SHERPA news

THE MAGAZINE SHERPA
Issue 8/2024

WILD ANGLE
JUST LIKE IN NATURE
Connected by SHERPA: The wood connectors lend the Haus der Wildnis in Lunz am See shape and support.

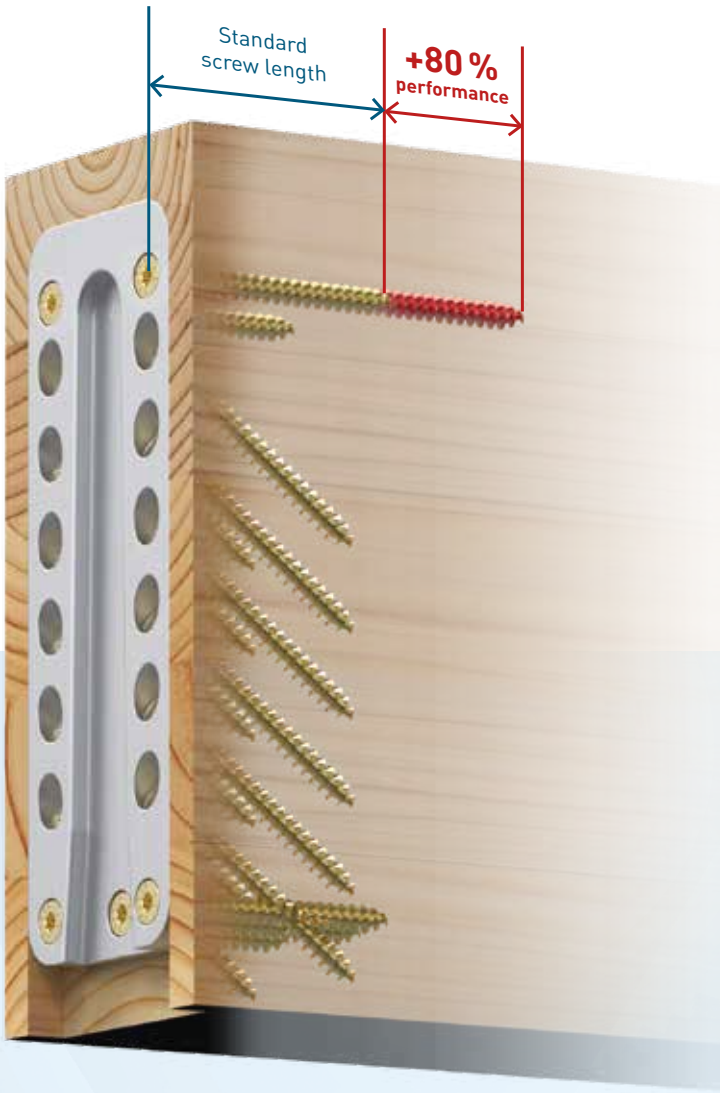
SOUND OF SONUS
Strong partners ensure performance

SYSTEM RIGIDITY
Influences on the main and ancillary girder connections

INTERVIEW
Detlef Heck on the future of wood construction

SYSTEM SCREWS

Longer screws **+80 % more performance**



Longer screws provide increased performance while reducing costs.

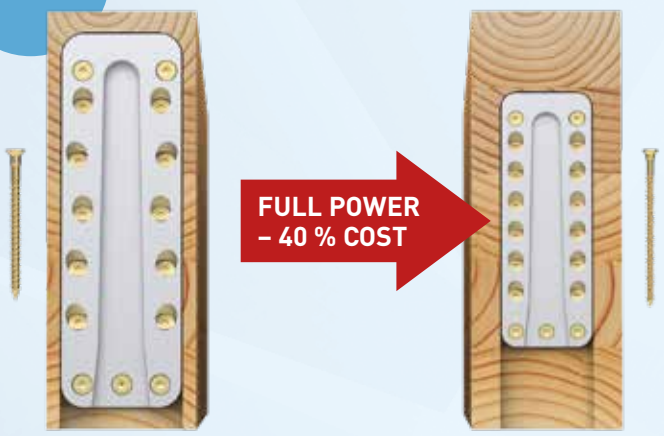
This applies to the following connector series:

M-series
Standard screw length: 6.5 x 65 mm
Alternatives: 6.5 x 85 and 6.5 x 105 mm

L-series
Standard screw length: 8.0 x 100 mm
Alternatives: 8.0 x 120 and 8.0 x 140 mm

XL/XXL-series
Standard screw length: 8.0 x 160 mm
Alternatives: 8.0 x 180 and 8.0 x 200 mm

Example



^ L60 with
8.0 x 100 mm

^ M40 with
6.5 x 105 mm

EDITORIAL

Let's stay "connected"

Right at the start of the new construction season, we'd like to provide you with plenty of useful knowledge and reading in the new "SHERPA News". Our editorial team has again compiled a mix of specialist contributions and innovations from SHERPA. And forward thinkers from science and technology also have their say. Especially in times of vague prognoses for the future, we are called on to ensure the best possible quality and the greatest possible benefits for our common customers. The constant further development of the "SHERPA system connector idea" enables us to help our partners to meet the increasing demands in modern wood construction.

We are especially proud of our contribution to the "Haus der Wildnis" project. The harmony and symbiosis between human beings and nature are particularly visible in this extraordinary wood building. Early in the year we undertook to stay "connected" with you. Reliability, permanence and the mutual trust in a successful future strengthens us in our daily commitment to our customers. On behalf of the entire SHERPA team, I continue to wish you every conceivable good fortune and great success.

Vinzenz Harrer
Managing Director of
SHERPA Connection Systems GmbH

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SUCCESS STORY

An Abode for the Wilderness

The "Haus der Wildnis" in Lunz am See, UNESCO World Natural Heritage Centre for the Dürrenstein-Lassingtal wilderness area, is presented as an all-around successful wood showcase. The architectonically challenging and technically elaborate construction of SHERPA connectors.

Hardly any straight walls, the most varied angles: just that alone already posed a challenge. But the most intricate was certainly the roof substructure. A total of hundreds of components, hardly one matching another." Stefan Heigl remembers the time well when he and his company, Heigl Holzbau GmbH played a critical role in erecting the Haus der Wildnis as a visitor's centre for the UNESCO world natural heritage site "Wildnis Dürrenstein-Lassingtal" wilderness area. This was between 2019 and 2021, with a hiatus in 2020 due to lockdown. The Haus der Wildnis is located right next to the church in Lunz am See. Stefan Heigl's company, wood construction, carpen-

KEY DATA/ADDRESS

Floor space: approx. 700 m²
Composite wood: 280 m ³
Energy Index: 49
(Low-energy building)

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Kirchenplatz 5
A-3293 Lunz am See
E-mail: info@haus-der-wildnis.at
Info-Telephone:
+43 (0) 7486 21122
www.haus-der-wildnis.at

try and sawmill, is located only two kilometres from the Haus der Wildnis. Heigl started the business 20 years ago as a sole trader, and today his company employs 20 people and is successfully involved in commercial, urban and private wood construction.

For the Haus der Wildnis, Heigl was responsible for the entire timber structure including the substructure of the roof. The structure was designed by architects of "Architekten Maurer & Partner ZT GmbH" with offices in Vienna, Hollabrunn and Korneuburg. Holzbau Strigl GmbH, located in Lunz am See provided the interior fittings and façades. All companies involved were invited to provide part of the services at no cost as a sponsoring contribution by the project sponsor "Weltnaturerbezentrum Haus der Wildnis Grundstücksverwaltungs Gesellschaft mbH" property management company, consisting of the State of Lower Austria, the Market Town of Lunz and the NÖ Versicherung AG insurance company. "In our case, this was the entire planning of the semi-finished parts of the timber frame and the substructure of the roof", Heigl explains.

The semi-finished wood components are assembled on the company premises and taken to the construction site in transportable sizes, there to be quickly and efficiently fitted together. For this, says Heigl, he used the proven SHERPA system connectors. The performance of the system regarding static bearing strength was crucial for this application. In addition, the use of SHERPA wood connectors enabled the main carriers and sub-carriers to be laid on one level due to the optimised load application at the connections. This resulted in a reduction of the structural height of the ceiling structure. Thus, more room height was gained with the same overall structural height. And Stefan Heigl points out yet another positive feature of the connector: "By the insertion of the dovetail-shaped spring element into the groove element of the connector, the individual components are securely in position early in the assembly process. This facilitates as smooth connection of the structural parts even at very low tolerances from the blank."

Wood connects

As a creative timber wale construction, the "Haus der Wildnis" in Lunz am See is sustainable in two regards. As a UNESCO world nature heritage centre, it brings it visitors closer to the limited

Haus der Wildnis: architectonically sophisticated timber frame construction, connected by SHERPA.

“PEOPLE SHOULD MERELY OBSERVE, EXPERIENCE AND RESEARCH HERE, BUT NOT CREATE. THE SOLE CREATOR SHOULD BE NATURE ITSELF.”

CHRISTOPH LEDITZNIG,
MANAGING CHAIR

accessibility wilderness area of Dürrenstein-Lassingtal, the greatest remaining area of “primeval forest” in the Alpine region as a museum, event centre and restaurant. A unique natural monument in our region, that has alluded cultivation for centuries due to its exposed location and difficult accessibility. In 1875, the area was first protected by its then owner, Albert Rothschild. In 2017 it was awarded the status of a UNESCO world nature heritage site. Is it not only a unique nature reserve, but under the conditions of advancing climate change, today also a kind of laboratory for the development of the alpine forest landscape.

The “Haus der Wildnis” is, however, also proof of the sustainability of building in wood. Wood from domestic forests is a renewable raw material travelling only a short distance. It represents climate-friendly and regional added value and jobs, especially in rural regions affected by migration. Wood offers its users reliability over decades, if not centuries. Wood frame construction, which plays an important role in the revitalization of wood as a construction material, guarantees not only efficiency in construction in conjunction with intelligent plywood and wooden connector systems such as those in the SHERPA Product groups, but also enables opportunity for creative design.

The “Haus der Wildnis” was consciously also orchestrated as an architectonic symbol by its designers, the architects of “Architekten Maurer & Partner ZT GmbH”: “The positioning in the centre of town and next to the church requires a harmonious use of local materials such as wood and stone. They made sure that the building could also be seen from above as a prominent element. From an architectonic point of view, it is also an eye-catcher with the layered roof construction. Five asymmetrical cubes are woven together in the longitudinal direction and shape the interior like fallen tree trunks.”

Because the modern timber structure was set on the foundations of an incomplete hotel project, and thus transformed a long-standing abandoned construction project in a sensitive area into a showcase that completes the image of sustainability of this timber structure, which has already been used by many thousands of visitors since its completion and opening in 2021.

Photos: Haus der Wildnis / Theo Kust, Wildnis Dürrenstein / Hans Glader, Heigl Holzbau GmbH, Shutterstock

SHERPA NEWS

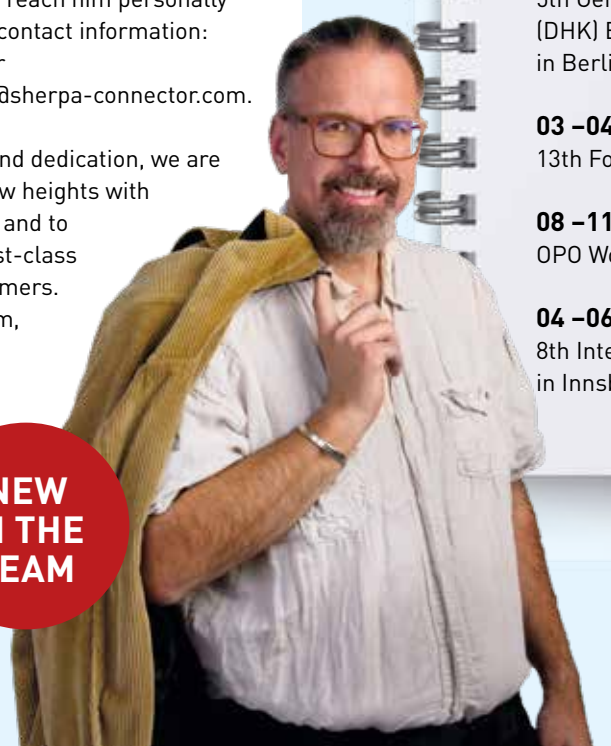
ALWAYS UP TO DATE

BERND STRAHAMMER WELCOME

We are thrilled to introduce Bernd Strahammer as a new member of our SHERPA team! Since November 2023, he has reinforced our team as an experienced master of wood construction and an adept expert in technical sales and support. Bernd brings comprehensive experience in wood constructions and his specialist knowledge and dedication make him a valuable addition to our team.

As a competent contact, Bernd is available to provide the best possible answers your questions regarding our SHERPA wood connectors. You can reach him personally using the following contact information: +43 664 405 78 92 or bernd.strahammer@sherpa-connector.com.

With his expertise and dedication, we are thrilled to rise to new heights with Bernd Strahammer and to continue to offer first-class service to our customers. Welcome to the team, Bernd!



NEW IN THE TEAM

EVENT OVERVIEW

WHERE YOU CAN MEET US IN 2024:

05 –07 March 2024
Futurebuild London

18 –19 March 2024
Doctoral colloquium in wood construction in Stuttgart

26 –28 March 2024
Mass Timber Conference, in Portland

23 –24 April 2024
Polish Timber Construction Forum

24 -25 April 2024
7th International Construction Physics and Building Technology in Friedrichshafen

02 May 2024
Biel Timber Construction Day 2024

04 –05 June 2024
1st International Symposium on Support Structure Design in Timber Construction (HTK), in Memmingen

11 –12 June 2024
5th German Timber Construction Congress (DHK) Building with wood in urban spaces, in Berlin

03 –04 October 2024
13th Forum Wood Building Nordic, in Oslo

08 –11 October 2024
OPO World, in Switzerland

04 –06 December 2024
8th International Timber Construction Forum, in Innsbruck

SOUND INSULATION BRACKETS

Quiet Advancements

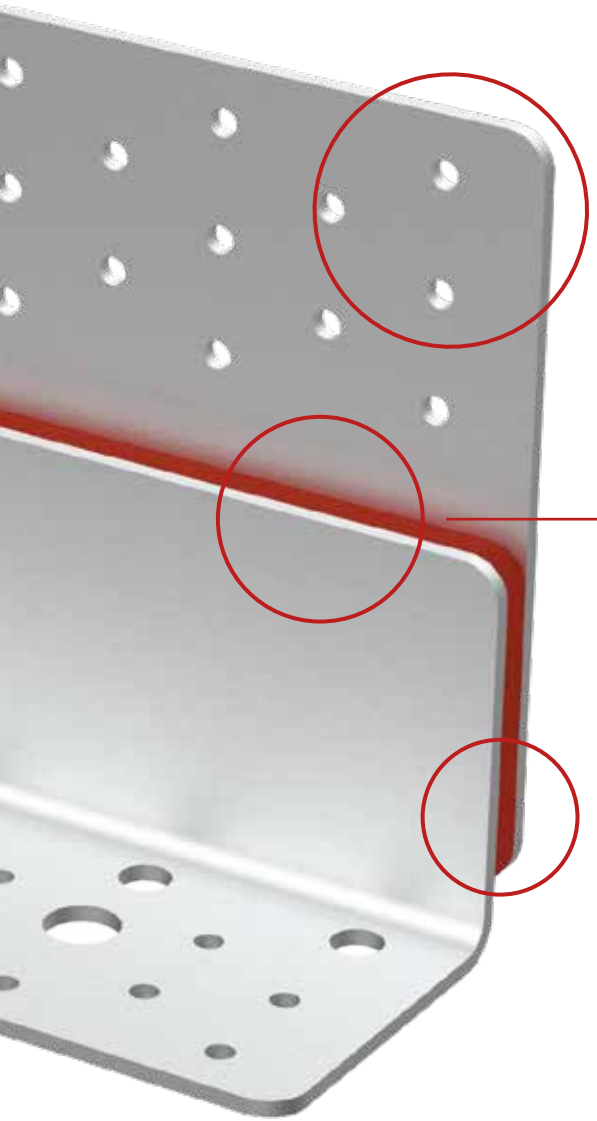
Sound insulation in wood construction: an Achilles heel. With the SHERPA Sonus sound insulation connector, we have the last piece in a new complete chain of isolation solutions for sound insulation. An innovation with a nearly disruptive efficiency factor. Three development and production partners also have a significant share.

We approached the subject very critically, when we were invited to be involved in the development of the SHERPA Sonus", says Holger Schneider, Sales Manager of the Acoustics Division of "REGUPOL Germany GmbH & Co. KG", looking back. "We were already involved in multiple projects for various manufacturers. Yet the results did not all meet our expectations, and had often soberingly low efficiency; many too low to take them to market." But it was diametrically different: "The result really impressed us." It was a real quantum leap.

Headquartered in Bad Berleburg and with around 750 employees at sites worldwide, REGUPOL has been dedicated to the processing of reclaimed elastomers since 1954. These are used in high-performance sports and cushioning mats, anti-slip mats for securing loads, products for impact sound protection and vibration insulation as well as protective and separating layers for use in construction. REGUPOL has a special focus on optimisation approaches in sound insulation in wood construction.

For the SHERPA Sonus, REGUPOL provides the elastomer bearing surface and REGUFORM pads: key components for the acoustic protection effect that must be produced without any material contaminations to enable later adhesion to the metal components.

And these metal components for sound insulation come from Ybbsitz in the Amstetten district. This has been the home of metal competency for centuries. The history and tradition of the owner-run "Fuchs Metalltechnik GmbH", in its seventh generation, reach back to 1780. With a high-performance machine fleet, with punching technology at the fore, the



FUCHS METALLTECHNIK: The Lower Austria company produces the metal brackets for the SHERPA Sonus with high-tech punching machines.
www.fuchs-metall.at

REGUPOL: Made in Germany – the sound insulation pads of recycled elastomers come from Bad Berleburg in Westphalia.
www.regupol.de

BEEP MOBILITY: In Amstetten in Lower Austria, the components are then adhered so that the sound insulation connectors withstand all strain.
www.beep-mobility.at

65 employees mainly produce limited and special series in small to medium part counts for customers all over Europe, including their own products. The performance spectrum ranges from feasibility testing to engineering to production, explains Markus Felber, managing director of Fuchs Metalltechnik GmbH.

"The requirements for our expertise in development and production were very complex with the SHERPA Sonus", says Felber. In addition to the high static resilience and selection of the materials suitable for it also depended on the purity of the notches. In terms of safe use, we also had to avoid sharp edges and burrs. And finally, it was necessary to set up tools and the production process so that economic efficiency and the highest product quality would go hand in hand. You need a particular know-how, and not everyone is up to the job."

But it was two tailor-made components without a third that connected them - the adhesive. In 2021 four experience experts responsible for the development of the high-tech interiors of rail vehicles at leading industry suppliers, including our contact Reinhard Entner, founded their own company in Amstetten, "BEEP Mobility GmbH". Its customers now include a who's who of international rail mobility.

One of the key components of BEEP Mobility is the adhesive. Still a young jointing technology in the industrial manufacturing process, as Entner explains, "in the use of which one must have durability, reliability, safety and stability under respective ambient and environmental conditions and strain. It is also important to be able to certainly prove these quality characteristics. And ultimately also being able to continually guarantee the highest quality level of the adhesive in the manufacturing process." The expertise of BEEP Mobility also rests on the rail vehicle industry, where adhesive of components exposed to the highest strains is already state of the art.

LOAD CAPACITY

Connection rigidity

Influence of system rigidities on the assessment of main connections and secondary connections

The consideration of rigidity values of connection details is often questioned in practice. The following contribution should familiarize the support structure designer with rigidity values so that the effects can be better estimated.

Modelling

In the verification of support structures, the designer must compare the modelling of the structure with the design and consider connection rigidity if necessary. This can be assessed both with translation and also rotational rigidities. In wood construction, the translation rigidities can be determined using the k_{ser} values set out in EN 1995-1-1 [1].

The rotational rigidity of a connection with pin-shaped connectors is determined as follows [1+2].

For system connectors, the product specific rigidity values are found in the respective European technical assessments. For SHERPA connectors, this is the ETA-12/0067 [2] (see Tab. 1).

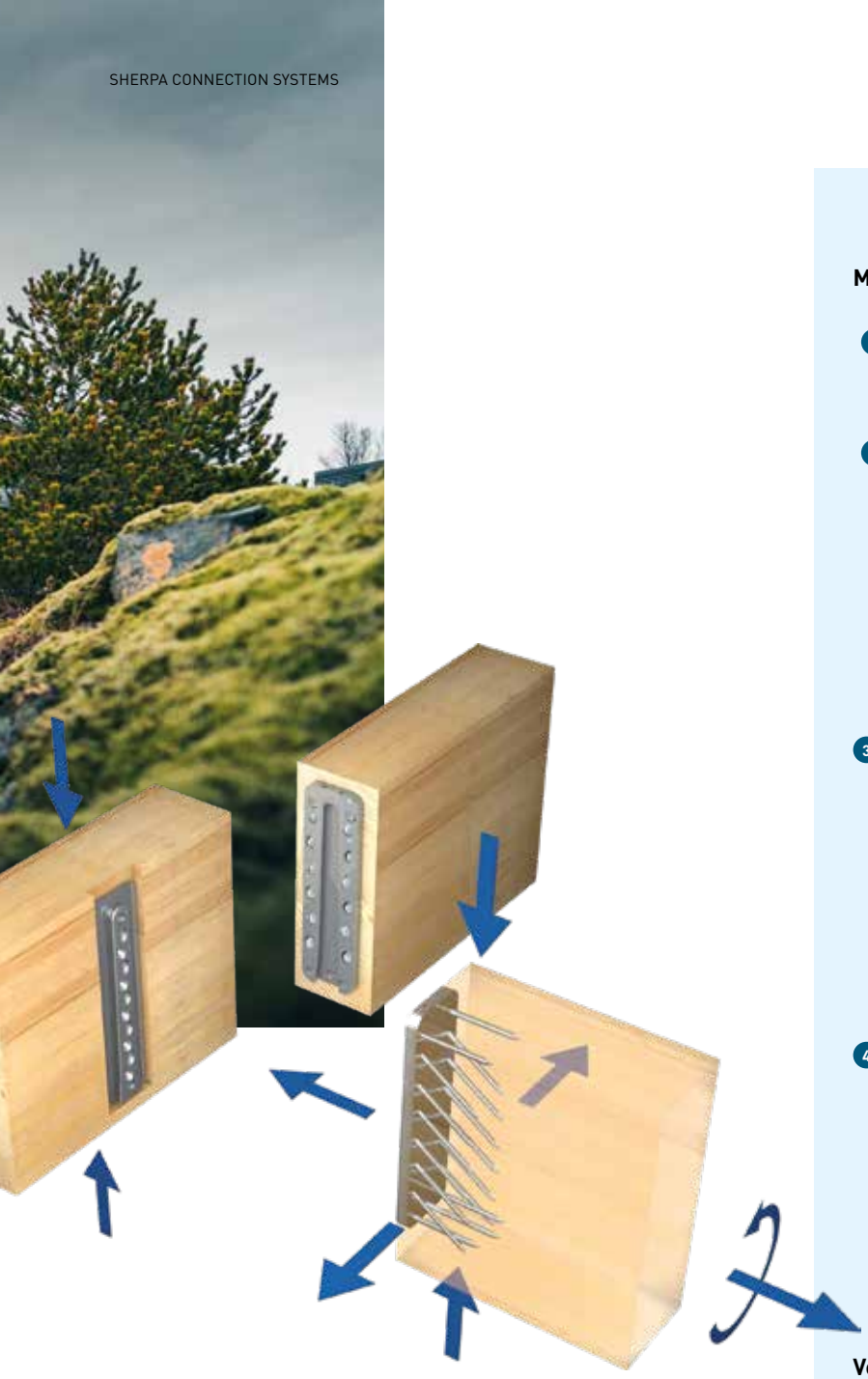
If you consider a connection between a main and secondary connection, this can be simplified using two rotation springs. These are on the one hand the rotation spring rigidity of the system connector and on the other the system rigidity that results from the rigidity of the support structure (see Fig. 1).

For the determination of the overall rigidity of the connection ($k_{\varphi,ser}$), the individual rotation springs can be summarized by a serial connection. Thus the connection rigidity ($k_{\varphi,ser}$) results as follows: equation [3].

It is evident (see equation 3) that the lower rigidity of both rotation springs is crucial to the overall rigidity and thus for the connection torque.

The system rigidity reflects the rotation capacity of the support structure at the connection point of the system connector. If one is looking at a fork shaped edge support, the system rigidity of the support structure varies along the longitudinal direction of the support. In the area of the fork bearing, the system rigidity is higher than in the middle of the support.

The determination of system rigidity at the connection point of a support structure can only be done using a model of the entire structure. The connection torque to be set can be estimated through the modelling of a bilateral, symmetrical torsion spring mounted single span girder using the torsion module (see. Tab. 1) on the flexible fixed supports.
The connection torques can be determined as follows depending on the ratio of the rigidities (α_{EI}) for a uniformly distributed load: equation [4].



Modelling

1 $K_{\varphi,ser} = K_{ser} \cdot I_P$

with:

2 $I_P = \sum r_i^2 = \sum (x_i^2 + y_i^2) = \sum x_i^2 + \sum y_i^2$

r_i ..... Distance between the respective connector to the connection mean balance point
x_i ..... Horizontal distance between the respective connector to the connection mean balance point
y_i ..... Vertical distance between the respective connector to the connection mean balance point

3 $$\frac{1}{k_{\varphi,ser}} = \frac{1}{k_{\varphi,Sys}} + \frac{1}{k_{2,\varphi,ser}}$$

with:

$k_{\varphi,ser}$ ..... Overall rigidity of the connection situation
$k_{\varphi,Sy}$ ..... System rigidity of the bearing structure
$k_{2,\varphi,ser}$ ..... Rotational rigidity of the system connector

4 $$M_{connection} = -\frac{\frac{1}{144} + \frac{l}{72 \cdot \alpha_{EI}}}{\frac{1}{12} + \frac{2}{9 \cdot \alpha_{EI}} + \frac{2}{9 \cdot (\alpha_{EI})^2}} \cdot q \cdot l^2$$

with:

$$\alpha_{EI} = \frac{2/3 \cdot k_{2,\varphi,ser}}{\frac{3 \cdot EI}{l}}$$

Verification

5 $$\alpha_{R\,2,k} = \frac{R'_{2,k}}{R_{2,k}} = \frac{1}{\sqrt[3]{1 + \left(\frac{e - e_{border}}{e_2}\right)^3}}$$

with:

$\alpha_{R2,k}$ ..... Reduction factor of the lateral force R2,k
$R'_{2,k}$ ..... Reduced lateral force bearing capacity
$R_{2,k}$ ..... Characteristic value of the lateral force bearing capacity under a centre strain in the direction of insertion
e ..... Actual eccentricity of the effective force $\left(\frac{M_{d,\,connection}}{Q_{d,\,connection}}\right)$
e_{border} ..... Borderline eccentricity of the SHERPA connector
e_2 ..... Least favourable eccentricity for the primary and secondary support connection for the maximum acceptable torque

	Slip module			Torsion module
Product	$k_{1,ser}$ [kN/mm]	$k_{2,ser}$ [kN/mm]	$k_{45,ser}$ [kN/mm]	$k_{2,\varphi,ser}$ [kNm/rad]
TYPES and XS	$\frac{R_{1,k}}{0.5}$	$\frac{R_{2,k}}{1.00}$	$\frac{R_{45,k}}{1.25}$	$175 \cdot R_{2,k} \cdot e_2$
TYPE M	$\frac{R_{1,k}}{1.00}$	$\frac{R_{2,k}}{1.50}$	$\frac{R_{45,k}}{1.75}$	$200 \cdot R_{2,k} \cdot e_2$
TYPE L	$\frac{R_{1,k}}{2.50}$	$\frac{R_{2,k}}{2.00}$	$\frac{R_{45,k}}{2.00}$	$275 \cdot R_{2,k} \cdot e_2$
TYPES XL and XXL		$\frac{R_{2,k}}{3.00}$	$\frac{R_{45,k}}{5,00}$	$100 \cdot R_{2,k} \cdot e_2$

Table 1: Rigidity values of SHERPA system connector

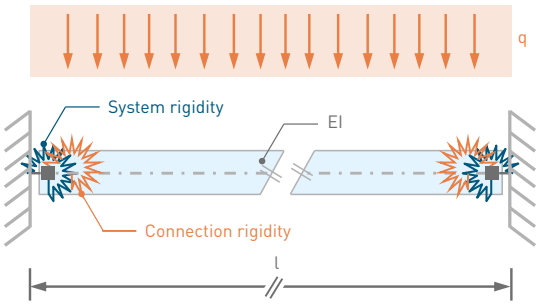


Figure 1: Modelling of a connection between primary and secondary supports using two rotation springs

Verification

Through the torsion module ($k_{2,\varphi,ser}$), the torque bearing capacity as well as the transverse bearing capacity are important for the measurement of the system connector. Because these types of connectors were designed to transfer transverse forces, the load of the connection torque to be set is considered by a reduction of the transverse bearing capacity (see equation 5).

Borderline eccentricity e_{border} thus describes the connection eccentricity from which the contact pressure of the top oblique screw on the secondary support is in balance with the horizontal force through the eccentricity torque [3]. If the borderline eccentricity is exceeded, contact is lost between the connector and the timber component and the torque screws are subjected to tension.
Figure 3 shows the reduction factor $\alpha_{R_{2,k}}$ of the characteristic load capacity in the direction of insertion ($R_{2,k}$) for the consideration of the torque strain.

Conclusion

The present article shows that it is expedient to consider the connection rigidity of a connection. In conventional connections, this may be done using the polar inertia torque and the associated slip module following [1]. For system connectors, the rigidity of the elected connection is found in the respective European technical assessments.
If one takes the rigidities of the connection into consideration, usually multiple iteration steps are necessary during the measurement. This has the background that the designed connector or the selection of a connector implies rotational rigidity. This is in balance with the connection torque to be set. In order to achieve an economical solution, multiple calculation steps are necessary.

Bibliography

[1] EN 1995-1-1:2004; Eurocode 5: Design of Timber Structures – Part 1-1: General – Common rules and rules for buildings, + AC (2006) + A1 (2008) + A2 (2014). CEN European committee for standardization, Brussels, Belgium.

[2] ETA-12/0067: Europäische Technische Bewertung, Dreidimensionale Nagelplatte SHERPA, Österreichisches Institut für Bautechnik (OIB), Vienna.

[3] Kowal, J., Harrer, V., Schinner, H.: SHERPA Handbook, Frohnleiten, Austria, 2016.

"EVEN SYSTEM CONNECTORS MUST BE PRECISELY TAKEN INTO CONSIDERATION IN THE MEASUREMENT"

FRANK BRÜHL,
EN.AR[TEC]-DEUTSCHLAND

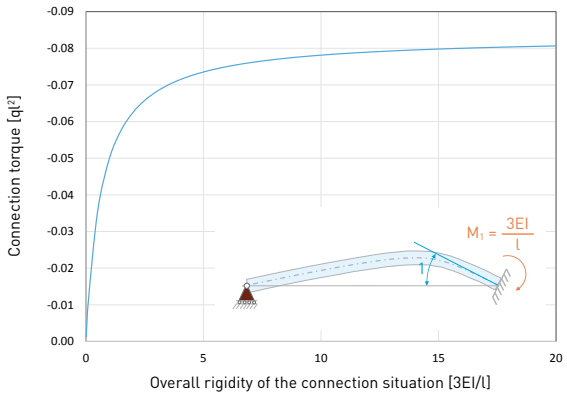


Figure 2: Connection torque depending on overall rigidity $k_{\varphi,ser}$

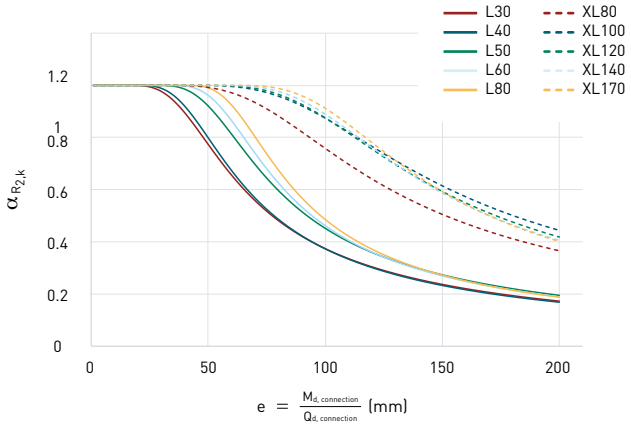


Figure 3: Reduction factor $\alpha_{R_{2,k}}$ for taking into account the torque strain for selected SHERPA system connectors

Example

Connector: XL80
20 mm / 120 mm / 330 mm
Material:..... GL24h
Profile:..... 140 mm / 360 mm
Span: ..... 5.00 m
Impact q_d: ..... 17.00 kN/m
k_{mod}: 0.9

Lateral force bearing capacity of the SHERPA connector

$$R_{2,k} = \left(\frac{385}{350}\right)^2 \cdot 1.15 \cdot 76.8 = 95.3 \text{ kN}$$

Rotational rigidity of the SHERPA connector

$$k_{2,\varphi,ser} = 2/3 \cdot 100 \cdot 95.3 \cdot 0.0625 = 397.1 \text{ kNm/rad}$$

Cut sizes

$M_{d,\,connection} = -4.85$ kNm

$Q_{d,\,connection} = 42.5$ kN

Connection eccentricity

$$e = \frac{M_{d,\,connection}}{Q_{d,\,connection}} = \frac{4.85 \text{ kNm}}{42.5 \text{ kN}} = 114 \text{ mm}$$

Reduction of lateral force

$\alpha_{R\,2,k} = 0.673$

Reduced lateral force bearing capacity

$$R'_{2,k} = 0.673 \cdot 95.3 \text{ kN} = 64.13 \text{ kN}$$

Design lateral force bearing capacity

$$R'_{2,d} = \frac{0.9}{1.3} \cdot 64.13 \text{ kN} = 44.40 \text{ kN}$$

Evidence

$$\eta = \frac{Q_{d,\,connection}}{R'_{2,d}} = \frac{42.5 \text{ kN}}{44.40 \text{ kN}} = 0.957 \leq 1{,}0$$

INTERVIEW

Strong Connections for the Future

Modern timber constructions are inconceivable today without connection technology. Professor Detlef Heck of the Graz University of Technology explains in an extended interview why standardized system will continue to be the key to economic projects and what the future of the industry looks like.

They are mainly concerned with the "non-technical" part of construction. What are your thoughts on the use of standardized systems instead of unique solutions that are constantly being developed?
Well, we economic engineers are concerned very much with the technical side of construction, however, we also take the economic components into consideration. Standardized systems are naturally more efficient for planning, implementation and monitoring. System solutions serve for finding qualitative verified solutions that function even with a lack of specialist personnel.

How important will the use of resilient connectors that have a low error potential be, especially due to the lack of specialist staff you addressed?
I would use connectors that are easy to use without significant error potential in the medium-term. The lack of specialist personnel will further intensify along the entire chain in the wood

construction industry. We as a technical university are not able to find enough students in the MINT area*. And the lack of personnel on construction sites is also striking. Resilient systems help to alleviate the initial need.

Can you keep your finger on the pulse of the times with connection technology?
The principle of connection technology is even more current than ever. With the current collective agreement increases of nearly 10 percent, construction can only be made affordable through increases in efficiency. In this, standardized connectors support above all reducing time on the construction site.

There is a tradition of a higher degree of prefabrication in wood construction nowadays. What potential do you see for further improvements in assembly on the construction site related to connection technology?
At our institute, we have already been able to examine some projects with the aid of assistants and students to analyse the potential of prefabrication. Flippant statements that wood construction is generally more expensive than solid construction don't help. Instead, operational planning methods such as a selection of procedure, work preparation, timing, the use of subcontractors and secondary services such as scaffolding work and the TGA and interior fittings must be included in the overall consideration. A comparison can first be created. I still see the potential for optimisations over the entire value added process at 5 to 15 percent of the costs. A similar magnitude can be found in the construction time.

All of these processes are also subject to controls. This gives the ÖBA, the local construction supervisory authority, a certain monitoring task. What does that mean with regard to the inspection of statically important connections?
The more trusted systems are utilised, the faster the ÖBA can carry out the monitoring. Laborious inspections in individual cases are avoided and the dwell times for quality assurance are reduced. With regard to documentation, routines can be developed using approved systems. The same applies to statically important connections.

"CONNECTORS WITHOUT SIGNIFICANT ERROR POTENTIAL WILL BE USED IN THE MEDIUM-TERM."

DETLEF HECK, UNIVERSITY PROFESSOR AT THE INSTITUTE FOR CONSTRUCTION MANAGEMENT AND ECONOMICS AT THE GRAZ UNIVERSITY OF TECHNOLOGY

This means that system connectors are easier to document than individual solutions?
Because construction always involves high investment in which emotions also play a large role, if there is an error, the search for the guilty party is inevitable. We have to prevent catastrophes in the future, such as the collapse of the ice pavilion in Bad Reichenhall. Within this context, the documentation of standardized connection solutions ahead of individual constructions is safer and less complex.

How will BIM (Building Information Modelling) change planning and constructions in general?
With standardization, the use of BIM will increase. Planners, manufacturers of connection elements and executors will all utilize component catalogues more in the future, which creates an increase in efficiency. At the end, even the users know which elements and even connectors have been installed.

The building industry faced economic challenges in 2023. Will material scarcity, high building material prices and increasing interest also be critical for building conjecture in 2024 as well?
2024 will represent a turning point. The latent low number of building permits results in a subdued construction market in building construction. Private investors have utilized the persisting low interest phase and government aid to cover their investment requirements. Even with cash-strapped coffers, public contractors still have a high maintenance requirement that continues to be fired by ambitious climate goals. The current situation should be used by the companies to reconsider their own processes and drive innovation forward to further qualify the existing staff. However, diversification plays a subordinate role for wood construction companies.

What is your prognosis for wood construction?
It is important to reinforce the benefits of wood construction with innovative systems, in the integration of HVAC, but also in the successive trades and in fire protection. The CO_2 taxation on energy-intensive building products will ultimately also generate financial advantages for wood as a construction material. The awareness of climate-friendly products is rising in any case.

Photos: Robert Illemann * MINT stands for Mathematics, Information Technology, Natural Sciences and Technology.

COMING UP

All **data, numbers and facts**

All of the important numbers and facts will be summarized compact in the new assessment guide. It supports you in the simple measure of all SHERPA products and enables quick and economical planning.

Available soon for you in the download area.

For a simple measure of all SHERPA products

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