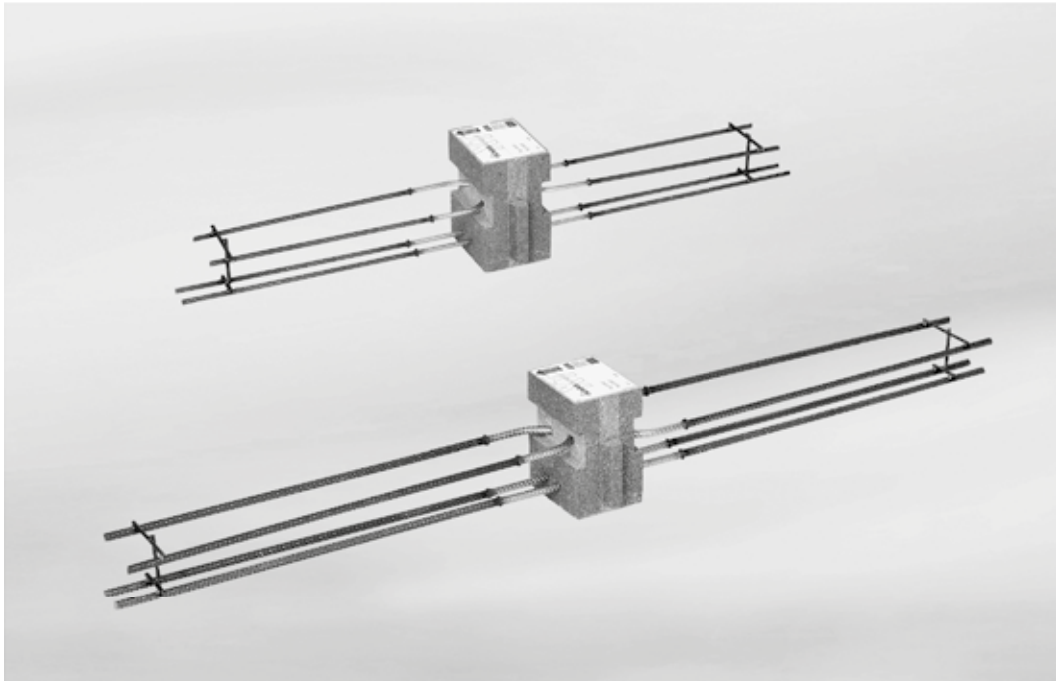


## Schöck Isokorb® supplementary type EQXT



Schöck Isokorb® type EQXT1 (top), type EQXT2 (bottom)

### Schöck Isokorb® supplementary type EQXT

Suitable for standard existing horizontal forces or positive moments.

It transmits horizontal shear forces and tension forces.

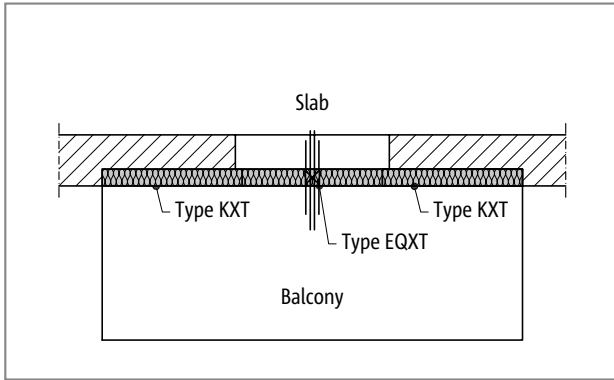
In combination with the Schöck Isokorb® type KXT it transmits horizontal shear forces and positive moments, or tension forces.

The Schöck Isokorb® supplementary type EQXT is to be included only in combination with an approved Isokorb® type KXT, type QXT, type QPXT or type DXT.

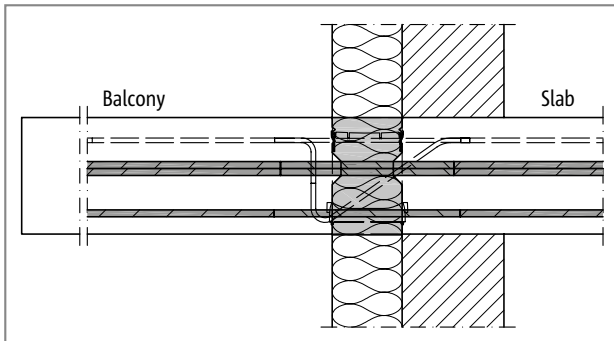
EQXT

Reinforced concrete/Reinforced  
concrete

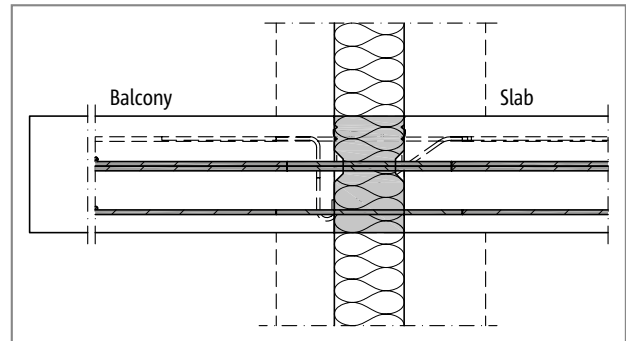
## Element arrangement | Installation cross sections



Schöck Isokorb® type EQXT: Balcony freely projecting with positive moment loading



Schöck Isokorb® type KXT, EQXT: Thermal insulation composite system (EIFS)



Schöck Isokorb® type KXT, EQXT: Indirect support, non-load-bearing cavity masonry

EQXT

Reinforced concrete/Reinforced concrete

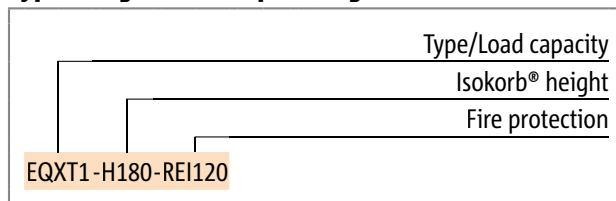
## Product selection | Type designations | Special designs

### Schöck Isokorb® supplementary type EQXT variants

The configuration of the Schöck Isokorb® supplementary type EQXT can be varied as follows:

- ▶ Load capacity:  
EQXT1 and EQXT2
- ▶ Height:  
H = 160 - 250 mm
- ▶ Fire resistance class:  
RO: Standard,  
REI120: Projecting upper fire protection slab 10 mm on both side

### Type designations in planning documents



### **i** Special designs

Please contact the design support department if you have connections that are not possible with the standard product variants shown in this information (contact details on page 3).

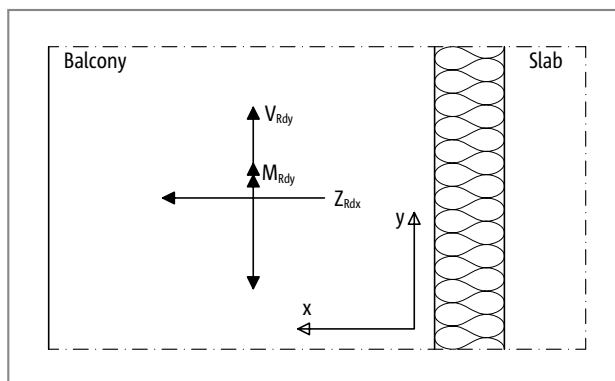
EQXT

Reinforced concrete/Reinforced  
concrete

## C25/30 design

Schöck Isokorb® type		EQXT1	EQXT2	
Recommended design values with	Concrete cover CV [mm]		Concrete strength class $\geq$ C25/30	
	CV35	CV50		
Isokorb® height H [mm]	$M_{Rd,y}$ [kNm/Element] width $N_{Rd,x} = 0$			
	160	-	3.8	8.3
	-	180	4.1	8.8
	170	-	4.3	9.3
	-	190	4.5	9.7
	180	-	4.7	10.2
	-	200	4.9	10.7
	190	-	5.1	11.2
	-	210	5.4	11.7
	200	-	5.6	12.2
	-	220	5.8	12.7
	210	-	6.0	13.2
	-	230	6.2	13.7
	220	-	6.5	14.2
	-	240	6.7	14.7
	230	-	6.9	15.2
	-	250	7.1	15.6
240	-	7.3	16.1	
-	250	7.8	17.1	
Isokorb® height	$N_{Rd,x}$ ( $Z_{Rd,x}$ ) [kN/Element] width $M_{Rd,y} = 0$			
	160 - 250		43.7	98.4
Isokorb® height	$V_{Rd,y}$ [kN/element]			
	160 - 250		$\pm 12.5$	$\pm 28.2$

Schöck Isokorb® type	EQXT1	EQXT2
Isokorb® length [mm]	150	150
Tension bars	2 $\varnothing$ 8	2 $\varnothing$ 12
Shear force bars horizontal	2 $\times$ 1 $\varnothing$ 8	2 $\times$ 1 $\varnothing$ 12



Schöck Isokorb® type EQXT: Sign convention for the design

## Design

### **i** Notes on design

- ▶ With the design internal force variables either  $M_{Rd,y}$  or  $N_{Rd,x}$  ( $Z_{Rd,x}$ ) applies, not both at the same time.
- ▶ A combination of the Schöck Isokorb® supplementary type EQXT with the Schöck Isokorb® type KXT as follows is recommended:  
Schöck Isokorb® supplementary type EQXT1 with Isokorb® supplementary type KXT40 to KXT50,  
Schöck Isokorb® supplementary type EQXT2 with at least supplementary type KXT55.  
For the activation of the positive design moments the combination of the Schöck Isokorb® supplementary type EQXT2 is required at least with supplementary type KXT55.
- ▶ With the design of a linear connection it is to be noted that the use of the supplementary type EQXT can reduce the design values (e.g. type KXT with  $L = 1.0$  m and supplementary type EQXT with  $L = 0.15$  m in continuous transition a reduction of  $m_{Rd}$  and  $v_{Rd}$  of the linear connection with type KXT of ca. 13 %).
- ▶ With the selection of type (supplementary type EQXT) and configuration, attention is to be paid that no unnecessary fixed points are created and the maximum expansion joint spacings (of e.g. type KXT, type QXT or type DXT) are maintained.
- ▶ The required number of Schöck Isokorb® supplementary type EQXT is to be determined according to static requirements.
- ▶ The Schöck Isokorb® supplementary type EQXT is not to be installed at the slab edge.
- ▶ With different concrete strength classes (e.g. balcony C32/40, inner slab C25/30) basically the weaker concrete is relevant for the design of the Schöck Isokorb®.
- ▶ The indicative minimum concrete strength class of the external structural component is C32/40.

EQXT

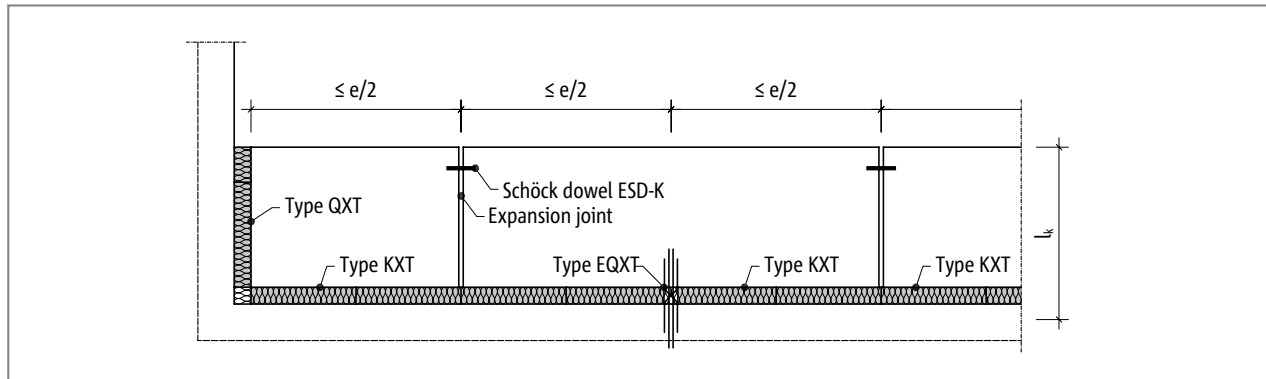
Reinforced concrete/Reinforced  
concrete

## Expansion joint spacing

### Maximum expansion joint spacing

If the structural component length exceeds the maximum expansion joint spacing  $e$ , expansion joints must be installed in the exterior concrete structural components at right angles to the insulation plane, in order to limit the effect as a result of temperature changes. With fixed points such as, for example, corners of balconies, parapets and balustrades or with the employment of the supplementary types HPXT or EQXT half the maximum expansion joint spacing  $e/2$  from the fixed point applies.

The shear force transmission in the expansion joint can be ensured using a longitudinally displaceable shear force dowel, e.g. Schöck Dowel.



Schöck Isokorb® type EQXT: Expansion joint formation using longitudinally displaceable shear force dowel, e.g. Schöck Dowel

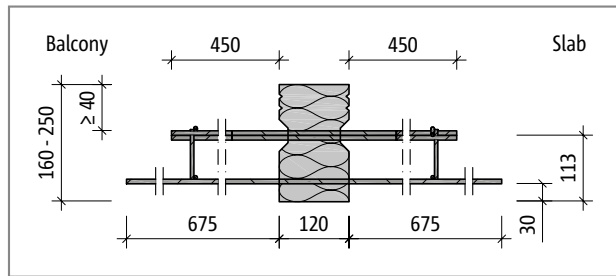
Schöck Isokorb® type EQXT combined with	KXT	KXT-HV, KXT-BH, KXT-WU, KXT-WO	QXT, QXT+QXT	QPXT, QPXT+QPXT, QPZXT	DXT
maximum expansion joint spacing from fixed point $e/2$ [m]	$\le e/2$ see p. 59	10.9	$\le e/2$ see p. 123	$\le e/2$ see p. 139	9.9

### i Edge distances

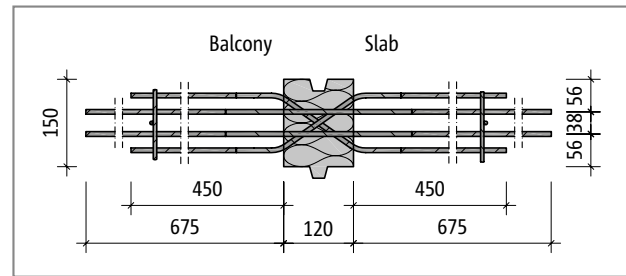
The Schöck Isokorb® must be so arranged at the expansion joint that the following conditions are met:

- ▶ For the centre distance of the tension bars from the free edge or from the expansion joint:  $e_R \geq 50$  mm and  $e_R \leq 150$  mm applies.
- ▶ For the centre distance of the compression elements from the free edge or from the expansion joint:  $e_R \geq 50$  mm applies.
- ▶ For the centre distance of the shear force bars from the free edge or from the expansion joint:  $e_R \geq 100$  mm and  $e_R \leq 150$  mm applies.

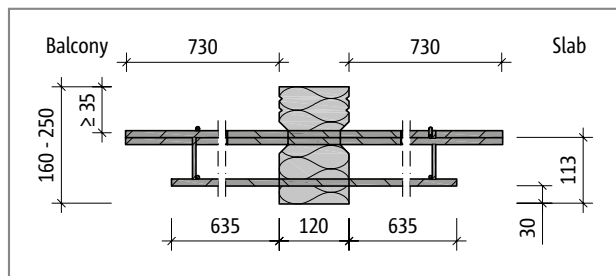
## Product description | Fire protection configuration



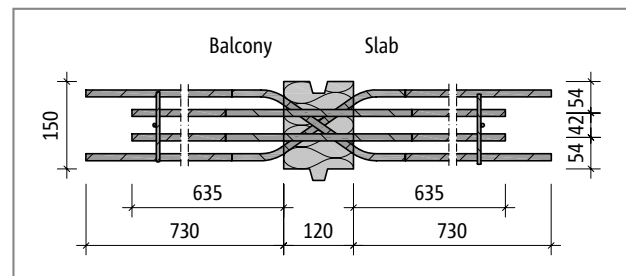
Schöck Isokorb® type EQXT1: Product section



Schöck Isokorb® type EQXT1: Product plan view



Schöck Isokorb® type EQXT2: Product section

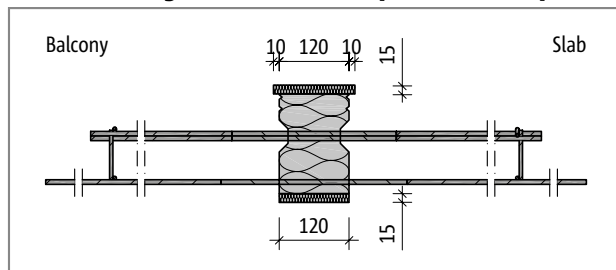


Schöck Isokorb® type EQXT2: Product plan view

### **i** Product information

- Download further product plan views and cross-sections at [www.schoeck.co.uk/download](http://www.schoeck.co.uk/download)

### Product configuration with fire protection requirement



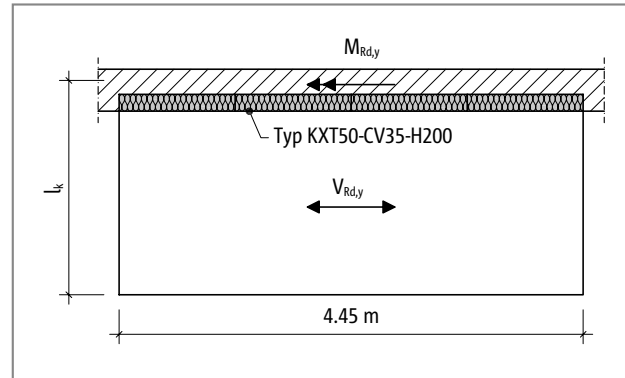
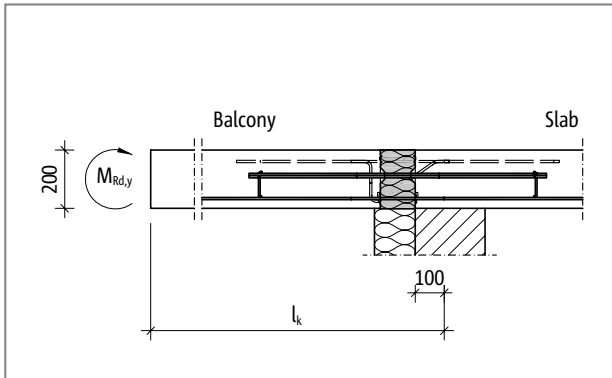
Schöck Isokorb® type EQXT1 Product section with REI120: fire protection slab top and bottom

EQXT

Reinforced concrete/Reinforced concrete

## Design example

### Schöck Isokorb® type KXT and supplementary type EQXT with standard positive moment effect



given:

cantilever slab connection with Schöck Isokorb® type KXT50-CV35-H200, concrete strength class C25/30

design of the connection and selection of the appropriate Schöck Isokorb® type KXT load-bearing level see p. 67

Standard positive moment and positive normal force:

$$V_{Ed,y} = 11.0 \text{ kN/slab}$$

$$M_{Ed,y} = 4.1 \text{ kNm/slab}$$

selected:

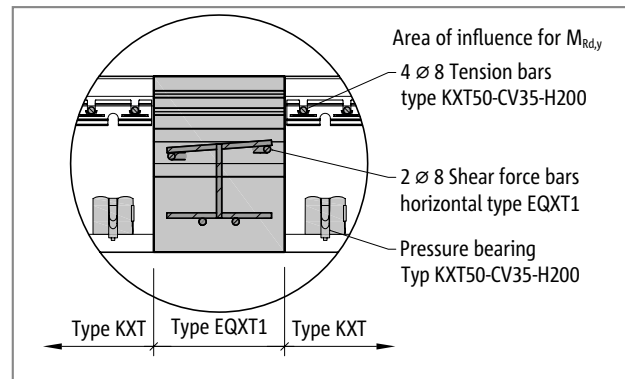
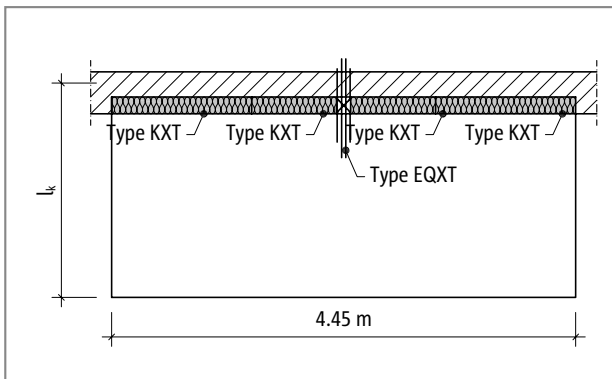
Schöck Isokorb® supplementary type EQXT1

$$V_{Rd,y} = 12.5 \text{ kN} \geq V_{Ed,y} = 11.0 \text{ kN/slab}$$

$$M_{Rd,y} = 5.6 \text{ kNm} \geq M_{Ed,y} = 4.1 \text{ kNm/slab}$$

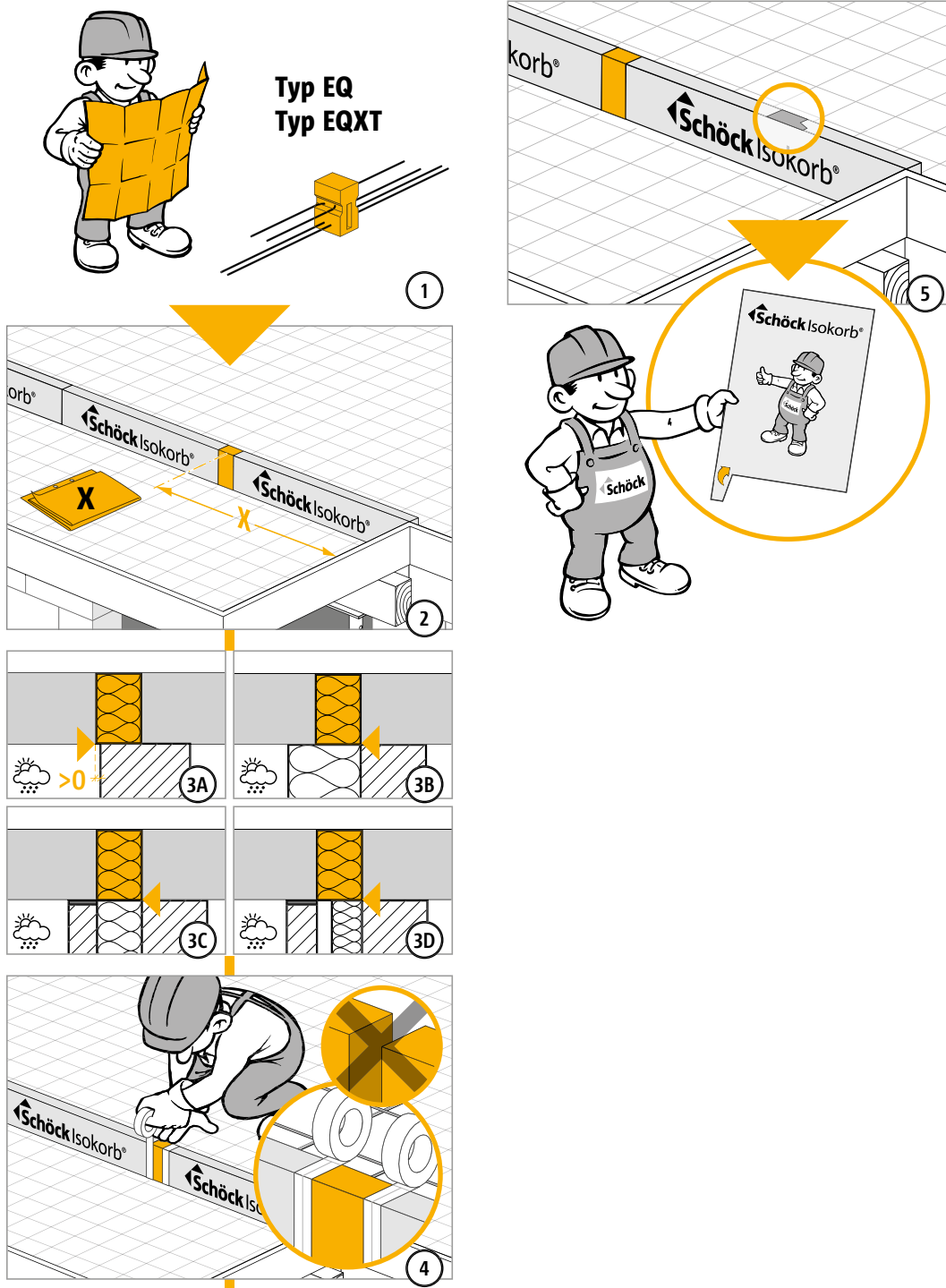
#### **i** Design example

- ▶ For the activation of  $M_{Rd,y}$  adjacent Schöck Isokorb® type KXT are required directly on the supplementary type EQXT.
- ▶ Configuration of the Schöck Isokorb® supplementary type EQXT in accordance with page 164 and the check list.





# Installation instructions



EQXT

Reinforced concrete/Reinforced concrete

## Check list

- Have the loads on the Schöck Isokorb® connection been specified at design level?
- With a linear connection in combination with Schöck Isokorb® of length 1 m, has the reduction of the design values of the linear connection been taken into account?
- With the selection of the design table is the relevant concrete cover taken into account?
- Are the maximum allowable expansion joint spacings taken into account?
- Is the required component geometry present with the connection to a floor or a wall? Is a special design required?
- Are the requirements with regard to fire protection explained and is the appropriate addendum entered in the Isokorb® type description in the implementation plans?

EQXT

Reinforced concrete/Reinforced  
concrete