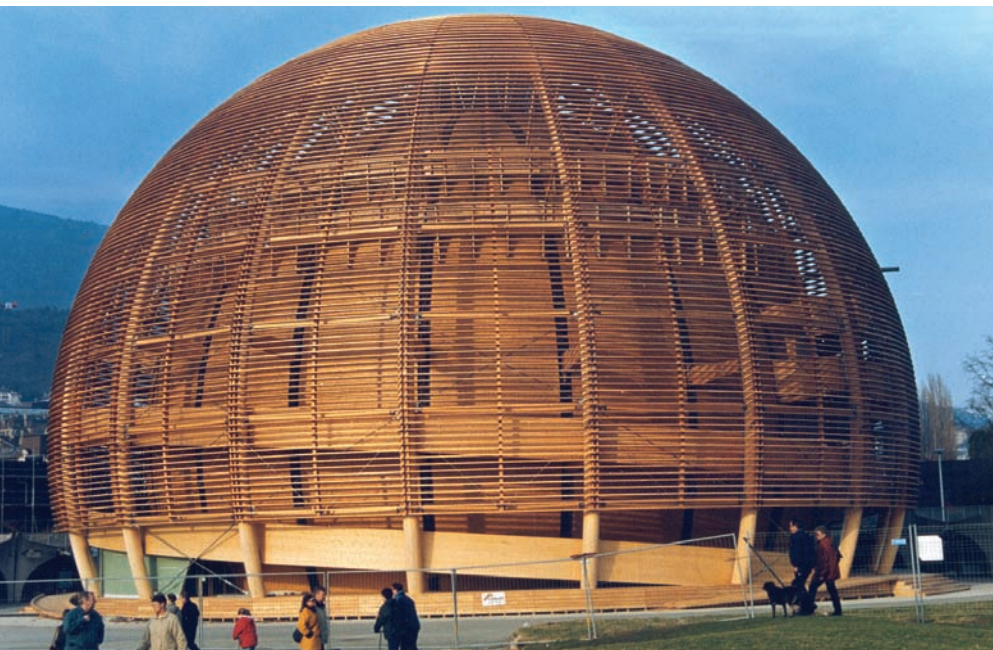


**Inspiring versatility and performance:
the WT fastening system for cost-effective,
durable joints in structural timberwork.**



Innovative design concepts or simple timber joints: the WT fastening system is always a convincing solution.



Implementing unusual solutions simply and cost-effectively

Well-conceived fastening solutions are called for to implement creative, efficient design methods efficiently and cost-effectively in structural timberwork.

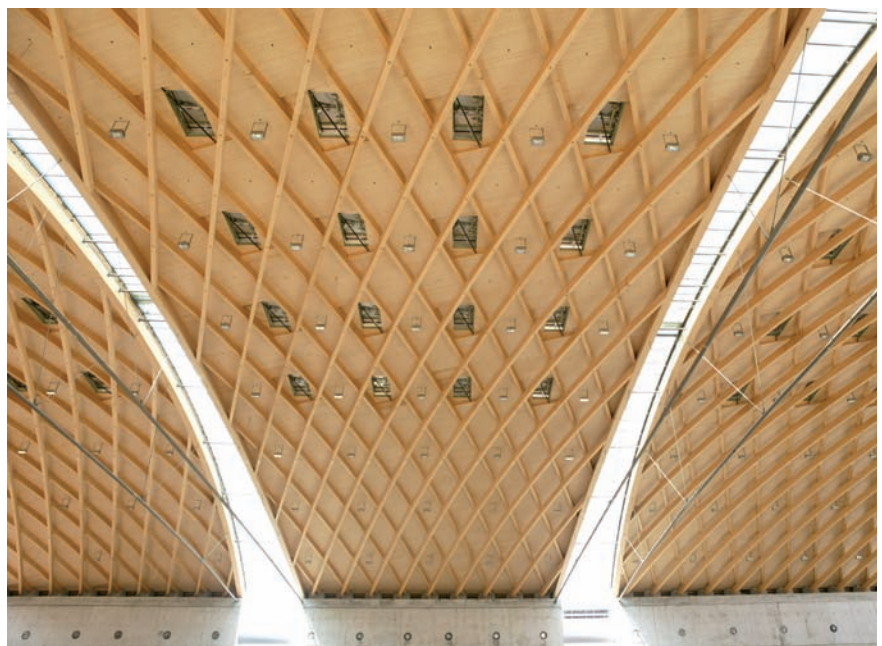
With the new WT system by SFS intec, innovative architects and engineers can implement unusual design concepts inexpensively, without compromising on safety and aesthetic aspects. This efficient fastening system offers convincing advantages both for implementing highly complex engineering structures and also in structural timberwork.

< Palais de l'Equilibre, CH-Neuchâtel

Significantly enhanced productivity in prefabricated buildings, pitched roof and siding structures, and general carpentry work

Filigree batten joints or heavily loaded purlin reinforcement: the WT system is a convincing solution for a wide variety of applications.

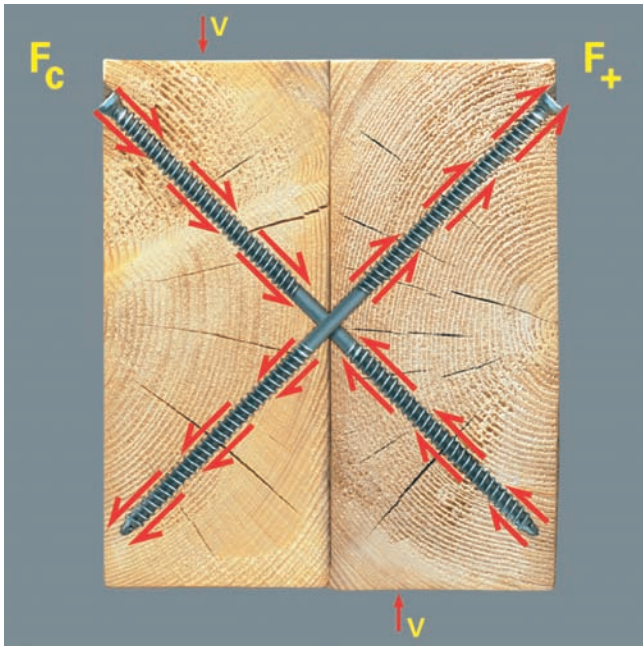
Where several fastening methods have had to be used to date, one system can now be employed. The WT system leaves nothing to be desired, either in prefabricated buildings or in carpentry work. Contractors and installers benefit equally from the elimination of operations, user-friendly installation and easy integration in existing workflows.



Cover:
ÖBF AG, office building
Architects: Herwig, Ronacher (Austria)

New exhibition halls, DE-Karlsruhe >

Reap potential benefits at several levels: contractors, project engineers and installers benefit equally.



Efficiency that pays off

The WT system offers convincing advantages over conventional fastening elements such as nails, commercial wood screws or shaped sheet metal parts:

■ Time and cost reductions

Structural timber components are connected with the WT special fastener in a single operation, without any pilot drilling. This enables significant time and cost reductions to be achieved.

■ Inventory savings

A wide range of potential uses means that different traditional fastening methods can be replaced. Besides simplifying materials management, this also results in inventory savings.

■ Easy, reliable calculation

An extensive selection of basic calculation aids catering for the different applications in structural timberwork facilitates easy, reliable calculation of the joints



Bridge Leonardo da Vinci, Norway; Photograph: Terje Johansen

Capability that gives you security

■ High load-bearing capacity

The WT system guarantees maximum security through optimum installation quality and the absorption of enormous forces. For example, characteristic forces of up to 4.0 tonnes can be absorbed by a main/secondary purlin joint.

■ Durable joint

The double thread of the WT special fastener pulls the structural components tightly together so that any loss of initial stress is impossible. The cohesive forces are also optimally coordinated during changes in moisture content of the timber, and exceptional anti-corrosion protection assures the joint of a long service life.

Outstanding user-friendliness

Even the most ingenious fastening methods only achieve the desired effect if they are used properly and accurately – from the first installation point in the building project to the last.

■ Fast, secure installation

Well-conceived setting tools are available with the WT system, designed for the wide variety of applications in structural timberwork. They facilitate the efficient, accurate installation of the fasteners as well as fatigue-free working over longer periods.

■ Structural advantages

Particularly worth mentioning are the high fire resistance due to the concealed location of the fasteners and the elimination of heat bridges.

■ Aesthetic aspects

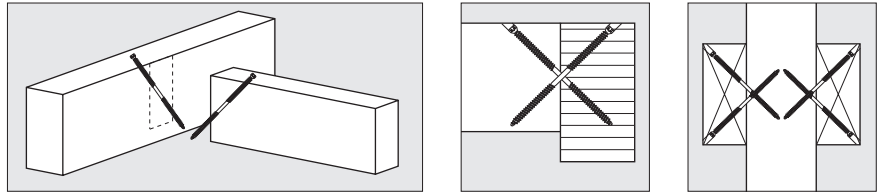
The special geometry of the fasteners enables them to be countersunk systematically in the timber. This can be of decisive importance, especially as regards aesthetic aspects when implementing prestigious projects.



The ideal solution for numerous applications in structural timberwork: the WT fastening system, simply convincing.

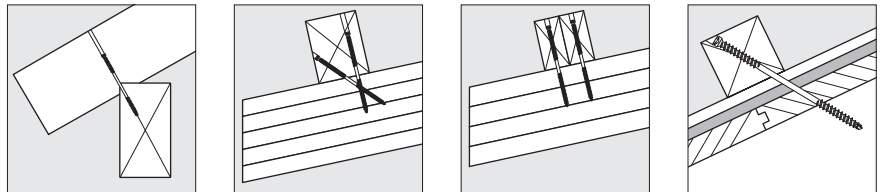
Joining main/secondary purlins, posts and rails

Whether in the workshop or on the building site, the WT system enables joints with high load-bearing capacity to be produced easily, quickly and invisibly.



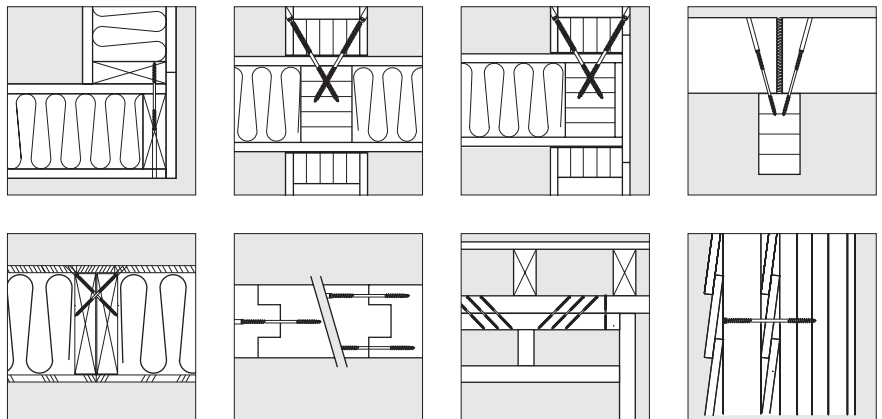
Joining rafters and purlins

Significantly shorter assembly time with exceptionally high load-bearing capacity are the advantages when joining rafters and purlins.



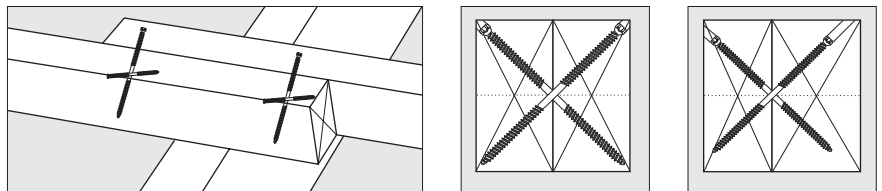
Prefabricated buildings

The WT system facilitates joints in floors, roofs and walls. The fasteners function under tensile, compressive and shearing forces and can be installed at different angles. Huge savings in working time, high performance and system reliability are convincing advantages.



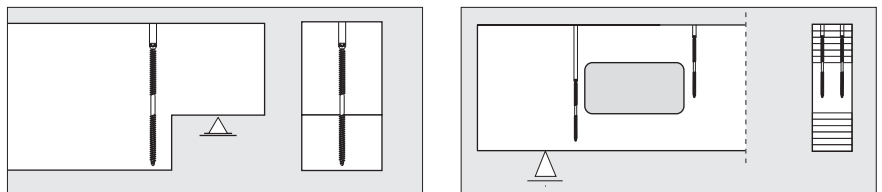
Coupling purlins

No pilot drilling, easy installation, no tightening-up: there's no faster, better or more durable method of joining coupling purlins.



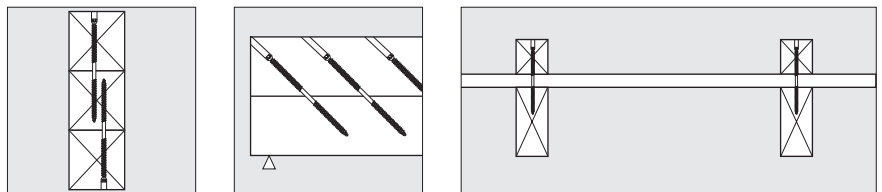
Notching and penetrations

The WT system makes the complicated reinforcement of weakened cross-sections easy. The joints retain their total operating capacity even during temperature fluctuations.



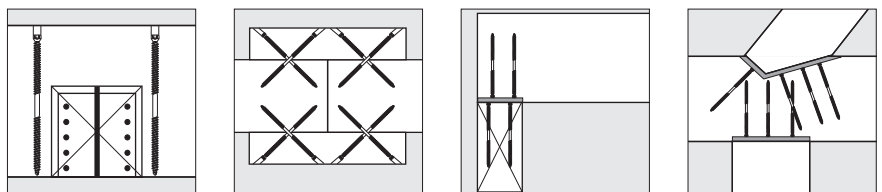
Composite purlins and doubling-up

Dowelled purlins and ceilings can be produced cost-effectively in renovation projects or new buildings. The joint is invisible and very rigid.



Other spheres of application

- tie joints
- screw-press-gluing
- lateral tensile and compressive reinforcement and many other applications.



WT fastening system: the new benchmark for durable, attractive timber/timber joints.

Fastener range

WT-S-6,5 x L

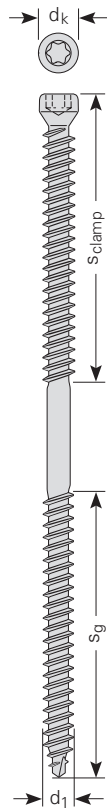
Material: stainless steel A2
(1.4567)
Surface finish: waxed
Thread-Ø: 6.5 mm

WT-T-6,5 x L

Material: carbon steel
Surface finish: Durocoat
Thread-Ø: 6.5 mm

WT-T-8,2 x L

Material: carbon steel
Surface finish: Durocoat
Thread-Ø: 8.2 mm (s_g)
and Ø 8.9 mm (s_{clamp})



Fastener range WT-S-6,5 x L									
Type	Material	Thread-Ø	Length	s_g	s_{clamp}	d_k	Bit		
	S = stainless steel	d_1 [mm]	[mm]	[mm]	[mm]	[mm]			
WT	- S	- 6,5 x	65	28	28	8.0	T30		
WT	- S	- 6,5 x	90	40	40	8.0	T30		
WT	- S	- 6,5 x	130	55	55	8.0	T30		

Fastener range WT-T-6,5 x L									
Type	Material	Thread-Ø	Length	s_g	s_{clamp}	d_k	Bit		
	T = carbon steel	d_1 [mm]	[mm]	[mm]	[mm]	[mm]			
WT	- T	- 6,5 x	65	28	28	8.0	T30		
WT	- T	- 6,5 x	90	40	40	8.0	T30		
WT	- T	- 6,5 x	130	55	55	8.0	T30		
WT	- T	- 6,5 x	160	65	65	8.0	T30		
WT	- T	- 6,5 x	190	80	80	8.0	T30		
WT	- T	- 6,5 x	220	95	95	8.0	T30		

Fastener range WT-T-8,2 x L									
Type	Material	Thread-Ø	Length	s_g	s_{clamp}	d_k	Bit		
	T = carbon steel	d_1 [mm]	[mm]	[mm]	[mm]	[mm]			
WT	- T	- 8,2 x	160	65	65	10.0	T40		
WT	- T	- 8,2 x	190	80	80	10.0	T40		
WT	- T	- 8,2 x	220	95	95	10.0	T40		
WT	- T	- 8,2 x	245	107	107	10.0	T40		
WT	- T	- 8,2 x	275	122	122	10.0	T40		
WT	- T	- 8,2 x	300	135	135	10.0	T40		
WT	- T	- 8,2 x	330	135	135	10.0	T40		

Installation aids

We offer appropriate accessories, from simple universal templates to special tools for individual applications. Our consultants will be pleased to assist you in making the right choice.

Principles of calculation

Detailed planning documentation catering for a very wide range of applications ensures easy, reliable calculation. For special applications our structural timberwork consultants will be pleased to assist you in selecting the most efficient and cost-effective fastening method.



More information:

If you have any questions about fastening technology, just call us. We'll be pleased to advise you!

Setting tools and accessories (extract)

Application	Tools/Accessories	Fastener	Tools/Accessories
Main/secondary purlins, dowelled purlins, prefabricated building, etc.	ZLWT/U universal template 	WT-T-8,2 x L WT-S/T-6,5 x L	BO 1055 screwgun
Main/secondary purlins	ZLWT/MS setting tool 	WT-S/T-6,5 x L L max.: 130 mm	DI 650 screwgun
Main/secondary purlins	ZLWT/S purlin support 	WT-T-8,2 x L WT-S/T-6,5 x L	WT-T40/D10 adapter WT-T30 adapter
Coupling purlins	ZLWT setting tool 	WT-T-8,2 x L WT-S/T-6,5 x L	T40 bit, lengths 70, 152, 200, 350 and 520 mm T30 bit, lengths 70, 200 and 350 mm



A strong partner in mechanical fastening with an international presence.

Fastening technology you can rely on

As a manufacturer of fastening systems SFS intec has set standards for many years based on its long experience of the market and intensive research and development work. Numerous innovations which have proved their qualities millions of times all over the world are tangible evidence of this fact. Manufacturing know-how accumulated over many years in production plants in various European countries and the USA makes SFS intec a highly qualified partner in the field of mechanical fastening technology.

Assured quality

The high quality standards by SFS intec's products and services are guaranteed by a dynamic quality assurance system and extensive testing in the company's own test laboratories. It goes without saying that our fasteners have been awarded the necessary approvals, test reports and certificates issued by national and international testing institutions.

