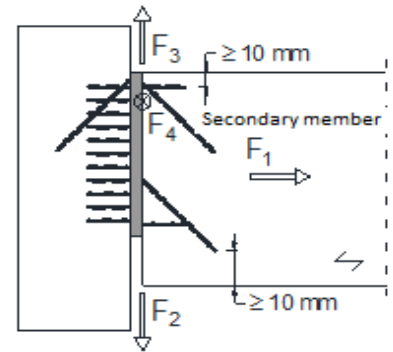
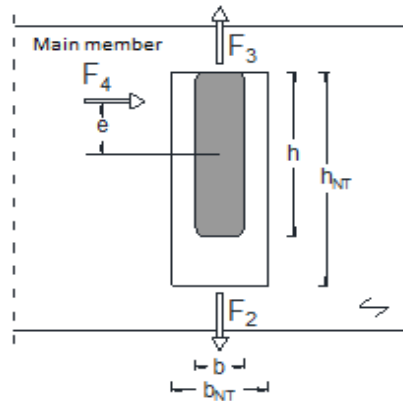




GH - Top UV 60

ETA 11/0036



For further design notes, refer to UV connectors in general, structural calculations

Dimensions

Timber-to-timber 60x160x16
Timber-to-concrete 60x160x24

Characteristic resistances per connector in kN All holes filled with screws

		Screws 45°						
		6x100	6x120	6x140	6x160	6x180	6x200	
Screws 90°	5x50	$F_{1,Rk}$	2,90	2,90	2,90	2,90	2,90	2,90
		$F_{2,Rk}$	31,8	39,2	44,8	44,8	44,8	44,8
		$F_{3,Rk}$	5,31	6,53	7,50	8,72	9,72	9,72
		$F_{4,Rk}$	e = 0 mm	8,67	8,67	8,67	8,67	8,67
	e = 80 mm		3,01	3,01	3,01	3,01	3,01	3,01
	5x60	$F_{1,Rk}$	3,53	3,53	3,53	3,53	3,53	3,53
		$F_{2,Rk}$	31,8	39,2	45,0	47,6	47,6	47,6
		$F_{3,Rk}$	5,31	6,53	7,50	8,72	9,72	9,72
		$F_{4,Rk}$	e = 0 mm	9,06	9,06	9,06	9,06	9,06
	e = 80 mm		3,15	3,15	3,15	3,15	3,15	3,15
	5x70	$F_{1,Rk}$	4,16	4,16	4,16	4,16	4,16	4,16
		$F_{2,Rk}$	31,8	39,2	45,0	50,3	50,3	50,3
$F_{3,Rk}$		5,31	6,53	7,50	8,72	9,72	9,72	
$F_{4,Rk}$		e = 0 mm	9,46	9,46	9,46	9,46	9,46	9,46
	e = 80 mm	3,28	3,28	3,28	3,28	3,28	3,28	
Minimum height of secondary member in mm		175	185	200	215	230	245	
Minimum width of secondary member in mm		80						
Resistance design value: $F_{i,Rd} = F_{i,Rk} \cdot k_{mod} / \gamma_{M,Timber}$ where $\gamma_{M,Timber} = 1.3$								
Design value of the resistance in load case F_3 for timber-to-concrete/steel joint: $F_{3,Rd} = 6 / 1.25 = 4.8$ kN								



Characteristic resistances per connector in kN, partially screwed

		Screws 45°							
		6x100	6x120	6x140	6x160	6x180	6x200		
Screws 90°	5x50	F _{1,Rk}	2,90	2,90	2,90	2,90	2,90	2,90	
		F _{2,Rk}	21,2	23,5	23,5	23,5	23,5	23,5	
		F _{3,Rk}	5,31	6,53	7,50	8,72	9,72	9,72	
		F _{4,Rk}	e = 0 mm	6,94	6,94	6,94	6,94	6,94	6,94
			e = 80 mm	2,71	2,71	2,71	2,71	2,71	2,71
		5x60	F _{1,Rk}	3,53	3,53	3,53	3,53	3,53	3,53
	F _{2,Rk}		21,2	24,9	24,9	24,9	24,9	24,9	
	F _{3,Rk}		5,31	6,53	7,50	8,72	9,72	9,72	
	F _{4,Rk}		e = 0 mm	7,25	7,25	7,25	7,25	7,25	7,25
			e = 80 mm	2,83	2,83	2,83	2,83	2,83	2,83
	5x70		F _{1,Rk}	4,16	4,16	4,16	4,16	4,16	4,16
		F _{2,Rk}	21,2	26,1	26,4	26,4	26,4	26,4	
		F _{3,Rk}	5,31	6,53	7,50	8,72	9,72	9,72	
		F _{4,Rk}	e = 0 mm	7,57	7,57	7,57	7,57	7,57	7,57
			e = 80 mm	2,95	2,95	2,95	2,95	2,95	2,95
		Minimum height of secondary member in mm		175	185	200	215	230	245
	Minimum width of secondary member in mm		80						
	Resistance design value: $F_{i,Rd} = F_{i,Rk} \cdot k_{mod} / \gamma_{M,Timber} = 1.3$								
Design value of the resistance in load case F ₃ for timber-to-concrete/steel joint: $F_{3,Rd} = 6 / 1.25 = 4.8$ kN									