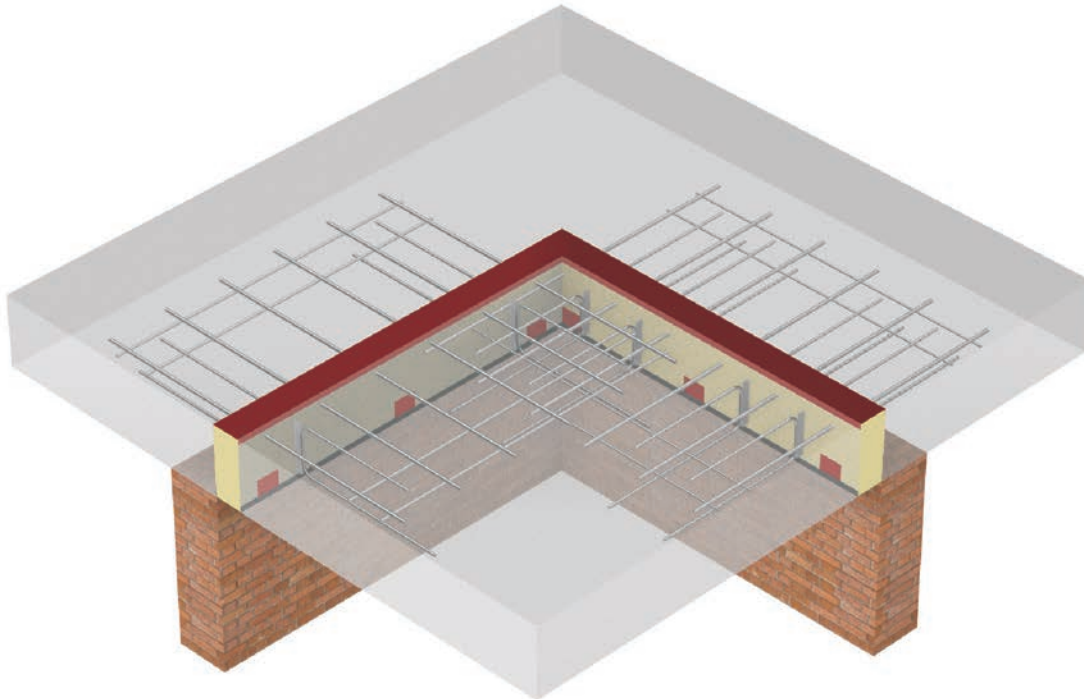


KP-100 BALCONY CONNECTOR - element 100 cm												Concrete class: C25/30		
Symbol	h [mm]	h <sub>i</sub> [mm]	Bar diameter φ [mm]	Quantity			M <sub>red</sub> (-) [kNm]	Insulation	Insulation	Rigidity k [kNm/rad]	ψ [W/mK]	Dimension [mm]		
				Bars	Plate	Compression bearing		80 mm V <sub>red</sub> (±) [kN]	120 mm V <sub>red</sub> (±) [kN]			S	E	E1
KP-103 4x10-1 L=1000 mm	140	80	10	4	1	2	13	22	16	635	0,127	960	250	125
	160	100	10	4	1	2	16	27	22	1 034	0,133	960	250	125
	180	120	10	4	1	2	20	33	27	1 529	0,140	960	250	125
	200	140	10	4	1	2	23	38	31	2 121	0,147	960	250	125
	220	160	10	4	1	2	26	44	35	2 810	0,154	960	250	125
	240	180	10	4	1	2	30	49	40	3 595	0,161	960	250	125
	260	200	10	4	1	2	33	55	45	4 478	0,168	960	250	125
	280	220	10	4	1	2	37	60	48	5 456	0,175	960	250	125
	300	240	10	4	1	2	40	65	53	6 532	0,182	960	250	125
KP-104 6x10-2 L=1000 mm	140	80	10	6	2	3	19	43	32	953	0,182	960	167	83
	160	100	10	6	2	3	24	54	44	1 551	0,193	960	167	83
	180	120	10	6	2	3	29	65	54	2 294	0,204	960	167	83
	200	140	10	6	2	3	34	76	62	3 182	0,215	960	167	83
	220	160	10	6	2	3	40	87	70	4 215	0,227	960	167	83
	240	180	10	6	2	3	45	98	80	5 393	0,238	960	167	83
	260	200	10	6	2	3	50	109	90	6 716	0,250	960	167	83
	280	220	10	6	2	3	55	120	96	8 184	0,261	960	167	83
	300	240	10	6	2	3	60	130	106	9 797	0,273	960	167	83
KP-105 4x14-2 L=1000 mm	140	80	14	4	2	4	24	43	32	900	0,205	1280	250	125
	160	100	14	4	2	4	31	54	44	1 483	0,217	1280	250	125
	180	120	14	4	2	4	38	65	54	2 211	0,229	1280	250	125
	200	140	14	4	2	4	44	76	62	3 084	0,241	1280	250	125
	220	160	14	4	2	4	51	87	70	4 102	0,253	1280	250	125
	240	180	14	4	2	4	58	98	80	5 265	0,264	1280	250	125
	260	200	14	4	2	4	65	109	90	6 572	0,276	1280	250	125
	280	220	14	4	2	4	72	120	96	8 025	0,287	1280	250	125
	300	240	14	4	2	4	78	130	106	9 622	0,299	1280	250	125
KP-106 6x14-3 L=1000 mm	140	80	14	6	3	6	36	65	48	1 350	0,283	1280	167	83
	160	100	14	6	3	6	46	81	66	2 225	0,299	1280	167	83
	180	120	14	6	3	6	56	98	81	3 317	0,314	1280	167	83
	200	140	14	6	3	6	67	114	93	4 626	0,319	1280	167	83
	220	160	14	6	3	6	77	131	105	6 153	0,335	1280	167	83
	240	180	14	6	3	6	87	147	120	7 897	0,350	1280	167	83
	260	200	14	6	3	6	97	164	135	9 858	0,366	1280	167	83
	280	220	14	6	3	6	107	180	144	12 037	0,381	1280	167	83
	300	240	14	6	3	6	118	195	159	14 433	0,397	1280	167	83
KP-107 8x14-4 L=1000 mm	140	80	14	8	4	8	48	86	64	1 800	0,326	1280	125	63
	160	100	14	8	4	8	62	108	88	2 967	0,345	1280	125	63
	180	120	14	8	4	8	75	130	108	4 423	0,364	1280	125	63
	200	140	14	8	4	8	89	152	124	6 168	0,383	1280	125	63
	220	160	14	8	4	8	102	174	140	8 204	0,402	1280	125	63
	240	180	14	8	4	8	116	196	160	10 529	0,420	1280	125	63
	260	200	14	8	4	8	130	218	180	13 145	0,439	1280	125	63
	280	220	14	8	4	8	143	240	192	16 049	0,457	1280	125	63
	300	240	14	8	4	8	157	260	212	19 244	0,476	1280	125	63
KP-108 10x14-5 L=1000 mm	140	80	14	10	5	10	60	97	72	2 250	0,375	1280	100	50
	160	100	14	10	5	10	77	122	99	3 708	0,396	1280	100	50
	180	120	14	10	5	10	94	146	122	5 528	0,417	1280	100	50
	200	140	14	10	5	10	111	171	140	7 711	0,438	1280	100	50
	220	160	14	10	5	10	128	196	158	10 255	0,459	1280	100	50
	240	180	14	10	5	10	145	221	180	13 162	0,480	1280	100	50
	260	200	14	10	5	10	162	245	203	16 431	0,500	1280	100	50
	280	220	14	10	5	10	179	270	216	20 062	0,521	1280	100	50
	300	240	14	10	5	10	196	293	239	24 055	0,542	1280	100	50

## ■ KPE-100 BALCONY CONNECTOR FOR SUPPORT BALCONY SLABS - CORNERS

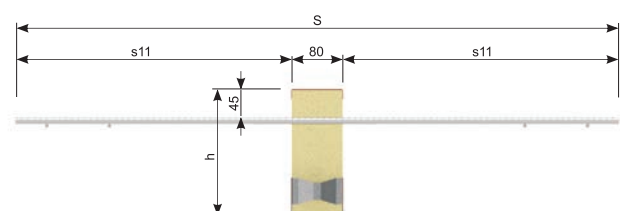
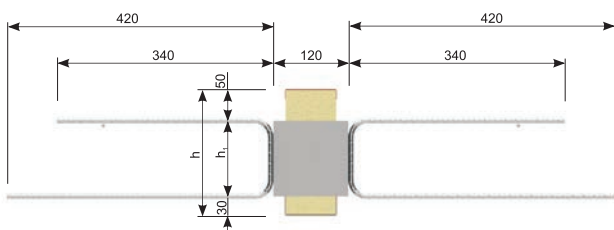


- standard elements for ceilings of thickness between 160 mm and 300 mm
- standard insulation thickness 80 mm; options: 60 mm, 100 mm, 120 mm
- insulation type: mineral wool (WM) or styrofoam (XPS)
- reinforcement bars of stainless steel
- steel plates of stainless steel
- stainless steel compression bearing (for 16 cm thick ceilings) or concrete compression bearing (for ceiling thickness values 18 cm and upwards)

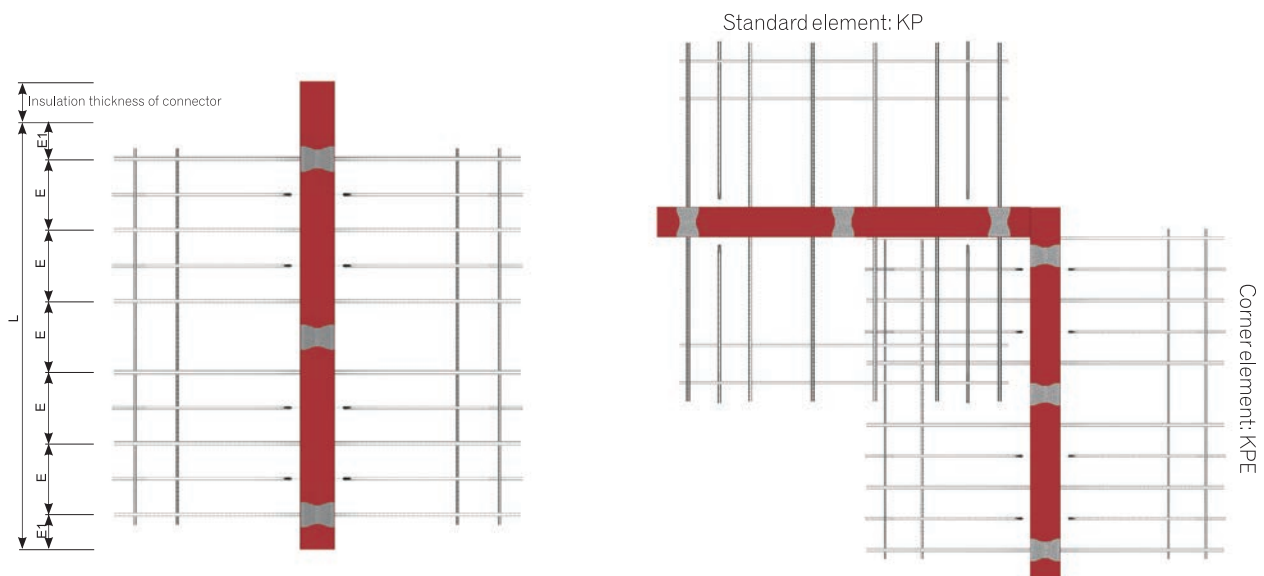
### Marking example:

KPE - 109, 6 x 10, 4 h=200 mm, XPS80, L=1000 mm

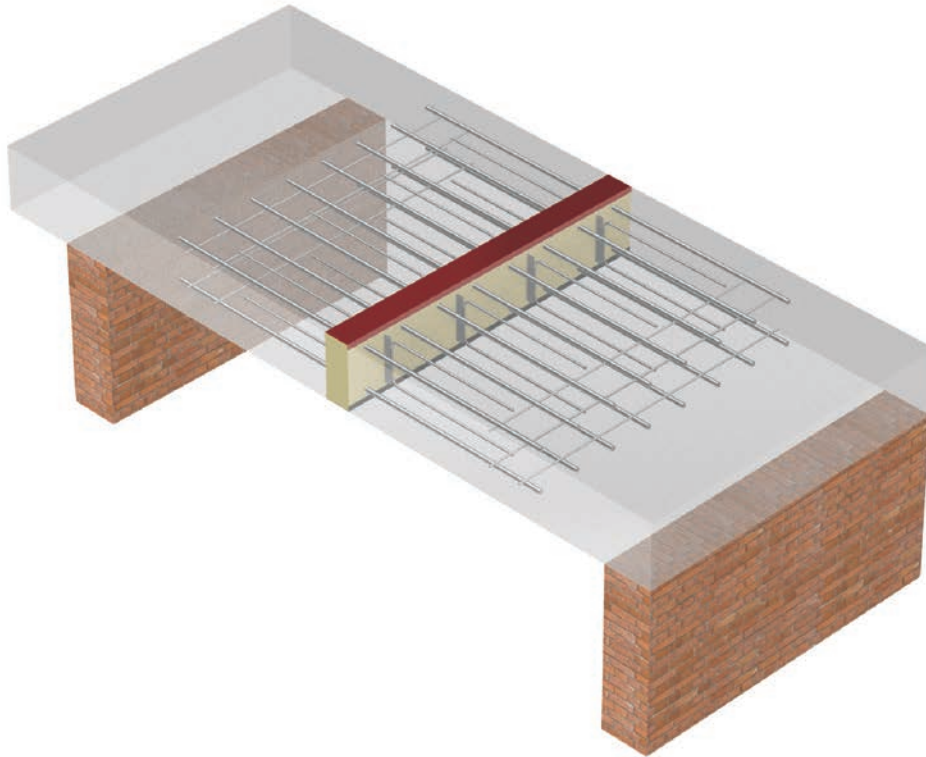
connector type    quantity of bars    bar diameter    quantity of steel plate



KPE-100 BALCONY CONNECTOR - element 100 cm												Concrete class: C25/30		
Symbol	h [mm]	h <sub>1</sub> [mm]	Bar diameter $\phi$ [mm]	Quantity			M <sub>red</sub> (-) [kNm]	Insulation 80 mm	Insulation 120 mm	Rigidity k [kNm/rad]	$\psi$ [W/mK]	Dimension [mm]		
				Bars	Plate	Compression bearing		V <sub>red</sub> ( $\pm$ ) [kN]	V <sub>red</sub> ( $\pm$ ) [kN]			S	E	E1
KPE-109 6x10-4 L=1000 mm	160	80	10	6	4	3	20	86	64	1 089	0,230	960	167	83
	180	100	10	6	4	3	25	108	88	1 723	0,250	960	167	83
	200	120	10	6	4	3	31	130	108	2 502	0,270	960	167	83
	220	140	10	6	4	3	36	152	124	3 427	0,290	960	167	83
	240	160	10	6	4	3	41	174	140	4 496	0,310	960	167	83
	260	180	10	6	4	3	46	196	160	5 710	0,330	960	167	83
	280	200	10	6	4	3	51	218	180	7 070	0,350	960	167	83
	300	220	10	6	4	3	57	240	192	8 574	0,370	960	167	83
KPE-110 6x14-5 L=1000 mm	160	80	14	6	5	6	38	97	72	1 549	0,316	1280	167	83
	180	100	14	6	5	6	49	122	99	2 428	0,337	1280	167	83
	200	120	14	6	5	6	59	146	122	3 624	0,358	1280	167	83
	220	140	14	6	5	6	69	171	140	4 988	0,379	1280	167	83
	240	160	14	6	5	6	79	196	158	6 569	0,401	1280	167	83
	260	180	14	6	5	6	89	221	180	8 367	0,422	1280	167	83
	280	200	14	6	5	6	100	245	203	10 383	0,444	1280	167	83
	300	220	14	6	5	6	110	270	216	16 616	0,465	1280	167	83
KPE-111 8x14-5 L=1000 mm	160	80	14	8	5	8	51	97	72	2 065	0,351	1280	125	63
	180	100	14	8	5	8	65	122	99	3 303	0,372	1280	125	63
	200	120	14	8	5	8	79	146	122	4 832	0,393	1280	125	63
	220	140	14	8	5	8	92	171	140	6 650	0,414	1280	125	63
	240	160	14	8	5	8	106	196	158	8 758	0,435	1280	125	63
	260	180	14	8	5	8	119	221	180	11 156	0,456	1280	125	63
	280	200	14	8	5	8	133	245	203	13 844	0,477	1280	125	63
	300	220	14	8	5	8	146	270	216	16 821	0,498	1280	125	63
KPE-112 10x14-6 L=1000 mm	160	80	14	10	6	10	64	110	80	2 581	0,398	1280	100	50
	180	100	14	10	6	10	81	138	110	4 129	0,419	1280	100	50
	200	120	14	10	6	10	98	166	135	6 040	0,442	1280	100	50
	220	140	14	10	6	10	115	194	155	8 313	0,465	1280	100	50
	240	160	14	10	6	10	132	222	175	10 948	0,488	1280	100	50
	260	180	14	10	6	10	149	250	200	13 945	0,512	1280	100	50
	280	200	14	10	6	10	166	278	225	17 305	0,535	1280	100	50
	300	220	14	10	6	10	183	306	240	21 026	0,558	1280	100	50



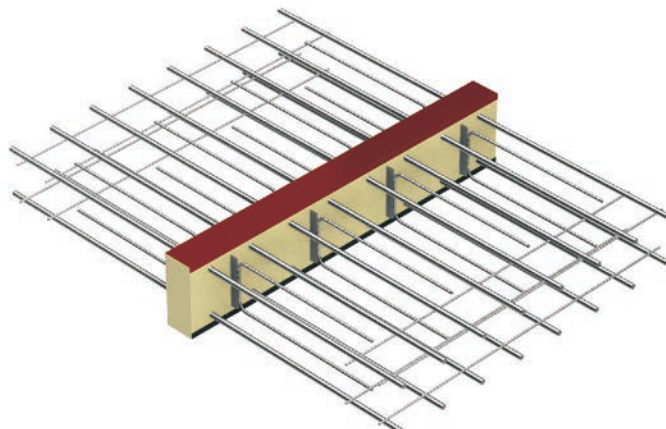
■ **KP-200 BALCONY CONNECTOR FOR SEAMLESS CONNECTION OF THE BALCONY SLAB WITH THE CEILING SLAB**



- standard elements for ceilings of thickness between 140 mm and 300 mm
- standard insulation thickness 80 mm; options: 60 mm, 100 mm, 120 mm
- insulation type: mineral wool (WM) or styrofoam (XPS)
- reinforcement bars of stainless steel
- steel plates of stainless steel

**Marking example:**

$\text{KP-204}$ ,  $\frac{8}{}$  x  $\frac{14}{}$  -  $\frac{4}{}$  h=200 mm, XPS80, L=1000 mm  
connector type    quantity of bars    bar diameter    quantity of steel plate



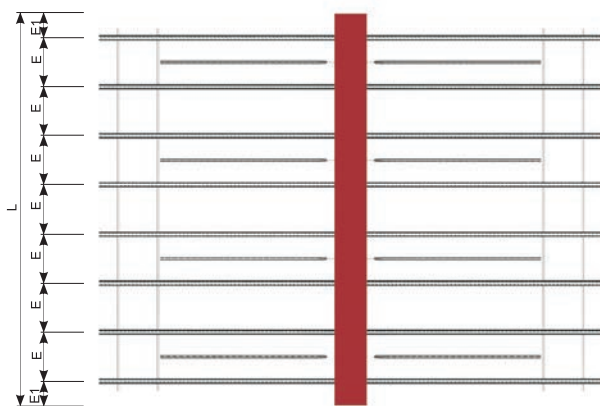
KP-204 balcony connector (8 x 14 - 4)

# Balcony connectors PRODUCTS

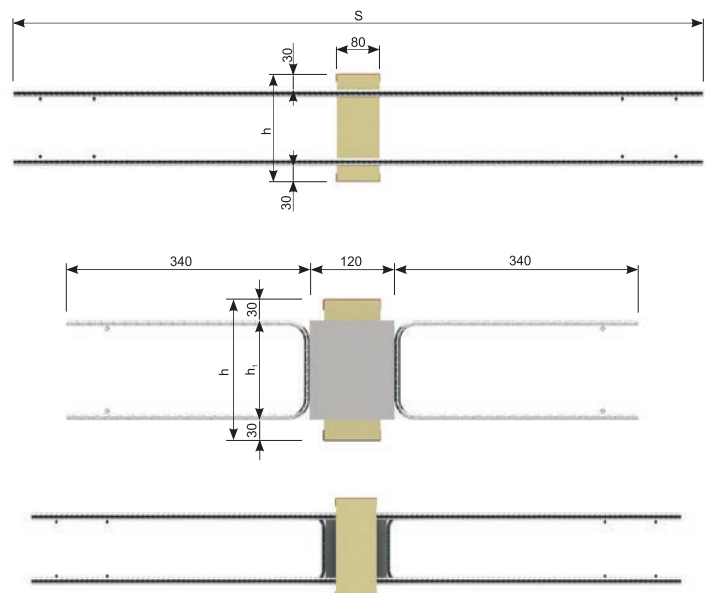
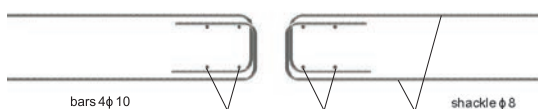
## KP-200 BALCONY CONNECTOR - element 100 cm

Concrete class:  $\geq$  C25/30

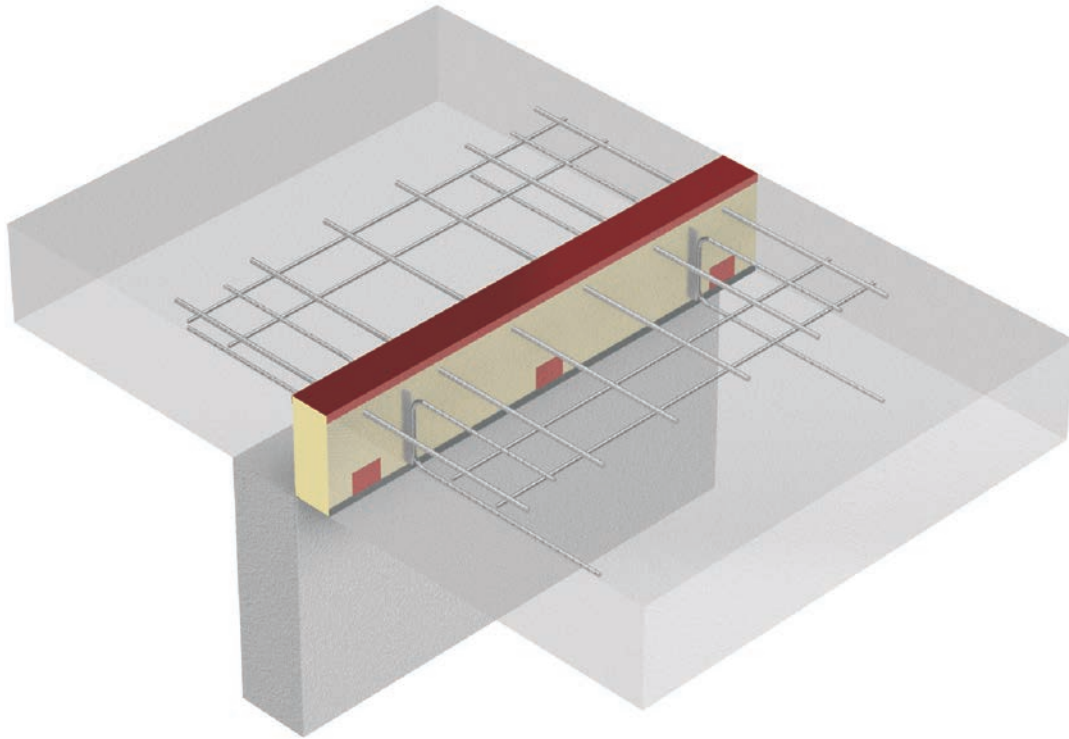
Symbol	h [mm]	h <sub>i</sub> [mm]	Bar diameter $\phi$ [mm]	Quantity		M <sub>rd</sub> (-) [kNm]	Insulation		Rlidity k [kNm/rad]	$\psi$ [W/mK]	Dimension [mm]		
				Bars	Plate		80 mm	120 mm			S	E	E1
							V <sub>rd</sub> ( $\pm$ ) [kN]	V <sub>rd</sub> ( $\pm$ ) [kN]					
KP-201 6x10-2 L=1000 mm	140	80	10	6	2	15	43	32	888	0,174	960	167	83
	160	100	10	6	2	20	54	44	1 468	0,186	960	167	83
	180	120	10	6	2	24	65	54	2 193	0,198	960	167	83
	200	140	10	6	2	29	76	62	3 063	0,210	960	167	83
	220	160	10	6	2	33	87	70	4 078	0,222	960	167	83
	240	180	10	6	2	37	98	80	5 238	0,234	960	167	83
	260	200	10	6	2	42	109	90	6 543	0,245	960	167	83
	280	220	10	6	2	46	120	96	7 993	0,257	960	167	83
	300	240	10	6	2	51	130	106	9 588	0,269	960	167	83
KP-202 4x14-2 L=1000 mm	140	80	14	4	2	21	43	32	789	0,191	1280	250	125
	160	100	14	4	2	27	54	44	1 339	0,203	1280	250	125
	180	120	14	4	2	34	65	54	2 035	0,215	1280	250	125
	200	140	14	4	2	40	76	62	2 875	0,227	1280	250	125
	220	160	14	4	2	47	87	70	3 860	0,239	1280	250	125
	240	180	14	4	2	53	98	80	4 990	0,251	1280	250	125
	260	200	14	4	2	59	109	90	6 265	0,262	1280	250	125
	280	220	14	4	2	66	120	96	7 685	0,274	1280	250	125
	300	240	14	4	2	72	130	106	9 250	0,286	1280	250	125
KP-203 6x14-3 L=1000 mm	140	80	14	6	3	32	65	48	1 183	0,260	1280	167	83
	160	100	14	6	3	41	81	66	2 009	0,276	1280	167	83
	180	120	14	6	3	51	98	81	3 052	0,290	1280	167	83
	200	140	14	6	3	60	114	93	4 313	0,305	1280	167	83
	220	160	14	6	3	70	131	105	5 791	0,319	1280	167	83
	240	180	14	6	3	80	147	120	7 486	0,334	1280	167	83
	260	200	14	6	3	89	164	135	9 398	0,348	1280	167	83
	280	220	14	6	3	99	180	144	11 528	0,363	1280	167	83
	300	240	14	6	3	108	195	159	13 875	0,377	1280	167	83
KP-204 8x14-4 L=1000 mm	140	80	14	8	4	42	86	64	1 578	0,312	1280	125	63
	160	100	14	8	4	55	108	88	2 678	0,331	1280	125	63
	180	120	14	8	4	68	130	108	4 070	0,350	1280	125	63
	200	140	14	8	4	81	152	124	5 750	0,369	1280	125	63
	220	160	14	8	4	93	174	140	7 721	0,387	1280	125	63
	240	180	14	8	4	106	196	160	9 981	0,405	1280	125	63
	260	200	14	8	4	119	218	180	12 531	0,422	1280	125	63
	280	220	14	8	4	132	240	192	15 374	0,440	1280	125	63
	300	240	14	8	4	144	260	212	18 500	0,458	1280	125	63



Additional bars installed at the construction site



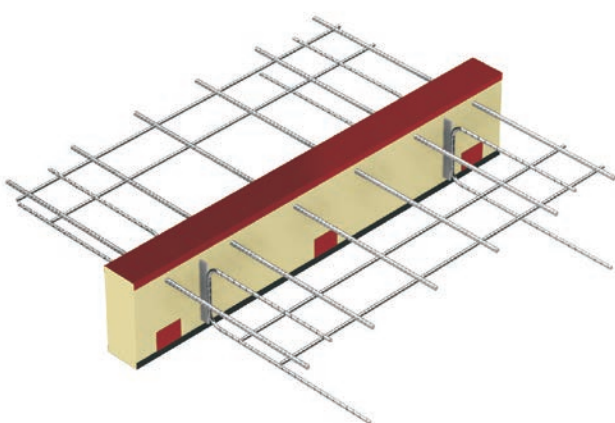
## ■ KP-300 BALCONY CONNECTOR FOR SUPPORT BALCONY SLABS



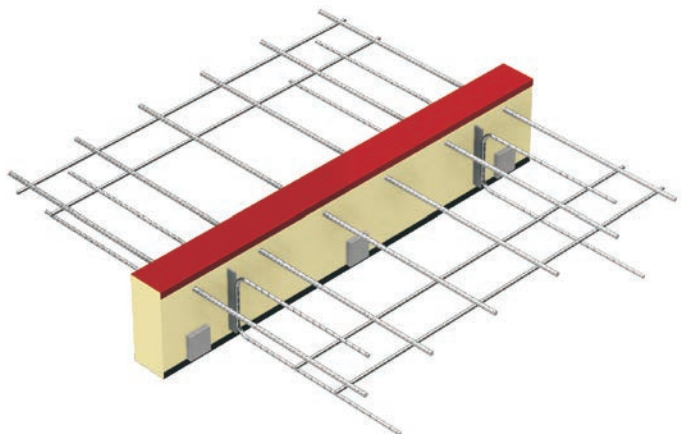
- standard elements for ceilings of thickness between 140 mm and 300 mm
- standard insulation thickness 80 mm; options: 60 mm, 100 mm, 120 mm
- insulation type: mineral wool (WM) or styrofoam (XPS)
- expanded tension rod of ordinary heat galvanised carbon steel
- steel plates of stainless steel
- stainless steel compression bearing (for 14 cm or 16 cm thick ceilings) or concrete compression bearing (for ceiling thickness values 18 cm and upwards)

### Marking example:

$\text{KP-304}$ ,  $6$  x  $10$  -  $2$  h=200 mm, XPS80, L=1000 mm  
connector type      quantity of bars      bar diameter      quantity of steel plate



KP-304 balcony connector (6 x 10 - 2) with concrete compression bearings



KP-304 balcony connector (6 x 10 - 2) with steel compression bearings