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Code approved

# SFS environmental impact focus

Being a worldwide leading supplier of mechanical fastening systems, assemblies, precision molded parts and logistics solutions, sustainable business practices are part of our DNA. Together with our customers we develop and supply customized solutions for the most varied of industries and markets that offer sustained added value. The SFS Group has a microsite which describes the varied activities, posts statistics and shares success stories.

To find out more about the SFS Group sustainable activities, visit: **sustainability.sfs.com** 

# SFS Division Construction - North America

# New initiative

Our North America Construction Division has undertaken initiatives to achieve sustainable success with improvements in production, facility infrastructure and logistics. Now we have expanded our commitment to activities in our marketing efforts. Utilizing FSC certified and 100% recycleable paper, LED-UV



59.7 US Short tons less, a difference of 358.2 trees



147.8 million BTUs less, a difference of 174.9 residential refrigerators operated/year



GHG 156,700 pounds CO2 equivalent less, a difference of 14.3 cars/year



26,000 gallons less, a difference of 19.4 clothes washers operated/year



960 pounds less, a difference of 217 people generating solid waste/day

inks and participating in the PrintReleaf program will help SFS reduce our paper footprint in measurable ways.

We estimate, based on 2019-2020 print activities, that these initiatives will have the following annual impact:

**Wood use:** measures the amount of wood required to produce a given amount of paper.

**Total energy:** measures all energy required over the paper's life cycle, including all renewable and nonrenewable resouce use, including black liquor and all wood sources.

**Greenhouse gases/climate change impacts:** measures carbon dioxide or CO2 from burning fossil fuels, methane from paper decomposing in landfills and short-lived climate pollutants (such as black carbon and organic carbon) which contribute to climate change by trapping energy from the sun in the earth's atmosphere.

**Water usage:** measures the amount of process and cooling water that is consumed or degraded throughout the life cycle of the paper product.

**Solid waste:** measures sludge and other wastes generated during pulp and paper manufacturing and used paper disposed of in landfills and incinerators.

# We make. You build. They plant.

We believe that as the use of mass timber grows, so does our responsibility to our planet. We're looking for partners to build a sustainable future together.

Every project built with our mass timber hardware supports the National Forest Foundation to plant trees and regenerate our forests. Join us in ensuring our industry and planet thrive.





# **Mass Timber Construction**

SFS manufactures customized fastening solutions for timber construction, providing robust designs that meet the latest standards.



# Low Slope Roofing

SFS has been at the forefront for setting standards in the mechanical fastening of membranes and insulation on low slope roofs for over 50 years.



# **Roofing and Cladding**

SFS is a pioneer in self-drilling and threading fasteners for roofing and cladding, offering a wide spectrum of products, backed up by comprehensive technical expertise.



# **Rainscreen Support Systems**

SFS manufactures Rainscreen Support Systems that are safe, economic and effective for use across a wide range of building types.



# **Rainscreen Attachment Systems**

SFS offers a wide range of fasteners for secure installation of building facade materials, including HPL, fiber cement, ACM systems, curtain walls and insulated metal panels. All fasteners are designed to meet aesthetic, strength and sustainability requirements.



# **Hinge Technology and Fenestration**

SFS manufacturers high quality hinges for internal and external doors and windows across a wide range of material types including UPVC, timber, composite and metal.

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# Mass timber hardware manufacturing specialis





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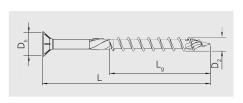
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# **Product geometry**

Designed with a wide range of variants ensuring a suitable fastener is available for your project, all providing an economic and long lasting solution.

# Legend

### Fastener dimensions



**D**<sub>2</sub> Diameter **L** Nominal length

L<sub>g</sub> Thread length D<sub>b</sub> Head diameter

### Coatings

A2K = Fe/Zn5B per ASTM F1941

- A3K = Fe/Zn8B per ASTM F1941
- **Duracoat** = Zinc rich organic multi-coat process for optimum corrosion resistance



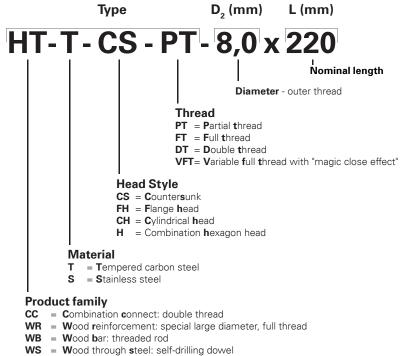
Carbon steel with zinc\*

304 Stainless (1.4567)\*

Carbon steel with Duracoat®

\*All HT and CC fasteners are treated with a proprietary dry film torque modification system, providing for effortless installation.

# **Product code**



- **VB** = **V**erbundwerkstoff **b**eton: (timber) concrete composite
- HT = Heavy timber: core products for variety of timber connections

# **Fastener matrix**

Screw type	Thread type	Diameter	Length range availa	ble, in (mm)		
	Double thread (DT)	1/4" (6.5)	_	_	_	3-7/8" to 8-1/2" (100–215)
S		5/16" (8.5)	—	—	_	3-7/8" to 15-3/4" (100–400)
WR	Full thread (FT)	1/2" (13)	15-3/4" to 39-3/8" (400–10000)	_	_	_
	Partial thread (PT)	1/4" (6)	2" to 11-3/4" (50–300)	_	3-7/8" to 11-3/4" (100–300)	_
		5/16" (8)	3-1/8" to 19-5/8" (80–500)	4-3/4" to 5-1/2" (120–140)	4-3/4" to 19-5/8" (120–500)	_
		3/8" (10)	3-1/8" to 19-5/8" (80–500)	4-3/4" to 5-1/2" (120–140)	5-1/2" to 15-3/4" (140–400)	-
	Full thread (FT)	1/4" (6)	1-5/8" to 6-1/4" (40–160)	_	_	4-3/4" to 7-7/8" (120–200)
		5/16" (8)	2-3/8" to 15" (60–380)	2" to 3-7/8" (50–100)	3-1/8" to 4-3/4" (80–120)	4-3/4" to 15" (120–380)
보		3/8" (10)	4-3/4" to 15" (120–380)	2-3/8" to 3-7/8" (60–100)	3-1/8" to 4-3/4" (80–120)	4-3/4" to 15" (120–380)
		Head type	Countersunk head (CS) HT with milling pockets WR without milling pockets	CombiHexagon head (HH) with internal T-drive	Flange Head (FH) raised flange	Cylinder head (CH)

# **Connection matrix**

r timber	H	•	٠	٠	•	٠	•	•	•	_	_	_	_
Glulam or timber	V	•	٠	٠	_	٠	•	•	٠	_	_	_	_
	H	•	•	•	•	•	•	•	•	•	_	•	_
СLT	V	•	_	•	•	•	•	•	٠	_	_	_	_
		V	H	V	H	v	H		H	<	_		_
		CLT		Glulam o	or timber	Concrete Structural Steel			al Steel	Wood Fra	aming	Light Gua Steel Fra	

# **Fastener overview**

HT-T-CS-PT-6xL 1/4" countersunk partial thread	
HT-T-CS-PT-8xL 5/16" countersunk partial thread	☐ ZMIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII
HT-T-CS-PT-10xL 3/8" countersunk partial thread	→ ■ 2-1/8"
HT-T-FH-PT-6xL 1/4* flange head partial thread	()
HT-T-FH-FT-8xL	1
5/16" flange head full thread	D 111111111111111111111111111111111111
HT-T-FH-PT-8xL 5/16" flange head partial thread	↓ 2-3/4"
	U
HT-T-FH-FT-10xL 3/8" flange head full thread	
HT-T-FH-PT-10xL 3/8° flange head partial thread	▲ 5-1/2"
HT-T-H-FT-8xL	
5/16" hex head full thread	
	[]□\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
HT-T-H-PT-8xL 5/16" hex head partial thread	
	Image: Contribution of the second
HT-T-H-FT-10xL	
3/8" hex head full thread	
HT-T-H-PT-10xL	A-3/4"
3/8" hex head partial thread	D 5-1/2"
	0" 1" 2" 3" 4" 5" 6" 7" 8" 9"

11-3/4

11-3/4"

									/		
10"	11"	12"	13"	14"	15"	16"	17"	18"	19"	V 38"	39"

9

# **Fastener overview continued**

HT-T-CS-FT-6xL 1/4" countersunk full thread	<i>▶</i>									
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HT-T-CS-FT-8xL 5/16" countersunk full thread	<i>⊨uuuun</i>	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	172 2-3/8"							
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HT-T-CS-FT-10xL 3/8" countersunk full thread	) Juunun				<b>1111117</b> 4-3	/4"				
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<b>HT-T-CH-FT-6xL</b> 1/4" cylinder head full thread					<b>1111112</b> 4-3	/4"				
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HT-T-CH-FT-8xL 5/16" cylinder head full thread		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	4-3	/4"				
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<b>HT-T-CH-FT-10xL</b> 3/8" cylinder head full thread					4-3	/4"				
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WR-T-CS-FT-13xL 1/2" countersunk full thread	Aummun	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
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<b>HT-T-CH-CC-6xL</b> 1/4" cylinder head double thread					3-7/8"					
						,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		<b>11112</b> 8-1/2"	
HT-T-CH-CC-8xL 5/16" cylinder head double thread					3-7/8"					
			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				,,, <u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>	
WS-T-7xL 1/4" self-drilling dowel with cylinder head	Danni			2-7/8"						
	Datat									_> 9-1/8"
VB-48-7.5xL 5/16" timber-concrete composite with external T-drive		INTERNE		hininininin	HIMININI H		∞ 6-1/8"			
	<b>a</b>	<i>u</i> v		UUUUUU			TUTUTU	THEFT	LAA 8-5/	8"
	0" 1	1"	2"	3"	4"	5"	6"	7"	8"	9"

10"	11"	12"	13"	14"	15"	16"	17"	18"	19"	V 38"	39"

# SFS HT partial thread

### Value engineered for ultimate efficiency

Designers and installers alike can appreciate the wide range of timber connection possibilities within the HT range. Generally used in laterally loaded connections, HT partially threaded screws undergo a proprietary heat treatment process that results in superior bending yield strength, while maintaining incredible ductility. Generally a 90 degree bend is achieved without fracture of an HT screw.

The revolutionary point and shank geometry of HT partially threaded screws makes installation quick and effortless. A drilling tip with specially crafted milling ribs enables installation at reduced spacing without cracking of the timber members, even without pre-drilling. Shank ribs on these screws slightly enlarge the hole after the threaded part of the timber connection, minimizing the torque to install by reducing the friction effect of the shank and ensuring an efficient installation process. With a wide range of application flexibility, effortless installation without pre-drilling, superior bending yield strength and unbelievable ductility; HT partially threaded screws epitomize value engineering, while ensuring the most secure connections.

### **Product Information**

- No pre-drilling required
- Faster driving
- Reduced risk of splitting the wood
- Lower driving torque

### Approvals







### **Combination hexagon head**

The combination hexagon head with T-drive allows comfortable and universal processing with various tools



# FH

Flange head provides higher load transmission due to the increased clamping surface of the head

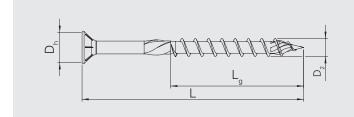


# Countersunk head with milling grooves for ensure head is clearly

Permit easy, stress free driving

**Higher thread pitch** For faster driving

Tip with milling ribs Reduces the risk of splitting the wood



Countersunk head with milling grooves |T-drive | Partial thread Bright zinc plated, A3K | Carbon steel

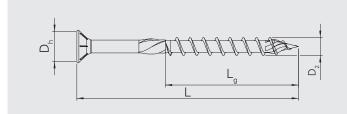
1/4" (6 mm) Carbon steel countersunk head







Product code	Diame	ter (D <sub>2</sub> )	Nomina	l length (L)	Thread	length (L <sub>g</sub> )	Head d	iameter (D <sub>h</sub> )	Drive	Carton
Туре	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)		qty
HT-T-CS-PT-6.0x50	1/4"	6.0	2"	50	1-1/8"	30	7/16"	11.7	T-30	200
HT-T-CS-PT-6.0x60	1/4"	6.0	2-3/8"	60	1-3/8"	36	7/16"	11.7	T-30	200
HT-T-CS-PT-6.0x70	1/4"	6.0	2-3/4"	70	1-5/8"	42	7/16"	11.7	T-30	200
HT-T-CS-PT-6.0x80	1/4"	6.0	3-1/8"	80	1-7/8"	48	7/16"	11.7	T-30	100
HT-T-CS-PT-6.0x90	1/4"	6.0	3-1/2"	90	2-1/8"	54	7/16"	11.7	T-30	100
HT-T-CS-PT-6.0x100	1/4"	6.0	3-7/8"	100	2-3/8"	60	7/16"	11.7	T-30	100
HT-T-CS-PT-6.0x110	1/4"	6.0	4-3/8"	110	2-5/8"	66	7/16"	11.7	T-30	100
HT-T-CS-PT-6.0x120	1/4"	6.0	4-3/4"	120	2-7/8"	72	7/16"	11.7	T-30	100
HT-T-CS-PT-6.0x130	1/4"	6.0	5-1/8"	130	2-7/8"	72	7/16"	11.7	T-30	100
HT-T-CS-PT-6.0x140	1/4"	6.0	5-1/2"	140	2-7/8"	72	7/16"	11.7	T-30	100
HT-T-CS-PT-6.0x150	1/4"	6.0	5-7/8"	150	2-7/8"	72	7/16"	11.7	T-30	100
HT-T-CS-PT-6.0x160	1/4"	6.0	6-1/4"	160	2-7/8"	72	7/16"	11.7	T-30	100
HT-T-CS-PT-6.0x180	1/4"	6.0	7-1/8"	180	2-7/8"	72	7/16"	11.7	T-30	100
HT-T-CS-PT-6.0x200	1/4"	6.0	7-7/8"	200	2-7/8"	72	7/16"	11.7	T-30	100
HT-T-CS-PT-6.0x220	1/4"	6.0	8-5/8"	220	2-7/8"	72	7/16"	11.7	T-30	100
HT-T-CS-PT-6.0x240	1/4"	6.0	9-1/2"	240	2-7/8"	72	7/16"	11.7	T-30	100
HT-T-CS-PT-6.0x260	1/4"	6.0	10-1/4"	260	2-7/8"	72	7/16"	11.7	T-30	100
HT-T-CS-PT-6.0x280	1/4"	6.0	11"	280	2-7/8"	72	7/16"	11.7	T-30	100
HT-T-CS-PT-6.0x300	1/4"	6.0	11-3/4"	300	2-7/8"	72	7/16"	11.7	T-30	100



Countersunk head with milling grooves |T-drive | Partial thread Bright zinc plated, A3K | Carbon steel

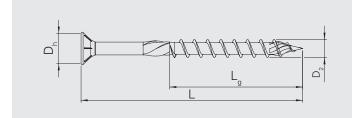
5/16" (8 mm) Carbon steel countersunk head







Product code	Diamet	er (D₂)	Nomina	l length (L)	Thread	length (L <sub>g</sub> )	Head di	iameter (D <sub>h</sub> )	Drive	Carton
Туре	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	O	qty
HT-T-CS-PT-8.0x80	5/16"	8.0	3-1/8"	80	2-3/8"	60	9/16"	14.8	T-40	100
HT-T-CS-PT-8.0x90	5/16"	8.0	3-1/2"	90	2-3/8"	60	9/16"	14.8	T-40	100
HT-T-CS-PT-8.0x100	5/16"	8.0	3-7/8"	100	2-3/8"	60	9/16"	14.8	T-40	100
HT-T-CS-PT-8.0x120	5/16"	8.0	4-3/4"	120	2-7/8"	72	9/16"	14.8	T-40	100
HT-T-CS-PT-8.0x140	5/16"	8.0	5-1/2"	140	2-7/8"	72	9/16"	14.8	T-40	100
HT-T-CS-PT-8.0x160	5/16"	8.0	6-1/4"	160	3-7/8"	100	9/16"	14.8	T-40	100
HT-T-CS-PT-8.0x180	5/16"	8.0	7-1/8"	180	3-7/8"	100	9/16"	14.8	T-40	100
HT-T-CS-PT-8.0x200	5/16"	8.0	7-7/8"	200	3-7/8"	100	9/16"	14.8	T-40	100
HT-T-CS-PT-8.0x220	5/16"	8.0	8-5/8"	220	3-7/8"	100	9/16"	14.8	T-40	50
HT-T-CS-PT-8.0x240	5/16"	8.0	9-1/2"	240	3-7/8"	100	9/16"	14.8	T-40	50
HT-T-CS-PT-8.0x260	5/16"	8.0	10-1/4"	260	3-7/8"	100	9/16"	14.8	T-40	50
HT-T-CS-PT-8.0x280	5/16"	8.0	11"	280	3-7/8"	100	9/16"	14.8	T-40	50
HT-T-CS-PT-8.0x300	5/16"	8.0	11-3/4"	300	3-7/8"	100	9/16"	14.8	T-40	50
HT-T-CS-PT-8.0x320	5/16"	8.0	12-5/8"	320	3-7/8"	100	9/16"	14.8	T-40	50
HT-T-CS-PT-8.0x340	5/16"	8.0	13-3/8"	340	3-7/8"	100	9/16"	14.8	T-40	50
HT-T-CS-PT-8.0x360	5/16"	8.0	14-1/8"	360	3-7/8"	100	9/16"	14.8	T-40	50
HT-T-CS-PT-8.0x380	5/16"	8.0	15"	380	3-7/8"	100	9/16"	14.8	T-40	50
HT-T-CS-PT-8.0x400	5/16"	8.0	15-3/4"	400	3-7/8"	100	9/16"	14.8	T-40	50
HT-T-CS-PT-8.0x420	5/16"	8.0	16-1/2"	420	3-7/8"	100	9/16"	14.8	T-40	50
HT-T-CS-PT-8.0x460	5/16"	8.0	18-1/8"	460	3-7/8"	100	9/16"	14.8	T-40	50
HT-T-CS-PT-8.0x500	5/16"	8.0	19-5/8"	500	3-7/8"	100	9/16"	14.8	T-40	50



Countersunk head with milling grooves |T-drive | Partial thread Bright zinc plated, A3K | Carbon steel

3/8" (10 mm) Carbon steel countersunk head

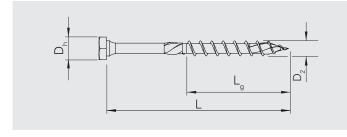






Product code	Diamet	ter (D₂)	Nomina	l length (L)	Thread	length (L <sub>g</sub> )	Head d	liameter (D <sub>h</sub> )	Drive	Carton
Туре	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	0	qty
HT-T-CS-PT-10.0x80	3/8"	10.0	3-1/8"	80	2-3/8"	60	3/4"	18.5	T-40	50
HT-T-CS-PT-10.0x100	3/8"	10.0	3-7/8"	100	3-1/4"	84	3/4"	18.5	T-40	50
HT-T-CS-PT-10.0x120	3/8"	10.0	4-3/4"	120	3-1/4"	84	3/4"	18.5	T-40	50
HT-T-CS-PT-10.0x140	3/8"	10.0	5-1/2"	140	3-1/4"	84	3/4"	18.5	T-40	50
HT-T-CS-PT-10.0x160	3/8"	10.0	6-1/4"	160	3-7/8"	100	3/4"	18.5	T-40	50
HT-T-CS-PT-10.0x180	3/8"	10.0	7-1/8"	180	3-7/8"	100	3/4"	18.5	T-40	50
HT-T-CS-PT-10.0x200	3/8"	10.0	7-7/8"	200	3-7/8"	100	3/4"	18.5	T-40	50
HT-T-CS-PT-10.0x220	3/8"	10.0	8-5/8"	220	3-7/8"	100	3/4"	18.5	T-40	50
HT-T-CS-PT-10.0x240	3/8"	10.0	9-1/2"	240	3-7/8"	100	3/4"	18.5	T-40	50
HT-T-CS-PT-10.0x260	3/8"	10.0	10-1/4"	260	3-7/8"	100	3/4"	18.5	T-40	50
HT-T-CS-PT-10.0x280	3/8"	10.0	11"	280	3-7/8"	100	3/4"	18.5	T-40	50
HT-T-CS-PT-10.0x300	3/8"	10.0	11-3/4"	300	3-7/8"	100	3/4"	18.5	T-40	50
HT-T-CS-PT-10.0x320	3/8"	10.0	12-5/8"	320	3-7/8"	100	3/4"	18.5	T-40	50
HT-T-CS-PT-10.0x340	3/8"	10.0	13-3/8"	340	3-7/8"	100	3/4"	18.5	T-40	50
HT-T-CS-PT-10.0x360	3/8"	10.0	14-1/8"	360	3-7/8"	100	3/4"	18.5	T-40	50
HT-T-CS-PT-10.0x380	3/8"	10.0	15"	380	3-7/8"	100	3/4"	18.5	T-40	50
HT-T-CS-PT-10.0x400	3/8"	10.0	15-3/4"	400	3-7/8"	100	3/4"	18.5	T-40	50
HT-T-CS-PT-10.0x420	3/8"	10.0	16-1/2"	420	3-7/8"	100	3/4"	18.5	T-40	25
HT-T-CS-PT-10.0x460	3/8"	10.0	18-1/8"	460	3-7/8"	100	3/4"	18.5	T-40	25
HT-T-CS-PT-10.0x500	3/8"	10.0	19-5/8"	500	3-7/8"	100	3/4"	18.5	T-40	25

# SFS HT combination hexagon head



Combination hexagon head |T-drive Partial or full thread | Bright zinc plated, A3K | Carbon steel

3/8" (10 mm) Carbon steel combination hexagon head







Product code	Diamet	Diameter (D <sub>2</sub> )		Nominal length (L)		Thread length (L <sub>g</sub> )		iameter (D <sub>h</sub> )	Drive	Carton
Туре	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	-	qty
HT-T-H-FT-8.0x50	5/16"	8.0	2"	50	1-5/8"	42	1/2"	13.0	13 mm hex/T-40	100
HT-T-H-FT-8.0x60	5/16"	8.0	2-3/8"	60	2"	52	1/2"	13.0	13 mm hex/T-40	100
HT-T-H-FT-8.0x70	5/16"	8.0	2-3/4"	70	2-3/8"	62	1/2"	13.0	13 mm hex /T-40	50
HT-T-H-FT-8.0x80	5/16"	8.0	3-1/8"	80	2-7/8"	72	1/2"	13.0	13 mm hex/T-40	50
HT-T-H-FT-8.0x100	5/16"	8.0	3-7/8"	100	3-1/2"	92	1/2"	13.0	13 mm hex/T-40	50
HT-T-H-FT-10.0x60	3/8"	10.0	2-3/8"	60	2"	50	9/16"	15.0	15 mm hex/T-40	50
HT-T-H-FT-10.0x70	3/8"	10.0	2-3/4"	70	2-3/8"	60	9/16"	15.0	15 mm hex/T-40	50
HT-T-H-FT-10.0x80	3/8"	10.0	3-1/8"	80	2-3/4"	70	9/16"	15.0	15 mm hex/T-40	50
HT-T-H-FT-10.0x100	3/8"	10.0	3-7/8"	100	3-1/2"	90	9/16"	15.0	15 mm hex/T-40	50

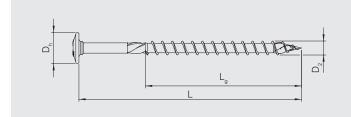
### **Partial thread**

Product code	Diamet	Diameter (D <sub>2</sub> )		Nominal length (L)		Thread length (L <sub>g</sub> )		iameter (D <sub>h</sub> )	Drive	Carton
Туре	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	-	qty
HT-T-H-PT-8.0x120	5/16"	8.0	4-3/4"	120	2-7/8"	72	1/2"	13.0	13 mm hex/T-40	50
HT-T-H-PT-8.0x140	5/16"	8.0	5-1/2"	140	3-1/4"	84	1/2"	13.0	13 mm hex/T-40	50
HT-T-H-PT-10.0x120	3/8"	10.0	4-3/4"	120	2-7/8"	72	9/16"	15.0	15 mm hex/T-40	50
HT-T-H-PT-10.0x140	3/8"	10.0	5-1/2"	140	3-1/4"	84	9/16"	15.0	15 mm hex/T-40	50

Note: Short lengths may resemble full thread configuration.

Products with HT-T-H-FT designation do not have shank ribs and are threaded to within 3/8" of the head.

# SFS HT flange head



Flange head |T-drive | Partial thread Bright zinc plated, A3K | Carbon steel

1/4" (6 mm) Carbon steel flange head

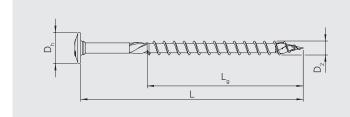






Product code	Diame	ter (D <sub>2</sub> )	Nomina	l length (L)	Thread	length (L <sub>a</sub> )	Head d	iameter (D <sub>h</sub> )	Drive	Carton
Туре	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)		qty
HT-T-FH-PT-6.0x100	1/4"	6.0	3-7/8"	100	2-3/8"	60	9/16"	14.0	T-30	100
HT-T-FH-PT-6.0x120	1/4"	6.0	4-3/4"	120	2-7/8"	72	9/16"	14.0	T-30	100
HT-T-FH-PT-6.0x140	1/4"	6.0	5-1/2"	140	2-7/8"	72	9/16"	14.0	T-30	100
HT-T-FH-PT-6.0x160	1/4"	6.0	6-1/4"	160	2-7/8"	72	9/16"	14.0	T-30	100
HT-T-FH-PT-6.0x180	1/4"	6.0	7-1/8"	180	2-7/8"	72	9/16"	14.0	T-30	100
HT-T-FH-PT-6.0x200	1/4"	6.0	7-7/8"	200	2-7/8"	72	9/16"	14.0	T-30	100
HT-T-FH-PT-6.0x220	1/4"	6.0	8-5/8"	220	2-7/8"	72	9/16"	14.0	T-30	100
HT-T-FH-PT-6.0x240	1/4"	6.0	9-1/2"	240	2-7/8"	72	9/16"	14.0	T-30	100
HT-T-FH-PT-6.0x260	1/4"	6.0	10-1/4"	260	2-7/8"	72	9/16"	14.0	T-30	100
HT-T-FH-PT-6.0x280	1/4"	6.0	11-1/8"	280	2-7/8"	72	9/16"	14.0	T-30	100
HT-T-FH-PT-6.0x300	1/4"	6.0	11-3/4"	300	2-7/8"	72	9/16"	14.0	T-30	100

# SFS HT flange head



Flange head | T-drive | Partial or full thread Bright zinc plated, A3K | Carbon steel

5/16" (8 mm) Carbon steel flange head







Product code	Diameter (D <sub>2</sub> )		Nominal	length (L)	Thread le	ength (L <sub>g</sub> )	Head dia	meter (D <sub>h</sub> )	Drive	Carton
Туре	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	U	qty
HT-T-FH-FT-8.0x80	5/16"	8.0	3-1/8"	80	2-7/8"	74	11/16"	18.0	T-40	50
HT-T-FH-FT-8.0x100	5/16"	8.0	3-7/8"	100	3-3/4"	94	11/16"	18.0	T-40	50
HT-T-FH-FT-8.0x120	5/16"	8.0	4-3/4"	120	4-1/2"	114	11/16"	18.0	T-40	50

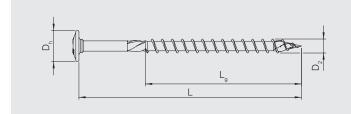
### Partial thread

Product code	Diamet	er (D <sub>2</sub> )	Nomina	l length (L)	Thread	length (L <sub>g</sub> )	Head di	ameter (D <sub>h</sub> )	Drive	Carton
Туре	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	0	qty
HT-T-FH-PT-8.0x120	5/16"	8.0	4-3/4"	120	2-7/8"	72	11/16"	18.0	T-40	50
HT-T-FH-PT-8.0x140	5/16"	8.0	5-1/2"	140	3-7/8"	100	11/16"	18.0	T-40	50
HT-T-FH-PT-8.0x160	5/16"	8.0	6-1/4"	160	3-7/8"	100	11/16"	18.0	T-40	50
HT-T-FH-PT-8.0x180	5/16"	8.0	7-1/8"	180	3-7/8"	100	11/16"	18.0	T-40	50
HT-T-FH-PT-8.0x200	5/16"	8.0	7-7/8"	200	3-7/8"	100	11/16"	18.0	T-40	50
HT-T-FH-PT-8.0x220	5/16"	8.0	8-5/8"	220	3-7/8"	100	11/16"	18.0	T-40	50
HT-T-FH-PT-8.0x240	5/16"	8.0	9-1/2"	240	3-7/8"	100	11/16"	18.0	T-40	50
HT-T-FH-PT-8.0x260	5/16"	8.0	10-1/4"	260	3-7/8"	100	11/16"	18.0	T-40	50
HT-T-FH-PT-8.0x280	5/16"	8.0	11"	280	3-7/8"	100	11/16"	18.0	T-40	50
HT-T-FH-PT-8.0x300	5/16"	8.0	11-3/4"	300	3-7/8"	100	11/16"	18.0	T-40	50
HT-T-FH-PT-8.0x320	5/16"	8.0	12-5/8"	320	3-7/8"	100	11/16"	18.0	T-40	50
HT-T-FH-PT-8.0x340	5/16"	8.0	13-3/8"	340	3-7/8"	100	11/16"	18.0	T-40	50
HT-T-FH-PT-8.0x360	5/16"	8.0	14-1/8"	360	3-7/8"	100	11/16"	18.0	T-40	50
HT-T-FH-PT-8.0x380	5/16"	8.0	15"	380	3-7/8"	100	11/16"	18.0	T-40	50
HT-T-FH-PT-8.0x400	5/16"	8.0	15-3/4"	400	3-7/8"	100	11/16"	18.0	T-40	50
HT-T-FH-PT-8.0x420	5/16"	8.0	16-1/2"	420	3-7/8"	100	11/16"	18.0	T-40	50
HT-T-FH-PT-8.0x460	5/16"	8.0	18-1/8"	460	3-7/8"	100	11/16"	18.0	T-40	50
HT-T-FH-PT-8.0x500	5/16"	8.0	19-5/8"	500	3-7/8"	100	11/16"	18.0	T-40	50

Note: Short lengths may resemble full thread configuration.

Products with HT-T-FH-FT designation do not have shank ribs and are threaded to within 1/4" of the head.

# SFS HT flange head



Flange head | T-drive | Partial or full thread Bright zinc plated, A3K | Carbon steel

3/8" (10 mm) Carbon steel flange head







### Full thread

Product code	Diameter (D <sub>2</sub> )		Nominal length (L)		Thread length (L <sub>g</sub> )		Head dia	meter (D <sub>h</sub> )	Drive	Carton
Туре	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	O	qty
HT-T-FH-FT-10.0x80	3/8"	10.0	3-1/8"	80	2-7/8"	73	7/8"	22.5	T-40	50
HT-T-FH-FT-10.0x100	3/8"	10.0	3-7/8"	100	3-5/8"	93	7/8"	22.5	T-40	50
HT-T-FH-FT-10.0x120	3/8"	10.0	4-3/4"	120	3-7/8"	100	7/8"	22.5	T-40	50

### **Partial Thread**

Product code	Diamet	er (D <sub>2</sub> )	Nomina	l length (L)	Thread	length (L <sub>g</sub> )	Head d	liameter (D <sub>h</sub> )	Drive	Carton
Туре	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	0	qty
HT-T-FH-PT-10.0x140	3/8"	10.0	5-1/2"	140	3-1/4"	84	7/8"	22.5	T-40	50
HT-T-FH-PT-10.0x160	3/8"	10.0	6-1/4"	160	3-7/8"	100	7/8"	22.5	T-40	50
HT-T-FH-PT-10.0x180	3/8"	10.0	7-1/8"	180	3-7/8"	100	7/8"	22.5	T-40	50
HT-T-FH-PT-10.0x200	3/8"	10.0	7-7/8"	200	3-7/8"	100	7/8"	22.5	T-40	50
HT-T-FH-PT-10.0x220	3/8"	10.0	8-5/8"	220	3-7/8"	100	7/8"	22.5	T-40	50
HT-T-FH-PT-10.0x240	3/8"	10.0	9-1/2"	240	3-7/8"	100	7/8"	22.5	T-40	50
HT-T-FH-PT-10.0x260	3/8"	10.0	10-1/4"	260	3-7/8"	100	7/8"	22.5	T-40	50
HT-T-FH-PT-10.0x280	3/8"	10.0	11"	280	3-7/8"	100	7/8"	22.5	T-40	50
HT-T-FH-PT-10.0x300	3/8"	10.0	11-3/4"	300	3-7/8"	100	7/8"	22.5	T-40	50
HT-T-FH-PT-10.0x320	3/8"	10.0	12-5/8"	320	3-7/8"	100	7/8"	22.5	T-40	50
HT-T-FH-PT-10.0x340	3/8"	10.0	13-3/8"	340	3-7/8"	100	7/8"	22.5	T-40	50
HT-T-FH-PT-10.0x360	3/8"	10.0	14-1/8"	360	3-7/8"	100	7/8"	22.5	T-40	50
HT-T-FH-PT-10.0x380	3/8"	10.0	15"	380	3-7/8"	100	7/8"	22.5	T-40	50
HT-T-FH-PT-10.0x400	3/8"	10.0	15-3/4"	400	3-7/8"	100	7/8"	22.5	T-40	50

Note: Short lengths may resemble full thread configuration.

Products with HT-T-FH-FT designation do not have shank ribs and are threaded to within 1/4" of the head.

# SFS HT full thread

### Expertly engineered thread profiles

HT fully threaded screws are generally used in axially loaded conditions such as angled attachments and connections, and reinforcements for tension and compression. These screws are available in very long lengths to accommodate a wide range of axial loading scenarios and they enjoy all the features and benefits of the HT partially threaded fasteners and more.

1/4" countersunk HT screws include a wildly innovative variable full thread (VFT), where the thread pitch varies along the length of the fastener, creating a contraction effect when connecting two timber members together. This creates an extremely tight, secure connection. All other HT fully threaded fasteners have a specially engineered thread pitch based on screw diameter and length, the result of which is the optimal combination of installation time and ease; this is called "Perfect-Pitch". Whether it's an innovative variable thread or a custom curated "Perfect-Pitch" thread configuration, HT fully threaded fasteners show years of engineering expertise can make the best even better.

### **Product Information**

- Transfer of high tensile and compressive loads via the full thread
- Reduced edge and center distances
- Fast and simple to use

### Approvals



ropean Technical Assessment editapping scenes in timber structures ETA-19/05553





### Cylinder head

for countersinking without splitting, even with a tight spacing between the screws. Concealed installation is possible.



# CS

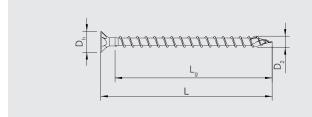
Countersunk head with milling grooves for flush countersinking of the head in timber and steel connections.

# Optimized full thread design up to the head

For transmission of high tensile and compressive loads

### Tip with milling ribs

Reduces the risk of splitting the wood



Countersunk head with milling grooves |T-drive Variable full thread | Bright zinc plated, A3K | Carbon steel

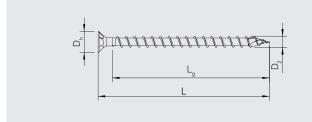
1/4" (6 mm) Variable full thread carbon steel countersunk head

# CHROME (VI) FREE





Product code	Diamete	er (D <sub>2</sub> )	Nomina	l length (L)	Thread	length (L <sub>g</sub> )	Head d	iameter (D <sub>h</sub> )	Drive	Carton
Туре	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)		qty
HT-T-CS-VFT-6.0x40	1/4"	6.0	1-5/8"	40	1-1/4"	33	11.7	7/16"	T-30	200
HT-T-CS-VFT-6.0x60	1/4"	6.0	2-3/8"	60	2-1/8"	53	11.7	7/16"	T-30	200
HT-T-CS-VFT-6.0x80	1/4"	6.0	3-1/8"	80	2-7/8"	73	11.7	7/16"	T-30	100
HT-T-CS-VFT-6.0x100	1/4"	6.0	3-7/8"	100	3-5/8"	93	11.7	7/16"	T-30	100
HT-T-CS-VFT-6.0x120	1/4"	6.0	4-3/4"	120	4-1/2"	113	11.7	7/16"	T-30	100
HT-T-CS-VFT-6.0x140	1/4"	6.0	5-1/2"	140	5-1/4"	133	11.7	7/16"	T-30	100
HT-T-CS-VFT-6.0x160	1/4"	6.0	6-1/4"	160	6"	153	11.7	7/16"	T-30	100



Countersunk head with milling grooves | T-drive | Full thread Bright zinc plated, A3K | Carbon steel

5/16" (8 mm) and 3/8" (10 mm) Carbon steel countersunk head

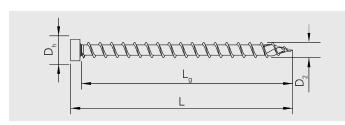






Product code	Diamet	er (D₂)	Nomina	l length (L)	Thread I	ength (L <sub>a</sub> )	Head d	iameter (D <sub>h</sub> )	Drive	Carton
Туре	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	0	qty
HT-T-CS-FT-8.0x60	5/16"	8.0	2-3/8"	60	2"	50	9/16"	14.8	T-40	100
HT-T-CS-FT-8.0x80	5/16"	8.0	3-1/8"	80	2-3/4"	70	9/16"	14.8	T-40	100
HT-T-CS-FT-8.0x100	5/16"	8.0	3-7/8"	100	3-1/2"	90	9/16"	14.8	T-40	100
HT-T-CS-FT-8.0x120	5/16"	8.0	4-3/4"	120	4-3/8"	110	9/16"	14.8	T-40	100
HT-T-CS-FT-8.0x160	5/16"	8.0	6-1/4"	160	5-7/8"	150	9/16"	14.8	T-40	100
HT-T-CS-FT-8.0x180	5/16"	8.0	7-1/8"	180	6-3/4"	170	9/16"	14.8	T-40	100
HT-T-CS-FT-8.0x200	5/16"	8.0	7-7/8"	200	7-1/2"	190	9/16"	14.8	T-40	100
HT-T-CS-FT-8.0x220	5/16"	8.0	8-5/8"	220	8-1/4"	210	9/16"	14.8	T-40	50
HT-T-CS-FT-8.0x240	5/16"	8.0	9-1/2"	240	9"	230	9/16"	14.8	T-40	50
HT-T-CS-FT-8.0x260	5/16"	8.0	10-1/4"	260	9-7/8"	250	9/16"	14.8	T-40	50
HT-T-CS-FT-8.0x280	5/16"	8.0	11"	280	10-5/8"	270	9/16"	14.8	T-40	50
HT-T-CS-FT-8.0x300	5/16"	8.0	11-3/4"	300	11-3/8"	290	9/16"	14.8	T-40	50
HT-T-CS-FT-8.0x340	5/16"	8.0	13-3/8"	340	13"	330	9/16"	14.8	T-40	50
HT-T-CS-FT-8.0x380	5/16"	8.0	15"	380	14-5/8"	370	9/16"	14.8	T-40	50
HT-T-CS-FT-10.0x120	3/8"	10.0	4-3/4"	120	4-1/4"	108	3/4"	18.5	T-40	50
HT-T-CS-FT-10.0x160	3/8"	10.0	6-1/4"	160	5-7/8"	148	3/4"	18.5	T-40	50
HT-T-CS-FT-10.0x200	3/8"	10.0	7-7/8"	200	7-3/8"	188	3/4"	18.5	T-40	50
HT-T-CS-FT-10.0x220	3/8"	10.0	8-5/8"	220	8-1/4"	208	3/4"	18.5	T-40	50
HT-T-CS-FT-10.0x240	3/8"	10.0	9-1/2"	240	9"	228	3/4"	18.5	T-40	50
HT-T-CS-FT-10.0x260	3/8"	10.0	10-1/4"	260	9-3/4"	248	3/4"	18.5	T-40	50
HT-T-CS-FT-10.0x280	3/8"	10.0	11"	280	10-1/2"	268	3/4"	18.5	T-40	50
HT-T-CS-FT-10.0x300	3/8"	10.0	11-3/4"	300	11-3/8"	288	3/4"	18.5	T-40	50
HT-T-CS-FT-10.0x340	3/8"	10.0	13-3/8"	340	12-7/8"	328	3/4"	18.5	T-40	50
HT-T-CS-FT-10.0x380	3/8"	10.0	15"	380	14-1/2"	368	3/4"	18.5	T-40	50

# SFS HT cylinder head



Cylinder head | T-drive | Full thread Bright zinc plated, A3K | Carbon steel

1/4" (6 mm), 5/16" (8 mm) and 3/8" (10 mm) Carbon steel cylinder head





Product code	Diameter (D <sub>2</sub> )		Nomina	Nominal length (L)		Thread length (L <sub>g</sub> )		iameter (D <sub>h</sub> )	Drive	Carton
Туре	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)		qty
HT-T-CH-FT-6.0x120	1/4"	6.0	4-3/4"	120	4-1/2"	114	5/16"	8.0	T-30	100
HT-T-CH-FT-6.0x140	1/4"	6.0	5-1/2"	140	5-1/4"	134	5/16"	8.0	T-30	100
HT-T-CH-FT-6.0x160	1/4"	6.0	6-1/4"	160	6-1/8"	154	5/16"	8.0	T-30	100
HT-T-CH-FT-6.0x180	1/4"	6.0	7-1/8"	180	6-7/8"	174	5/16"	8.0	T-30	100
HT-T-CH-FT-6.0x200	1/4"	6.0	7-7/8"	200	7-5/8"	194	5/16"	8.0	T-30	100

Product code	Diamet	er (D <sub>2</sub> )	Nomina	l length (L)	Thread I	ength (L <sub>g</sub> )	Head d	iameter (D <sub>h</sub> )		Carton
Туре	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	0	qty
HT-T-CH-FT-8.0x120	5/16"	8.0	4-3/4"	120	4-3/8"	112	1/2"	12.0	T-40	100
HT-T-CH-FT-8.0x160	5/16"	8.0	6-1/4"	160	6"	152	1/2"	12.0	T-40	100
HT-T-CH-FT-8.0x180	5/16"	8.0	7-1/8"	180	6-3/4"	172	1/2"	12.0	T-40	100
HT-T-CH-FT-8.0x200	5/16"	8.0	7-7/8"	200	7-1/2"	192	1/2"	12.0	T-40	100
HT-T-CH-FT-8.0x220	5/16"	8.0	8-5/8"	220	8-3/8"	212	1/2"	12.0	T-40	50
HT-T-CH-FT-8.0x240	5/16"	8.0	9-1/2"	240	9-1/8"	232	1/2"	12.0	T-40	50
HT-T-CH-FT-8.0x260	5/16"	8.0	10-1/4"	260	9-7/8"	252	1/2"	12.0	T-40	50
HT-T-CH-FT-8.0x280	5/16"	8.0	11-1/8"	280	10-3/4"	272	1/2"	12.0	T-40	50
HT-T-CH-FT-8.0x300	5/16"	8.0	11-3/4"	300	11-1/2"	292	1/2"	12.0	T-40	50
HT-T-CH-FT-8.0x340	5/16"	8.0	13-3/8"	340	13-1/8"	332	1/2"	12.0	T-40	50
HT-T-CH-FT-8.0x380	5/16"	8.0	15"	380	14-5/8"	372	1/2"	12.0	T-40	50
HT-T-CH-FT-10.0x120	3/8"	10.0	4-3/4"	120	4-3/8"	110	9/16"	14.0	T-40	50
HT-T-CH-FT-10.0x160	3/8"	10.0	6-1/4"	160	5-7/8"	150	9/16"	14.0	T-40	50
HT-T-CH-FT-10.0x200	3/8"	10.0	7-7/8"	200	7-1/2"	190	9/16"	14.0	T-40	50
HT-T-CH-FT-10.0x220	3/8"	10.0	8-5/8"	220	8-1/4"	210	9/16"	14.0	T-40	50
HT-T-CH-FT-10.0x240	3/8"	10.0	9-1/2"	240	9"	230	9/16"	14.0	T-40	50
HT-T-CH-FT-10.0x260	3/8"	10.0	10-1/4"	260	9-7/8"	250	9/16"	14.0	T-40	50
HT-T-CH-FT-10.0x280	3/8"	10.0	11-1/8"	280	10-5/8"	270	9/16"	14.0	T-40	50
HT-T-CH-FT-10.0x300	3/8"	10.0	11-3/4"	300	11-3/8"	290	9/16"	14.0	T-40	50
HT-T-CH-FT-10.0x340	3/8"	10.0	13-3/8"	340	13"	330	9/16"	14.0	T-40	50
HT-T-CH-FT-10.0x380	3/8"	10.0	15"	380	14-1/4"	370	9/16"	14.0	T-40	50

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# **SFS HT stainless**

### Safety and security with stainless steel

Experts in the timber construction sector value the advantages of HT 304 stainless steel screws when used in challenging environmental applications such as generally damp exterior exposure and use in treated lumber. Safety and security is knowing the inherent corrosion resistance of 304 stainless steel and not relying on coating systems that can be damaged during installation or break down over time of exposure. HT stainless steel screws provide all the excellent benefit of carbon HT screws, but with the safety and security of 304 stainless steel.

### **Product Information**

- No pre-drilling required
- Faster driving
- Reduced risk of splitting the wood
- Lower driving torque

### Approvals





Flange head provides higher load transmission due to the increased clamping surface of the head

Countersunk head with milling ribs for ensure head is clearly countersunk

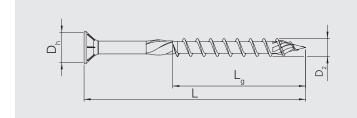
### Shank ribs

Permit easy, stress free driving

# **Higher thread pitch**

Tip with milling ribs Reduces the risk of splitting the wood

# SFS HT countersunk stainless



Countersunk head with milling ribs |T-drive | Partial thread 304 Stainless steel (A2 1.4567)

3/16" (5 mm) and 1/4" (6 mm) Stainless steel countersunk head



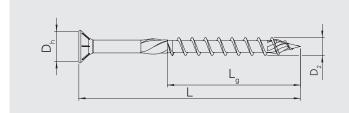




Product code	Diamet	er (D <sub>2</sub> )	Nomina	Nominal length (L)		length (L <sub>g</sub> )	Head diameter (D <sub>h</sub> )		Drive	Carton
Туре	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)		qty
HT-S-CS-PT-5.0x30	3/16"	5.0	1-1/8"	30	1/4"	6	3/8"	9.6	T-20	200
HT-S-CS-PT-5.0x35	3/16"	5.0	1-3/8"	35	1/2"	12	3/8"	9.6	T-20	200
HT-S-CS-PT-5.0x40	3/16"	5.0	1-5/8"	40	3/4"	18	3/8"	9.6	T-20	200
HT-S-CS-PT-5.0x45	3/16"	5.0	1-3/4"	45	1"	24	3/8"	9.6	T-20	200
HT-S-CS-PT-5.0x50	3/16"	5.0	2"	50	1-1/8"	30	3/8"	9.6	T-20	200
HT-S-CS-PT-5.0x60	3/16"	5.0	2-3/8"	60	1-3/8"	36	3/8"	9.6	T-20	200
HT-S-CS-PT-5.0x70	3/16"	5.0	2-3/4"	70	1-5/8"	42	3/8"	9.6	T-20	200
HT-S-CS-PT-5.0x80	3/16"	5.0	3-1/8"	80	1-7/8"	48	3/8"	9.6	T-20	200
HT-S-CS-PT-5.0x90	3/16"	5.0	3-1/2"	90	2-1/8"	54	3/8"	9.6	T-20	200
HT-S-CS-PT-5.0x100	3/16"	5.0	4"	100	2-3/8"	60	3/8"	9.6	T-20	100

Product code	Diamet	er (D <sub>2</sub> )	Nomina	l length (L)	Thread	length (L <sub>g</sub> )	Head di	ameter (D <sub>h</sub> )	Drive	Carton
Туре	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)		qty
HT-S-CS-PT-6.0x40	1/4"	6.0	1-5/8"	40	1"	24	7/16"	11.7	T-30	200
HT-S-CS-PT-6.0x50	1/4"	6.0	2"	50	1-1/8"	30	7/16"	11.7	T-30	200
HT-S-CS-PT-6.0x60	1/4"	6.0	2-3/8"	60	1-3/8"	36	7/16"	11.7	T-30	200
HT-S-CS-PT-6.0x70	1/4"	6.0	2-3/4"	70	1-5/8"	42	7/16"	11.7	T-30	200
HT-S-CS-PT-6.0x80	1/4"	6.0	3-1/8"	80	1-7/8"	48	7/16"	11.7	T-30	100
HT-S-CS-PT-6.0x90	1/4"	6.0	3-1/2"	90	2-1/8"	54	7/16"	11.7	T-30	100
HT-S-CS-PT-6.0x100	1/4"	6.0	3-7/8"	100	2-3/8"	60	7/16"	11.7	T-30	100
HT-S-CS-PT-6.0x120	1/4"	6.0	4-3/4"	120	2-7/8"	72	7/16"	11.7	T-30	100
HT-S-CS-PT-6.0x140	1/4"	6.0	5-1/2"	140	2-7/8"	72	7/16"	11.7	T-30	100
HT-S-CS-PT-6.0x160	1/4"	6.0	6-1/4"	160	2-7/8"	72	7/16"	11.7	T-30	100
HT-S-CS-PT-6.0x180	1/4"	6.0	7-1/8"	180	2-7/8"	72	7/16"	11.7	T-30	100
HT-S-CS-PT-6.0x200	1/4"	6.0	7-7/8"	200	2-7/8"	72	7/16"	11.7	T-30	100

# SFS HT countersunk stainless



Countersunk head with milling ribs |T-drive | Partial thread 304 Stainless steel (A2 1.4567)

3/8" (8 mm) Stainless steel countersunk head

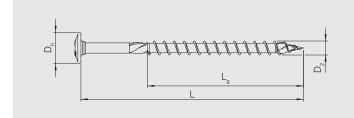






Product code	Diamet	er (D <sub>2</sub> )	Nomina	l length (L)	Thread	length (L <sub>g</sub> )	Head d	iameter (D <sub>h</sub> )	Drive	Carton
Туре	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	0	qty
HT-S-CS-PT-8.0x80	5/16"	8.0	3-1/8"	80	2-3/8"	60	9/16"	14.8	T-40	100
HT-S-CS-PT-8.0x100	5/16"	8.0	3-7/8"	100	2-3/8"	60	9/16"	14.8	T-40	100
HT-S-CS-PT-8.0x120	5/16"	8.0	4-3/4"	120	2-7/8"	72	9/16"	14.8	T-40	100
HT-S-CS-PT-8.0x140	5/16"	8.0	5-1/2"	140	2-7/8"	72	9/16"	14.8	T-40	100
HT-S-CS-PT-8.0x160	5/16"	8.0	6-1/4"	160	3-7/8"	100	9/16"	14.8	T-40	100
HT-S-CS-PT-8.0x180	5/16"	8.0	7-1/8"	180	3-7/8"	100	9/16"	14.8	T-40	100
HT-S-CS-PT-8.0x200	5/16"	8.0	7-7/8"	200	3-7/8"	100	9/16"	14.8	T-40	100
HT-S-CS-PT-8.0x220	5/16"	8.0	8-5/8"	220	3-7/8"	100	9/16"	14.8	T-40	50
HT-S-CS-PT-8.0x240	5/16"	8.0	9-1/2"	240	3-7/8"	100	9/16"	14.8	T-40	50
HT-S-CS-PT-8.0x260	5/16"	8.0	10-1/4"	260	3-7/8"	100	9/16"	14.8	T-40	50
HT-S-CS-PT-8.0x280	5/16"	8.0	11"	280	3-7/8"	100	9/16"	14.8	T-40	50
HT-S-CS-PT-8.0x300	5/16"	8.0	11-3/4"	300	3-7/8"	100	9/16"	14.8	T-40	50
HT-S-CS-PT-8.0x320	5/16"	8.0	12-5/8"	320	3-7/8"	100	9/16"	14.8	T-40	50
HT-S-CS-PT-8.0x340	5/16"	8.0	13-3/8"	340	3-7/8"	100	9/16"	14.8	T-40	50
HT-S-CS-PT-8.0x360	5/16"	8.0	14-1/8"	360	3-7/8"	100	9/16"	14.8	T-40	50
HT-S-CS-PT-8.0x380	5/16"	8.0	15"	380	3-7/8"	100	9/16"	14.8	T-40	50
HT-S-CS-PT-8.0x400	5/16"	8.0	15-3/4"	400	3-7/8"	100	9/16"	14.8	T-40	50

# SFS HT flange head stainless



Flange head | T-drive | Partial thread 304 Stainless steel (A2 1.4567)

1/4" (6 mm) and 5/16" (8 mm) Stainless steel flange head







Product code	Diameter (D <sub>2</sub> )		Nomina	Nominal length (L)		Thread length (L <sub>g</sub> )		Head diameter (D <sub>h</sub> )		Carton
Туре	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)		qty
HT-S-FH-PT-6.0x100	1/4"	6.0	3-7/8"	100	3-1/4"	84	9/16"	14.0	T-30	100
HT-S-FH-PT-6.0x120	1/4"	6.0	4-3/4"	120	3-7/8"	100	9/16"	14.0	T-30	100

Product code	Diameter (D <sub>2</sub> )		Nominal	Nominal length (L)		length (L <sub>g</sub> )	Head diameter (D <sub>h</sub> )		Drive	Carton
Туре	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	0	qty
HT-S-FH-PT-8.0x140	5/16"	8.0	5-1/2"	140	3-1/4"	84	11/16"	18.0	T-40	50
HT-S-FH-PT-8.0x160	5/16"	8.0	6-1/4"	160	3-7/8"	100	11/16"	18.0	T-40	50
HT-S-FH-PT-8.0x180	5/16"	8.0	7-1/8"	180	3-7/8"	100	11/16"	18.0	T-40	50
HT-S-FH-PT-8.0x200	5/16"	8.0	7-7/8"	200	3-7/8"	100	11/16"	18.0	T-40	50
HT-S-FH-PT-8.0x220	5/16"	8.0	8-5/8"	220	3-7/8"	100	11/16"	18.0	T-40	50
HT-S-FH-PT-8.0x240	5/16"	8.0	9-1/2"	240	3-7/8"	100	11/16"	18.0	T-40	50
HT-S-FH-PT-8.0x260	5/16"	8.0	10-1/4"	260	3-7/8"	100	11/16"	18.0	T-40	50
HT-S-FH-PT-8.0x280	5/16"	8.0	11"	280	3-7/8"	100	11/16"	18.0	T-40	50
HT-S-FH-PT-8.0x300	5/16"	8.0	11-3/4"	300	3-7/8"	100	11/16"	18.0	T-40	50

Product code	Diameter (D <sub>2</sub> )		Nominal length (L)		Thread length (L <sub>g</sub> )		Head diameter (D <sub>h</sub> )		Drive	Carton
Туре	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	0	qty
HT-S-FH-FT-8.0x40	5/16"	8.0	1-5/8"	40	1-3/8"	34	11/16"	18.0	T-40	50
HT-S-FH-FT-8.0x50	5/16"	8.0	2"	50	1-3/4"	44	11/16"	18.0	T-40	50
HT-S-FH-FT-8.0x60	5/16"	8.0	2-3/8"	60	2-1/8"	54	11/16"	18.0	T-40	50
HT-S-FH-FT-8.0x80	5/16"	8.0	3-1/8"	80	2-7/8"	74	11/16"	18.0	T-40	50
HT-S-FH-FT-8.0x100	5/16"	8.0	3-7/8"	100	3-3/4"	94	11/16"	18.0	T-40	50
HT-S-FH-FT-8.0x120	5/16"	8.0	4-3/4"	120	4-1/2"	114	11/16"	18.0	T-40	50

Note: Short lengths may resemble full thread configuration.

Products with HT-S-FH-FT designation do not have shank ribs and are threaded to within 3/8" of the head.

# SFS CC

# Innovative double thread screws for efficient timber connections

Combination connect is what gives the system CC its name and it comes from the innovative double thread geometry of the screw. The double thread, which has different thread pitch and thread diameter on the point side of the fastener vs. the head side of the fastener creates a contraction effect when joining two timber members together; resulting in extremely tight, secure connections.

Tried and tested for many years in Europe, the CC system opens the door for a wide array of connection possibilities, even when making angled connections. The sleek cylinder head can be embedded into the timber member, resulting in a basically invisible connection. Particularly when used in crossing pairs, the system CC can create strong, reliable connections without the need for additional steel components. Tight, reliable connections that can be made virtually invisible, while eliminating the need for ancillary steel connection components make the CC system one of the most innovative and efficient timber connection systems available.

### **Product Information**

- Very high load transfer
- Fast installation
- Varied pitch double thread tightly draws members together
- Low edge and spacing distances

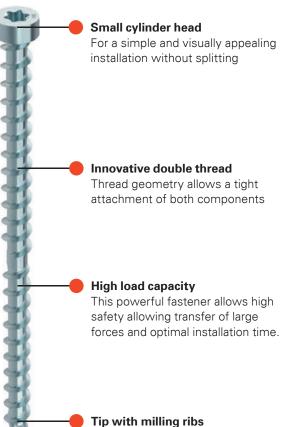
### Design

SFS provides guidance during the design and construction phase.

### Approvals

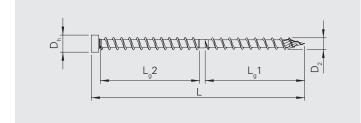


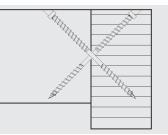




Noticeable reduction in the risk of wood-splitting together with fastener installation speed

# SFS CC





Cylinder head |T-drive | Double thread Bright zinc plated (A3K)

1/4" (6.5 mm) and 5/16" (8.5 mm) Carbon steel timber fastener



Product code	Diameter (D <sub>2</sub> )		Nominal length (L)		Thread length (L <sub>g</sub> )		Head diameter (D <sub>h</sub> )		Drive	Carton
Туре	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)		qty
CC-T-CH-DT-6.5x100	1/4"	6.5	3-7/8"	100	1-3/4"	45	3/8"	9.0	T-30	100
CC-T-CH-DT-6.5x130	1/4"	6.5	5-1/8"	130	2-3/8"	60	3/8"	9.0	T-30	100
CC-T-CH-DT-6.5x150	1/4"	6.5	5-7/8"	150	2-3/4"	70	3/8"	9.0	T-30	100
CC-T-CH-DT-6.5x190	1/4"	6.5	7-1/2"	190	3-1/2"	90	3/8"	9.0	T-30	100
CC-T-CH-DT-6.5x215	1/4"	6.5	8-1/2"	215	3-7/8"	100	3/8"	9.0	T-30	100

Product code	Diameter (D <sub>2</sub> )		Nomina	Nominal length (L)		Thread length (L <sub>g</sub> )		Head diameter (D <sub>h</sub> )		Carton
Туре	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	0	qty
CC-T-CH-DT-8.5x100	5/16"	8.5	3-7/8"	100	1-3/4"	45	1/2"	12.0	T-40	100
CC-T-CH-DT-8.5x150	5/16"	8.5	5-7/8"	150	2-3/4"	70	1/2"	12.0	T-40	100
CC-T-CH-DT-8.5x190	5/16"	8.5	7-1/2"	190	3-1/2"	90	1/2"	12.0	T-40	100
CC-T-CH-DT-8.5x215	5/16"	8.5	8-1/2"	215	3-7/8"	100	1/2"	12.0	T-40	50
CC-T-CH-DT-8.5x250	5/16"	8.5	9-7/8"	250	4-3/8"	110	1/2"	12.0	T-40	50
CC-T-CH-DT-8.5x270	5/16"	8.5	10-5/8"	270	4-3/4"	122	1/2"	12.0	T-40	50
CC-T-CH-DT-8.5x300	5/16"	8.5	11-3/4"	300	5-3/8"	138	1/2"	12.0	T-40	50
CC-T-CH-DT-8.5x350	5/16"	8.5	13-3/4"	350	6-1/4"	158	1/2"	12.0	T-40	50
CC-T-CH-DT-8.5x400	5/16"	8.5	15-3/4"	400	7-1/8"	182	1/2"	12.0	T-40	50

\*2 threads each of this length.

# SFS WR

# The full thread fastener for powerful connections and reinforcements

The WR is a 1/2" diameter, fully threaded screw that is available in lengths up to 39", making it the ideal solution for unique, high load connections and structural reinforcements. The high efficiency of the WR is derivative of its incredibly high mechanical properties in tension and bending, while still being able to be installed without pre-drilling. This all results in using fewer fasteners and installing them quicker, reducing the installed cost; WR is truly a powerful connection.

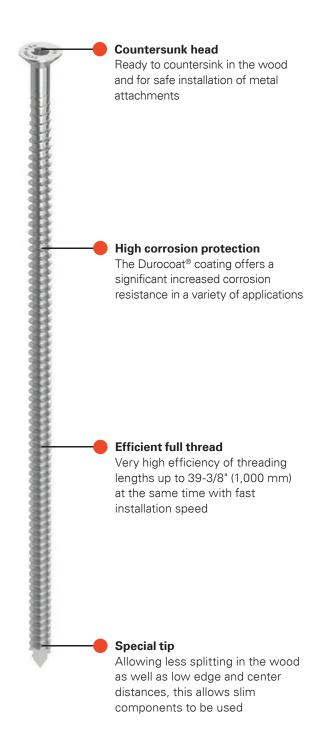
### **Product Information**

- Up to 39-3/8" (1,000 mm) in length
- No pre-drilling required
- High corrosion resistance
- High technical values
- Low tendency to crack with low edge and spacing

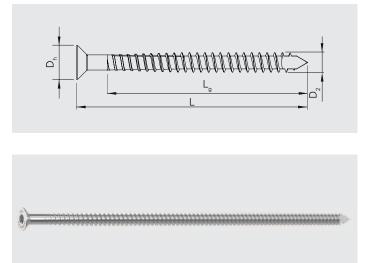
### Approvals







# SFS WR



Countersunk head | T-drive | Full thread | Durocoat®

1/2" (13 mm) Carbon steel timber fastener





Product code	Diameter (D <sub>2</sub> )		Nominal length (L)		Thread length (L <sub>g</sub> )		Head diameter (D <sub>h</sub> )		Drive	Carton
Туре	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	⊛	qty
WR-T-CS-FT-13.0x400	1/2"	13.0	15-3/4"	400	15"	380	7/8"	22.0	T-50	25
WR-T-CS-FT-13.0x500	1/2"	13.0	19-5/8"	500	18-7/8"	480	7/8"	22.0	T-50	25
WR-T-CS-FT-13.0x600	1/2"	13.0	23-5/8"	600	22-7/8"	580	7/8"	22.0	T-50	25
WR-T-CS-FT-13.0x700	1/2"	13.0	27-1/2"	700	26-3/4"	680	7/8"	22.0	T-50	25
WR-T-CS-FT-13.0x800	1/2"	13.0	31-1/2"	800	30-3/4"	780	7/8"	22.0	T-50	25
WR-T-CS-FT-13.0x900	1/2"	13.0	35-3/8"	900	34-5/8"	880	7/8"	22.0	T-50	25
WR-T-CS-FT-13.0x1000	1/2"	13.0	39-3/8"	1,000	38-5/8"	980	7/8"	22.0	T-50	25

# SFS WS

### The self-drilling dowel system for an economical wood-steel connection

The WS system allows you to create high quality and economical wood-steel connections.

The self-drilling dowels are installed in a single operation, saving time and money since neither the timber or steel plates require pre-drilling. With a drilling capacity of up to 3 x 0.197" (3 x 5 mm) steel sheets or a single 0.394" (10 mm) steel sheet (quality: ASTM A283 Grade C), a wide range of durable concealed connections are possible. The proprietary assembled drill tip configuration provides extremely reliable drill performance through even very thick steel sections while maintaining a high combination of bending yield and ductility within the dowel itself.

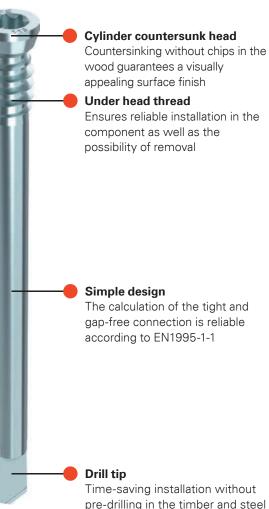
When installed the dowel does not break through the back of the connection and there is simple and reliable concealed connections.

### **Product Information**

- Self-drilling with the special drill tip
- Removable
- Simple design
- High bending yield Fyb=78.5 ksi (541 MPa)
- High fire resistance

### Approvals

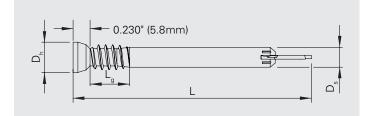




pre-drilling in the timber and steel up to 3 x 0.197" (3 x 5 mm)



# **SFS WS**



Cylinder countersunk head | T-drive | Bright zinc plated (A2K) Self-drilling dowel

1/4" (7 mm) Carbon steel timber fastener







Product code	Diamet	Diameter (D <sub>2</sub> )		Nominal length (L)		Thread length (L <sub>g</sub> )		Head diameter (D <sub>h</sub> )		Carton
type	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	<b>C</b> qt	qty
WS-T-7.0x73	1/4"	7.0	2-7/8"	73	1/2"	13	3/8"	10.0	T-40	100
WS-T-7.0x93	1/4"	7.0	3-5/8"	93	1/2"	13	3/8"	10.0	T-40	100
WS-T-7.0x113	1/4"	7.0	4-1/2"	113	1/2"	13	3/8"	10.0	T-40	100
WS-T-7.0x133	1/4"	7.0	5-1/4"	133	1/2"	13	3/8"	10.0	T-40	100
WS-T-7.0x153	1/4"	7.0	6"	153	1/2"	13	3/8"	10.0	T-40	50
WS-T-7.0x173	1/4"	7.0	6-3/4"	173	1/2"	13	3/8"	10.0	T-40	50
WS-T-7.0x193	1/4"	7.0	7-5/8"	193	1/2"	13	3/8"	10.0	T-40	50
WS-T-7.0x213	1/4"	7.0	8-3/8"	213	1/2"	13	3/8"	10.0	T-40	50
WS-T-7.0x233	1/4"	7.0	9-1/8"	233	1/2"	13	3/8"	10.0	T-40	50

### Using suitable installation tools is recommended

Manual CF-WS/M Pneumatic CF WS/P







# SFS WB

# Threaded rod system for maximum efficiency in tension and compression reinforcements

With the WB system, a diverse variety of reinforcement applications become feasible. For example: cross connections, notches, curved beams, main-secondary beams, etc.

Thanks to the very high tensile strength, aggressive thread geometry and large diameters; fewer threaded rods are needed, saving time and money. Load transmission is achieved strictly by the direct engagement of the coarse thread with the timber member; so the time-consuming, messy process of applying glue is eliminated. The option to cut the rods to custom lengths and the extensive complimentary installation accessories offer the greatest possible application flexibility and customer benefit.

### **Product Information**

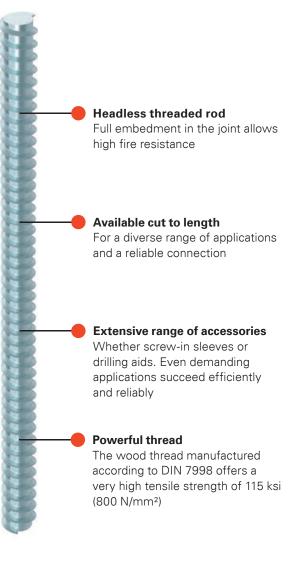
- Headless threaded rod
- High tensile strength of 115 ksi (800N/mm<sup>2</sup>)
- Available cut to length
- Easy application without glue
- Concealed connections and reinforcement

### Cut to length

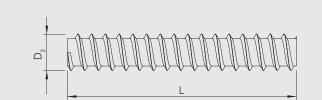
We can take care of the exact cut for you. Your advantages: no preliminary work, no cuttings, maximum economy.

### Approvals





# SFS WB



Headless | Full thread | Bright zinc plated (A2K) Threaded rod

Carbon steel timber fastener







Material Product code		Diameter (D <sub>2</sub> )		Nominal length (L)		Thread length (L <sub>g</sub> )		Head diameter (D <sub>h</sub> )		Drive	
no.	type	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	Ī	qty
1029306	WB-T-16.0x3.000	5/8"	16.0	118-1/8"	3,000	118-1/8"	3,000	-	-	-	5
1029309	WB-T-20.0x3.000	13/16"	20.0	118-1/8"	3,000	118-1/8"	3,000	-	-	-	5

### Using suitable accessories is recommended

For WB-T-16 DWA-12-ZA-SET	For WB-T-20 DWA-15-ZA-SET	Spare drill bit for WB-T-16 DWA-12-M7	Spare drill bit for WB-T-20 DWA-15-M9
Material No. 1112594	Material No. 1112595	Material No. 1119336	Material No. 1119337
ZE-16-WB	ZE-16-WB-blunt	ZE-20-WB	
Material No. 1039597	Material No. 1333186	Material No. 1039598	

# SFS VB

# The leading and proven method for timber-concrete composite floors

The production of timber-concrete composite systems can be done simple, safe and economically with the help of VBmounting solutions by SFS.

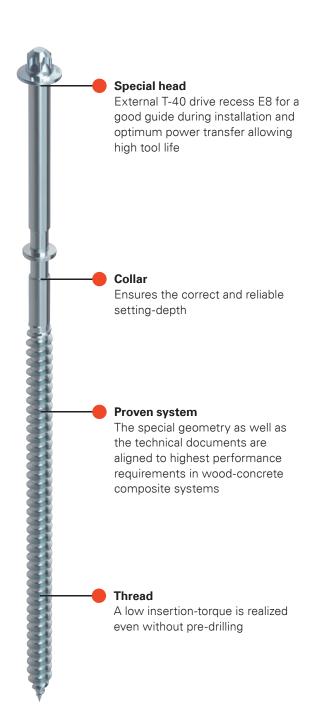
The complex fastener geometry developed and manufactured for this application ensures proper function in this demanding application. Coupled with ergonomic installation tools, comfortable and precise angled installation is achieved, ensuring the proper composite action. Speed and reliability of the system VB make it the most cost effective way to achieve timberconcrete composite structures in new or existing construction.

### **Product Information**

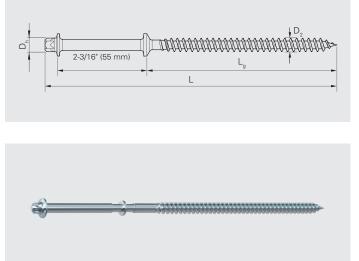
- Very high efficiency
- Highest security
- Maximum installation comfort
- For renovation and new build construction

### Approvals





# SFS VB



Special head |T-drive | Partial thread | Bright zinc plated (A2K) Timber-concrete composite

5/16" (7.5 mm) Carbon steel timber fastener





Product code*	Diamete	Diameter (D <sub>2</sub> )		Nominal length (L)		Thread length (L <sub>g</sub> )		ameter (D <sub>h</sub> )	Drive	Carton
type	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)		qty
VB-48-7.5x100	5/16"	7.5	6-1/8"	155	4"	100	1/2"	12.0	external T40	100
VB-48-7.5x165	5/16"	7.5	8-5/8"	220	6-1/2"	165	1/2"	12.0	external T40	100

\*Product code length designation reflects thread length (lg). Unthreaded upper length (lu) remains fixed at 55 mm for both nominal lengths 155 and 220.

### Using suitable installation tools is recommended

Stand-up setting tool CF-VB/L	Insert bit V40-15VB	Magnetic bit holder ZA1/4"-CF-WS/M
Material No. 1130228	Material No. 98173	Material No. 1659455

# Accessories

DI 650 ET EL

# **Special HD bits**

# for ultimate drive stability when installing SFS timber fasteners

HD-20 drive bit T-20 wedge fit 1/4" Hex x 2"	HD-30 drive bit T-30 wedge fit 1/4" Hex x 2"	HD-40 drive bit T-40 wedge fit 1/4" Hex x 2"	
Material No. 1205168	Material No. 1205169	Material No. 1205170	
HD-20 drive bit insert T-20 wedge fit 1/4" Hex x 1"	HD-25 drive bit insert T-25 wedge fit 1/4" Hex x 1"	HD-30 drive bit insert T-30 wedge fit 1/4" Hex x 1"	HD-40 drive bit insert T-40 wedge fit 1/4" Hex x 1"
Material No. 1205164	Material No. 1205165	Material No. 1205166	Material No. 1205167
HD-20	HD-25	HD-30	HECO HD-40
Magic flip Magnetic 1/4" bit insert driver	<b>ClicFix</b> Locking 1/4" bit insert driver		
Material No. 1205175	Material No. 1205057		
	ALEO CLIFTA		

# Installation tool

# for SFS HT and WR

### ZA Hex 11.5-5/16-WR

Telescoping drive bit assembly holds fastener head captive for effortless installation

Material No. 1205173



T-40 drive bit

Use independent or with ZA hex tool 5/16" x 2"

Material No. 1205176



T-50 drive bit

Use independent or with ZA hex tool 5/16" x 2"  $\,$ 

Material No. 1205177



# Washers

## HT countersunk head 90° washer

8 mm dia. screw/25 mm dia. washer 50 pieces

Material No. 1204958



HT countersunk head 90° washer 10 mm dia. screw/30 mm dia. washer 50 pieces

Material No. 1204959



# **Drilling system**

# for WB-T

For WB-T-16 DWA-12-ZA-SET

Material No. 1112594

Material No. 1112595

For WB-T-20

**DWA-15-ZA-SET** 

### Spare drill bit for WB-T-16 DWA-12-M7

Material No. 1119336

Spare drill bit for WB-T-20 DWA-15-M9

- FORTH STORE

Material No. 1119337

FOR DE	

FORTH FORT

Installation tool

# for WB-T

# ZE-20-WB ZE-16-WB ZE-16-WB-blunt Material No. 1039597 Material No. 1333186 Material No. 1039598

# Installation tools

# for WS-T

Manual CF-WS/M Pneumatic CF WS/P



Material No. 730772





# **Installation tools**

# for VB

# Stand-up setting tool CF-VB/L

Material No. 1130228

V40-15VB

Insert bit

Material No. 98173



Magnetic bit holder ZA1/4"-CF-WS/M

Material No. 1659455





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