



INSTALLATION MANUAL OF

KWP-P-E

TYPE
SMOKE DAMPERS



NOTE:

1. This manual does not replace the operation and maintenance documentation.
2. The company reserves the right to make changes and modifications in this document.

SMAV LLC / Ciepłownicza 29 St. / 31-587 Cracow / Poland
tel.: +48 12 680 20 80 / fax: +48 12 680 20 89 / e-mail: info@smav.eu



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Multi-compartment smoke control damper

Type: KWP-P-E

Nominal activation conditions/sensitivity:

Closing/opening in appropriate moment and acceptable time - pass

Automatic actuation - pass

Response time/closing time:

Automatic actuation - pass

Operational reliability:

10 000 cycles - pass

Fire resistance:

Integrity - E

Insulation- I

Smoke leakage - S

Mechanical stability (under E):

– EI 120 (v_{ew} h₀ i↔o) S1500C_{10 000}AAmulti

Maintenance of the cross-section (under E)

Durability:

Of response delay - pass

Of operational reliability - pass

INSTALLATION MANUAL OF KWP-P-E TYPE SMOKE CONTROL DAMPERS

1. Prior to the installation, smoke control dampers should be checked whether there has been no damage to the dampers during transportation or storage.
2. Check whether the damper blade could be opened and closed (fully open and closed position). The full opening and closing must proceed smoothly (not stepwise).

The smoke control dampers, to maintain declared EIS120 (or EIS90) fire resistance class, should be installed in walls which are verified and classified as EI120 (or EI90). It is allowed to use KWP-P-E smoke control dampers for different fire resistance class walls (EI30, EI60, EI90), however it must be understood that the fire resistance class EI of the whole finished installation is corresponding to the least classified element in the installation.

KWP-P-E type smoke control dampers may be installed in different types of building compartments (rigid compartments):

- concrete walls with thickness of not less than 115mm,
- Brickwork or aerated concrete walls with thickness of not less than 115mm.

REMARKS:

1. Install the smoke control damper in such way, that the damper blade would be in horizontal position.
2. Smoke control damper cannot be the support for the constructing wall.
3. Ductwork cannot be the load for the smoke control damper, ductwork suspensions have to provide full load capacity.
4. Ductwork suspensions fixed to the set of dampers have to be made in accordance with the ductwork manufacturer instructions.
5. In place of suspensions Z1, Z2 and cement mortar, mounting brackets may be applied (paying special attention for immobilization of the fire damper).

I – RIGID WALL COMPARTMENTS

INSTALLATION TECHNOLOGY

According to Fig. 1, 2 and 3

1. Make an opening in the wall with the dimensions 120 mm greater than the nominal dimensions of the smoke control damper = $B+120$ and $H+120$.
2. Put the smoke control damper into the installation opening on depth marked by undercuts on the damper body (dimension 60mm). From one side fix it with suspension Z1, and from other side, fix it to ventilation duct suspended on suspension Z2.
3. After setting the fire damper in accordance to the guidelines, fill the gap between the fire damper and the wall with cement and lime mortar, concrete or PROMASTOP MG III made by PROMAT.
4. After 48h from the installation, the suspensions and supports used during installation of the fire damper, may be removed.

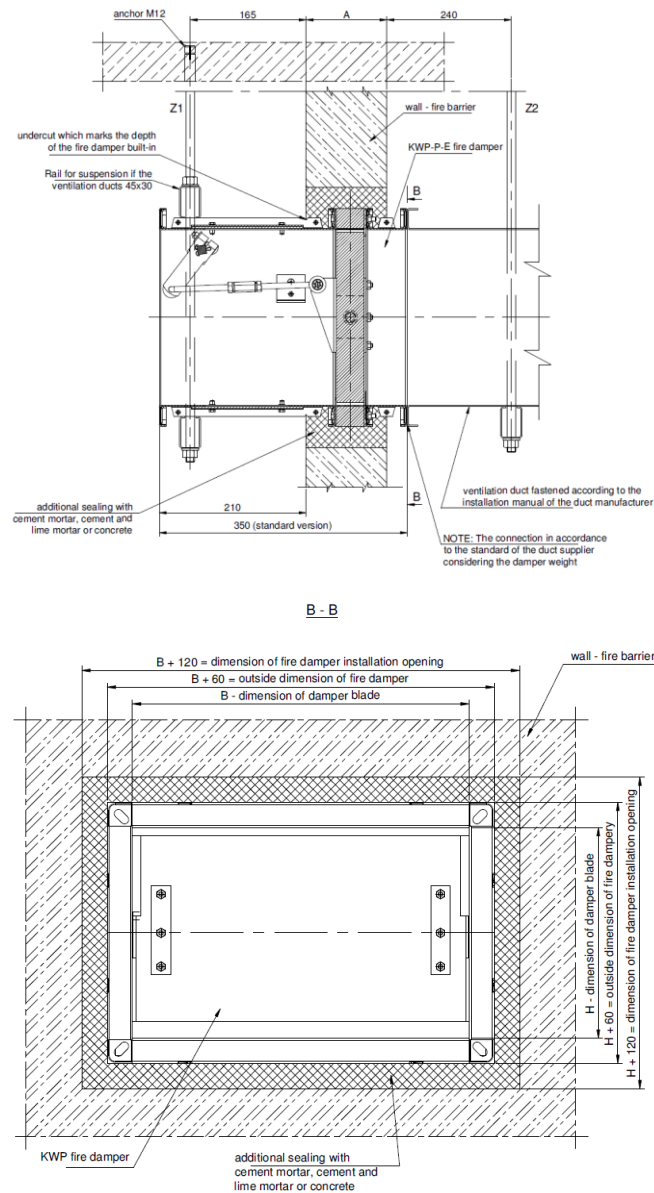
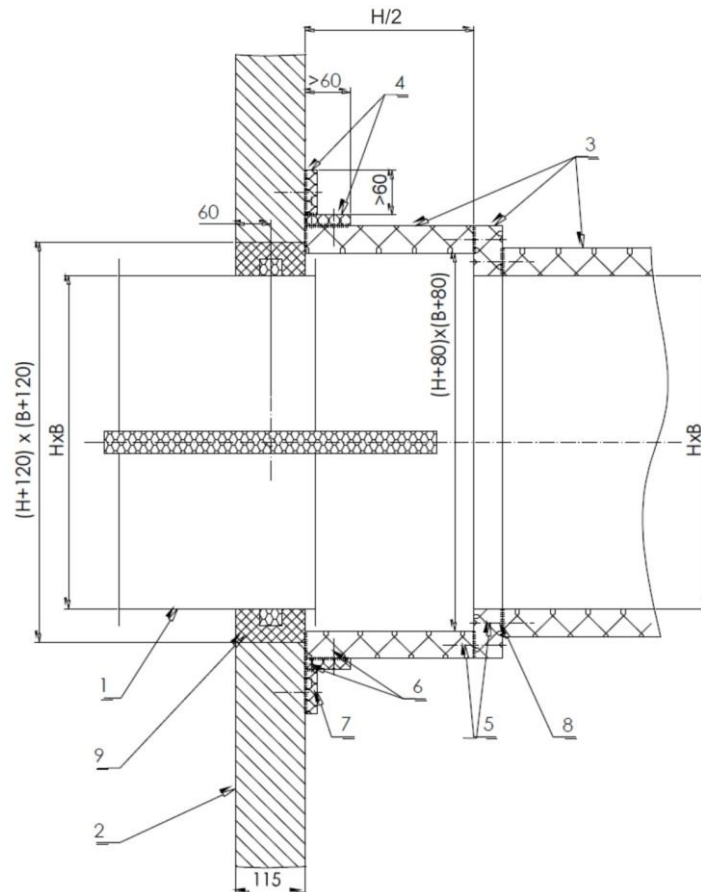


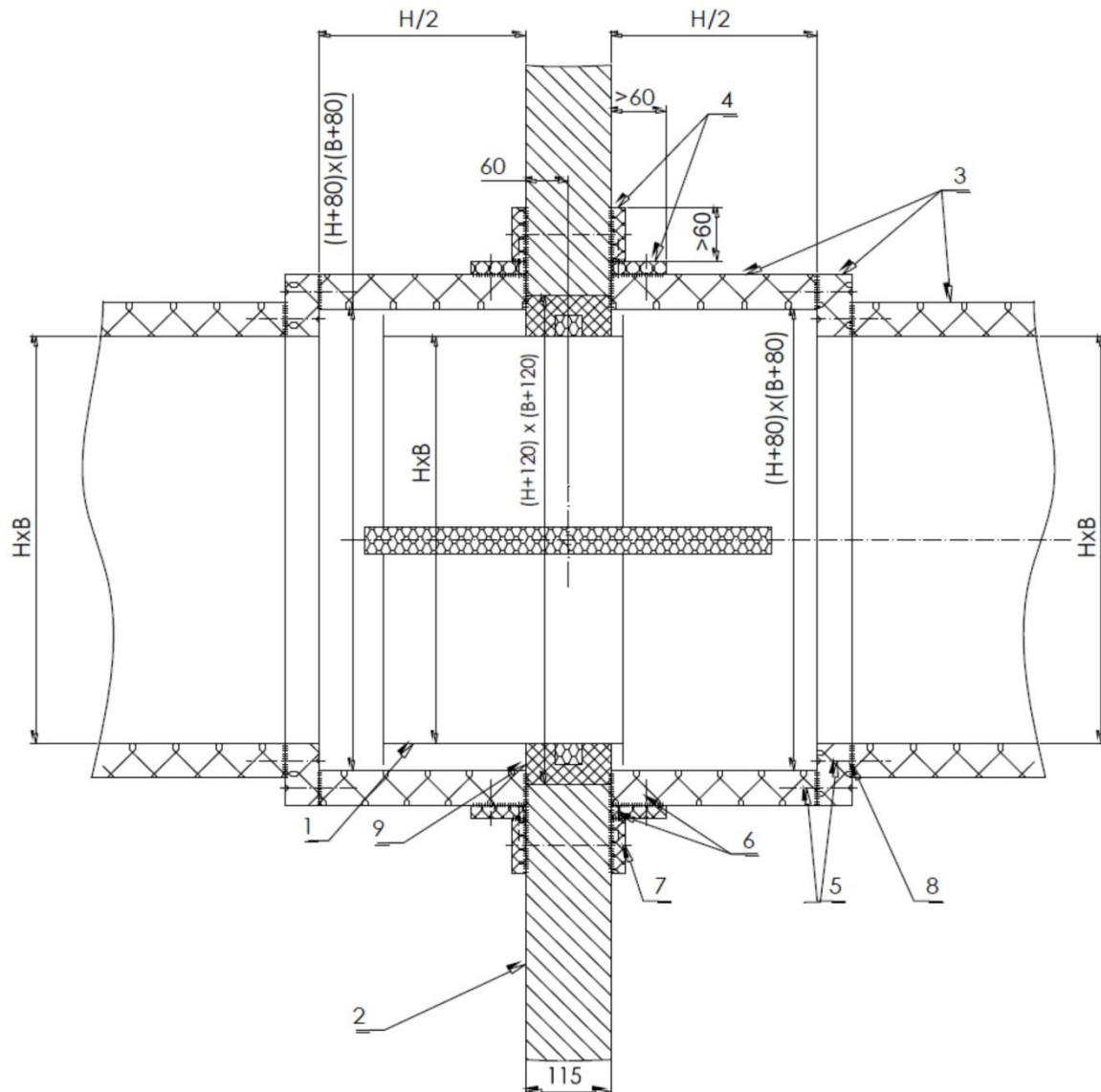
Figure 1. Installation method of KWP-P-E type smoke control damper in vertical rigid compartment



EXPLANATIONS:

1. Smoke control KWP-P-E – schematic drawing
2. Wall, fire compartment
3. PROMATECT L500 x50
4. PROMATECT -H x20
5. Countersunk screw UNIX 6x90; a=200.
6. Countersunk screw UNIX 4x35; a=200.
7. Mounting anchor FPX M8 I; a=200.
8. PROMAT K-84 glue
8. Cement mortar, cement and lime mortar or concrete. a = spacing

Figure 2. Installation method of KWP-P-E type smoke control damper in vertical rigid compartment, connected single-sidedly with multi-compartment smoke control ductwork



EXPLANATIONS:

1. Smoke control KWP-P-E – schematic drawing
2. Wall, fire compartment
3. PROMATECT L500 x50
4. PROMATECT -H x20
5. Countersunk screw UNIX 6x90; a=200.
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7. Mounting anchor FPX M8 I; a=200.
8. PROMAT K-84 glue
8. Cement mortar, cement and lime mortar or concrete. a = spacing

Figure 3. Installation method of KWP-P-E type smoke control damper in vertical rigid compartment, connected from both sides with multi-compartment smoke control ductwork

ADDITIONAL INFORMATIONS

Weight of KWP-P-E smoke control damper

B\H	200	300	400	500	600	700	800	900	1000
Tab. 1	Weight of KWP-P-E smoke control damper [kg]								
200	11,0	13,1	15,2	17,5	19,6				
300	13,1	15,5	17,8	20,3	22,7	25,0	27,6	30,0	
400	15,2	17,8	20,4	23,2	25,9	30,0	31,1	33,7	36,5
500	17,5	20,3	23,2	26,0	28,9	31,8	34,7	37,6	40,4
600	19,6	22,7	25,9	28,9	32,0	35,2	38,3	41,5	44,6
700		25,0	30,0	31,8	35,2	38,4	41,8	47,6	51,2
800		27,6	31,1	34,7	38,3	41,8	45,5	49,0	52,8
900		30,0	33,7	37,6	41,5	47,6	49,0	52,9	56,9
1000			36,5	40,4	44,6	51,2	52,8	56,9	60,9
1100			39,2	43,5	47,7	52,1	56,4	60,8	65,1
1200			41,7	46,4	50,9	55,4	60,0	64,6	69,2
1300				49,3	54,1	59,3	63,7	68,5	73,4
1400				52,3	57,2	63,5	67,4	72,5	77,6
1500				55,2	60,3	66,8	70,6	76,4	81,7