

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

Based on 2021-2022 print activities, these initiatives had the following environmental impact:



**102.5 US Short tons less, a difference of 615.2 trees** Wood use: measures the amount of wood required to produce a given amount of paper.



### 262.8 million BTUs less, a difference of 311.9 residential refrigerators operated/year

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.



### GHG 299,700 pounds ${\rm CO_2}$ equivalent less, a difference of 27.3 cars/year

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.



### 70,000 gallons less, a difference of 51.4 clothes washers operated/year

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



### 2,160 pounds less, a difference of 487 people generating solid waste/day

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.

#### Post frame



SFS has a broad line of fasteners specifically designed for metal to wood applications that will meet budgetary, environment or unique project needs. Our first-rate engineering is accompanied by collaborative customer service.



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## **Product geometry**



#### 1 Product family

CC: Combination connect: double thread

WR: Wood reinforcement: special large diameter, full thread

WB: Wood bar: threaded rod

WS: Wood through steel: self-drilling dowel VB: Verbundwerkstoff beton: (timber) concrete

HTP: Heavy timber: core products for variety of

timber connections

#### 2 Material

T: Tempered carbon steel

S: Stainless steel

#### 3 Head style

CS: Countersunk FH: Flange head CH: Cylindrical head

H: Combination hexagon head

#### 4 Thread

PT: Partial thread FT: Full thread

VFT: Variable full thread with "magic close effect"

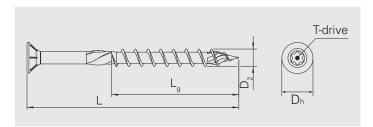
DT: Double thread

#### 5 Diameter (D<sub>2</sub>)

Outer thread, mm

#### 6 Length (L)

Nominal length, mm



D<sub>2</sub>: Diameter

L: Nominal length

L<sub>g</sub>: Thread length

D<sub>h</sub>: Head diameter

#### Coatings

Code	Treatment
A2K	Fe/Zn5B per ASTM F1941
A3K	Fe/Zn8B per ASTM F1941
Durocoat®	Zinc rich organic multi-coat process for optimum corrosion resistance

#### Material



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

## **Fastener matrix**

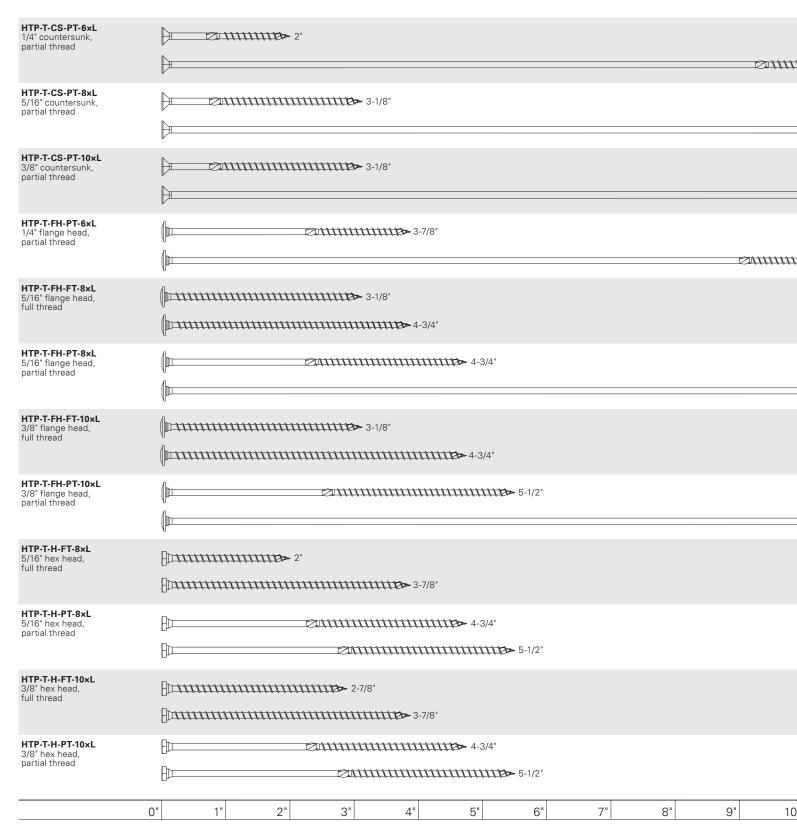
Screw type	Thread type	Diameter, in (mm)	Length range availa	ıble, in (mm)		
			Countersunk (CS) <sup>1</sup>	CombiHexagon (HH) <sup>2</sup>	Flange head (FH) <sup>3</sup>	Cylinder head (CH)
Head type	_	_				
CC	Double thread (DT)	1/4" (6.5)	_	_	_	3-7/8" to 8-1/2" (100-215)
		5/16" (8.5)				3-7/8" to 15-3/4" (100-400)
WR	Full thread (FT)	1/2" (13)	15-3/4" to 39-3/8" (400–10000)			_
HTP	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)
	UP	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)
		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)

<sup>&</sup>lt;sup>1</sup> HTP with milling pockets; WR without milling pockets <sup>2</sup> Internal T-drive <sup>3</sup> Raised flange

## **Connection matrix**

Materia	al CLT		Glulam d	Glulam or timber		Concrete		Structural steel		Wood framing		age ming	
		Vertical	Horzontal	Vertical	Horzontal	Vertical	Horzontal	Vertical	Horzontal	Vertical	Horzontal —	Vertical	Horzontal —
Glu- lam/ timber	Horzontal	•	•	•	•	•	•	•	•	_	_	_	_
	Vertical	•	_	•	_	•	•	•	•	_	_	_	_
CLT	Horzontal	•	•	•	•	•	•	•	•	•	_	•	_
	Vertical	•	_	•	•	•	•	•	•	_	_	_	_

## **Fastener overview**



mmin	<b>111112&gt;-</b> 11-	3/4"									
						***********		,,,,,,,,,,,,,,,	19-5/8"		
								,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	19-5/8"		
mmm	1111112>> 11-	3/4"									
							mmm	mmm	19-5/8"		
	ľ		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		15-3/4"						
11"	12"	13"	14"	15"	16"	17"	18"	19"	38"	39"	40"

## Fastener overview continued

HTP-T-CS-VFT-6×L 1/4" countersunk, full thread	1-5/8"
	<u> </u>
HTP-T-CS-FT-8×L 5/16" countersunk, full thread	<b>₹1111111111111112→</b> 2-3/8'
	$\hspace{2cm}  \qquad $
HTP-T-CS-FT-10xL 3/8" countersunk, full thread	<b>≱111111111111111111111111111111111111</b>
	)
HTP-T-CH-FT-6×L 1/4" cylinder head, full thread	<u> </u>
	<u> </u>
HTP-T-CH-FT-8xL 5/16" cylinder head, full thread	<u>□ 111111111111111111111111111111111111</u>
HTP-T-CH-FT-10xL 3/8" cylinder head, full thread	<u>□ 111111111111111111111111111111111111</u>
WR-T-CS-FT-13xL 1/2" countersunk, full thread	
	$ \hspace{2cm}                                    $
HTP-T-CH-DT-6.5×L 1/4" cylinder head, double thread	<u>□ 111111111111111111111111111111111111</u>
	<u> </u>
HTP-T-CH-DT-8.5xL 5/16" cylinder head, double thread	<u> </u>
WS-T-7×L 1/4" self-drilling dowel with cylinder head	<u> </u>
	<u>□</u>
VB-48-7.5×L 5/16" timber-concrete composite with external T-drive	e D <del>``````````````````````````````````</del> 6-1/8"
	<u> </u>
0	)" 1" 2" 3" 4" 5" 6" 7" 8" 9" 10

<u>.111111111111111111111111111111111111</u>
39-3/8°
1111111111111111111111111111111111111
11"   12"   13"   14"   15"   16"   17"   18"   19"   38"   39"   40"

## **HTP** partial thread

#### Value engineered for ultimate efficiency

Designers and installers alike can appreciate the wide range of timber connection possibilities within the HTP range. Generally used in laterally loaded connections, HTP 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 HTP screw.

The revolutionary point and shank geometry of HTP 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; HTP 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**







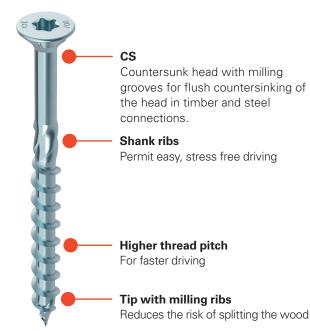
#### Combination hexagon head

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

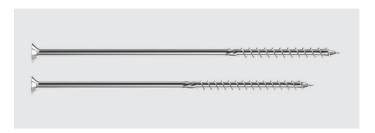


#### FΗ

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







# T-drive Dh

#### **Features**

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

#### **Approvals**





#### Material





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

Product code	Diame	Diameter (D <sub>2</sub> )		l length (L)	Thread	length (L <sub>g</sub> )	Head d	lia. (D <sub>h</sub> )	Drive	Carton
type	in	mm	in	mm	in	mm	in	mm		qty
HTP-T-CS-PT-6.0×50	1/4"	6.0	2"	50	1-1/8"	30	7/16"	11.7	T30	200
HTP-T-CS-PT-6.0×60			2-3/8"	60	1-3/8"	36				
HTP-T-CS-PT-6.0×70			2-3/4"	70	1-5/8"	42				
HTP-T-CS-PT-6.0×80			3-1/8"	80	1-7/8"	48				100
HTP-T-CS-PT-6.0×90			3-1/2"	90	2-1/8"	54				
HTP-T-CS-PT-6.0×100			3-7/8"	100	2-3/8"	60				
HTP-T-CS-PT-6.0×110			4-3/8"	110	2-5/8"	66				
HTP-T-CS-PT-6.0×120			4-3/4"	120	2-7/8"	72				
HTP-T-CS-PT-6.0×130			5-1/8"	130						
HTP-T-CS-PT-6.0×140			5-1/2"	140						
HTP-T-CS-PT-6.0×150			5-7/8"	150						
HTP-T-CS-PT-6.0×160			6-1/4"	160						
HTP-T-CS-PT-6.0×180			7-1/8"	180						
HTP-T-CS-PT-6.0×200			7-7/8"	200						
HTP-T-CS-PT-6.0×220			8-5/8"	220						
HTP-T-CS-PT-6.0×240			9-1/2"	240						
HTP-T-CS-PT-6.0×260			10-1/4"	260						
HTP-T-CS-PT-6.0×280			11"	280						
HTP-T-CS-PT-6.0×300			11-3/4"	300						





# T-drive L<sub>g</sub> D<sub>h</sub>

#### **Features**

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

#### **Approvals**





#### Material

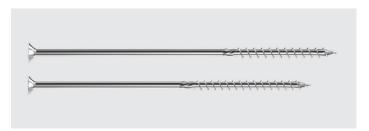




#### 5/16" (8 mm) Carbon steel countersunk head

Product code	Diameter (D <sub>2</sub> )		Nominal length (L)		Thread	Thread length (L <sub>g</sub> )		lia. (D <sub>h</sub> )	Drive	Carton
type	in	mm	in	mm	in	mm	in	mm	O	qty
HTP-T-CS-PT-8.0×80	5/16"	8.0	3-1/8"	80	2-3/8"	60	9/16"	14.8	T40	100
HTP-T-CS-PT-8.0×90			3-1/2"	90						
HTP-T-CS-PT-8.0×100			3-7/8"	100						
HTP-T-CS-PT-8.0×120			4-3/4"	120	2-7/8"	72				
HTP-T-CS-PT-8.0×140			5-1/2"	140						
HTP-T-CS-PT-8.0×160			6-1/4"	160	3-7/8"	100				
HTP-T-CS-PT-8.0×180			7-1/8"	180						
HTP-T-CS-PT-8.0×200			7-7/8"	200						
HTP-T-CS-PT-8.0×220			8-5/8"	220						50
HTP-T-CS-PT-8.0×240			9-1/2"	240						
HTP-T-CS-PT-8.0×260			10-1/4"	260						
HTP-T-CS-PT-8.0×280			11"	280						
HTP-T-CS-PT-8.0×300			11-3/4"	300						
HTP-T-CS-PT-8.0×320			12-5/8"	320						
HTP-T-CS-PT-8.0×340			13-3/8"	340						
HTP-T-CS-PT-8.0×360			14-1/8"	360						
HTP-T-CS-PT-8.0×380			15"	380						
HTP-T-CS-PT-8.0×400			15-3/4"	400						
HTP-T-CS-PT-8.0×420			16-1/2"	420						
HTP-T-CS-PT-8.0×460			18-1/8"	460						
HTP-T-CS-PT-8.0×500			19-5/8"	500						





# T-drive Dh

#### **Features**

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

#### **Approvals**





#### Material

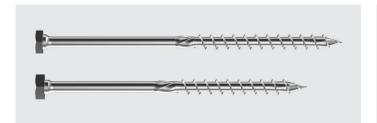




#### 3/8" (10 mm) Carbon steel countersunk head

Product code	Diame	ter (D <sub>2</sub> )	Nominal length (L)		Thread	Thread length (L <sub>g</sub> )		lia. (D <sub>h</sub> )	Drive	Carton
type	in	mm	in	mm	in	mm	in	mm	O	qty
HTP-T-CS-PT-10.0×80	3/8"	10.0	3-1/8"	80	2-3/8"	60	3/4"	18.5	T40	50
HTP-T-CS-PT-10.0×100			3-7/8"	100	3-1/4"	84				
HTP-T-CS-PT-10.0×120			4-3/4"	120						
HTP-T-CS-PT-10.0×140			5-1/2"	140						
HTP-T-CS-PT-10.0×160			6-1/4"	160	3-7/8"	100				
HTP-T-CS-PT-10.0×180			7-1/8"	180						
HTP-T-CS-PT-10.0×200			7-7/8"	200						
HTP-T-CS-PT-10.0×220			8-5/8"	220						
HTP-T-CS-PT-10.0×240			9-1/2"	240						
HTP-T-CS-PT-10.0×260			10-1/4"	260						
HTP-T-CS-PT-10.0×280			11"	280						
HTP-T-CS-PT-10.0×300			11-3/4"	300						
HTP-T-CS-PT-10.0×320			12-5/8"	320						
HTP-T-CS-PT-10.0×340			13-3/8"	340						
HTP-T-CS-PT-10.0×360			14-1/8"	360						
HTP-T-CS-PT-10.0×380			15"	380						
HTP-T-CS-PT-10.0×400			15-3/4"	400						
HTP-T-CS-PT-10.0×420			16-1/2"	420						25
HTP-T-CS-PT-10.0×460			18-1/8"	460						
HTP-T-CS-PT-10.0×500			19-5/8"	500						

# HTP combination hexagon hea dry, interior applications



# T-drive Dh

#### **Features**

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

#### **Approvals**





#### Material





#### 5/16" (8 mm) and 3/8" (10 mm) Carbon steel combination hexagon head

#### **Full thread**

i un tincaa										
Product code	Diam	Diameter (D <sub>2</sub> )		al length (L)	Thread	Thread length (L <sub>g</sub> )		Head dia. (D <sub>h</sub> )		Carton
type	in	mm	in	mm	in	mm	in	mm		qty
HTP-T-H-FT-8.0×50	5/16"	8.0	2"	50	1-5/8"	42	1/2"	13.0	13 mm	100
HTP-T-H-FT-8.0×60			2-3/8"	60	2"	52			hex/T40	
HTP-T-H-FT-8.0×70			2-3/4"	70	2-3/8"	62				50
HTP-T-H-FT-8.0×80			3-1/8"	80	2-7/8"	72				
HTP-T-H-FT-8.0×100			3-7/8"	100	3-1/2"	92				
HTP-T-H-FT-10.0×60	3/8"	10.0	2-3/8"	60	2"	50	9/16"	15.0	15 mm	50
HTP-T-H-FT-10.0×70			2-3/4"	70	2-3/8"	60			hex/T-40	
HTP-T-H-FT-10.0×80			3-1/8"	80	2-3/4"	70				
HTP-T-Ha-FT-10.0×100			3-7/8"	100	3-1/2"	90				

#### Partial thread

Product code	Diameter (D <sub>2</sub> )		Nominal length (L)		Thread	l length (L <sub>g</sub> )	Head	dia. (D <sub>h</sub> )	Drive	Carton
type	in	mm	in	mm	in	mm	in	mm		qty
HTP-T-H-PT-8.0×120	5/16"	8.0	4-3/4"	120	2-7/8"	72	1/2"	13.0	13 mm	50
HTP-T-H-PT-8.0×140			5-1/2"	140	3-1/4"	84			hex/T40	
HTP-T-H-PT-10.0×120	3/8"	10.0	4-3/4"	120	2-7/8"	72	9/16"	15.0	15 mm	50
HTP-T-H-PT-10.0×140			5-1/2"	140	3-1/4"	84			hex/T40	

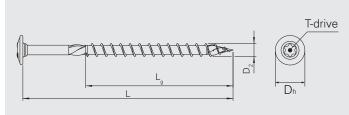
Note: Short lengths may resemble full thread configuration.

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

## **HTP flange head**







#### **Features**

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

#### **Approvals**





#### Material





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

Product code	Diame	eter (D <sub>2</sub> )	Nomina	l length (L)	Thread	length (L <sub>g</sub> )	Head d	lia. (D <sub>h</sub> )	Drive	Carton
type	in	mm	in	mm	in	mm	in	mm		qty
HTP-T-FH-PT-6.0×100	1/4"	6.0	3-7/8"	100	2-3/8"	60	9/16"	14.0	T30	100
HTP-T-FH-PT-6.0×120			4-3/4"	120	2-7/8"	72				
HTP-T-FH-PT-6.0×140			5-1/2"	140						
HTP-T-FH-PT-6.0×160			6-1/4"	160						
HTP-T-FH-PT-6.0×180			7-1/8"	180						
HTP-T-FH-PT-6.0×200			7-7/8"	200						
HTP-T-FH-PT-6.0×220			8-5/8"	220						
HTP-T-FH-PT-6.0×240			9-1/2"	240						
HTP-T-FH-PT-6.0×260			10-1/4"	260						
HTP-T-FH-PT-6.0×280			11-1/8"	280						
HTP-T-FH-PT-6.0×300			11-3/4"	300						

## **HTP flange head**





# T-drive

#### **Features**

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

#### **Approvals**





#### Material





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

#### **Full thread**

Product code	Diame	eter (D <sub>2</sub> )	Nomina	l length (L)	Thread	length (L <sub>g</sub> )	Head	dia. (D <sub>h</sub> )	Drive	Carton
type	in	mm	in	mm	in	mm	in	mm	U	qty
HTP-T-FH-FT-8.0×80	5/16"	8.0	3-1/8"	80	2-7/8"	74	11/16"	18.0	T40	50
HTP-T-FH-FT-8.0×100			3-7/8"	100	3-3/4"	94				
HTP-T-FH-FT-8.0×120			4-3/4"	120	4-1/2"	114				

#### Partial thread

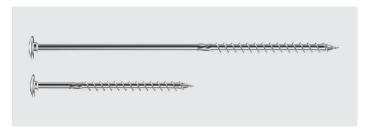
Product code	Diame	ter (D <sub>2</sub> )	Nomina	l length (L)	Thread	length (L <sub>g</sub> )	Head d	lia. (D <sub>h</sub> )	Drive	Carton
type	in	mm	in	mm	in	mm	in	mm		qty
HTP-T-FH-PT-8.0×120	5/16"	8.0	4-3/4"	120	2-7/8"	72	11/16"	18.0	T40	50
HTP-T-FH-PT-8.0×140			5-1/2"	140	3-7/8"	100				
HTP-T-FH-PT-8.0×160			6-1/4"	160						
HTP-T-FH-PT-8.0×180			7-1/8"	180						
HTP-T-FH-PT-8.0×200			7-7/8"	200						
HTP-T-FH-PT-8.0×220			8-5/8"	220						
HTP-T-FH-PT-8.0×240			9-1/2"	240						
HTP-T-FH-PT-8.0×260			10-1/4"	260						
HTP-T-FH-PT-8.0×280			11"	280						
HTP-T-FH-PT-8.0×300			11-3/4"	300						
HTP-T-FH-PT-8.0×320			12-5/8"	320						
HTP-T-FH-PT-8.0×340			13-3/8"	340						
HTP-T-FH-PT-8.0×360			14-1/8"	360						
HTP-T-FH-PT-8.0×380			15"	380						
HTP-T-FH-PT-8.0×400			15-3/4"	400						
HTP-T-FH-PT-8.0×420			16-1/2"	420						
HTP-T-FH-PT-8.0×460	1		18-1/8"	460						
HTP-T-FH-PT-8.0×500			19-5/8"	500						

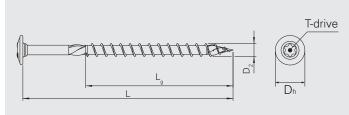
Note: Short lengths may resemble full thread configuration.

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

## **HTP flange head**







#### **Features**

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

#### **Approvals**





#### Material





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

#### **Full thread**

Product code	Diamo	eter (D <sub>2</sub> )	Nomina	l length (L)	Thread	length (L <sub>g</sub> )	Head	dia. (D <sub>h</sub> )	Drive	l
type	in	mm	in	mm	in	mm	in	mm	U	qty
HTP-T-FH-FT-10.0×80	3/8"	10.0	3-1/8"	80	2-7/8"	73	7/8"	22.5	T40	50
HTP-T-FH-FT-10.0×100			3-7/8"	100	3-5/8"	93				
HTP-T-FH-FT-10.0×120			4-3/4"	120	3-7/8"	100				

#### **Partial Thread**

Product code	Diame	eter (D <sub>2</sub> )	Nomina	l length (L)	Thread	length (L <sub>g</sub> )	Head	dia. (D <sub>h</sub> )	Drive	Carton
type	in	mm	in	mm	in	mm	in	mm	<b>O</b>	qty
HTP-T-FH-PT-10.0×140	3/8"	10.0	5-1/2"	140	3-1/4"	84	7/8"	22.5	T40	50
HTP-T-FH-PT-10.0×160			6-1/4"	160	3-7/8"	100				
HTP-T-FH-PT-10.0×180			7-1/8"	180						
HTP-T-FH-PT-10.0×200			7-7/8"	200						
HTP-T-FH-PT-10.0×220			8-5/8"	220						
HTP-T-FH-PT-10.0×240			9-1/2"	240						
HTP-T-FH-PT-10.0×260			10-1/4"	260						
HTP-T-FH-PT-10.0×280			11"	280						
HTP-T-FH-PT-10.0×300			11-3/4"	300						
HTP-T-FH-PT-10.0×320			12-5/8"	320						
HTP-T-FH-PT-10.0×340			13-3/8"	340						
HTP-T-FH-PT-10.0×360			14-1/8"	360						
HTP-T-FH-PT-10.0×380			15"	380						
HTP-T-FH-PT-10.0×400			15-3/4"	400						

Note: Short lengths may resemble full thread configuration.

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

## **HTP full thread**

#### **Expertly engineered thread profiles**

HTP 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 HTP partially threaded fasteners and more.

1/4" countersunk HTP 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 HTP 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, HTP 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**

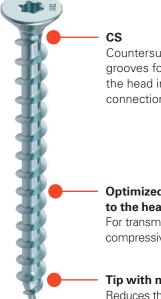






#### Cylinder head

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



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

### Optimized full thread design up to the head

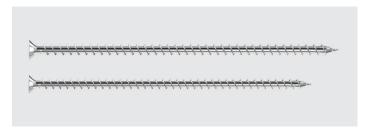
For transmission of high tensile and compressive loads

#### Tip with milling ribs

Reduces the risk of splitting the wood

22





# T-drive Dh

#### **Features**

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

#### **Approvals**





#### Material

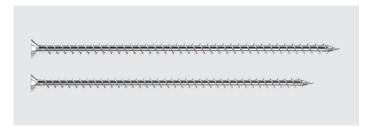




#### 1/4" (6 mm) Variable full thread carbon steel countersunk head

Product code	Diame	eter (D <sub>2</sub> )	Nomina	I length (L)	Thread	length $(L_g)$	Head	dia. (D <sub>h</sub> )	Drive	Carton
type	in	mm	in	mm	in	mm	in	mm		qty
HTP-T-CS-VFT-6.0×40	1/4"	6.0	1-5/8"	40	1-1/4"	33	11.7	7/16"	T30	200
HTP-T-CS-VFT-6.0×60			2-3/8"	60	2-1/8"	53				
HTP-T-CS-VFT-6.0×80			3-1/8"	80	2-7/8"	73				100
HTP-T-CS-VFT-6.0×100			3-7/8"	100	3-5/8"	93				
HTP-T-CS-VFT-6.0×120			4-3/4"	120	4-1/2"	113				
HTP-T-CS-VFT-6.0×140			5-1/2"	140	5-1/4"	133				
HTP-T-CS-VFT-6.0×160			6-1/4"	160	6"	153				





# T-drive L Dh

#### **Features**

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

#### **Approvals**





#### Material



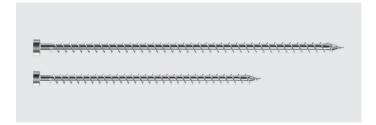


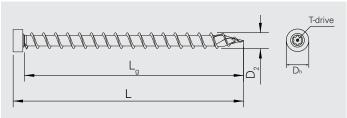
#### 5/16" (8 mm) and 3/8" (10 mm) Carbon steel countersunk head

Product code	Diame	ter (D <sub>2</sub> )	Nominal I	ength (L)	Thread I	length (L <sub>g</sub> )	Head d	ia. (D <sub>h</sub> )	Drive	Carton
type	in	mm	in	mm	in	mm	in	mm	O	qty
HTP-T-CS-FT-8.0×60	5/16"	8.0	2-3/8"	60	2"	50	9/16"	14.8	T40	100
HTP-T-CS-FT-8.0×80			3-1/8"	80	2-3/4"	70				
HTP-T-CS-FT-8.0×100			3-7/8"	100	3-1/2"	90				
HTP-T-CS-FT-8.0×120			4-3/4"	120	4-3/8"	110				
HTP-T-CS-FT-8.0×160			6-1/4"	160	5-7/8"	150				
HTP-T-CS-FT-8.0×180			7-1/8"	180	6-3/4"	170				
HTP-T-CS-FT-8.0×200			7-7/8"	200	7-1/2"	190				
HTP-T-CS-FT-8.0×220			8-5/8"	220	8-1/4"	210				50
HTP-T-CS-FT-8.0×240			9-1/2"	240	9"	230				
HTP-T-CS-FT-8.0×260			10-1/4"	260	9-7/8"	250				
HTP-T-CS-FT-8.0×280			11"	280	10-5/8"	270				
HTP-T-CS-FT-8.0×300			11-3/4"	300	11-3/8"	290				
HTP-T-CS-FT-8.0×340			13-3/8"	340	13"	330				
HTP-T-CS-FT-8.0×380			15"	380	14-5/8"	370				
HTP-T-CS-FT-10.0×120	3/8"	10.0	4-3/4"	120	4-1/4"	108	3/4"	18.5	T40	50
HTP-T-CS-FT-10.0×160			6-1/4"	160	5-7/8"	148				
HTP-T-CS-FT-10.0×200			7-7/8"	200	7-3/8"	188				
HTP-T-CS-FT-10.0×220			8-5/8"	220	8-1/4"	208				
HTP-T-CS-FT-10.0×240			9-1/2"	240	9"	228				
HTP-T-CS-FT-10.0×260			10-1/4"	260	9-3/4"	248				
HTP-T-CS-FT-10.0×280			11"	280	10-1/2"	268				
HTP-T-CS-FT-10.0×300			11-3/4"	300	11-3/8"	288				
HTP-T-CS-FT-10.0×340			13-3/8"	340	12-7/8"	328				
HTP-T-CS-FT-10.0×380			15"	380	14-1/2"	368				

## HTP cylinder head







#### **Features**

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

#### **Approvals**





#### Material





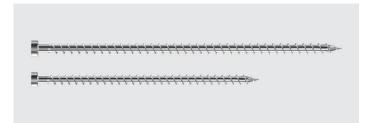
#### 1/4" (6 mm), 5/16" (8 mm) and 3/8" (10 mm) Carbon steel cylinder head

Product code	Diame	eter (D <sub>2</sub> )	Nomina	al length (L)	Thread	d length (L <sub>g</sub> )	Head	dia. (D <sub>h</sub> )	Drive	Carton
type	in	mm	in	mm	in	mm	in	mm		qty
HTP-T-CH-FT-6.0×120	1/4"	6.0	4-3/4"	120	4-1/2"	114	5/16"	8.0	T30	100
HTP-T-CH-FT-6.0×140			5-1/2"	140	5-1/4"	134				
HTP-T-CH-FT-6.0×160	1		6-1/4"	160	6-1/8"	154				
HTP-T-CH-FT-6.0×180	1		7-1/8"	180	6-7/8"	174				
HTP-T-CH-FT-6.0×200	1	-	7-7/8"	200	7-5/8"	194				

Product code	Diam	eter (D <sub>2</sub> )	Nomina	al length (L)	Thread	l length (L <sub>g</sub> )	Head	dia. (D <sub>h</sub> )	Drive	Carton
type	in	mm	in	mm	in	mm	in	mm	O	qty
HTP-T-CH-FT-8.0×120	5/16"	8.0	4-3/4"	120	4-3/8"	112	1/2"	12.0	T40	100
HTP-T-CH-FT-8.0×160			6-1/4"	160	6"	152				
HTP-T-CH-FT-8.0×180			7-1/8"	180	6-3/4"	172				
HTP-T-CH-FT-8.0×200			7-7/8"	200	7-1/2"	192				
HTP-T-CH-FT-8.0×220			8-5/8"	220	8-3/8"	212			Ī	50
HTP-T-CH-FT-8.0×240			9-1/2"	240	9-1/8"	232				
HTP-T-CH-FT-8.0×260			10-1/4"	260	9-7/8"	252				
HTP-T-CH-FT-8.0×280			11-1/8"	280	10-3/4"	272				
HTP-T-CH-FT-8.0×300			11-3/4"	300	11-1/2"	292				
HTP-T-CH-FT-8.0×340			13-3/8"	340	13-1/8"	332				
HTP-T-CH-FT-8.0×380			15"	380	14-5/8"	372				

## HTP cylinder head





# T-drive Dh

#### **Features**

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

#### **Approvals**





#### Material





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

Product code	Diame	eter (D <sub>2</sub> )	Nomina	ıl length (L)	Thread	l length (L <sub>g</sub> )	Head	dia. (D <sub>h</sub> )	Drive	Carton
type	in	mm	in	mm	in	mm	in	mm		qty
HTP-T-CH-FT-10.0×120	3/8"	10.0	4-3/4"	120	4-3/8"	110	9/16"	14.0	T40	50
HTP-T-CH-FT-10.0×160			6-1/4"	160	5-7/8"	150				
HTP-T-CH-FT-10.0×200			7-7/8"	200	7-1/2"	190				
HTP-T-CH-FT-10.0×220			8-5/8"	220	8-1/4"	210				
HTP-T-CH-FT-10.0×240			9-1/2"	240	9"	230				
HTP-T-CH-FT-10.0×260			10-1/4"	260	9-7/8"	250				
HTP-T-CH-FT-10.0×280			11-1/8"	280	10-5/8"	270				
HTP-T-CH-FT-10.0×300			11-3/4"	300	11-3/8"	290				
HTP-T-CH-FT-10.0×340			13-3/8"	340	13"	330				
HTP-T-CH-FT-10.0×380			15"	380	14-1/4"	370				

### **HTP** stainless

#### Safety and security with stainless steel

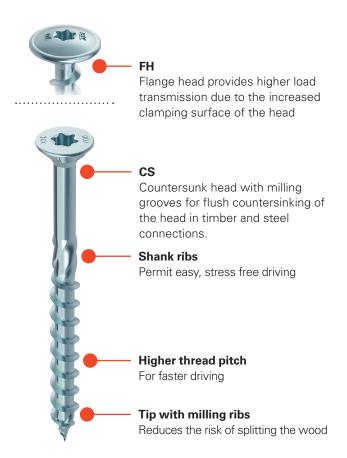
Experts in the timber construction sector value the advantages of HTP 304 stainless steel screws when used in challenging environmental applications such as generally damp exterior exposure and use in treated lumber. Safety and security is knowing the inherent corrosion resistance of 304 stainless steel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

#### **Product Information**

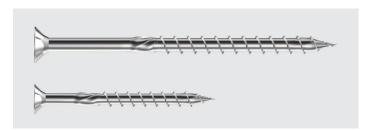
- No pre-drilling required
- Faster driving
- Reduced risk of splitting the wood
- Lower driving torque

#### **Approvals**



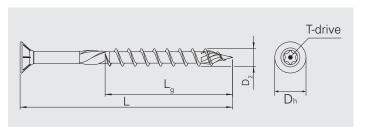


## **HTP** countersunk stainless



#### Features

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



#### **Approvals**



#### Material

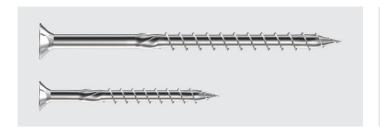


#### 3/16" (5 mm) and 1/4" (6 mm) Stainless steel countersunk head

Product code	Diame	eter (D <sub>2</sub> )	Nomina	al length (L)	Thread	d length (L <sub>g</sub> )	Head	dia. (D <sub>h</sub> )	Drive	Carton
type	in	mm	in	mm	in	mm	in	mm		qty
HTP-S-CS-PT-5.0×30	3/16"	5.0	1-1/8"	30	1/4"	6	3/8"	9.6	T20	200
HTP-S-CS-PT-5.0×35			1-3/8"	35	1/2"	12				
HTP-S-CS-PT-5.0×40			1-5/8"	40	3/4"	18				
HTP-S-CS-PT-5.0×45			1-3/4"	45	1"	24				
HTP-S-CS-PT-5.0×50			2"	50	1-1/8"	30				
HTP-S-CS-PT-5.0×60			2-3/8"	60	1-3/8"	36				
HTP-S-CS-PT-5.0×70			2-3/4"	70	1-5/8"	42				
HTP-S-CS-PT-5.0×80			3-1/8"	80	1-7/8"	48				
HTP-S-CS-PT-5.0×90			3-1/2"	90	2-1/8"	54				
HTP-S-CS-PT-5.0×100			4"	100	2-3/8"	60				100

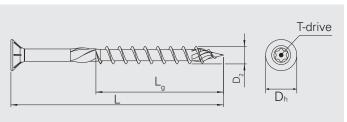
Product code	Diame	ter (D <sub>2</sub> )	Nomina	al length (L)	Thread	l length (L <sub>g</sub> )	Head o	dia. (D <sub>h</sub> )	Drive	Carton
type	in	mm	in	mm	in	mm	in	mm		qty
HTP-S-CS-PT-6.0×40	1/4"	6.0	1-5/8"	40	1"	24	7/16"	11.7	T30	200
HTP-S-CS-PT-6.0×50			2"	50	1-1/8"	30				
HTP-S-CS-PT-6.0×60			2-3/8"	60	1-3/8"	36				
HTP-S-CS-PT-6.0×70			2-3/4"	70	1-5/8"	42				
HTP-S-CS-PT-6.0×80			3-1/8"	80	1-7/8"	48				100
HTP-S-CS-PT-6.0×90			3-1/2"	90	2-1/8"	54				
HTP-S-CS-PT-6.0×100			3-7/8"	100	2-3/8"	60				
HTP-S-CS-PT-6.0×120			4-3/4"	120	2-7/8"	72				
HTP-S-CS-PT-6.0×140			5-1/2"	140						
HTP-S-CS-PT-6.0×160			6-1/4"	160						
HTP-S-CS-PT-6.0×180			7-1/8"	180						
HTP-S-CS-PT-6.0×200			7-7/8"	200						

## **HTP countersunk stainless**



#### **Features**

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



#### **Approvals**



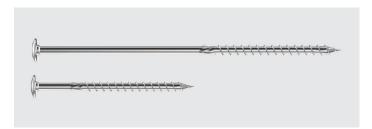
#### Material



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

Product code	Diame	ter (D <sub>2</sub> )	Nominal length (L)		Thread	Thread length (L <sub>g</sub> )		ia. (D <sub>h</sub> )	Drive	Carton
type	in	mm	in	mm	in	mm	in	mm	O	qty
HTP-S-CS-PT-8.0×80	5/16"	8.0	3-1/8"	80	2-3/8"	60	9/16"	14.8	T40	100
HTP-S-CS-PT-8.0×100			3-7/8"	100						
HTP-S-CS-PT-8.0×120			4-3/4"	120	2-7/8"	72				
HTP-S-CS-PT-8.0×140			5-1/2"	140						
HTP-S-CS-PT-8.0×160			6-1/4"	160	3-7/8"	100				
HTP-S-CS-PT-8.0×180			7-1/8"	180						
HTP-S-CS-PT-8.0×200			7-7/8"	200						
HTP-S-CS-PT-8.0×220			8-5/8"	220						50
HTP-S-CS-PT-8.0×240			9-1/2"	240						
HTP-S-CS-PT-8.0×260			10-1/4"	260						
HTP-S-CS-PT-8.0×280			11"	280						
HTP-S-CS-PT-8.0×300			11-3/4"	300						
HTP-S-CS-PT-8.0×320			12-5/8"	320						
HTP-S-CS-PT-8.0×340			13-3/8"	340						
HTP-S-CS-PT-8.0×360			14-1/8"	360						
HTP-S-CS-PT-8.0×380			15"	380						
HTP-S-CS-PT-8.0×400			15-3/4"	400						

## HTP flange head stainless



# T-drive L Dh

#### **Features**

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

#### **Approvals**



#### Material



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

Product code	Diam	eter (D <sub>2</sub> )	Nomina	al length (L)	Thread	d length (L <sub>g</sub> )	Head	dia. (D <sub>h</sub> )	Drive	Carton
type	in	mm	in	mm	in	mm	in	mm		qty
HTP-S-FH-PT-6.0×100	1/4"	6.0	3-7/8"	100	3-1/4"	84	9/16"	14.0	T30	100
HTP-S-FH-PT-6.0×120			4-3/4"	120	3-7/8"	100				

Product code	Diameter (D <sub>2</sub> )		Nomina	Nominal length (L)		Thread length (L <sub>g</sub> )		Head dia. (D <sub>h</sub> )		Carton
type	in	mm	in	mm	in	mm	in	mm	O	qty
HTP-S-FH-PT-8.0×140	5/16"	8.0	5-1/2"	140	3-1/4"	84	11/16"	18.0	T40	50
HTP-S-FH-PT-8.0×160			6-1/4"	160	3-7/8"	100				
HTP-S-FH-PT-8.0×180			7-1/8"	180						
HTP-S-FH-PT-8.0×200			7-7/8"	200						
HTP-S-FH-PT-8.0×220			8-5/8"	220						
HTP-S-FH-PT-8.0×240			9-1/2"	240						
HTP-S-FH-PT-8.0×260			10-1/4"	260						
HTP-S-FH-PT-8.0×280			11"	280						
HTP-S-FH-PT-8.0×300	1		11-3/4"	300						

Product code	Diameter (D <sub>2</sub> )		Nominal length (L)		Thread length (L <sub>g</sub> )		Head dia. (D <sub>h</sub> )		Drive	
type	in	mm	in	mm	in	mm	in	mm	O	qty
HTP-S-FH-FT-8.0×40	5/16"	8.0	1-5/8"	40	1-3/8"	34	11/16"	18.0	T40	50
HTP-S-FH-FT-8.0×50			2"	50	1-3/4"	44				
HTP-S-FH-FT-8.0×60			2-3/8"	60	2-1/8"	54				
HTP-S-FH-FT-8.0×80			3-1/8"	80	2-7/8"	74				
HTP-S-FH-FT-8.0×100	]		3-7/8"	100	3-3/4"	94				
HTP-S-FH-FT-8.0×120			4-3/4"	120	4-1/2"	114				

Note: Short lengths may resemble full thread configuration.

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

## 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

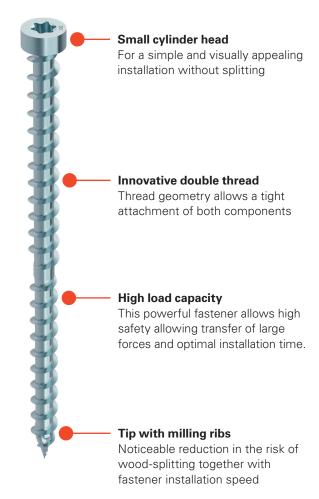
#### Design

SFS provides guidance during the design and construction phase.

#### **Approvals**

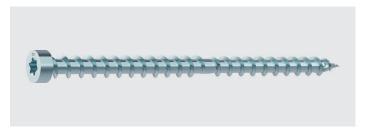


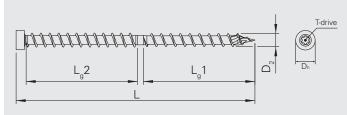




## CC







#### **Features**

- Cylinder head
- T-drive
- Double thread
- Bright zinc plated, A3K

#### **Approvals**





#### Material



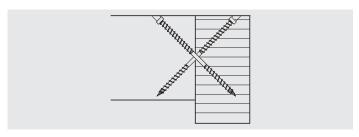


#### 1/4" (6.5 mm) and 5/16" (8.5 mm) Carbon steel timber fastener

Product code	Diameter (D <sub>2</sub> )		Nomina	Nominal length (L)		Thread length (L <sub>g</sub> )		Head dia. (D <sub>h</sub> )		Carton
type	in	mm	in	mm	in	mm	in	mm		qty
CC-T-CH-DT-6.5×100	1/4"	6.5	3-7/8"	100	1-3/4"	45	3/8"	9.0	T30	100
CC-T-CH-DT-6.5×130			5-1/8"	130	2-3/8"	60				
CC-T-CH-DT-6.5×150			5-7/8"	150	2-3/4"	70				
CC-T-CH-DT-6.5×190			7-1/2"	190	3-1/2"	90				
CC-T-CH-DT-6.5×215			8-1/2"	215	3-7/8"	100				

Product code	Diameter (D <sub>2</sub> )		Nomina	Nominal length (L)		Thread length (L <sub>g</sub> )		Head dia. (D <sub>h</sub> )		Carton
type	in	mm	in	mm	in	mm	in	mm	U	qty
CC-T-CH-DT-8.5×100	5/16"	8.5	3-7/8"	100	1-3/4"	45	1/2"	12.0	T40	100
CC-T-CH-DT-8.5×150			5-7/8"	150	2-3/4"	70				
CC-T-CH-DT-8.5×190			7-1/2"	190	3-1/2"	90				
CC-T-CH-DT-8.5×215			8-1/2"	215	3-7/8"	100				50
CC-T-CH-DT-8.5×250			9-7/8"	250	4-3/8"	110				
CC-T-CH-DT-8.5×270			10-5/8"	270	4-3/4"	122				
CC-T-CH-DT-8.5×300			11-3/4"	300	5-3/8"	138				
CC-T-CH-DT-8.5×350			13-3/4"	350	6-1/4"	158				
CC-T-CH-DT-8.5×400			15-3/4"	400	7-1/8"	182				

<sup>\*2</sup> threads each of this length.



## **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.

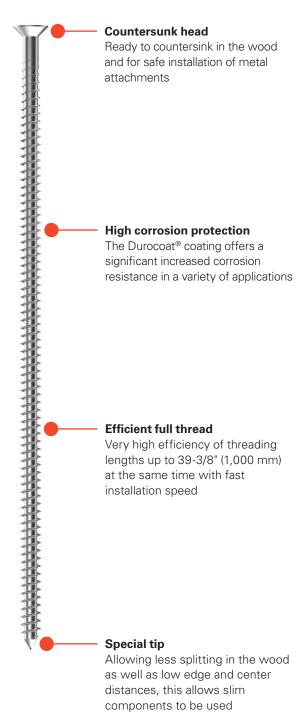
#### **Product Information**

- 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**







## WR



# T-drive L<sub>0</sub> D<sub>h</sub>

#### **Features**

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

#### **Approvals**





#### Material



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

Product code	Diameter (D <sub>2</sub> )		Nomina	Nominal length (L)		Thread length $(L_g)$		Head dia. (D <sub>h</sub> )		Carton
type	in	mm	in	mm	in	mm	in	mm	⊕	qty
WR-T-CS-FT-13.0×400	1/2"	13.0	15-3/4"	400	15"	380	7/8"	22.0	T50	25
WR-T-CS-FT-13.0×500			19-5/8"	500	18-7/8"	480				
WR-T-CS-FT-13.0×600			23-5/8"	600	22-7/8"	580				
WR-T-CS-FT-13.0×700			27-1/2"	700	26-3/4"	680				
WR-T-CS-FT-13.0×800			31-1/2"	800	30-3/4"	780				
WR-T-CS-FT-13.0×900			35-3/8"	900	34-5/8"	880				
WR-T-CS-FT-13.0×1000			39-3/8"	1,000	38-5/8"	980				

## 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  $3\times0.197\mbox{"}$  ( $3\times5\mbox{ mm}$ ) 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.

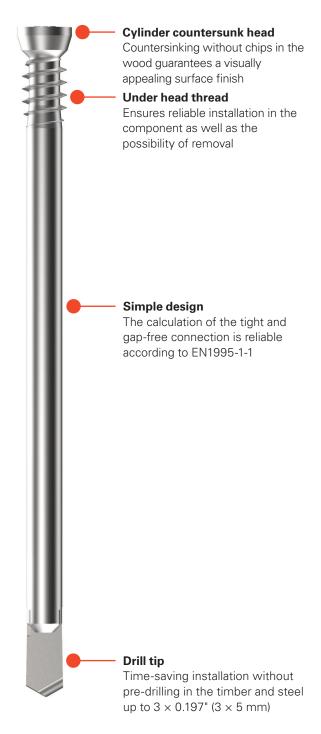
When installed the dowel does not break through the back of the connection and there is simple and reliable concealed connections.

#### **Product Information**

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

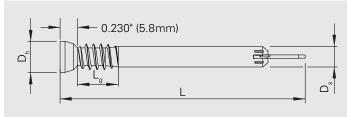
#### **Approvals**











#### **Features**

- Cylinder countersunk head
- Bright zinc plated, A2K
- Self-drilling dowel

#### **Approvals**



#### Material





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

Product code	Diame	eter (D <sub>2</sub> )	Nomina	l length (L)	Thread	length (L <sub>g</sub> )	Head	dia. (D <sub>h</sub> )	Drive	Carton
type	in	mm	in	mm	in	mm	in	mm	O	qty
WS-T-7.0×73	1/4"	7.0	2-7/8"	73	1/2"	13	3/8"	10.0	T40	100
WS-T-7.0×93			3-5/8"	93						
WS-T-7.0×113			4-1/2"	113						
WS-T-7.0×133			5-1/4"	133						
WS-T-7.0×153			6"	153						50
WS-T-7.0×173	1		6-3/4"	173						
WS-T-7.0×193	1		7-5/8"	193						
WS-T-7.0×213	1		8-3/8"	213						
WS-T-7.0×233	1		9-1/8"	233						

#### **Accessories**

Using suitable installation tools is recommended





Product code	Description	Material no.
CF-WS/M	Manual setting tool with dowel guidance	1236515
CF-WS/P	Pneumatically supported fram setting tool	730772

## **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**

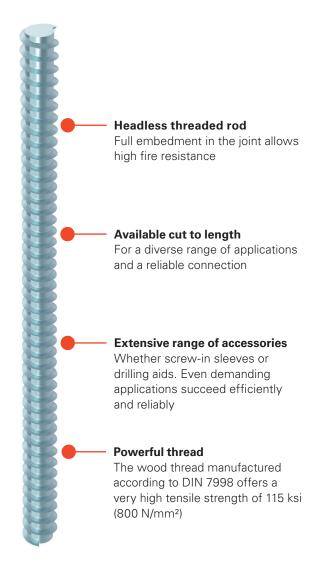
- Headless threaded rod
- High tensile strength of 115 ksi (800N/mm²)
- Available cut to length
- Easy application without glue
- Concealed connections and reinforcement

#### **Cut to length**

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

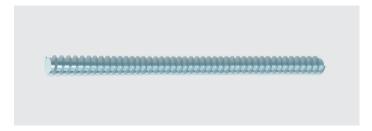
#### **Approvals**

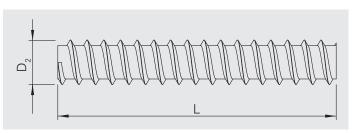




## WB







#### **Features**

- Headless
- Full thread
- Bright zinc plated, A2K
- Threaded rod

#### **Approvals**



#### Material





#### Carbon steel timber fastener

Product code	Diame	eter (D <sub>2</sub> )	Nomina	l length (L)	Thread	length (L <sub>g</sub> )	Head	dia. (D <sub>h</sub> )	Drive	l
type	in	mm	in	mm	in	mm	in	mm		qty
WB-T-16.0×3.000	5/8"	16.0	118-1/8"	3,000	118-1/8"	3,000	-	-	-	5
WB-T-20.0×3.000	13/16"	20.0								

#### **Accessories**

Using suitable installation tools is recommended





Product code	Description	Qty.	Material no.
DWA-12-M7	Drill bit for WB-T-16	1	1119336
DWA-15-M9	Drill bit for WB-T-20		1119337
DWA-12-ZA-SET	Drill set for WB-T-16		1112594
DWA-15-ZA-SET	Drill set for WB-T-20		1112595







Product code	Description	Qty.	Material no.
ZE-16-WB	Insertion sleeve Ø16 mm	1	1039597
	Setting tool with 1/2" socket wrench drive		
ZE-16-WB-blunt	Insertion sleeve Ø16 mm		1333186
	Setting tool with 1/2" socket wrench drive		
ZE-20-WB	Insertion sleeve Ø20 mm		1039598
	Setting tool with 1/2" socket wrench drive		

## **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 VB-mounting solutions by SFS.

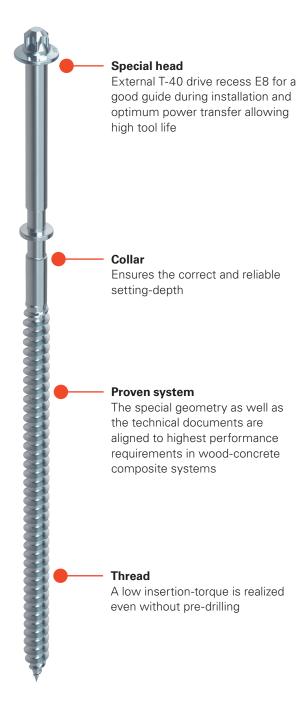
The complex fastener geometry developed and manufactured for this application ensures proper function in this demanding application. Coupled with ergonomic installation tools, comfortable and precise angled installation is achieved, ensuring the proper composite action. Speed and reliability of the system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

#### **Product Information**

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

#### **Approvals**





## **VB**



# 2-3/16" (55 mm) L<sub>o</sub>

#### **Features**

- Special head
- T-drive
- Partial thread
- Bright zinc plated, A2K
- Timber-concrete composite

#### **Approvals**



#### Material



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

Product code*	Diam	eter (D <sub>2</sub> )	Nomin	al length (L)	Thread	d length (L <sub>g</sub> )	Head	dia. (D <sub>h</sub> )	Drive	Carton
Туре	in	mm	in	mm	in	mm	in	mm		qty
VB-48-7.5×100	5/16"	7.5	6-1/8"	155	4"	100	1/2"	12.0	external	100
VB-48-7.5×165			8-5/8"	220	6-1/2"	165			T40	

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

#### **Accessories**

Using suitable installation tools is recommended







Product code	Description	Qty.	Material no.
CF-VB/L	Stand-up setting tool	1	1130228
V40-15VB	Insert bit	1	98173
ZA1/4"-CF-WS/M	Magnetic bit holder	1	1659455



# **Accessories**

## **Special HD bits**

for ultimate drive stability when installing SFS timber fasteners

	Product	Description	Drive	Qty.	Material no.
DZEC HECO	HD-20 drive bit	1/4" HEX×2"	T20 wedgefit	3	1205168
72HT HECO HD 30	HD-30 drive bit		T30 wedgefit		1205169
330X HECO HD-40	HD-40 drive bit		T40 wedgefit		1205170
III HECO	HD-20 drive bit	1/4" HEX×1"	T20 wedgefit	10	1205164
1285 HECO HD-23	HD-25 drive bit		T25 wedgefit		1205165
III HECO	HD-30 drive bit		T30 wedgefit		1205166
NECO (1020)	HD-40 drive bit		T40 wedgefit		1205167
HECO POINTAINE CONMINING	Bit-set-HD-11×	Bit Box "Selector" 1× HD10,15,25 2× HD30,40 3× HD20 1× ClicFix bit holder	-	1	1205178
◆ NGY HEGO	Magic flip, magnetic	1/4"	HEX×8"		1205175
OGEN A	ClicFix, magnetic				1205057

### **HTP and WR bits**

	Product	Description	Drive	Qty.	Material no.
	ZA HEX 11.5-5/16-WR	Telescoping drive bit assembly holds fastener head captive for effortless installation		1	1205173
T40	T40 drive bit*	5/16"×2"	T40*		1205176
116	T50 drive bit*				1205177

<sup>\*</sup>Use independent or with ZA HEX tool 5/16"

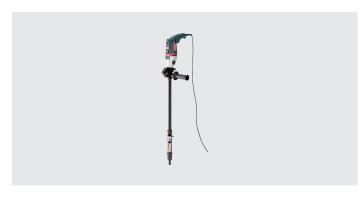
#### **HTP** washers

Product	Diameter	Qty.	Material no.
HTP countersunk head 90° washer	8mm screw/ 25mm washer	1	1204958
HTP countersunk head 90° washer	10mm screw/ 30mm washer		1204959

## WB bits and insertion sleeves

Product	Description	Qty.	Material no.
DWA-12-M7	Drill bit for WB-T-16	1	1119336
DWA-15-M9	Drill bit for WB-T-20		1119337
DWA-12-ZA-SET	Drill set for WB-T-16		1112594
DWA-15-ZA-SET	Drill set for WB-T-20		1112595
ZE-16-WB	Insertion sleeve Ø16 mm Setting tool with 1/2" socket wrench drive		1039597
ZE-16-WB-blunt	Insertion sleeve Ø16 mm Setting tool with 1/2" socket wrench drive		1333186
ZE-20-WB	Insertion sleeve Ø20 mm Setting tool with 1/2" socket wrench drive		1039598

# CF-VB/L



#### **Technical Data**

Material no.	1119336
Power supply	230 V
Absorbed power	1100 W
Full load regime	2800 rpm
Overall length	9.4"/240 mm
Height	39.7"/1008 mm
Weight	9.5 lbs/4.3 kg
Angle control	45° level on tool

#### **Application**

Manual laying machine for VB connectors.

# **DWA-Box**



#### **Technical Data**

Aluminum guide and wick support straps

Drill length 1500 mm

Drill length 2300 mm

Compressed air connection for chip evacuation

#### **Application**

Rod air drill kit for WB. Provided with 16 mm screwdriver chuck.

Product code	Drill diameter	Qty.	Material no.
DWA-12-BOX	12	1	1170391
DWA-15-BOX	16		1358172
DWA-12-15-BOX	12 and 16		1067217

# CF-WS/P



#### **Technical Data**

Material no.	1017417
Power supply	230 V
Absorbed power	1200 W
Full load regime	1600 rpm
Weight	193 lbs/87.5 kg

#### **Application**

Installation machine with pneumatic assistance for fast and economical installation of WS pins.

# **CF-WS/M**



#### **Technical Data**

1067215
230 V
1200 W
1600 rpm
16"/410 mm
31"/790 mm
17 lbs/7.5 kg

#### **Application**

WS manual pin setting machine.

SFS Group USA, Inc. Division Construction 1045 Spring Street US-Wyomissing, PA 19610

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