Engineered Strength for Mass Timber Connections

SIMPSON Strong-Tie

Structural Timber to Timber Connections Including Glulam Seat Reinforcement and CLT Applications

The Solid-Drive® SDCF screw is a structural fastener, designed for cross-laminated timber (CLT), mass timber construction and general interior applications.

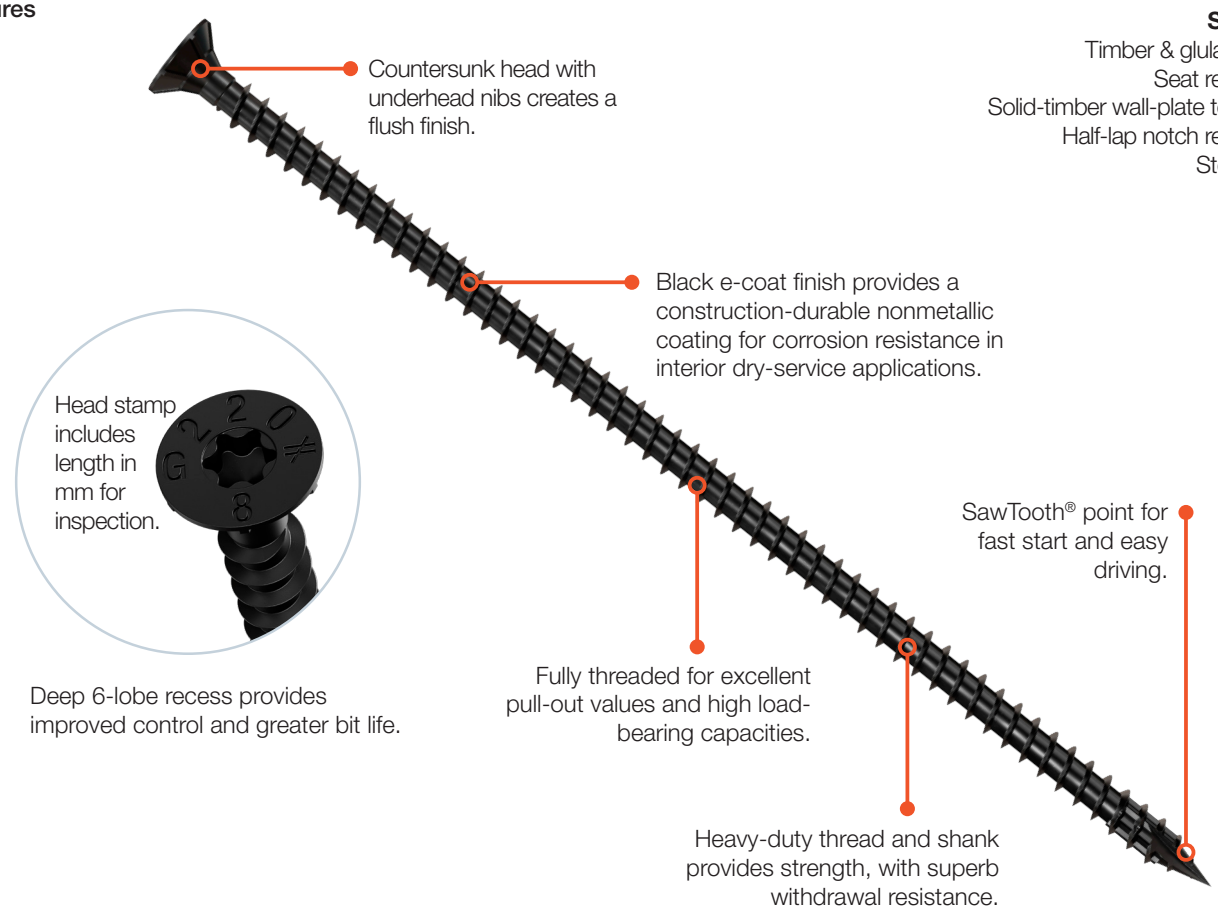
These 8.0 mm, 10.0 mm, and 12.0 mm diameter structural fasteners provide uncompromised strength for these demanding applications. The countersunk head with underhead nibs ensures clean countersinking and a flush finish. The SDCF screw has been redesigned to incorporate black e-coat and a sawtooth point. Its SawTooth® point technology ensures fast starts, reducing installation torque and eliminating the need for predrilling in most applications.

Codes/Standards: ETA-21/0670

ETA-21/0670

SDCF screws in mass timber application.

Features



Suitable for:
Timber & glulam fastening
Seat reinforcement
Solid-timber wall-plate to CLT planel
Half-lap notch reinforcement
Steel to timber

Technical Support Contact your local Simpson Strong-Tie technical support team at any time during the design stage. We can advise the optimal nail pattern and load capacity.

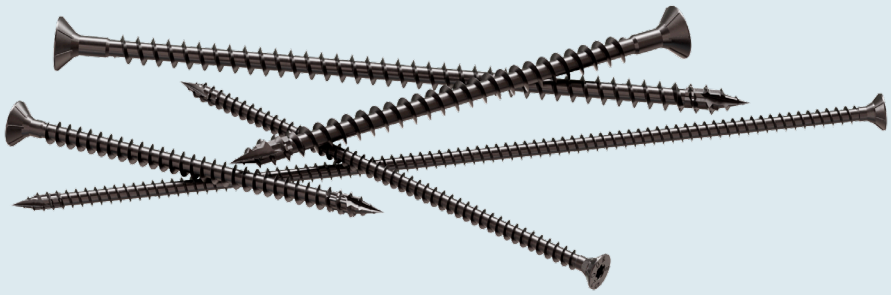
Solid·Drive™ SDCF Fully Threaded Screw – NEW! Black E-Coat

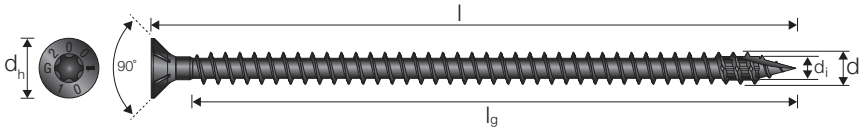
Advantages of Black E-Coat

Black E-Coat reduces the risk of hydrogen embrittlement, which is a malfunction phenomonon seen on zinc coated screws when they are put under a lot of stress.

E-coat is a construction-durable non-metallic coating for corrosion resistance in interior dry-service applications.

To know more about hydrogen embrittlement and how to avoid it, go to our website **strongtie.eu.**





Black E-Coat
C2 acc. to EN ISO 12944-2
SC2 – 50 years acc. to EC5

SDCF – Range Overview

Reference	Article code	Dimensions [mm]				
		d	l	l_g	d_h	d_i
SDCF8X120	78423	8,0	120	110	15	5,2
SDCF8X140	78424	8,0	140	130	15	5,2
SDCF8X160	78425	8,0	160	150	15	5,2
SDCF8X180	78426	8,0	180	170	15	5,2
SDCF8X200	78427	8,0	200	190	15	5,2
SDCF8X220	78428	8,0	220	210	15	5,2
SDCF8X240	78429	8,0	240	230	15	5,2
SDCF8X260	78430	8,0	260	250	15	5,2
SDCF8X300	78431	8,0	300	290	15	5,2
SDCF8X350	78432	8,0	350	340	15	5,2
SDCF10X160	78433	10,0	160	148	18,5	6,2
SDCF10X200	78434	10,0	200	188	18,5	6,2
SDCF10X240	78435	10,0	240	228	18,5	6,2
SDCF10X280	78436	10,0	280	268	18,5	6,2
SDCF10X360	78437	10,0	360	348	18,5	6,2
SDCF10X400	78438	10,0	400	388	18,5	6,2
SDCF10X450	78439	10,0	450	426	18,5	6,2
SDCF12X200	78440	12,0	200	180	22,2	6,8
SDCF12X240	78441	12,0	240	220	22,2	6,8
SDCF12X280	78442	12,0	280	260	22,2	6,8
SDCF12X350	78443	12,0	350	330	22,2	6,8
SDCF12X450	78444	12,0	450	425	22,2	6,8
SDCF12X600	78445	12,0	600	575	22,2	6,8

SDCF – Characteristic Parameters

Reference	Characteristic Parameters					
	$M_{y,k}$ [Nmm]	$f_{ax,k}$ [N/mm²]	$f_{tens,k}$ [kN]	$f_{tor,k}$ [Nm]	$f_{head,k}$ [N/mm²]	$f_{y,k}$ [N/mm²]
SDCF8	21,9	13,4	21,7	25	9,4	1000
SDCF10	37,9	13	32,9	46	9,4	1000
SDCF12	44,3	10,3	38,3	59	9,4	1000

$f_{ax,k}$ is the characteristic withdrawal parameter for timber with a characteristic density of 350 kg/m³

$f_{head,k}$ is the characteristic head pull through parameter for timber with a characteristic density of 350 kg/m³ at max. 15 mm embedment.

Ratio of the characteristic torsional strength to the mean insertion moment: $f_{tor,k} / R_{tor,mean} \geq 1,5$

Use Fastener Designer to make your calculations.

Go to strongtie.eu/fastener-designer

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