAL 9010, gloss level 50 %, optionally powder-coated to RAL 9006, gloss level 30 %, other RAL colours gloss level 70 %. The plenum box is made of galvanised sheet steel, the fire protection plate is a special insulation material (mineral fibre acoustic plate), fusible link is brass.

## Order Example

Make: TROX  
Type: DLK-Fb / 625 / 0 / 0 / P1 / RAL 9016