

# Declaration of performance

DoP/FKRS-EU/DE/006



<b>1. Product</b> Unique identification code of the product type	Fire damper FKRS-EU
<b>2. Intended use</b>	In conjunction with walls and ceilings for maintaining fire compartments in heating, ventilation and air conditioning installations
<b>3. Manufacturers</b>	TROX GmbH Heinrich-Trox-Platz • 47504 Neukirchen-Vluyn • Germany Phone +49 (0) 2845 2020 • Fax +49 (0) 2845 202265 E-mail trox-de@troxgroup.com • Internet www.troxtechnik.com
<b>5. System of assessment and verification of constancy of performance</b>	System 1
<b>6. Harmonised standard</b> Notified body/ies	EN 15650:2010  The notified body 1322 - IBS - carried out the initial inspection of the manufacturing plants and of the factory production control as well as the continuous surveillance, assessment and evaluation of factory production control according to System 1 of the Construction Products Regulation and issued the certificate of constancy of performance: 1322-CPR-74135/02

## 7 Declared performances

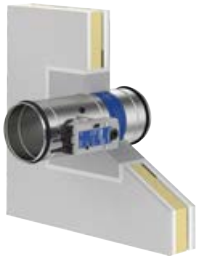
Supporting construction	Construction	Installation location	Installation type	Class of performance for
<p>Solid wall</p>	d ≥ 75 mm, Distance to load-bearing structural elements ≥ 40 mm, Distance between casings ≥ 200 mm	in the wall	Mortar-based installation	EI 120 (v <sub>e</sub> i↔o) S
	d ≥ 100 mm, Distance to load-bearing structural elements ≥ 40 mm, Distance between casings ≥ 40 mm	in the wall	Mortar-based installation	EI 120 (v <sub>e</sub> i↔o) S
	d ≥ 100 mm, Distance to load-bearing structural elements ≥ 40 mm, Distance between casings ≥ 10 mm	in the wall	Mortar-based installation	EI 90 (v <sub>e</sub> i↔o) S
	d ≥ 80 mm, Gypsum wall boards, Distance to load-bearing structural elements ≥ 40 mm, Distance between casings ≥ 200 mm	in the wall	Mortar-based installation	EI 120 (v <sub>e</sub> i↔o) S
	d ≥ 100 mm, combined assembly up to 1.2 m <sup>2</sup> total fire damper area, Distance to load-bearing structural elements ≥ 40 mm, Distance to fire dampers FK-EU/FK2-EU ≥ 50 mm, Distance between casings ≥ 40 mm	in the wall	Mortar-based installation	EI 90 (v <sub>e</sub> i↔o) S
	d ≥ 100 mm, Multiple occupancy up to 1.2 m <sup>2</sup> total fire damper area, Distance to load-bearing structural elements ≥ 40 mm, Distance between casings ≥ 10 mm	in the wall	Mortar-based installation	EI 90 (v <sub>e</sub> i↔o) S



# Declaration of performance

d ≥ 100 mm, Distance to load-bearing structural elements 40 - 50 mm, Distance between casings ≥ 40 mm	in the wall	Mortar-based installation (and partly with mineral wool)	EI 90 (v <sub>e</sub> i↔o) S
d ≥ 100 mm, below flexible ceiling joints, Distance to load-bearing structural elements ≥ 40 mm, Distance between casings ≥ 40 mm	in the wall	Mortar-based installation	EI 90 (v <sub>e</sub> i↔o) S
d ≥ 100 mm, Installation block ER, Distance from installation block to load-bearing structural elements ≥ 75 mm, Distance between installation blocks ≥ 200 mm	in the wall	Dry mortarless installation	EI 90 (v <sub>e</sub> i↔o) S
d ≥ 100 mm, Installation kit TQ2, Distance to load-bearing structural elements ≥ 55 mm, Distance between casings ≥ 200 mm	in the wall	Dry mortarless installation	EI 120 (v <sub>e</sub> i↔o) S
d ≥ 100 mm, Installation kit WA2, Distance to load-bearing structural elements ≥ 75 mm, Distance between casings ≥ 200 mm	on the face of the wall	Dry mortarless installation	EI 90 (v <sub>e</sub> i↔o) S
d ≥ 100 mm, Installation kit WE2, Wall connection, Cladding on 2, 3 or 4 sides, Distance to load-bearing structural elements ≥ 50 mm, Distance between casings ≥ 260 mm	remote from the wall	Dry mortarless installation	EI 120 (v <sub>e</sub> i↔o) S
d ≥ 100 mm, Installation kit WE2, Wall penetration, Cladding on 2, 3 or 4 sides, Distance to load-bearing structural elements ≥ 50 mm, Distance between casings ≥ 200 mm	remote from the wall	Dry mortarless installation	EI 120 (v <sub>e</sub> i↔o) S
d ≥ 100 mm, Mineral wool insulation, Mortar-based installation, Distance to load-bearing structural elements ≥ 200 mm, Distance between casings ≥ 400 mm	remote from the wall	Dry mortarless installation	EI 60 (v <sub>e</sub> i↔o) S
d ≥ 100 mm, Mineral wool insulation, Fire batt, Distance to load-bearing structural elements ≥ 200 mm, Distance between casings ≥ 400 mm	remote from the wall	Dry mortarless installation	EI 60 (v <sub>e</sub> i↔o) S
d ≥ 100 mm, 2-plate mineral wool bulkhead (2 x 50 mm), Distance to load-bearing structural elements ≥ 40 mm, Distance between casings ≥ 40 mm	in the wall	Fire batt	EI 120 (v <sub>e</sub> i↔o) S
d ≥ 100 mm, 2-plate mineral wool bulkhead (2 x 50 mm), Distance to load-bearing structural elements ≥ 40 mm, Distance between casings ≥ 10 mm	in the wall	Fire batt	EI 90 (v <sub>e</sub> i↔o) S
d ≥ 100 mm, Multiple occupancy up to 1.2 m <sup>2</sup> total fire damper area, 2-plate mineral wool bulkhead (2 x 50 mm), Distance to load-bearing structural elements ≥ 40 mm, Distance between casings ≥ 10 mm	in the wall	Fire batt	EI 90 (v <sub>e</sub> i↔o) S
d ≥ 100 mm, 2-plate mineral wool bulkhead (Combined penetration seal), Distance to load-bearing structural elements ≥ 40 mm, Distance to fire dampers FK-EU/FK2-EU ≥ 50 mm, Distance to pipe openings ≥ 50 mm, Distance to cable openings ≥ 100 mm, Distance between casings ≥ 40 mm	in the wall	Fire batt	EI 90 (v <sub>e</sub> i↔o) S
d ≥ 100 mm, Fire protection stone bulkhead system Hilti CFS-BL, Distance to load-bearing structural elements ≥ 50 mm, Distance to cable penetrations and empty pipes ≥ 200 mm, Distance between fire damper and penetration seal edge ≥ 50 mm, Distance between casings ≥ 200 mm	in the wall	Dry mortarless installation	EI 90 (v <sub>e</sub> i↔o) S

# Declaration of performance



Lightweight partition wall

<p>Metal support structure (also steel support structure and with sheet steel inlay as compartment wall, safety partition wall or to provide radiation protection), With or without mineral wool, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, <math>d \geq 94</math> mm, Distance to load-bearing structural elements <math>\geq 40</math> mm, Distance between casings <math>\geq 40</math> mm</p>	in the wall	Mortar-based installation	EI 120 ( $v_e i \leftrightarrow o$ ) S
<p>Metal support structure (also steel support structure and with sheet steel inlay as compartment wall, safety partition wall or to provide radiation protection), With or without mineral wool, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, <math>d \geq 94</math> mm, Distance to load-bearing structural elements <math>\geq 40</math> mm, Distance between casings <math>\geq 10</math> mm</p>	in the wall	Mortar-based installation	EI 90 ( $v_e i \leftrightarrow o$ ) S
<p>Metal support structure (also steel support structure and with sheet steel inlay as compartment wall, safety partition wall or to provide radiation protection), With or without mineral wool, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, <math>d \geq 80</math> mm, Distance to load-bearing structural elements <math>\geq 40</math> mm, Distance between casings <math>\geq 10</math> mm</p>	in the wall	Mortar-based installation	EI 60 ( $v_e i \leftrightarrow o$ ) S
<p>Metal support structure (also steel support structure and with sheet steel inlay as compartment wall, safety partition wall or to provide radiation protection), With or without mineral wool, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, <math>d \geq 75</math> mm, Distance to load-bearing structural elements <math>\geq 40</math> mm, Distance between casings <math>\geq 10</math> mm</p>	in the wall	Mortar-based installation	EI 30 ( $v_e i \leftrightarrow o$ ) S
<p>Metal support structure (also steel support structure and with sheet steel inlay as compartment wall, safety partition wall or to provide radiation protection), With or without mineral wool, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, <math>d \geq 94</math> mm, combined assembly up to 1.2 m<sup>2</sup> total fire damper area, Distance to load-bearing structural elements <math>\geq 40</math> mm, Distance to fire dampers FK-EU/FK2-EU <math>\geq 50</math> mm, Distance between casings <math>\geq 40</math> mm</p>	in the wall	Mortar-based installation	EI 90 ( $v_e i \leftrightarrow o$ ) S
<p>Metal support structure (also steel support structure and with sheet steel inlay as compartment wall, safety partition wall or to provide radiation protection), With or without mineral wool, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, <math>d \geq 94</math> mm, Multiple occupancy up to 1.2 m<sup>2</sup> total fire damper area, Distance to load-bearing structural elements <math>\geq 40</math> mm, Distance between casings <math>\geq 10</math> mm</p>	in the wall	Mortar-based installation	EI 90 ( $v_e i \leftrightarrow o$ ) S
<p>Metal support structure (also steel support structure and with sheet steel inlay as compartment wall, safety partition wall or to provide radiation protection), With or without mineral wool, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, <math>d \geq 94</math> mm, Without installation kit, Distance to load-bearing structural elements <math>\geq 75</math> mm, Distance between casings <math>\geq 200</math> mm</p>	in the wall	Dry mortarless installation	EI 60 ( $v_e i \leftrightarrow o$ ) S

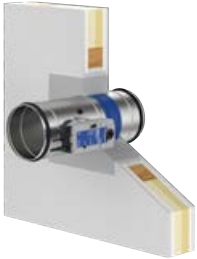
# Declaration of performance

Metal support structure (also steel support structure and with sheet steel inlay as compartment wall, safety partition wall or to provide radiation protection), With or without mineral wool, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, d ≥ 94 mm, Installation kit TQ2, Distance to load-bearing structural elements ≥ 55 mm, Distance between casings ≥ 200 mm	in the wall	Dry mortarless installation	EI 120 (v <sub>e</sub> i↔o) S
Metal support structure (also steel support structure and with sheet steel inlay as compartment wall, safety partition wall or to provide radiation protection), With or without mineral wool, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, d ≥ 94 mm, Installation kit TQ2, Distance to load-bearing structural elements ≥ 55 mm, Distance between casings ≥ 200 mm	in the wall	Dry mortarless installation	EI 90 (v <sub>e</sub> i↔o) S
Metal support structure (also steel support structure and with sheet steel inlay as compartment wall, safety partition wall or to provide radiation protection), With or without mineral wool, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, d ≥ 80 mm, Installation kit TQ2, Distance to load-bearing structural elements ≥ 55 mm, Distance between casings ≥ 200 mm	in the wall	Dry mortarless installation	EI 60 (v <sub>e</sub> i↔o) S
Metal support structure (also steel support structure and with sheet steel inlay as compartment wall, safety partition wall or to provide radiation protection), With or without mineral wool, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, d ≥ 75 mm, Installation kit TQ2, Distance to load-bearing structural elements ≥ 55 mm, Distance between casings ≥ 200 mm	in the wall	Dry mortarless installation	EI 30 (v <sub>e</sub> i↔o) S
Metal support structure (also steel support structure and with sheet steel inlay as compartment wall, safety partition wall or to provide radiation protection), With or without mineral wool, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, d ≥ 94 mm, Installation kit WE2, Cladding on 2, 3 or 4 sides, Distance to load-bearing structural elements ≥ 50 mm, Distance between casings ≥ 300 mm	remote from the wall	Dry mortarless installation	EI 90 (v <sub>e</sub> i↔o) S
Metal support structure (also steel support structure and with sheet steel inlay as compartment wall, safety partition wall or to provide radiation protection), With or without mineral wool, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, d ≥ 94 mm, Mineral wool insulation, Joint filler, Distance to load-bearing structural elements ≥ 200 mm, Distance between casings ≥ 400 mm	remote from the wall	Dry mortarless installation	EI 60 (v <sub>e</sub> i↔o) S
Metal support structure (also steel support structure and with sheet steel inlay as compartment wall, safety partition wall or to provide radiation protection), With or without mineral wool, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, d ≥ 94 mm, Mineral wool insulation, Fire batt, Distance to load-bearing structural elements ≥ 200 mm, Distance between casings ≥ 400 mm	remote from the wall	Dry mortarless installation	EI 60 (v <sub>e</sub> i↔o) S

# Declaration of performance

Metal support structure (also with steel support structure), With or without mineral wool, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, d = 94 - 100 mm, Installation kit GL2, direct wall installation, Distance to load-bearing structural elements ≥ 90 mm, Distance between casings ≥ 200 mm	in the wall	Dry mortarless installation	EI 90 (v <sub>e</sub> i↔o) S
Metal support structure (also steel support structure and with sheet steel inlay as compartment wall, safety partition wall or to provide radiation protection), With or without mineral wool, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, d ≥ 100 mm, flexible ceiling joint, Installation kit GL2, Distance to load-bearing structural elements ≥ 50 mm, Distance between casings ≥ 100 mm	in the wall	Dry mortarless installation	EI 90 (v <sub>e</sub> i↔o) S
Metal support structure (also steel support structure and with sheet steel inlay as compartment wall, safety partition wall or to provide radiation protection), With or without mineral wool, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, d ≥ 94 mm, 2-plate mineral wool bulkhead (2 x 50 mm), Distance to load-bearing structural elements ≥ 40 mm, Distance between casings ≥ 40 mm	in the wall	Fire batt	EI 120 (v <sub>e</sub> i↔o) S
Metal support structure (also steel support structure and with sheet steel inlay as compartment wall, safety partition wall or to provide radiation protection), With or without mineral wool, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, d ≥ 94 mm, 2-plate mineral wool bulkhead (2 x 50 mm), Distance to load-bearing structural elements ≥ 40 mm, Distance between casings ≥ 10 mm	in the wall	Fire batt	EI 90 (v <sub>e</sub> i↔o) S
Metal support structure (also steel support structure and with sheet steel inlay as compartment wall, safety partition wall or to provide radiation protection), With or without mineral wool, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, d ≥ 80 mm, 2-plate mineral wool bulkhead (2 x 50 mm), Distance to load-bearing structural elements ≥ 40 mm, Distance between casings ≥ 10 mm	in the wall	Fire batt	EI 60 (v <sub>e</sub> i↔o) S
Metal support structure (also steel support structure and with sheet steel inlay as compartment wall, safety partition wall or to provide radiation protection), With or without mineral wool, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, d ≥ 75 mm, 2-plate mineral wool bulkhead (2 x 50 mm), Distance to load-bearing structural elements ≥ 40 mm, Distance between casings ≥ 10 mm	in the wall	Fire batt	EI 30 (v <sub>e</sub> i↔o) S
Metal support structure (also steel support structure and with sheet steel inlay as compartment wall, safety partition wall or to provide radiation protection), With or without mineral wool, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, d ≥ 94 mm, Multiple occupancy up to 1.2 m <sup>2</sup> total fire damper area, 2-plate mineral wool bulkhead (2 x 50 mm), Distance to load-bearing structural elements ≥ 40 mm, Distance between casings ≥ 10 mm	in the wall	Fire batt	EI 90 (v <sub>e</sub> i↔o) S

# Declaration of performance

	<p>Metal support structure (also steel support structure and with sheet steel inlay as compartment wall, safety partition wall or to provide radiation protection), With or without mineral wool, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, <math>d \geq 100</math> mm, 2-plate mineral wool bulkhead (Combined penetration seal), Distance to load-bearing structural elements <math>\geq 40</math> mm, Distance to fire dampers FK-EU/FK2-EU <math>\geq 50</math> mm, Distance to pipe openings <math>\geq 50</math> mm, Distance to cable openings <math>\geq 100</math> mm, Distance between casings <math>\geq 40</math> mm</p>	in the wall	Fire batt	EI 90 (v <sub>e</sub> i↔o) S
	<p>Metal support structure (also steel support structure and with sheet steel inlay as compartment wall, safety partition wall or to provide radiation protection), With or without mineral wool, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, <math>d = 100 - 200</math> mm, Fire protection stone bulkhead system Hilti CFS-BL, Trim panels, Distance to cable penetrations and empty pipes <math>\geq 200</math> mm, Distance between fire damper and penetration seal edge <math>\geq 50</math> mm, Distance between casings <math>\geq 200</math> mm</p>	in the wall	Dry mortarless installation	EI 90 (v <sub>e</sub> i↔o) S
 <p>Timber stud wall</p>	<p>Timber studs (also timber panel constructions and timber frames), With or without mineral wool, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, <math>d \geq 130</math> mm, Distance to load-bearing structural elements <math>\geq 40</math> mm, Distance between casings <math>\geq 40</math> mm</p>	in the wall	Mortar-based installation	EI 120 (v <sub>e</sub> i↔o) S
	<p>Timber studs (also timber panel constructions and timber frames), With or without mineral wool, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, <math>d \geq 130</math> mm, Distance to load-bearing structural elements <math>\geq 40</math> mm, Distance between casings <math>\geq 10</math> mm</p>	in the wall	Mortar-based installation	EI 90 (v <sub>e</sub> i↔o) S
	<p>Timber studs (also timber panel constructions and timber frames), With or without mineral wool, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, <math>d \geq 110</math> mm, Distance to load-bearing structural elements <math>\geq 40</math> mm, Distance between casings <math>\geq 10</math> mm</p>	in the wall	Mortar-based installation	EI 60 (v <sub>e</sub> i↔o) S
	<p>Timber studs (also timber panel constructions and timber frames), With or without mineral wool, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, <math>d \geq 105</math> mm, Distance to load-bearing structural elements <math>\geq 40</math> mm, Distance between casings <math>\geq 10</math> mm</p>	in the wall	Mortar-based installation	EI 30 (v <sub>e</sub> i↔o) S
	<p>Timber studs (also timber panel constructions and timber frames), With or without mineral wool, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, <math>d \geq 130</math> mm, combined assembly up to 1.2 m<sup>2</sup> total fire damper area, Distance to load-bearing structural elements <math>\geq 40</math> mm, Distance to fire dampers FK-EU/FK2-EU <math>\geq 50</math> mm, Distance between casings <math>\geq 40</math> mm</p>	in the wall	Mortar-based installation	EI 90 (v <sub>e</sub> i↔o) S

# Declaration of performance

Timber studs (also timber panel constructions and timber frames), With or without mineral wool, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, $d \geq 130$ mm, Multiple occupancy up to $1.2 \text{ m}^2$ total fire damper area, Distance to load-bearing structural elements $\geq 40$ mm, Distance between casings $\geq 10$ mm	in the wall	Mortar-based installation	EI 90 ( $v_e i \leftrightarrow o$ ) S
Timber studs (also timber panel constructions and timber frames), With or without mineral wool, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, $d \geq 130$ mm, Installation kit TQ2, Distance to load-bearing structural elements $\geq 55$ mm, Distance between casings $\geq 200$ mm	in the wall	Dry mortarless installation	EI 120 ( $v_e i \leftrightarrow o$ ) S
Timber studs (also timber panel constructions and timber frames), With or without mineral wool, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, $d \geq 130$ mm, Installation kit TQ2, Distance to load-bearing structural elements $\geq 55$ mm, Distance between casings $\geq 200$ mm	in the wall	Dry mortarless installation	EI 90 ( $v_e i \leftrightarrow o$ ) S
Timber studs (also timber panel constructions and timber frames), With or without mineral wool, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, $d \geq 110$ mm, Installation kit TQ2, Distance to load-bearing structural elements $\geq 55$ mm, Distance between casings $\geq 200$ mm	in the wall	Dry mortarless installation	EI 60 ( $v_e i \leftrightarrow o$ ) S
Timber studs (also timber panel constructions and timber frames), With or without mineral wool, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, $d \geq 105$ mm, Installation kit TQ2, Distance to load-bearing structural elements $\geq 55$ mm, Distance between casings $\geq 200$ mm	in the wall	Dry mortarless installation	EI 30 ( $v_e i \leftrightarrow o$ ) S
Timber studs (also timber panel constructions and timber frames), With or without mineral wool, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, $d \geq 130$ mm, Mineral wool insulation, Joint filler, Distance to load-bearing structural elements $\geq 200$ mm, Distance between casings $\geq 400$ mm	remote from the wall	Dry mortarless installation	EI 60 ( $v_e i \leftrightarrow o$ ) S
Timber studs (also timber panel constructions and timber frames), With or without mineral wool, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, $d \geq 130$ mm, Mineral wool insulation, Fire batt, Distance to load-bearing structural elements $\geq 200$ mm, Distance between casings $\geq 400$ mm	remote from the wall	Dry mortarless installation	EI 60 ( $v_e i \leftrightarrow o$ ) S
Timber studs (also timber panel constructions and timber frames), With or without mineral wool, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, $d \geq 130$ mm, 2-plate mineral wool bulkhead ( $2 \times 50$ mm), Distance to load-bearing structural elements $\geq 40$ mm, Distance between casings $\geq 40$ mm	in the wall	Fire batt	EI 120 ( $v_e i \leftrightarrow o$ ) S

# Declaration of performance

Timber studs (also timber panel constructions and timber frames), With or without mineral wool, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, $d \geq 130$ mm, 2-plate mineral wool bulkhead (2 x 50 mm), Distance to load-bearing structural elements $\geq 40$ mm, Distance between casings $\geq 10$ mm	in the wall	Fire batt	EI 90 ( $v_e i \leftrightarrow o$ ) S
Timber studs (also timber panel constructions and timber frames), With or without mineral wool, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, $d \geq 110$ mm, 2-plate mineral wool bulkhead (2 x 50 mm), Distance to load-bearing structural elements $\geq 40$ mm, Distance between casings $\geq 10$ mm	in the wall	Fire batt	EI 60 ( $v_e i \leftrightarrow o$ ) S
Timber studs (also timber panel constructions and timber frames), With or without mineral wool, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, $d \geq 105$ mm, 2-plate mineral wool bulkhead (2 x 50 mm), Distance to load-bearing structural elements $\geq 40$ mm, Distance between casings $\geq 10$ mm	in the wall	Fire batt	EI 30 ( $v_e i \leftrightarrow o$ ) S
Timber studs (also timber panel constructions and timber frames), With or without mineral wool, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, $d \geq 130$ mm, Multiple occupancy up to 1.2 m <sup>2</sup> total fire damper area, 2-plate mineral wool bulkhead (2 x 50 mm), Distance to load-bearing structural elements $\geq 40$ mm, Distance between casings $\geq 10$ mm	in the wall	Fire batt	EI 90 ( $v_e i \leftrightarrow o$ ) S
Timber studs (also timber panel constructions and timber frames), With or without mineral wool, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, $d \geq 130$ mm, 2-plate mineral wool bulkhead (Combined penetration seal), Distance to load-bearing structural elements $\geq 40$ mm, Distance to fire dampers FK-EU/FK2-EU $\geq 50$ mm, Distance to pipe openings $\geq 50$ mm, Distance to cable openings $\geq 100$ mm, Distance between casings $\geq 40$ mm	in the wall	Fire batt	EI 90 ( $v_e i \leftrightarrow o$ ) S
Half-timbered construction, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, $d \geq 140$ mm, Distance to load-bearing structural elements $\geq 40$ mm, Distance between casings $\geq 40$ mm	in the wall	Mortar-based installation	EI 120 ( $v_e i \leftrightarrow o$ ) S
Half-timbered construction, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, $d \geq 140$ mm, Distance to load-bearing structural elements $\geq 40$ mm, Distance between casings $\geq 10$ mm	in the wall	Mortar-based installation	EI 90 ( $v_e i \leftrightarrow o$ ) S
Half-timbered construction, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, $d \geq 110$ mm, Distance to load-bearing structural elements $\geq 40$ mm, Distance between casings $\geq 10$ mm	in the wall	Mortar-based installation	EI 30 ( $v_e i \leftrightarrow o$ ) S



# Declaration of performance

Half-timbered construction, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, $d \geq 140$ mm, combined assembly up to 1.2 m <sup>2</sup> total fire damper area, Distance to load-bearing structural elements $\geq 40$ mm, Distance to fire dampers FK-EU/ FK2-EU $\geq 50$ mm, Distance between casings $\geq 40$ mm	in the wall	Mortar-based installation	EI 90 (v <sub>e</sub> i↔o) S
Half-timbered construction, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, $d \geq 140$ mm, Multiple occupancy up to 1.2 m <sup>2</sup> total fire damper area, Distance to load-bearing structural elements $\geq 40$ mm, Distance between casings $\geq 10$ mm	in the wall	Mortar-based installation	EI 90 (v <sub>e</sub> i↔o) S
Half-timbered construction, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, $d \geq 140$ mm, Installation kit TQ2, Distance to load-bearing structural elements $\geq 55$ mm, Distance between casings $\geq 200$ mm	in the wall	Dry mortarless installation	EI 120 (v <sub>e</sub> i↔o) S
Half-timbered construction, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, $d \geq 140$ mm, Installation kit TQ2, Distance to load-bearing structural elements $\geq 55$ mm, Distance between casings $\geq 200$ mm	in the wall	Dry mortarless installation	EI 90 (v <sub>e</sub> i↔o) S
Half-timbered construction, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, $d \geq 110$ mm, Installation kit TQ2, Distance to load-bearing structural elements $\geq 55$ mm, Distance between casings $\geq 200$ mm	in the wall	Dry mortarless installation	EI 30 (v <sub>e</sub> i↔o) S
Half-timbered construction, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, $d \geq 140$ mm, Mineral wool insulation, Joint filler, Distance to load-bearing structural elements $\geq 200$ mm, Distance between casings $\geq 400$ mm	remote from the wall	Dry mortarless installation	EI 60 (v <sub>e</sub> i↔o) S
Half-timbered construction, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, $d \geq 140$ mm, Mineral wool insulation, Fire batt, Distance to load-bearing structural elements $\geq 200$ mm, Distance between casings $\geq 400$ mm	remote from the wall	Dry mortarless installation	EI 60 (v <sub>e</sub> i↔o) S
Half-timbered construction, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, $d \geq 140$ mm, 2-plate mineral wool bulkhead (2 x 50 mm), Distance to load-bearing structural elements $\geq 40$ mm, Distance between casings $\geq 40$ mm	in the wall	Fire batt	EI 120 (v <sub>e</sub> i↔o) S
Half-timbered construction, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, $d \geq 140$ mm, 2-plate mineral wool bulkhead (2 x 50 mm), Distance to load-bearing structural elements $\geq 40$ mm, Distance between casings $\geq 10$ mm	in the wall	Fire batt	EI 90 (v <sub>e</sub> i↔o) S
Half-timbered construction, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, $d \geq 110$ mm, 2-plate mineral wool bulkhead (2 x 50 mm), Distance to load-bearing structural elements $\geq 40$ mm, Distance between casings $\geq 10$ mm	in the wall	Fire batt	EI 30 (v <sub>e</sub> i↔o) S

# Declaration of performance


	Half-timbered construction, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, $d \geq 140$ mm, Multiple occupancy up to $1.2 \text{ m}^2$ total fire damper area, 2-plate mineral wool bulkhead ( $2 \times 50$ mm), Distance to load-bearing structural elements $\geq 40$ mm, Distance between casings $\geq 10$ mm	in the wall	Fire batt	EI 90 ( $v_e i \leftrightarrow o$ ) S
 <p>Solid wood wall</p>	Solid wood wall / CLT wall, $d \geq 95$ mm (also with additional fire-rated plasterboard cladding), Distance to load-bearing structural elements $\geq 40$ mm, Distance between casings $\geq 10$ mm	in the wall	Mortar-based installation	EI 90 ( $v_e i \leftrightarrow o$ ) S
	Solid wood wall / CLT wall, $d \geq 95$ mm (also with additional fire-rated plasterboard cladding), Installation kit TQ2, Distance to load-bearing structural elements $\geq 55$ mm, Distance between casings $\geq 200$ mm	in the wall	Dry mortarless installation	EI 90 ( $v_e i \leftrightarrow o$ ) S
	Solid wood wall / CLT wall, $d \geq 100$ mm (also with additional fire-rated plasterboard cladding), Mineral wool insulation, Mortar-based installation, Distance to load-bearing structural elements $\geq 200$ mm, Distance between casings $\geq 400$ mm	remote from the wall	Dry mortarless installation	EI 60 ( $v_e i \leftrightarrow o$ ) S
	Solid wood wall / CLT wall, $d \geq 100$ mm (also with additional fire-rated plasterboard cladding), Mineral wool insulation, Fire batt, Distance to load-bearing structural elements $\geq 200$ mm, Distance between casings $\geq 400$ mm	remote from the wall	Dry mortarless installation	EI 60 ( $v_e i \leftrightarrow o$ ) S
	Solid wood wall / CLT wall, $d \geq 95$ mm (also with additional fire-rated plasterboard cladding), 2-plate mineral wool bulkhead ( $2 \times 50$ mm), Distance to load-bearing structural elements $\geq 40$ mm, Distance between casings $\geq 200$ mm	in the wall	Fire batt	EI 90 ( $v_e i \leftrightarrow o$ ) S
	Solid wood wall / CLT wall, $d \geq 95$ mm (also with additional fire-rated plasterboard cladding), 2-plate mineral wool bulkhead (Combined penetration seal), Distance to load-bearing structural elements $\geq 40$ mm, Distance to fire dampers FK-EU/FK2-EU $\geq 50$ mm, Distance to pipe openings $\geq 50$ mm, Distance to cable openings $\geq 100$ mm, Distance between casings $\geq 40$ mm	in the wall	Fire batt	EI 90 ( $v_e i \leftrightarrow o$ ) S
 <p>Shaft wall</p>	Metal support structure (also steel support structure and facings), Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, Cladding on one side, $d \geq 90$ mm, Distance to load-bearing structural elements $\geq 40$ mm, Distance between casings $\geq 10$ mm	in the wall	Mortar-based installation	EI 90 ( $v_e i \leftrightarrow o$ ) S
	Metal support structure (also steel support structure and facings), Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, Cladding on one side (construction with adjusted cladding), $d \geq 80$ mm, Distance to load-bearing structural elements $\geq 40$ mm, Distance between casings $\geq 10$ mm	in the wall	Mortar-based installation	EI 90 ( $v_e i \leftrightarrow o$ ) S
	Metal support structure (also steel support structure and facings), Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, Cladding on one side, $d \geq 80$ mm, Distance to load-bearing structural elements $\geq 40$ mm, Distance between casings $\geq 10$ mm	in the wall	Mortar-based installation	EI 60 ( $v_e i \leftrightarrow o$ ) S



# Declaration of performance

Metal support structure (also steel support structure and facings), Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, Cladding on one side, $d \geq 75$ mm, Distance to load-bearing structural elements $\geq 40$ mm, Distance between casings $\geq 10$ mm	in the wall	Mortar-based installation	EI 30 (v <sub>e</sub> i↔o) S
Metal support structure (also steel support structure and facings), Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, Cladding on one side, $d \geq 90$ mm, combined assembly up to 1.2 m <sup>2</sup> total fire damper area, Distance to load-bearing structural elements $\geq 40$ mm, Distance to fire dampers FK-EU/ FK2-EU $\geq 50$ mm, Distance between casings $\geq 40$ mm	in the wall	Mortar-based installation	EI 90 (v <sub>e</sub> i↔o) S
Metal support structure (also steel support structure and facings), Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, Cladding on one side, $d \geq 90$ mm, Installation kit TQ2, Distance to load-bearing structural elements $\geq 55$ mm, Distance between casings $\geq 200$ mm	in the wall	Dry mortarless installation	EI 90 (v <sub>e</sub> i↔o) S
Metal support structure (also steel support structure and facings), Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, Cladding on one side (construction with adjusted cladding), $d \geq 80$ mm, Installation kit TQ2, Distance to load-bearing structural elements $\geq 55$ mm, Distance between casings $\geq 200$ mm	in the wall	Dry mortarless installation	EI 90 (v <sub>e</sub> i↔o) S
Metal support structure (also steel support structure and facings), Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, Cladding on one side, $d \geq 80$ mm, Installation kit TQ2, Distance to load-bearing structural elements $\geq 55$ mm, Distance between casings $\geq 200$ mm	in the wall	Dry mortarless installation	EI 60 (v <sub>e</sub> i↔o) S
Metal support structure (also steel support structure and facings), Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, Cladding on one side, $d \geq 75$ mm, Installation kit TQ2, Distance to load-bearing structural elements $\geq 55$ mm, Distance between casings $\geq 200$ mm	in the wall	Dry mortarless installation	EI 30 (v <sub>e</sub> i↔o) S
Metal support structure, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, Cladding on one side, $d \geq 90$ mm, Installation kit WA2, Distance to load-bearing structural elements $\geq 75$ mm, Distance between casings $\geq 200$ mm	on the face of the wall	Dry mortarless installation	EI 90 (v <sub>e</sub> i↔o) S
Metal support structure, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, Cladding on one side, $d \geq 80$ mm, 2-plate mineral wool bulkhead (2 x 50 mm), Distance to load-bearing structural elements $\geq 40$ mm, Distance between casings $\geq 200$ mm	in the wall	Fire batt	EI 60 (v <sub>e</sub> i↔o) S
Without metal support structure, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, Cladding on one side, $d \geq 50$ mm, Distance to load-bearing structural elements $\geq 40$ mm, Distance between casings $\geq 200$ mm	in the wall	Mortar-based installation	EI 90 (v <sub>e</sub> i↔o) S

# Declaration of performance

	Without metal support structure, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, Cladding on one side, $d \geq 50$ mm, Installation kit TQ2, Distance to load-bearing structural elements $\geq 55$ mm, Distance between casings $\geq 200$ mm	in the wall	Dry mortarless installation	EI 90 ( $v_e$ i $\leftrightarrow$ o) S
	Without metal support structure, Gypsum bonded or cement bonded panel materials, fibre-reinforced gypsum boards or firestop boards of calcium silicate, Cladding on one side, $d \geq 40$ mm, Installation kit WA2, Distance to load-bearing structural elements $\geq 75$ mm, Distance between casings $\geq 200$ mm	on the face of the wall	Dry mortarless installation	EI 90 ( $v_e$ i $\leftrightarrow$ o) S
	Metal studs with gypsum plasterboard, Asymmetric cladding, $\geq 3 \times 15$ mm, optionally with filling strips or trimmers, $d \geq 105$ mm	in the wall	Mortar-based installation	EI 120 ( $v_e$ i $\leftrightarrow$ o) S
	Metal studs with gypsum plasterboard, Asymmetric cladding, $\geq 2 \times 15$ mm, optionally with filling strips or trimmers, $d \geq 105$ mm, with reinforcing board	in the wall	Mortar-based installation	EI 90 ( $v_e$ i $\leftrightarrow$ o) S
	Metal studs with gypsum plasterboard, Asymmetric cladding, optionally with filling strips or trimmers, $d \geq 105$ mm, $\geq 2 \times 12.5$ mm, with reinforcing board	in the wall	Mortar-based installation	EI 60 ( $v_e$ i $\leftrightarrow$ o) S
	Metal studs with gypsum plasterboard, Asymmetric cladding, $\geq 3 \times 15$ mm, optionally with filling strips or trimmers, $d \geq 105$ mm, with reinforcing board, Installation kit TQ2	in the wall	Dry mortarless installation	EI 120 ( $v_e$ i $\leftrightarrow$ o) S
	Metal studs with gypsum plasterboard, Asymmetric cladding, $\geq 2 \times 15$ mm, optionally with filling strips or trimmers, $d \geq 105$ mm, with reinforcing board, Installation kit TQ2	in the wall	Dry mortarless installation	EI 90 ( $v_e$ i $\leftrightarrow$ o) S
	Metal studs with gypsum plasterboard, Asymmetric cladding, optionally with filling strips or trimmers, $d \geq 105$ mm, $\geq 2 \times 12.5$ mm, with reinforcing board, Installation kit TQ2	in the wall	Dry mortarless installation	EI 60 ( $v_e$ i $\leftrightarrow$ o) S
	$d = 100 - 200$ mm (sheet thickness on both sides $\geq 0.5$ mm sheet steel, mineral wool filling), Fire protection stone bulkhead system Hilti CFS-BL, Trim panels, Distance to cable penetrations and empty pipes $\geq 200$ mm, Distance between fire damper and penetration seal edge $\geq 50$ mm, Distance between casings $\geq 200$ mm	in the wall	Dry mortarless installation	EI 90 ( $v_e$ i $\leftrightarrow$ o) S
	$d \geq 100$ mm, Distance to load-bearing structural elements $\geq 40$ mm, Distance between casings $\geq 45$ mm	in the ceiling	Mortar-based installation	EI 120 ( $h_o$ i $\leftrightarrow$ o) S
	$d \geq 100$ mm, Distance to load-bearing structural elements $\geq 40$ mm, Distance between casings $\geq 45$ mm	in the ceiling	Mortar-based installation	EI 90 ( $h_o$ i $\leftrightarrow$ o) S
	$d \geq 150$ mm, combined assembly up to $1.2$ m <sup>2</sup> total fire damper area, Distance to load-bearing structural elements $\geq 40$ mm, Distance to fire dampers FK-EU/FK2-EU $\geq 50$ mm, Distance between casings $\geq 45$ mm	in the ceiling	Mortar-based installation	EI 90 ( $h_o$ i $\leftrightarrow$ o) S
	$d \geq 150$ mm, Multiple occupancy up to $1.2$ m <sup>2</sup> total fire damper area, Distance to load-bearing structural elements $\geq 40$ mm, Distance between casings $\geq 10$ mm	in the ceiling	Mortar-based installation	EI 90 ( $h_o$ i $\leftrightarrow$ o) S
	$d \geq 100$ mm, Concrete base $\leq 750$ mm, Distance to load-bearing structural elements $\geq 40$ mm, Distance between casings $\geq 45$ mm	in the ceiling	Mortar-based installation	EI 120 ( $h_o$ i $\leftrightarrow$ o) S
$d \geq 100$ mm, Concrete base $\leq 750$ mm, combined assembly up to $1.2$ m <sup>2</sup> total fire damper area, Distance to load-bearing structural elements $\geq 40$ mm, Distance to fire dampers FK-EU/FK2-EU $\geq 50$ mm, Distance between casings $\geq 45$ mm	in the ceiling	Mortar-based installation	EI 90 ( $h_o$ i $\leftrightarrow$ o) S	

# Declaration of performance

	d ≥ 100 mm, Concrete base ≤ 750 mm, Multiple occupancy up to 1.2 m <sup>2</sup> total fire damper area, Distance to load-bearing structural elements ≥ 40 mm, Distance between casings ≥ 10 mm	in the ceiling	Mortar-based installation	EI 90 (h <sub>o</sub> i↔o) S
	d ≥ 150 mm, Hollow stone ceilings, Hollow chamber ceilings, Ribbed Ceilings, Composite ceilings and comparable ceiling constructions, Distance to load-bearing structural elements ≥ 40 mm, Distance between casings ≥ 45 mm	in the ceiling	Mortar-based installation	EI 90 (h <sub>o</sub> i↔o) S
	Combined with wooden beam ceilings (glued laminated timber also), Partial concrete ceiling, d ≥ 150 mm, Distance to load-bearing structural elements ≥ 40 mm, Distance between casings ≥ 45 mm	in the ceiling	Mortar-based installation	EI 90 (h <sub>o</sub> i↔o) S
	Combined with solid wood ceilings, Partial concrete ceiling, d ≥ 150 mm, Distance to load-bearing structural elements ≥ 40 mm, Distance between casings ≥ 45 mm	in the ceiling	Mortar-based installation	EI 90 (h <sub>o</sub> i↔o) S
	Combined with suspended ceiling systems (Cadolto system), Partial concrete ceiling, d ≥ 150 mm, Distance to load-bearing structural elements ≥ 40 mm, Distance between casings ≥ 45 mm	in the ceiling	Mortar-based installation	EI 120 (h <sub>o</sub> i↔o) S
	combined with lightweight ceilings (ADK system), partial concrete ceiling, d ≥ 125 mm, Distance to load-bearing structural elements ≥ 40 mm, Distance between casings ≥ 45 mm	in the ceiling	Mortar-based installation	EI 90 (h <sub>o</sub> i↔o) S
	d ≥ 100 mm, Installation block ER, Distance from installation block to load-bearing structural elements ≥ 75 mm, Distance between installation blocks ≥ 200 mm	in the ceiling	Dry mortarless installation	EI 90 (h <sub>o</sub> i↔o) S
	d ≥ 150 mm, Installation kit WA2, Distance to load-bearing structural elements ≥ 75 mm, Distance between casings ≥ 200 mm	on the ceiling	Dry mortarless installation	EI 90 (h <sub>o</sub> i↔o) S
	d ≥ 125 mm, below the ceiling, with horizontal duct, Installation kit WE2, clad on 4 sides, Distance to load-bearing structural elements ≥ 130 mm, Distance between casings ≥ 260 mm	remote from the ceiling	Dry mortarless installation	EI 90 (h <sub>o</sub> i↔o) S
	d ≥ 125 mm, above the ceiling, with horizontal duct, Installation kit WE2, clad on 4 sides, Distance to load-bearing structural elements ≥ 130 mm, Distance between casings ≥ 260 mm	remote from the ceiling	Dry mortarless installation	EI 90 (h <sub>o</sub> i↔o) S
	Fireshield, d ≥ 150 mm, Distance to load-bearing structural elements ≥ 100 mm, Distance between casings ≥ 200 mm	in the ceiling	Mortar-based installation	EI 90 (h <sub>o</sub> i↔o) S
	d ≥ 100 mm, 2-plate mineral wool bulkhead (2 x 50 mm), Distance to load-bearing structural elements ≥ 40 mm, Distance between casings ≥ 200 mm	in the ceiling	Fire batt	EI 120 (h <sub>o</sub> i↔o) S
	d ≥ 100 mm, 2-plate mineral wool bulkhead (2 x 50 mm), Distance to load-bearing structural elements ≥ 40 mm, Distance between casings ≥ 200 mm	in the ceiling	Fire batt	EI 90 (h <sub>o</sub> i↔o) S
 <p>Solid wood ceiling</p>	d ≥ 140 mm, Distance to load-bearing structural elements ≥ 40 mm, Distance between casings ≥ 200 mm	in the ceiling	Mortar-based installation	EI 90 (h <sub>o</sub> i↔o) S
	d ≥ 112.5 mm, Additional cladding, Distance to load-bearing structural elements ≥ 40 mm, Distance between casings ≥ 200 mm	in the ceiling	Mortar-based installation	EI 90 (h <sub>o</sub> i↔o) S
	d ≥ 140 mm, Installation kit TQ2, Distance to load-bearing structural elements ≥ 55 mm, Distance between casings ≥ 200 mm	in the ceiling	Dry mortarless installation	EI 90 (h <sub>o</sub> i↔o) S

# Declaration of performance

	d ≥ 112.5 mm, Additional cladding, Installation kit TQ2, Distance to load-bearing structural elements ≥ 55 mm, Distance between casings ≥ 200 mm	in the ceiling	Dry mortarless installation	EI 90 (h <sub>o</sub> i↔o) S
 <p>Wooden panel element</p>	d ≥ 140 mm, Distance to load-bearing structural elements ≥ 40 mm, Distance between casings ≥ 200 mm	in the ceiling	Mortar-based installation	EI 90 (h <sub>o</sub> i↔o) S
	d ≥ 140 mm, Distance to load-bearing structural elements ≥ 55 mm, Distance between casings ≥ 200 mm	in the ceiling	Dry mortarless installation	EI 90 (h <sub>o</sub> i↔o) S
 <p>Wooden beam ceiling</p>	d ≥ 167.5 mm, wooden beam or gluelam, Additional cladding, Distance to load-bearing structural elements ≥ 40 mm, Distance between casings ≥ 200 mm	in the ceiling	Mortar-based installation	EI 90 (h <sub>o</sub> i↔o) S
	d ≥ 155 mm, wooden beam or gluelam, Additional cladding, Distance to load-bearing structural elements ≥ 40 mm, Distance between casings ≥ 200 mm	in the ceiling	Mortar-based installation	EI 60 (h <sub>o</sub> i↔o) S
	d ≥ 142.5 mm, wooden beam or gluelam, Additional cladding, Distance to load-bearing structural elements ≥ 40 mm, Distance between casings ≥ 200 mm	in the ceiling	Mortar-based installation	EI 30 (h <sub>o</sub> i↔o) S
	d ≥ 167.5 mm, wooden beam or gluelam, Additional cladding, Installation kit TQ2, Distance to load-bearing structural elements ≥ 55 mm, Distance between casings ≥ 200 mm	in the ceiling	Dry mortarless installation	EI 90 (h <sub>o</sub> i↔o) S
	d ≥ 155 mm, wooden beam or gluelam, Additional cladding, Installation kit TQ2, Distance to load-bearing structural elements ≥ 55 mm, Distance between casings ≥ 200 mm	in the ceiling	Dry mortarless installation	EI 60 (h <sub>o</sub> i↔o) S
	d ≥ 142.5 mm, wooden beam or gluelam, Additional cladding, Installation kit TQ2, Distance to load-bearing structural elements ≥ 55 mm, Distance between casings ≥ 200 mm	in the ceiling	Dry mortarless installation	EI 30 (h <sub>o</sub> i↔o) S
	Historical wooden beam ceilings, Construction according to local conditions with 30 minutes fire resistance, Distance to load-bearing structural elements ≥ 40 mm, Distance between casings ≥ 200 mm	in the ceiling	Mortar-based installation	EI 30 (h <sub>o</sub> i↔o) S

Table 2

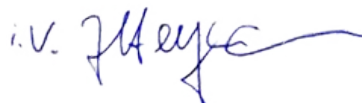
Essential characteristics	Technical specification	Performance
<b>Nominal activation conditions/sensitivity</b> Sensing element load-bearing capacity Sensing element response temperature 72 °C, 95 °C	ISO 10294-4:2001	Pass
<b>Response delay/response time</b> Closure time	EN 1366-2:2015	Pass
<b>Operational reliability</b> Open and closing cycle, 50 cycles	EN 15650:2010 EN 1366-2:2015	Pass
<b>Durability of response delay</b> Sensing element response to temperature and load-bearing capacity	ISO 10294-4:2001	Pass
<b>Durability of operational reliability</b> Testing of the open and closing cycle, 10,000 cycles B(L)F 24-T(N)-(ST) TR, B(L)F230-T-(ST)-TR BF24TL-T-(ST)-TR BFL 24-T-(ST) TR, BFL 230-T-(ST) TR BFN 24-T-(ST) TR, BFN 230-T-(ST) TR ExMax-15-BF-TR, RedMax-15-BF-TR GGA126.1E/T../GGA326.1E/T... GNA126.1E/T../GNA326.1E/T... GRA126.1E/T../GRA326.1E/T... SFR 1.90 T (SLC) SFR 2.90 T 340TA-230-05-S2 TR 340TA-024-05-S2/ST01 TR	EN 15650:2010	Pass
<b>Protection against corrosion</b>	EN 15650:2010	Pass
<b>Damper blade leakage</b>	EN 1751:2014	Class 3
<b>Damper casing leakage</b>	EN 1751:2014	Class C

The classification of the fire damper must not be higher than the classification of the wall or ceiling slab it is installed in. In this case the class of performance of the wall or ceiling slab applies also to the fire damper.

The performance of the product identified above is in conformity with the set of declared performances. This declaration of performance is issued, in accordance with regulation (EU) no. 305/2011, under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by

Neukirchen-Vluyn, 01.12.2023



Jan Heymann • Authorised Representative • CE-marked products