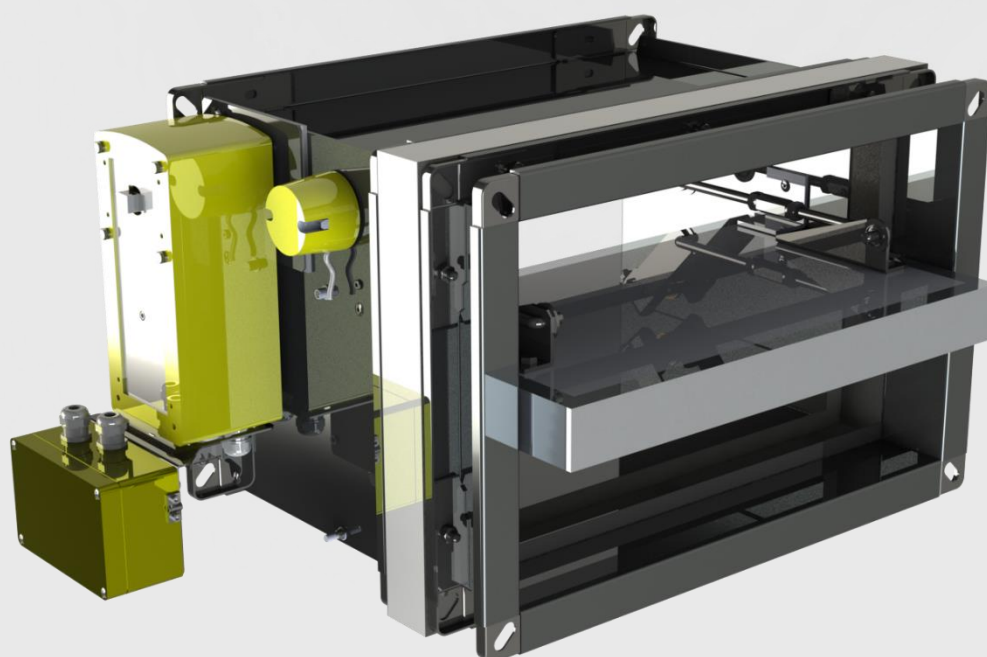


KWP-O- E(S)-EX

Fire Damper

Installation manual



SMAYTM

Version 6.00

SMAY reserves the right to make changes to this document.

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INSTALLATION TECHNOOGY

Before installing fire dampers please read assembly technology recommended by the manufacturer. The way of installing recommended by one manufacturer may not be the same for other dampers. Recommended material and dimensions of the openings follow from experience from conducted research. In rectangular dampers, most of all dampers with cross-sectional area more than 1 m², it is recommended to use mounting wedge and spreader securing the housing against squeezing during assembly.

Squeezing the housing can change the dimensions of slot between baffle and housing, correct dimensions of this slot is needed to keep correct way of opening and closing the damper. Correct preparation housing to montage is presented on the figure.

Be careful that any of metal item cannot get in damper (for example tools, loose fasteners), and cannot any left after installing the ventilation ducts.

To preserve the declared resistance, insulation and smoke leakage EIS120, dampers should be installed in a wall, which was classified as EIS120. It is allowed to install dampers in wall with other fire-resistance, should be remembered that fire-resistance in this situation is resistance of lowest classified (in this regard) element in this system.

Ducts made of flammable and non-flammable materials can be connected to the damper. Ducts should be installed that they cannot load the damper during fire. Ducts lengthening during fire can be compensated by support and knee.

ATTENTION: Distance between fire dampers or fire damper and construction elements must be compatible with standard 1366-2:

Minimal 200 mm between fire damper, which are installed in different ventilating ducts,

Minimal 75 mm between fire damper and construction element (wall/ceiling).

The damper housing must be effectively grounded by connecting a ground wire with grounded by grounding clamp, which are placed on damper housing, and marked by symbol.



I. INSTALLATION TECHNOLOGY – RIGID WALL

- Make an opening in the wall with the 100 [mm] (acceptable 80 ÷ 120 [mm]) greater than the nominal dimensions of the fire damper = B+100 and H+100.
- Put the closed fire damper into the installation opening on depth marked by undercuts on the damper body (dimension 60 mm), from one side fix it with suspension Z1, and from other side fix it to the ventilation duct suspended on Z2 suspension.
- After setting the fire damper as described, fill the gap between the fire damper and the wall with cement, cement-lime mortar, concrete, or PROMASTOP MG III of production of the PROMAT company.
- After 48 hours from the installation, the suspensions and supports used during installation of fire damper, may be removed.

ATTENTIONS:

- Carry out the installation in protective clothing, (gloves, glasses, helmet),
- Pay attention at the sharp edges of the sheets,
- Damper Baffle axis must be in horizontal or vertical position after montage
- Damper cannot be formwork for wall
- Ventilations duct should be installed that they cannot put any load on the damper, their suspension must ensure their full load capacity.
- The suspensions of the ventilation duct connected with the damper battery must be done according to instruction manufacturer of ventilation ducts
- In place of suspensions Z1 and Z2, which are installed for the time of assembly of the damper and in place of mortar binding it can be used mounting brackets, paying attention to the immobilization of the damper.

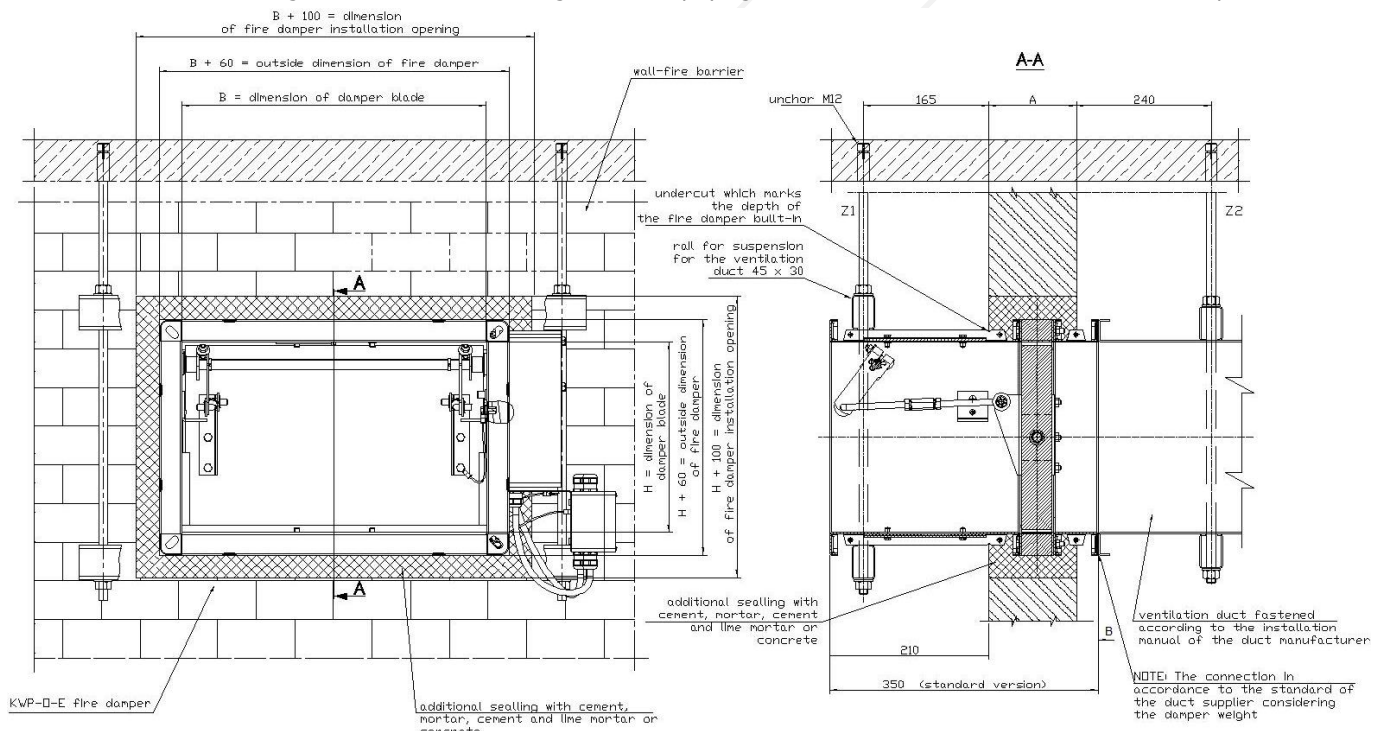


Figure 1. Installation method of fire dampers KWP-O in rigid wall

II. INSTALLATION TECHNOLOGY – FLEXIBLE WALL

- a. Make an opening in the wall with the dimensions 100 [mm] (acceptable 80 ÷ 120 [mm]) greater than the nominal dimensions of the fire damper = B+100 and H+100.
- b. Make a frame of two layers of GKF boards, 12,5 mm thick and the width relative to the width of opening, mounting by screws remembering to carefully seal the contact edges with a mastic: Hilti Firestop Coating CP 673, Promastop-Coating, Promaseal-Mastic or Soudal Firesilicone B1 FR.
- c. Put the closed fire damper into the installation opening and support or suspend, in this way that the minimum installation depth mark is on the plane of the flange surface.
- d. After setting the fire damper as described, fill the gap between the fire damper and the wall with non-flammable mineral wool of high density, 80 kg/m³ or more.
- e. Seal the place of filling with mineral wool using the sealing compounds given in pts.2.
- f. Mount collar, both side of wall, made of GKF boards, 15 mm thick and 150 mm wide, using screws.
- g. After mounting the collar, remove the supports or suspensions, check the fire damper correct operation and leave it in open position.



III. INSTALLATION TECHNOLOGY - CEILING

- Make an opening in the ceiling with the 100 [mm] (acceptable $80 \div 120$ [mm]) greater than the nominal dimensions of the fire damper = B+100 and H+100.
- Put the closed fire damper into the ceiling to the depth marked on housing (dimension 60mm)
- After setting the fire damper as described, with using montage supports, fill the gap between the fire damper and the wall with cement, cement-lime mortar, concrete, or PROMASTOP MG III of production of the PROMAT company.

ATTENTIONS:

- Install the mounting brackets on each side.
- Quantity of mounting brackets:
 - Side length up to 500 mm – 1 pcs.
 - Side length from 500 to 800 mm – 2 pcs.
- Mount the mounting brackets to the ceiling using dowels.

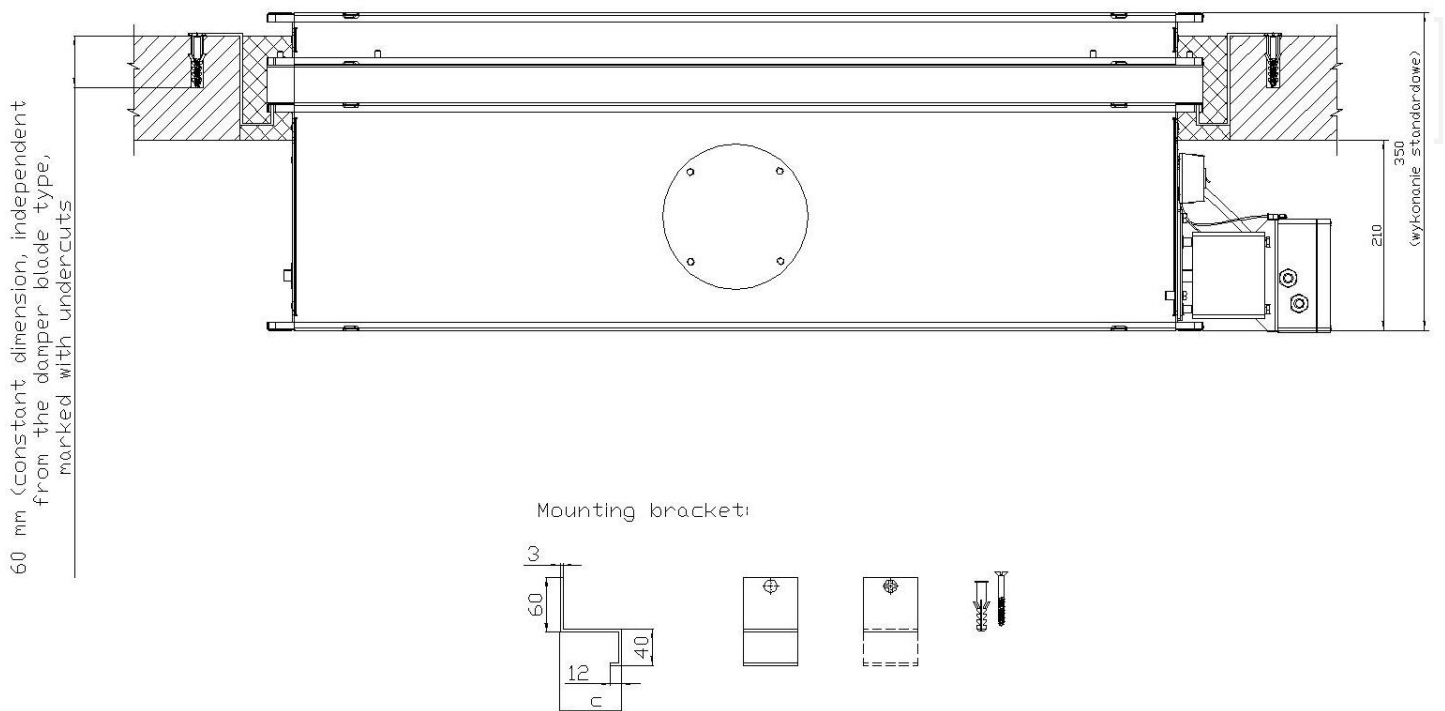


Figure 3. Installation method of fire dampers in ceiling

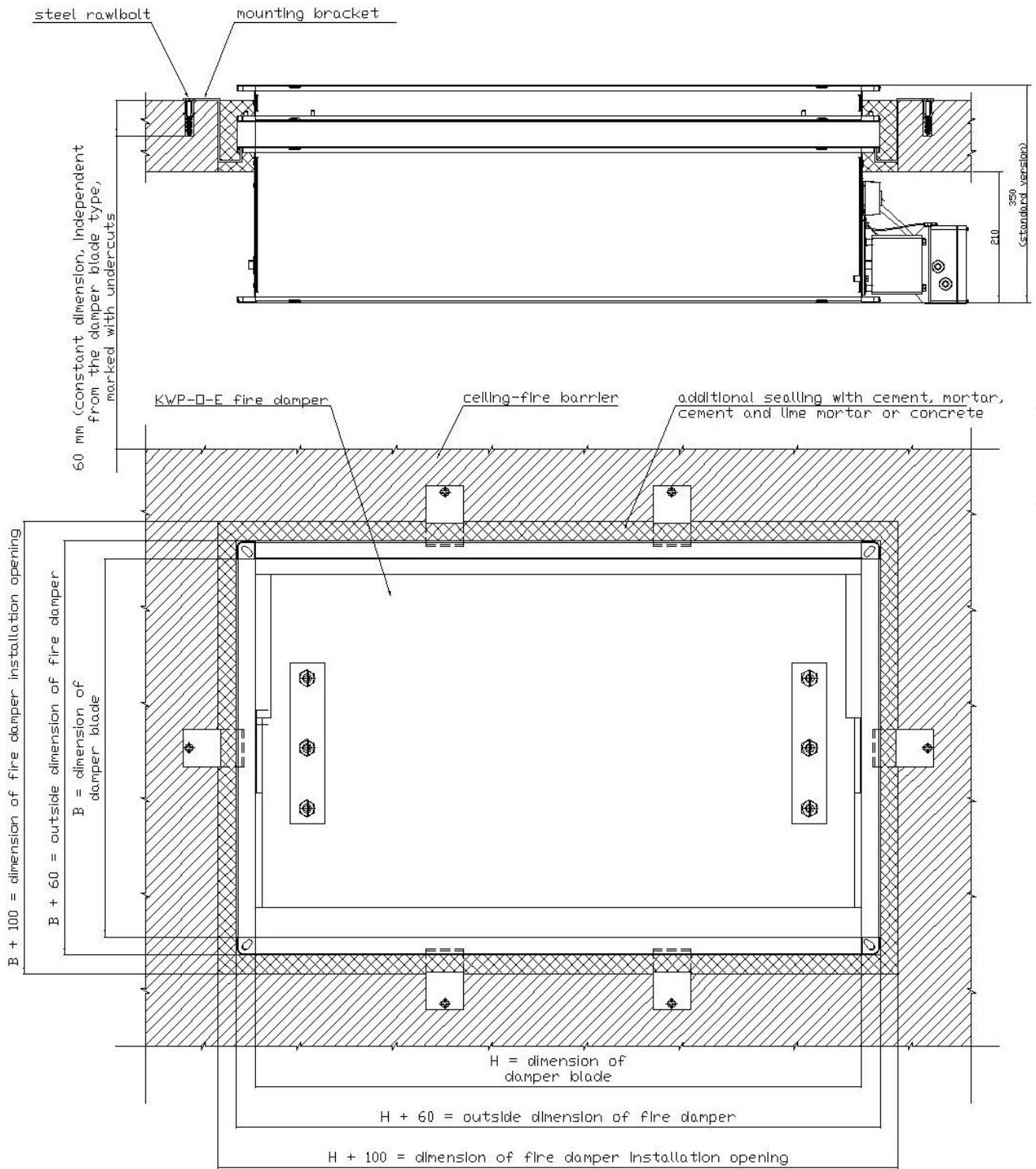


Figure 4. Installation method of fire dampers in ceiling

IV. INSTALLATION TECHNOLOGY – STRUCTURES THICKER THAN 135 mm

The KWP-O-E(S) damper can be installed also in horizontal compartments thicker than length of damper's body. In this case, ventilation ducts are going to be partially inbuilt in the fire compartment (Figure 7).

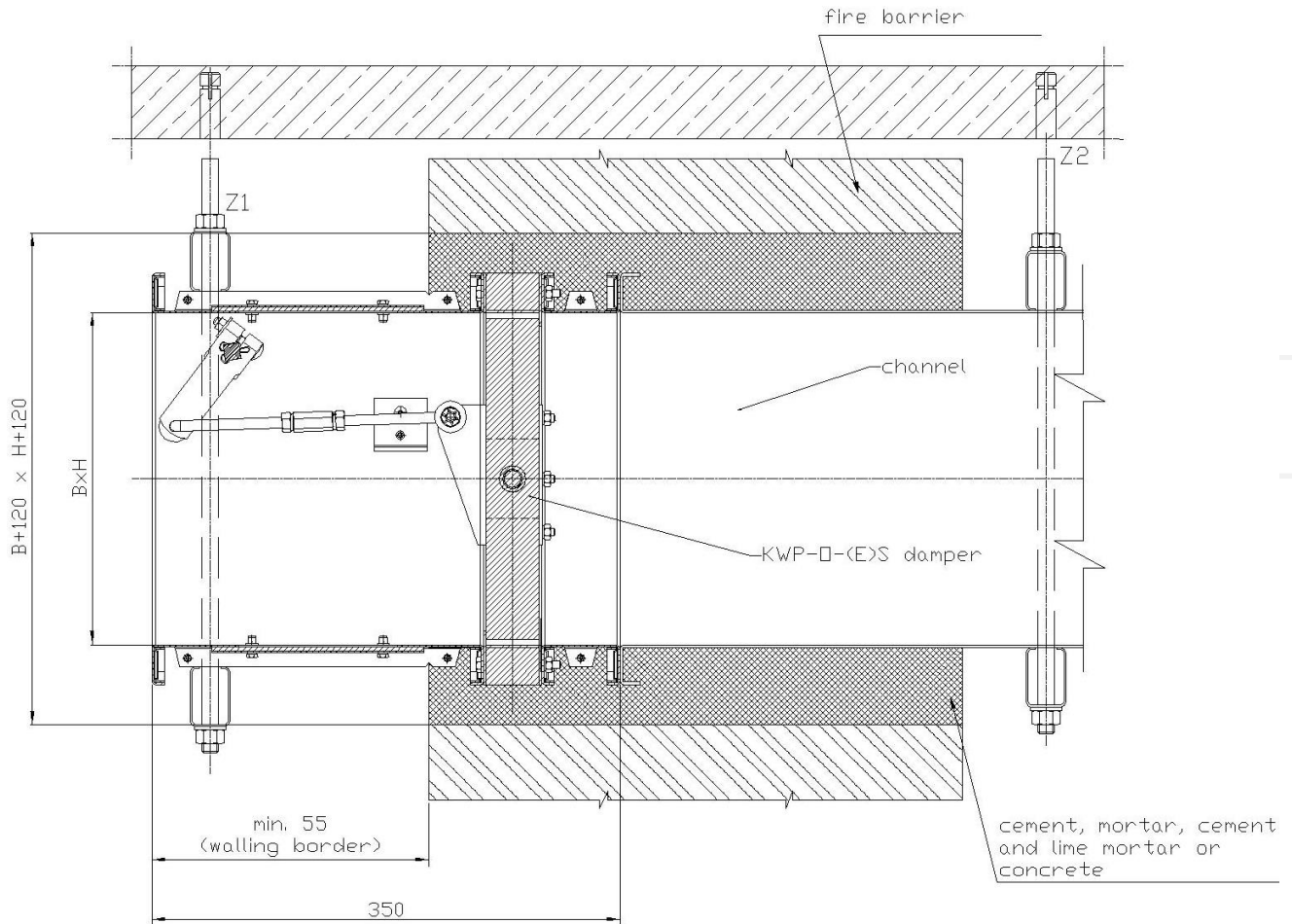


Figure 5. Installation method of fire dampers in structures thicker than 135 mm