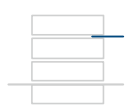


TECHNICAL INFORMATION – JULY 2023

IQlick for support-free mounted reinforced concrete structures

 Load-bearing thermal insulation elements for the effective reduction of thermal bridges on projecting structural elements such as balconies, arcades and canopies.

Planning and consulting service

The engineers of Schöck's technical design department would be very happy to advise you on static, structural and building-physics questions and will produce for you proposals for your solution with calculations and detailed drawings. For this please send your planning documentation (general arrangements, sections, static data) with the address of the building project to:

Contact

Tel.: +46 70 8307846

E-Mail: mattias.oehlin@schoeck.com

Web: www.schoeck.com

Notes | Symbols

i Technical Information

- This Technical Information on the respective product application is valid only if complete and therefore may only be reproduced as a whole. With texts and graphics published solely as extracts there is a danger of communicating insufficient or even misleading information. Therefore dissemination is the sole responsibility of the user or the person carrying out the process!
- This technical information is valid solely for Sweden and takes into account country-specific standards and product-specific accreditations / approvals.
- If the installation takes place in another country, then the valid technical information the respective country is to be applied.
- The currently valid version of the technical information is to be applied. The current version can be found at:
www.schoeck.com/download/se

i Installation instructions

Current installation instructions can be found online at:
www.schoeck.com/download-monteringsanvisningar/se

i Special constructions

Some connection situations cannot be realised with those standard product variants presented in this Technical Information. In this case special constructions can be requested from the application engineering department (for contact see page 3.) This applies, for example, with additional requirements as a result of prefabricated component construction (limitation due to manufacturing constraints or through transport width), which can possibly be met using coupler bars.

i Bending of reinforcing steel

With the production of the Schöck Isokorb® in the factory it is ensured through monitoring that the conditions of the general building supervisory approval document and of SS-EN 1992-1-1 (EC2) and SS-EN 1992-1-1/NA with regard to bending of reinforcing steel are observed.

Attention: If original Schöck Isokorb® reinforcing steels are bent or bent and bent back on-site, the observation and the monitoring of the respective conditions (European Technical Assessment (ETA), SS-EN 1992-1-1 (EC2) and SS-EN 1992-1-1/NA) lie outside the influence of Schöck Bauteile GmbH. Therefore, in such cases, our warranty is invalidated.

Notes Symbols

⚠ Hazard note

The triangle with exclamation mark indicates a hazard warning. This means there is a danger to life and limb if compliance is not observed.

i Info

The square with an “i” indicates important information which, for example, must be read in conjunction with the design.

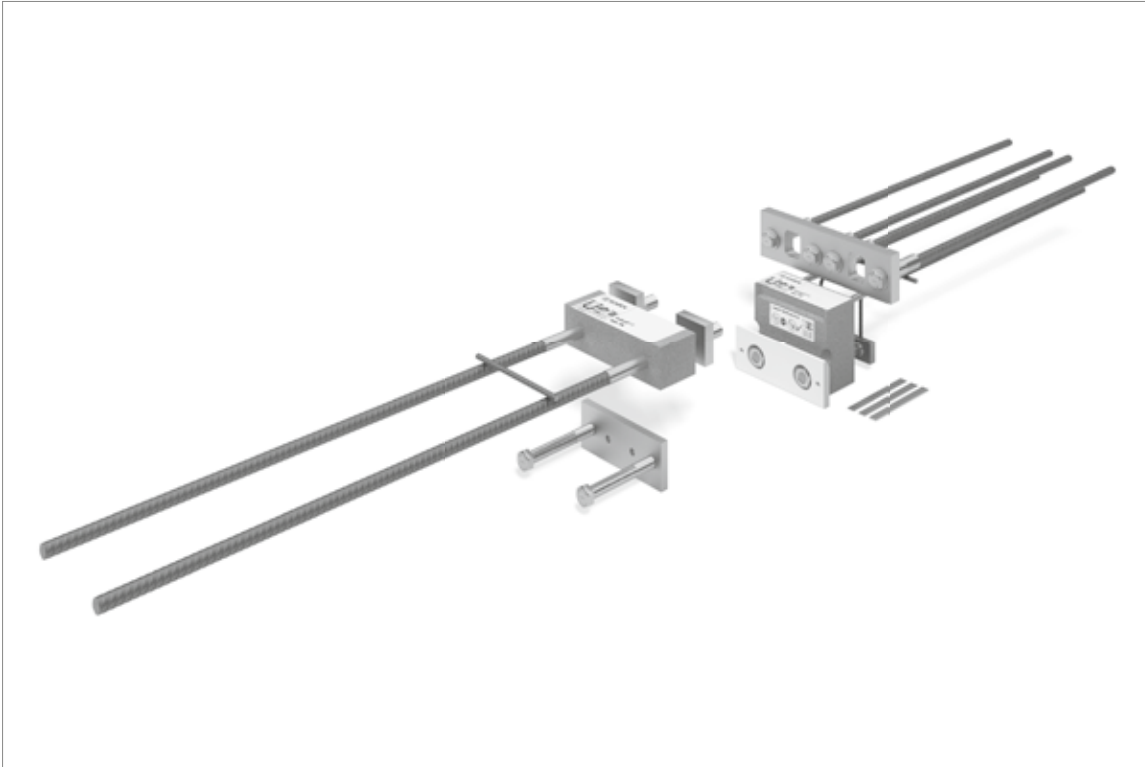
✓ Check list

The square with a tick indicates the check list. Here, the essential points of the design are briefly summarised.

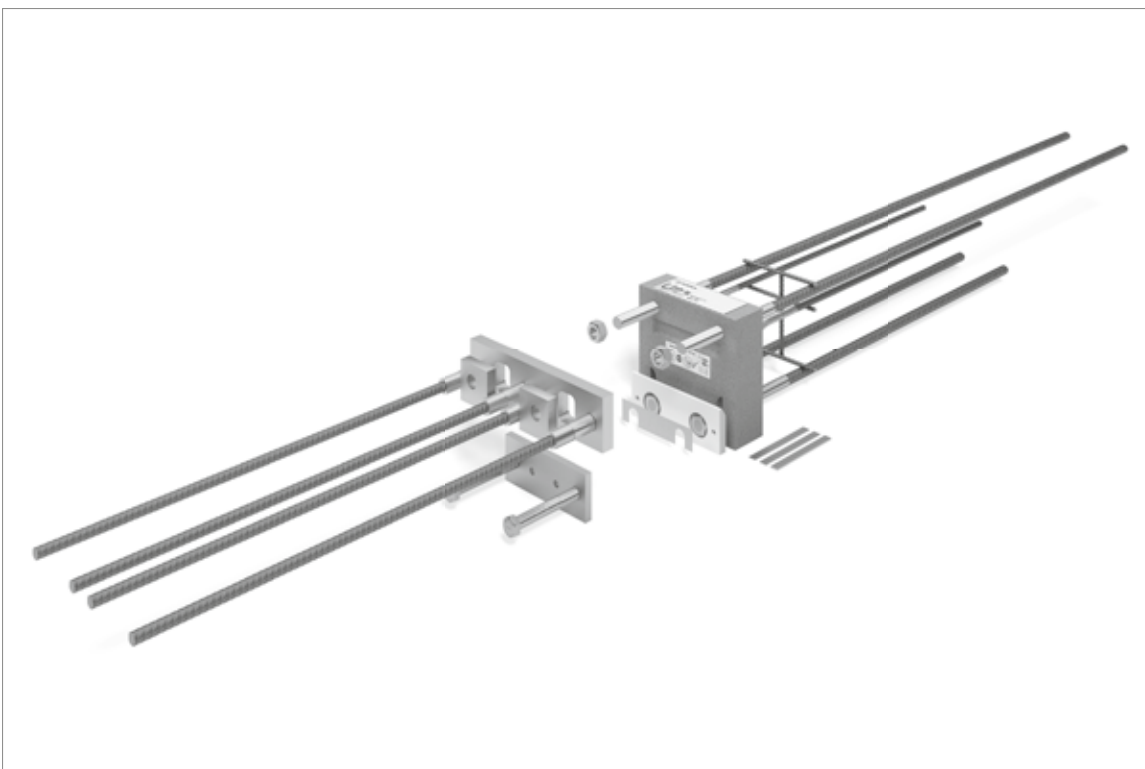
Reinforced concrete – reinforced concrete

Schöck IQlick

The Schöck Isokorb® T type K-IQ-A and K-IQ-B enable the balcony to be installed from the crane within 15-25 minutes. The anchorage consists of two parts, whereby the connecting elements are embedded by means of a special form both in the floor as well as in the balcony element. During installation on site, the threaded rods of the connection are fixed to the special mounting plate using two nuts. Following adjustment the recesses are filled with casting mortar in order to achieve a smooth finish.



1: Schöck Isokorb® T type K-IQ-A: The tensile connection is mounted and adjusted on the floor side.



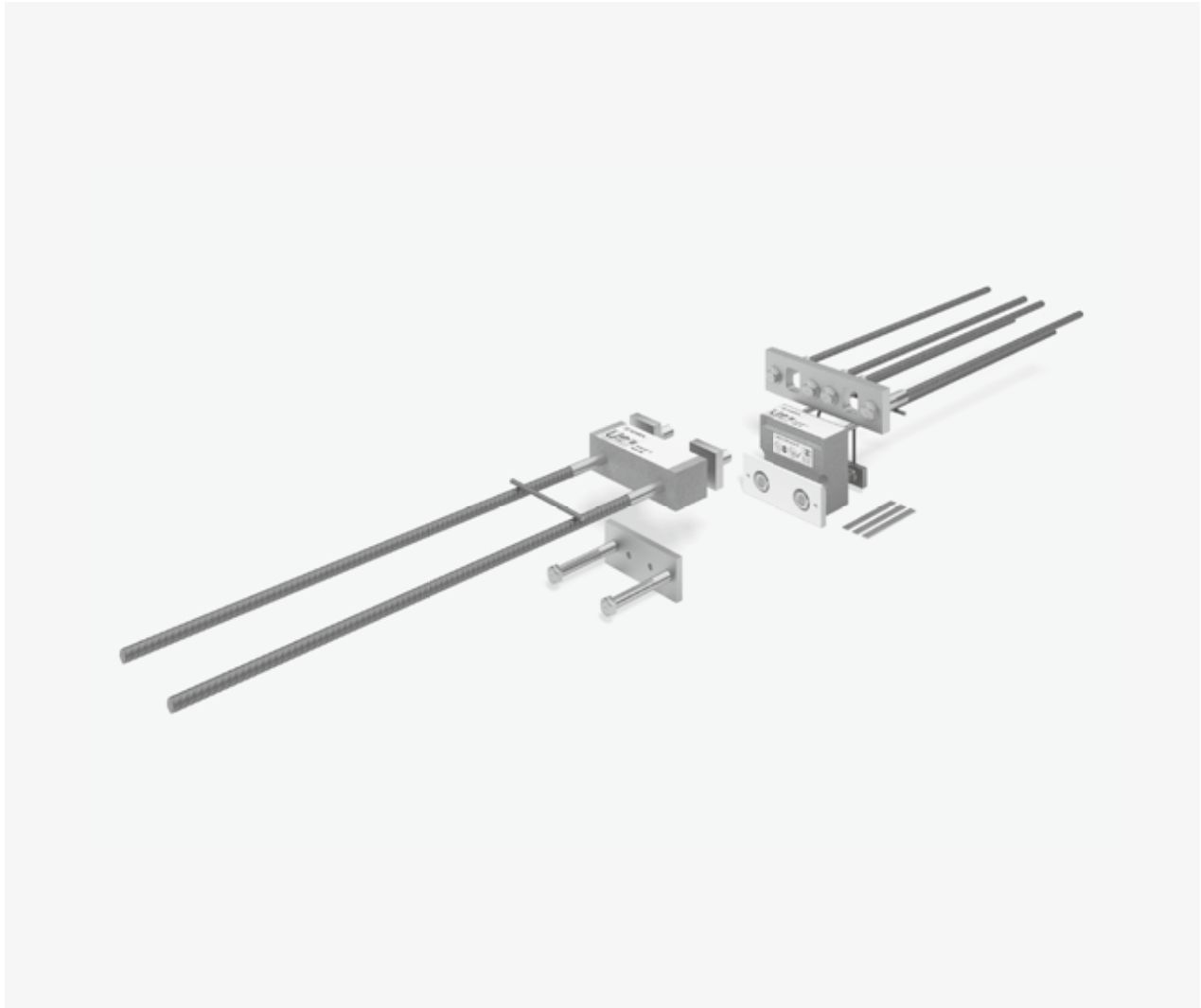
2: Schöck Isokorb® T type K-IQ-B: The tensile connection is mounted and adjusted on the balcony side.

Construction materials

Schöck Isokorb® construction materials

Reinforcing steel	B500B as per DIN 488-1, BSt 500 NR as per general technical approval
Pressure bearing in the concrete	S 355 JO as per NS EN 10025
Stainless steel	Grade: 1.4401, 1.4404, 1.4362, 1.4462 and 1.4571, as per Approval No.: Z-30.3-6
Load-bearing plate	Grade: 1.4404, 1.4362 and 1.4571 or higher quality e. g 1.4462
Spacer shims	Grade: 1.4401 S 235, thickness 2 mm and 3 mm
Insulating material	Neopor® – this insulating material is a polystyrene hard foam and is a registered trademark of BASF, $\lambda = 0.031 \text{ W}/(\text{m}\cdot\text{K})$, building material classification B1 (flame retardant). The version of the insulating material in mineral wool is available on request.
Butt plates	S 355 treated with preservative according to specification
Buffer plate	Polyamide PA6
	<ul style="list-style-type: none"> ■ The Schöck Isokorb® T type SK, which is manufactured and designed as per approval Z-15.7-292, is used as thermal insulation element. This document has been prepared on the basis of the standards SS-EN 1992 and SS-EN 1993. Where the National Annex to SS-EN 1992 and SS-EN 1993 deviates from these standards, the requirement according to SS-EN is higher in all cases. The structural design type approval carried out can therefore be used to verify compliance with the building regulations.

Schöck Isokorb® T type K-IQ-A, K-IQ-B



Schöck Isokorb® T type K-IQ-A, K-IQ-B

Load-bearing thermal break element for the support-free flexible installation of cantilevered balconies. The element transfers positive moments and negative shear forces.

Element arrangement

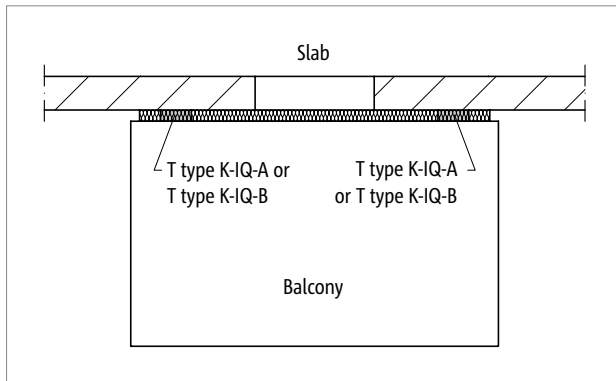


Fig. 3: Schöck Isokorb® T type K-IQ-A or K-IQ-B: Cantilevered balcony

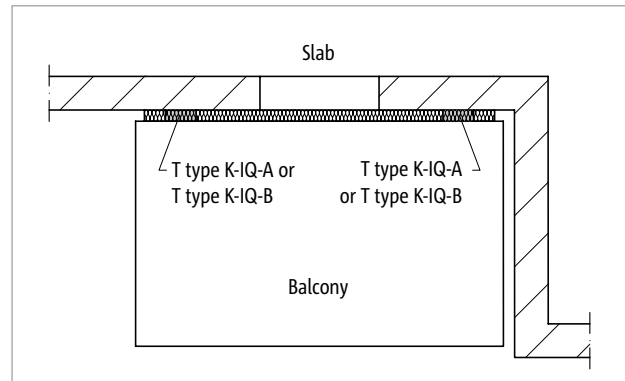


Fig. 4: Schöck Isokorb® T type K-IQ-A or K-IQ-B: Balcony with façade offset

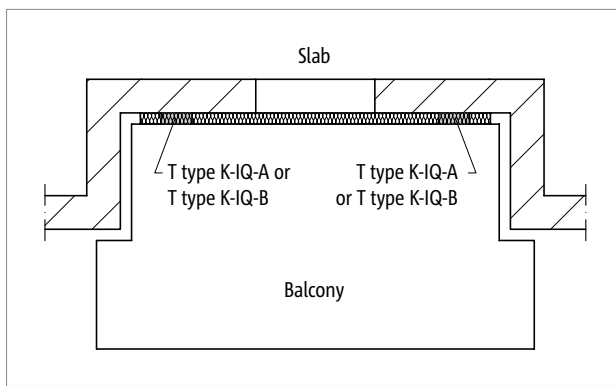


Fig. 5: Schöck Isokorb® T type K-IQ-A or K-IQ-B: Balcony with façade recess

Installation cross sections

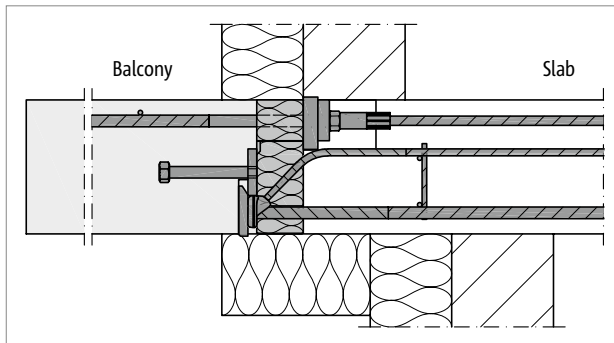


Fig. 6: Schöck Isokorb® T type K-IQ-A: Connection for an indirectly supported floor and ETICS

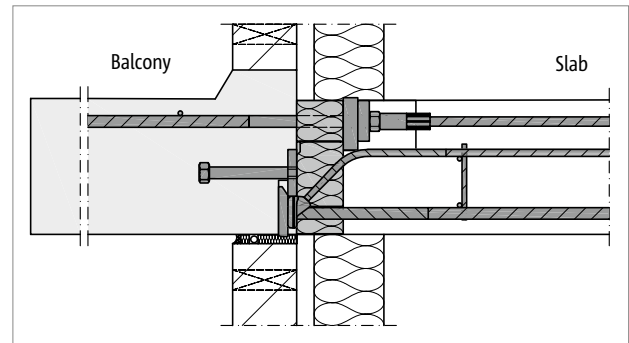


Fig. 7: Schöck Isokorb® T type K-IQ-A: Connection of precast balcony; the floor height corresponds to the height of the Schöck Isokorb®

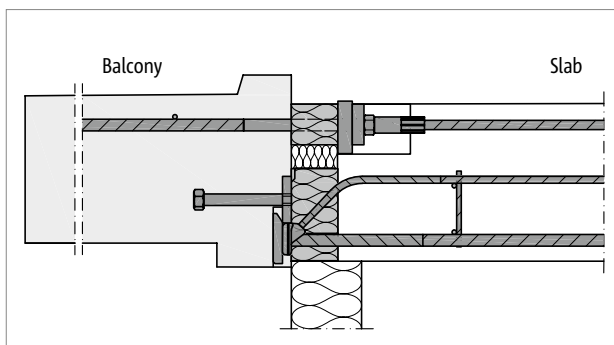


Fig. 8: Schöck Isokorb® T type K-IQ-A: Connection of precast balcony; the floor height is greater than the height of the Schöck Isokorb®

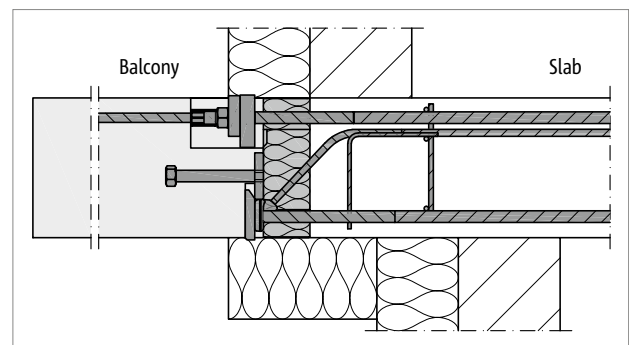


Fig. 9: Schöck Isokorb® T type K-IQ-B: Connection for an indirectly supported floor and ETICS

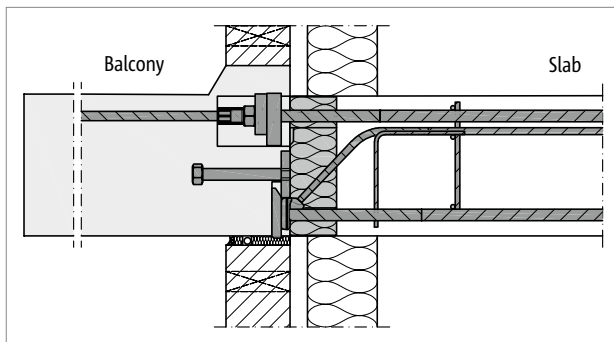


Fig. 10: Schöck Isokorb® T type K-IQ-B: Connection of precast balcony; the floor height corresponds to the height of the Schöck Isokorb®

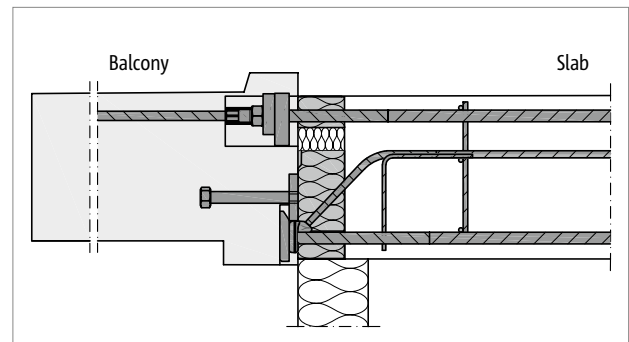


Fig. 11: Schöck Isokorb® T type K-IQ-B: Connection of precast balcony; the floor height is greater than the height of the Schöck Isokorb®

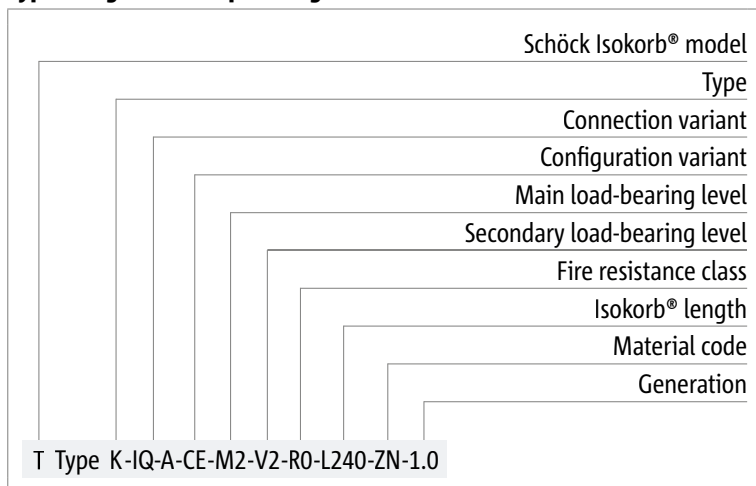
Product selection

Schöck Isokorb® T type K-IQ-A variants

The configuration of the Schöck Isokorb® T type K-IQ-A can vary as follows:

- Configuration variant:
 - IQ-A: The tensile connection is mounted and adjusted on the floor side.
- Connection variant:
 - CE with steel pressure bearing
 - CB with compression bars
- Main load-bearing level:
 - M2
- Secondary load-bearing level:
 - N2
- Fire resistance class:
 - R 0
- Isokorb® height:
 - H = 240 to 320mm for Schöck Isokorb® T type K-IQ-A, graduated in 10 mm steps. The planned height is to be set by the installer and the distance between the FS and BS parts is to be filled with insulation.
 - H = 160 mm for Schöck Isokorb® T part K-IQ-A-FS
 - H = 70 mm for Schöck Isokorb® T part K-IQ-A-BS
- Isokorb® length:
 - L = 240 mm for T type K-IQ-A
 - L = 180 mm for T part K-IQ-A-FS
 - L = 240 mm for T part K-IQ-A-BS
- Material code:
 - ZN - galvanised
 - NR - stainless
 - DC - duplex coating
- Generation:
 - 1.0

Type designations in planning documents



Product selection

Schöck Isokorb® T type K-IQ-A variants

The Schöck Isokorb® T type K-IQ-A consists of an FS (floor side) set and a BS (balcony side) set, which are sent to various processors:

Schöck Isokorb® T set K-IQ-A-CE/CB-FS is delivered to the building site (or precast plant) and includes:

- 1 x Schöck Isokorb® T part K-IQ-A-CE/CB-FS (Pos. 2)
 - including:
 - 2 x Schöck Isokorb® T part PW (Pos. 4)
 - 2 x M22 nuts (Pos. 5)
 - 2 x Schöck Isokorb® T part PA (Pos. 10)
 - 3 x steel shims (Pos. 11)

- 1 x Schöck Isokorb® T set K-IQ-A-FS:
 - 1 x Schöck Isokorb® T-K-IQ part PC (Pos. 3)
 - 4 x Schöck Isokorb® T-K-IQ part AC (Pos. 6)
 - 4 x Schöck Isokorb® T-K-IQ part BR (Pos. 9)

Schöck Isokorb® T set K-IQ-A-BS is delivered to the precast plant for balcony production and includes:

- 1 x Schöck Isokorb® T part K-IQ-A-BS (Pos. 1)
 - including:
 - 2 x Schöck Isokorb® T part PW (Pos. 4)
 - 2 x Schöck Isokorb® T part PA (Pos. 10)
- 1 x Schöck Isokorb® T set K-IQ-A-BS:
 - 1 x Schöck Isokorb® T-K-IQ part PV (Pos. 7)
 - 2 x Schöck Isokorb® T-K-IQ part BC (Pos. 8)

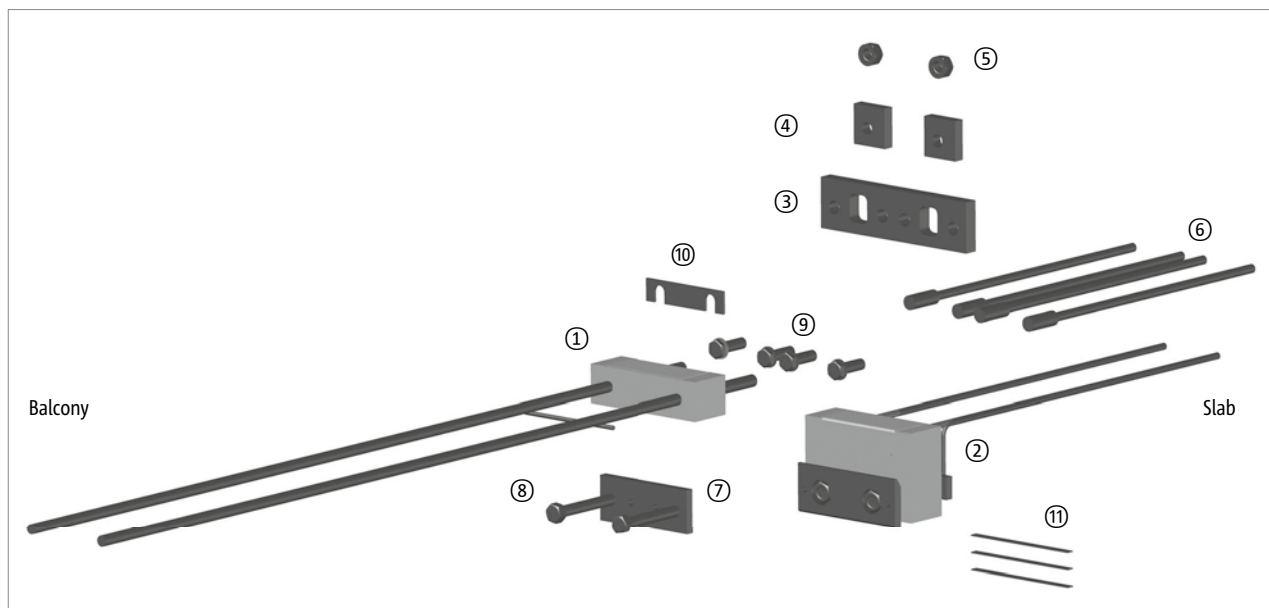


Fig. 12: Schöck Isokorb® T type K-IQ-A-CE: 3D representation

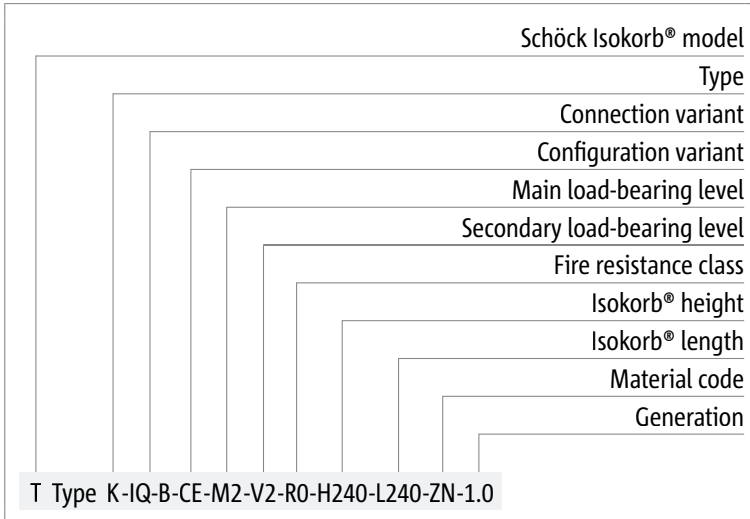
Product selection

Schöck Isokorb® T type K-IQ-B variant

The configuration of the Schöck Isokorb® T type K-IQ-B can vary as follows:

- Configuration variant:
 - IQ-B: The tensile connection is mounted and adjusted on the balcony side.
- Connection variant:
 - CE with steel pressure bearing
 - CB with compression bars
- Main load-bearing level:
 - M2
- Secondary load-bearing level:
 - N2
- Fire resistance class:
 - R 0
- Isokorb® height:
 - H = 240 to 320 mm, graduated in 10 mm steps
- Isokorb® length:
 - L = 240 mm
- Material code:
 - ZN - galvanised
 - NR - stainless
 - DC - duplex coating
- Generation:
 - 1.0

Type designations in planning documents



Product selection

Schöck Isokorb® T type K-IQ-B variant

The Schöck Isokorb® T type K-IQ-B consists of an FS (floor side) set and a BS (balcony side) set, which are sent to various processors:

- 1 x Schöck Isokorb® T part K-IQ-A-CE/CB-FS (Pos. 2)
including:
 - 2 x Schöck Isokorb® T part PW (Pos. 4)
 - 2 x Schöck Isokorb® T part PA (Pos. 10)
 - 2 x M22 nuts (Pos. 5)
 - 3 x steel shims (Pos. 11)
- Schöck Isokorb® T set K-IQ-B-BS:
 - 1 x Schöck Isokorb® T-K-IQ part PC (Pos. 3)
 - 4 x Schöck Isokorb® T-K-IQ part AC (Pos. 6)
 - 1 x Schöck Isokorb® T-K-IQ part PV (Pos. 7)
 - 2 x Schöck Isokorb® T-K-IQ part BC (Pos. 8)
 - 4 x Schöck Isokorb® T-K-IQ part BR (Pos. 9)

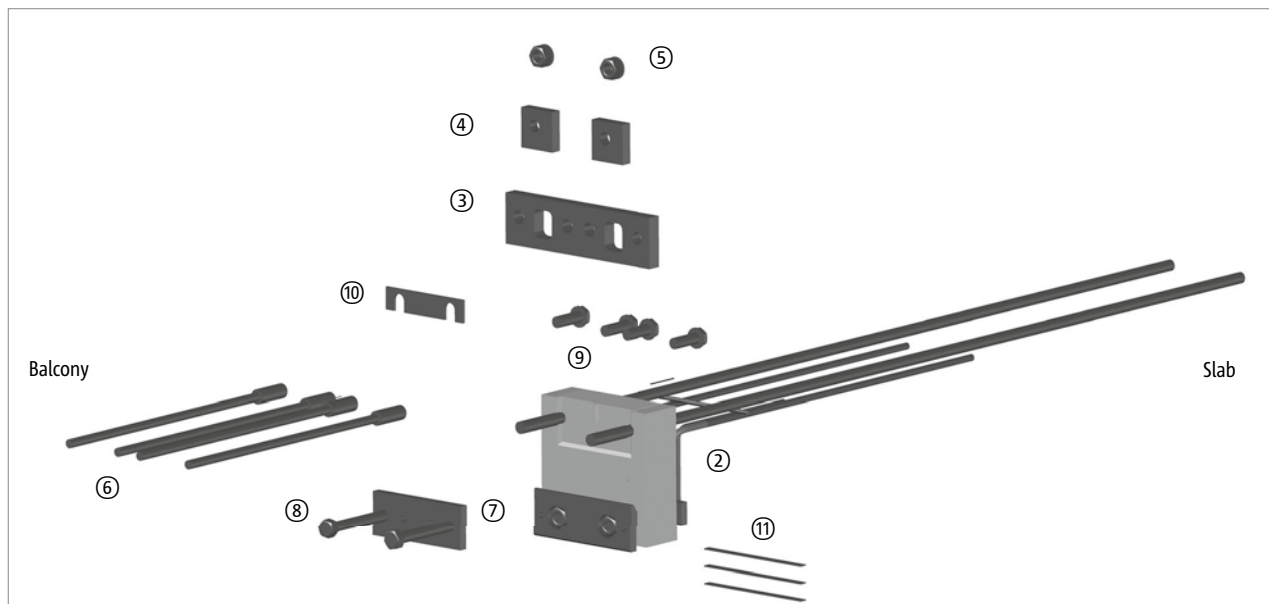


Fig. 13: Schöck Isokorb® T type K-IQ-B-CE: 3D representation

Slenderness

Slenderness

In order to safeguard the serviceability limit state we recommend the limitation of the slenderness to the following maximum cantilever lengths $max l_k$ [m]:

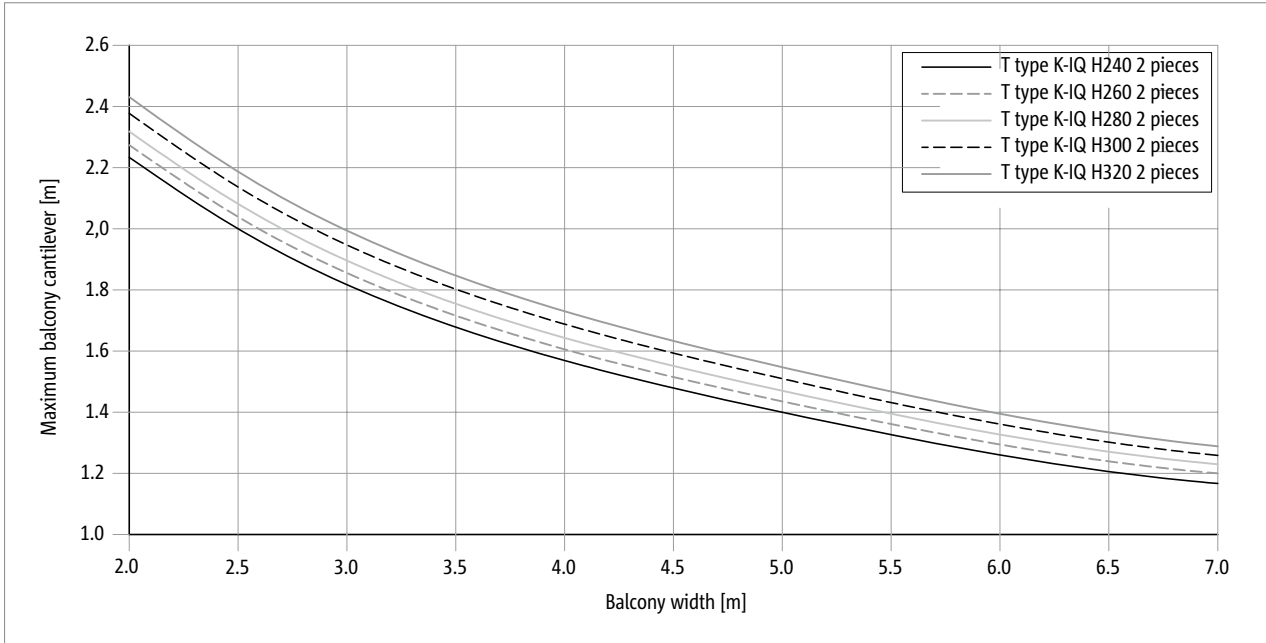


Fig. 14: Schöck Isokorb® T type K-IQ-A or K-IQ-B (2 pieces): Maximum cantilever length

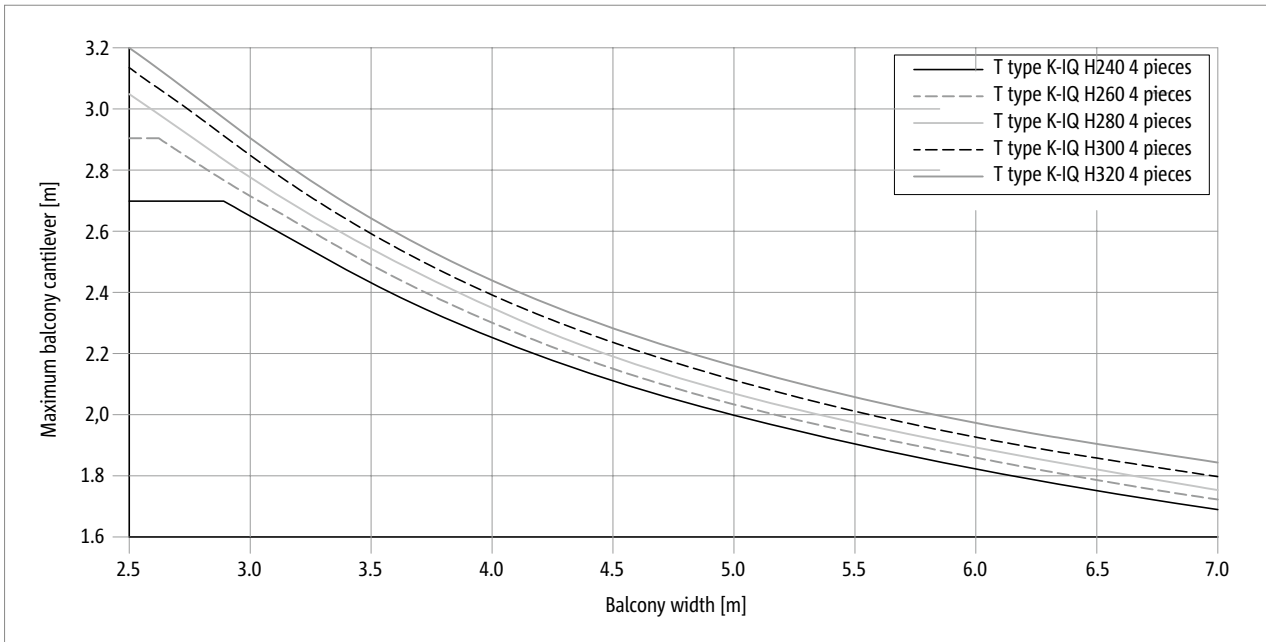


Fig. 15: Schöck Isokorb® T type K-IQ-A or K-IQ-B (4 pieces): Maximum cantilever length

Slenderness

A reduction in weight according to the following principles, with the same cantilever, can increase the usable width by up to 30 %.

The engineers of Schöck's Technical Design Department will be happy to advise you on structural and design issues. Please contact our Technical Design Department with any questions about our products and for assistance with your projects.

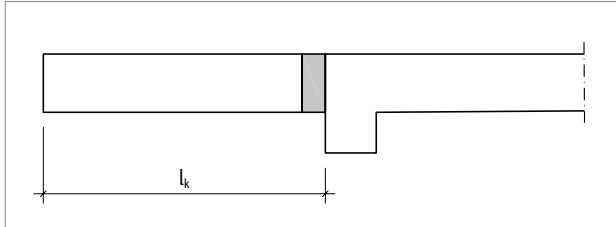


Fig. 16: Schöck Isokorb® T type K-IQ-A or K-IQ-B: Standard balcony type

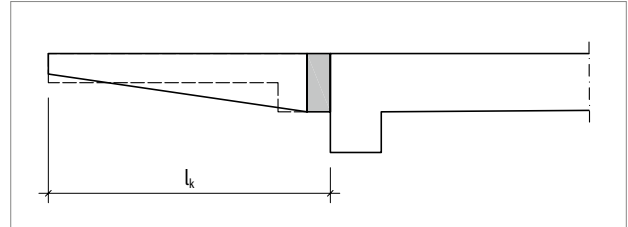


Fig. 17: Schöck Isokorb® T type K-IQ-A or K-IQ-B: Balcony type with weight reduction

i Maximum cantilever length

- The maximum cantilever length to ensure serviceability is a benchmark. It can be limited by the load-bearing capacity when using the Schöck Isokorb® T type K-IQ.

Design

Schöck Isokorb® T type K-IQ-A/B-CE		M2					
Design values with		$k_{VRd,z}$	Concrete strength class				
			$\geq C20/25$	$\geq C25/30$	$\geq C30/37$	$\geq C35/45$	$\geq C40/50$
		$M_{Rd,y} = \text{Tabellenwert} + k_{VRd,z} \cdot (69,5 \text{ kN} - V_{Ed,z}) \text{ [kN/Element]}$					
Isokorb® height H [mm]	240	0.073	18,8	24,7	30,7	36,7	37,5
	250	0.082	19,5	25,9	32,2	38,5	39,4
	260	0.092	20,3	27,0	33,6	40,3	41,3
	270	0.101	21,1	28,1	35,1	42,1	43,1
	280	0.110	21,8	29,2	36,6	44,0	45,0
	290	0.120	22,6	30,3	38,1	45,8	46,9
	300	0.129	23,4	31,5	39,5	47,6	48,8
	310	0.139	24,1	32,6	41,0	49,5	50,7
	320	0.148	24,9	33,7	42,5	51,3	52,5
Secondary load-bearing level	$V_{Rd,z} \text{ [kN/element]}$						
	V2	69.5					
	$V_{Rd,y} \text{ [kN/element]}$						
	V2	±6.5					

Schöck Isokorb® T type K-IQ-A/B-CB		M2			
Design values with		$k_{VRd,z}$	Concrete strength class		
			$\geq C20/25$	$\geq C25/30$	
		$M_{Rd,y} = \text{Tabellenwert} + k_{VRd,z} \cdot (69,5 \text{ kN} - V_{Ed,z}) \text{ [kN/Element]}$			
Isokorb® height H [mm]	240	0.073	30,0	37,5	
	250	0.082	31,5	39,4	
	260	0.092	33,0	41,3	
	270	0.101	34,5	43,1	
	280	0.110	36,0	45,0	
	290	0.120	37,5	46,9	
	300	0.129	39,0	48,8	
	310	0.139	40,5	50,7	
	320	0.148	42,0	52,5	
Secondary load-bearing level	$V_{Rd,z} \text{ [kN/element]}$				
	V2	69.5			
	$V_{Rd,y} \text{ [kN/element]}$				
	V2	±6.5			

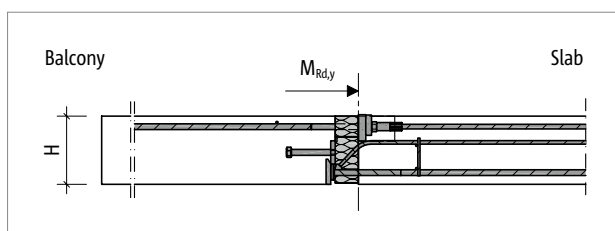


Fig. 18: Schöck Isokorb® T type K-IQ-A-CB: Static system

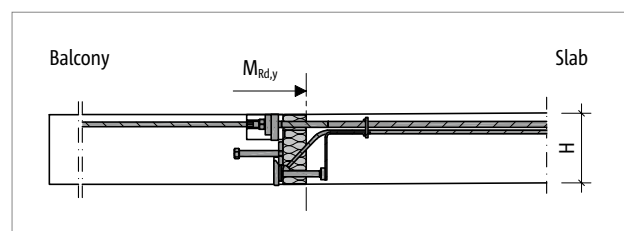


Fig. 19: Schöck Isokorb® T type K-IQ-B-CE: Static system

Notes on design

- Static evidence must be furnished for the components connecting to both sides of the Isokorb®.
- Moment resistance $M_{Rd,y}$ results from the formula: $M_{Rd,y} = \text{Table value} + k_{VRd,z} \cdot (69,5 \text{ kN} - V_{Ed,z}) \text{ [kNm/element]}$

Design example

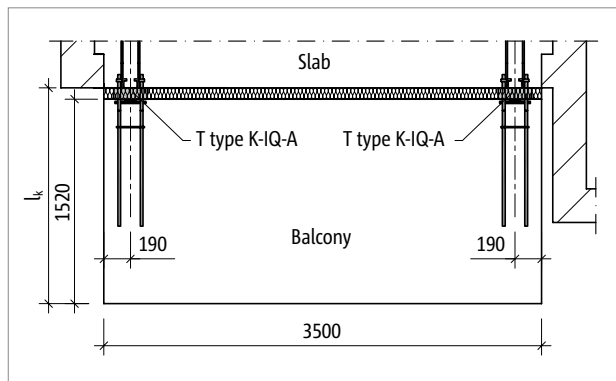


Fig. 20: Schöck Isokorb® T type K-IQ-A: Plan

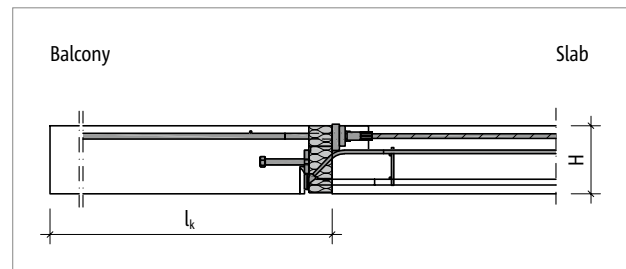


Fig. 21: Schöck Isokorb® T type K-IQ-A-CB: Section

Static system and design load

Prefabricated construction – completely precast balcony

Selected:	Schöck Isokorb® height $H = 280$ mm Concrete strength class C25/30 for the floor Concrete strength class C40/50 for the balcony Concrete cover $c_v = 30$ mm for the Schöck Isokorb® tension bars Insulating element thickness $b = 80$ mm
Connection geometry:	No height offset, no floor edge downstand beam, no balcony upstand
Load assumptions:	Balcony slab $g = 7.00$ kN/m ² Imposed load $g = 3.5$ kN/m ² Edge load (balustrade) $g_R = 0.8$ kN/m
Slab bearing:	Slab edge indirectly supported
Balcony bearing:	Restraint of the cantilever slab using Schöck Isokorb® T type K-IQ-A-CB

Verification of ultimate limit state (moment stress and shear force)

Internal forces:	$M_{Ed} = +([3.5 \text{ m} \cdot (\gamma_G \cdot g + \gamma_Q \cdot q) + 2 \cdot \gamma_G \cdot g_R] \cdot l_k \cdot (0.5 \cdot l_k + b) + 3.5 \text{ m} \cdot \gamma_G \cdot g_R \cdot (l_k + b)) / 2$ $M_{Ed} = +([3.5 \cdot (1.35 \cdot 7.00 + 1.5 \cdot 3.5) + 2 \cdot 1.35 \cdot 0.8] \cdot 1.52 \cdot (0.5 \cdot 1.52 + 0.08) + 3.5 \cdot 1.35 \cdot 0.8 \cdot (1.52 + 0.08)) / 2 = +37.2$ kNm/element $V_{Ed} = +([3.5 \text{ m} \cdot (\gamma_G \cdot g + \gamma_Q \cdot q) + 2 \cdot \gamma_G \cdot g_R] \cdot l_k + 3.5 \text{ m} \cdot \gamma_G \cdot g_R) / 2$ $V_{Ed} = + (3.5 \cdot [(1.35 \cdot 7.00 + 1.5 \cdot 3.5) + 2 \cdot 1.35 \cdot 0.8] \cdot 1.52 + 3.5 \cdot 1.35 \cdot 0.8) / 2 = +42.60$ kN/element
------------------	---

Selected: **2 pieces Schöck Isokorb® T type K-IQ-A-CB-M2-V2-R0-L240-1.0**

$$M_{Rd} = \text{Table value} + k_{VRd,z} \cdot (69.5 \text{ kN} - V_{Ed,z}) > M_{Ed}$$

$$M_{Rd} = 45.0 + 0.110 \cdot (69.5 - 42.60) = +48.00 \text{ kN/element} > M_{Ed}$$

$$V_{Rd} = +69.5 \text{ kN/element} > V_{Ed}$$

Verification of serviceability limit state (deflection/precamber, vibrations)

Torsion spring stiffness: $C = 7187$ kNm/rad/m (from table, see page 20)

Quasi permanent load combination: $g + 0.3 \cdot q$

Calculate $M_{Ed,SLS}$ in serviceability limit state

$$M_{Ed,SLS} = +([3.5 \text{ m} \cdot [(g + \psi_{2.1} \cdot q) + 2 \cdot g_R] \cdot l_k \cdot (0.5 \cdot l_k + b) + b \cdot g_R \cdot (l_k + b)) / 2$$

$$M_{Ed,SLS} = +([3.5 \cdot [(7.0 + 0.3 \cdot 2.5) + 2 \cdot 0.8] \cdot 1.52 \cdot (0.5 \cdot 1.52 + 0.08) + 3.5 \cdot 0.8 \cdot (1.52 + 0.08)) / 2 = +21.2$$
 kNm/element

Deflection $w_{\ddot{u}} = M_{Ed,SLS} (l_k + b) / C \cdot 10^3$ [mm]

$$w_{\ddot{u}} = +21.2 \cdot (1.52 + 0.08) / 7187 \cdot 10^3 = 4.7 \text{ mm}$$

Natural frequency $f_e = \sqrt{(0.384 \cdot 10^3 / 4.7)} = 9.04$ Hz > 6 Hz

=> No disturbing vibrations

Deflection/Camber | Torsional spring stiffness

Deflection

With Schöck Isokorb®, which transfer moments, it is to be noted that with the transfer of force a small angular deflection ($\varphi_{\text{Isokorb}}^{\circ}$) occurs in the Schöck Isokorb®. If you want to undo this deformation in the final state, the affected concrete components must be adapted by an additional camber at the end of the cantilever during construction.

Deformation ($w_{\bar{u}}$) caused by the Schöck Isokorb®

$$w_{\bar{u}} = M_{\text{Ed,SLS}} / C \cdot l_k \cdot 10^3 \text{ [mm]}$$

Factors to be incorporated:

$M_{\text{Ed,SLS}}$ = Relevant bending moment [kNm/m] in serviceability limit state (SLS) for the determination of the deformation $w_{\bar{u}}$ [mm] caused by the Schöck Isokorb®.

The structural engineer specifies the load combination to be used when calculating the deformation.

(Recommendation: Load combination for the determination of the camber $w_{\bar{u}}$: determine $g + 0.3 \cdot q$, $M_{\text{Ed,SLS}}$ in the serviceability limit state)

C = Torsion spring stiffness of the Schöck Isokorb® [kNm/rad/m], see design

l_k = Cantilever length [m]

Design example, see page 19

Torsion spring stiffness

The torsion spring stiffness of the Schöck Isokorb® is to be taken into account with the verification of the serviceability limit state. To the extent that an examination of the vibration behaviour of the steel structure to be connected is necessary, the additional deformation resulting from the Schöck Isokorb® must be taken into consideration.

Schöck Isokorb® T type K-IQ-A/B		M2
Torsion spring stiffness for		C [kNm/rad]
Isokorb® height H [mm]	240	4688
	250	5263
	260	5871
	270	6512
	280	7187
	290	7894
	300	8635
	310	9409
	320	10217

Expansion joint spacing | Edge spacing

Maximum expansion joint spacing

Expansion joints must be provided in the external member. Changes in length due to temperature deformation are determined by the maximum distance e from the centre of the outermost Schöck Isokorb® T type K-IQ. With this the external component can overhang the outermost Schöck Isokorb®. In the case of fixed points, half the maximum distance e from the fixed point applies.

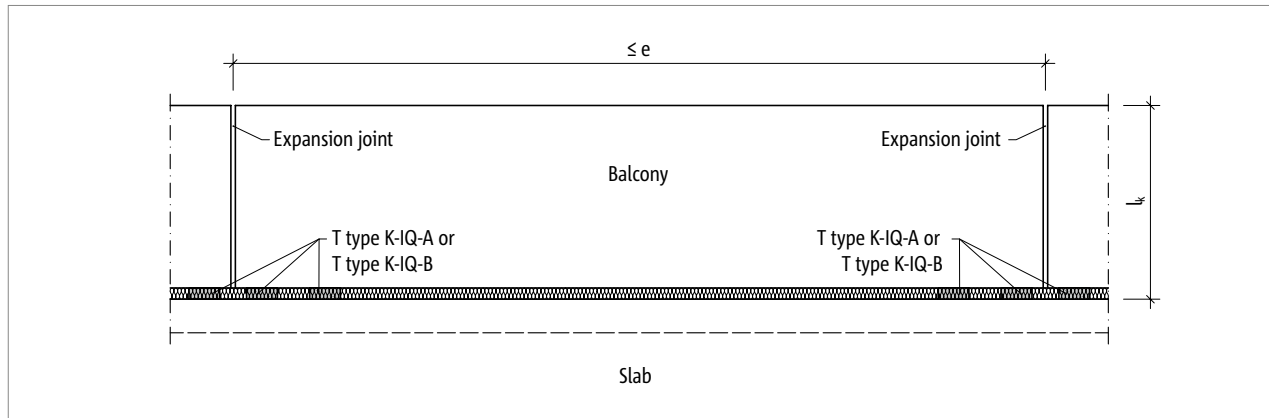


Fig. 22: Schöck Isokorb® T type K-IQ: Expansion joint layout

Schöck Isokorb® T type K-IQ-A/B		M2
Maximum expansion joint spacing when		e [m]
Insulating element thickness [mm]	80	3.5

Edge spacing

The Schöck Isokorb® T type K-IQ must be so positioned that minimum edge spacing in relation to the inner reinforced concrete elements are complied with:

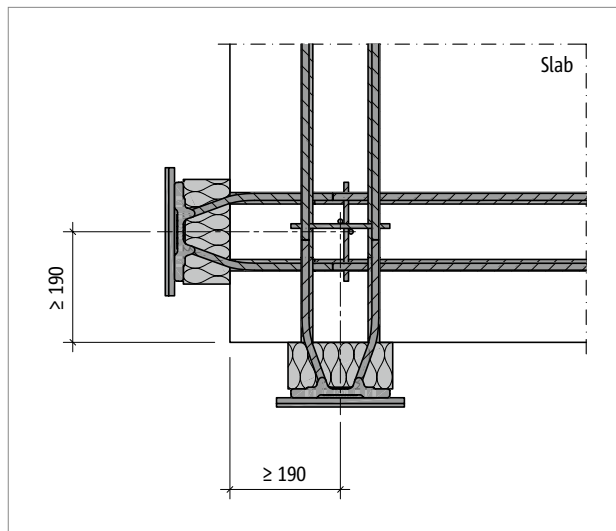


Fig. 23: Schöck Isokorb® T type K-IQ-A: Edge distances at the outer corner with Isokorbs® arranged vertically to each other

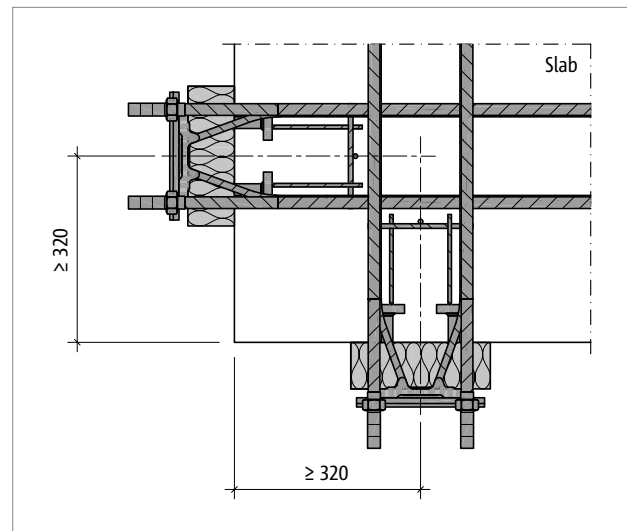


Fig. 24: Schöck Isokorb® T type K-IQ-B: Edge distances at the outer corner with Isokorbs® arranged vertically to each other

Centre-to-centre distances

Axis distances

The Schöck Isokorb® T type K-IQ must be so positioned that minimum centre-to-centre distances of Isokorb® to Isokorb® are complied with:

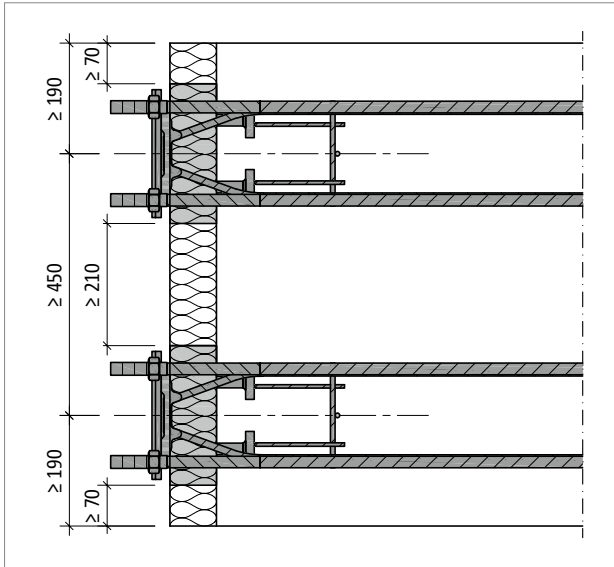


Fig. 25: Schöck Isokorb® T type K-IQ: Axis distance

Outer corner

Height offset on outer corner

On an outer corner, the Schöck Isokorbs® T type K-IQ are arranged perpendicular to each other. This will allow the tension, compression and shear force rods to overlap, which is why the Schöck Isokorbs® T type K-IQ must be arranged at offset heights. To help achieve this, 20 mm insulation strips are added directly beneath and directly above the insulating element of the Schöck Isokorb® type K-IQ on site.

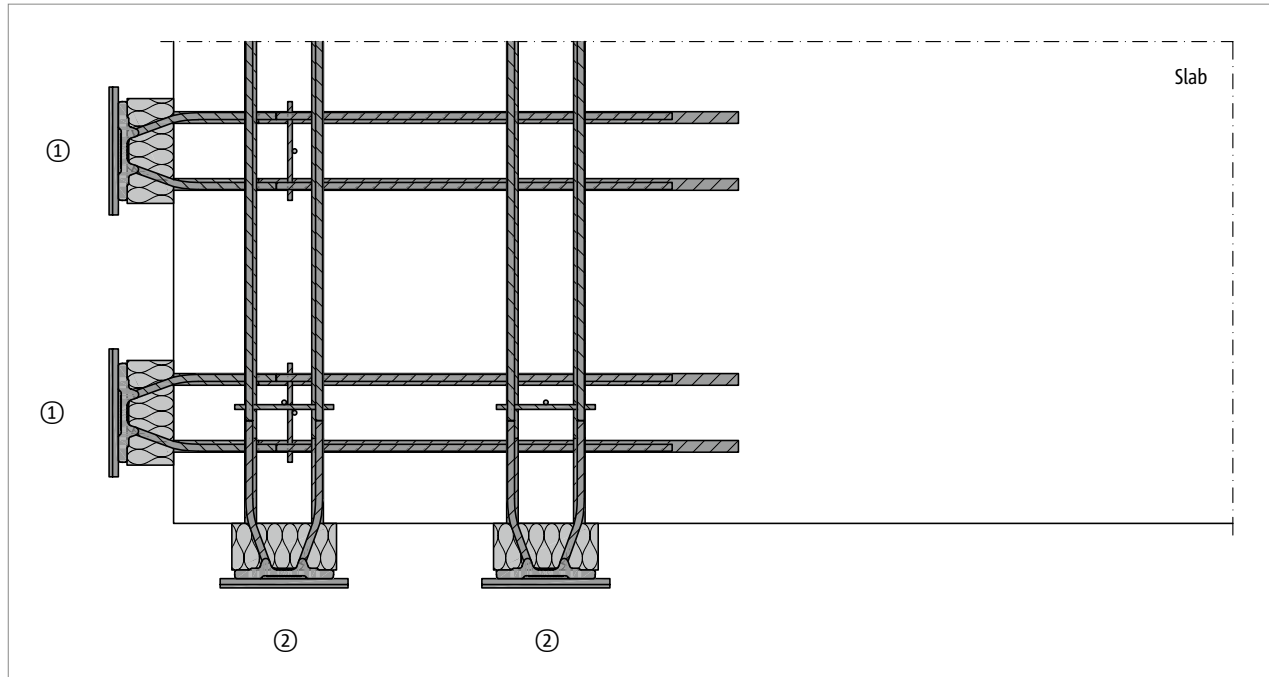


Fig. 26: Schöck Isokorb® T type K-IQ-A: Outer corner

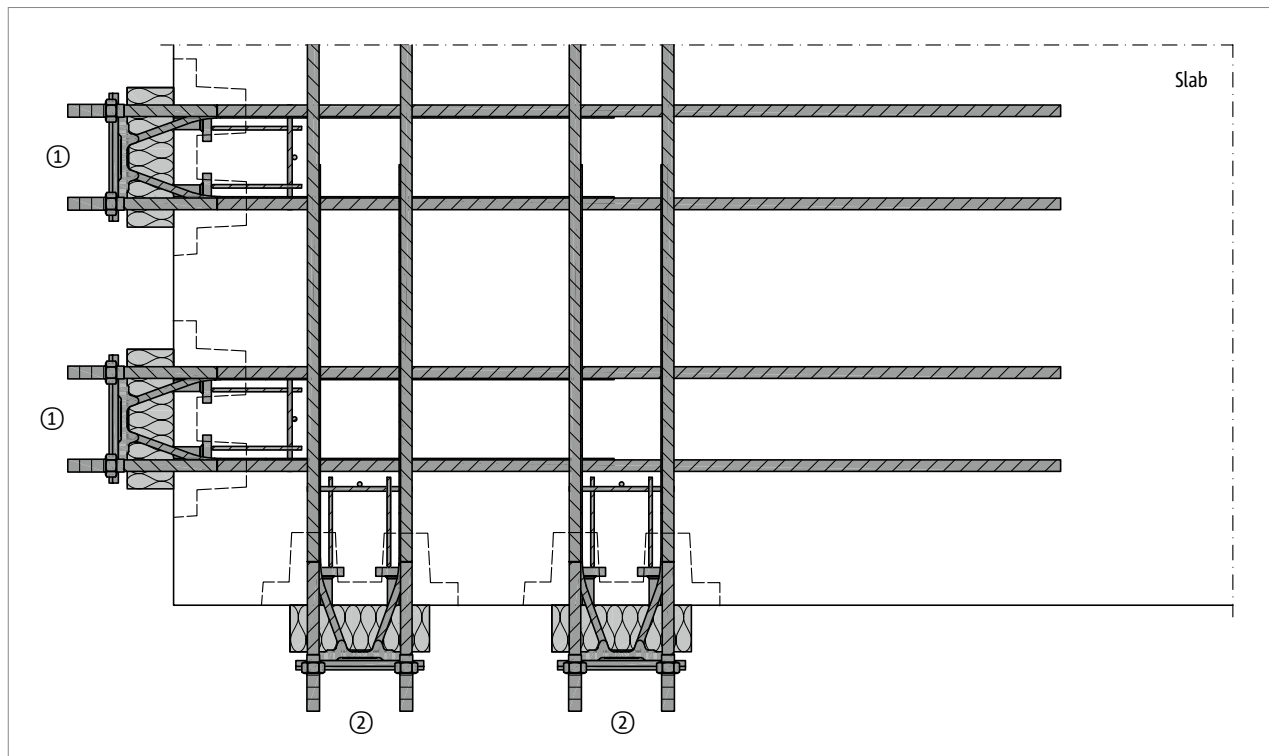


Fig. 27: Schöck Isokorb® T type K-IQ-B: Outer corner

Outer corner

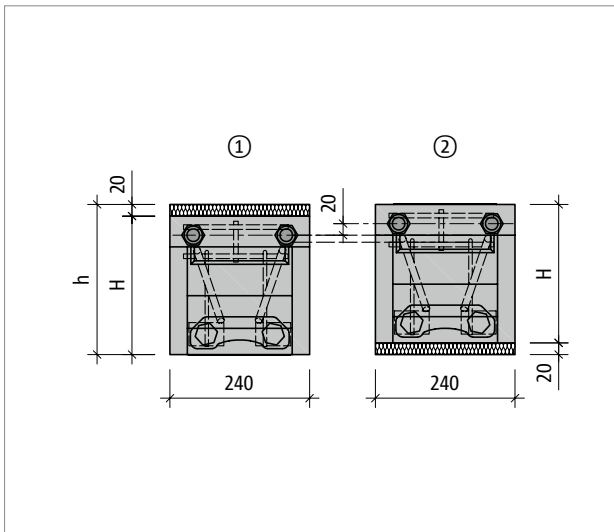


Fig. 28: Schöck Isokorb® T type K-IQ: Positioning with height offset

i Outer corner

- The corner solution using Schöck Isokorb® T type K-IQ requires a floor thickness of $h \geq 260$ mm!
- With the design of a corner balcony it is to be noted that the 20 mm height difference in the area of the corner is also to be taken into account with the on-site front slabs.
- The centre-to-centre, element and edge distances of the Schöck Isokorb® T type K-IQ are to be maintained.

Product description

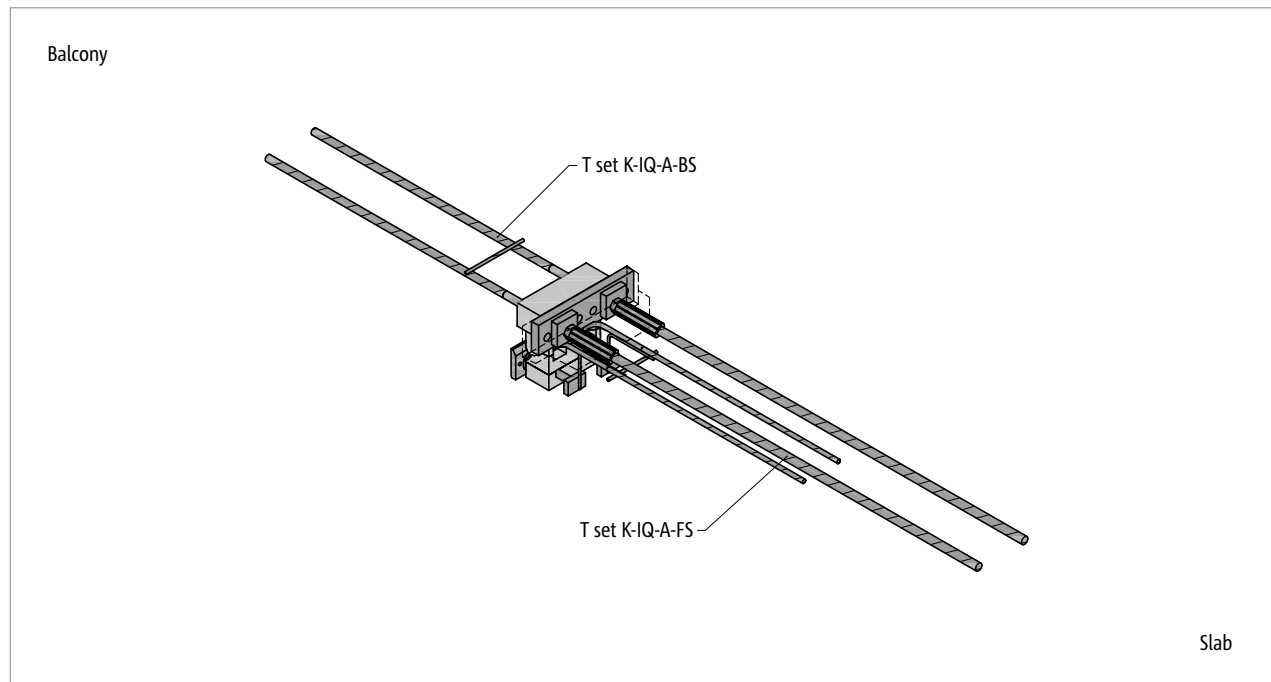


Fig. 29: Schöck Isokorb® T type K-IQ-A: 3D representation

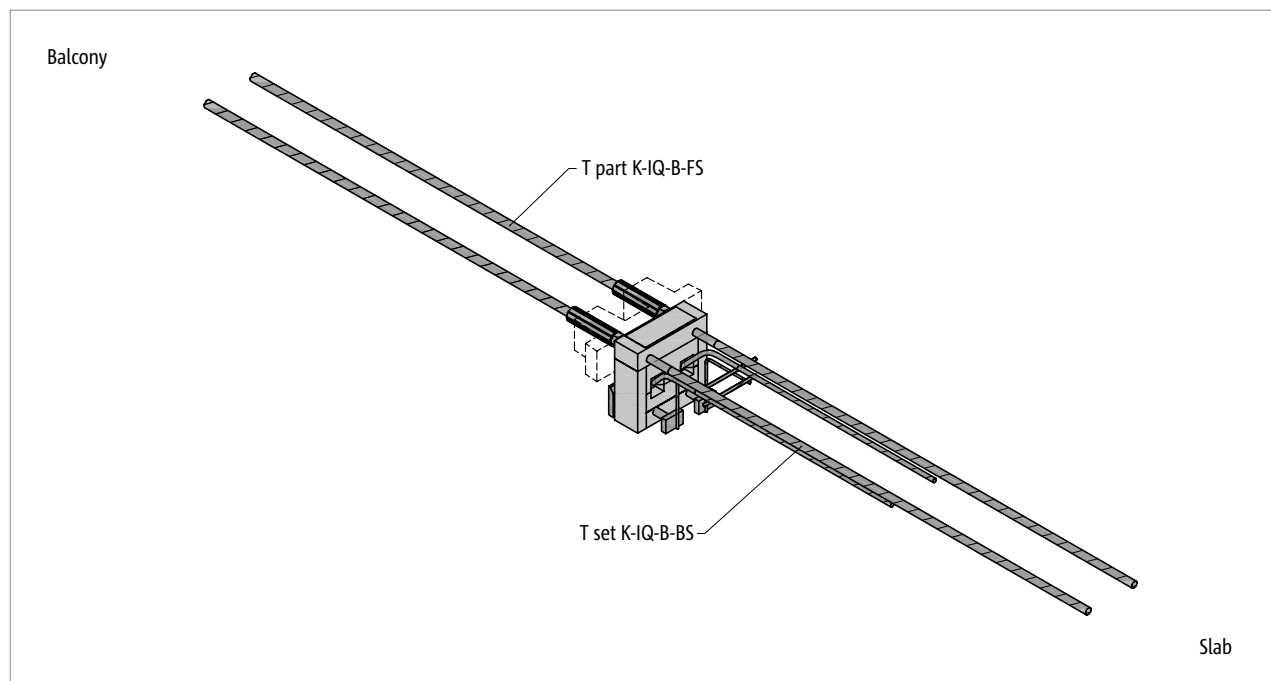


Fig. 30: Schöck Isokorb® T type K-IQ-B: 3D representation

Product description

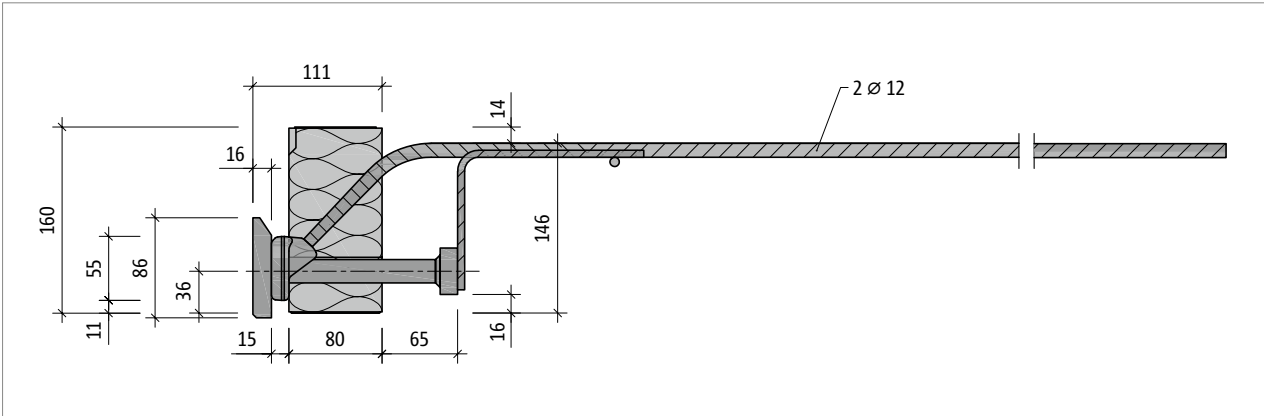


Fig. 31: Schöck Isokorb® T part K-IQ-A-CE-FS: Product section

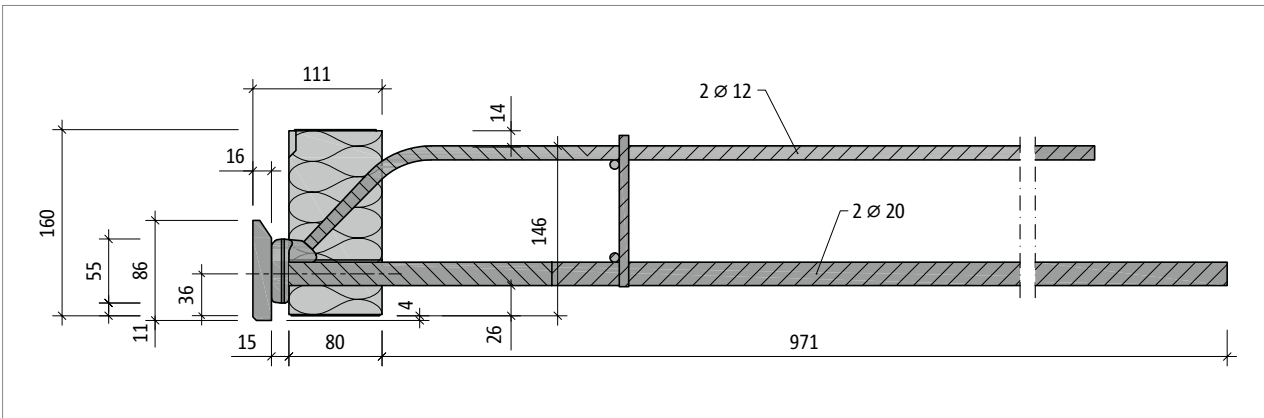


Fig. 32: Schöck Isokorb® T part K-IQ-A-CB-FS: Product section

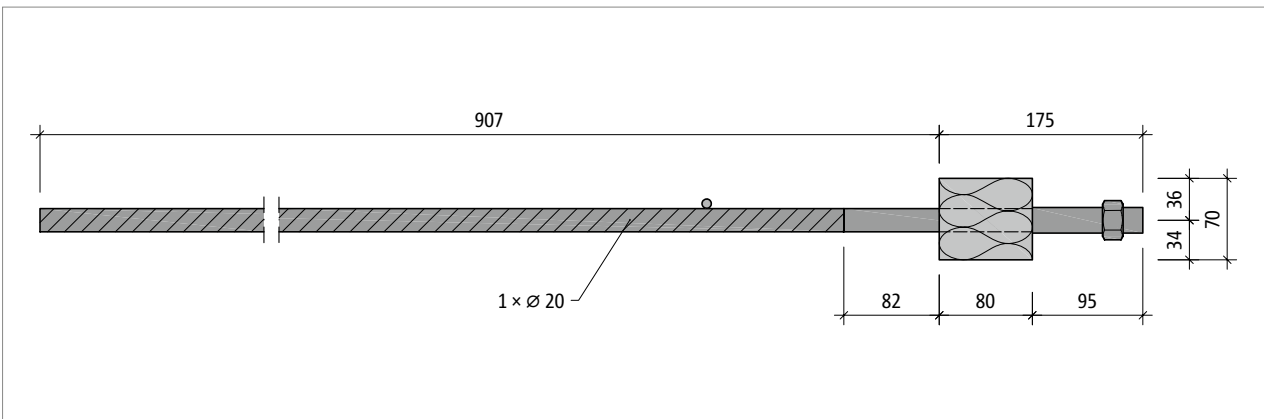


Fig. 33: Schöck Isokorb® T part K-IQ-A-BS: Product section

Product information

- For additional 2D and 3D product drawings contact our Design Support department.

Product description

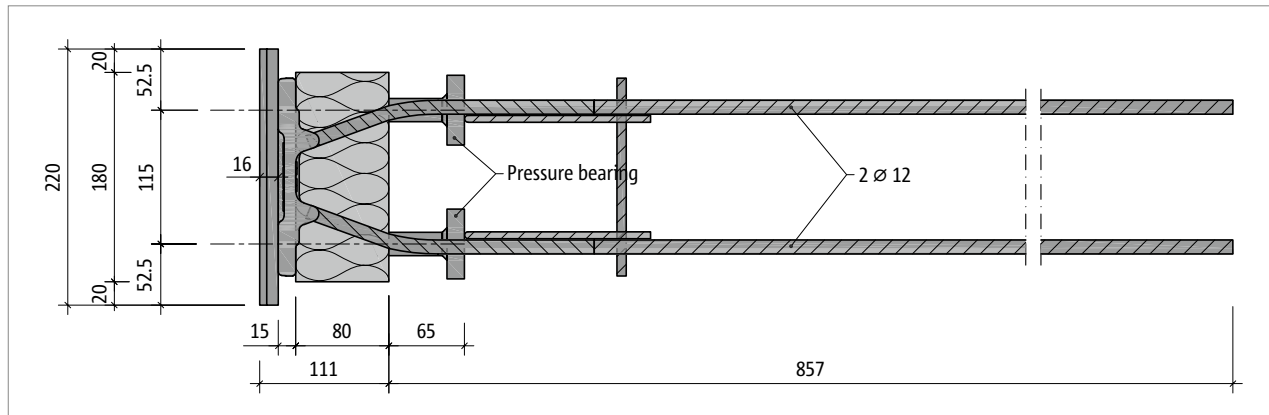


Fig. 34: Schöck Isokorb® T part K-IQ-A-CE-FS: Product layout

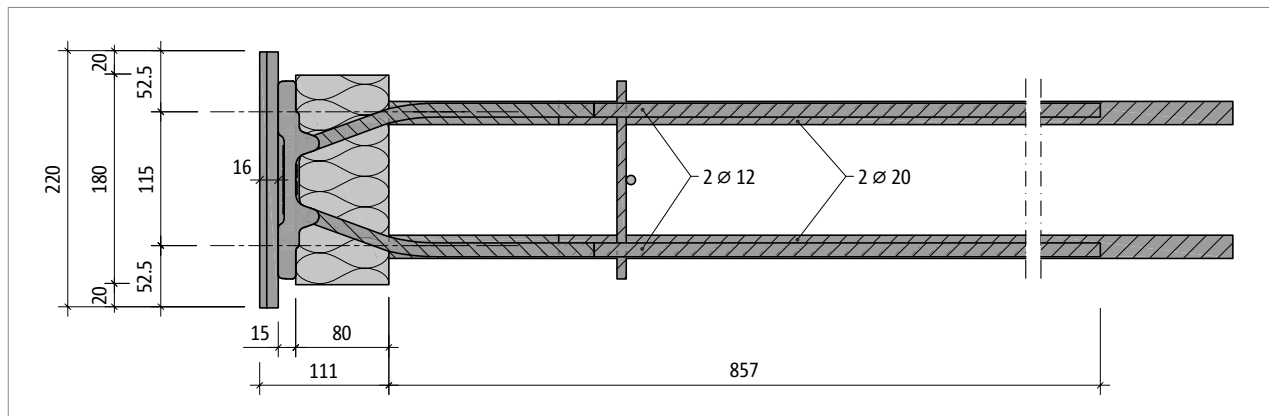


Fig. 35: Schöck Isokorb® T part K-IQ-A-CB-FS: Product layout

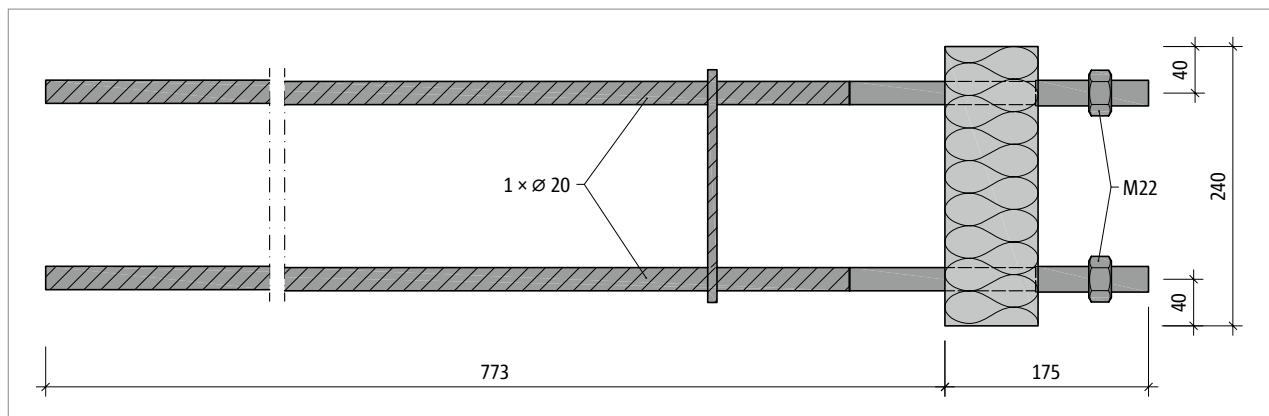


Fig. 36: Schöck Isokorb® T part K-IQ-A-B5: Product layout

Product information

- For additional 2D and 3D product drawings contact our Design Support department.

Product description

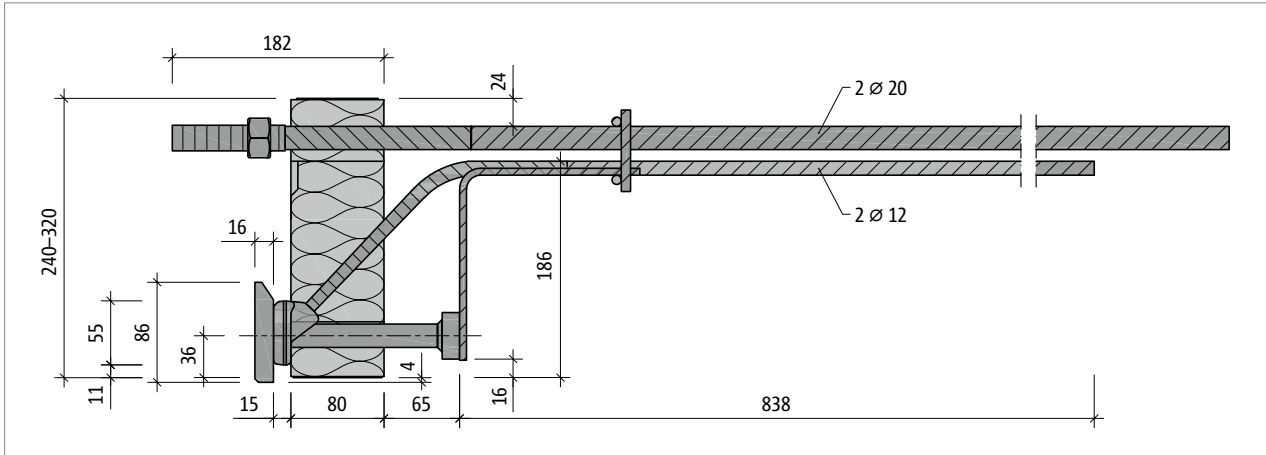


Fig. 37: Schöck Isokorb® T part K-IQ-B-CE: Product section

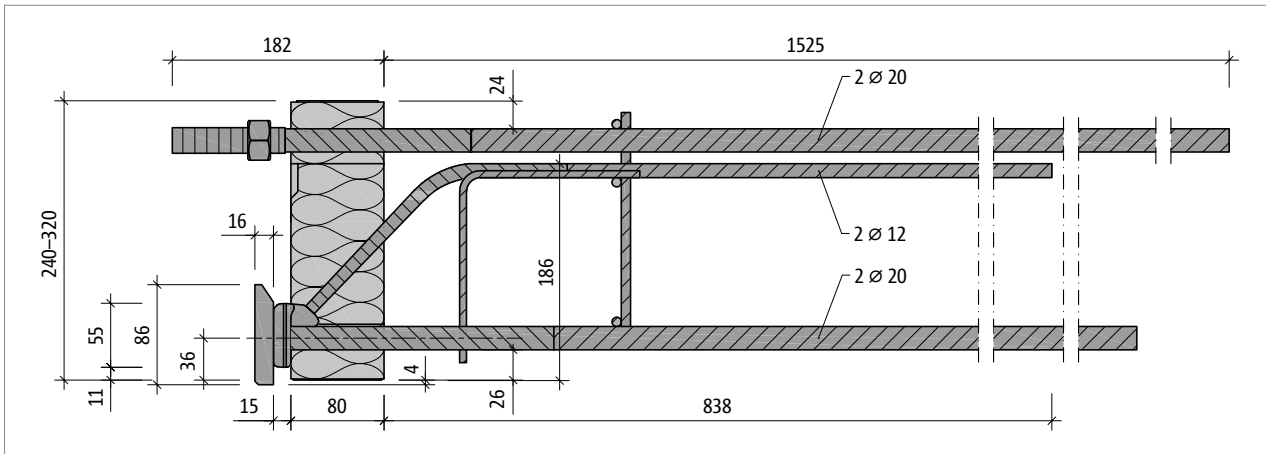


Fig. 38: Schöck Isokorb® T part K-IQ-B-CB: Product section

Product information

- For additional 2D and 3D product drawings contact our Design Support department.

Product description

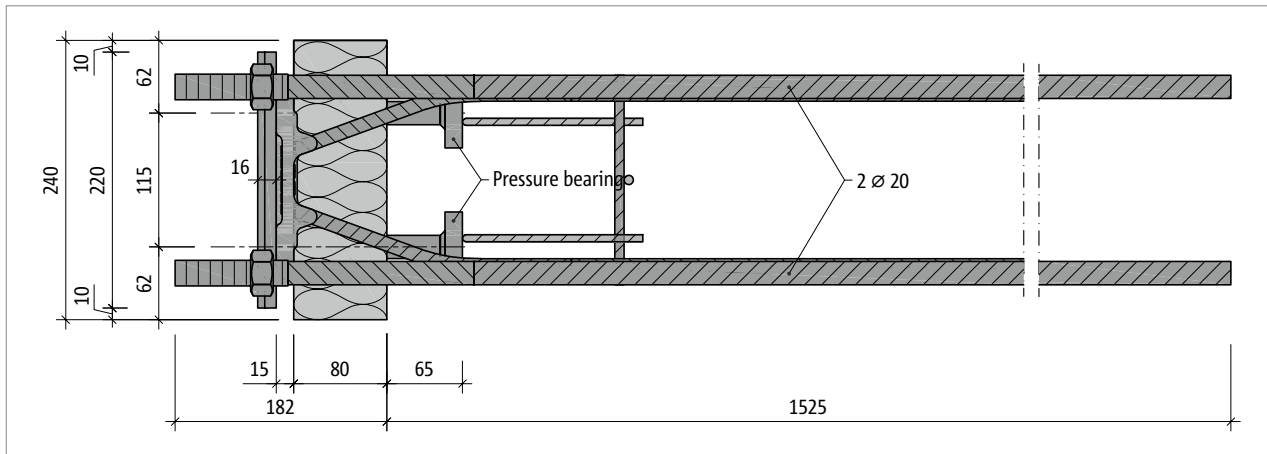


Fig. 39: Schöck Isokorb® T part K-IQ-B-CE: Product layout

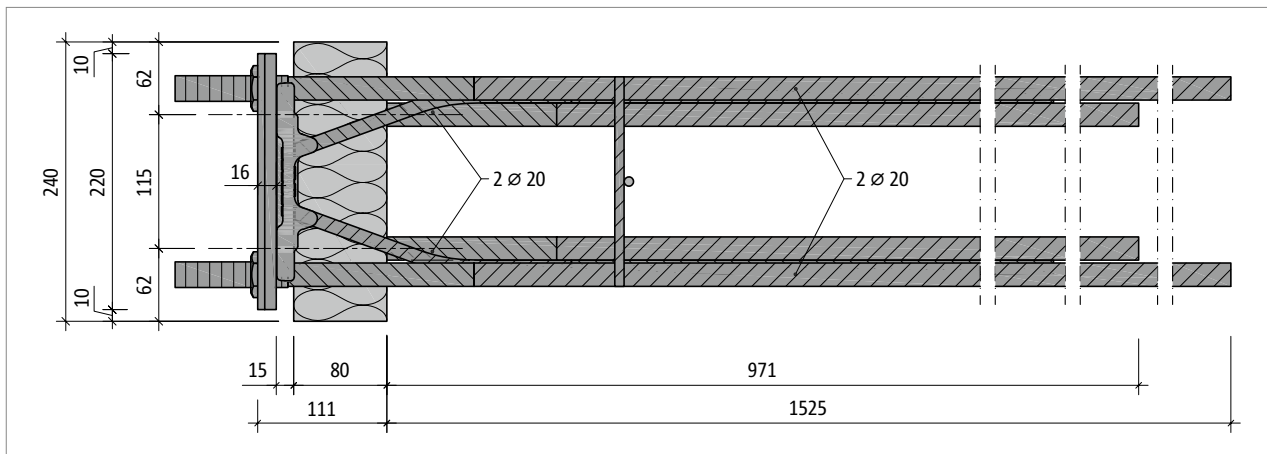


Fig. 40: Schöck Isokorb® T part K-IQ-B-CB: Product layout

Product information

- For additional 2D and 3D product drawings contact our Design Support department.

Product description

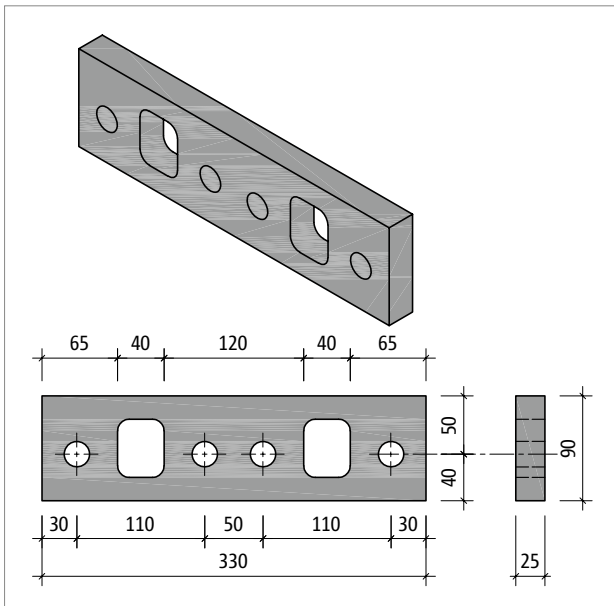


Fig. 41: Schöck Isokorb® T part K-IQ-PC: Product details

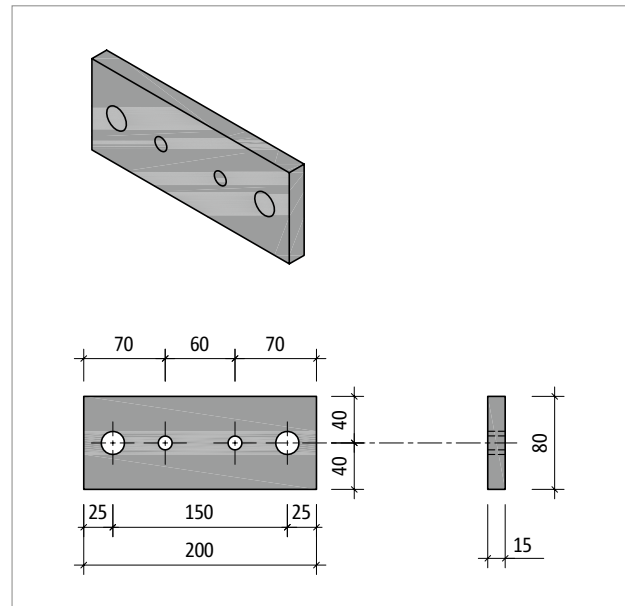


Fig. 42: Schöck Isokorb® T part K-IQ-PV: Product details

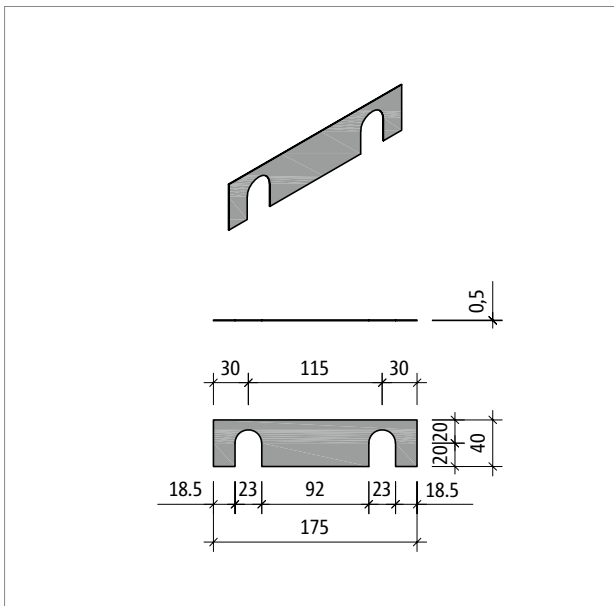


Fig. 43: Schöck Isokorb® T part K-IQ-PA: Product details

Product information

- For additional 2D and 3D product drawings contact our Design Support department.

Product description

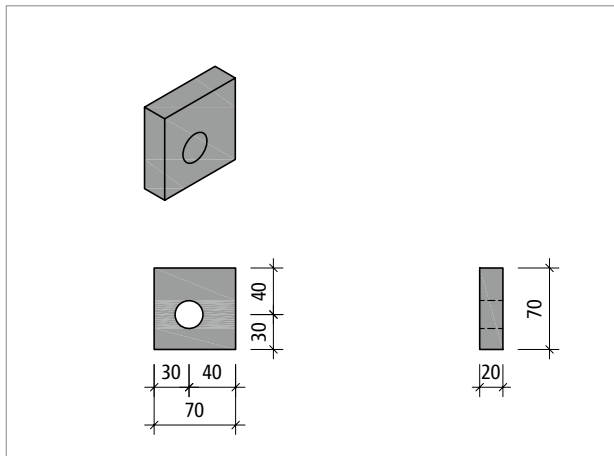


Fig. 44: Schöck Isokorb® T part K-IQ-PW: Product details

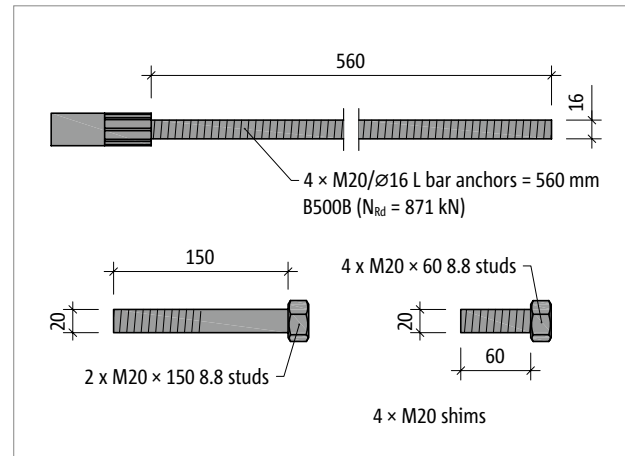


Fig. 45: Schöck Isokorb® T part K-IQ-AC, -BC and -BR: Product details

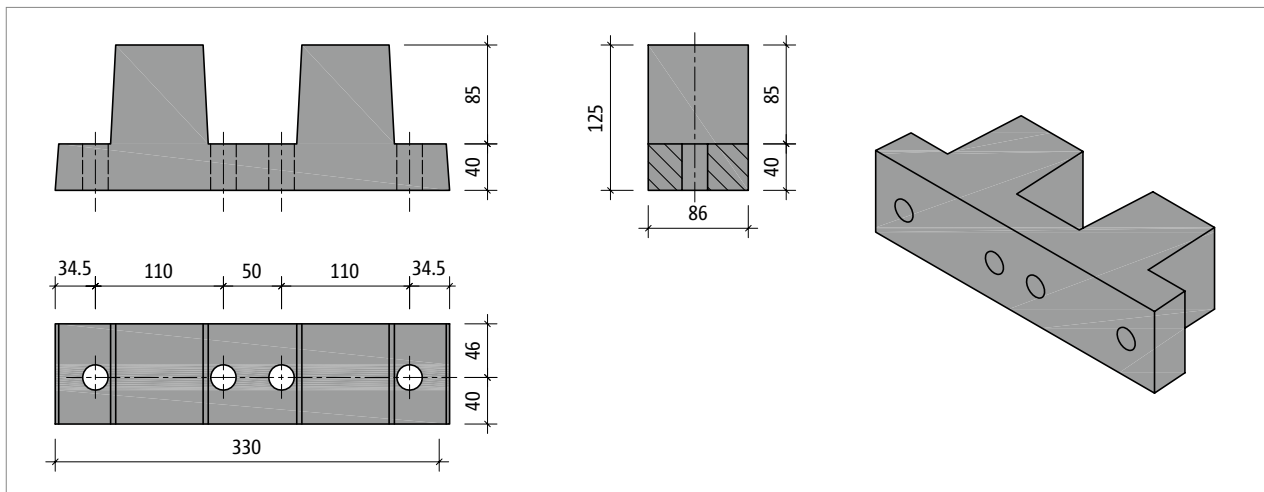


Fig. 46: Schöck Isokorb®: Recess element (not supplied by Schöck)

i Product information

- For additional 2D and 3D product drawings contact our Design Support department.
- Recess element is not supplied by Schöck. We recommend that this recess element is produced in a rubber compound (due to deformation and reuse). Please contact our Technical Design Department for questions and support with your projects.

Product description

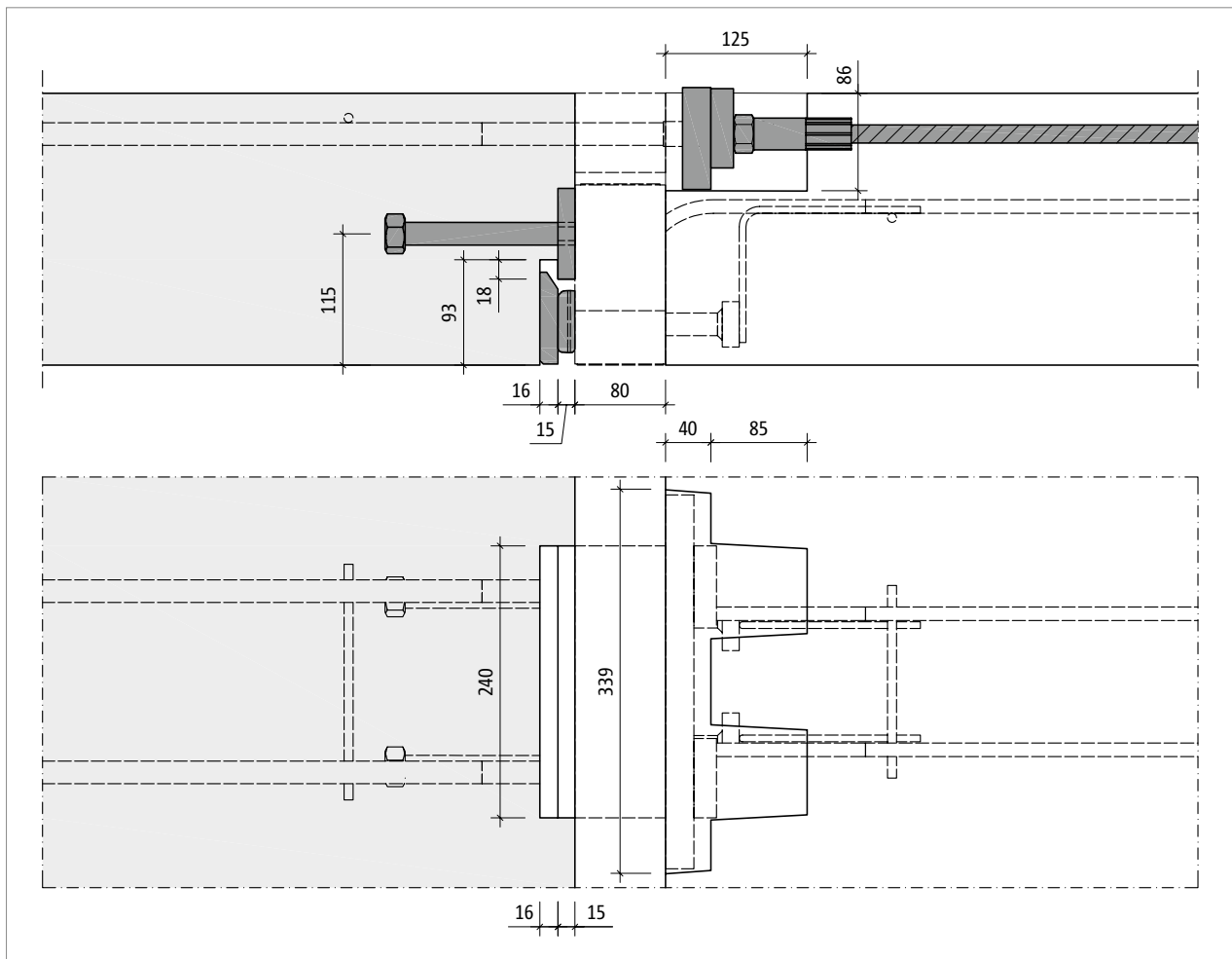


Fig. 47: Schöck Isokorb® T type K-IQ-A: Installation

i Product information

- For additional 2D and 3D product drawings contact our Design Support department.

Product description

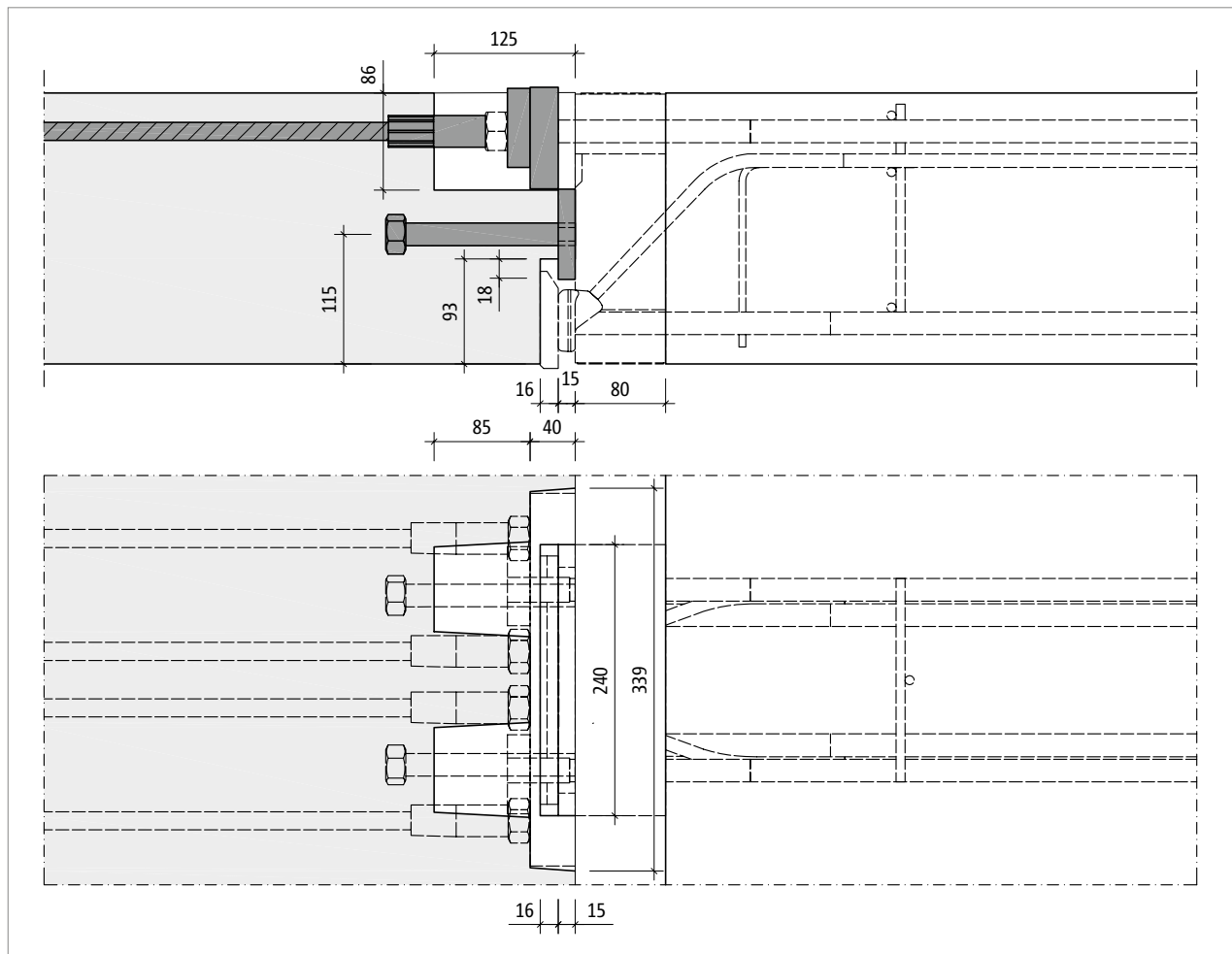


Fig. 48: Schöck Isokorb® T type K-IQ-B: Installation

i Product information

- For additional 2D and 3D product drawings contact our Design Support department.

On-site reinforcement

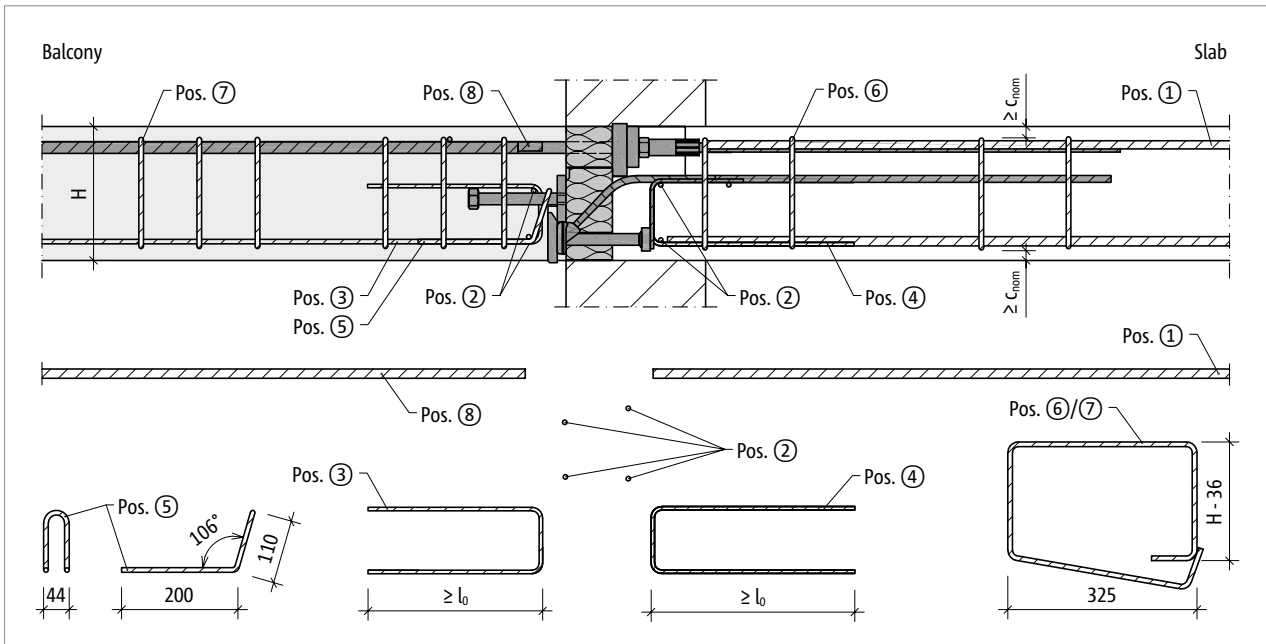


Fig. 49: Schöck Isokorb® T type K-IQ-A-CE: On-site reinforcement

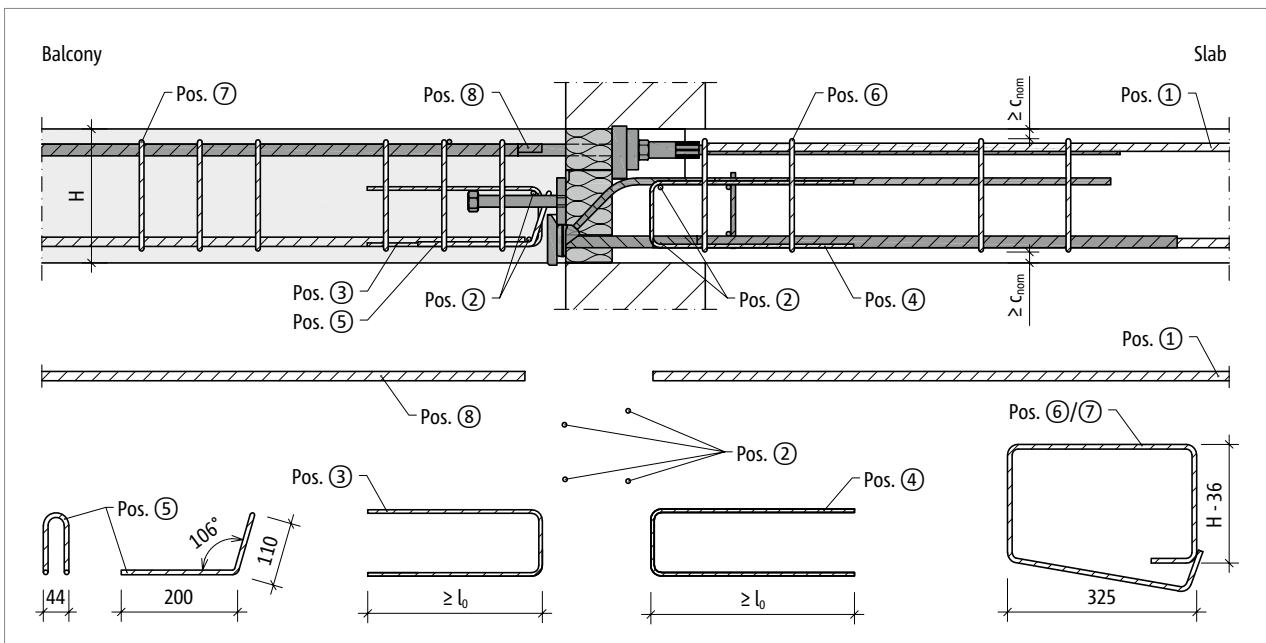


Fig. 50: Schöck Isokorb® T type K-IQ-A-CB: On-site reinforcement

On-site reinforcement

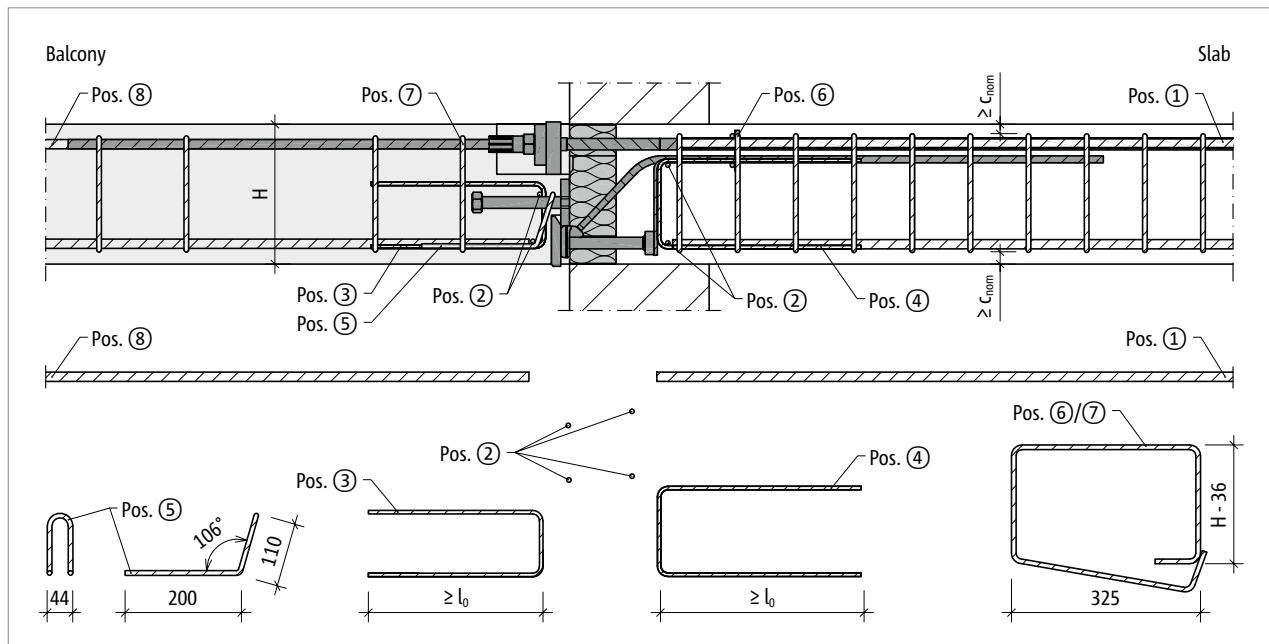


Fig. 51: Schöck Isokorb® T type K-IQ-B-CE: On-site reinforcement

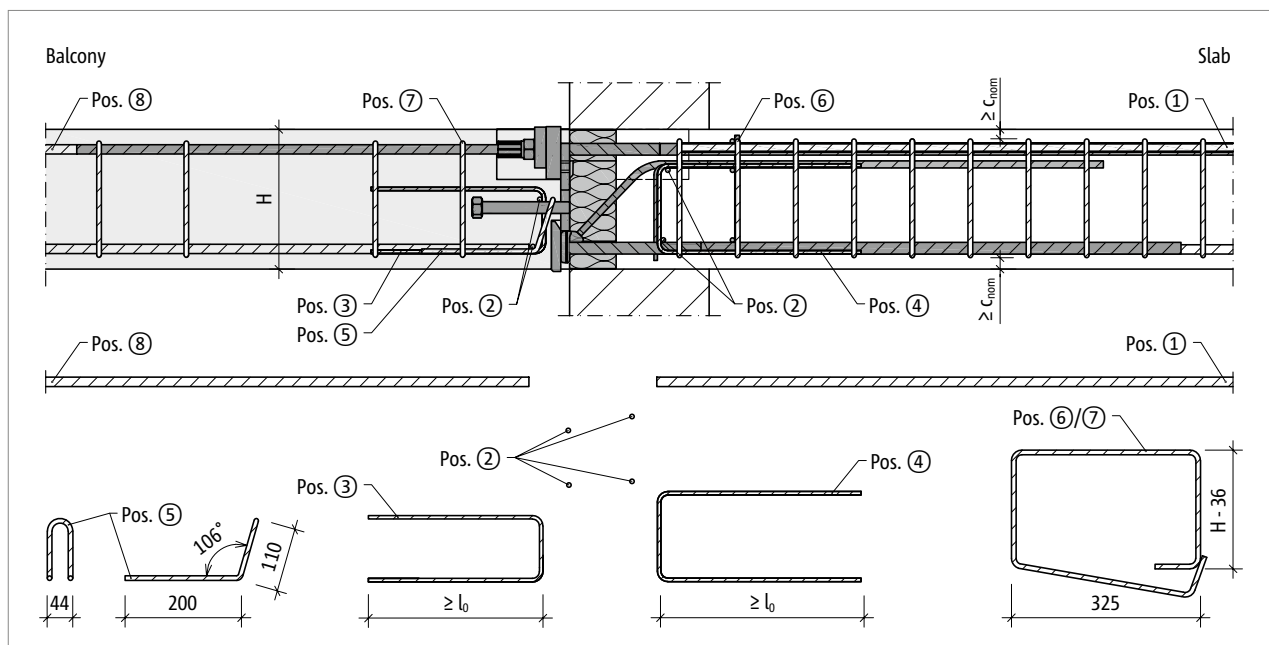


Fig. 52: Schöck Isokorb® T type K-IQ-B-CB: On-site reinforcement

On-site reinforcement

Schöck Isokorb® T type K-IQ-A			M2
On-site reinforcement	Location	Height H [mm]	Concrete strength class \geq C20/25
Overlapping reinforcement			
Pos. 1	Floor side	240–320	4 \varnothing 16
Steel bars along the insulation joint			
Pos. 2	Floor side/ balcony side	240–320	2 \times 2 \varnothing 8
Stirrup			
Pos. 3	Floor side	240–320	2 \varnothing 8/60 mm
Pos. 4	Balcony side		2 \varnothing 8/60 mm
Pos. 5			2 \varnothing 8
Pos. 6	Floor side		2 \times 2 \varnothing 8/150 mm
Pos.7	Balcony side		2 \times 3 \varnothing 8/100 mm
Overlapping reinforcement			
Pos. 8	Balcony side	240–320	acc. to the specifications of the structural engineer

Schöck Isokorb® T type K-IQ-B			M2
On-site reinforcement	Location	Height H [mm]	Concrete strength class \geq C20/25
Overlapping reinforcement			
Pos. 1	Floor side	240–320	3 \cdot H16
Steel bars along the insulation joint			
Pos. 2	Floor side/ balcony side	240–320	2 \times 2 \varnothing 8
Stirrup			
Pos. 3	Floor side	240–320	2 \varnothing 8/60 mm
Pos. 4	Balcony side		2 \varnothing 8/60 mm
Pos. 5			2 \varnothing 8
Pos. 6	Floor side		10 \varnothing 8/125 mm
Pos.7	Balcony side		2 \times 3 \varnothing 8/150 mm
Overlapping reinforcement			
Pos. 8	Balcony side	240–320	4 \varnothing 16

Information about on-site reinforcement

- Lapping of the reinforcement in the connecting reinforced concrete components must be applied as close as possible to the insulating element of the Schöck Isokorb®, the required concrete cover must be observed.
- Overlapping joints as per SS EN 1992-1-1 (EC2) and SS EN 1992-1-1/NA.

✓ Check list

- Is the relevant concrete strength class taken into account when selecting the design and calculation table?
- Have the loads on the Schöck Isokorb® connection been specified at design level?
- Are the minimum concrete strength and exposure classes specified in the implementation plans?
- Is there a situation in which the construction must be designed for an emergency situation or special load during construction?
- Is the stiffness of the support taken into account with the design of statically indefinite constructions?
- Has the transfer of the forces in the reinforced concrete component been verified?
- Have the fire protection requirements for the overall load-bearing structure been clarified? Are the on-site measures included in the construction drawings?
- Is the Schöck Isokorb® connection exposed to uplifting shear forces in conjunction with positive connection moments?
- When calculating the deflection of the overall structure, has the camber caused by Schöck Isokorb® been taken into account?
- Is the drainage direction taken into account with the resulting camber information? Is the degree of camber entered in the working drawings?
- Are temperature deformations directly attributed to the Isokorb® connection and has the maximum expansion joint spacing been taken into consideration in this respect?
- Do the construction drawings contain sufficient reference to the essential on-site butt stop?
- Have the requirements for on-site reinforcement of connections been defined in each case?
- Are the tightening torques for the screwed connections noted in the construction drawings?

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