

## System for Fire-Resistant Duct Insulation

- practical design tables

### 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 15, 30, 45 a 60 - ve, ho (o → i) S**

Fire resistance	Horizontal	Vertical
<b>Rectangular duct</b>		
EI 30 S	40 mm	40 mm
EI 45 S	40 mm	40 mm
EI 60 S	60 mm	40 or 60 mm
<b>Circular duct</b>		
EI 30, 45, 60 S	50 mm	50 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.

#### Required insulation thickness for fire resistance

**EI 15, 30, 45, 60, 90 a 120 - ve, ho (o → i), (o ← i), (o ↔ i) S**

#### Rectangular duct

Fire	Fire resistance						Duct orientation
	EI 15	EI 30	EI 45	EI 60	EI 90	EI 120	
Outside (o → i) type A	30*	30*	30*	30* (40*)	80	80	ho+ve
Inside (i → o), (o ↔ i) type B	30*	40*	60	60 (80)	80	80 (100)	ho
Inside (i → o), (o ↔ i) type B	40*	60	80	80	100*	100*	ve

#### Circular duct

Fire	Fire resistance						Duct orientation
	EI 15	EI 30	EI 45	EI 60	EI 90	EI 120	
Outside (o → i) type A	30	30	30	60	100	100	ho+ve
Inside (i → o), (o ↔ i) type B	40*	60	60	75* (100)	100	(120*) 125*	ho+ve

Notes:

\* Available only on request when fulfilling minimum order quantity.

Number in parenthesis means thickness in mm to use in case of light-weight partition walls.