

SV

PRESTANDEDEKLARATION

enligt bilaga III till EU-förordning nr 305/2011 (Byggproduktförordning)

 Hilti skruvar för sandwichpanel S-CD S, S-CDW S
 Nr Hilti-SF-DoP-009

- 1. Produkttypens unika identifikationskod:** Hilti fästskruvar för sandwichpanel S-CD S, S-CDW S
- 2. Typ-, parti- eller serienummer eller någon annan beteckning som möjliggör identifiering av byggprodukter i enlighet med artikel 11(4):** Typ- och partinummer står på förpackningen

3. Byggproduktens avsedda användning eller användningar i enlighet med den tillämpliga, harmoniserade tekniska specifikationen, såsom förutsett av tillverkaren:

Generisk typ och användning	Självborrande fästskruvar för sandwichpanel
Produktstorlek	Skruvdiameter 5,5 och 6,5
Grund- och monterat material	Stål enligt EN 10025-1 och EN 10346, Trä enligt EN 14081
Fästelementets material	Rostfritt stål (1.4301, 1.4401 eller 1.4571) enligt EN 10088
Belastning	Statisk och kvasistatisk (vindlast)

4. Tillverkarens namn, registrerade företagsnamn eller registrerade varumärken samt kontaktadress enligt vad som krävs i artikel 11(5): Hilti Aktiengesellschaft, Business Unit Direct Fastening, 9494 Schaan, Fürstendömet Liechtenstein

5. I tillämpliga fall namn och kontaktadress för tillverkarens representant vars mandat omfattar de uppgifter som anges i artikel 12(2) inte tillämpligt

6. Systemet eller systemen för bedömning och fortlöpande kontroll av byggproduktens prestanda enligt bilaga V: System 2+

7. För det fall att prestandadeklarationen avser en byggprodukt som omfattas av en harmoniserad standard:: inte tillämpligt

8. För det fall att prestandadeklarationen avser en byggprodukt för vilken en europeisk teknisk bedömning har utfärdats: Deutsches Institut für Bautechnik (DIBt) har utfärdat ETA-13/0179 på grundval av EAD 330047-01-0602. Det anmälda organet MPA-Karlsruhe 0769 har utfört uppgifter för tredje part enligt system 2+ och har utfärdat intyg om överensstämmelse efter tillverkningskontroll 0769-CPR-VAS-00705.

9. Angiven prestanda:

Väsentlig egenskap	Prestanda	Harmoniserad teknisk specifikation
Karaktäristisk bärförmåga vid dragning $N_{R,k}$	Bilaga 1-16 ETA-13/0179 (Bilaga 8-11, 16-27)	ETA 13/0179 EAD 330047-01-0602
Karaktäristiskt skjvmotstånd $V_{R,k}$		
Max. förskjutning av skruvhuvudet u		
Applikationsgränser		
Brandtålighet	A1	

10. Prestandan för den produkt som anges i punkterna 1 och 2 överensstämmer med den prestanda som anges i punkt 9. Denna prestandadeklaration utfärdas på eget ansvar av den tillverkare som anges under punkt 4.

Undertecknat för tillverkaren av:

Lars Taenzer
Head of Business Unit Direct Fastening

Pierre Hohmeier
Head of Quality Screw Fastening

Hilti Aktiengesellschaft, Schaan, 01.05.2017

Annex 1:
ETA-13/0179, Annex 8

Material:
Fastener: stainless Steel (1.4301, 1.4401, 1.4571) - EN 10088
Washer: stainless Steel (1.4301) - EN 10088
Component I: S280GD, S320GD, S350GD, S390GD, S420GD, S450GD - EN 10346
Component II: S235, S275, S355, S420 - EN 10025-1, S280GD, S320GD, S350GD, S390GD, S420GD, S450GD - EN 10346

Drilling capacity: $\Sigma t_i \leq 6,00$ mm

Timber substructures:
no performance determined

t_{N1}, t_{N2}, d, D [mm]	t_i [mm]									
	1,50	2,00	2,50	3,00	4,00	5,00	6,00	8,00	$\geq 10,0$	
$V_{R,k}$ [kN]	0,40	0,65	0,65	0,65	0,65	0,65	0,65	—	—	—
	0,50	1,17	1,17	1,17	1,17	1,17	1,17	—	—	—
	0,55	1,36	1,36	1,36	1,36	1,36	1,36	—	—	—
	0,60	1,54	1,54	1,54	1,54	1,54	1,54	—	—	—
	0,63	1,65	1,65	1,65	1,65	1,65	1,65	—	—	—
	0,75	2,03	2,03	2,03	2,03	2,03	2,03	—	—	—
	0,88	2,40	2,40	2,40	2,40	2,40	2,40	—	—	—
	1,00	2,68	2,68	2,68	2,68	2,68	2,68	—	—	—
$N_{R,k}$ [kN]	0,40	—	—	—	—	—	—	—	—	—
	0,50	1,80	1,92	1,92	1,92	1,92	1,92	—	—	—
	0,55	1,80	2,19	2,19	2,19	2,19	2,19	—	—	—
	0,60	1,80	2,48	2,48	2,48	2,48	2,48	—	—	—
	0,63	1,80	2,65	2,65	2,65	2,65	2,65	—	—	—
	0,75	1,80	2,80	3,57	3,57	3,57	3,57	—	—	—
	0,88	1,80	2,80	3,57	3,57	3,57	3,57	—	—	—
	1,00	1,80	2,80	3,57	3,57	3,57	3,57	—	—	—
u [mm]	40	18,0	8,0	7,0	6,0	5,0	3,0	—	—	—
	50	22,0	10,5	9,0	7,5	6,5	4,3	—	—	—
	60	26,0	13,0	11,0	9,0	8,0	5,5	—	—	—
	70	29,5	16,5	14,0	12,0	11,5	6,8	—	—	—
	80	33,0	20,0	17,5	15,0	14,0	8,0	—	—	—
	100	33,0	20,0	17,5	15,0	14,0	10,0	—	—	—
	120	33,0	20,0	17,5	15,0	14,0	12,0	—	—	—
	≥ 140	33,0	20,0	17,5	15,0	14,0	14,0	—	—	—
$N_{R,k,II}$ [kN]	1,94	2,84	3,83	4,89	7,18	7,18	—	—	—	

If component t_{N1} resp. t_{N2} is made of steel grade higher than S280GD the grey highlighted values may be increased by 8,3%. If both components t_{N1} resp. t_{N2} and t_i are made of steel grade higher than S280GD all values $V_{R,k}$ and $N_{R,k}$ may be increased by 8,3%.

If component t_i is made of steel grade higher than S235 or S280GD the values $N_{R,k,II}$ may be increased by 8,3%.

Self drilling screw	Annex 8
Hilti S-CDH 53 S 5,5 x L Hilti S-CDH 53 SS 5,5 x L with hexagon head and sealing washer $\varnothing 16$ mm	

Annex 2:
ETA-13/0179, Annex 9

Material:
Fastener: stainless Steel (1.4301, 1.4401, 1.4571) - EN 10088
Washer: stainless Steel (1.4301) - EN 10088
Component I: S280GD, S320GD, S350GD, S390GD, S420GD, S450GD - EN 10346
Component II: S235, S275, S355, S420 - EN 10025-1, S280GD, S320GD, S350GD, S390GD, S420GD, S450GD - EN 10346

Drilling capacity: $\Sigma t_i \leq 6,00$ mm

Timber substructures:
no performance determined

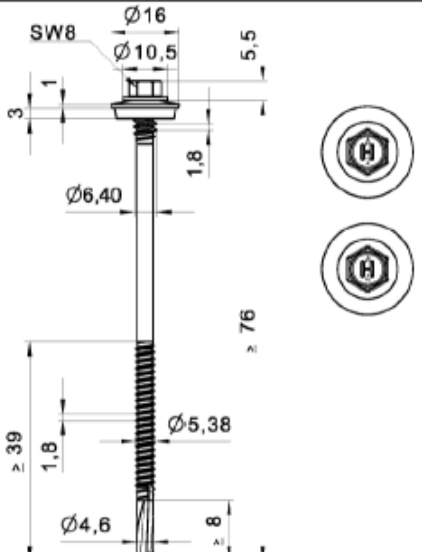
t_{N1}, t_{N2}, d, D [mm]	t_i [mm]									
	1,50	2,00	2,50	3,00	4,00	5,00	6,00	8,00	≥ 10,0	
$V_{R,k}$ [kN]	0,40	0,65	0,65	0,65	0,65	0,65	0,65	—	—	—
	0,50	1,17	1,17	1,17	1,17	1,17	1,17	—	—	—
	0,55	1,36	1,36	1,36	1,36	1,36	1,36	—	—	—
	0,60	1,54	1,54	1,54	1,54	1,54	1,54	—	—	—
	0,63	1,65	1,65	1,65	1,65	1,65	1,65	—	—	—
	0,75	2,03	2,03	2,03	2,03	2,03	2,03	—	—	—
	0,88	2,40	2,40	2,40	2,40	2,40	2,40	—	—	—
	1,00	2,68	2,68	2,68	2,68	2,68	2,68	—	—	—
$N_{R,k}$ [kN]	0,40	—	—	—	—	—	—	—	—	—
	0,50	1,80	2,60	2,60	2,60	2,60	2,60	—	—	—
	0,55	1,80	2,80	3,00	3,00	3,00	3,00	—	—	—
	0,60	1,80	2,80	3,25	3,25	3,25	3,25	—	—	—
	0,63	1,80	2,80	3,40	3,40	3,40	3,40	—	—	—
	0,75	1,80	2,80	3,80	4,20	4,20	4,20	—	—	—
	0,88	1,80	2,80	3,80	4,50	4,50	4,50	—	—	—
	1,00	1,80	2,80	3,80	4,50	4,50	4,50	—	—	—
u [mm]	40	18,0	8,0	7,0	6,0	5,0	3,0	—	—	—
	50	22,0	10,5	9,0	7,5	6,5	4,3	—	—	—
	60	26,0	13,0	11,0	9,0	8,0	5,5	—	—	—
	70	29,5	16,5	14,0	12,0	11,5	6,8	—	—	—
	80	33,0	20,0	17,5	15,0	14,0	8,0	—	—	—
	100	33,0	20,0	17,5	15,0	14,0	10,0	—	—	—
	120	33,0	20,0	17,5	15,0	14,0	12,0	—	—	—
	≥ 140	33,0	20,0	17,5	15,0	14,0	14,0	—	—	—
$N_{R,k,II}$ [kN]	1,94	2,84	3,83	4,89	7,18	7,18	—	—	—	

If component t_{N1} resp. t_{N2} is made of steel grade higher than S280GD the grey highlighted values may be increased by 8,3%. If both components t_{N1} resp. t_{N2} and t_i are made of steel grade higher than S280GD all values $V_{R,k}$ and $N_{R,k}$ may be increased by 8,3%.

If component t_i is made of steel grade higher than S235 or S280GD the values $N_{R,k,II}$ may be increased by 8,3%.

Self drilling screw	Annex 9
Hilti S-CDH 63 S 5,5 x L Hilti S-CDH 63 SS 5,5 x L Hilti S-CDH 73 S 5,5 x L Hilti S-CDH 73 SS 5,5 x L with hexagon head and sealing washer $\geq \text{Ø}19$ mm	

Annex 3:
ETA-13/0179, Annex 10



Material:
Fastener: stainless Steel (1.4301, 1.4401, 1.4571) - EN 10088
Washer: stainless Steel (1.4301) - EN 10088
Component I: S280GD, S320GD, S350GD, S390GD, S420GD, S450GD - EN 10346
Component II: S235, S275, S355, S420 - EN 10025-1, S280GD, S320GD, S350GD, S390GD, S420GD, S450GD - EN 10346

Drilling capacity: $\Sigma t_i \leq 6,00$ mm

Timber substructures:
no performance determined

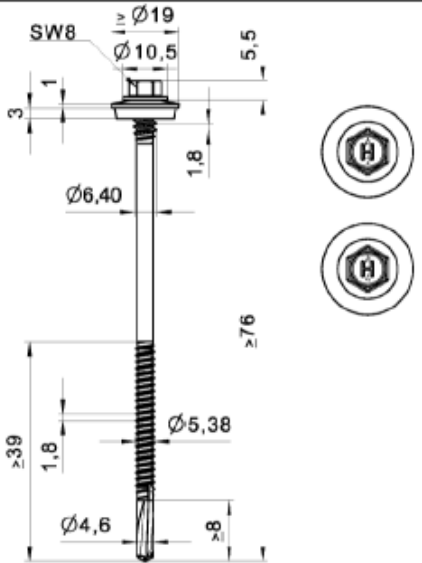
t_{N1}, t_{N2}, d, D [mm]	t_i [mm]									
	1,50	2,00	2,50	3,00	4,00	5,00	6,00	8,00	≥ 10,0	
$V_{R,k}$ [kN]	0,40	0,65	0,65	0,65	0,65	0,65	0,65	—	—	—
	0,50	1,17	1,17	1,17	1,17	1,17	1,17	—	—	—
	0,55	1,36	1,36	1,36	1,36	1,36	1,36	—	—	—
	0,60	1,54	1,54	1,54	1,54	1,54	1,54	—	—	—
	0,63	1,65	1,65	1,65	1,65	1,65	1,65	—	—	—
	0,75	2,03	2,03	2,03	2,03	2,03	2,03	—	—	—
	0,88	2,40	2,40	2,40	2,40	2,40	2,40	—	—	—
	1,00	2,68	2,68	2,68	2,68	2,68	2,68	—	—	—
$N_{R,k}$ [kN]	0,40	—	—	—	—	—	—	—	—	—
	0,50	1,80	1,92	1,92	1,92	1,92	1,92	—	—	—
	0,55	1,80	2,19	2,19	2,19	2,19	2,19	—	—	—
	0,60	1,80	2,48	2,48	2,48	2,48	2,48	—	—	—
	0,63	1,80	2,65	2,65	2,65	2,65	2,65	—	—	—
	0,75	1,80	2,80	3,57	3,57	3,57	3,57	—	—	—
	0,88	1,80	2,80	3,57	3,57	3,57	3,57	—	—	—
	1,00	1,80	2,80	3,57	3,57	3,57	3,57	—	—	—
u [mm]	40	18,0	8,0	7,0	6,0	5,0	3,0	—	—	—
	50	22,0	10,5	9,0	7,5	6,5	4,3	—	—	—
	60	26,0	13,0	11,0	9,0	8,0	5,5	—	—	—
	70	29,5	16,5	14,0	12,0	11,5	6,8	—	—	—
	80	33,0	20,0	17,5	15,0	14,0	8,0	—	—	—
	100	33,0	20,0	17,5	15,0	14,0	10,0	—	—	—
	120	33,0	20,0	17,5	15,0	14,0	12,0	—	—	—
	≥ 140	33,0	20,0	17,5	15,0	14,0	14,0	—	—	—
$N_{R,k,II}$ [kN]	1,94	2,84	3,83	4,89	7,18	7,18	—	—	—	

If component t_{N1} resp. t_{N2} is made of steel grade higher than S280GD the grey highlighted values may be increased by 8,3%. If both components t_{N1} resp. t_{N2} and t_i are made of steel grade higher than S280GD all values $V_{R,k}$ and $N_{R,k}$ may be increased by 8,3%.

If component t_i is made of steel grade higher than S235 or S280GD the values $N_{R,k,II}$ may be increased by 8,3%.

Self drilling screw	Annex 10
Hilti S-CD 53 S 5,5 x L Hilti S-CD 53 SS 5,5 x L with hexagon head and sealing washer Ø16 mm	

Annex 4:
ETA-13/0179, Annex 11



Material:
Fastener: stainless Steel (1.4301, 1.4401, 1.4571) - EN 10088
Washer: stainless Steel (1.4301) - EN 10088
Component I: S280GD, S320GD, S350GD, S390GD, S420GD, S450GD - EN 10346
Component II: S235, S275, S355, S420 - EN 10025-1, S280GD, S320GD, S350GD, S390GD, S420GD, S450GD - EN 10346

Drilling capacity: $\Sigma t_i \leq 6,00$ mm

Timber substructures:
no performance determined

t_{N1}, t_{N2}, d, D [mm]	t_i [mm]								
	1,50	2,00	2,50	3,00	4,00	5,00	6,00	8,00	≥ 10,0
$V_{R,k}$ [kN]	0,40	0,65	0,65	0,65	0,65	0,65	—	—	—
	0,50	1,17	1,17	1,17	1,17	1,17	—	—	—
	0,55	1,36	1,36	1,36	1,36	1,36	—	—	—
	0,60	1,54	1,54	1,54	1,54	1,54	—	—	—
	0,63	1,65	1,65	1,65	1,65	1,65	—	—	—
	0,75	2,03	2,03	2,03	2,03	2,03	—	—	—
	0,88	2,40	2,40	2,40	2,40	2,40	—	—	—
	1,00	2,68	2,68	2,68	2,68	2,68	—	—	—
$N_{R,k}$ [kN]	0,40	—	—	—	—	—	—	—	—
	0,50	1,80	2,60	2,60	2,60	2,60	—	—	—
	0,55	1,80	2,80	3,00	3,00	3,00	—	—	—
	0,60	1,80	2,80	3,25	3,25	3,25	—	—	—
	0,63	1,80	2,80	3,40	3,40	3,40	—	—	—
	0,75	1,80	2,80	3,80	4,20	4,20	—	—	—
	0,88	1,80	2,80	3,80	4,50	4,50	—	—	—
	1,00	1,80	2,80	3,80	4,50	4,50	—	—	—
u [mm]	40	18,0	8,0	7,0	6,0	5,0	3,0	—	—
	50	22,0	10,5	9,0	7,5	6,5	4,3	—	—
	60	26,0	13,0	11,0	9,0	8,0	5,5	—	—
	70	29,5	16,5	14,0	12,0	11,5	6,8	—	—
	80	33,0	20,0	17,5	15,0	14,0	8,0	—	—
	100	33,0	20,0	17,5	15,0	14,0	10,0	—	—
	120	33,0	20,0	17,5	15,0	14,0	12,0	—	—
≥ 140	33,0	20,0	17,5	15,0	14,0	14,0	—	—	
$N_{R,k,II}$ [kN]	1,94	2,84	3,83	4,89	7,18	7,18	—	—	—

If component t_{N1} resp. t_{N2} is made of steel grade higher than S280GD the grey highlighted values may be increased by 8,3%. If both components t_{N1} resp. t_{N2} and t_i are made of steel grade higher than S280GD all values $V_{R,k}$ and $N_{R,k}$ may be increased by 8,3%.

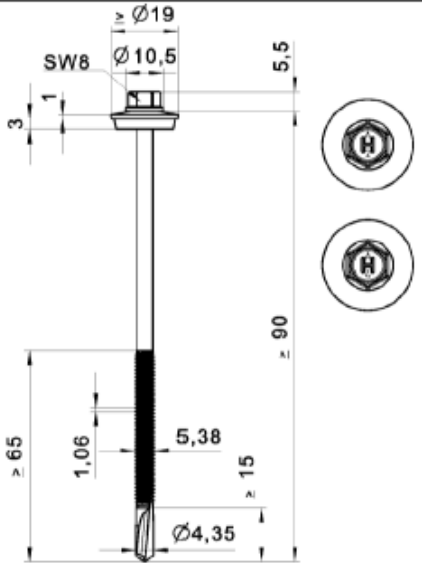
If component t_i is made of steel grade higher than S235 or S280GD the values $N_{R,k,II}$ may be increased by 8,3%.

Self drilling screw	Annex 11
Hilti S-CD 63 S 5,5 x L Hilti S-CD 63 SS 5,5 x L Hilti S-CD 73 S 5,5 x L Hilti S-CD 73 SS 5,5 x L with hexagon head and sealing washer $\geq \text{Ø}19$ mm	

Annex 5:
ETA-13/0179, Annex 16

	Material: Fastener: stainless Steel (1.4301, 1.4401, 1.4571) - EN 10088 Washer: stainless Steel (1.4301) - EN 10088 Component I: S280GD, S320GD, S350GD - EN 10346 Component II: S235 - EN 10025-1 S280GD, S320GD - EN 10346																																																																																																																																																																																																																																																								
	Drilling capacity: $\Sigma t_i \leq 12,00$ mm																																																																																																																																																																																																																																																								
	Timber substructures: no performance determined																																																																																																																																																																																																																																																								
<table border="1"> <thead> <tr> <th>t_{N1}, t_{N2}, d, D [mm]</th> <th>3,00</th> <th>4,00</th> <th>5,00</th> <th>6,00</th> <th>8,00</th> <th>9,00</th> <th>10,0</th> <th>11,0</th> <th>≥ 12,0</th> </tr> </thead> <tbody> <tr> <td rowspan="8">$V_{R,k}$ [kN]</td> <td>0,40</td> <td>0,99</td> <td>0,99</td> <td>0,99</td> <td>0,99</td> <td>0,99</td> <td>0,99</td> <td>0,99</td> <td>—</td> </tr> <tr> <td>0,50</td> <td>1,46</td> <td>1,46</td> <td>1,46</td> <td>1,46</td> <td>1,46</td> <td>1,46</td> <td>1,46</td> <td>—</td> </tr> <tr> <td>0,55</td> <td>1,62</td> <td>1,62</td> <td>1,62</td> <td>1,62</td> <td>1,62</td> <td>1,62</td> <td>1,62</td> <td>—</td> </tr> <tr> <td>0,60</td> <td>1,80</td> <td>1,80</td> <td>1,80</td> <td>1,80</td> <td>1,80</td> <td>1,80</td> <td>1,80</td> <td>—</td> </tr> <tr> <td>0,63</td> <td>1,90</td> <td>1,90</td> <td>1,90</td> <td>1,90</td> <td>1,90</td> <td>1,90</td> <td>1,90</td> <td>—</td> </tr> <tr> <td>0,75</td> <td>2,37</td> <td>2,37</td> <td>2,37</td> <td>2,37</td> <td>2,37</td> <td>2,37</td> <td>2,37</td> <td>—</td> </tr> <tr> <td>0,88</td> <td>2,94</td> <td>2,94</td> <td>2,94</td> <td>2,94</td> <td>2,94</td> <td>2,94</td> <td>2,94</td> <td>—</td> </tr> <tr> <td>1,00</td> <td>3,52</td> <td>3,52</td> <td>3,52</td> <td>3,52</td> <td>3,52</td> <td>3,52</td> <td>3,52</td> <td>—</td> </tr> <tr> <td rowspan="8">$N_{R,k}$ [kN]</td> <td>0,40</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>0,50</td> <td>1,96</td> <td>1,96</td> <td>1,96</td> <td>1,96</td> <td>1,96</td> <td>1,96</td> <td>1,96</td> <td>—</td> </tr> <tr> <td>0,55</td> <td>2,25</td> <td>2,25</td> <td>2,25</td> <td>2,25</td> <td>2,25</td> <td>2,25</td> <td>2,25</td> <td>—</td> </tr> <tr> <td>0,60</td> <td>2,57</td> <td>2,57</td> <td>2,57</td> <td>2,57</td> <td>2,57</td> <td>2,57</td> <td>2,57</td> <td>—</td> </tr> <tr> <td>0,63</td> <td>2,76</td> <td>2,76</td> <td>2,76</td> <td>2,76</td> <td>2,76</td> <td>2,76</td> <td>2,76</td> <td>—</td> </tr> <tr> <td>0,75</td> <td>3,49</td> <td>3,49</td> <td>3,49</td> <td>3,49</td> <td>3,49</td> <td>3,49</td> <td>3,49</td> <td>—</td> </tr> <tr> <td>0,88</td> <td>3,49</td> <td>3,49</td> <td>3,49</td> <td>3,49</td> <td>3,49</td> <td>3,49</td> <td>3,49</td> <td>—</td> </tr> <tr> <td>1,00</td> <td>3,49</td> <td>3,49</td> <td>3,49</td> <td>3,49</td> <td>3,49</td> <td>3,49</td> <td>3,49</td> <td>—</td> </tr> <tr> <td rowspan="8">u [mm]</td> <td>40</td> <td>6,0</td> <td>5,5</td> <td>5,0</td> <td>4,0</td> <td>4,0</td> <td>4,0</td> <td>4,0</td> <td>—</td> </tr> <tr> <td>50</td> <td>8,0</td> <td>7,5</td> <td>7,0</td> <td>6,0</td> <td>6,0</td> <td>6,0</td> <td>6,0</td> <td>—</td> </tr> <tr> <td>60</td> <td>10,0</td> <td>9,5</td> <td>9,0</td> <td>8,0</td> <td>8,0</td> <td>8,0</td> <td>8,0</td> <td>—</td> </tr> <tr> <td>70</td> <td>12,5</td> <td>11,5</td> <td>11,0</td> <td>9,5</td> <td>9,5</td> <td>9,5</td> <td>9,5</td> <td>—</td> </tr> <tr> <td>80</td> <td>15,0</td> <td>14,0</td> <td>13,0</td> <td>11,0</td> <td>11,0</td> <td>11,0</td> <td>11,0</td> <td>—</td> </tr> <tr> <td>100</td> <td>15,0</td> <td>14,0</td> <td>13,0</td> <td>11,0</td> <td>11,0</td> <td>11,0</td> <td>11,0</td> <td>—</td> </tr> <tr> <td>120</td> <td>15,0</td> <td>14,0</td> <td>13,0</td> <td>11,0</td> <td>11,0</td> <td>11,0</td> <td>11,0</td> <td>—</td> </tr> <tr> <td>≥ 140</td> <td>15,0</td> <td>14,0</td> <td>13,0</td> <td>11,0</td> <td>11,0</td> <td>11,0</td> <td>11,0</td> <td>—</td> </tr> <tr> <td>$N_{R,k,II}$ [kN]</td> <td>4,65</td> <td>6,40</td> <td>7,74</td> <td>8,36</td> <td>8,36</td> <td>8,36</td> <td>8,36</td> <td>8,36</td> <td>—</td> </tr> </tbody> </table>	t_{N1}, t_{N2}, d, D [mm]	3,00	4,00	5,00	6,00	8,00	9,00	10,0	11,0	≥ 12,0	$V_{R,k}$ [kN]	0,40	0,99	0,99	0,99	0,99	0,99	0,99	0,99	—	0,50	1,46	1,46	1,46	1,46	1,46	1,46	1,46	—	0,55	1,62	1,62	1,62	1,62	1,62	1,62	1,62	—	0,60	1,80	1,80	1,80	1,80	1,80	1,80	1,80	—	0,63	1,90	1,90	1,90	1,90	1,90	1,90	1,90	—	0,75	2,37	2,37	2,37	2,37	2,37	2,37	2,37	—	0,88	2,94	2,94	2,94	2,94	2,94	2,94	2,94	—	1,00	3,52	3,52	3,52	3,52	3,52	3,52	3,52	—	$N_{R,k}$ [kN]	0,40	—	—	—	—	—	—	—	—	0,50	1,96	1,96	1,96	1,96	1,96	1,96	1,96	—	0,55	2,25	2,25	2,25	2,25	2,25	2,25	2,25	—	0,60	2,57	2,57	2,57	2,57	2,57	2,57	2,57	—	0,63	2,76	2,76	2,76	2,76	2,76	2,76	2,76	—	0,75	3,49	3,49	3,49	3,49	3,49	3,49	3,49	—	0,88	3,49	3,49	3,49	3,49	3,49	3,49	3,49	—	1,00	3,49	3,49	3,49	3,49	3,49	3,49	3,49	—	u [mm]	40	6,0	5,5	5,0	4,0	4,0	4,0	4,0	—	50	8,0	7,5	7,0	6,0	6,0	6,0	6,0	—	60	10,0	9,5	9,0	8,0	8,0	8,0	8,0	—	70	12,5	11,5	11,0	9,5	9,5	9,5	9,5	—	80	15,0	14,0	13,0	11,0	11,0	11,0	11,0	—	100	15,0	14,0	13,0	11,0	11,0	11,0	11,0	—	120	15,0	14,0	13,0	11,0	11,0	11,0	11,0	—	≥ 140	15,0	14,0	13,0	11,0	11,0	11,0	11,0	—	$N_{R,k,II}$ [kN]	4,65	6,40	7,74	8,36	8,36	8,36	8,36	8,36	—	If component t_{N1} resp. t_{N2} is made of S320GD or S350GD the grey highlighted values may be increased by 8,3%. If component t_i is made of S275, S355, S320GD or S350GD the values $N_{R,k,II}$ may be increased by 8,3%.									
t_{N1}, t_{N2}, d, D [mm]	3,00	4,00	5,00	6,00	8,00	9,00	10,0	11,0	≥ 12,0																																																																																																																																																																																																																																																
$V_{R,k}$ [kN]	0,40	0,99	0,99	0,99	0,99	0,99	0,99	0,99	—																																																																																																																																																																																																																																																
	0,50	1,46	1,46	1,46	1,46	1,46	1,46	1,46	—																																																																																																																																																																																																																																																
	0,55	1,62	1,62	1,62	1,62	1,62	1,62	1,62	—																																																																																																																																																																																																																																																
	0,60	1,80	1,80	1,80	1,80	1,80	1,80	1,80	—																																																																																																																																																																																																																																																
	0,63	1,90	1,90	1,90	1,90	1,90	1,90	1,90	—																																																																																																																																																																																																																																																
	0,75	2,37	2,37	2,37	2,37	2,37	2,37	2,37	—																																																																																																																																																																																																																																																
	0,88	2,94	2,94	2,94	2,94	2,94	2,94	2,94	—																																																																																																																																																																																																																																																
	1,00	3,52	3,52	3,52	3,52	3,52	3,52	3,52	—																																																																																																																																																																																																																																																
$N_{R,k}$ [kN]	0,40	—	—	—	—	—	—	—	—																																																																																																																																																																																																																																																
	0,50	1,96	1,96	1,96	1,96	1,96	1,96	1,96	—																																																																																																																																																																																																																																																
	0,55	2,25	2,25	2,25	2,25	2,25	2,25	2,25	—																																																																																																																																																																																																																																																
	0,60	2,57	2,57	2,57	2,57	2,57	2,57	2,57	—																																																																																																																																																																																																																																																
	0,63	2,76	2,76	2,76	2,76	2,76	2,76	2,76	—																																																																																																																																																																																																																																																
	0,75	3,49	3,49	3,49	3,49	3,49	3,49	3,49	—																																																																																																																																																																																																																																																
	0,88	3,49	3,49	3,49	3,49	3,49	3,49	3,49	—																																																																																																																																																																																																																																																
	1,00	3,49	3,49	3,49	3,49	3,49	3,49	3,49	—																																																																																																																																																																																																																																																
u [mm]	40	6,0	5,5	5,0	4,0	4,0	4,0	4,0	—																																																																																																																																																																																																																																																
	50	8,0	7,5	7,0	6,0	6,0	6,0	6,0	—																																																																																																																																																																																																																																																
	60	10,0	9,5	9,0	8,0	8,0	8,0	8,0	—																																																																																																																																																																																																																																																
	70	12,5	11,5	11,0	9,5	9,5	9,5	9,5	—																																																																																																																																																																																																																																																
	80	15,0	14,0	13,0	11,0	11,0	11,0	11,0	—																																																																																																																																																																																																																																																
	100	15,0	14,0	13,0	11,0	11,0	11,0	11,0	—																																																																																																																																																																																																																																																
	120	15,0	14,0	13,0	11,0	11,0	11,0	11,0	—																																																																																																																																																																																																																																																
	≥ 140	15,0	14,0	13,0	11,0	11,0	11,0	11,0	—																																																																																																																																																																																																																																																
$N_{R,k,II}$ [kN]	4,65	6,40	7,74	8,36	8,36	8,36	8,36	8,36	—																																																																																																																																																																																																																																																
Self drilling screw										Annex 16																																																																																																																																																																																																																																															
Hilti S-CDH 55 S 5,5 x L Hilti S-CDH 55 SS 5,5 x L with hexagon head and sealing washer Ø16 mm																																																																																																																																																																																																																																																									

Annex 6:
ETA-13/0179, Annex 17



Material:
Fastener: stainless Steel (1.4301, 1.4401, 1.4571) - EN 10088
Washer: stainless Steel (1.4301) - EN 10088
Component I: S280GD, S320GD, S350GD - EN 10346
Component II: S235 - EN 10025-1
 S280GD, S320GD - EN 10346

Drilling capacity: $\Sigma t_i \leq 12,00$ mm

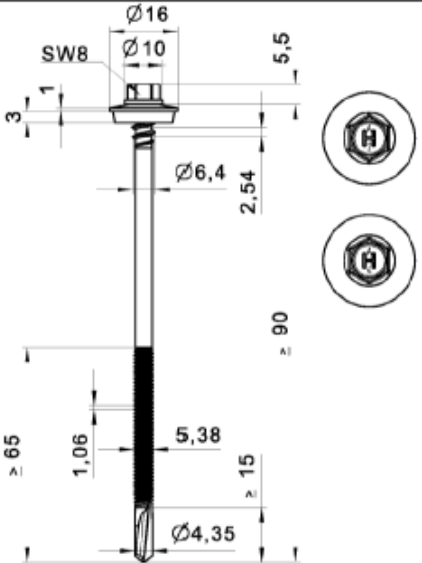
Timber substructures:
no performance determined

t_{N1}, t_{N2}, d, D [mm]	t_i [mm]									
	3,00	4,00	5,00	6,00	8,00	9,00	10,0	11,0	≥ 12,0	
$V_{R,k}$ [kN]	0,99	0,99	0,99	0,99	0,99	0,99	0,99	0,99	0,99	—
0,40	1,46	1,46	1,46	1,46	1,46	1,46	1,46	1,46	1,46	—
0,50	1,62	1,62	1,62	1,62	1,62	1,62	1,62	1,62	1,62	—
0,55	1,80	1,80	1,80	1,80	1,80	1,80	1,80	1,80	1,80	—
0,60	1,90	1,90	1,90	1,90	1,90	1,90	1,90	1,90	1,90	—
0,63	2,37	2,37	2,37	2,37	2,37	2,37	2,37	2,37	2,37	—
0,75	2,94	2,94	2,94	2,94	2,94	2,94	2,94	2,94	2,94	—
0,88	3,52	3,52	3,52	3,52	3,52	3,52	3,52	3,52	3,52	—
1,00	—	—	—	—	—	—	—	—	—	—
$N_{R,k}$ [kN]	2,10	2,10	2,10	2,10	2,10	2,10	2,10	2,10	2,10	—
0,40	2,50	2,50	2,50	2,50	2,50	2,50	2,50	2,50	2,50	—
0,50	2,75	2,75	2,75	2,75	2,75	2,75	2,75	2,75	2,75	—
0,55	2,90	2,90	2,90	2,90	2,90	2,90	2,90	2,90	2,90	—
0,60	3,70	3,70	3,70	3,70	3,70	3,70	3,70	3,70	3,70	—
0,63	4,50	4,60	4,60	4,60	4,60	4,60	4,60	4,60	4,60	—
0,75	4,50	5,20	5,20	5,20	5,20	5,20	5,20	5,20	5,20	—
0,88	—	—	—	—	—	—	—	—	—	—
1,00	6,0	5,5	5,0	4,0	4,0	4,0	4,0	4,0	4,0	—
u [mm]	8,0	7,5	7,0	6,0	6,0	6,0	6,0	6,0	6,0	—
40	10,0	9,5	9,0	8,0	8,0	8,0	8,0	8,0	8,0	—
50	12,5	11,5	11,0	9,5	9,5	9,5	9,5	9,5	9,5	—
60	15,0	14,0	13,0	11,0	11,0	11,0	11,0	11,0	11,0	—
70	15,0	14,0	13,0	11,0	11,0	11,0	11,0	11,0	11,0	—
80	15,0	14,0	13,0	11,0	11,0	11,0	11,0	11,0	11,0	—
100	15,0	14,0	13,0	11,0	11,0	11,0	11,0	11,0	11,0	—
120	15,0	14,0	13,0	11,0	11,0	11,0	11,0	11,0	11,0	—
≥ 140	15,0	14,0	13,0	11,0	11,0	11,0	11,0	11,0	11,0	—
$N_{R,k,II}$ [kN]	4,65	6,40	7,74	8,36	8,36	8,36	8,36	8,36	8,36	—

If component t_{N1} resp. t_{N2} is made of S320GD or S350GD the grey highlighted values may be increased by 8,3%. If both components t_{N1} and t_i are made of S320GD or S350GD the values $N_{R,k}$ may be increased by 8,3%.
 If component t_i is made of S275, S355, S320GD or S350GD the values $N_{R,k,II}$ may be increased by 8,3%.

Self drilling screw	Annex 17
Hilti S-CDH 65 S 5,5 x L Hilti S-CDH 65 SS 5,5 x L Hilti S-CDH 75 S 5,5 x L Hilti S-CDH 75 SS 5,5 x L with hexagon head and sealing washer $\geq \text{Ø}19$ mm	

Annex 7:
ETA-13/0179, Annex 18



Material:
Fastener: stainless Steel (1.4301, 1.4401, 1.4571) - EN 10088
Washer: stainless Steel (1.4301) - EN 10088
Component I: S280GD, S320GD, S350GD - EN 10346
Component II: S235 - EN 10025-1
 S280GD, S320GD - EN 10346

Drilling capacity: $\Sigma t_i \leq 12,00$ mm

Timber substructures:
no performance determined

t_{N1}, t_{N2}, d, D [mm]	t_i [mm]									
	3,00	4,00	5,00	6,00	8,00	9,00	10,0	11,0	≥ 12,0	
$V_{R,k}$ [kN]	0,40	0,99	0,99	0,99	0,99	0,99	0,99	0,99	0,99	—
	0,50	1,46	1,46	1,46	1,46	1,46	1,46	1,46	1,46	—
	0,55	1,62	1,62	1,62	1,62	1,62	1,62	1,62	1,62	—
	0,60	1,80	1,80	1,80	1,80	1,80	1,80	1,80	1,80	—
	0,63	1,90	1,90	1,90	1,90	1,90	1,90	1,90	1,90	—
	0,75	2,37	2,37	2,37	2,37	2,37	2,37	2,37	2,37	—
	0,88	2,94	2,94	2,94	2,94	2,94	2,94	2,94	2,94	—
	1,00	3,52	3,52	3,52	3,52	3,52	3,52	3,52	3,52	—
$N_{R,k}$ [kN]	0,40	—	—	—	—	—	—	—	—	—
	0,50	1,96	1,96	1,96	1,96	1,96	1,96	1,96	1,96	—
	0,55	2,25	2,25	2,25	2,25	2,25	2,25	2,25	2,25	—
	0,60	2,57	2,57	2,57	2,57	2,57	2,57	2,57	2,57	—
	0,63	2,76	2,76	2,76	2,76	2,76	2,76	2,76	2,76	—
	0,75	3,49	3,49	3,49	3,49	3,49	3,49	3,49	3,49	—
	0,88	3,49	3,49	3,49	3,49	3,49	3,49	3,49	3,49	—
	1,00	3,49	3,49	3,49	3,49	3,49	3,49	3,49	3,49	—
u [mm]	40	6,0	5,5	5,0	4,0	4,0	4,0	4,0	4,0	—
	50	8,0	7,5	7,0	6,0	6,0	6,0	6,0	6,0	—
	60	10,0	9,5	9,0	8,0	8,0	8,0	8,0	8,0	—
	70	12,5	11,5	11,0	9,5	9,5	9,5	9,5	9,5	—
	80	15,0	14,0	13,0	11,0	11,0	11,0	11,0	11,0	—
	100	15,0	14,0	13,0	11,0	11,0	11,0	11,0	11,0	—
	120	15,0	14,0	13,0	11,0	11,0	11,0	11,0	11,0	—
	≥ 140	15,0	14,0	13,0	11,0	11,0	11,0	11,0	11,0	—
$N_{R,k,II}$ [kN]	4,65	6,40	7,74	8,36	8,36	8,36	8,36	8,36	8,36	—

If component t_{N1} resp. t_{N2} is made of S320GD or S350GD the grey highlighted values may be increased by 8,3%.
 If component t_i is made of S275, S355, S320GD or S350GD the values $N_{R,k,II}$ may be increased by 8,3%.

Self drilling screw	Annex 18
Hilti S-CD 55 S 5,5 x L Hilti S-CD 55 SS 5,5 x L with hexagon head and sealing washer Ø16 mm	

Annex 8:
ETA-13/0179, Annex 19

Material:
Fastener: stainless Steel (1.4301, 1.4401, 1.4571) - EN 10088
Washer: stainless Steel (1.4301) - EN 10088
Component I: S280GD, S320GD, S350GD - EN 10346
Component II: S235 - EN 10025-1
 S280GD, S320GD - EN 10346

Drilling capacity: $\Sigma t_i \leq 12,00$ mm

Timber substructures:
no performance determined

t_{N1}, t_{N2}, d, D [mm]	3,00	4,00	5,00	6,00	t_i [mm]					
					8,00	9,00	10,0	11,0	$\geq 12,0$	
$V_{R,k}$ [kN]	0,40	0,99	0,99	0,99	0,99	0,99	0,99	0,99	0,99	—
	0,50	1,46	1,46	1,46	1,46	1,46	1,46	1,46	1,46	—
	0,55	1,62	1,62	1,62	1,62	1,62	1,62	1,62	1,62	—
	0,60	1,80	1,80	1,80	1,80	1,80	1,80	1,80	1,80	—
	0,63	1,90	1,90	1,90	1,90	1,90	1,90	1,90	1,90	—
	0,75	2,37	2,37	2,37	2,37	2,37	2,37	2,37	2,37	—
	0,88	2,94	2,94	2,94	2,94	2,94	2,94	2,94	2,94	—
	1,00	3,52	3,52	3,52	3,52	3,52	3,52	3,52	3,52	—
$N_{R,k}$ [kN]	0,40	—	—	—	—	—	—	—	—	—
	0,50	2,10	2,10	2,10	2,10	2,10	2,10	2,10	2,10	—
	0,55	2,50	2,50	2,50	2,50	2,50	2,50	2,50	2,50	—
	0,60	2,75	2,75	2,75	2,75	2,75	2,75	2,75	2,75	—
	0,63	2,90	2,90	2,90	2,90	2,90	2,90	2,90	2,90	—
	0,75	3,70	3,70	3,70	3,70	3,70	3,70	3,70	3,70	—
	0,88	4,50	4,60	4,60	4,60	4,60	4,60	4,60	4,60	—
	1,00	4,50	5,20	5,20	5,20	5,20	5,20	5,20	5,20	—
u [mm]	40	6,0	5,5	5,0	4,0	4,0	4,0	4,0	4,0	—
	50	8,0	7,5	7,0	6,0	6,0	6,0	6,0	6,0	—
	60	10,0	9,5	9,0	8,0	8,0	8,0	8,0	8,0	—
	70	12,5	11,5	11,0	9,5	9,5	9,5	9,5	9,5	—
	80	15,0	14,0	13,0	11,0	11,0	11,0	11,0	11,0	—
	100	15,0	14,0	13,0	11,0	11,0	11,0	11,0	11,0	—
	120	15,0	14,0	13,0	11,0	11,0	11,0	11,0	11,0	—
	≥ 140	15,0	14,0	13,0	11,0	11,0	11,0	11,0	11,0	—
$N_{R,k,II}$ [kN]	4,65	6,40	7,74	8,36	8,36	8,36	8,36	8,36	—	

If component t_{N1} resp. t_{N2} is made of S320GD or S350GD the grey highlighted values may be increased by 8,3%. If both components t_{N1} and t_i are made of S320GD or S350GD the values $N_{R,k}$ may be increased by 8,3%.
 If component t_i is made of S275, S355, S320GD or S350GD the values $N_{R,k,II}$ may be increased by 8,3%.

Self drilling screw	
Hilti S-CD 65 S 5,5 x L Hilti S-CD 65 SS 5,5 x L Hilti S-CD 75 S 5,5 x L Hilti S-CD 75 SS 5,5 x L with hexagon head and sealing washer $\geq \varnothing 19$ mm	Annex 19

Annex 9:
ETA-13/0179, Annex 20

Material:
Fastener: stainless Steel (1.4301, 1.4401, 1.4571) - EN 10088
Washer: stainless Steel (1.4301) - EN 10088
Component I: S280GD, S320GD, S350GD - EN 10346
Component II: S235, S275, S355 - EN 10025-1
 S280GD, S320GD, S350GD - EN 10346

Drilling capacity: $\Sigma t_i \leq 15,00$ mm

Timber substructures:
no performance determined

t_{N1}, t_{N2}, d, D [mm]	t_i [mm]						—	—	—	
	4,00	5,00	6,00	7,00	8,00	≥ 10,0				
$V_{R,k}$ [kN]	0,40	0,82	0,82	0,82	0,82	0,82	0,82	—	—	—
	0,50	0,93	0,93	0,93	0,93	0,93	0,93	—	—	—
	0,55	1,12	1,12	1,12	1,12	1,12	1,12	—	—	—
	0,60	1,31	1,31	1,31	1,31	1,31	1,31	—	—	—
	0,63	1,42	1,42	1,42	1,42	1,42	1,42	—	—	—
	0,75	1,88	1,88	1,88	1,88	1,88	1,88	—	—	—
	0,88	2,33	2,33	2,33	2,33	2,33	2,33	—	—	—
	1,00	2,74	2,74	2,74	2,74	2,74	2,74	—	—	—
$N_{R,k}$ [kN]	0,40	1,46	1,46	1,46	1,46	1,46	1,46	—	—	—
	0,50	1,89	1,89	1,89	1,89	1,89	1,89	—	—	—
	0,55	2,21	2,21	2,21	2,21	2,21	2,21	—	—	—
	0,60	2,53	2,53	2,53	2,53	2,53	2,53	—	—	—
	0,63	2,73	2,73	2,73	2,73	2,73	2,73	—	—	—
	0,75	3,50	3,50	3,50	3,50	3,50	3,50	—	—	—
	0,88	3,68	3,68	3,68	3,68	3,68	3,68	—	—	—
	1,00	3,84	3,84	3,84	3,84	3,84	3,84	—	—	—
u [mm]	40	3,0	3,0	3,0	3,0	3,0	3,0	—	—	—
	50	4,5	4,5	4,5	4,5	4,5	4,5	—	—	—
	60	6,0	6,0	6,0	6,0	6,0	6,0	—	—	—
	70	7,4	7,4	7,4	7,4	7,4	7,4	—	—	—
	80	8,8	8,8	8,8	8,8	8,8	8,8	—	—	—
	90	10,1	10,1	10,1	10,1	10,1	10,1	—	—	—
≥ 100	11,5	11,5	11,5	11,5	11,5	11,5	—	—	—	
$N_{R,k,II}$ [kN]	3,92	4,92	5,91	6,22	6,52	6,52	—	—	—	

No additional regulations.

Self drilling screw

Hilti S-CDH 55 GS 5,5 x L
 Hilti S-CDH 55 GSS 5,5 x L
 with hexagon head and sealing washer Ø16 mm

Annex 20

Annex 10:
ETA-13/0179, Annex 21

	<p>Material:</p> <p>Fastener: stainless Steel (1.4301, 1.4401, 1.4571) - EN 10088</p> <p>Washer: stainless Steel (1.4301) - EN 10088</p> <p>Component I: S280GD, S320GD, S350GD - EN 10346</p> <p>Component II: S235, S275, S355 - EN 10025-1 S280GD, S320GD, S350GD - EN 10346</p>
	<p>Drilling capacity: $\Sigma t \leq 15,00$ mm</p>
	<p>Timber substructures: no performance determined</p>

t_{N1}, t_{N2}, d, D [mm]	t_t [mm]							—	—	—
	4,00	5,00	6,00	7,00	8,00	≥ 10,0				
$V_{R,k}$ [kN]	0,40	0,82	0,82	0,82	0,82	0,82	0,82	—	—	—
	0,50	0,93	1,12	1,30	1,30	1,30	1,30	—	—	—
	0,55	1,12	1,28	1,44	1,44	1,44	1,44	—	—	—
	0,60	1,31	1,45	1,58	1,58	1,58	1,58	—	—	—
	0,63	1,42	1,54	1,66	1,66	1,66	1,66	—	—	—
	0,75	1,88	1,94	2,00	2,00	2,00	2,00	—	—	—
	0,88	2,33	2,57	2,81	2,81	2,81	2,81	—	—	—
	1,00	2,74	3,15	3,56	3,56	3,56	3,56	—	—	—
$N_{R,k}$ [kN]	0,40	1,46	1,46	1,46	1,46	1,46	1,46	—	—	—
	0,50	1,89	1,89	1,89	1,89	1,89	1,89	—	—	—
	0,55	2,21	2,21	2,21	2,21	2,21	2,21	—	—	—
	0,60	2,53	2,53	2,53	2,53	2,53	2,53	—	—	—
	0,63	2,73	2,73	2,73	2,73	2,73	2,73	—	—	—
	0,75	3,50	3,50	3,50	3,50	3,50	3,50	—	—	—
	0,88	3,68	3,68	3,68	3,68	3,68	3,68	—	—	—
	1,00	3,84	3,84	3,84	3,84	3,84	3,84	—	—	—
u [mm]	40	3,0	3,0	3,0	3,0	3,0	3,0	—	—	—
	50	4,5	4,5	4,5	4,5	4,5	4,5	—	—	—
	60	6,0	6,0	6,0	6,0	6,0	6,0	—	—	—
	70	7,4	7,4	7,4	7,4	7,4	7,4	—	—	—
	80	8,8	8,8	8,8	8,8	8,8	8,8	—	—	—
	90	10,1	10,1	10,1	10,1	10,1	10,1	—	—	—
≥ 100	11,5	11,5	11,5	11,5	11,5	11,5	—	—	—	
$N_{R,k,II}$ [kN]	3,92	4,92	5,91	6,22	6,52	6,52	—	—	—	

No additional regulations.

Self drilling screw

Hilti S-CDH 65 GS 5,5 x L
Hilti S-CDH 65 GSS 5,5 x L
with hexagon head and sealing washer Ø19 mm

Annex 21

Annex 11:
ETA-13/0179, Annex 22

Material:
Fastener: stainless Steel (1.4301, 1.4401, 1.4571) - EN 10088
Washer: stainless Steel (1.4301) - EN 10088
Component I: S280GD, S320GD, S350GD - EN 10346
Component II: S235, S275, S355 - EN 10025-1
 S280GD, S320GD, S350GD - EN 10346

Drilling capacity: $\Sigma t_i \leq 15,00$ mm

Timber substructures:
no performance determined

t_{N1}, t_{N2}, d, D [mm]	t_i [mm]						—	—	—	
	4,00	5,00	6,00	7,00	8,00	≥ 10,0				
$V_{R,k}$ [kN]	0,40	0,82	0,82	0,82	0,82	0,82	0,82	—	—	—
	0,50	0,93	1,12	1,30	1,30	1,30	1,30	—	—	—
	0,55	1,12	1,28	1,44	1,44	1,44	1,44	—	—	—
	0,60	1,31	1,45	1,58	1,58	1,58	1,58	—	—	—
	0,63	1,42	1,54	1,66	1,66	1,66	1,66	—	—	—
	0,75	1,88	1,94	2,00	2,00	2,00	2,00	—	—	—
	0,88	2,33	2,57	2,81	2,81	2,81	2,81	—	—	—
	1,00	2,74	3,15	3,56	3,56	3,56	3,56	—	—	—
	$N_{R,k}$ [kN]	0,40	1,65	1,65	1,65	1,65	1,65	1,65	—	—
0,50		1,77	1,77	1,77	1,77	1,77	1,77	—	—	—
0,55		2,26	2,26	2,26	2,26	2,26	2,26	—	—	—
0,60		2,74	2,74	2,74	2,74	2,74	2,74	—	—	—
0,63		3,03	3,03	3,03	3,03	3,03	3,03	—	—	—
0,75		3,92	4,20	4,20	4,20	4,20	4,20	—	—	—
0,88		3,92	4,32	4,32	4,32	4,32	4,32	—	—	—
1,00		3,92	4,44	4,44	4,44	4,44	4,44	—	—	—
u [mm]	40	3,0	3,0	3,0	3,0	3,0	3,0	—	—	—
	50	4,5	4,5	4,5	4,5	4,5	4,5	—	—	—
	60	6,0	6,0	6,0	6,0	6,0	6,0	—	—	—
	70	7,4	7,4	7,4	7,4	7,4	7,4	—	—	—
	80	8,8	8,8	8,8	8,8	8,8	8,8	—	—	—
	90	10,1	10,1	10,1	10,1	10,1	10,1	—	—	—
≥ 100	11,5	11,5	11,5	11,5	11,5	11,5	—	—	—	
$N_{R,k,II}$ [kN]	3,92	4,92	5,91	6,22	6,52	6,52	—	—	—	

No additional regulations.

Self drilling screw

Hilti S-CDH 75 GS 5,5 x L
 Hilti S-CDH 75 GSS 5,5 x L
 with hexagon head and sealing washer Ø22 mm

Annex 22

Annex 12:
ETA-13/0179, Annex 23

Material:
Fastener: stainless Steel (1.4301, 1.4401, 1.4571) - EN 10088
Washer: stainless Steel (1.4301) - EN 10088
Component I: S280GD, S320GD, S350GD - EN 10346
Component II: S235, S275, S355 - EN 10025-1
 S280GD, S320GD, S350GD - EN 10346

Drilling capacity: $\Sigma t \leq 15,00$ mm

Timber substructures:
no performance determined

t_{N1}, t_{N2}, d, D [mm]	4,00	5,00	6,00	7,00	8,00	$\geq 10,0$	—	—	—
$V_{R,k}$ [kN]	0,40	0,82	0,82	0,82	0,82	0,82	—	—	—
	0,50	0,93	0,93	0,93	0,93	0,93	—	—	—
	0,55	1,12	1,12	1,12	1,12	1,12	—	—	—
	0,60	1,31	1,31	1,31	1,31	1,31	—	—	—
	0,63	1,42	1,42	1,42	1,42	1,42	—	—	—
	0,75	1,88	1,88	1,88	1,88	1,88	—	—	—
	0,88	2,33	2,33	2,33	2,33	2,33	—	—	—
	1,00	2,74	2,74	2,74	2,74	2,74	—	—	—
$N_{R,k}$ [kN]	0,40	1,46	1,46	1,46	1,46	1,46	—	—	—
	0,50	1,89	1,89	1,89	1,89	1,89	—	—	—
	0,55	2,21	2,21	2,21	2,21	2,21	—	—	—
	0,60	2,53	2,53	2,53	2,53	2,53	—	—	—
	0,63	2,73	2,73	2,73	2,73	2,73	—	—	—
	0,75	3,50	3,50	3,50	3,50	3,50	—	—	—
	0,88	3,68	3,68	3,68	3,68	3,68	—	—	—
	1,00	3,84	3,84	3,84	3,84	3,84	—	—	—
u [mm]	40	3,0	3,0	3,0	3,0	3,0	—	—	—
	50	4,5	4,5	4,5	4,5	4,5	—	—	—
	60	6,0	6,0	6,0	6,0	6,0	—	—	—
	70	7,4	7,4	7,4	7,4	7,4	—	—	—
	80	8,8	8,8	8,8	8,8	8,8	—	—	—
	90	10,1	10,1	10,1	10,1	10,1	—	—	—
≥ 100	11,5	11,5	11,5	11,5	11,5	—	—	—	
$N_{R,k,II}$ [kN]	3,92	4,92	5,91	6,22	6,52	6,52	—	—	—

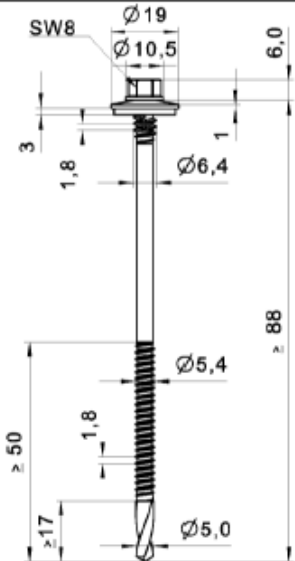
No additional regulations.

Self drilling screw

Hilti S-CD 55 GS 5,5 x L
 Hilti S-CD 55 GSS 5,5 x L
 with hexagon head and sealing washer $\varnothing 16$ mm

Annex 23

Annex 13:
ETA-13/0179, Annex 24



Material:
Fastener: stainless Steel (1.4301, 1.4401, 1.4571) - EN 10088
Washer: stainless Steel (1.4301) - EN 10088
Component I: S280GD, S320GD, S350GD - EN 10346
Component II: S235, S275, S355 - EN 10025-1
 S280GD, S320GD, S350GD - EN 10346

Drilling capacity: $\Sigma t \leq 15,00$ mm

Timber substructures:
no performance determined

t_{N1}, t_{N2}, d, D [mm]	4,00	5,00	6,00	7,00	8,00	$\geq 10,0$	—	—	—
$V_{R,x}$ [kN]	0,40	0,82	0,82	0,82	0,82	0,82	—	—	—
	0,50	0,93	1,12	1,30	1,30	1,30	—	—	—
	0,55	1,12	1,28	1,44	1,44	1,44	—	—	—
	0,60	1,31	1,45	1,58	1,58	1,58	—	—	—
	0,63	1,42	1,54	1,66	1,66	1,66	—	—	—
	0,75	1,88	1,94	2,00	2,00	2,00	—	—	—
	0,88	2,33	2,57	2,81	2,81	2,81	—	—	—
	1,00	2,74	3,15	3,56	3,56	3,56	—	—	—
$N_{R,x}$ [kN]	0,40	1,46	1,46	1,46	1,46	1,46	—	—	—
	0,50	1,89	1,89	1,89	1,89	1,89	—	—	—
	0,55	2,21	2,21	2,21	2,21	2,21	—	—	—
	0,60	2,53	2,53	2,53	2,53	2,53	—	—	—
	0,63	2,73	2,73	2,73	2,73	2,73	—	—	—
	0,75	3,50	3,50	3,50	3,50	3,50	—	—	—
	0,88	3,68	3,68	3,68	3,68	3,68	—	—	—
	1,00	3,84	3,84	3,84	3,84	3,84	—	—	—
u [mm]	40	3,0	3,0	3,0	3,0	3,0	—	—	—
	50	4,5	4,5	4,5	4,5	4,5	—	—	—
	60	6,0	6,0	6,0	6,0	6,0	—	—	—
	70	7,4	7,4	7,4	7,4	7,4	—	—	—
	80	8,8	8,8	8,8	8,8	8,8	—	—	—
	90	10,1	10,1	10,1	10,1	10,1	—	—	—
≥ 100	11,5	11,5	11,5	11,5	11,5	—	—	—	
$N_{R,kII}$ [kN]	3,92	4,92	5,91	6,22	6,52	6,52	—	—	—

No additional regulations.

Self drilling screw

Hilti S-CD 65 GS 5,5 x L
 Hilti S-CD 65 GSS 5,5 x L
 with hexagon head and sealing washer $\varnothing 19$ mm

Annex 24

Annex 14:
ETA-13/0179, Annex 25

Material:
Fastener: stainless Steel (1.4301, 1.4401, 1.4571) - EN 10088
Washer: stainless Steel (1.4301) - EN 10088
Component I: S280GD, S320GD, S350GD - EN 10346
Component II: S235, S275, S355 - EN 10025-1
 S280GD, S320GD, S350GD - EN 10346

Drilling capacity: $\Sigma t \leq 15,00$ mm

Timber substructures:
no performance determined

t_{N1}, t_{N2}, d, D [mm]	4,00	5,00	6,00	7,00	8,00	$\geq 10,0$	—	—	—
$V_{R,x}$ [kN]	0,40	0,82	0,82	0,82	0,82	0,82	—	—	—
	0,50	0,93	1,12	1,30	1,30	1,30	—	—	—
	0,55	1,12	1,28	1,44	1,44	1,44	—	—	—
	0,60	1,31	1,45	1,58	1,58	1,58	—	—	—
	0,63	1,42	1,54	1,66	1,66	1,66	—	—	—
	0,75	1,88	1,94	2,00	2,00	2,00	—	—	—
	0,88	2,33	2,57	2,81	2,81	2,81	—	—	—
	1,00	2,74	3,15	3,56	3,56	3,56	—	—	—
$N_{R,x}$ [kN]	0,40	1,65	1,65	1,65	1,65	1,65	—	—	—
	0,50	1,77	1,77	1,77	1,77	1,77	—	—	—
	0,55	2,26	2,26	2,26	2,26	2,26	—	—	—
	0,60	2,74	2,74	2,74	2,74	2,74	—	—	—
	0,63	3,03	3,03	3,03	3,03	3,03	—	—	—
	0,75	3,92	4,20	4,20	4,20	4,20	—	—	—
	0,88	3,92	4,32	4,32	4,32	4,32	—	—	—
	1,00	3,92	4,44	4,44	4,44	4,44	—	—	—
u [mm]	40	3,0	3,0	3,0	3,0	3,0	—	—	—
	50	4,5	4,5	4,5	4,5	4,5	—	—	—
	60	6,0	6,0	6,0	6,0	6,0	—	—	—
	70	7,4	7,4	7,4	7,4	7,4	—	—	—
	80	8,8	8,8	8,8	8,8	8,8	—	—	—
	≥ 100	11,5	11,5	11,5	11,5	11,5	—	—	—
$N_{R,k,II}$ [kN]	3,92	4,92	5,91	6,22	6,52	6,52	—	—	—

No additional regulations.

Self drilling screw

Hilti S-CD 75 GS 5,5 x L
 Hilti S-CD 75 GSS 5,5 x L
 with hexagon head and sealing washer Ø22 mm

Annex 25

Annex 15:
ETA-13/0179, Annex 26

Material:
 Fastener: stainless Steel (1.4301, 1.4401, 1.4571) - EN 10088
 Washer: stainless Steel (1.4301) - EN 10088
 Component I: S280GD, S320GD - EN 10346
 Component II: Structural timber - EN 14081

Drilling capacity: $\Sigma t_i \leq 2,00$ mm

Timber substructures:
 performance determined with

$M_{y,Rk} = 9,741$ Nm
 $f_{ax,k} = 10,769$ N/mm² for $l_{ef} \geq 50,0$ mm

t_{N1}, t_{N2} [mm]	d, D [mm]									
	30	40	50	60	70	80	100	120	≥ 140	
$V_{R,k}$ [kN]	0,40	0,62	0,62	0,62	0,62	0,62	0,62	0,62	0,62	0,62
	0,50	0,98	0,98	0,98	0,98	0,98	0,98	0,98	0,98	0,98
	0,55	1,15	1,15	1,15	1,15	1,15	1,15	1,15	1,15	1,15
	0,60	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37
	0,63	1,50	1,50	1,50	1,50	1,50	1,50	1,50	1,50	1,50
	0,75	2,17	2,17	2,17	2,17	2,17	2,17	2,17	2,17	2,17
	0,88	2,17	2,17	2,17	2,17	2,17	2,17	2,17	2,17	2,17
	1,00	2,17	2,17	2,17	2,17	2,17	2,17	2,17	2,17	2,17
$N_{R,k}$ [kN]	0,40	—	—	—	—	—	—	—	—	—
	0,50	1,72	1,72	1,72	1,72	1,72	1,72	1,72	1,72	1,72
	0,55	1,96	1,96	1,96	1,96	1,96	1,96	1,96	1,96	1,96
	0,60	2,12	2,12	2,12	2,12	2,12	2,12	2,12	2,12	2,12
	0,63	2,21	2,21	2,21	2,21	2,21	2,21	2,21	2,21	2,21
	0,75	2,73	2,73	2,73	2,73	2,73	2,73	2,73	2,73	2,73
	0,88	3,32	3,32	3,32	3,32	3,32	3,32	3,32	3,32	3,32
	1,00	3,50	3,50	3,50	3,50	3,50	3,50	3,50	3,50	3,50
u [mm]	—	5,0	7,0	9,0	11,0	13,0	18,0	18,0	18,0	
$N_{R,k,II}$ [kN]	3,50	3,50	3,50	3,50	3,50	3,50	3,50	3,50	3,50	

If component t_{N1} resp. t_{N2} is made of S320GD the grey highlighted values may be increased by 8,3%.
 The values listed above in dependence on the screw-in length l_{ef} and the values $N_{R,k,II}$ are valid for $K_{mod} = 0,90$ and timber strength grade C24 ($\rho_{0a} = 350$ kg/m³). For other combinations of K_{mod} and timber strength grades see Annex 3.

Self drilling screw	Annex 26
Hilti S-CDW 51 S 6,5 x L Hilti S-CDW 51 SS 6,5 x L with hexagon head and sealing washer Ø16 mm	

Annex 16:
ETA-13/0179, Annex 27

Material:

Fastener: stainless Steel (1.4301, 1.4401, 1.4571) - EN 10088
Washer: stainless Steel (1.4301) - EN 10088
Component I: S280GD, S320GD - EN 10346
Component II: Structural timber - EN 14081

Drilling capacity: $\Sigma t_i \leq 2,00$ mm

Timber substructures:
performance determined with

$M_{y,Rk} = 9,741$ Nm
 $f_{ax,k} = 10,769$ N/mm² for $l_{ef} \geq 50,0$ mm

t_{N1}, t_{N2} [mm]	d, D [mm]									
	30	40	50	60	70	80	100	120	≥ 140	
V_{Rk} [kN]	0,40	0,62	0,62	0,62	0,62	0,62	0,62	0,62	0,62	0,62
	0,50	0,98	0,98	0,98	0,98	0,98	0,98	0,98	0,98	0,98
	0,55	1,15	1,15	1,15	1,15	1,15	1,15	1,15	1,15	1,15
	0,60	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37	1,37
	0,63	1,50	1,50	1,50	1,50	1,50	1,50	1,50	1,50	1,50
	0,75	2,17	2,17	2,17	2,17	2,17	2,17	2,17	2,17	2,17
	0,88	2,17	2,17	2,17	2,17	2,17	2,17	2,17	2,17	2,17
	1,00	2,17	2,17	2,17	2,17	2,17	2,17	2,17	2,17	2,17
$N_{R,k}$ [kN]	0,40	—	—	—	—	—	—	—	—	—
	0,50	2,60	2,60	2,60	2,60	2,60	2,60	2,60	2,60	2,60
	0,55	3,10	3,10	3,10	3,10	3,10	3,10	3,10	3,10	3,10
	0,60	3,35	3,35	3,35	3,35	3,35	3,35	3,35	3,35	3,35
	0,63	3,50	3,50	3,50	3,50	3,50	3,50	3,50	3,50	3,50
	0,75	3,50	3,50	3,50	3,50	3,50	3,50	3,50	3,50	3,50
	0,88	3,50	3,50	3,50	3,50	3,50	3,50	3,50	3,50	3,50
	1,00	3,50	3,50	3,50	3,50	3,50	3,50	3,50	3,50	3,50
u [mm]	—	5,0	7,0	9,0	11,0	13,0	18,0	18,0	18,0	
$N_{R,k,II}$ [kN]	3,50	3,50	3,50	3,50	3,50	3,50	3,50	3,50	3,50	

If component t_{N1} resp. t_{N2} is made of S320GD the grey highlighted values may be increased by 8,3%.
The values listed above in dependence on the screw-in length l_{ef} and the values $N_{R,k,II}$ are valid for $K_{mod} = 0,90$ and timber strength grade C24 ($\rho_{0a} = 350$ kg/m³). For other combinations of K_{mod} and timber strength grades see Annex 3.

Self drilling screw	Annex 27
Hilti S-CDW 61 S 6,5 x L Hilti S-CDW 61 SS 6,5 x L Hilti S-CDW 71 S 6,5 x L Hilti S-CDW 71 SS 6,5 x L with hexagon head and sealing washer $\geq \text{Ø}19$ mm	