

FASTENERS FOR TIMBER CONSTRUCTION





Fully automated warehouse logistics

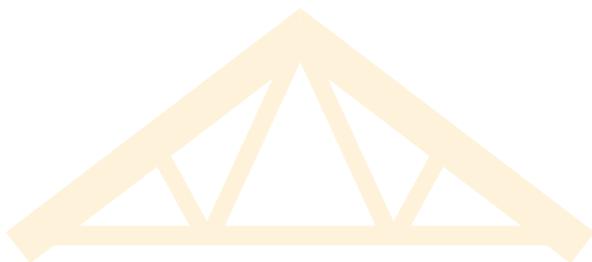
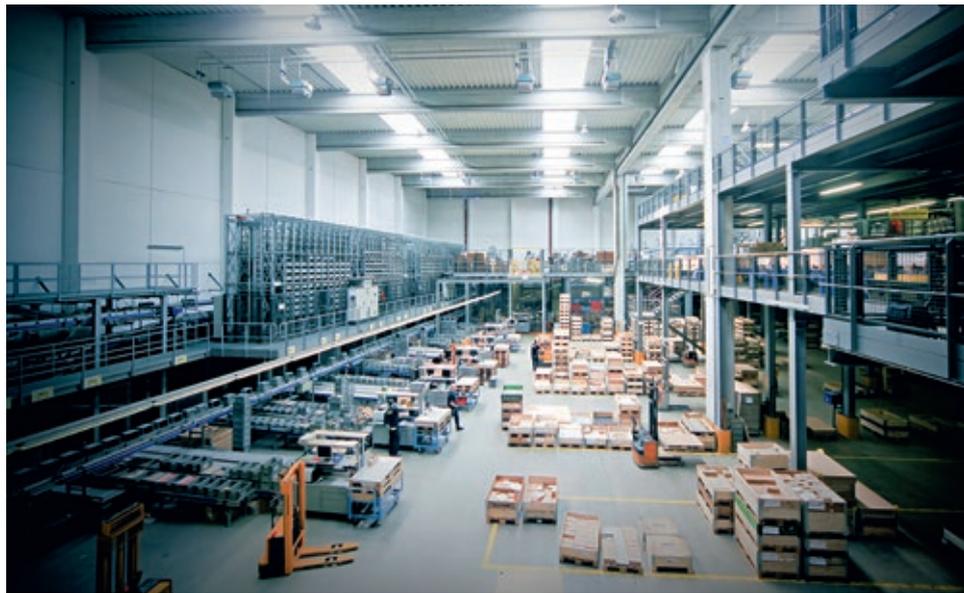


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■ About REYHER

With over 130 years' experience REYHER is one of the leading wholesalers of fasteners and fixing technology in Europe and serves trade and industry customers worldwide.

At its central location in Hamburg over 700 staff ensure a daily delivery rate for c-parts of over 99% using individual, flexible solutions.





Timber construction industry

■ Wood building industry – traditional methods with a great future

Even in these times when steel and concrete are the dominant building materials, traditional timber construction methods are in no way obsolete. On the contrary: Roof trusses are primarily made of wood and in recent years more and more houses are being built with prefabricated wood construction elements. On average every sixth house is made of wood. In addition to considerable construction time saving other advan-

tages of this building method are generally high energy efficiency and comparatively low cost. In addition wood is also used for children's adventure playgrounds and carports. The timber construction sector has in recent years shown a continual growth in turnover. The German master carpenters association – Bund Deutscher Zimmermeister – expects growth to continue. The prospects for the coming years are good.

■ REYHER and timber construction

Timber presents special challenges for fasteners with respect to quality and safety. In the sector REYHER is known for its high quality standard, wide product range and expertise in the special requirements set by the customers and the demands of the sector. In our product portfolio we have chipboard screws (with CE markings in line with DIN EN 14592) and wood building screws (with CE markings in line with ETA-12/0276) and other fasteners and fixing technology required in timber construction. Alongside articles from wellknown pro-

ducers, REYHER has other high grade fasteners for timber construction. Manufacturers' relevant Declarations of Performance in line with the construction products regulation (CPR) for various articles, are available on our website www.reyher.de. REYHER is a reliable partner not only for product quality, but also when it comes to deliveries and services. A daily fill-rate of over 99 percent ensures fast, reliable supplies. Needs orientated compiling of articles into sets makes assembly easier.



■ Individual kitting

REYHER Kitting & Packaging – RKP provides individualized kitting according to needs. Whether for production or assembly, we compile the components required into sets or assembly kits to fulfil timber construction needs. Reyher also offers pre-assembly of single components and on request adds assembly instructions, tools or other materials. The customer individually chooses the products and services required.



■ Flexible kanban supply systems

REYHER Order Management – ROM ensures reliable kanban material supplies for production. The modular system helps to reduce procurement costs and error sources. Many modules can be combined to cover logistics service parameters and electronic requirements, all individually crafted to meet the needs of timber construction. The kanban solutions can easily be integrated into existing logistics processes and are ideal for high frequency as well as sporadic needs. Our experienced project team will accompany you throughout the entire process from the planning stage to system implementation.



■ REYHER – your partner in timber construction

- ▶ A wide variety of articles in stock available for immediate delivery
- ▶ Articles with CE markings in line with DIN EN 14592 and ETA
- ▶ Wood building screws with milling ribs, end mill/shank cutter and thread tip with countersunk slits
- ▶ Engineered and customer-specific parts
- ▶ Individualized kittings
- ▶ Comprehensive e-business solutions
- ▶ Reliable material supplies with flexible Kanban supply systems
- ▶ Daily fill-rate of over 99%

■ Comprehensive e-business solutions

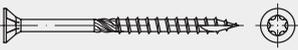
To make sourcing as rational and efficient for you as possible, we offer a variety of e-business solutions. Our customers can access RIO – REYHER Internet Order Webshop round the clock and see current prices and availability and place direct orders. Our electronic catalogs can be individually adapted to your needs and import article data into your existing procurement system. REYHER provides the catalogs in numerous formats such as Excel, CSV, BMEcat or DATANORM. In addition, the catalogs may contain classification systems such as eCl@ss or UNSPSC.





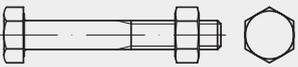
■ Wood building screws with countersunk head or flange head/countersunk washers
CE according to
ETA-12/0276



REYHER article	Article no.	Designation	Dimensions in mm Nominal-Ø x length	Directly to the webshop
 CE acc. to ETA-12/0276	89091	Wood building screws with countersunk head, mill cutter and threaded tip with scraper groove, zinc plated (ZP)	3,5 x 20 – 10 x 400 mill cutter available starting at the following sizes: 3.5 x 30 4 x 30 4.5 x 40 5 x 40 6 x 60 8 x 80 10 x 100	
 CE acc. to ETA-12/0276	89184	Countersunk washers for Wood building screws, zinc plated (ZP)	B 6, B 8, B 10	
 CE acc. to ETA-12/0276	89092	Wood building screws with flange head, mill cutter and threaded tip with scraper groove, zinc plated (ZP)	6 x 40 – 10 x 450	

■ Bolts with hexagon nut
CE according to EN 14592



REYHER article	Article no.	Designation	Dimensions in mm Nominal-Ø x length	Directly to the webshop
 CE acc. to EN 14592	89601	Bolts with hexagon nuts, zinc plated (ZP)	12 x 100 – 24 x 660	



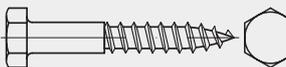
■ Chipboard screws with pan head
or countersunk head
CE according to EN 14592



REYHER article	Article no.	Designation	Dimensions in mm Nominal- \varnothing x length	Directly to the webshop
 CE acc. to EN 14592	89096	Chipboard screws, pan head, Pozidriv-cross recess, full thread, zinc plated (ZP), A 2 Note: CE marking from thread length 4 x d	3 x 10 – 6 x 100	
 CE acc. to EN 14592	89097	Chipboard screws, countersunk head, Pozidriv-cross recess, full/partial thread, zinc plated (ZP), A 2 Note: CE marking from thread length 4 x d	3 x 10 – 6 x 300	
 CE acc. to EN 14592	89098	Chipboard screws, countersunk head, hexalobular socket, full/partial thread, zinc plated (ZP), A 2 Note: CE marking starting at thread length 4 x d	3 x 12 – 8 x 140	

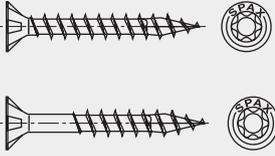
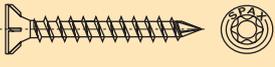
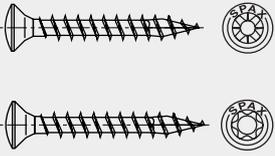
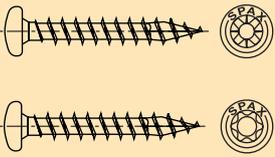
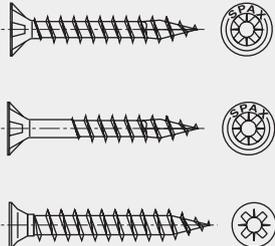
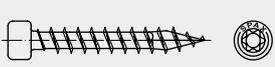
■ Hexagon wood building screw
CE according to EN 14592



REYHER article	Article no.	Designation	Dimensions in mm Nominal- \varnothing x length	Directly to the webshop
 CE acc. to EN 14592	89571	Hexagon wood building screw, zinc plated (ZP)	8 x 80; 12 x 80 – 12 x 340	



SPAX articles at REYHER

REYHER article	Article no.	Designation	Dimensions in mm Nominal-Ø x length	Directly to the webshop
	88091	SPAX Universal screws with 4CUT point, MULTI-countersunk head T-STAR plus and full thread SPAX Universal screws with 4CUT point, MULTI-countersunk head T-STAR plus and partial thread	3 x 12 – 6 x 80 (WIROX) 3 x 12 – 12 x 600 (YELLOW) 3 x 12 – 6 x 80 (A2) 3 x 30 – 6 x 300 (WIROX) 3 x 30 – 6 x 300 (YELLOW) 8 x 80 – 12 x 600 (WIROX) 3.5 x 30 – 6 x 160 (A2)	
	88196	SPAX Wood building screws with CUT point MULTI-countersunk head, T-STAR plus/ T-STAR and full thread	8 x 160 – 12 x 600 (WIROX)	
	88092	SPAX Universal screws with 4CUT point, MULTI-raised countersunk head and Pozidriv-cross recess Z SPAX Universal screws with 4CUT point MULTI-raised countersunk head and T-STAR plus	3 x 12 – 5 x 60 (WIROX) 3 x 16 – 5 x 80 (NP) 3 x 12 – 5 x 60 (WIROX) 3 x 16 – 4.5 x 50 (A2)	
	88093	SPAX Universal screws with 4CUT point, pan head and Pozidriv-cross recess Z SPAX Universal screws with 4CUT point, pan head and T-STAR plus	3 x 10 – 6 x 100 (WIROX) 3 x 10 – 6 x 100 (WIROX) 3 x 20 – 5 x 50 (A2)	
	88094	SPAX Universal screws with 4CUT point, MULTI-countersunk head and Pozidriv-cross recess Z and full thread SPAX Universal screws with 4CUT point, MULTI-countersunk head and Pozidriv-cross recess Z and partial thread SPAX Universal screws with flat counter-sunk head and Pozidriv-cross recess Z	2.5 x 10 – 6 x 240 (WIROX) 2 x 10 – 6 x 200 (YELLOW) 2.5 x 12 – 6 x 120 (browned) 3 x 12 – 6 x 100 (A2) 3,5 x 30 – 6 x 80 (WIROX) 3.5 x 30 – 6 x 90 (YELLOW) 3 x 10 – 3 x 30 (WIROX)	
	88193	SPAX HI.FORCE with 4CUT point/cutter, washer head and T-STAR plus Note: from length 160 mm with 4CUT-cutter	6 x 60 – 8 x 200 (A2) 6 x 60 – 10 x 450 (WIROX)	
	89010*	SPAX frame anchors RA with flat countersunk head and T-STAR plus	7.5 x 40 – 7.5 x 150 (WIROX)	
	89011*	SPAX frame anchors RA with cylindrical head and T-STAR plus	7.5 x 110 and 7.5 x 210 (WIROX)	
	89014	SPAX IN.FORCE for wood, glass and facade with 4CUT point, cylindrical head and T-STAR plus	6 x 80 – 8 x 450 (WIROX)	
	89015	SPAX Flooring screws with fixing thread, 4CUT point, MULTI-countersunk head and T-STAR plus	4.5 x 50 – 4.5 x 80 (WIROX)	

* without CE marking



■ Chipboard screws
Article no. 88096



■ Terrace screws
Article no. 89192



■ Spengler screws
Article no. 88296



■ Timber connector
DIN 1052



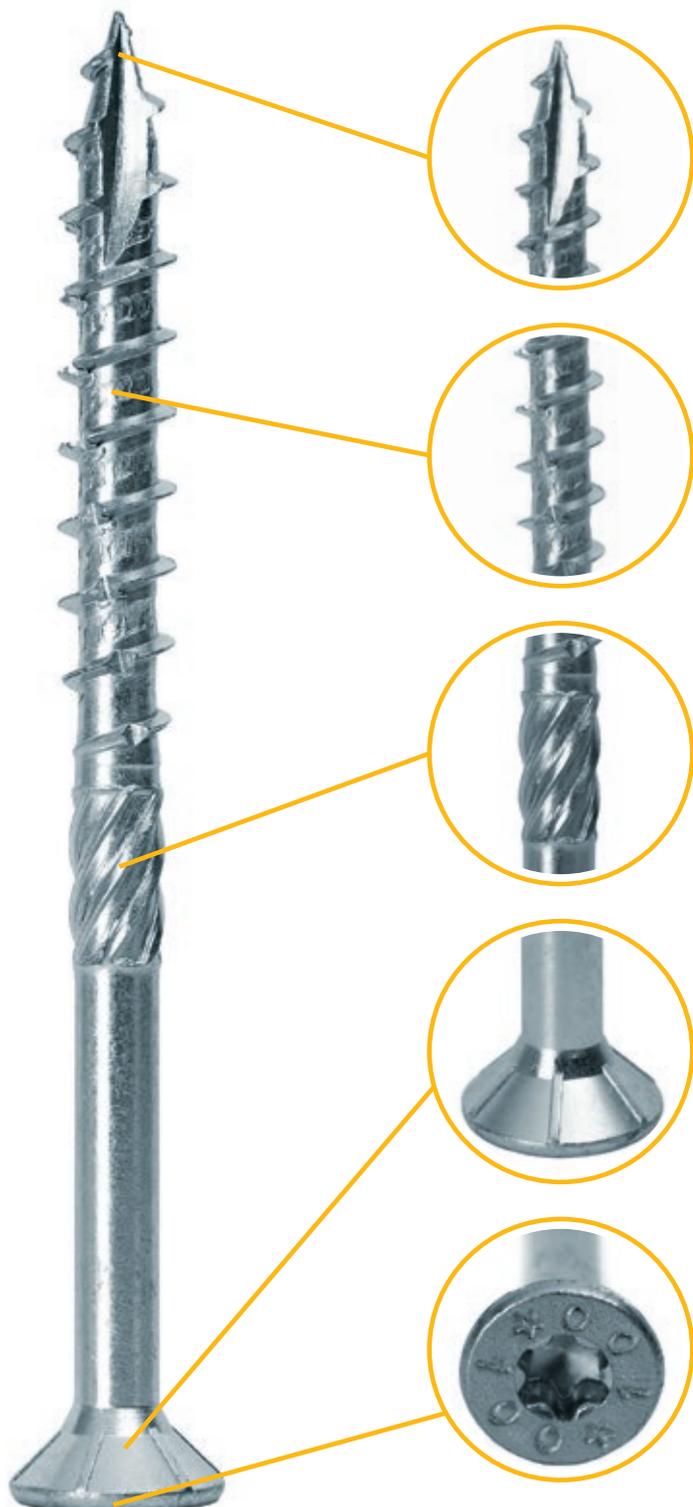
REYHER offers a comprehensive product range for timber construction.
Note: We offer you Fischer products too. All articles you can order via
our convenient webshop RIO - REYHER Internet Order.





■ Advantages of wood building screws

Wood building screws with countersunk or flange head from the REYHER product range offer considerable advantage during assembly. For example, no pre-drilling is required. An effective sliding coating also ensures a low bolting up torque.



Self-drilling, thread up to the head for easier centering

Safe, clean work with deep thread for high extraction values

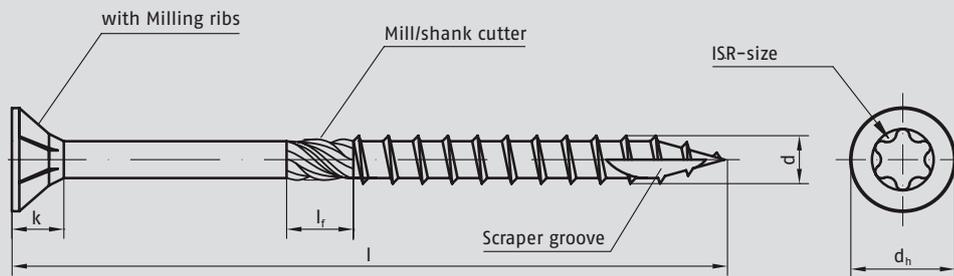
With end mill/shank cutter to screw in with less resistance

Countersunk with milling ribs for splinter-free fixing

Fast, precise force transfer countersunk or round head with TX drive, cold stamping with length specification of 6 / 8 / 10 mm diameter



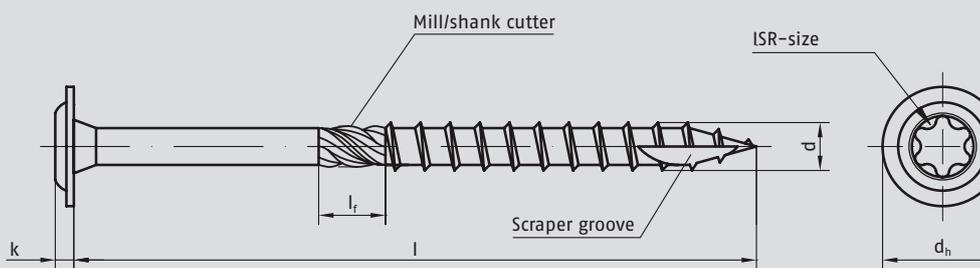
Wood building screws with countersunk head and hexalobular socket according to ETA-12/0276



Scraper groove at point or offset

d	6	8	10
dh	11.8	14.5	18
k	5.6	7	8.7
ISR-size	30	40	40
l _r	12	12	12
Length l	60 – 260	80 – 400	100 – 400
Characteristic yield moment $M_{y,Rk}$ [Nm]	9.5	20	36
Characteristic tensile capacity $f_{tens,k}$ [kN]	9.6	19	25
Characteristic breaking torque $f_{tor,k}$ [Nm]	9	24	40

Wood building screws with flange head and hexalobular socket according to ETA-12/0276



Scraper groove at point or offset

d	6	8	10
dh	15.3	22	25
k	3.1	3.4	4
p	4.5	5.2	5.6
ISR-size	30	40	40
l _r	12	12	12
Length l	60 – 200	80 – 400	100 – 400
Characteristic yield moment $M_{y,Rk}$ [Nm]	9.5	20	36
Characteristic tensile capacity $f_{tens,k}$ [kN]	9.6	19	25
Characteristic breaking torque $f_{tor,k}$ [Nm]	9	24	40



■ Proven safety meets the highest demands

There are special regulations for the use of construction products, which guarantee high quality standards. They are listed in EU regulation no. 305/2011 also defined in the EU Construction Products Regulation (CRP). In 2013, this entirely replaced regulation 89/106/ EEC with immediate force with no transitional period. In accordance with the CRP and further regulations, construction products are to be inspected during production, to ensure constant fulfilment of the product requirements. All products for timber construction are affected. The inspections are carried out either on the basis of the harmonised European standards or European Technical Approval (ETA). When all inspections are successfully completed, it is mandatory that the product is given a CE marking. The user can then easily identify that the product meets the necessary requirements. A further proof of the products' performance efficiency is the Declaration of Performance. This replaces the previous declaration of conformity. This document shows the user the concrete performance

data of the product. All wood products from REYHER have a clearly visible reference to this statement. This ensures the highest transparency, enabling you to clearly identify the products without difficulty.

► **Declarations of Performance available for download:**
www.reyher.de



■ Note

Basically the individual requirements on fasteners in the steel/metal sector and wood interior construction are to be differentiated. In steel and metal construction as well as wood construction the same products can be used e.g. hexagon head bolts in line with ISO 4014/4017, and nuts in line with ISO 4032. These products are subjected to different methods of evaluation for the CE marking, depending on their application, which means each user takes a high responsibility for specifying which application requires which CE marking.



■ CE markings for timber construction

The basis for qualification of a product for timber construction is stated in the EU building product regulations. This states that product regulations can be defined either to harmonise with European Standards or in the European Technical Approvals – ETA. Building product manufacturers can request an ETA when there are none or only one insufficient harmonised standard available.

For general applications and products the relevant standard is DIN EN 14592. This defines which properties a product must have and how this is to be checked to ensure a high safety level.

For special applications and the highest performance characteristics, REYHER carries a range of wood building screws in line with ETA-12/0276 or with approvals of the manufacturer SPAX.

With its timber construction range REYHER pursues various paths for each product to reach the optimal qualification taking performance characteristics and cost into account.

Product group	Qualification	Application
Wood building screws R 89091, R 89092 and Countersunk washer R 89184	ETA-12/0276	Timber construction with highest demands and best processing properties
Bolts R 89601	EN 14592	Timber construction – metric thread
Hexagon wood building screw R 89571	EN 14592	Timber construction – wood building screw thread
Chipboard screws R 89096, R 89097, R 89098	EN 14592	Timber construction – chipboard screw thread
SPAX-range	ETA-12/0114	Timber construction – chipboard screw thread i. a.



Adventure playground



Carport



Roof structure



Pre-fabricated house



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