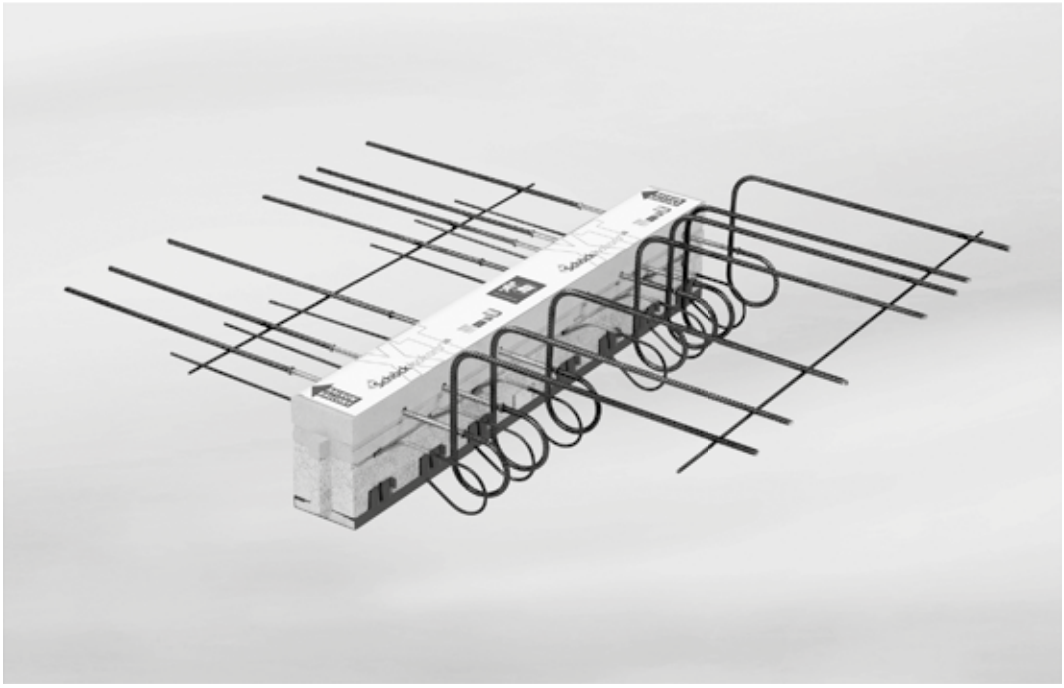
Schöck Isokorb® type KXT-HV, KXT-BH, KXT-WO, KXT-WU



Schöck Isokorb® type KXT-HV

Schöck Isokorb® type KXT-HV
Suitable for cantilevered, lower lying balconies. The balcony lies lower than the floor slab. It transfers negative moments and positive shear forces.

Schöck Isokorb® type KXT-BH
Suitable for cantilevered, higher lying balconies. The balcony lies higher than the floor slab. It transfers negative moments and positive shear forces.

Schöck Isokorb® type KXT-WO
Suitable for cantilevered balconies, which are connected above to a reinforced concrete wall. It transfers negative moments and positive shear forces.

Schöck Isokorb® type KXT-WU
Suitable for cantilevered balconies, which are connected below to a reinforced concrete wall. It transfers negative moments and positive shear forces.

Lower lying balconies using Schöck Isokorb® type KXT

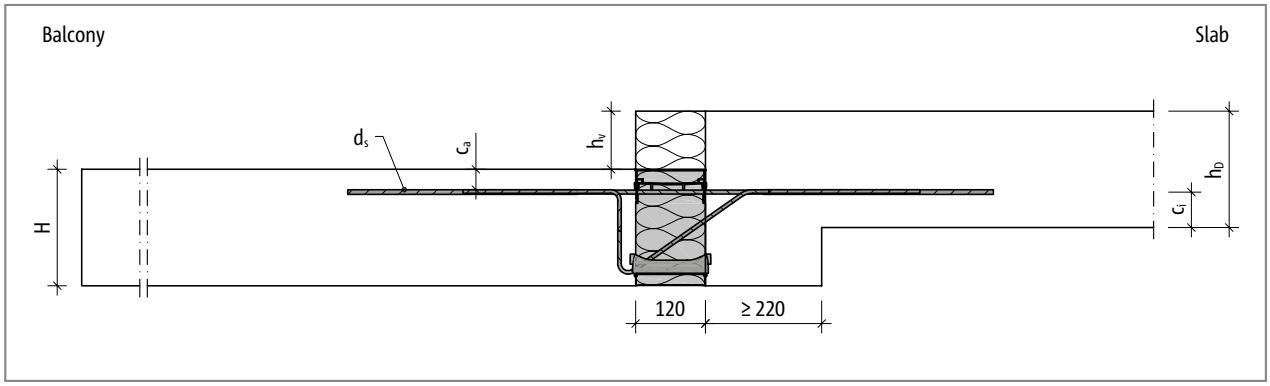
Height offset $h_V \leq h_D - c_a - d_s - c_i$

- If $h_V \leq h_D - c_a - d_s - c_i$ then the Schöck Isokorb® type KXT with straight tension bars can be selected.

h_V = height offset
h_D = slab thickness
c_a = concrete cover outer
d_s = diameter tension bar Isokorb
c_i = concrete cover inner
H = Isokorb-height

Example: Schöck Isokorb® type KXT50-CV35
h_D = 180 mm, c_a = 35 mm, d_s = 8 mm, c_i = 30 mm
max. h_V = 180 - 35 - 8 - 30 = 107 mm

- Recommendation: Downstand beam width at least 220 mm
- With floor-side arrangement of element slabs for c_i the element slab thickness + $\varnothing_S$ is to be applied.



Schöck Isokorb® type KXT: Smaller height offset downwards (balcony lies lower)

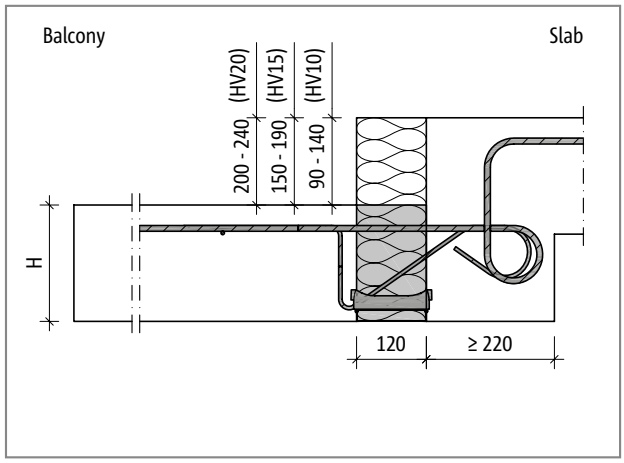
Height offset $h_V > h_D - c_a - d_s - c_i$

If the condition $h_V \leq h_D - c_a - d_s - c_i$ is not met the connection can be carried out using these variants:

- KXT-HV10-CV35 for height offset of 90 mm to 140 mm
- KXT-HV15-CV35 for height offset of 150 mm to 190 mm
- KXT-HV20-CV35 for height offset of 200 mm to 240 mm

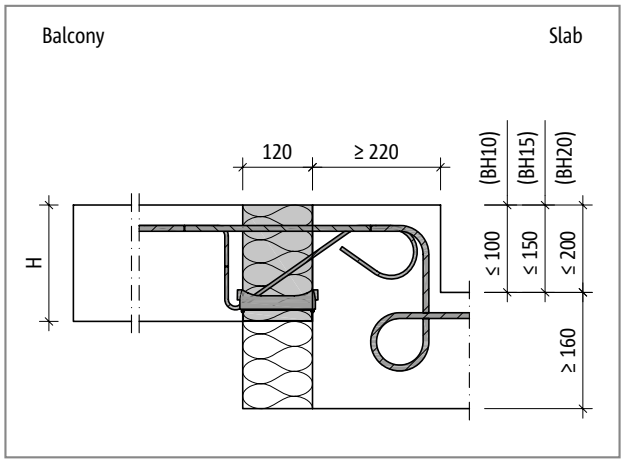
Installation cross sections

Lower lying balcony



Schöck Isokorb® type KXT-HV: Lower lying balcony and outer insulation

Higher lying balcony

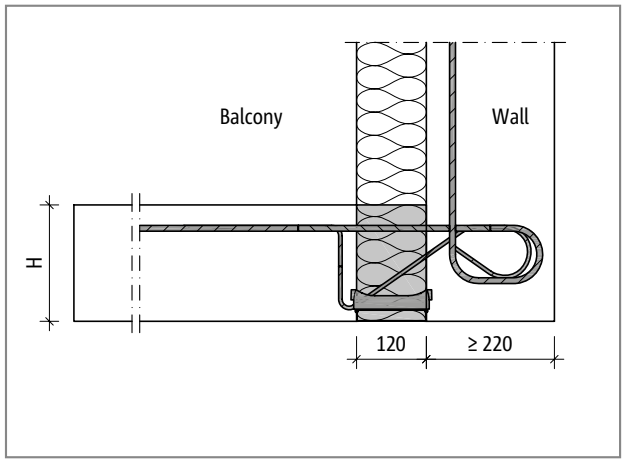


Schöck Isokorb® type KXT-BH: Higher lying balcony and outer insulation

Downstand/upstand beam width

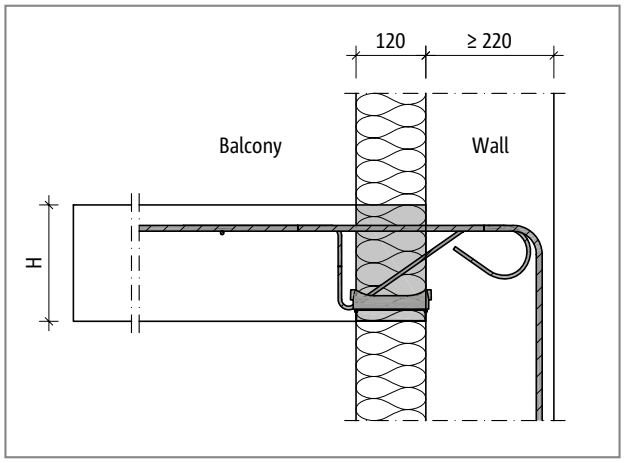
- at least 220 mm
- Special designs are also available for lower downstand/upstand beam widths.

Wall connection upwards



Schöck Isokorb® type KXT-WO: Wall connection upwards with outer insulation

Wall connection downwards



Schöck Isokorb® type KXT-WU: Wall connection downwards with outer insulation

Wall thickness

- at least 220 mm
- Special designs are also available for lower wall thicknesses.

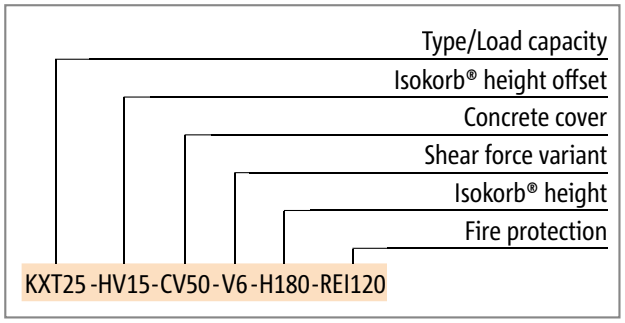
Product selection | Type designations | Special designs

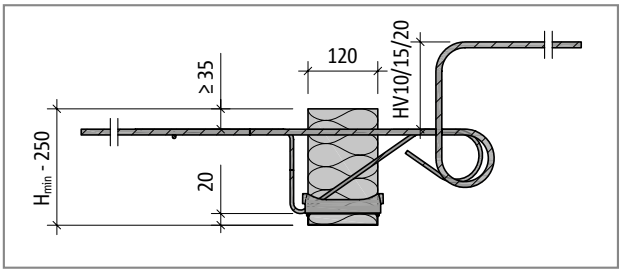
Schöck Isokorb® type KXT-HV variants

The configuration of the Schöck Isokorb® type KXT-HV can be varied as follows:

- Load capacity:
  KXT25-HV, KXT30-HV, KXT50-HV, KXT65-HV
- Connection geometry:
  HV10 = Isokorb® height offset: 90 - 140 mm
  HV15 = Isokorb® height offset: 150 - 190 mm
  HV20 = Isokorb® height offset: 200 - 240 mm
- Concrete cover of the tension bars::
  CV35 = 35 mm, CV50 = 50 mm (e.g.: KXT50-HV15-CV35-V6-H200)
- Shear force variant:
  Number and diameter of the shear force bars V6, V8 bei KXT65-... available
- Fire resistance class: R0 (Standard), REI120

Type designations in planning documents





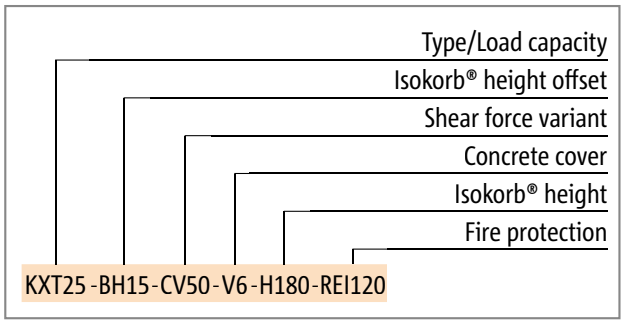
Schöck Isokorb® type KXT-HV15: Product section

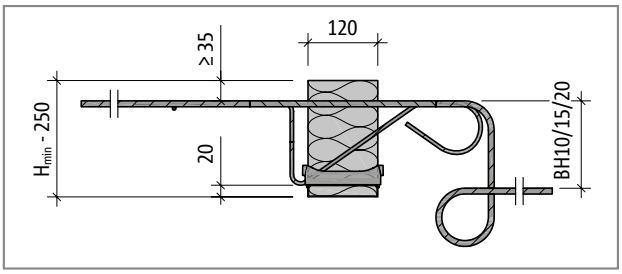
Schöck Isokorb® type KXT-BH variants

The configuraton of the Schöck Isokorb® type KXT-BH can be varied as follows:

- Load capacity:
  KXT25-BH, KXT30-BH, KXT50-BH, KXT65-BH
- Connection geometry:
  BH10 = Isokorb® height offset: ≤ 100 mm
  BH15 = Isokorb® height offset: ≤ 150 mm
  BH20 = Isokorb® height offset: ≤ 200 mm
- Concrete cover of the tension bars::
  CV35 = 35 mm, CV50 = 50 mm (e.g.: KXT50-BH15-CV35-V6-H200)
- Shear force variant:
  Number and diameter of the shear force bars V6, V8 bei KXT65-... available
- Fire resistance class: R0 (Standard), REI120

Type designations in planning documents





Schöck Isokorb® type KXT-BH15: Product section

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).

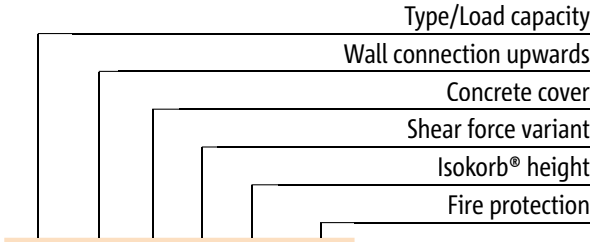
Product selection | Type designations | Special designs

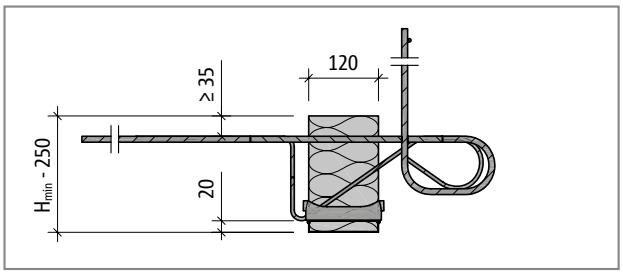
Schöck Isokorb® type KXT-WO variants

The configuration of the Schöck Isokorb® type KXT-WO can be varied as follows:

- Load capacity:
  KXT25-WO, KXT30-WO, KXT50-WO, KXT65-WO
- Connection geometry:
  WO = connection to a wall upwards
- Concrete cover of the tension bars::
  CV35 = 35 mm, CV50 = 50 mm (e.g.: KXT50-WO-CV35-V6-H200)
- Shear force variant:
  Number and diameter of the shear force bars V6, V8 bei KXT65-... available
- Fire resistance class:
  R0 (Standard), REI120

Type designations in planning documents





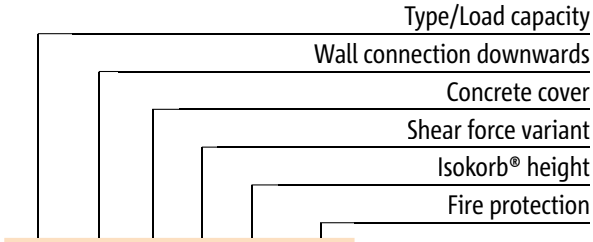
Schöck Isokorb® type KXT-WO: Product section

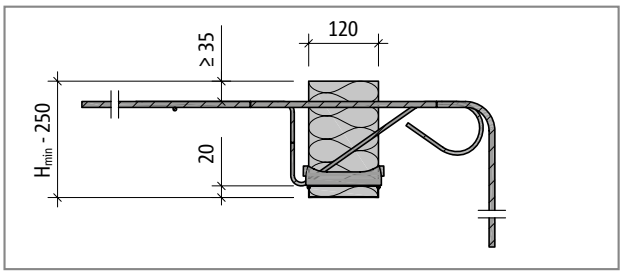
Schöck Isokorb® type KXT-WU variants

The configuration of the Schöck Isokorb® type KXT-WU can be varied as follows:

- Load capacity:
  KXT25-WU, KXT30-WU, KXT50-WU, KXT65-WU
- Connection geometry:
  WU = connection to a wall downwards
- Concrete cover of the tension bars::
  CV35 = 35 mm, CV50 = 50 mm (e.g.: KXT50-WU-CV35-V6-H200)
- Shear force variant:
  Number and diameter of the shear force bars V6, V8 bei KXT65-... available
- Fire resistance class:
  R0 (Standard), REI120

Type designations in planning documents





Schöck Isokorb® type KXT-WU: Product section

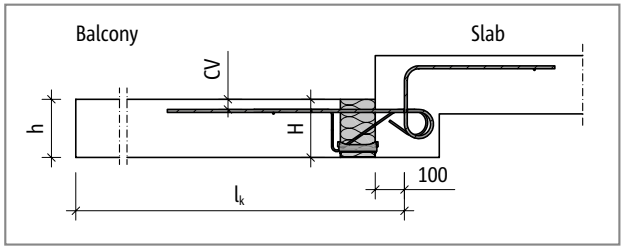
Special designs

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).

C25/30 design

Schöck Isokorb® type			KXT25-HV10/15/20 KXT25-BH10/15/20 KXT25-WO KXT25-WU	KXT30-HV10/15/20 KXT30-BH10/15/20 KXT30-WO KXT30-WU	KXT50-HV10/15/20 KXT50-BH10/15/20 KXT50-WO KXT50-WU	KXT65-HV10/15/20 KXT65-BH10/15/20 KXT65-WO KXT65-WU
Design values with	Concrete cover CV [mm]		Concrete strength class ≥ C25/30			
	CV35	CV50	$m_{Rd,y}$ [kNm/m]			
Isokorb® height H [mm]	160		-14.7	-20.6	-28.0	-36.4
		180	-15.6	-21.8	-29.7	-38.6
	170		-16.4	-23.0	-31.4	-40.8
		190	-17.2	-24.1	-33.1	-43.1
	180		-18.1	-25.3	-34.8	-45.3
		200	-18.9	-26.5	-36.5	-47.5
	190		-19.8	-27.7	-38.3	-49.7
		210	-20.6	-28.9	-40.0	-51.9
	200		-21.5	-30.1	-41.7	-54.2
		220	-22.3	-31.2	-43.4	-56.4
	210		-23.2	-32.4	-45.1	-58.6
		230	-24.0	-33.6	-46.8	-60.8
	220		-24.8	-34.8	-48.5	-63.0
		240	-25.7	-36.0	-50.2	-65.3
	230		-26.5	-37.2	-51.9	-67.5
		250	-27.4	-38.3	-53.6	-69.7
	240		-28.2	-39.5	-55.3	-71.9
	250		-29.9	-41.9	-58.7	-76.4
Shear force variant			$v_{Rd,z}$ [kN/m]			
	V6		28.2	42.3	42.3	56.7
	V8		-	-	-	66.2

Schöck Isokorb® type	KXT25-HV10/15/20 KXT25-BH10/15/20 KXT25-WO KXT25-WU	KXT30-HV10/15/20 KXT30-BH10/15/20 KXT30-WO KXT30-WU	KXT50-HV10/15/20 KXT50-BH10/15/20 KXT50-WO KXT50-WU	KXT65-HV10/15/20 KXT65-BH10/15/20 KXT65-WO KXT65-WU
Isokorb® length [mm]	1000	1000	1000	1000
Tension bars	5 ⌀ 10	7 ⌀ 10	10 ⌀ 10	13 ⌀ 10
Shear force bars V6	4 ⌀ 6	6 ⌀ 6	6 ⌀ 6	6 ⌀ 8
Shear force bars V8	-	-	-	7 ⌀ 8
Pressure bearing (pce)	5	7	8	12
Special stirrup (pce)	-	-	-	4



Schöck Isokorb® type KXT-HV: Static system

C25/30 design

Notes on design

- The shear force loading of the slabs in the area of the insulation joint is to be limited to $V_{Rd, max}$, whereby $V_{Rd, max}$, acc. to BS EN 1992-1-1 (EC2), Exp. (6.9) is determined for $\theta = 45°$ and $\alpha = 90°$ (slab load-bearing capacity).
- With CV50, H = 180 mm is the lowest Isokorb® height, this requires a minimum slab thickness of h = 180 mm.
- The indicative minimum concrete strength class of the external structural component is C32/40.
- Note FEM guidelines if a FEM program is to be used for design.

Deflection/Camber

Deflection

The deflection factors given in the table (tan α [%]) result alone from the deflection of the Schöck Isokorb® under 100% steel utilisation. They serve for the estimation of the required camber. The total arithmetic camber of the balcony slab formwork results from the calculation acc. to BS EN 1992-1-1 (EC2) and BS EN 1992-1-1/NA plus the deflection from Schöck Isokorb®. The camber of the balcony slab formwork to be given by the structural engineer/designer in the implementation plans (Basis: Calculated total deflection from cantilever slab + floor rotation angle + Schöck Isokorb®) should be so rounded that the scheduled drainage direction is maintained (round up: with drainage to the building facade, round down: with drainage towards the cantilever slab end).

Deflection (p) as a result of Schöck Isokorb®

$p = \tan \alpha \cdot l_k \cdot (m_{pd} / m_{Rd}) \cdot 10$ [mm]

Factors to be applied

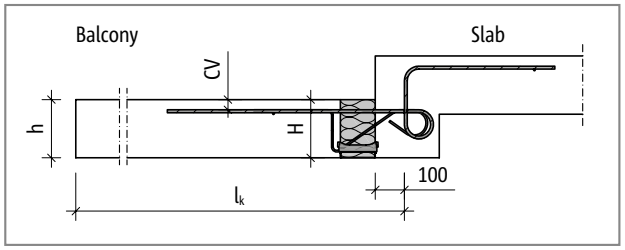
$\tan \alpha$ = apply table

l_k = cantilever length [m]

m_{pd} = relevant bending moment [kNm/m] in the ultimate limit state for the determination of the p [mm] from Schöck Isokorb®.
The load combination to be applied for the deflection is determined by the structural engineer.
(Recommendation: Load combination for the determination of the camber p : determine g+q/2, m_{pd} in the ultimate limit state)

m_{Rd} = maximum design moment [kNm/m] of the Schöck Isokorb®

Design example, see page 67



Schöck Isokorb® type KXT-HV: Static system

Schöck Isokorb® type		KXT-HV, -BH, -WO, -WU	
Deflection factors when		tan α [%]	
		CV35	CV50
Isokorb® height H [mm]	160	1.1	-
	170	1.0	-
	180	0.9	1.1
	190	0.8	1.0
	200	0.8	0.9
	210	0.7	0.8
	220	0.7	0.7
	230	0.6	0.7
	240	0.6	0.6
	250	0.6	0.6

Slenderness | Expansion joint spacing

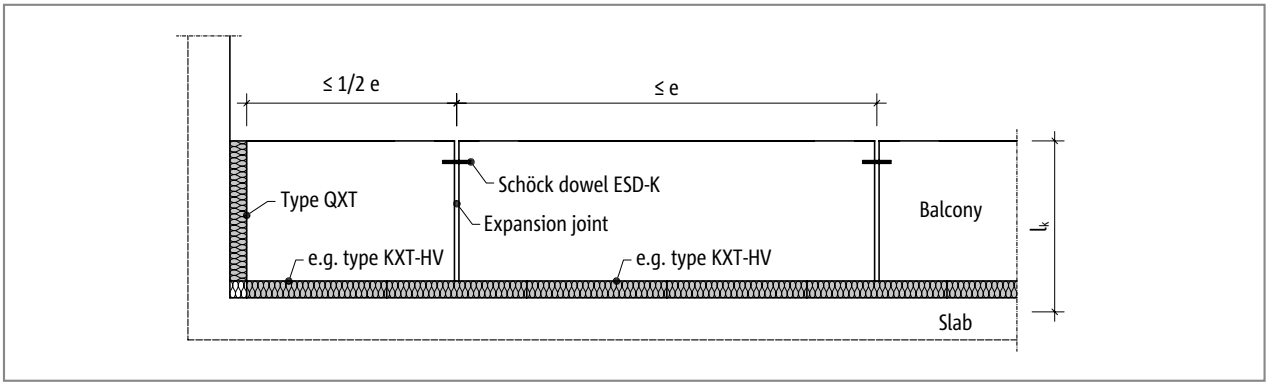
Slenderness

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

Schöck Isokorb® type		KXT-HV, -BH, -WO, -WU	
maximum cantilever length with		$l_{k,max}$ [m]	
		CV35	CV50
Isokorb® height H [mm]	160	1.65	-
	170	1.78	-
	180	1.90	1.70
	190	2.03	1.80
	200	2.15	1.90
	210	2.28	2.00
	220	2.40	2.10
	230	2.53	2.20
	240	2.65	2.30
	250	2.78	2.40

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 KXT-HV: Arrangement of expansion joints

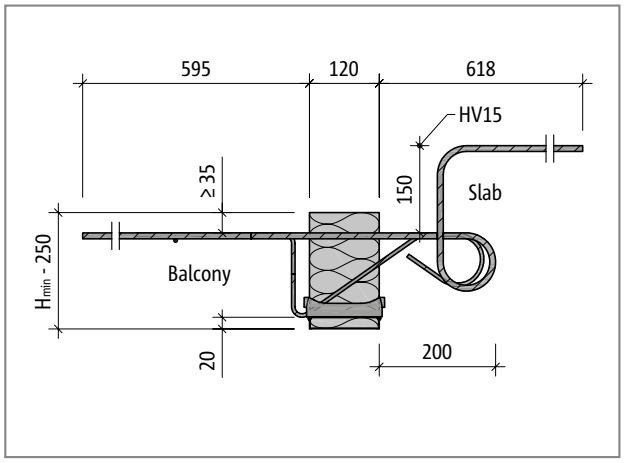
Schöck Isokorb® type		KXT-HV, -BH, -WO, -WU
Maximum expansion joint spacing e		e [m]
Insulating element thickness [mm]	120	21.7

Edge distances

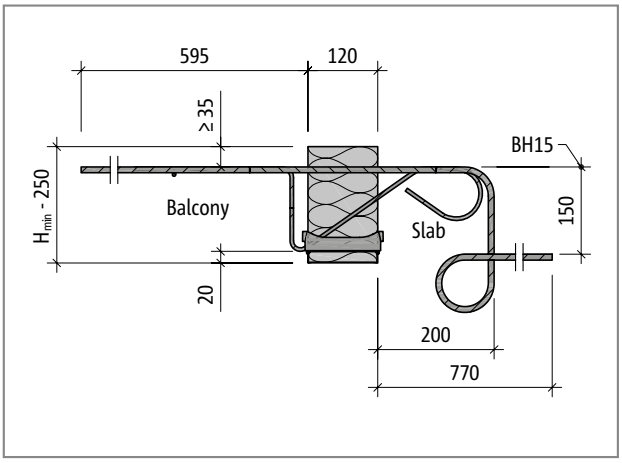
The Schöck Isokorb® must be so arranged at the expansion joint that the following conditions are met:

- 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 exapansion joint: $e_R \geq 100$ mm and $e_R \leq 150$ mm applies.

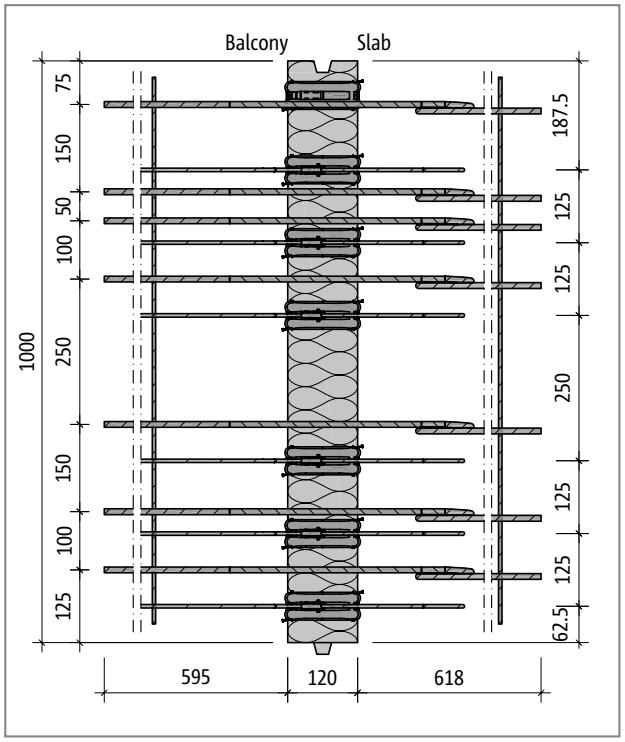
Product description



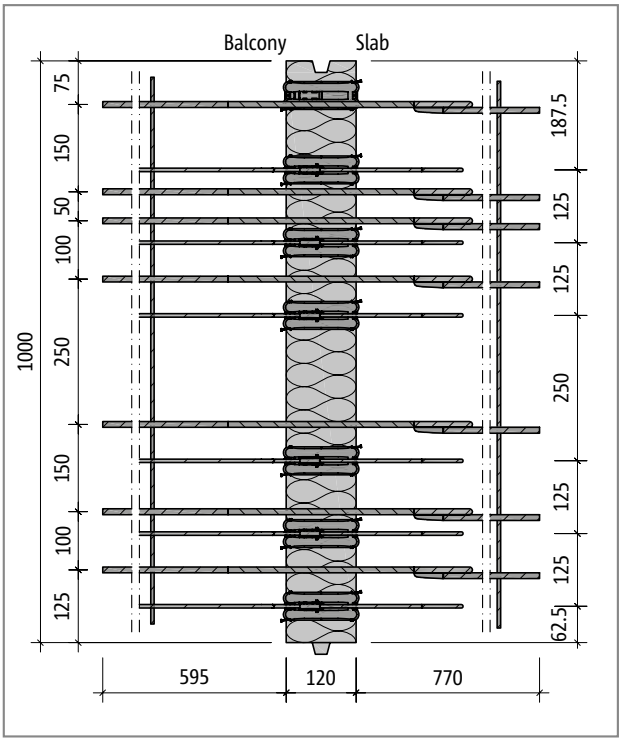
Schöck Isokorb® type KXT30-HV15: Product section



Schöck Isokorb® type KXT30-BH15: Product section



Schöck Isokorb® type KXT30-HV: Product plan view

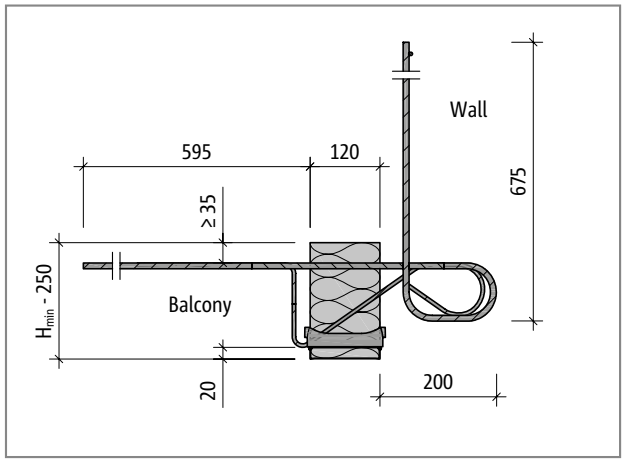


Schöck Isokorb® type KXT30-BH: Product plan view

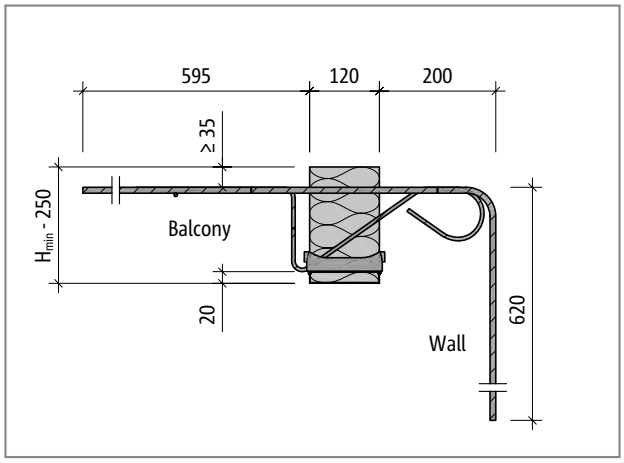
Product information

- Download further product plan views and cross-sections at www.schoeck.co.uk/download
- Minimum height Schöck Isokorb® type KXT-HV, -BH: H_{min} = 160 mm
- On-site dividing of the Schöck Isokorb® Type KXT-HV, -BH on the unreinforced positions possible; take into account the load-bearing capacity reduced due to the dividing; take into account required edge distances
- Concrete cover of the tension bars: CV35 = 35 mm, CV50 = 50 mm

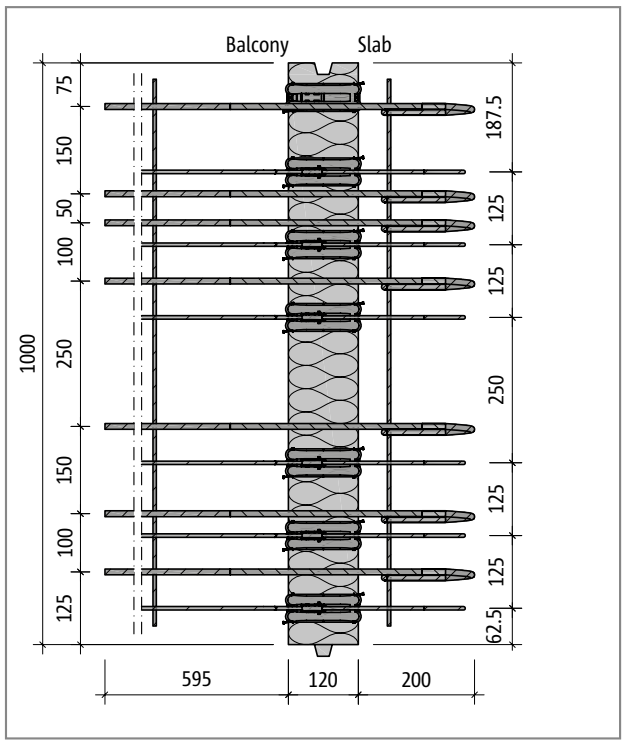
Product description



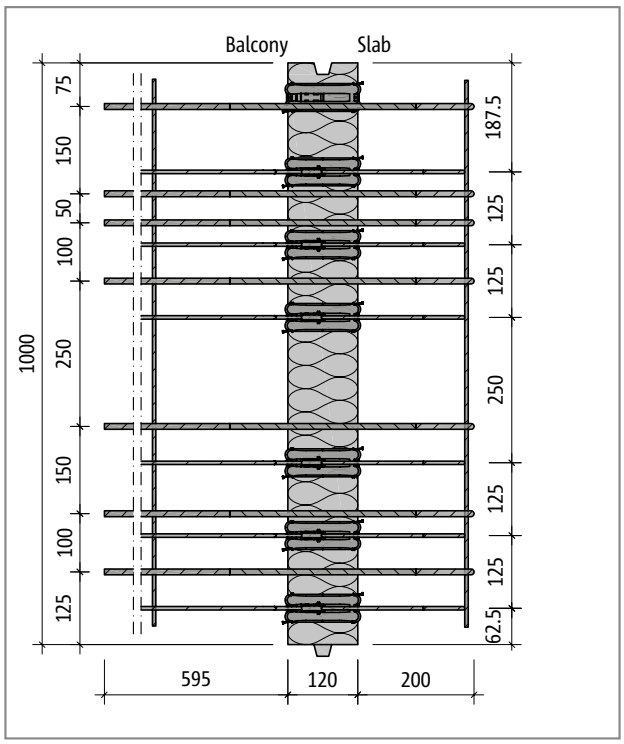
Schöck Isokorb® type KXT30-WO: Product section



Schöck Isokorb® type KXT30-WU : Product section



Schöck Isokorb® type KXT30-WO: Product plan view

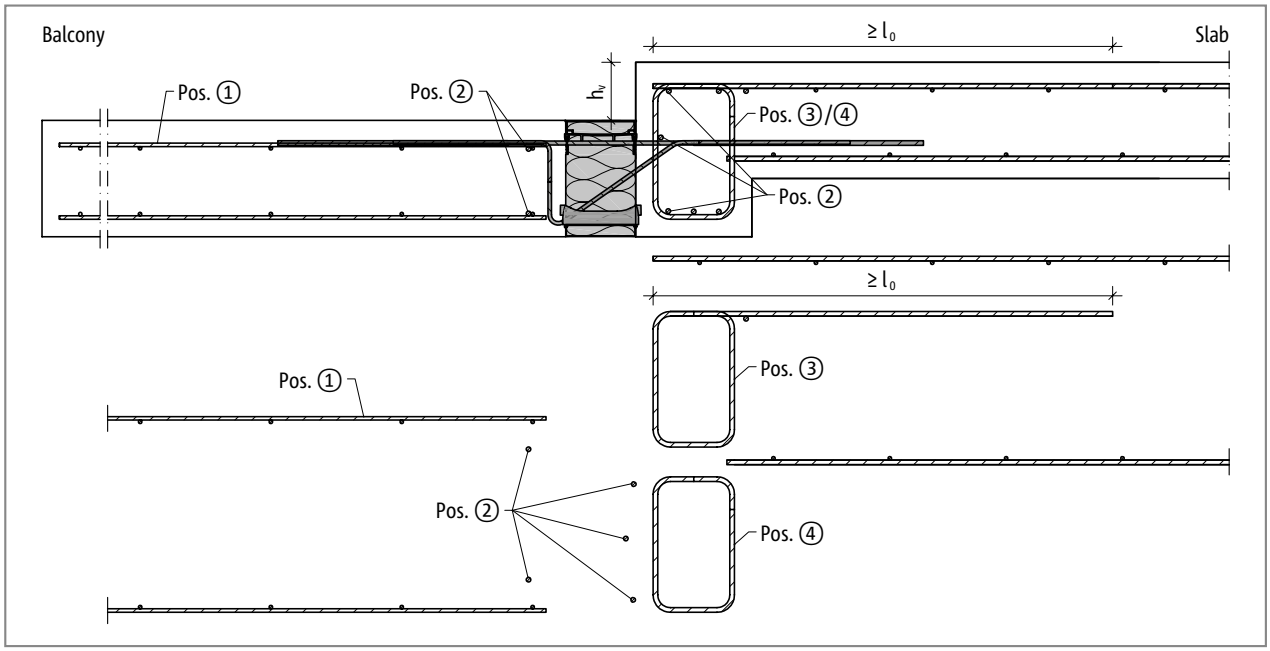


Schöck Isokorb® type KXT30-WU: Product plan view

Product information

- Download further product plan views and cross-sections at www.schoeck.co.uk/download
- Minimum height Schöck Isokorb® type KXT-WO, -WU: H_{min} = 160 mm
- On-site dividing of the Schöck Isokorb® type KXT on the unreinforced positions possible; take into account the load-bearing capacity reduced due to the dividing; take into account required edge distances
- Concrete cover of the tension bars: CV35 = 35 mm, CV50 = 50 mm

On-site reinforcement - Schöck Isokorb® type KXT-HV



Schöck Isokorb® type KXT: On-site reinforcement for small height offset

Information about on-site reinforcement

- Due to the reinforcement density in the downstand beam application is recommended up to KXT65 only.
- For the redirection of the tension force on the floor-side, a stirrup reinforcement Pos. 3 is required in the floor edge beam (upper side length $l_{0,bü}$). This stirrup reinforcement Pos.3 safeguards the load transmission from the Schöck Isokorb®.
- The shear force reinforcement Pos. 4 conforms to the loading of balcony, floor and the supporting width of the downstand/upstand beam. Therefore the shear force reinforcement in individual cases ts to be verified by the structural engineer.
- The required lateral reinforcement in the upstand beam area is to be verified acc. to BS EN 1992-1-1 (EC2), 8.7 to 8.8 and BS EN 1992-1-1/NA, NDPs for 8.8.
- The Schöck Isokorb® type KXT, if required, is to be laid before the installation of the downstand/upstand reinforcement.
- Pos. 3: Value for Isokorb® heights between 160 mm and 250 mm may be interpolated.
- Pos. 3: For larger downstand beam widths a reduction of the required reinforcement acc. to the structural engineer's details is possible.
- The indicative minimum concrete strength class of the external structural component is C32/40.

On-site reinforcement - Schöck Isokorb® type KXT-HV

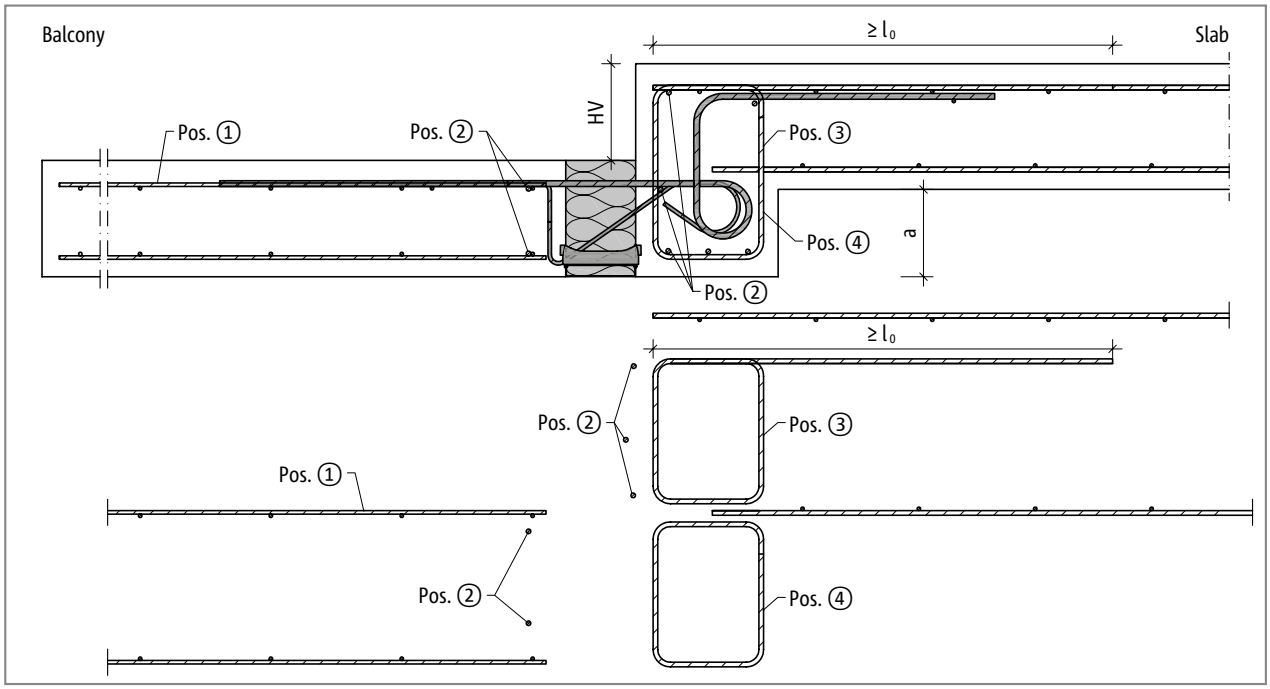
Recommendation for the on-site connection reinforcement

Details of the lapping reinforcement for Schöck Isokorb® with a loading of 100 % of the maximum design moment with C25/30; positively selected: a_s lapping reinforcement ≥ a_s Isokorb® tension bars.

Schöck Isokorb® type			KXT15	KXT25	KXT30	KXT40	KXT45	KXT50
On-site reinforcement	Location	Height [mm]	Concrete strength class ≥ C25/30					
Pos. 1 Lapping reinforcement								
Pos. 1 [mm²/m]	Balcony side	160 - 250	201	352	503	600	654	755
Pos. 2 Steel bars along the insulation joint								
Pos. 2	Balcony side	160 - 250	2 • H8	2 • H8	2 • H8	2 • H8	2 • H8	2 • H8
	Floor side	160 - 250	3 • H8	3 • H8	3 • H8	3 • H8	3 • H8	3 • H8
Pos. 3 Stirrup reinforcement for the redirection of the tension force								
Pos. 3 [mm²/m]	Floor side	160	159	254	361	454	558	558
		250	298	536	767	928	1168	1168
Pos. 4 Stirrup reinforcement acc. to shear force design								
Pos. 4	Floor side	160 - 250	Stirrup reinforcement acc. to BS EN 1992-1-1 (EC2), 6.2.3, 9.2.2					

Schöck Isokorb® type			KXT55
On-site reinforcement	Location	Height [mm]	Concrete strength class ≥ C25/30
Pos. 1 Lapping reinforcement			
Pos. 1 [mm²/m]	Balcony side	160 - 250	905
Pos. 2 Steel bars along the insulation joint			
Pos. 2	Balcony side	160 - 250	2 • H8
	Floor side	160 - 250	3 • H8
Pos. 3 Stirrup reinforcement for the redirection of the tension force			
Pos. 3 [mm²/m]	Floor side	160	716
		250	1517
Pos. 4 Stirrup reinforcement acc. to shear force design			
Pos. 4	Floor side	160 - 250	Stirrup reinforcement acc. to BS EN 1992-1-1 (EC2), 6.2.3, 9.2.2

On-site reinforcement - Schöck Isokorb® type KXT-HV



Schöck Isokorb® type KXT-HV: On-site reinforcement

Recommendation for the on-site connection reinforcement

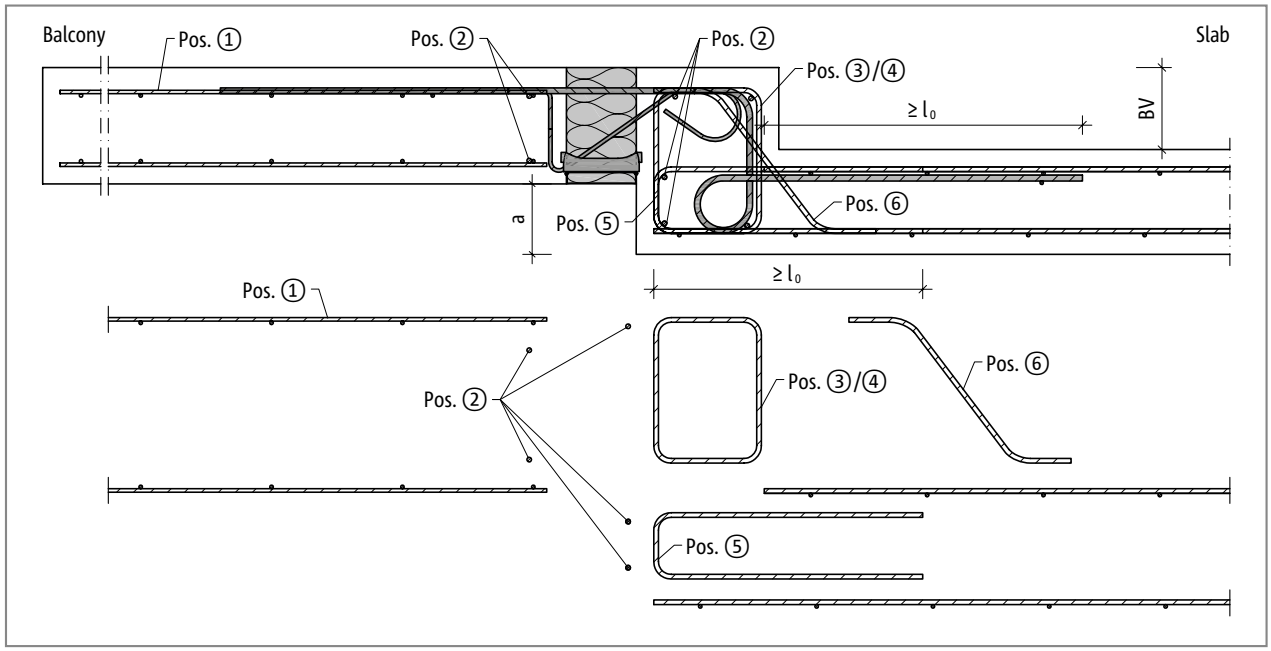
Details of the lapping reinforcement for Schöck Isokorb® with a loading of 100 % of the maximum design moment with C25/30; positively selected: a_s lapping reinforcement ≥ a_s Isokorb® tension bars.

Schöck Isokorb® type		KXT25-HV	KXT30-HV	KXT50-HV	KXT65-HV
On-site reinforcement	Location	Concrete strength class ≥ C25/30			
Pos. 1 Lapping reinforcement					
Pos. 1 [mm²/m]	Balcony side	403	629	873	1130
Pos. 2 Steel bars along the insulation joint					
Pos. 2	Balcony side/downstand beam	5 • H8	5 • H8	5 • H8	5 • H8
Pos. 3 Stirrup					
Pos. 3 [mm²/m]	Downstand beam a = 260 mm	732	1052	1538	2075
	Downstand beam a = 135 mm	454	650	925	1227
Pos. 4 Stirrup					
Pos. 4	Downstand beam	Taking into account of shear forces and moments by the structural engineer			

Information about on-site reinforcement

- For the redirection of the tension force on the floor-side, a stirrup reinforcement Pos. 3 is required in the floor edge beam (upper side length $l_{0,bü}$). This stirrup reinforcement Pos.3 safeguards the load transmission from the Schöck Isokorb®.
- l_0 for l_0 (⌀10) ≥ 570 mm, l_0 (⌀12) ≥ 680 mm and l_0 (⌀14) ≥ 790 mm.
- Pos. 3 applies for downstand widths b = 220 mm. For b > 220 mm a reduction is possible.
- Pos. 3 is given for two offset dimensions a. In between it can be interpolated.
- The shear force reinforcement Pos. 4 conforms to the loading of balcony, floor and the supporting width of the downstand/upstand beam. Therefore the shear force reinforcement in individual cases ts to be verified by the structural engineer.
- The required lateral reinforcement in the upstand beam area is to be verified acc. to BS EN 1992-1-1 (EC2), 8.7 to 8.8 and BS EN 1992-1-1/NA, NDPs for 8.8.
- The Schöck Isokorb® type KXT-HV, if required, is to be laid before the installation of the downstand/upstand reinforcement.
- The indicative minimum concrete strength class of the external structural component is C32/40.

On-site reinforcement - Schöck Isokorb® type KXT-BH



Schöck Isokorb® type KXT-BH: On-site reinforcement

Recommendation for the on-site connection reinforcement

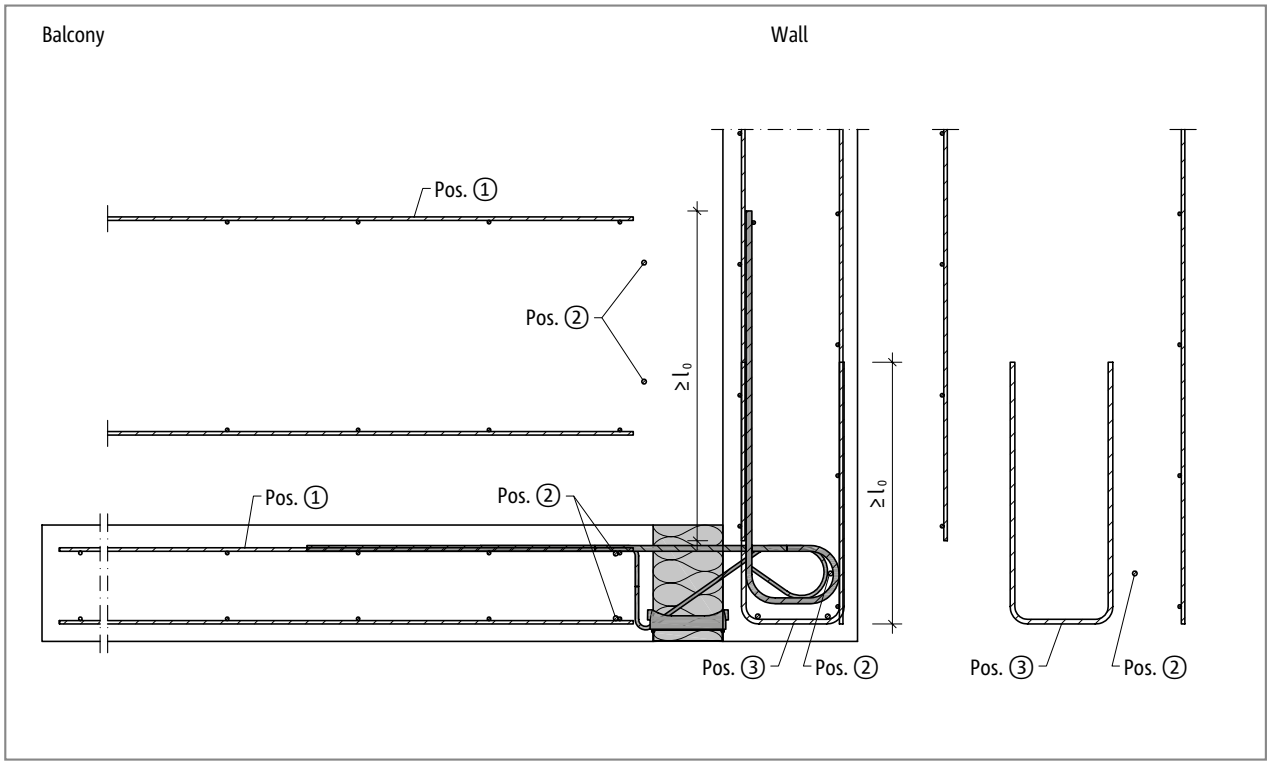
Details of the lapping reinforcement for Schöck Isokorb® with a loading of 100 % of the maximum design moment with C25/30; positively selected: a_s lapping reinforcement ≥ a_s Isokorb® tension bars.

Schöck Isokorb® type		KXT25-BH	KXT30-BH	KXT50-BH	KXT65-BH
On-site reinforcement	Location	Concrete strength class ≥ C25/30			
Pos. 1 Lapping reinforcement					
Pos. 1 [mm²/m]	Balcony side	403	629	873	1130
Pos. 2 Steel bars along the insulation joint					
Pos. 2	Balcony/upstand beam	5 • H8	5 • H8	5 • H8	5 • H8
Pos. 3 and Pos. 5 Stirrup					
Pos. 3 and Pos. 5 [mm²/m]	Upstand beam a = 260 mm	732	1052	1372	2075
	Upstand beam a = 135 mm	454	650	925	1227
Pos. 4 Stirrup					
Pos. 4	Upstand beam	Taking into account of shear forces and moments by the structural engineer			
Pos. 6 Inclined reinforcement					
Pos. 6	Upstand beam	H8@200	H8@200	H8@200	H10@140

Information about on-site reinforcement

- For the redirection of the tension force on the floor side, a stirrup reinforcement Pos. 3 is required in the floor edge beam (upper side length $l_{0,bü}$). This stirrup reinforcement Pos.3 + Pos.5 safeguards the load passing from the Schöck Isokorb®.
- l_0 for l_0 (⌀10) ≥ 570 mm, l_0 (⌀12) ≥ 680 mm and l_0 (⌀14) ≥ 790 mm.
- Pos. 3 and Pos. 5 apply for upstand beam widths b = 220 mm. For b > 220 mm a reduction is possible.
- Pos. 3 and Pos. 5 are given for two offset dimensions a. In b tween it can be interpolated.
- The shear force reinforcement Pos. 4 conforms to the loading of balcony, floor and the supporting width of the downstand/upstand beam. Therefore the shear force reinforcement in individual cases ts to be verified by the structural engineer.
- The required lateral reinforcement in the upstand beam area is to be verified acc. to BS EN 1992-1-1 (EC2), 8.7 to 8.8 and BS EN 1992-1-1/NA, NDPs for 8.8.
- The Schöck Isokorb® type KXT-BH, if required, is to be laid before the installation of the downstand/upstand reinforcement.
- The indicative minimum concrete strength class of the external structural component is C32/40.

On-site reinforcement - Schöck Isokorb® type KXT-WO



Schöck Isokorb® type KXT-WO: On-site reinforcement

Recommendation for the on-site connection reinforcement

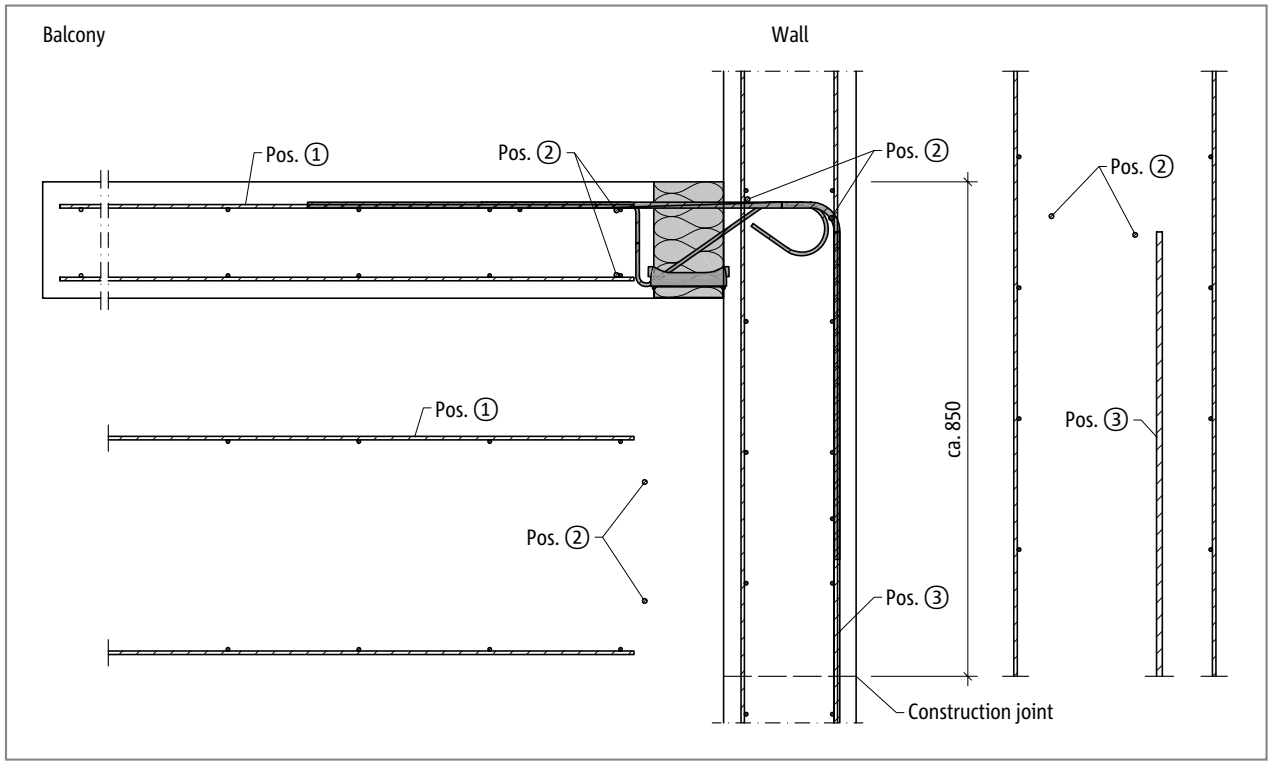
Details of the lapping reinforcement for Schöck Isokorb® with a loading of 100 % of the maximum design moment with C25/30; positively selected: a_s lapping reinforcement ≥ a_s Isokorb® tension bars.

Schöck Isokorb® type		KXT25-WO	KXT30-WO	KXT50-WO	KXT65-WO
On-site reinforcement	Location	Concrete strength class ≥ C25/30			
Pos. 1 Lapping reinforcement					
Pos. 1 [mm²/m]	Balcony side	403	629	873	1130
Pos. 2 Steel bars along the insulation joint					
Pos. 2	Balcony side/wall side	3 • H8	3 • H8	3 • H8	3 • H8
Pos. 3 Stirrup					
Pos. 3	Wall side	H8@100	H10@100	H12@100	H16@100
l_0 [mm]	Wall side	≥ 570	≥ 680	≥ 790	≥ 790

Information about on-site reinforcement

- The required lateral reinforcement in the upstand beam area is to be verified acc. to BS EN 1992-1-1 (EC2), 8.7 to 8.8 and BS EN 1992-1-1/NA, NDPs for 8.8.
- The Schöck Isokorb® type KXT-WO, if required, is to be laid before the installation of the downstand/upstand reinforcement.
- The indicative minimum concrete strength class of the external structural component is C32/40.

On-site reinforcement - Schöck Isokorb® type KXT-WU



Schöck Isokorb® type KXT-WU: On-site reinforcement

Recommendation for the on-site connection reinforcement

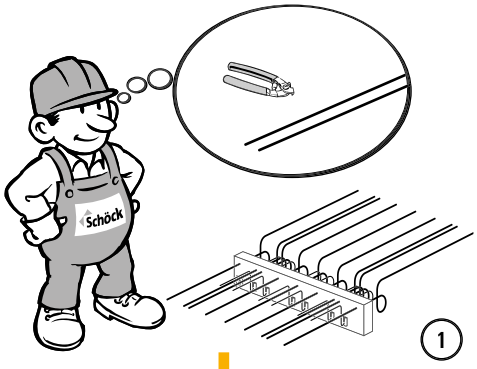
Details of the lapping reinforcement for Schöck Isokorb® with a loading of 100 % of the maximum design moment with C25/30; positively selected: a_s lapping reinforcement ≥ a_s Isokorb® tension bars.

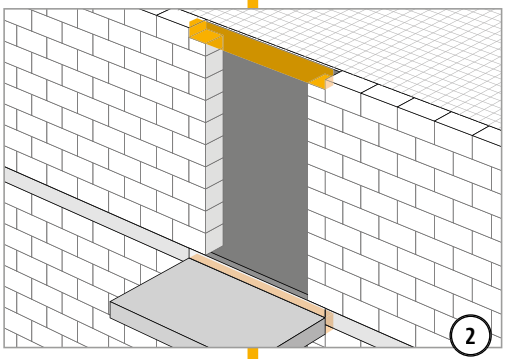
Schöck Isokorb® type		KXT25-WU	KXT30-WU	KXT50-WU	KXT65-WU
On-site reinforcement	Location	Concrete strength class ≥ C25/30			
Pos. 1 Lapping reinforcement					
Pos. 1 [mm²/m]	Balcony side	403	629	873	1130
Pos. 2 Steel bars along the insulation joint					
Pos. 2	Balcony side/wall side	3 • H8	3 • H8	3 • H8	3 • H8
Pos. 3 Bar steel					
Pos. 3	Wall side	H8@100	H10@100	H12@100	H16@100
l_0 [mm]	Wall side	≥ 570	≥ 680	≥ 790	≥ 790

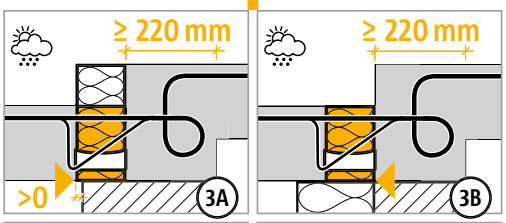
Information about on-site reinforcement

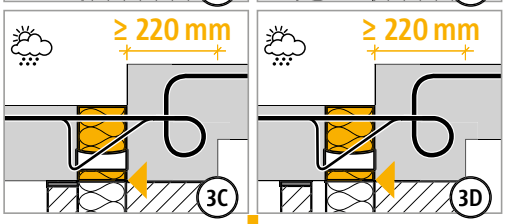
- The required lateral reinforcement in the upstand beam area is to be verified acc. to BS EN 1992-1-1 (EC2), 8.7 to 8.8 and BS EN 1992-1-1/NA, NDPs for 8.8.
- The Schöck Isokorb® type KXT-WU, if required, is to be laid before the installation of the outer reinforcement in the wall.
- The indicative minimum concrete strength class of the external structural component is C32/40.

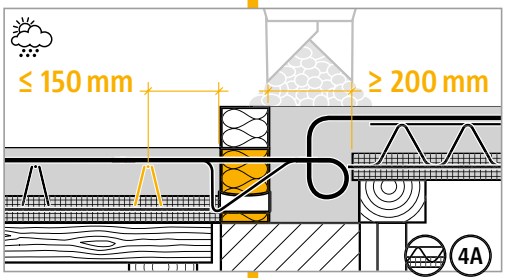
Installation instructions

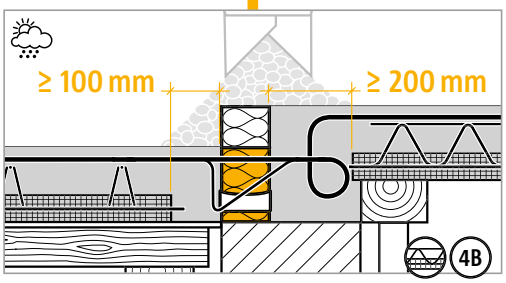




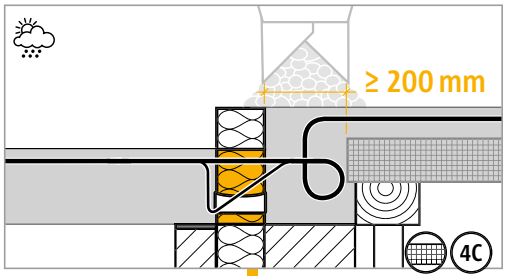


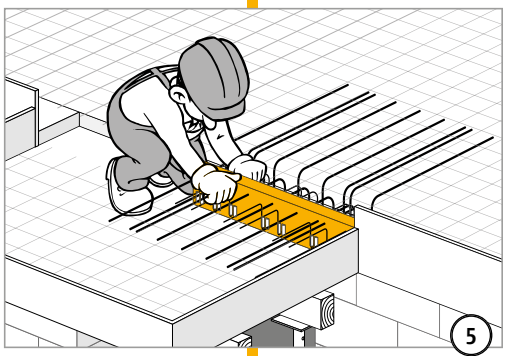


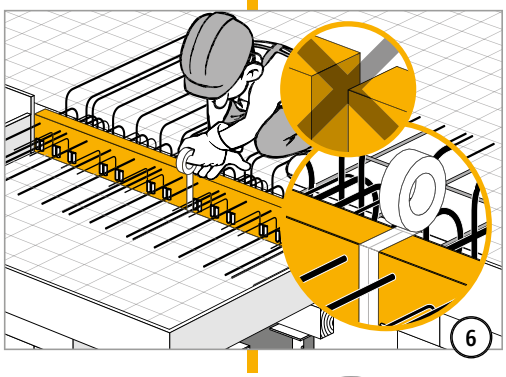


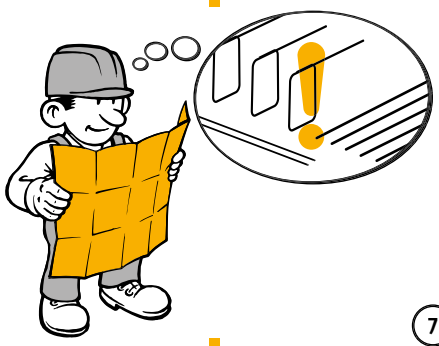


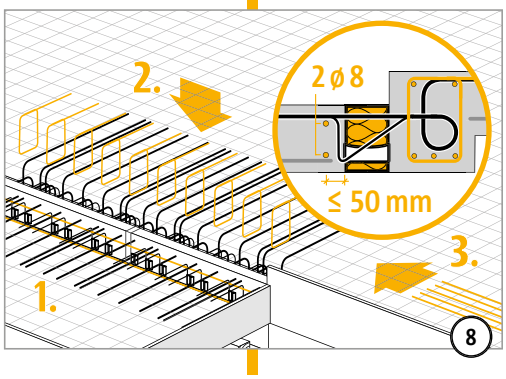
Without fail fill compression joint with in-situ concrete! Joint width ≥ 100 mm.



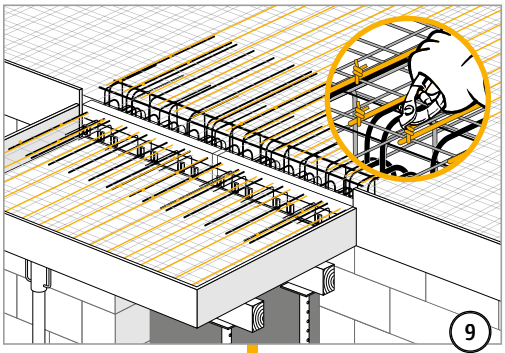


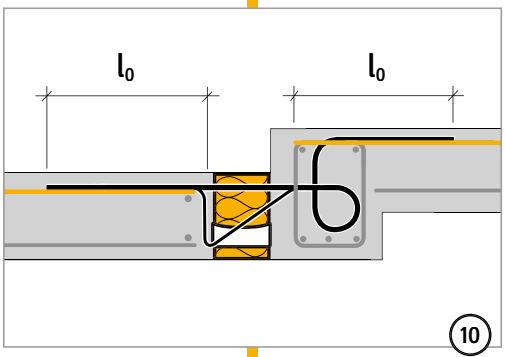


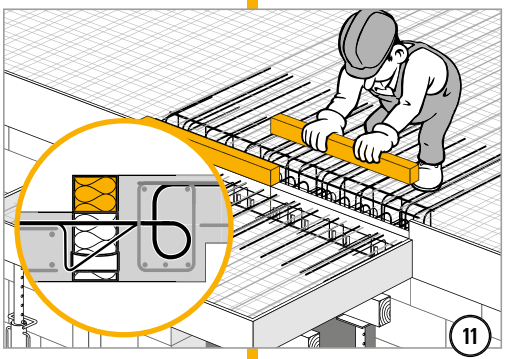


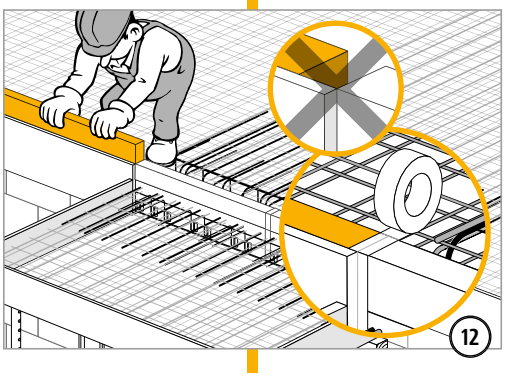


Installation instructions









Check list

- ☐ Have the loads on the Schöck Isokorb® connection been specified at design level?
- ☐ Has the cantilevered system length or the system support width been taken as a basis?
- ☐ Has the additional proportionate deflection resulting from the 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?
- ☐ Is the increased minimum slab thickness taken into account with CV50?
- ☐ Are the recommendations for the limitation of the slenderness observed?
- ☐ Are the maximum allowable expansion joint specings taken into account?
- ☐ Are the Schöck FEM guidelines taken into acount with the calculation using FEM?
- ☐ Are existing horizontal loads e.g. from wind pressure taken into account? Are additional Schöck Isokorb® supplementary type HPXT required for this?
- ☐ Are the requirements with regard to fire protection explained and is the appropriate addendum entered in the Isokorb® type description in the implementation plans?
- ☐ Is the the in-situ concrete strip (width ≥ 100 mm from insulating block of the Schöck Isokorb®type EXT), required in combination with precast floors, marked in the implementation plans?
- ☐ Is the required component geometry present with the connection to a floor or a wall? Is a special design required?
- ☐ Have the requirements for on-site reinforcement of connections been defined in each case?
- ☐ With precast balconies are possibly necessary gaps for the front side transportation anchors and downpipes with internal drainage taken into account? Is the maximum centre distance of 300 mm for the Isokorb® bars observed?