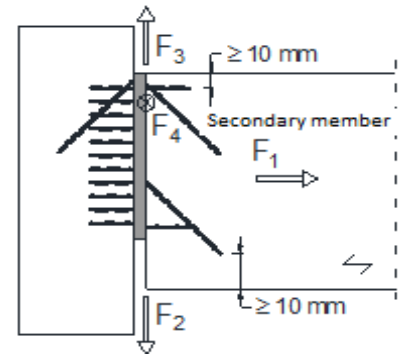
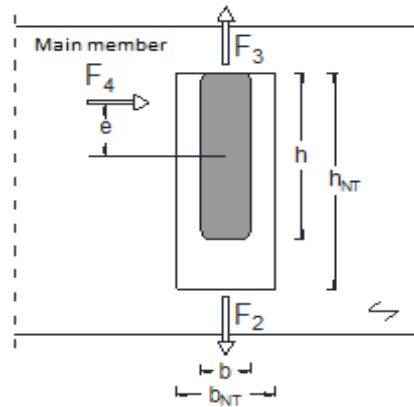




GH - Top UV 40

ETA 11/0036



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

Dimensions

- Timber-to-timber 60x115x16
- Timber-to-concrete 60x115x24

Characteristic resistances per connector in kN All holes filled with screws

		Screws 45°						
		6x100	6x120	6x140	6x160	6x180	6x200	
Screws 90°	5x50	$F_{1,Rk}$	1,45	1,45	1,45	1,45	1,45	1,45
		$F_{2,Rk}$	31,8	32,0	32,0	32,0	32,0	32,0
		$F_{3,Rk}$	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
		e = 58 mm	2,59	2,59	2,59	2,59	2,59	2,59
	5x60	$F_{1,Rk}$	1,76	1,76	1,76	1,76	1,76	1,76
		$F_{2,Rk}$	31,8	34,0	34,0	34,0	34,0	34,0
		$F_{3,Rk}$	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
		e = 58 mm	2,70	2,70	2,70	2,70	2,70	2,70
	5x70	$F_{1,Rk}$	2,08	2,08	2,08	2,08	2,08	2,08
		$F_{2,Rk}$	31,8	36,0	36,0	36,0	36,0	36,0
$F_{3,Rk}$		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 = 58 mm	2,82	2,82	2,82	2,82	2,82	2,82	
Minimum height of secondary member in mm		175	185	200	215	230	245	
Minimum width of secondary member in mm		80						
Resistance design value: $F_{i,Rd} = F_{i,Rk} \times k_{mod} / g_{M,Timber}$ with $g_{M,Timber} = 1.3$								
Design value of the resistance in load case F3 for timber-concrete/steel joint: $F_{3,Rd} = 6 / 1.25 = 4.8 \text{ kN}$								



Characteristic resistances per connector in kN, partially screwed

		Screws 45°							
		6x100	6x120	6x140	6x160	6x180	6x200		
Screws 90°	5x50	F _{1,Rk}	1,45	1,45	1,45	1,45	1,45	1,45	
		F _{2,Rk}	17,1	17,1	17,1	17,1	17,1	17,1	
		F _{3,Rk}	5,31	6,53	7,50	8,72	9,72	9,72	
		F _{4,Rk}	e = 0 mm	5,20	5,20	5,20	5,20	5,20	5,20
			e = 58 mm	2,18	2,18	2,18	2,18	2,18	2,18
	5x60	F _{1,Rk}	1,76	1,76	1,76	1,76	1,76	1,76	
		F _{2,Rk}	18,1	18,1	18,1	18,1	18,1	18,1	
		F _{3,Rk}	5,31	6,53	7,50	8,72	9,72	9,72	
		F _{4,Rk}	e = 0 mm	5,44	5,44	5,44	5,44	5,44	5,44
			e = 58 mm	2,28	2,28	2,28	2,28	2,28	2,28
	5x70	F _{1,Rk}	2,08	2,08	2,08	2,08	2,08	2,08	
		F _{2,Rk}	19,2	19,2	19,2	19,2	19,2	19,2	
		F _{3,Rk}	5,31	6,53	7,50	8,72	9,72	9,72	
		F _{4,Rk}	e = 0 mm	5,67	5,67	5,67	5,67	5,67	5,67
			e = 58 mm	2,38	2,38	2,38	2,38	2,38	2,38
Minimum height of secondary member in mm		175	185	200	215	230	245		
Minimum width of secondary member in mm		80							
Resistance design value: $F_{i,Rd} = F_{i,Rk} \times k_{mod} / g_{M,Timber}$ with $g_{M,Timber} = 1.3$									
Design value of the resistance in load case F3 for timber-concrete/steel joint: $F_{3,Rd} = 6 / 1.25 = 4.8 \text{ kN}$									