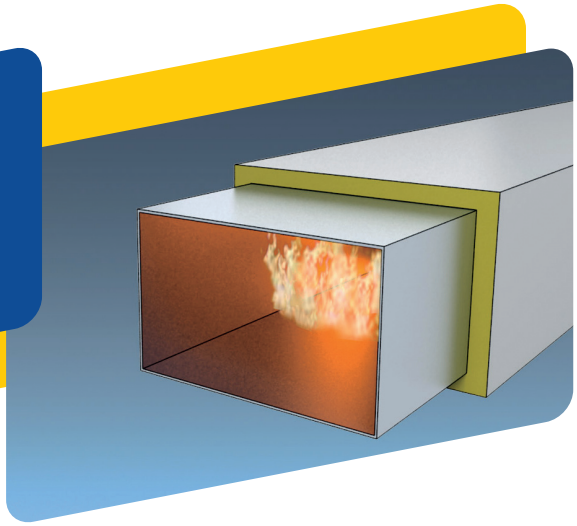
System for Fire-Resistant Duct Insulation



Practical dimensional tables for ducts tested in standard rigid wall constructions

ORSTECH PROTECT

- Fire-resistant duct type A is exposed to fire only from outside according to EN 1366-1.

Required insulation thickness for fire resistance

EI 30, 45 a 60 – ve, ho (o → i) S

Fire resistance	Horizontal	Vertical
Rectangular duct		
EI 30 S	40 mm	40 mm
EI 45 S	40 mm	40 mm
EI 60 S	60 mm	40 mm
Circular duct		
EI 30, 45 S	40 mm	40 mm
EI 60 S	50 mm	40 mm

ULTIMATE PROTECT

- Fire-resistant duct type A is exposed to fire only from outside according to EN 1366-1. Fire-resistant duct type B is exposed to fire both from inside and outside. Smoke extraction ducts is tested according to EN 1366-8.

Required insulation thickness for fire resistance

EI 30, 45, 60, 90 a 120 – ve, ho (o → i), (i → o), (i ↔ o) S

Rectangular duct

Fire	Fire resistance					Duct orientation
	EI 30	EI 45	EI 60	EI 90	EI 120	
Outside (o → i) type A	50	50	70	80	-	ho
Outside (o → i) type A	50	50	50	80	80	ve
Inside (i → o), (i ↔ o) type B	50	70	80	80	80	ho
Inside (i → o), (i ↔ o) type B	50	70	80	80	80	ve
Smoke Extraction Duct*	70	80	80	90	90	ho, ve

*EI 30 S 1500 multi, EI 60 S 500 multi, EI 120 S 500 multi

Circular duct

Fire	Fire resistance					Duct orientation
	EI 30	EI 45	EI 60	EI 90	EI 120	
Outside (o → i) type A	50	50	50	120	120	ho
Outside (o → i) type A	50	50	50	50	120	ve
Inside (i → o), (i ↔ o) type B	50	70	80	120	120	ho
Inside (i → o), (i ↔ o) type B	50	70	80	80	120	ve
Smoke Extraction Duct*	120	120	120	120	120	ho, ve

*EI 120 S 1000 multi