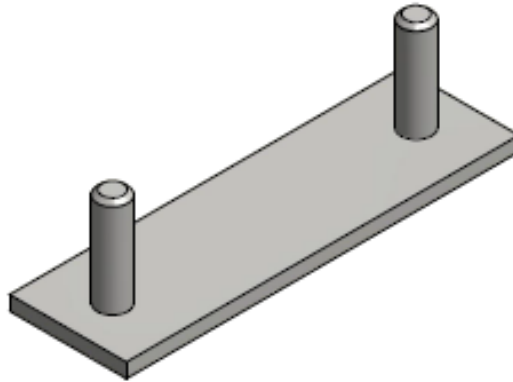


MOUNTING INSTRUCTIONS



3D - LIFTING SYSTEMS | **IPK PLATES**



ATTACHMENT OF THE SLOT - ANCHORS IN CONCRETE

There must be a cavity in the concrete in order to link the TH2 lifting clutch to the T-slot anchor. This cavity is spherical in shape and can be either a half ball or a small ball slot. Various support kits are available for making this recess. For a half ball cavity, the TH2 lifting clutch can be attached in any direction and can ultimately turn in the cavity during lifting until the lifting hook has reached its proper position. The RB recess former is the most practical.

RECESS FORMERS

The anchors are fitted in the mould with a recess former. The cavity former, enables the lifting clutch to fit over the anchor. Because of the special design, there are no sharp edges on the precast element. The recess formers are of course available in the same range as the lifting clutches and the anchors. This is indicated by a load group, marked on the top.

The formers are mounted on the mould with fixing plates. After demoulding the element, the recess formers can be removed easily. Another option is represented by the magnetic and steel recess formers.

The standard recess formers are made of rubber shore 65° - 70°. The rubber used has a good resistance to demould oil. The formers will keep their original shape, even when they are heated up to 120°C. They can be used many times. The steel magnetic recess formers are manufactured without rubber.

TKA-TILT ANCHOR

Forged from carbon steel, these have a design load capacity in the range of 13 kN to 50 kN.

TKA anchors can carry loads of between 13 kN and 50 kN. These anchors are used for tilting and transporting thin concrete walls. This type of anchor is typically used in combination with additional reinforcing steel. The TKA anchor must be fixed in the mould using a specific recess former RBK. The recess former holds the anchor securely in position when pouring the concrete. The IPK is mounted in the RBK in order to stabilise the RBK during pouring and hardening.

TKA anchors are available in two versions: shot blasting and hot-dip galvanising (TV).

Remark: this anchor does not allow for the lifting shackle to be turned or twisted inside the recess, using a spreader beam is recommended in combination with this anchor.

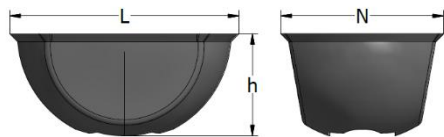


TKA-anchor black		TKA-anchor hot dip galvanised		Load group	L	Ø D	Ø D1	Ø d
Descr.	Product no.	Descr.	Product no.	[kN]	[mm]	[mm]	[mm]	[mm]
TKA-013-0120	44476	TKA-013-0120-TV	44804	13	120	19	23	11
TKA-025-0170	44477	TKA-025-0170-TV	44805	25	170	25	34	16
TKA-050-0240	44478	TKA-050-240-TV	44806	50	240	36	50	21



CHARACTERISTICS OF RBK BALLS

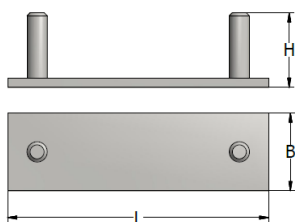
RBK-recess former		Load group	Length L	Height H	Width B
Descr.	Product no.	[kN]	[mm]	[mm]	[mm]
RBK-13	43946	13	70	32	49
RBK-25	43947	25	86	38	60
RBK-50	43948	50	110	53	78



CHARACTERISTICS OF IPK PLATES

The IPK - plate is mounted in the RBK in order to stabilize the RBK during pouring and hardening.

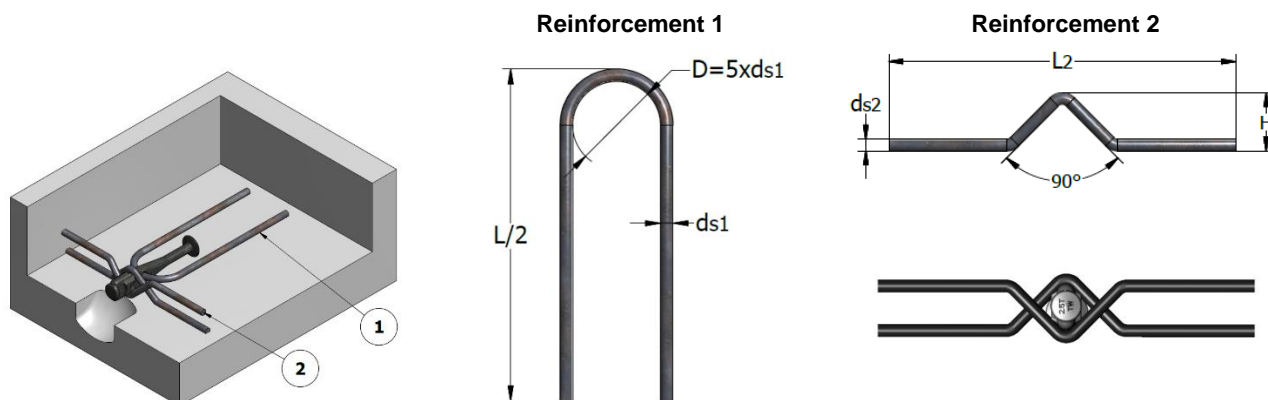
IPK plates		Load group	Length L	Height H	Width B
Descr.	Product no.	[kN]	[mm]	[mm]	[mm]
IPK -13	47225	13	54	16	15
IPK -25	47224	25	67	16	20
IPK -50	47223	50	84	24	25



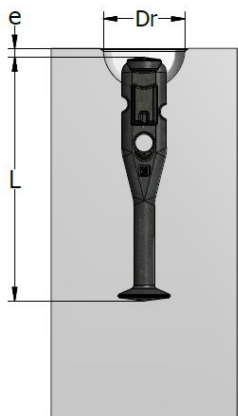
For tilting, additional reinforcements have to be installed in the anchor zone. Take care with anchor placement so that the anchors ensure the load transfer. The RBK recess former is removed from the hardened concrete, and then the lifting device can be connected. The shackle nose must be oriented in the direction of lifting.

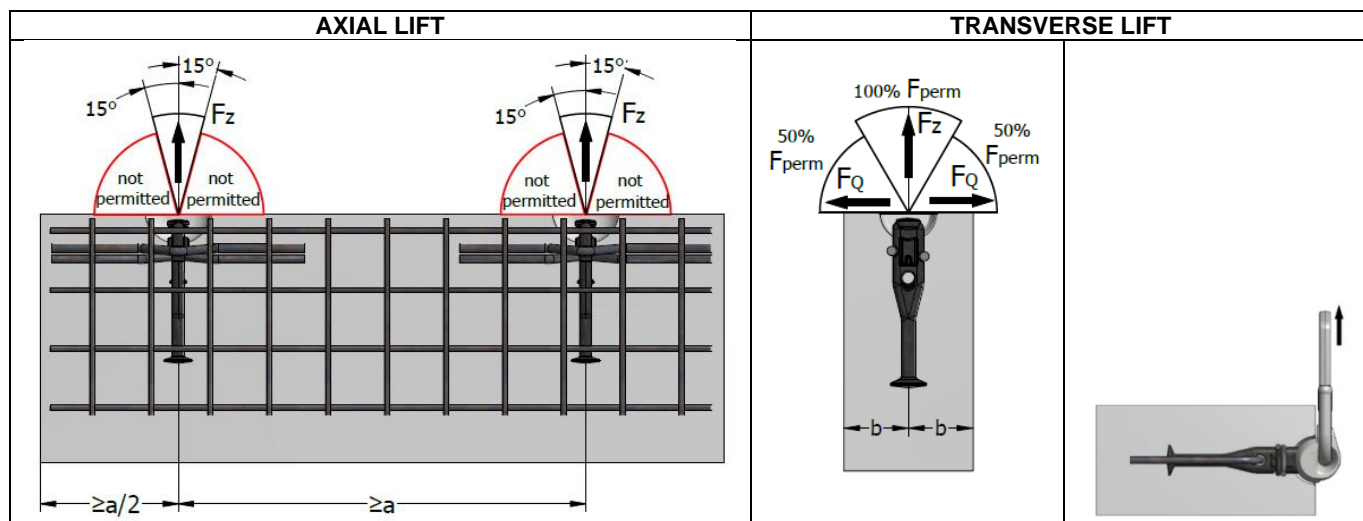
REINFORCEMENT USED IN ANCHOR ZONE FOR ANGLED LIFT IN PANELS OR BEAMS

Additional reinforcements:



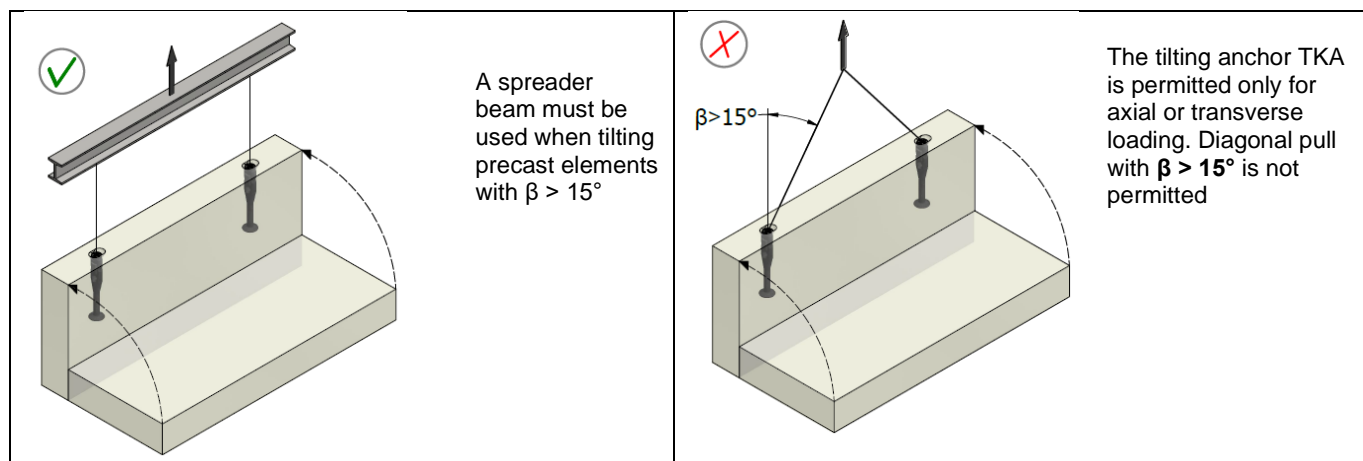
TKA-ANCHOR – LOAD CAPACITY AND REINFORCEMENTS							
TKA-anchor type	Load group	Mesh reinforcement	Reinforcement 1			Reinforcement 2	
			ds ₁	L (straight)	L/2 (bent)	ds ₂	L ₂
	[kN]	[mm ² /m]	[mm]	[mm]	[mm]	[mm]	[mm]
TKA-013-0120	13	131	10	1035	500	10	500
TKA-025-0170	25	2 x 131	10	1635	800	12	800
TKA-050-0240	50	2 x 140	12	2240	1100	16	1000

Type TKS Anchor	Load Group	D _R	e		
Description	[kN]	[mm]	[mm]		
TKA-013-0120	13	70	10		<ul style="list-style-type: none"> - L = anchor length - e = cover to anchor head - Dr = recess dimension
TKA-025-XXXX	25	86	11		
TKA-050-XXXX	50	110	15		



Permissible load:

TKA-anchor type	Axial Load [kN]	Element thickness 2 x b [mm]	Spacing between anchors "a" [mm]	Transverse lift F_Q		Axial pull angled pull F_Z $\beta \leq 15^\circ$	
				Concrete strength		Concrete strength	
				15 MPa [kN]	25 MPa [kN]	15 MPa [kN]	25 MPa [kN]
TKA-013-0120	13	80	850	3.0	3.6	11.0	13.0
		100		4.0	4.6	12.0	13.0
		120		5.0	5.6	13.0	13.0
TKA-025-0170	25	100	1300	7.8	10.1	22.2	25.0
		110		9.0	11.6	23.8	25.0
		120		10.3	12.5	25.0	25.0
		130		11.6	12.5	25.0	25.0
		140		12.5	12.5	25.0	25.0
TKA-050-0240	50	120	1550	13.8	17.8	31.2	40.0
		130		14.6	18.8	33.1	42.7
		140		15.6	20.1	35.0	45.2
		150		17.3	22.3	36.8	47.5
		160		19.1	24.6	38.7	50.0
		180		20.9	25.0	42.2	50.0
		200		22.6	25.0	45.7	50.0



CONTACT

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TERWA CONSTRUCTION GROUP**Terwa Construction Netherlands (HQ)****Global Sales & Distribution**

Kamerlingh Onneslaan 1-3
3401 MZ IJsselstein
The Netherlands

T +31-(0)30 699 13 29

F +31-(0)30 220 10 77

E info@terwa.com

Terwa Construction Central East Europe**Sales & Distribution**

Strada Sânzieni
507075 Ghimbav
Romania

T +40 372 611 576

E info@terwa.com

Terwa Construction Poland**Sales & Distribution**

Ul. Cicha 5 lok. 4
00-353 Warszawa
Poland

E info@terwa.com

Terwa Construction India & Middle East**Sales & Distribution**

India
T +91 89 687 000 41
E info@terwa.com

Terwa Construction China**Sales & distribution**

5F 504, No. 101 Chuanchang road
PRC, 200032, Shanghai
China

E info@terwa.com

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