Technical Sheet

SDCF

Fully Threaded Countersunk Structural Wood Screw

SIMPSON Strong-Tie

SDCF is a full threaded screw with a countersunk head, suitable for hidden timber to timber assembly and steel to timber assembly. It can also be used for timber reinforcement.



Features

Material

- Hardened Carbon Steel
- Black E-Coat™

Applications

Advantages

- **Countersunk head:** ideal for timber/timber or steel/timber assembly with head flush with surface
- **Underhead ribs:** for a clear finish and no timber superficial split
- **Full asymetrical thread** for a maximum withdrawal capacity, allows compressive load bearing
- **SawTooth® point:** fast start, easy driving, no need for pre-drilling
- T**orx driven:** reduces the wear of the bit

Suitable for

- Solid Timber, Glulam timber, CLT, Wood-based panels
- Pre-drilled steel plate

When to use

- Timber to timber assembly
- Steel to timber assembly
- Timber reinforcement (to transversile tension or compression)

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Technical Data

Product Dimensions

Reference	Fasteners Dimensions[mm]										
	Item Code	Other				Product Dimensions[mm]					
		Tun / DB nr.	NOB nr.	Qty per box	Weight[kg]	d[mm]	l[mm]	Thread Length[mm]	dh[mm]	d1[mm]	Driver Bit[mm]
SDCF8X120	78423	2523216	60774102	50.0	0.033	8	120	110	15	5.2	T-40
SDCF8X140	78424	2523217	60774103	50.0	0.035	8	140	130	15	5.2	T-40
SDCF8X160	78425	2523218	60774104	50.0	0.04	8	160	150	15	5.2	T-40
SDCF8X180	78426	2523219	60774105	50.0	0.045	8	180	170	15	5.2	T-40
SDCF8X200	78427	2523220	60774106	50.0	0.048	8	200	190	15	5.2	T-40
SDCF8X220	78428	2523221	60774107	50.0	0.049	8	220	210	15	5.2	T-40
SDCF8X240	78429	2523222	60774108	50.0	0.054	8	240	230	15	5.2	T-40
SDCF8X260	78430	2523223	60774109	50.0	0.061	8	260	250	15	5.2	T-40
SDCF8X300	78431	2523224	60774110	50.0	0.065	8	300	290	15	5.2	T-40
SDCF8X350	78432	2523225	60774111	50.0	0.066	8	350	340	15	5.2	T-40
SDCF10X160	78433	2523226	60774112	30.0	0.05	10	160	148	18.5	6.2	T-50
SDCF10X200	78434	2523227	60774113	30.0	0.065	10	200	188	18.5	6.2	T-50
SDCF10X240	78435	2523228	60774114	30.0	0.082	10	240	228	18.5	6.2	T-50
SDCF10X280	78436	2523230	60774115	30.0	0.094	10	280	268	18.5	6.2	T-50
SDCF10X360	78437	2523231	60774116	25.0	0.116	10	360	348	18.5	6.2	T-50
SDCF10X400	78438	2523232	60774117	25.0	0.128	10	400	388	18.5	6.2	T-50
SDCF10X450	78439	2523233	60774118	25.0	0.143	10	450	426	18.5	6.2	T-50
SDCF12X200	78440	2523235	60774119	25.0	0.085	12	200	180	22.2	6.8	T-50
SDCF12X240	78441	2523237	60774120	25.0	0.105	12	240	220	22.2	6.8	T-50
SDCF12X280	78442	2523238	60774121	25.0	0.12	12	280	260	22.2	6.8	T-50
SDCF12X350	78443	2523239	60774122	25.0	0.142	12	350	330	22.2	6.8	T-50
SDCF12X450	78444	2523241	60774123	25.0	0.181	12	450	425	22.2	6.8	T-50
SDCF12X600	78445	2523243	60774124	15.0	0.247	12	600	575	22.2	6.8	T-50

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Product characteristic properties

Reference	Screw Parameters				
	Characteristic parameters				
	Characteristic Yield Moment – $M_{y,k}$[Nm]	Characteristic withdrawal parameter - $f_{ax,k,90°}$[N/mm²]	Characteristic head pull-through parameter - $f_{head,k}$[N/mm²]	Characteristic tensile capacity - $f_{tens,k}$[kN]	Characteristic torsional strength - $f_{tor,k}$[Nm]
SDCF8X120	21.9	13.4	9.4	21.7	25
SDCF8X140	21.9	13.4	9.4	21.7	25
SDCF8X160	21.9	13.4	9.4	21.7	25
SDCF8X180	21.9	13.4	9.4	21.7	25
SDCF8X200	21.9	13.4	9.4	21.7	25
SDCF8X220	21.9	13.4	9.4	21.7	25
SDCF8X240	21.9	13.4	9.4	21.7	25
SDCF8X260	21.9	13.4	9.4	21.7	25
SDCF8X300	21.9	13.4	9.4	21.7	25
SDCF8X350	21.9	13.4	9.4	21.7	25
SDCF10X160	37.9	13	9.4	32.9	46
SDCF10X200	37.9	13	9.4	32.9	46
SDCF10X240	37.9	13	9.4	32.9	46
SDCF10X280	37.9	13	9.4	32.9	46
SDCF10X360	37.9	13	9.4	32.9	46
SDCF10X400	37.9	13	9.4	32.9	46
SDCF10X450	37.9	13	9.4	32.9	46
SDCF12X200	44.3	10.3	9.4	38.3	59
SDCF12X240	44.3	10.3	9.4	38.3	59
SDCF12X280	44.3	10.3	9.4	38.3	59
SDCF12X350	44.3	10.3	9.4	38.3	59
SDCF12X450	44.3	10.3	9.4	38.3	59
SDCF12X600	44.3	10.3	9.4	38.3	59

Technical Sheet

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Installation

Spacing and Edge distances - Shear loaded screws

Reference	Screw spacing										
	Minimum distances - Shear loaded fastener[mm]										
	a1.0[mm]						d grain = 90°			90[mm]	a4.t.90[mm]	a
SDCF8X120	96									80	80	
SDCF8X140	96									80	80	
SDCF8X160	96									80	80	
SDCF8X180	96									80	80	
SDCF8X200	96	40	120	80	40	40	40	40	80	80	80	

Spacing and Edge distances - Shear loaded screws
See full table online ➡️

Spacing and edge distances - Axially loaded screws

Reference	Screw spacing			
	Minimum distances - Axialy loaded fastener[mm]			
	a1[mm]	a2[mm]	a1.cg[mm]	a2.cg[mm]
SDCF8X120	80	24	64	24
SDCF8X140	80	24	64	24
SDCF8X160	80	24	64	24
SDCF8X180	80	24	64	24
SDCF8X200	80	24	64	24
SDCF8X220	80	24	64	24
SDCF8X240	80	24	64	24
SDCF8X260	80	24	64	24
SDCF8X300	80	24	64	24
SDCF8X350	80	24	64	24
SDCF10X160	100	30	80	30
SDCF10X200	100	30	80	30
SDCF10X240	100	30	80	30
SDCF10X280	100	30	80	30
SDCF10X360	100	30	80	30
SDCF10X400	100	30	80	30
SDCF10X450	100	30	80	30
SDCF12X200	120	36	96	36
SDCF12X240	120	36	96	36
SDCF12X280	120	36	96	36
SDCF12X350	120	36	96	36
SDCF12X450	120	36	96	36
SDCF12X600	120	36	96	36

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2026-11-15