

# S-CDW 61 C 6.5×L coated, case-hardened carbon steel self-drilling screw

## Product data

### General information

#### Material specification:

Carbon steel: Case-hardened

Coating: Kaitex RSP Silver

With fitted EPDM sealing washer  $\varnothing$  19 mm.

Coloured screws available on request.

#### Fastening tools:

Screwdriver: Hilti ST 1800

Drive using depth

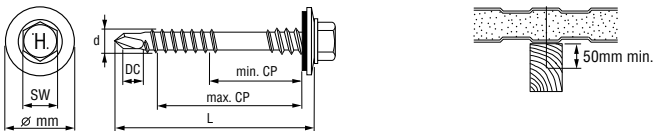
gauge set: Item no. 304611

Nut set driver S-NSD 8: Item no. 308901

## Dimensions

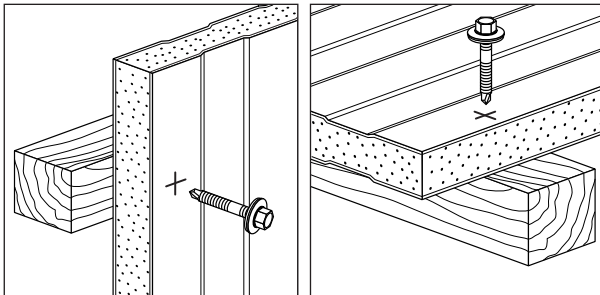
### Uses:

The Hilti S-CD self-drilling screw features a threadless shank for fastening sandwich panels without tension (no denting) and a threaded section below the head for good sealing washer contact with the surface of the sandwich panel.



## Applications

### Examples



**Load data**

**Design data**

**Screw-in depth  $l_{ef}$**

≥ 50.00 mm

**Component II**

solid timber C24  
(S10 according to DIN 4074-1)

**30    40    50    69    70    80    100    120    ≥ 140**

**Component I**

sheeting with  $t_{N1}$  or  $t_{N2}$  [mm]

S280GD or S320GD

(DIN EN 10326)

**Shear force  $V_{R,k}$  [kN]**

<b>0.50</b>	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
<b>0.55</b>	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
<b>0.63</b>	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60
<b>0.75</b>	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10
<b>0.88</b>	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10
<b>1.00</b>	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10

**Tension force  $N_{R,k}$  [kN]**

<b>0.50</b>	2.50 <sup>a)</sup>	2.50 <sup>a)</sup>	2.50 <sup>a)</sup>	2.50 <sup>a)</sup>	2.50 <sup>a)</sup>	2.50 <sup>a)</sup>	2.50 <sup>a)</sup>	2.50 <sup>a)</sup>	2.50 <sup>a)</sup>
<b>0.55</b>	2.90 <sup>a)</sup>	2.90 <sup>a)</sup>	2.90 <sup>a)</sup>	2.90 <sup>a)</sup>	2.90 <sup>a)</sup>	2.90 <sup>a)</sup>	2.90 <sup>a)</sup>	2.90 <sup>a)</sup>	2.90 <sup>a)</sup>
<b>0.63</b>	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30
<b>0.75</b>	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
<b>0.88</b>	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
<b>1.00</b>	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50

For  $t_{N2}$  made of S320GD all  $V_{R,k}$  values can be increased by 8.3%.

For  $t_{N1}$  made of S320GD all  $N_{R,k}$  values, marked with <sup>a)</sup>, can be increased by 8.3%.

Calculating the screw resistance in timber (Component II) according to timber standards.

**Safety factors according to EN 1993-1-3 and CUAP 06.02/07**

	Tension	Shear
<b>Partial safety concept</b>		
Partial safety factor	$\gamma_M = 1.33$	$\gamma_M = 1.33$
Influence of cyclic loading	$\alpha_{\text{cyclic}} = 1.0$	- / -
Design load	$N_{Rd} = 1.0 \cdot N_{Rk} / 1.33$	$V_{Rd} = V_{Rk} / 1.33$
<b>Global safety concept</b>		
Global safety factor *	$\gamma_{\text{GLOB}} = 2.0$	$\gamma_{\text{GLOB}} = 2.0$
Recommended load	$N_{\text{rec}} = 1.0 \cdot N_{Rk} / 2.0$	$V_{\text{rec}} = V_{Rk} / 2.0$

\* Note: The global safety factor of 2.0 includes a partial safety factor of  $\gamma_F = 1.5$  for wind load. For other loads safety factors should be applied in accordance with the appropriate standards.

**Screw selection**
**Screw program**

Drilling thickness DC mm	Sandwich panel thickness CP min.-max. in mm	Dimensions (dxL) mm	Sealing washer $\varnothing$ mm	Head size AF	Package contents	Ordering designation	Item no.
<b><math>\geq 50</math> mm timber</b>	<b>27– 47</b>	<b>6.5x100</b>	<b>19</b>	<b>8</b>	<b>100</b>	<b>S-CDW61 C 6.5x100</b>	<b>206981</b>
<b><math>\geq 50</math> mm timber</b>	<b>37– 57</b>	<b>6.5x110</b>	<b>19</b>	<b>8</b>	<b>100</b>	<b>S-CDW61 C 6.5x110</b>	<b>206982</b>
<b><math>\geq 50</math> mm timber</b>	<b>47– 67</b>	<b>6.5x120</b>	<b>19</b>	<b>8</b>	<b>100</b>	<b>S-CDW61 C 6.5x120</b>	<b>206983</b>
<b><math>\geq 50</math> mm timber</b>	<b>67– 87</b>	<b>6.5x140</b>	<b>19</b>	<b>8</b>	<b>100</b>	<b>S-CDW61 C 6.5x140</b>	<b>206984</b>
<b><math>\geq 50</math> mm timber</b>	<b>87–107</b>	<b>6.5x160</b>	<b>19</b>	<b>8</b>	<b>100</b>	<b>S-CDW61 C 6.5x160</b>	<b>206985</b>
<b><math>\geq 50</math> mm timber</b>	<b>107–127</b>	<b>6.5x180</b>	<b>19</b>	<b>8</b>	<b>100</b>	<b>S-CDW61 C 6.5x180</b>	<b>206986</b>
<b><math>\geq 50</math> mm timber</b>	<b>127–147</b>	<b>6.5x200</b>	<b>19</b>	<b>8</b>	<b>100</b>	<b>S-CDW61 C 6.5x200</b>	<b>206987</b>
<b><math>\geq 50</math> mm timber</b>	<b>147–167</b>	<b>6.5x220</b>	<b>19</b>	<b>8</b>	<b>100</b>	<b>S-CDW61 C 6.5x220</b>	<b>206988</b>
<b><math>\geq 50</math> mm timber</b>	<b>157–177</b>	<b>6.5x230</b>	<b>19</b>	<b>8</b>	<b>100</b>	<b>S-CDW61 C 6.5x230</b>	<b>206989</b>