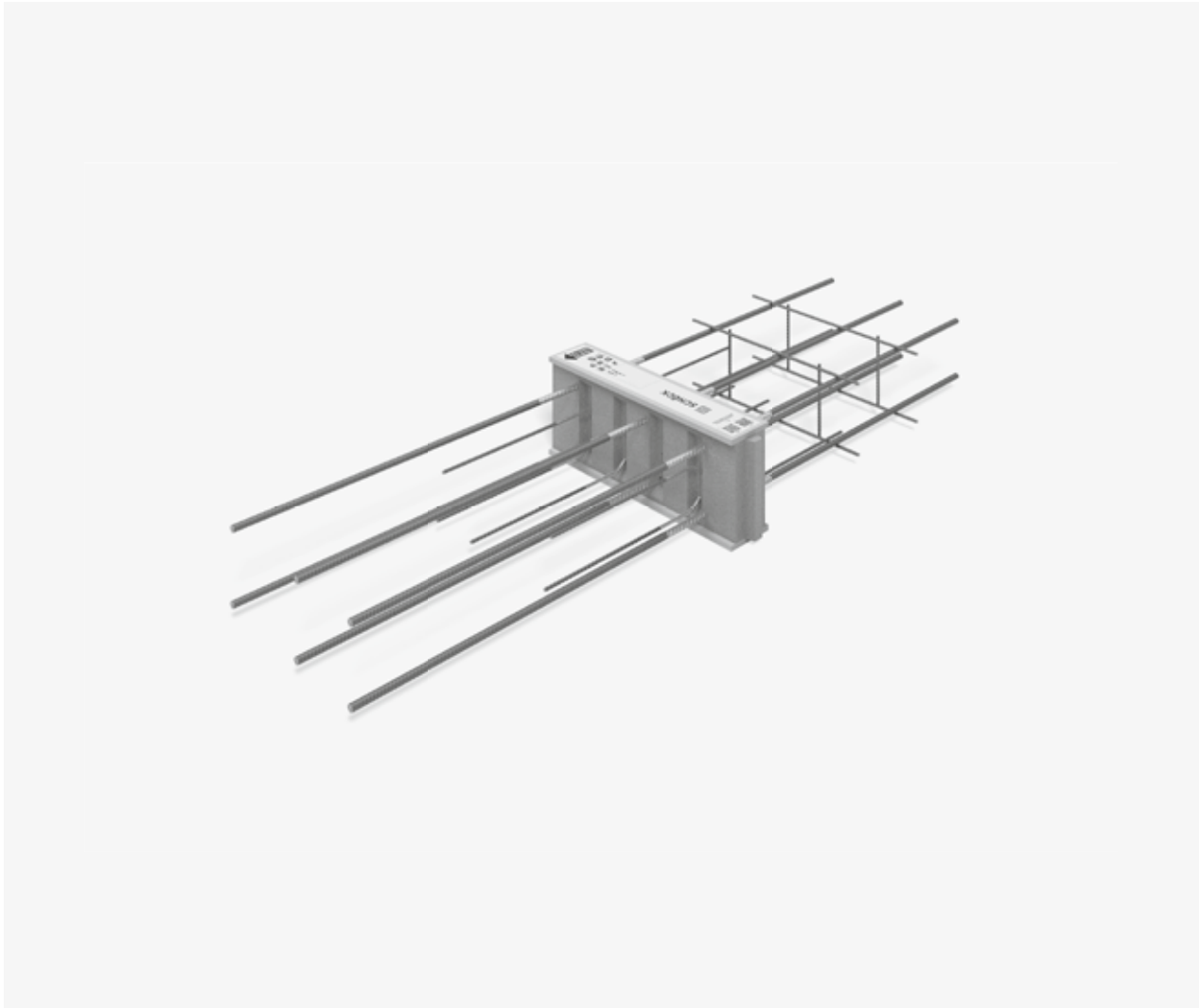


Schöck Isokorb® T Type CD



Schöck Isokorb® T Type CD

Load-bearing thermal insulation element for continuous flooring. The element transfers moments and shear forces.

CD

Products

Assembly Section Details | Element Arrangement

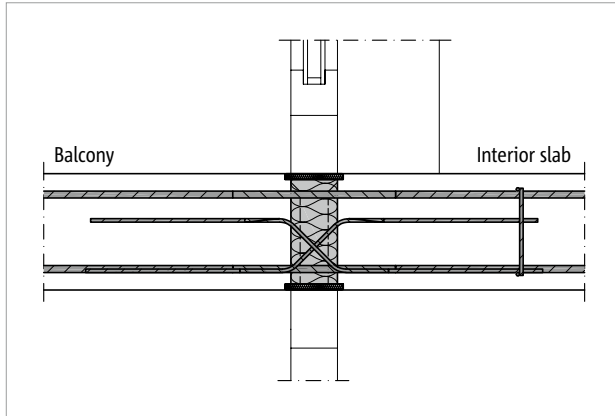


Fig. 1: Schöck Isokorb® T Type CD: Installation section; one-way spanning

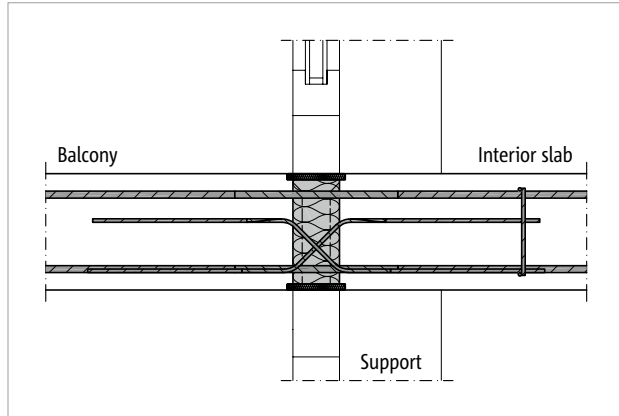


Fig. 2: Schöck Isokorb® T Type CD: Installation section; one-way spanning

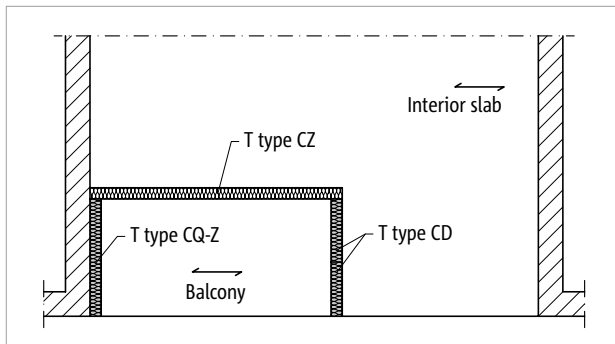


Fig. 3: Schöck Isokorb® T Type CD, CQ-Z; Z: One-way spanning

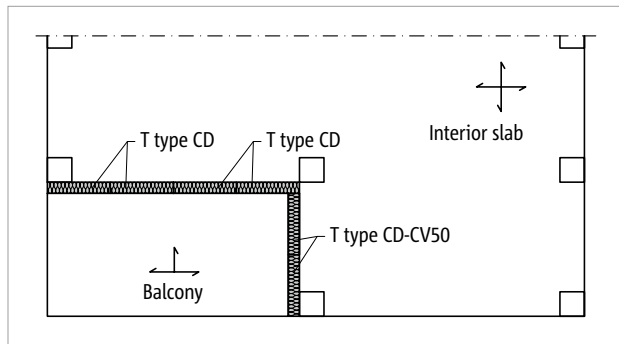


Fig. 4: Schöck Isokorb® T Type CD: Two-way spanning

Position of Schöck Isokorb®

For optimal thermal performance the Schöck Isokorb® should be aligned with the insulation layer.

Orientation of Schöck Isokorb®

- The Schöck Isokorb® does not have a symmetrical design in all cases.
- Ensure proper installation orientation as shown in the cross-section view on the design drawings and product labels.

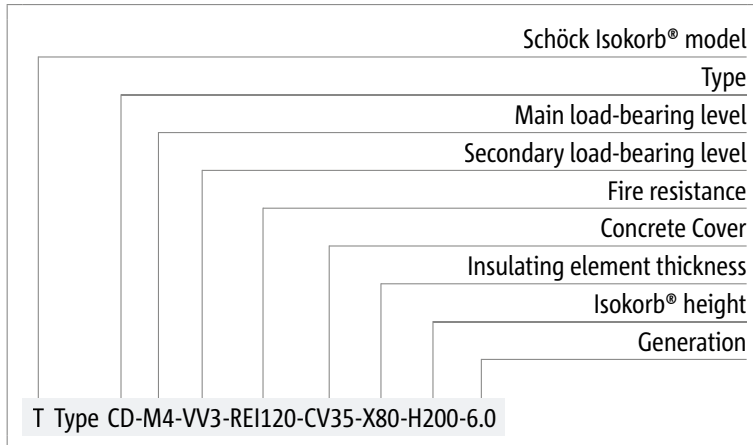
i Notes

- In the presence of horizontal loads, e.g. from earthquakes, Schöck Isokorb® Type CH must be added.
- If the Schöck Isokorb® is used in precast concrete construction, a cast-in-place strip of concrete (width = bar length from insulating element) must be allowed for sufficient connection bar anchorage.

Type Designation

Type designation

The following product naming system is used to specify the attributes of the Schöck Isokorb® product as required in the structural design. This naming system ensures that the product is manufactured in accordance with the required specification. There is also a short-form of each product name to facilitate recognition of the product on the construction site during installation. Every Schöck Isokorb® product comes with both its full production designation and short-form name printed on the label on each unit to ensure the product type is clearly represented.



CD

Products

Product Description

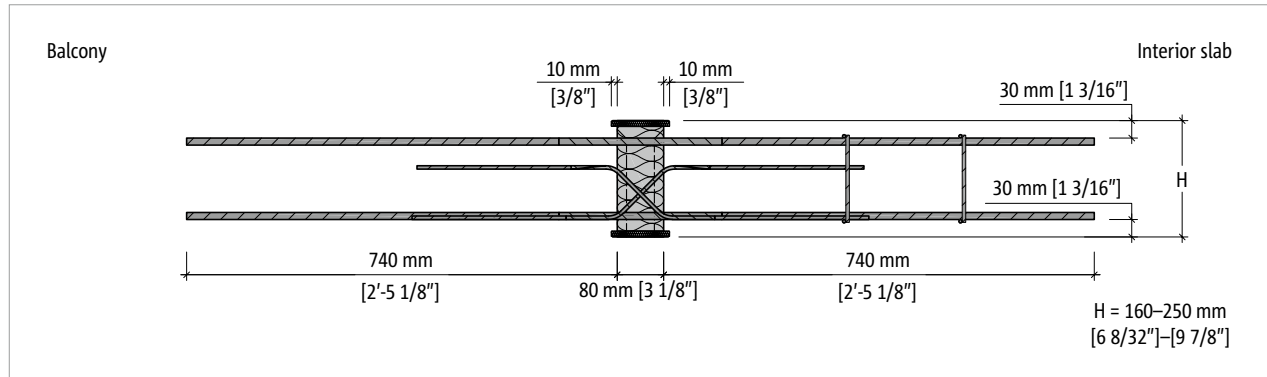


Fig. 5: Schöck Isokorb® T Type CD-MM1-VV1 with CV30: Product cross-section

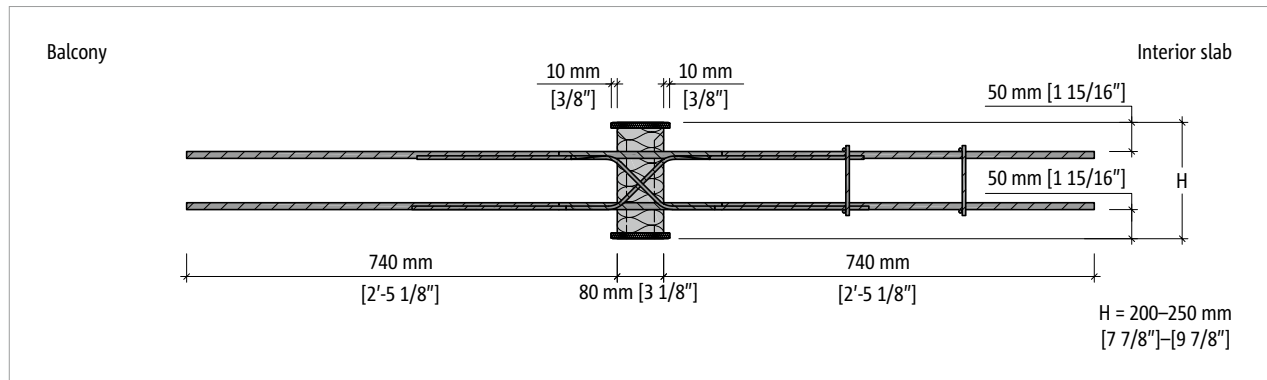


Fig. 6: Schöck Isokorb® T Type CD-MM1-VV1 with CV35: Product cross-section

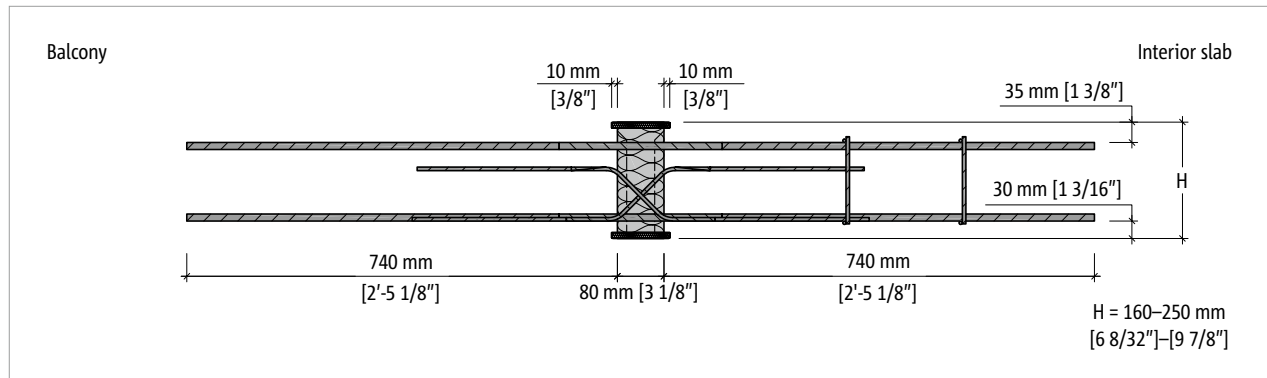


Fig. 7: Schöck Isokorb® T Type CD-MM1-VV1 with CV50: Product cross-section

Product Description

Schöck Isokorb® length and configuration

Schöck Isokorb® T Type CD 6.0	MM1		
	VV1	VV2	VV3
Placement with	Isokorb® length [mm]		
	500		
Length [ft in]	1'-7 11/16"		
Tension bars/compression members	2 × 2 Ø 12	2 × 2 Ø 12	2 × 2 Ø 12
Shear force bars	2 × 2 Ø 6	2 × 3 Ø 6	2 × 3 Ø 8
H _{min} with CV30 [mm]	160	160	170
H _{min} with CV35 [mm]	160	160	170
H _{min} with CV50 [mm]	200	200	210
H _{min} with CV 1 3/8 [in]	6 1/4"	6 1/4"	6 3/4"
H _{min} with CV 1 9/16 [in]	6 1/4"	6 1/4"	6 3/4"
H _{min} with CV 1 15/16 [in]	7 7/8"	7 7/8"	8 1/4"

Schöck Isokorb® T Type CD 6.0	MM2		
	VV1	VV2	VV3
Placement with	Isokorb® length [mm]		
	500		
Length [ft in]	1'-7 11/16"		
Tension bars/compression members	2 × 3 Ø 12	2 × 3 Ø 12	2 × 3 Ø 12
Shear force bars	2 × 3 Ø 6	2 × 3 Ø 8	2 × 3 Ø 10
H _{min} with CV30 [mm]	160	170	180
H _{min} with CV35 [mm]	160	170	180
H _{min} with CV50 [mm]	200	210	220
H _{min} with CV 1 3/8 [in]	6 1/4"	6 3/4"	7"
H _{min} with CV 1 9/16 [in]	6 1/4"	6 3/4"	7"
H _{min} with CV 1 15/16 [in]	7 7/8"	8 1/2"	8 3/4"

i Notes

- The shear force bar lengths vary as shown in the following plan details.
- The Schöck Isokorb® consists of metric components.
- Reinforcement bars Ø6 correspond to 1/4" diameter, approximately
- Reinforcement bars Ø8 correspond to 5/16" diameter, approximately
- Reinforcement bars Ø10 correspond to 3/8" diameter, approximately
- Reinforcement bars Ø12 correspond to 1/2" diameter, approximately

Product Description

Schöck Isokorb® T Type CD 6.0	MM3				
	VV1	VV2	VV3	VV4	VV5
Placement with	Isokorb® length [mm]				
	500				
Length [ft in]	1'-7 11/16"				
Tension bars/compression members	2 × 4 Ø 12	2 × 4 Ø 12	2 × 4 Ø 12	2 × 4 Ø 12	2 × 4 Ø 12
Shear force bars	2 × 3 Ø 6	2 × 3 Ø 8	2 × 3 Ø 10	2 × 4 Ø 10	2 × 4 Ø 12
H _{min} with CV30 [mm]	160	170	180	180	190
H _{min} with CV35 [mm]	160	170	180	180	200
H _{min} with CV50 [mm]	200	210	220	220	230
H _{min} with CV 1 3/8 [in]	6 1/4"	6 3/4"	7"	7"	7 1/2"
H _{min} with CV 1 9/16 [in]	6 1/4"	6 3/4"	7"	7"	7 7/8"
H _{min} with CV 1 15/16 [in]	7 7/8"	8 1/2"	8 3/4"	8 3/4"	9"

Schöck Isokorb® T Type CD 6.0	MM4				
	VV1	VV2	VV3	VV4	VV5
Placement with	Isokorb® length [mm]				
	500				
Length [ft in]	1'-7 11/16"				
Tension bars/compression members	2 × 5 Ø 12	2 × 5 Ø 12	2 × 5 Ø 12	2 × 5 Ø 12	2 × 5 Ø 12
Shear force bars	2 × 3 Ø 6	2 × 3 Ø 8	2 × 3 Ø 10	2 × 4 Ø 10	2 × 4 Ø 12
H _{min} with CV30 [mm]	160	170	180	180	190
H _{min} with CV35 [mm]	160	170	180	180	200
H _{min} with CV50 [mm]	200	210	220	220	230
H _{min} with CV 1 3/8 [in]	6 1/4"	6 3/4"	7"	7"	7 1/2"
H _{min} with CV 1 9/16 [in]	6 1/4"	6 3/4"	7"	7"	7 7/8"
H _{min} with CV 1 15/16 [in]	7 7/8"	8 1/2"	8 3/4"	8 3/4"	9"

i Notes

- The shear force bar lengths vary as shown in the following plan details.
- The Schöck Isokorb® consists of metric components.
- Reinforcement bars Ø6 correspond to 1/4" diameter, approximately
- Reinforcement bars Ø8 correspond to 5/16" diameter, approximately
- Reinforcement bars Ø10 correspond to 3/8" diameter, approximately
- Reinforcement bars Ø12 correspond to 1/2" diameter, approximately

Product Description

Schöck Isokorb® T Type CD 6.0	MM5				
	VV1	VV2	VV3	VV4	VV5
Placement with	Isokorb® length [mm]				
	500				
Length [ft in]	1'-7 11/16"				
Tension bars/compression members	2 × 6 Ø 12	2 × 6 Ø 12	2 × 6 Ø 12	2 × 6 Ø 12	2 × 6 Ø 12
Shear force bars	2 × 3 Ø 6	2 × 3 Ø 8	2 × 3 Ø 10	2 × 4 Ø 10	2 × 4 Ø 12
H _{min} with CV30 [mm]	160	170	180	180	190
H _{min} with CV35 [mm]	160	170	180	180	200
H _{min} with CV50 [mm]	200	210	220	220	230
H _{min} with CV 1 3/8 [in]	6 1/4"	6 3/4"	7"	7"	7 1/2"
H _{min} with CV 1 9/16 [in]	6 1/4"	6 3/4"	7"	7"	7 7/8"
H _{min} with CV 1 15/16 [in]	7 7/8"	8 1/2"	8 3/4"	8 3/4"	9"

Schöck Isokorb® T Type CD 6.0	MM6				
	VV1	VV2	VV3	VV4	VV5
Placement with	Isokorb® length [mm]				
	500				
Length [ft in]	1'-7 11/16"				
Tension bars/compression members	2 × 6 Ø 14	2 × 6 Ø 14	2 × 6 Ø 14	2 × 6 Ø 14	2 × 6 Ø 14
Shear force bars	2 × 3 Ø 6	2 × 3 Ø 8	2 × 3 Ø 10	2 × 4 Ø 10	2 × 4 Ø 12
H _{min} with CV30 [mm]	160	170	180	180	190
H _{min} with CV35 [mm]	160	170	180	180	200
H _{min} with CV50 [mm]	200	210	220	220	230
H _{min} with CV 1 3/8 [in]	6 1/4"	6 3/4"	7"	7"	7 1/2"
H _{min} with CV 1 9/16 [in]	6 1/4"	6 3/4"	7"	7"	7 7/8"
H _{min} with CV 1 15/16 [in]	7 7/8"	8 1/2"	8 3/4"	8 3/4"	9"

Notes

- The shear force bar lengths vary as shown in the following plan details.
- The Schöck Isokorb® consists of metric components.
- Reinforcement bars Ø6 correspond to 1/4" diameter, approximately
- Reinforcement bars Ø8 correspond to 5/16" diameter, approximately
- Reinforcement bars Ø10 correspond to 3/8" diameter, approximately
- Reinforcement bars Ø12 correspond to 1/2" diameter, approximately

Product Description

Schöck Isokorb® T type K-M12 to M14 is only available in length L = 500 mm

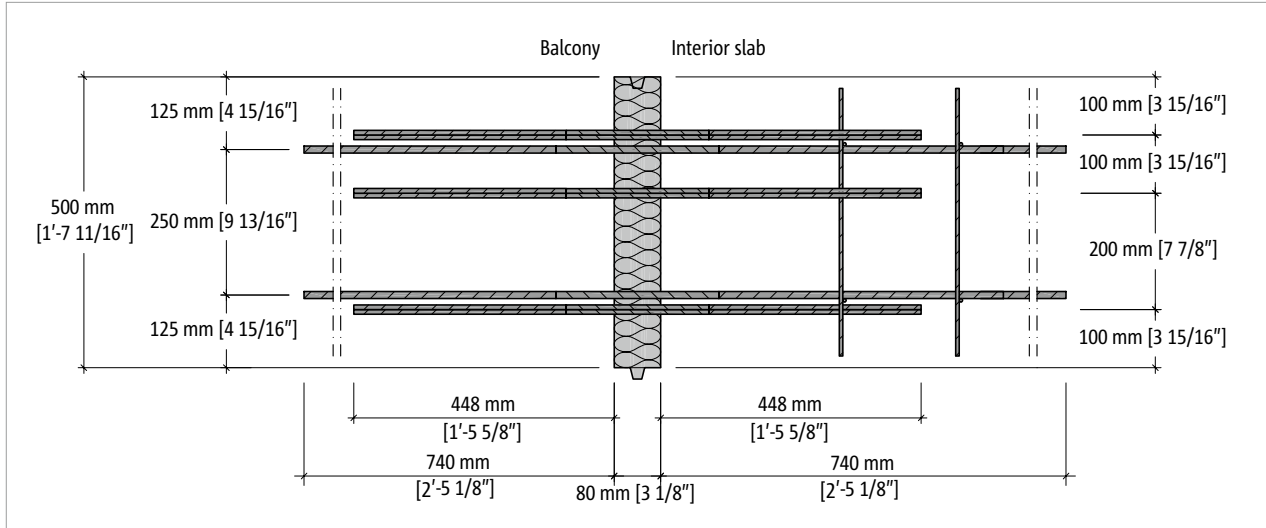


Fig. 8: Schöck Isokorb® T Type CD-MM1-VV3: Top view of the product

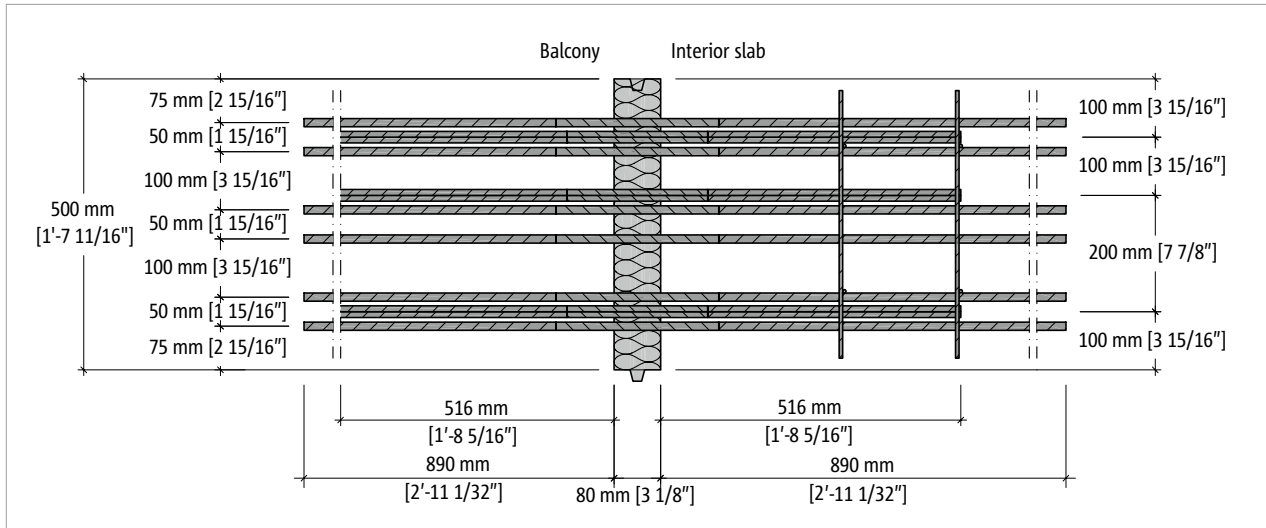


Fig. 9: Schöck Isokorb® T Type CD-MM6-VV3: Top view of the product

Strength Capacity

Notes

- If any concrete on the interior or exterior of the Schöck Isokorb® is less than 27.5 MPa [4,000 psi], contact the Schöck Design Department.
- The Engineer of Record (EOR) must confirm strength of the slabs attached at either side to the Schöck Isokorb®.
- In the presence of horizontal loads, e.g. from earthquakes, Schöck Isokorb® Type CH must be added.
- The Schöck Isokorb® capacities consider a maximum permitted bar separation for lap splices according to Building Code. This has to be taken into account by the Engineer of Record (EOR).
- The values shown in the design capacity tables are ultimate (factored) values.
- The support is assumed to be 100 mm [4"] from the Schöck Isokorb® insulation body on the interior slab side.
- For SI: 1 inch = 25.4 mm, 1 lbf = 4.448 N, 1 psi = 0.006897 MPa.
US customary units: 1 mm = 0.03937 inches, 1 N = 0.2248 lbf, 1 MPa = 145.0 psi.

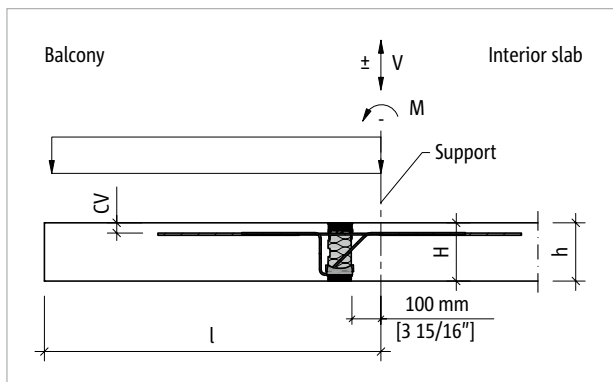


Fig. 10: Schöck Isokorb® T Type CK: Structural system

Strength Capacity

Design Values with	Schöck Isokorb® T Type CD 6.0			MM1-VV1	MM1-VV2	MM1-VV3
	Isokorb® height H [mm]	Isokorb® height H [in]	Minimum slab height [in]	Concrete Strength $\geq 4,000$ psi		
				ϕM_n [kip-ft/Element]		
Concrete cover CV 1 3/16 [in]	160	6 5/16"	6 1/4"	±5.8	±5.5	-
	170	6 11/16"	6 3/4"	±6.5	±6.2	±5.5
	180	7"	7"	±7.2	±6.8	±6.0
	190	7 1/2"	7 1/2"	±7.8	±7.4	±6.6
	200	7 7/8"	7 7/8"	±8.5	±8.0	±7.1
	210	8 1/4"	8 1/2"	±9.1	±8.7	±7.7
	220	8 5/8"	8 3/4"	±9.8	±9.3	±8.2
	230	9"	9"	±10.5	±10.0	±8.8
	240	9 1/2"	9 1/2"	±11.1	±10.5	±9.3
	250	9 7/8"	10"	±11.8	±11.2	±9.9
	260	10 1/4"	10 1/4"	±12.5	±11.8	±10.4
	270	10 5/8"	10 5/8"	±13.1	±12.5	±11.0
280	11"	11"	±13.7	±13.1	±11.5	
Concrete cover CV 1 3/8 [in]	160	6 5/16"	6 1/4"	±5.5	±5.2	-
	170	6 11/16"	6 3/4"	±6.1	±5.8	±5.2
	180	7"	7"	±6.8	±6.5	±5.7
	190	7 1/2"	7 1/2"	±7.4	±7.1	±6.3
	200	7 7/8"	7 7/8"	±8.1	±7.7	±6.8
	210	8 1/4"	8 1/2"	±8.8	±8.3	±7.4
	220	8 5/8"	8 3/4"	±9.4	±9.0	±7.9
	230	9"	9"	±10.1	±9.7	±8.5
	240	9 1/2"	9 1/2"	±10.8	±10.3	±9.1
	250	9 7/8"	10"	±11.4	±10.9	±9.6
	260	10 1/4"	10 1/4"	±12.1	±11.5	±10.2
	270	10 5/8"	10 5/8"	±12.8	±12.2	±10.7
280	11"	11"	±13.4	±12.8	±11.3	
Concrete cover CV 1 15/16 [in]	200	7 7/8"	7 7/8"	±5.8	±5.5	-
	210	8 1/4"	8 1/2"	±6.5	±6.2	±5.5
	220	8 5/8"	8 3/4"	±7.2	±6.8	±6.0
	230	9"	9"	±7.8	±7.4	±6.6
	240	9 1/2"	9 1/2"	±8.5	±8.0	±7.1
	250	9 7/8"	10"	±9.1	±8.7	±7.7
	260	10 1/4"	10 1/4"	±9.8	±9.3	±8.2
	270	10 5/8"	10 5/8"	±10.5	±10.0	±8.8
280	11"	11"	±11.1	±10.5	±9.3	
				ϕV_n [kips/Element]		
Secondary load-bearing level	VV1-VV3			±3.9	±5.9	±10.4

Notes

- Static system and information on the design see page 9.

Strength Capacity

Design Values with	Schöck Isokorb® T Type CD 6.0			MM2-VV1	MM2-VV2	MM2-VV3
	Isokorb® height H [mm]	Isokorb® height H [in]	Minimum slab height [in]	Concrete Strength $\geq 4,000$ psi		
				ϕM_n [kip-ft/Element]		
Concrete cover CV 1 3/16 [in]	160	6 5/16"	6 1/4"	±8.7	-	-
	170	6 11/16"	6 3/4"	±9.7	±9.0	-
	180	7"	7"	±10.7	±9.9	±9.1
	190	7 1/2"	7 1/2"	±11.7	±10.8	±9.9
	200	7 7/8"	7 7/8"	±12.7	±11.7	±10.7
	210	8 1/4"	8 1/2"	±13.7	±12.7	±11.6
	220	8 5/8"	8 3/4"	±14.7	±13.6	±12.4
	230	9"	9"	±15.6	±14.5	±13.2
	240	9 1/2"	9 1/2"	±16.7	±15.4	±14.1
	250	9 7/8"	10"	±17.6	±16.3	±14.9
	260	10 1/4"	10 1/4"	±18.7	±17.3	±15.7
	270	10 5/8"	10 5/8"	±19.6	±18.1	±16.6
	280	11"	11"	±20.7	±19.1	±17.4
Concrete cover CV 1 3/8 [in]	160	6 5/16"	6 1/4"	±8.3	-	-
	170	6 11/16"	6 3/4"	±9.2	±8.6	-
	180	7"	7"	±10.3	±9.4	±8.6
	190	7 1/2"	7 1/2"	±11.2	±10.4	±9.4
	200	7 7/8"	7 7/8"	±12.2	±11.3	±10.3
	210	8 1/4"	8 1/2"	±13.2	±12.2	±11.1
	220	8 5/8"	8 3/4"	±14.2	±13.1	±11.9
	230	9"	9"	±15.2	±14.0	±12.8
	240	9 1/2"	9 1/2"	±16.2	±15.0	±13.6
	250	9 7/8"	10"	±17.2	±15.9	±14.5
	260	10 1/4"	10 1/4"	±18.1	±16.8	±15.3
	270	10 5/8"	10 5/8"	±19.2	±17.7	±16.2
	280	11"	11"	±20.1	±18.6	±17.0
Concrete cover CV 1 15/16 [in]	200	7 7/8"	7 7/8"	±8.7	-	-
	210	8 1/4"	8 1/2"	±9.7	±9.0	-
	220	8 5/8"	8 3/4"	±10.7	±9.9	±9.1
	230	9"	9"	±11.7	±10.8	±9.9
	240	9 1/2"	9 1/2"	±12.7	±11.7	±10.7
	250	9 7/8"	10"	±13.7	±12.7	±11.6
	260	10 1/4"	10 1/4"	±14.7	±13.6	±12.4
	270	10 5/8"	10 5/8"	±15.6	±14.5	±13.2
280	11"	11"	±16.7	±15.4	±14.1	
				ϕV_n [kips/Element]		
Secondary load-bearing level	VV1-VV3			±5.9	±10.4	±15.3

Notes

- Static system and information on the design see page 9.

Strength Capacity

Schöck Isokorb® T Type CD 6.0				MM3-VV1	MM3-VV2	MM3-VV3	MM3-VV4	MM3-VV5
Design Values with	Isokorb® height H [mm]	Isokorb® height H [in]	Minimum slab height [in]	Concrete Strength $\geq 4,000$ psi				
				ϕM_n [kip-ft/Element]				
Concrete cover CV 1 3/16 [in]	160	6 5/16"	6 1/4"	±11.9	-	-	-	-
	170	6 11/16"	6 3/4"	±13.3	±12.5	-	-	-
	180	7"	7"	±14.6	±13.8	±13.0	±12.0	-
	190	7 1/2"	7 1/2"	±16.0	±15.1	±14.2	±13.2	±11.1
	200	7 7/8"	7 7/8"	±17.3	±16.4	±15.3	±14.3	±12.0
	210	8 1/4"	8 1/2"	±18.7	±17.6	±16.6	±15.4	±12.9
	220	8 5/8"	8 3/4"	±20.1	±19.0	±17.8	±16.5	±13.9
	230	9"	9"	±21.4	±20.2	±19.0	±17.6	±14.8
	240	9 1/2"	9 1/2"	±22.8	±21.5	±20.1	±18.7	±15.8
	250	9 7/8"	10"	±24.1	±22.8	±21.4	±19.8	±16.7
	260	10 1/4"	10 1/4"	±25.4	±24.0	±22.6	±21.0	±17.6
	270	10 5/8"	10 5/8"	±26.8	±25.4	±23.7	±22.1	±18.6
	280	11"	11"	±28.2	±26.6	±24.9	±23.2	±19.5
Concrete cover CV 1 3/8 [in]	160	6 5/16"	6 1/4"	±11.2	-	-	-	-
	170	6 11/16"	6 3/4"	±12.6	±11.9	-	-	-
	180	7"	7"	±13.9	±13.2	±12.4	±11.5	-
	190	7 1/2"	7 1/2"	±15.3	±14.5	±13.6	±12.6	-
	200	7 7/8"	7 7/8"	±16.7	±15.7	±14.8	±13.7	±11.5
	210	8 1/4"	8 1/2"	±18.0	±17.0	±15.9	±14.8	±12.5
	220	8 5/8"	8 3/4"	±19.4	±18.3	±17.2	±15.9	±13.4
	230	9"	9"	±20.7	±19.5	±18.4	±17.1	±14.4
	240	9 1/2"	9 1/2"	±22.1	±20.9	±19.5	±18.2	±15.3
	250	9 7/8"	10"	±23.5	±22.1	±20.7	±19.3	±16.2
	260	10 1/4"	10 1/4"	±24.8	±23.5	±22.0	±20.4	±17.2
270	10 5/8"	10 5/8"	±26.1	±24.7	±23.2	±21.5	±18.1	
280	11"	11"	±27.5	±26.0	±24.3	±22.6	±19.0	
Concrete cover CV 1 15/16 [in]	200	7 7/8"	7 7/8"	±11.9	-	-	-	-
	210	8 1/4"	8 1/2"	±13.3	±12.5	-	-	-
	220	8 5/8"	8 3/4"	±14.6	±13.8	±13.0	±12.0	-
	230	9"	9"	±16.0	±15.1	±14.2	±13.2	±11.1
	240	9 1/2"	9 1/2"	±17.3	±16.4	±15.3	±14.3	±12.0
	250	9 7/8"	10"	±18.7	±17.6	±16.6	±15.4	±12.9
	260	10 1/4"	10 1/4"	±20.1	±19.0	±17.8	±16.5	±13.9
	270	10 5/8"	10 5/8"	±21.4	±20.2	±19.0	±17.6	±14.8
280	11"	11"	±22.8	±21.5	±20.1	±18.7	±15.8	
ϕV_n [kips/Element]								
Secondary load-bearing level	VV1-VV5			±5.9	±10.4	±15.3	±20.4	±31.3

Notes

- Static system and information on the design see page 9.

Strength Capacity

Schöck Isokorb® T Type CD 6.0				MM4-VV1	MM4-VV2	MM4-VV3	MM4-VV4	MM4-VV5
Design Values with	Isokorb® height H [mm]	Isokorb® height H [in]	Minimum slab height [in]	Concrete Strength $\geq 4,000$ psi				
				ϕM_n [kip-ft/Element]				
Concrete cover CV 1 3/16 [in]	160	6 5/16"	6 1/4"	±15.1	-	-	-	-
	170	6 11/16"	6 3/4"	±16.8	±16.1	-	-	-
	180	7"	7"	±18.5	±17.7	±16.9	±16.0	-
	190	7 1/2"	7 1/2"	±20.3	±19.4	±18.4	±17.5	±15.3
	200	7 7/8"	7 7/8"	±22.0	±21.0	±20.0	±19.0	±16.7
	210	8 1/4"	8 1/2"	±23.7	±22.6	±21.5	±20.4	±17.9
	220	8 5/8"	8 3/4"	±25.4	±24.3	±23.2	±21.9	±19.3
	230	9"	9"	±27.1	±26.0	±24.7	±23.4	±20.6
	240	9 1/2"	9 1/2"	±28.8	±27.6	±26.3	±24.9	±21.8
	250	9 7/8"	10"	±30.5	±29.2	±27.8	±26.3	±23.2
	260	10 1/4"	10 1/4"	±32.3	±30.9	±29.4	±27.8	±24.4
	270	10 5/8"	10 5/8"	±34.0	±32.5	±30.9	±29.3	±25.7
	280	11"	11"	±35.7	±34.1	±32.5	±30.8	±27.1
Concrete cover CV 1 3/8 [in]	160	6 5/16"	6 1/4"	±14.2	-	-	-	-
	170	6 11/16"	6 3/4"	±16.0	±15.3	-	-	-
	180	7"	7"	±17.7	±16.9	±16.1	±15.3	-
	190	7 1/2"	7 1/2"	±19.4	±18.6	±17.6	±16.7	-
	200	7 7/8"	7 7/8"	±21.1	±20.2	±19.3	±18.2	±16.0
	210	8 1/4"	8 1/2"	±22.9	±21.8	±20.8	±19.7	±17.3
	220	8 5/8"	8 3/4"	±24.6	±23.5	±22.3	±21.2	±18.6
	230	9"	9"	±26.3	±25.2	±23.9	±22.6	±19.9
	240	9 1/2"	9 1/2"	±28.0	±26.8	±25.4	±24.1	±21.2
	250	9 7/8"	10"	±29.7	±28.4	±27.1	±25.6	±22.5
	260	10 1/4"	10 1/4"	±31.4	±30.1	±28.6	±27.1	±23.8
	270	10 5/8"	10 5/8"	±33.1	±31.7	±30.2	±28.5	±25.1
	280	11"	11"	±34.9	±33.3	±31.7	±30.0	±26.4
Concrete cover CV 1 15/16 [in]	200	7 7/8"	7 7/8"	±15.1	-	-	-	-
	210	8 1/4"	8 1/2"	±16.8	±16.1	-	-	-
	220	8 5/8"	8 3/4"	±18.5	±17.7	±16.9	±16.0	-
	230	9"	9"	±20.3	±19.4	±18.4	±17.5	±15.3
	240	9 1/2"	9 1/2"	±22.0	±21.0	±20.0	±19.0	±16.7
	250	9 7/8"	10"	±23.7	±22.6	±21.5	±20.4	±17.9
	260	10 1/4"	10 1/4"	±25.4	±24.3	±23.2	±21.9	±19.3
	270	10 5/8"	10 5/8"	±27.1	±26.0	±24.7	±23.4	±20.6
280	11"	11"	±28.8	±27.6	±26.3	±24.9	±21.8	
				ϕV_n [kips/Element]				
Secondary load-bearing level	VV1-VV5			±5.9	±10.4	±15.3	±20.4	±31.3

Notes

- Static system and information on the design see page 9.

Strength Capacity

Schöck Isokorb® T Type CD 6.0				MM5-VV1	MM5-VV2	MM5-VV3	MM5-VV4	MM5-VV5
Design Values with	Isokorb® height H [mm]	Isokorb® height H [in]	Minimum slab height [in]	Concrete Strength $\geq 4,000$ psi				
				ϕM_n [kip-ft/Element]				
Concrete cover CV 1 3/16 [in]	160	6 5/16"	6 1/4"	±18.3	-	-	-	-
	170	6 11/16"	6 3/4"	±20.4	±19.6	-	-	-
	180	7"	7"	±22.5	±21.7	±20.8	±19.9	-
	190	7 1/2"	7 1/2"	±24.6	±23.7	±22.7	±21.8	±19.6
	200	7 7/8"	7 7/8"	±26.6	±25.7	±24.6	±23.6	±21.3
	210	8 1/4"	8 1/2"	±28.7	±27.7	±26.6	±25.4	±22.9
	220	8 5/8"	8 3/4"	±30.8	±29.7	±28.5	±27.3	±24.6
	230	9"	9"	±32.9	±31.7	±30.4	±29.1	±26.3
	240	9 1/2"	9 1/2"	±35.0	±33.7	±32.4	±30.9	±28.0
	250	9 7/8"	10"	±37.0	±35.7	±34.3	±32.7	±29.6
	260	10 1/4"	10 1/4"	±39.1	±37.7	±36.2	±34.6	±31.3
	270	10 5/8"	10 5/8"	±41.2	±39.7	±38.1	±36.4	±32.9
	280	11"	11"	±43.3	±41.7	±40.0	±38.3	±34.6
Concrete cover CV 1 3/8 [in]	160	6 5/16"	6 1/4"	±17.3	-	-	-	-
	170	6 11/16"	6 3/4"	±19.3	±18.7	-	-	-
	180	7"	7"	±21.4	±20.7	±19.8	±19.0	-
	190	7 1/2"	7 1/2"	±23.5	±22.6	±21.8	±20.8	-
	200	7 7/8"	7 7/8"	±25.6	±24.6	±23.7	±22.6	±20.4
	210	8 1/4"	8 1/2"	±27.7	±26.7	±25.6	±24.5	±22.1
	220	8 5/8"	8 3/4"	±29.7	±28.7	±27.5	±26.3	±23.7
	230	9"	9"	±31.8	±30.7	±29.4	±28.2	±25.4
	240	9 1/2"	9 1/2"	±33.9	±32.7	±31.3	±30.0	±27.1
	250	9 7/8"	10"	±36.0	±34.7	±33.3	±31.9	±28.8
	260	10 1/4"	10 1/4"	±38.1	±36.7	±35.3	±33.7	±30.5
270	10 5/8"	10 5/8"	±40.1	±38.7	±37.2	±35.6	±32.1	
280	11"	11"	±42.2	±40.7	±39.1	±37.4	±33.8	
Concrete cover CV 1 15/16 [in]	200	7 7/8"	7 7/8"	±18.3	-	-	-	-
	210	8 1/4"	8 1/2"	±20.4	±19.6	-	-	-
	220	8 5/8"	8 3/4"	±22.5	±21.7	±20.8	±19.9	-
	230	9"	9"	±24.6	±23.7	±22.7	±21.8	±19.6
	240	9 1/2"	9 1/2"	±26.6	±25.7	±24.6	±23.6	±21.3
	250	9 7/8"	10"	±28.7	±27.7	±26.6	±25.4	±22.9
	260	10 1/4"	10 1/4"	±30.8	±29.7	±28.5	±27.3	±24.6
	270	10 5/8"	10 5/8"	±32.9	±31.7	±30.4	±29.1	±26.3
280	11"	11"	±35.0	±33.7	±32.4	±30.9	±28.0	
ϕV_n [kips/Element]								
Secondary load-bearing level	VV1-VV5			±5.9	±10.4	±15.3	±20.4	±31.3

Notes

- Static system and information on the design see page 9.

Strength Capacity

Schöck Isokorb® T Type CD 6.0				MM6-VV1	MM6-VV2	MM6-VV3	MM6-VV4	MM6-VV5
Design Values with	Isokorb® height H [mm]	Isokorb® height H [in]	Minimum slab height [in]	Concrete Strength $\geq 4,000$ psi				
				ϕM_n [kip-ft/Element]				
Concrete cover CV 1 3/16 [in]	160	6 5/16"	6 1/4"	±24.6	-	-	-	-
	170	6 11/16"	6 3/4"	±27.5	±26.8	-	-	-
	180	7"	7"	±30.4	±29.6	±28.8	±27.9	-
	190	7 1/2"	7 1/2"	±33.3	±32.4	±31.4	±30.5	±28.4
	200	7 7/8"	7 7/8"	±36.1	±35.2	±34.1	±33.1	±30.8
	210	8 1/4"	8 1/2"	±38.9	±38.0	±36.9	±35.7	±33.3
	220	8 5/8"	8 3/4"	±41.8	±40.7	±39.6	±38.4	±35.8
	230	9"	9"	±44.7	±43.5	±42.3	±41.0	±38.2
	240	9 1/2"	9 1/2"	±47.6	±46.3	±45.0	±43.6	±40.6
	250	9 7/8"	10"	±50.4	±49.1	±47.7	±46.2	±43.1
	260	10 1/4"	10 1/4"	±53.3	±51.9	±50.4	±48.9	±45.6
	270	10 5/8"	10 5/8"	±56.2	±54.7	±53.1	±51.5	±48.0
	280	11"	11"	±59.0	±57.5	±55.8	±54.1	±50.4
Concrete cover CV 1 3/8 [in]	160	6 5/16"	6 1/4"	±23.2	-	-	-	-
	170	6 11/16"	6 3/4"	±26.1	±25.4	-	-	-
	180	7"	7"	±28.9	±28.2	±27.4	±26.6	-
	190	7 1/2"	7 1/2"	±31.8	±31.0	±30.1	±29.1	-
	200	7 7/8"	7 7/8"	±34.7	±33.8	±32.8	±31.8	±29.7
	210	8 1/4"	8 1/2"	±37.5	±36.6	±35.6	±34.4	±32.1
	220	8 5/8"	8 3/4"	±40.4	±39.4	±38.2	±37.0	±34.5
	230	9"	9"	±43.3	±42.1	±40.9	±39.7	±37.0
	240	9 1/2"	9 1/2"	±46.2	±44.9	±43.7	±42.3	±39.5
	250	9 7/8"	10"	±49.0	±47.7	±46.4	±44.9	±41.9
	260	10 1/4"	10 1/4"	±51.9	±50.5	±49.0	±47.6	±44.3
	270	10 5/8"	10 5/8"	±54.7	±53.3	±51.8	±50.2	±46.8
	280	11"	11"	±57.6	±56.1	±54.5	±52.8	±49.2
Concrete cover CV 1 15/16 [in]	200	7 7/8"	7 7/8"	±24.6	-	-	-	-
	210	8 1/4"	8 1/2"	±27.5	±26.8	-	-	-
	220	8 5/8"	8 3/4"	±30.4	±29.6	±28.8	±27.9	-
	230	9"	9"	±33.3	±32.4	±31.4	±30.5	±28.4
	240	9 1/2"	9 1/2"	±36.1	±35.2	±34.1	±33.1	±30.8
	250	9 7/8"	10"	±38.9	±38.0	±36.9	±35.7	±33.3
	260	10 1/4"	10 1/4"	±41.8	±40.7	±39.6	±38.4	±35.8
	270	10 5/8"	10 5/8"	±44.7	±43.5	±42.3	±41.0	±38.2
280	11"	11"	±47.6	±46.3	±45.0	±43.6	±40.6	
				ϕV_n [kips/Element]				
Secondary load-bearing level	VV1-VV5			±5.9	±10.4	±15.3	±20.4	±31.3

Notes

- Static system and information on the design see page 9.

Strength Capacity

Schöck Isokorb® T Type CD 6.0			MM1-VV1	MM1-VV2	MM1-VV3
Design Values with	Isokorb® height H [mm]	Minimum slab height [mm]	Concrete Strength ≥ 27.5 MPa		
			ϕM_n [kNm/Unit]		
Concrete cover CV30 [mm]	160	160	± 7.9	± 7.5	-
	170	170	± 8.8	± 8.4	± 7.4
	180	180	± 9.7	± 9.2	± 8.1
	190	190	± 10.6	± 10.1	± 8.9
	200	200	± 11.5	± 10.9	± 9.6
	210	210	± 12.4	± 11.8	± 10.4
	220	220	± 13.3	± 12.6	± 11.1
	230	230	± 14.2	± 13.5	± 11.9
	240	240	± 15.1	± 14.3	± 12.6
	250	250	± 16.0	± 15.2	± 13.4
	260	260	± 16.9	± 16.0	± 14.1
	270	270	± 17.8	± 16.9	± 14.9
Concrete cover CV35 [mm]	160	160	± 7.4	± 7.1	-
	170	170	± 8.3	± 7.9	± 7.0
	180	180	± 9.2	± 8.8	± 7.7
	190	190	± 10.1	± 9.6	± 8.5
	200	200	± 11.0	± 10.5	± 9.2
	210	210	± 11.9	± 11.3	± 10.0
	220	220	± 12.8	± 12.2	± 10.7
	230	230	± 13.7	± 13.1	± 11.5
	240	240	± 14.6	± 13.9	± 12.3
	250	250	± 15.5	± 14.8	± 13.0
	260	260	± 16.4	± 15.6	± 13.8
	270	270	± 17.3	± 16.5	± 14.5
Concrete cover CV50 [mm]	200	200	± 7.9	± 7.5	-
	210	210	± 8.8	± 8.4	± 7.4
	220	220	± 9.7	± 9.2	± 8.1
	230	230	± 10.6	± 10.1	± 8.9
	240	240	± 11.5	± 10.9	± 9.6
	250	250	± 12.4	± 11.8	± 10.4
	260	260	± 13.3	± 12.6	± 11.1
	270	270	± 14.2	± 13.5	± 11.9
	280	280	± 15.1	± 14.3	± 12.6
ϕV_n [kN/Element]					
Secondary load-bearing level	VV1-VV3		± 17.4	± 26.1	± 46.4

Notes

- Static system and information on the design see page 9.

Strength Capacity

Schöck Isokorb® T Type CD 6.0			MM2-VV1	MM2-VV2	MM2-VV3
Design Values with	Isokorb® height H [mm]	Minimum slab height [mm]	Concrete Strength ≥ 27.5 MPa		
			ϕM_n [kNm/Unit]		
Concrete cover CV30 [mm]	160	160	±11.8	-	-
	170	170	±13.2	±12.2	-
	180	180	±14.5	±13.4	±12.3
	190	190	±15.9	±14.7	±13.4
	200	200	±17.2	±15.9	±14.5
	210	210	±18.6	±17.2	±15.7
	220	220	±19.9	±18.4	±16.8
	230	230	±21.2	±19.6	±17.9
	240	240	±22.6	±20.9	±19.1
	250	250	±23.9	±22.1	±20.2
	260	260	±25.3	±23.4	±21.3
	270	270	±26.6	±24.6	±22.5
	280	280	±28.0	±25.9	±23.6
Concrete cover CV35 [mm]	160	160	±11.2	-	-
	170	170	±12.5	±11.6	-
	180	180	±13.9	±12.8	±11.7
	190	190	±15.2	±14.1	±12.8
	200	200	±16.5	±15.3	±14.0
	210	210	±17.9	±16.5	±15.1
	220	220	±19.2	±17.8	±16.2
	230	230	±20.6	±19.0	±17.4
	240	240	±21.9	±20.3	±18.5
	250	250	±23.3	±21.5	±19.6
	260	260	±24.6	±22.8	±20.8
	270	270	±26.0	±24.0	±21.9
	280	280	±27.3	±25.2	±23.0
Concrete cover CV50 [mm]	200	200	±11.8	-	-
	210	210	±13.2	±12.2	-
	220	220	±14.5	±13.4	±12.3
	230	230	±15.9	±14.7	±13.4
	240	240	±17.2	±15.9	±14.5
	250	250	±18.6	±17.2	±15.7
	260	260	±19.9	±18.4	±16.8
	270	270	±21.2	±19.6	±17.9
	280	280	±22.6	±20.9	±19.1
			ϕV_n [kN/Element]		
Secondary load-bearing level	VV1-VV3		±26.1	±46.4	±68.0

Notes

- Static system and information on the design see page 9.

Strength Capacity

Schöck Isokorb® T Type CD 6.0			MM3-VV1	MM3-VV2	MM3-VV3	MM3-VV4	MM3-VV5
Design Values with	Isokorb® height H [mm]	Minimum slab height [mm]	Concrete Strength ≥ 27.5 MPa				
			ϕM_n [kNm/Unit]				
Concrete cover CV30 [mm]	160	160	±16.2	-	-	-	-
	170	170	±18.0	±17.0	-	-	-
	180	180	±19.8	±18.7	±17.6	±16.3	-
	190	190	±21.7	±20.5	±19.2	±17.9	±15.0
	200	200	±23.5	±22.2	±20.8	±19.4	±16.3
	210	210	±25.3	±23.9	±22.5	±20.9	±17.5
	220	220	±27.2	±25.7	±24.1	±22.4	±18.8
	230	230	±29.0	±27.4	±25.7	±23.9	±20.1
	240	240	±30.9	±29.1	±27.3	±25.4	±21.4
	250	250	±32.7	±30.9	±29.0	±26.9	±22.6
	260	260	±34.5	±32.6	±30.6	±28.5	±23.9
	270	270	±36.4	±34.4	±32.2	±30.0	±25.2
	280	280	±38.2	±36.1	±33.8	±31.5	±26.4
Concrete cover CV35 [mm]	160	160	±15.2	-	-	-	-
	170	170	±17.1	±16.1	-	-	-
	180	180	±18.9	±17.9	±16.8	±15.6	-
	190	190	±20.8	±19.6	±18.4	±17.1	-
	200	200	±22.6	±21.3	±20.0	±18.6	±15.6
	210	210	±24.4	±23.1	±21.6	±20.1	±16.9
	220	220	±26.3	±24.8	±23.3	±21.6	±18.2
	230	230	±28.1	±26.5	±24.9	±23.2	±19.5
	240	240	±29.9	±28.3	±26.5	±24.7	±20.7
	250	250	±31.8	±30.0	±28.1	±26.2	±22.0
	260	260	±33.6	±31.8	±29.8	±27.7	±23.3
270	270	±35.4	±33.5	±31.4	±29.2	±24.5	
280	280	±37.3	±35.2	±33.0	±30.7	±25.8	
Concrete cover CV50 [mm]	200	200	±16.2	-	-	-	-
	210	210	±18.0	±17.0	-	-	-
	220	220	±19.8	±18.7	±17.6	±16.3	-
	230	230	±21.7	±20.5	±19.2	±17.9	±15.0
	240	240	±23.5	±22.2	±20.8	±19.4	±16.3
	250	250	±25.3	±23.9	±22.5	±20.9	±17.5
	260	260	±27.2	±25.7	±24.1	±22.4	±18.8
	270	270	±29.0	±27.4	±25.7	±23.9	±20.1
280	280	±30.9	±29.1	±27.3	±25.4	±21.4	
ϕV_n [kN/Element]							
Secondary load-bearing level	VV1-VV5		±26.1	±46.4	±68.0	±90.7	±139.1

Notes

- Static system and information on the design see page 9.

Strength Capacity

Schöck Isokorb® T Type CD 6.0			MM4-VV1	MM4-VV2	MM4-VV3	MM4-VV4	MM4-VV5
Design Values with	Isokorb® height H [mm]	Minimum slab height [mm]	Concrete Strength ≥ 27.5 MPa				
			ϕM_n [kNm/Unit]				
Concrete cover CV30 [mm]	160	160	±20.5	-	-	-	-
	170	170	±22.8	±21.8	-	-	-
	180	180	±25.1	±24.0	±22.9	±21.7	-
	190	190	±27.5	±26.3	±25.0	±23.7	±20.8
	200	200	±29.8	±28.5	±27.1	±25.7	±22.6
	210	210	±32.1	±30.7	±29.2	±27.7	±24.3
	220	220	±34.5	±33.0	±31.4	±29.7	±26.1
	230	230	±36.8	±35.2	±33.5	±31.7	±27.9
	240	240	±39.1	±37.4	±35.6	±33.7	±29.6
	250	250	±41.4	±39.6	±37.7	±35.7	±31.4
	260	260	±43.8	±41.9	±39.8	±37.7	±33.1
	270	270	±46.1	±44.1	±41.9	±39.7	±34.9
	280	280	±48.4	±46.3	±44.1	±41.7	±36.7
Concrete cover CV35 [mm]	160	160	±19.3	-	-	-	-
	170	170	±21.7	±20.7	-	-	-
	180	180	±24.0	±22.9	±21.8	±20.7	-
	190	190	±26.3	±25.2	±23.9	±22.7	-
	200	200	±28.6	±27.4	±26.1	±24.7	±21.7
	210	210	±31.0	±29.6	±28.2	±26.7	±23.5
	220	220	±33.3	±31.8	±30.3	±28.7	±25.2
	230	230	±35.6	±34.1	±32.4	±30.7	±27.0
	240	240	±38.0	±36.3	±34.5	±32.7	±28.7
	250	250	±40.3	±38.5	±36.7	±34.7	±30.5
	260	260	±42.6	±40.8	±38.8	±36.7	±32.3
270	270	±44.9	±43.0	±40.9	±38.7	±34.0	
280	280	±47.3	±45.2	±43.0	±40.7	±35.8	
Concrete cover CV50 [mm]	200	200	±20.5	-	-	-	-
	210	210	±22.8	±21.8	-	-	-
	220	220	±25.1	±24.0	±22.9	±21.7	-
	230	230	±27.5	±26.3	±25.0	±23.7	±20.8
	240	240	±29.8	±28.5	±27.1	±25.7	±22.6
	250	250	±32.1	±30.7	±29.2	±27.7	±24.3
	260	260	±34.5	±33.0	±31.4	±29.7	±26.1
	270	270	±36.8	±35.2	±33.5	±31.7	±27.9
280	280	±39.1	±37.4	±35.6	±33.7	±29.6	
			ϕV_n [kN/Element]				
Secondary load-bearing level	VV1-VV5		±26.1	±46.4	±68.0	±90.7	±139.1

Notes

- Static system and information on the design see page 9.

Strength Capacity

Schöck Isokorb® T Type CD 6.0			MM5-VV1	MM5-VV2	MM5-VV3	MM5-VV4	MM5-VV5
Design Values with	Isokorb® height H [mm]	Minimum slab height [mm]	Concrete Strength ≥ 27.5 MPa				
			ϕM_n [kNm/Unit]				
Concrete cover CV30 [mm]	160	160	±24.8	-	-	-	-
	170	170	±27.6	±26.6	-	-	-
	180	180	±30.5	±29.4	±28.2	±27.0	-
	190	190	±33.3	±32.1	±30.8	±29.5	±26.6
	200	200	±36.1	±34.8	±33.4	±32.0	±28.9
	210	210	±38.9	±37.5	±36.0	±34.5	±31.1
	220	220	±41.7	±40.2	±38.6	±37.0	±33.4
	230	230	±44.6	±43.0	±41.2	±39.5	±35.6
	240	240	±47.4	±45.7	±43.9	±41.9	±37.9
	250	250	±50.2	±48.4	±46.5	±44.4	±40.1
	260	260	±53.0	±51.1	±49.1	±46.9	±42.4
	270	270	±55.8	±53.8	±51.7	±49.4	±44.6
	280	280	±58.7	±56.5	±54.3	±51.9	±46.9
Concrete cover CV35 [mm]	160	160	±23.4	-	-	-	-
	170	170	±26.2	±25.3	-	-	-
	180	180	±29.0	±28.0	±26.9	±25.7	-
	190	190	±31.9	±30.7	±29.5	±28.2	-
	200	200	±34.7	±33.4	±32.1	±30.7	±27.7
	210	210	±37.5	±36.2	±34.7	±33.2	±30.0
	220	220	±40.3	±38.9	±37.3	±35.7	±32.2
	230	230	±43.1	±41.6	±39.9	±38.2	±34.5
	240	240	±46.0	±44.3	±42.5	±40.7	±36.8
	250	250	±48.8	±47.0	±45.2	±43.2	±39.0
	260	260	±51.6	±49.7	±47.8	±45.7	±41.3
	270	270	±54.4	±52.5	±50.4	±48.2	±43.5
	280	280	±57.2	±55.2	±53.0	±50.7	±45.8
Concrete cover CV50 [mm]	200	200	±24.8	-	-	-	-
	210	210	±27.6	±26.6	-	-	-
	220	220	±30.5	±29.4	±28.2	±27.0	-
	230	230	±33.3	±32.1	±30.8	±29.5	±26.6
	240	240	±36.1	±34.8	±33.4	±32.0	±28.9
	250	250	±38.9	±37.5	±36.0	±34.5	±31.1
	260	260	±41.7	±40.2	±38.6	±37.0	±33.4
	270	270	±44.6	±43.0	±41.2	±39.5	±35.6
	280	280	±47.4	±45.7	±43.9	±41.9	±37.9
ϕV_n [kN/Element]							
Secondary load-bearing level	VV1-VV5		±26.1	±46.4	±68.0	±90.7	±139.1

Notes

- Static system and information on the design see page 9.

Strength Capacity

Schöck Isokorb® T Type CD 6.0			MM6-VV1	MM6-VV2	MM6-VV3	MM6-VV4	MM6-VV5
Design Values with	Isokorb® height H [mm]	Minimum slab height [mm]	Concrete Strength ≥ 27.5 MPa				
			ϕM_n [kNm/Unit]				
Concrete cover CV30 [mm]	160	160	±33.4	-	-	-	-
	170	170	±37.3	±36.3	-	-	-
	180	180	±41.2	±40.1	±39.0	±37.8	-
	190	190	±45.1	±43.9	±42.6	±41.3	±38.5
	200	200	±49.0	±47.7	±46.3	±44.9	±41.8
	210	210	±52.8	±51.5	±50.0	±48.4	±45.2
	220	220	±56.7	±55.2	±53.7	±52.0	±48.5
	230	230	±60.6	±59.0	±57.3	±55.6	±51.8
	240	240	±64.5	±62.8	±61.0	±59.1	±55.1
	250	250	±68.4	±66.6	±64.7	±62.7	±58.4
	260	260	±72.3	±70.4	±68.4	±66.3	±61.8
	270	270	±76.2	±74.2	±72.0	±69.8	±65.1
	280	280	±80.0	±77.9	±75.7	±73.4	±68.4
Concrete cover CV35 [mm]	160	160	±31.5	-	-	-	-
	170	170	±35.4	±34.4	-	-	-
	180	180	±39.2	±38.2	±37.1	±36.0	-
	190	190	±43.1	±42.0	±40.8	±39.5	-
	200	200	±47.0	±45.8	±44.5	±43.1	±40.2
	210	210	±50.9	±49.6	±48.2	±46.7	±43.5
	220	220	±54.8	±53.4	±51.8	±50.2	±46.8
	230	230	±58.7	±57.1	±55.5	±53.8	±50.1
	240	240	±62.6	±60.9	±59.2	±57.4	±53.5
	250	250	±66.4	±64.7	±62.9	±60.9	±56.8
	260	260	±70.3	±68.5	±66.5	±64.5	±60.1
270	270	±74.2	±72.3	±70.2	±68.0	±63.4	
280	280	±78.1	±76.1	±73.9	±71.6	±66.7	
Concrete cover CV50 [mm]	200	200	±33.4	-	-	-	-
	210	210	±37.3	±36.3	-	-	-
	220	220	±41.2	±40.1	±39.0	±37.8	-
	230	230	±45.1	±43.9	±42.6	±41.3	±38.5
	240	240	±49.0	±47.7	±46.3	±44.9	±41.8
	250	250	±52.8	±51.5	±50.0	±48.4	±45.2
	260	260	±56.7	±55.2	±53.7	±52.0	±48.5
	270	270	±60.6	±59.0	±57.3	±55.6	±51.8
280	280	±64.5	±62.8	±61.0	±59.1	±55.1	
			ϕV_n [kN/Element]				
Secondary load-bearing level	VV1-VV5		±26.1	±46.4	±68.0	±90.7	±139.1

Notes

- Static system and information on the design see page 9.

On Site Reinforcement

The cast-in-place floor and balcony slab reinforcement is to be defined by the Engineer of Record (EOR) of the building in accordance with structural requirements. The tension bars of the Schöck Isokorb® T Type CD must be overlapped with the tensile reinforcement noted below as Position 1. Position 2 (longitudinal edge reinforcement), Position 3 (U-Bars) and reinforcement at the free balcony edges should also be provided as per the following recommended reinforcement layout.

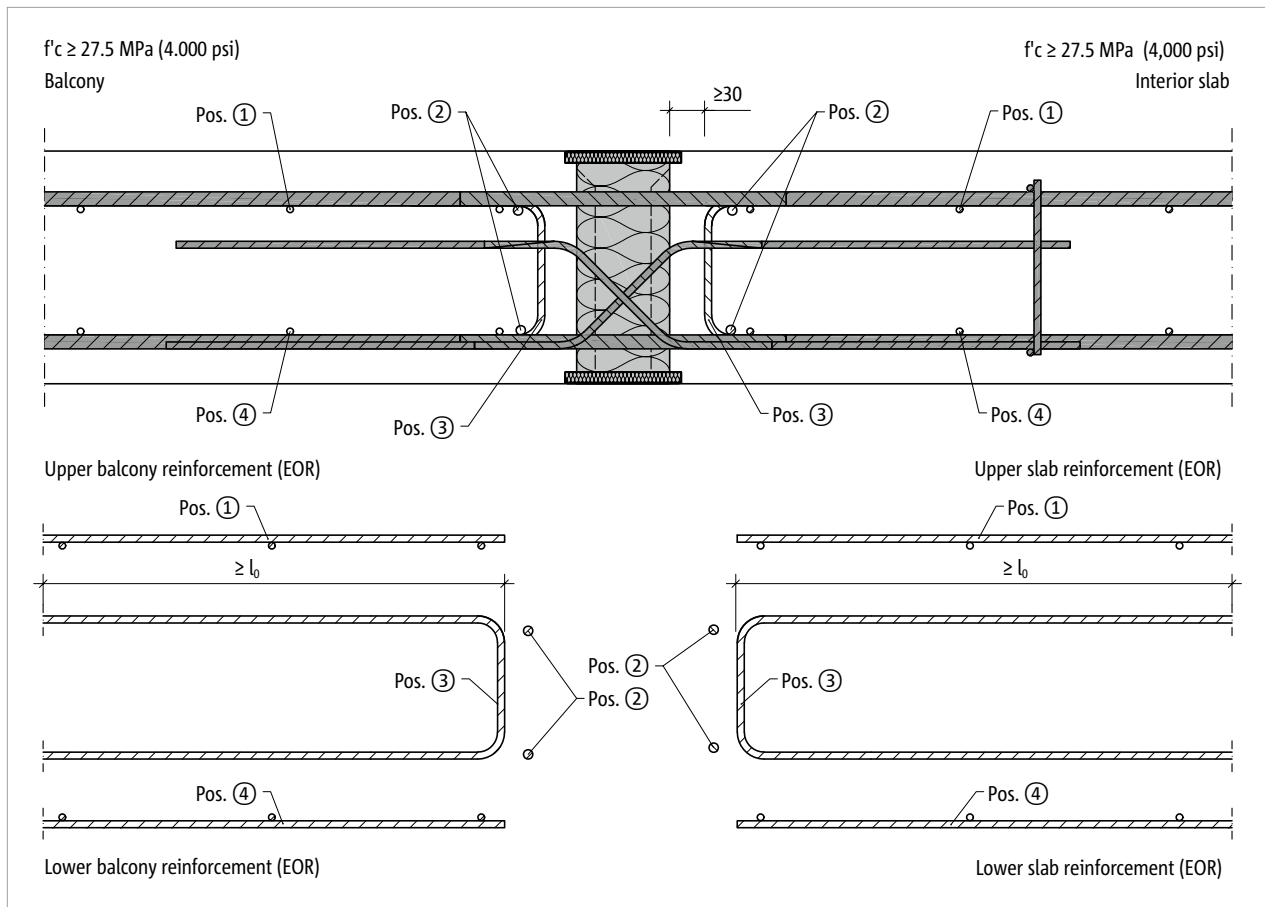


Fig. 11: Schöck Isokorb® T Type CD: Cross section of recommended cast-in-place reinforcement (supplied by others)

On Site Reinforcement

The table below suggests cast-in-place connective reinforcement for 100% section strength considering a minimum concrete strength of 27.5 MPa [4,000 psi]. The existing slab reinforcement can be taken into account for the recommended reinforcement of connections with Schöck Isokorb®. The required reinforcement cross section area for Pos. 1 depends on the bar diameter of the reinforcement bar or mesh.

Schöck Isokorb® T Type CD 6.0	MM1	MM1	MM1	MM2	MM2	MM2
	VV1	VV2	VV3	VV1	VV2	VV3
On-site reinforcement	Concrete Strength \geq 27.5 MPa (4,000 psi)					
Lap reinforcement dependent on bar diameter (necessary for negative moment)						
Pos. 1 mit #3 [mm ² /Element]	257	273	262	386	375	362
Pos. 1 mit #4 [mm ² /Element]	271	294	290	407	403	398
Pos. 1 with #3 [in ² /Element]	0.40	0.42	0.41	0.60	0.58	0.56
Pos. 1 with #4 [in ² /Element]	0.42	0.46	0.45	0.63	0.62	0.62
Longitudinal Bars Parallel to Insulation						
Pos. 2	2 × 2 × #3					
Vertical reinforcement						
Pos. 3	#3 @ 250 mm					
	#3 @ 10"					
Lap reinforcement dependent on bar diameter (necessary for positive moment)						
Pos. 4 with #3 [mm ² /Element]	257	273	262	386	375	362
Pos. 4 with #4 [mm ² /Element]	271	294	290	407	403	398
Pos. 4 with #3 [in ² /Element]	0.40	0.42	0.41	0.60	0.58	0.56
Pos. 4 with #4 [in ² /Element]	0.42	0.46	0.45	0.63	0.62	0.62

Schöck Isokorb® T Type CD 6.0	MM3	MM3	MM3	MM3	MM3
	VV1	VV2	VV3	VV4	VV5
On-site reinforcement	Concrete Strength \geq 27.5 MPa (4,000 psi)				
Lap reinforcement dependent on bar diameter (necessary for negative moment)					
Pos. 1 mit #3 [mm ² /Element]	499	488	475	483	452
Pos. 1 mit #4 [mm ² /Element]	520	516	511	531	452
Pos. 1 with #3 [in ² /Element]	0.77	0.76	0.74	0.75	0.70
Pos. 1 with #4 [in ² /Element]	0.81	0.80	0.79	0.82	0.70
Longitudinal Bars Parallel to Insulation					
Pos. 2	2 × 2 × #3				
Vertical reinforcement					
Pos. 3	#3 @ 250 mm	#3 @ 250 mm	#3 @ 250 mm	#4 @ 250 mm	#4 @ 150 mm
	#3 @ 10"	#3 @ 10"	#3 @ 10"	#4 @ 10"	#4 @ 6"
Lap reinforcement dependent on bar diameter (necessary for positive moment)					
Pos. 4 with #3 [mm ² /Element]	499	488	475	483	452
Pos. 4 with #4 [mm ² /Element]	520	516	511	531	452
Pos. 4 with #3 [in ² /Element]	0.77	0.76	0.74	0.75	0.70
Pos. 4 with #4 [in ² /Element]	0.81	0.80	0.79	0.82	0.70

On Site Reinforcement

Schöck Isokorb® T Type CD 6.0	MM4	MM4	MM4	MM4	MM4
	VV1	VV2	VV3	VV4	VV5
On-site reinforcement	Concrete Strength ≥ 27.5 MPa (4,000 psi)				
Lap reinforcement dependent on bar diameter (necessary for negative moment)					
Pos. 1 mit #3 [mm ² /Element]	612	601	588	596	565
Pos. 1 mit #4 [mm ² /Element]	705	703	701	727	632
Pos. 1 with #3 [in ² /Element]	0.95	0.93	0.91	0.92	0.88
Pos. 1 with #4 [in ² /Element]	1.09	1.09	1.09	1.13	0.98
Longitudinal Bars Parallel to Insulation					
Pos. 2	2 × 2 × #3				
Vertical reinforcement					
Pos. 3	#3 @ 250 mm	#3 @ 250 mm	#3 @ 250 mm	#4 @ 250 mm	#4 @ 150 mm
	#3 @ 10"	#3 @ 10"	#3 @ 10"	#4 @ 10"	#4 @ 6"
Lap reinforcement dependent on bar diameter (necessary for positive moment)					
Pos. 4 with #3 [mm ² /Element]	612	601	588	596	565
Pos. 4 with #4 [mm ² /Element]	705	703	701	727	632
Pos. 4 with #3 [in ² /Element]	0.95	0.93	0.91	0.92	0.88
Pos. 4 with #4 [in ² /Element]	1.09	1.09	1.09	1.13	0.98

Schöck Isokorb® T Type CD 6.0	MM5	MM5	MM5	MM5	MM5
	VV1	VV2	VV3	VV4	VV5
On-site reinforcement	Concrete Strength ≥ 27.5 MPa (4,000 psi)				
Lap reinforcement dependent on bar diameter (necessary for negative moment)					
Pos. 1 mit #3 [mm ² /Element]	725	714	702	709	679
Pos. 1 mit #4 [mm ² /Element]	829	828	825	852	757
Pos. 1 with #3 [in ² /Element]	1.12	1.11	1.09	1.10	1.05
Pos. 1 with #4 [in ² /Element]	1.28	1.28	1.28	1.32	1.17
Longitudinal Bars Parallel to Insulation					
Pos. 2	2 × 2 × #3				
Vertical reinforcement					
Pos. 3	#3 @ 250 mm	#3 @ 250 mm	#3 @ 250 mm	#4 @ 250 mm	#4 @ 150 mm
	#3 @ 10"	#3 @ 10"	#3 @ 10"	#4 @ 10"	#4 @ 6"
Lap reinforcement dependent on bar diameter (necessary for positive moment)					
Pos. 4 with #3 [mm ² /Element]	725	714	702	709	679
Pos. 4 with #4 [mm ² /Element]	829	828	825	852	757
Pos. 4 with #3 [in ² /Element]	1.12	1.11	1.09	1.10	1.05
Pos. 4 with #4 [in ² /Element]	1.28	1.28	1.28	1.32	1.17

On Site Reinforcement

Schöck Isokorb® T Type CD 6.0	MM6	MM6	MM6	MM6	MM6
	VV1	VV2	VV3	VV4	VV5
On-site reinforcement	Concrete Strength \geq 27.5 MPa (4,000 psi)				
Lap reinforcement dependent on bar diameter (necessary for negative moment)					
Pos. 1 mit #4 [mm ² /Element]	1013	1016	1018	1050	966
Pos. 1 with #4 [in ² /Element]	1.57	1.57	1.58	1.63	1.50
Longitudinal Bars Parallel to Insulation					
Pos. 2	2 × 2 × #3				
Vertical reinforcement					
Pos. 3	#3 @ 250 mm	#3 @ 250 mm	#3 @ 250 mm	#4 @ 250 mm	#4 @ 150 mm
	#3 @ 10"	#3 @ 10"	#3 @ 10"	#4 @ 10"	#4 @ 6"
Lap reinforcement dependent on bar diameter (necessary for positive moment)					
Pos. 4 with #4 [mm ² /Element]	1013	1016	1018	1050	966
Pos. 4 with #4 [in ² /Element]	1.57	1.57	1.58	1.63	1.50

CD

Products

Deflection/Camber

As the Schöck Isokorb® undergoes service loading, an internal deformation is caused by the elongation of the tension bars and shortening of the compression modules of the product. The final slope of the balcony slab results from deflection as per Building Code (w_1) plus the internal deformation (w_2) from the Schöck Isokorb®.

To calculate w_2 , deformation constants ($\tan \alpha$) are provided in the table below as a worst case-scenario for loading the Schöck Isokorb® to maximum capacity. To determine w_2 , multiply the deformation constant ($\tan \alpha$) by the length of the cantilever and a work-ratio of the serviceability moment to the full-capacity moment resistance of the product. Any requirement to pre-camber the balcony formwork can be determined if the desired final slope of the balcony is not achieved for drainage purposes.

Deformation (w_2) as a result of Schöck Isokorb®

$$w_2[\text{in}] \text{ or } [\text{mm}] = \tan \alpha \times \ell \times M_a / \phi M_n \times 1/100$$

$\tan \alpha$ = Insert value from table below

ℓ = Cantilever length [in] or [mm]

M_a = Maximum moment at the stage at which deflection is being computed in [kip-ft/ft] or [kNm/m]
The load combination to be used here is defined by the Engineer of Record (EOR)

ϕM_n = Ultimate (factored) moment resistance [kip-ft/ft] or [kNm/m] of the Schöck Isokorb® T Type CK (see page 16).

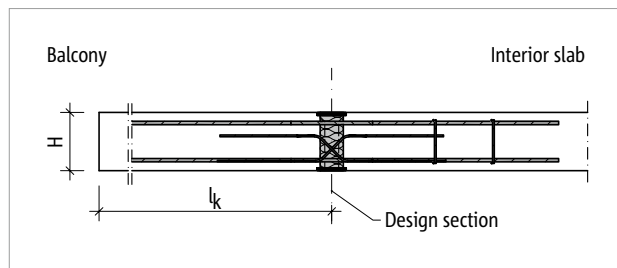


Fig. 12: Schöck Isokorb® T Type CD: Structural system

Schöck Isokorb® T Type CD 6.0			MM1 – MM5		
Deformation constants with:	[mm]	[in]	$\tan \alpha$ [%]		
			CV30	CV35	CV50
Isokorb® height H	160	6 5/16"	1.0	1.1	-
	170	6 11/16"	0.9	0.9	-
	180	7"	0.8	0.8	-
	190	7 1/2"	0.7	0.7	-
	200	7 7/8"	0.6	0.7	1.0
	210	8 1/4"	0.6	0.6	0.9
	220	8 5/8"	0.6	0.6	0.8
	230	9"	0.5	0.5	0.7
	240	9 1/2"	0.5	0.5	0.6
	250	9 7/8"	0.5	0.5	0.6
	260	10 1/4"	0.4	0.4	0.6
	270	10 5/8"	0.4	0.4	0.5
	280	11"	0.4	0.4	0.5

Deflection/Camber | Expansion Joint Spacing | Installation Instructions

Schöck Isokorb® T Type CD 6.0			MM6		
Deformation constants with:	[mm]	[in]	tan α [%]		
			CV30	CV35	CV50
Isokorb® height H	160	6 5/16"	1.8	1.9	-
	170	6 11/16"	1.6	1.7	-
	180	7"	1.4	1.5	-
	190	7 1/2"	1.2	1.3	-
	200	7 7/8"	1.1	1.2	1.8
	210	8 1/4"	1.1	1.1	1.6
	220	8 5/8"	1.0	1.0	1.4
	230	9"	0.9	1.0	1.2
	240	9 1/2"	0.9	0.9	1.1
	250	9 7/8"	0.8	0.8	1.1
	260	10 1/4"	0.8	0.8	1.0
	270	10 5/8"	0.7	0.8	0.9
	280	11"	0.7	0.7	0.9

Expansion joints (recommended spacing)

Expansion joints are recommended to protect balcony slabs from temperature cracking when they are continuous for more than a critical length. The expansion joint spacing shown below corresponds to a temperature difference of $\Delta T = 70^\circ\text{C}$ [126°F].

Schöck Isokorb® T Type CD 6.0		MM1 VV1–VV3	MM2–MM5 VV1–VV2	MM2 VV3	MM3–MM5 VV3–VV4	MM3–MM5 VV5	MM6 VV1–VV4	MM6 VV5
Maximum expansion joint spacing when		e [m]						
Insulation Thickness [mm]	80	11.0	11.0	10.6	10.6	9.5	10.1	9.5

Schöck Isokorb® T Type CD 6.0		MM1 VV1–VV3	MM2–MM5 VV1–VV2	MM2 VV3	MM3–MM5 VV3–VV4	MM3–MM5 VV5	MM6 VV1–VV4	MM6 VV5
Maximum expansion joint spacing when		e [ft in]						
Insulation Thickness [mm]	3 1/8"	36'-1 1/16"	36'-1 1/16"	34'-9 5/16"	34'-9 5/16"	31'-2 1/32"	33'-1 5/8"	31'-2 1/32"

i Notes

- The maximum expansion joint spacing must be verified by the Engineer of Record (EOR).
- The joint must be free to contract or expand in the longitudinal direction. Schöck Dorn type LD in stainless steel A4 would be a suitable dowel connector for the expansion joint with the Schöck expansion joint former board or equivalent.
- The Schöck expansion joint former board is available from Schöck North America.

i Installation instructions

The current installation instruction can be found online under:
www.schoeck.com/view/5181

✓ Check List

- Has the recommended maximum cantilever length for the selected height of the Schöck Isokorb® been taken into consideration?
- Has the system length “l” been used for the design?
- Have the factored forces at the Schöck Isokorb® connection been determined at design level?
- Has the critical concrete strength been taken into consideration in the choice of design table?
- Has an appropriate concrete cover been selected and used with the calculation tables?
- Have both slabs adjacent to the Isokorb® been verified for bending and shear capacities by the Engineer of Record (EOR)?
- Has the additional deformation as a result of the Schöck Isokorb® been taken into consideration in the deflection calculations of the overall structure?
- Has the required camber been specified in the design drawings? Was the drainage direction taken into consideration in the camber specification?
- Has the maximum permissible expansion gap spacing been taken into consideration for the specific slab configuration?
- Have the horizontal loads such as those from wind pressure or seismic loading been taken into consideration? Additional Schöck Isokorb® type CH may be required.
- Has the connecting reinforcement in the balcony and interior slabs been defined by the Engineer of Record (EOR)?
- When using Schöck Isokorb® in a pre-cast application, has a cast-in-place strip of concrete (width ≥ 50 mm [2"] from any compression modules) been specified in the design plans?