

The latest in structural timber building design and technologies

2018 STRUCTURAL TIMBER AWARDS JUDGES CHOICE WINNER OF WINNERS - THE MACALLAN DISTILLERY

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TOUCH OF GENIUS

The architectural and engineering approach behind The Macallan Distillery

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WINNING PROJECTS

All the 2018 winners in more detail

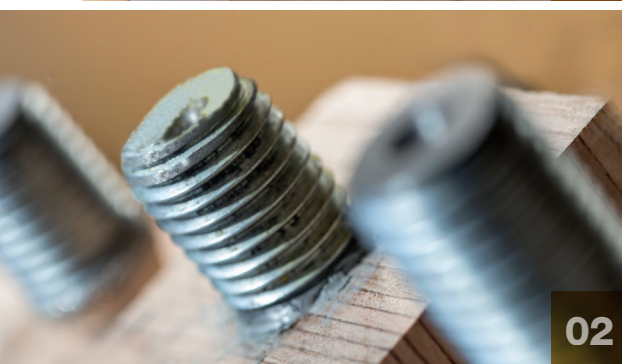
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TIMBER CONNECTORS

neue Holzbau, GSA® Technology and high performance



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EXAMPLES – AROUND THE WORLD (INCLUDING UK PROJECTS)

With the development of GSA® Technology, neue Holzbau AG has established itself as a leader in timber connector techniques. The following show the diversity of our company:

- Tesco Store, UK
- Community Centre, UK
- Pavilion, Olympic Winter Games Sochi, RUS
- Porta Nuova Garibaldi, Milano, IT
- Entry Portal in Oak, Volvo Munich, DE
- Jesus College, Cambridge, UK
- The Field Centre, UK
- Somerstown Community Centre, UK
- Lower James Street, London, UK
- NWCD, Birmingham, UK
- Schoolhouse North Strathfield, AUS
- Dome Structure, AZE
- Buga Garden Trade Fair, Koblenz, DE



International Ltd

High Performance in Timber Construction

We stand for quality, innovation, reliability and construction excellence since 1983. neue Holzbau AG are specialists in timber construction engineering and our GSA® Technology is unique and innovative. We are key partners in our industry and are a link between timber construction, architects and contractors. Whether you prefer advisory services, engineering services or the total project package from the beginning to completion, we are happy to accommodate your needs. We specialise in designing high-performance connectors and we research new connector technologies, bonding techniques and the use of different types of timber including hardwood.

PRODUCTION TECHNIQUES

Our planning department is very experienced, capable and efficient and thanks to our direct relationship with production, we can advise you in each step of the process so you can reap the benefits of our experience as we guide you through every project phase. From your plans, we can undertake the engineering, shop drawings and materials list as well as production process. We will organise the transport and logistics, 'pack and go' and will deliver the products to the site 'just in time'.

We will support you in the assembly and fitting. Our latest CAD/CNC technology and user-friendly plugs bring a high level of efficiency to the project. In our research laboratory, we are developing new possibilities with the use of 3D technology for timber construction engineers and if required, we can also provide an informative 3D visualisation for your customers.

GSA TECHNOLOGY

GSA® Technology is currently the highest performing and most complete connector system in timber construction.

Together with Professor Ernst Gehri, neue Holzbau AG has developed GSA® Technology, an innovative connector system for timber projects. GSA® Technology is a high-performance connection technology for modern timber engineering, in which threaded steel rods are glued to glulam and hardwood with epoxy resin. We have been implementing this system for two decades, and GSA® Technology can be found in more than 2,000 projects worldwide. Our in-house research laboratory allows us to test specific objects and quickly present relevant certification.

GSA® Technology offers a number of key advantages:

- Standardised system – this means high availability and a short response time.
- Higher level of completion – this means a higher level of precision and quality, as well as lower costs.
- Architecture – aesthetically appealing, nearly invisible connections.
- Fire prevention – the connectors are protected, thereby improving fire behaviour.
- Efficient assembly due to the plug GSA® connector elements.

neue Holzbau AG has over 10 years of experience in manufacturing glulam made of hardwood. Hardwood shows strength values that exceed the more frequently used construction timber made of pinewood. Especially its crush resistance and tensile strength, but also its fibre-parallel push and pull stability that considerably exceeds the quality of pinewood. Furthermore, the significantly higher efficiency of the fastener in the hardwood plays an important role.

BUILD WITH TIMBER – PROTECT THE ENVIRONMENT

Burning timber releases the same amount of CO₂ that the tree absorbed during its growth. When used for building, the CO₂ is stored. A total of 766 kilograms of CO₂ is stored in one cubic metre of spruce, while ash and beech store 1,125 kilograms of CO₂ per cubic metre. Each year we process nearly 9,000 cubic metres of timber and store around 7,500 tons of CO₂. A car emits an average of 200g of CO₂ exhaust fumes per kilometre. So 7,500 tons equals around 37.5 million kilometres of exhaust fumes. It's clear that our customers make a huge contribution to protecting the environment.

IMAGES:

1 & 2. GSA® Technology. Courtesy Holzbautechnik Burch AG, Sarnen, 3. New tennis halls, Bürgenstock Hotels & Resort. Courtesy Emanuel Ammon, Aura Fotoagentur / neue Holzbau AG 4. Tribune Kulm Hotel, St. Moritz. Courtesy A. Freund Holzbau GmbH, Samedan / Hr. Pfeffinger / neue Holzbau AG, 5. New assembly hall PC24 Pilatus Aircrafts, Stans. Courtesy Pilatus Aircraft Ltd, Stans, neue Holzbau AG, 6. Jesus College, Cambridge: Courtesy neue Holzbau AG, 7. Team n'H International for the UK market Jurg Stauffer (Engineer) with Reto Schneider (Sales)

For more information visit: www.neueholzbau.ch/en