

SHERPA news

THE MAGAZINE **SHERPA**[®]
Issue 11/2025



A FUTURE BUILT WITH WOOD – Filled with light, sustainable and structurally strong: timber, architecture and teamwork make Korbach a model project.

**conNEXTor
DESIGN KIT**
Rethinking
design

**CONNECTION AT
THE BEAM END**
Secure connections
in edge zones

**STRUCTURAL DESIGN
VS. ACOUSTICS**
A specialist dialogue
with real depth



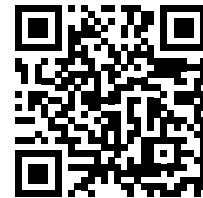
NOW AVAILABLE!

Design has **never been so simple.**

conNEXTor – One project. One design kit. SHERPA.



You know your project. The conNEXTor provides the right connection – guiding you in no time to a verifiable solution. Whether you design regularly or only deal with it occasionally: With just a few inputs, you'll reach your goal directly.



**You have
the project.
We have
the design kit.**


EDITORIAL

More than design: Intelligently planned. Simply connected.

Dear partners,

With the 11th edition of SHERPA News, we're looking ahead – toward a future in which timber construction is not only ecological, but also at the forefront of technology. With our new design solution conNEXTor, we're setting a clear benchmark in this area: by introducing AI-driven logic for the first time, we're taking structural design to a new level – faster, smarter and safer.

In times of increasing demands on cost-efficiency, durability and installation reliability, conNEXTor offers real added value: for engineers, planners, fabricators and dealers. The software is intuitive to use, transparent in its calculations and seamlessly integrable into modern planning tools – underlining the performance of the SHERPA system.

Modern timber construction needs partners who think ahead. SHERPA is more than a fastening solution. Our systems create real connections – between people, components, trades and ideas.

We thank all those who are walking this path with us, and we look forward to jointly developing a future-ready timber construction sector.

Vinzenz Harrer
Managing Director of
SHERPA Connection Systems GmbH


SHERPA Connection Systems GmbH

Badl 31, A-8130 Frohnleiten

SHERPA-HOTLINE:

Service: +43 3127 41 983 - 0

Technical Support: +43 3127 41 983 - 311

office@sherpa-connector.com

www.sherpa-connector.com



Imprint: Publisher: SHERPA Connection Systems GmbH, Badl 31, A-8130 Frohnleiten
Design and concept: Raminger & Hirtzberger, www.hirtzberger.com · Text: Ursula Mahlknecht, Bernd Strahammer, Michael Gstettner · Printing: Riedeldruck Druck Fulfillment-Druck Service GmbH · Images: SHERPA, Shutterstock, PROFORMA/Kassel, Riester Holzbau GmbH | www.riester-holzbau.de, Pollmeier Massivholz GmbH & Co. KG, Markus Schneidhofer | Kreativkuchl Fotoschmiede · Errors and misprints excepted · Gender note: We have made every effort to use gender-inclusive language in this magazine. If this has not always been achieved, we would like to emphasise that all genders are equally addressed at all times. · Circulation: 15,000 copies

SUCCESS STORY

Space for education

System-based architecture

The school building in Korbach shows how timber construction and connection technology work together – thoughtfully designed, precise and forward-looking.



In the heart of the Waldeck-Frankenberg district, the “Berliner Schule” in Korbach is creating an educational environment that sets new standards for sustainable architecture in rural regions. Here, timber construction becomes a forward-thinking solution for rising demands, proving that innovation and ecology can go hand in hand. The ensemble features a spacious spatial layout, coordinated lighting design and consistent choice of materials.

CONSTRUCTION PHASES AND ARCHITECTURE

The school is being built in several clearly structured phases. Despite challenging weather conditions at the scheduled start of construction in November 2024, the shell structure was completed in remarkably short time thanks to precise planning and modern prefabrication. The skeleton-frame construction with its prominent columns and long-span beams forms a flexible spatial concept that can adapt to evolving educational requirements. Exposed timber surfaces and expansive glazing

create learning environments full of light, warmth and inspiration.

The collaboration among all stakeholders is marked by partnership and a solution-oriented mindset. The architecture and structural design teams delivered exemplary planning work – and the professionals on site tackled technical details with experience and innovation. The use of BauBuche required new expertise, particularly with respect to raw density and screw connections. Here, SHERPA connectors were used in combination with state-of-the-art joinery machines and digitally networked planning tools.

TECHNICAL DETAILS – SHERPA CONNECTORS

The Berliner Schule also represents a step change in connection technology. SHERPA system connectors play a central role. Precise installation of the connectors ensures structural safety under high loads while at the same time allowing a flexible, demountable structure.





“DESPITE STARTING IN WINTER, ASSEMBLY RAN SMOOTHLY. THE CONNECTION SYSTEM PLAYED A KEY ROLE!”

SVEN LANGE,
PROJECT MANAGER AND TIMBER
ENGINEER, HENNECKE HOLZBAU

REGIONAL IDENTITY AND SUSTAINABILITY

At the heart of any modern timber building is the origin of its resources. The school in Korbach uses mainly regional timber from PEFC-certified supply chains. Full traceability ensures transparency and makes the building not only an architectural landmark, but also a benchmark for ecological design.

Sustainable concepts also shape the technical systems: the indoor climate is regulated by controlled ventilation with heat recovery, while energy-efficient heat pumps and an extensive green roof support biodiversity and well-being. The photovoltaic system provides the school with its own independent power supply.

INSIGHTS FROM THE PROJECT TEAM

The project partners report a strong team spirit and mutual appreciation. Sven Lange, project manager at

Even the entrance hall
proudly showcases
timber as a building
material >



Hennecke Holzbau GmbH, confirms the success achieved so far in the joint project: “The biggest challenge was the tight schedule in wintry conditions. Every step had to be executed with pinpoint accuracy to prevent moisture from causing damage. The reliable SHERPA systems and the close coordination between all partners were crucial to the success.”

FUTURE PERSPECTIVES AND IMPACT

The Berliner Schule in Korbach is both a role model and a driver of change. It represents a new generation of public timber buildings that are helping to bring about the shift towards environmentally conscious architecture. Parents, children and teachers experience every day the potential that modern timber construction holds. At the same time, the project is a source of inspiration for young people – perhaps encouraging some of them to choose training in a trade or in engineering and thus contribute to the further development of the timber construction sector.



Photos: PROFORMA/Kassel, supplied

BauBuche columns and beams are already a striking feature, even at the shell construction stage ✓



KEY DATA

- Location: Korbach
- Client: Waldeck-Frankenberg district
- Use: Primary school
- Completion: Summer 2026
- Construction method: All-timber (timber skeleton frame)
- Architect: foundation 5+ architekten BDA, Kassel

Key features:

- Innovative SHERPA connection systems
- BauBuche as the main structural focus
- PEFC-certified timber products
- Exemplary collaboration across all trades

DEFINING MOMENTS AND CONCLUSION

The start of the project under wintry conditions and the smooth progress thanks to prefabrication and the systematic cooperation of everyone involved will not be forgotten. The school now stands as a statement of successful timber construction and symbolises the link between tradition and modernity.

The Berliner Schule in Korbach is more than a building – it is a reference project, a driver of innovation and a symbol of sustainable development. The interplay of SHERPA technology, modern timber construction methods, responsible use of resources and strong teamwork makes it a flagship project for the region and far beyond.

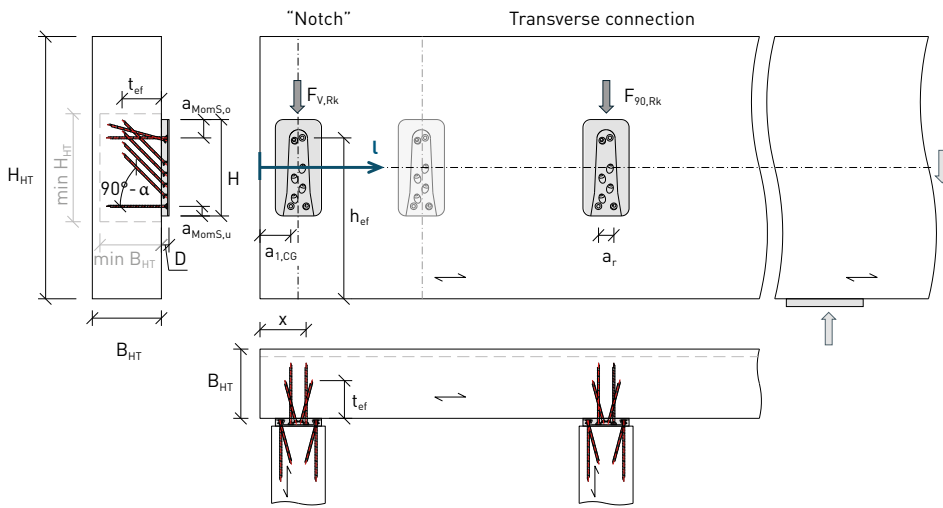


LOAD CAPACITY

SHERPA connection in edge zones

Instead of disguising local weaknesses, they are deliberately accounted for in design. SHERPA provides carefully considered solutions even for critical connection zones.





◀ **Figure 1:** SHERPA connector on a cantilevered beam



“LOCAL PERPENDICULAR-TO-GRAIN STRESSES FROM TRANSVERSE CONNECTIONS CANNOT ALWAYS BE AVOIDED. WITH SUITABLE DESIGN MODELS, HOWEVER, A RELIABLE SOLUTION CAN STILL BE FOUND.”

URSULA MAHLKNECHT,
FREIRAUM ZT GMBH

In roof structures, SHERPA connectors are usually installed with the top edges of main and secondary beams flush. If a connection is required in the central area of a deep main beam, for example a perimeter beam, the connection results in local perpendicular-to-grain tension in the main beam. As part of the structural design, the load capacity of the transverse connection must be verified and, where necessary, reinforcement measures provided.

Load capacity of the transverse connection

ÖNORM B 1995-1-1:2023 and DIN EN 1995-1-1/NA 2013 allow verification of the load capacity of a transverse connection against perpendicular-to-grain failure (splitting) to be omitted if the connector furthest from the bottom edge of the beam is placed at 70% of the beam height H_{HT} or higher. The final draft of the new Eurocode 5, FprEN 1995-1-1:2025, likewise accepts that, where the ratio of the distance of the furthest connector to the beam height is $h_{ef} / H_{HT} > 0.7$, this verification may be omitted.

Provisions for adjacent connections with $0.5 \cdot H_{HT} \leq$ spacing between SHERPA connectors $\leq 2 \cdot H_{HT}$ must be observed and may reduce the allowable local stresses. ÖNORM B 1995-1-1:2023 and DIN EN 1995-1-1/NA 2013 also provide

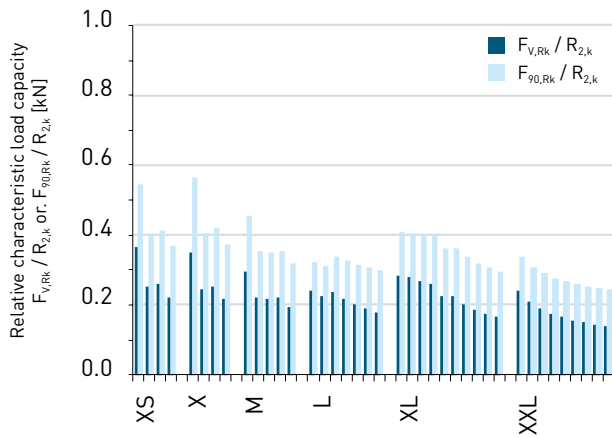
a calculation model for reinforcement measures at transverse connections.

For a transverse connection directly above a support, there is no risk of splitting. If the beam ends at the support, the minimum distance to the beam end $a_{1,CG}$ must be observed in accordance with the applicable standards. Since the SHERPA special screws manufactured by Schmid Schrauben meet the requirements for applying the minimum distances according to ETA 12/0373, the value $a_{1,CG}$ may also be taken from ETA 12/0373.

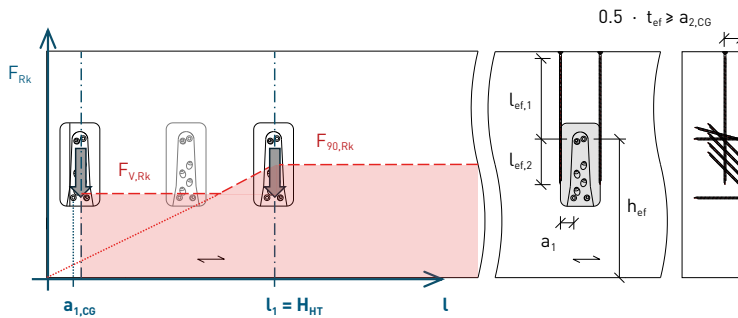
Note: The standards EN 1995-1-1:2014 and FprEN 1995-1-1:2025 include design models for calculating the “permissible perpendicular-to-grain tension under connector forces acting at an angle to the grain direction”. Compared with the design model for transverse connections against perpendicular-to-grain failure in ÖNORM B 1995-1-1:2023, these generally lead to significantly more conservative values.

SHERPA connection at the cantilevered beam end

At the cantilevered beam end, load spread is only possible to one side. To assess the load capacity, the connection is treated, by analogy with ÖNORM B 1995-1-1:2023, as an unreinforced end notch in a bending member.



^ **Figure 2:** Example of the characteristic load capacity of the transverse connection $F_{90,Rk}$ and the end notch $F_{V,Rk}$ in relation to the SHERPA load capacity in the insertion direction $R_{2,k}$ for $h_{ef} \approx 0.65 \cdot H_{HT}$



< **Figure 3:** (left) Relevant load capacity of the end notch $F_{V,Rk}$ or the transverse connection $F_{90,Rk}$ as a function of the distance l from the beam end for a SHERPA connector on a cantilevered deep main beam with $h_{ef} < 1.0$; (right) position of perpendicular-to-grain reinforcement with screws

As a potential crack plane, the position of the upper moment screw(s) in the SHERPA connector is assumed, in the same way as for the transverse connection*.

The characteristic resistance $F_{V,Rk}$ for $h_{ef} / H \geq 0.5$ is calculated as:

$$F_{V,Rk} = k_v \cdot k_{cr} \cdot f_{v,k} \cdot t_{ef} \cdot h_{ef} / 1.5$$

with:

- k_v according to ÖNORM B 1995-1-1:2023 with the parameters $i = 0$ and $x = a_{1,c} + a_r$, where a_r is the maximum spacing of the moment screws in the l -direction and $a_{1,c}$ is the distance to the end grain of the nearest screw in the main beam
- k_{cr} and the characteristic shear strength $f_{v,k}$ according to EN 1995-1-1 and the respective national regulations
- t_{ef} and h_{ef} are taken as the effective

beam width and height that can be credited in the calculation for the respective SHERPA connector, in line with the assumptions used for the transverse connection.

By way of example: a SHERPA connector is installed on a cantilevered beam with $a_{1,cg} = 10 d$ in accordance with ÖNORM B 1995-1-1:2023, with a maximum ratio of $H_{HT} : B_{HT} = 4 : 1$, and with typical member dimensions for solid timber beams of strength class C24 according to EN 338 (SHERPA series XS and S) and glulam beams of strength class GL24h according to EN 14080 (SHERPA series M, L, XL and XXL), with a ratio of $h_{ef} / H_{HT} \approx 0.65$.

The characteristic load capacity of the transverse connection $F_{90,Rk}$ compared with the SHERPA load capacity in the insertion direction $R_{2,k}$ lies between 29% and 57%, whereas the characteristic load capacity of the end notch $F_{V,Rk}$ lies between 17% and 37%, see Figure 2.

This raises the question of up to which distance l_1 of the SHERPA connector from the end of the cantilevered main beam the load capacity of the notch is governing, and from which distance l_1 the load capacity of the transverse connection becomes decisive. For EN 1995-1-1:2025 on the one hand provides a method for calculating the load capacity of a connection at the end of a beam as a notch, and on the other hand requires a linear reduction for a transverse connection at the beam end by multiplying the load capacity $F_{90,Rk}$ by the factor $k_{n,1} = \min\{l_1 / H_{HT}, 1.0\}$. In line with this, the following equation is proposed for determining the (perpendicular-to-grain) load capacity as a function of the distance l from the main beam end, with $l_1 = H_{HT}$.

Any necessary reinforcement measures can be calculated according to ÖNORM B 1995-1-1:2023 and DIN EN 1995-1-1/NA 2013. On the right-hand side of

$$F_{\text{notch}} = \begin{cases} F_{V,Rk} & \text{for } l_1 = F_{V,Rk} / F_{90,Rk} \cdot H_{HT} \\ l / H_{HT} \cdot F_{90,Rk} & \text{for } F_{V,Rk} / F_{90,Rk} \cdot H_{HT} < l_1 \leq H_{HT} \\ F_{90,Rk} & \text{for } l_1 > H_{HT} \end{cases}$$

$$F_{Rk} = \min \{ R_{2,K}, F_{\text{notch}} \}$$

Figure 3, an example of a top-screwed connection is shown.

Summary

If a SHERPA connection is made in the end region of a cantilevered main beam, the potential for splitting in the connection area due to local perpendicular-to-grain tension must be taken into account. If the connection is located more than $l \geq H_{HT}$ away from the beam end, verification can be carried out in line with the transverse-connection model in ÖNORM B 1995-1-1:2023. However, if the SHERPA connector is positioned close to the beam end with $l < H_{HT}$, a verification method based on an end notch in accordance with ÖNORM B 1995-1-1:2023 is proposed. This allows reliable design, in line with the current standard, for SHERPA connections in the range $h_{ef} / H_{HT} \geq 0.50$.

Verification of the transverse connection

based on ÖNORM B 1995-1-1

a_r Connection width; for the respective SHERPA series, a_r can be taken as the maximum spacing of the two horizontally adjacent moment screws*. The small value of a_r generally results in $k_s = 1.0$.

h_i Distance of the connectors from the top edge of the member for calculating the factor k_r . For the SHERPA connector, the number of inclined screws arranged one above the other, $n_{SchS,\bar{u}}$, is used, and the respective heights h_n are proposed to be calculated as follows:

$$h_1 = H_{HT} - h_{ef}$$

$$h_2 = h_1 + (H - a_{MomS,o} - a_{MomS,u}) / (n_{SchS,\bar{u}} + 1)$$

$$h_n = h_{n-1} + (H - a_{MomS,o} - a_{MomS,u}) / (n_{SchS,\bar{u}} + 1)$$

with:

H_{HT} ... height of the main beam

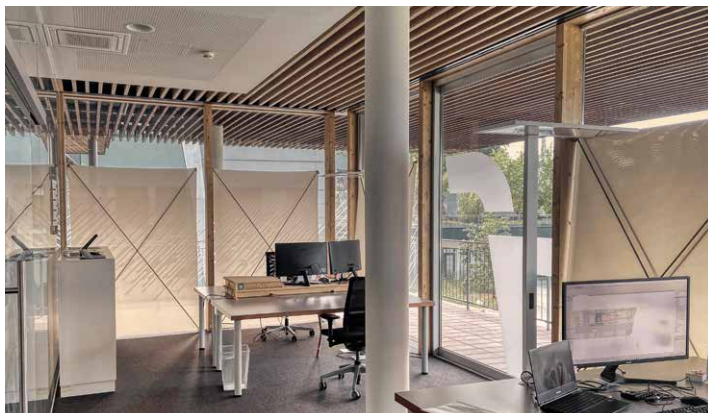
H ... height of the SHERPA connector

$a_{MomS,o}$, $a_{MomS,u}$... distance of the moment screw from the top or bottom edge of the SHERPA connector*

t_{ef} Effective connection depth per side

$$t_{ef} = 0.5 \cdot L_{\text{screw}}$$


* These values can be taken, for example, from ETA-12/0067 or from the technical drawings provided.



FREIRAUM ZT GMBH CIVIL ENGINEERING CONSULTANCY

We focus on structural planning and architecture, placing great importance on resource-efficient use of materials, along with high standards of quality and sustainability. Accordingly, wood often plays a central role in our projects as a building material.

www.freiraum.engineering



Strong connections: BauBuche

SHERPA connectors on BauBuche – efficient and safe with simple installation and minimal pre-drilling.

SHERPA system connectors offer high-performance solutions with a high degree of prefabrication and straightforward installation for softwood products (solid timber [VH], glulam [BSH], cross-laminated timber [CLT], etc.), and also for hardwood products such as glulam and laminated veneer lumber (see ETA-12/0067). In particular, beech laminated veneer lumber (BauBuche | ETA-14/0354) from Pollmeier, with its high strength and stiffness properties, provides an excellent option for creating structures with large spans and slender cross-sections.

Installation recommendations

For simple and precise installation of the connector plates in sizes M, L, XL

and XXL on the corresponding BauBuche beams, only the moment screws need to be pre-drilled, while the inclined screws are driven in without pre-drilling.

Recommended drill diameters:

- for system screws $d = 6.5$ mm (connector series M): $d_{B,6.5} = 3.5$ mm
- for system screws $d = 8.0$ mm (series L, XL, XXL): $d_{B,8} = 5.5$ mm

Design

To determine the characteristic load capacity of system connectors installed on BauBuche ($R_{2,k,730}$), the characteristic load capacity according to ETA-12/0067, based on C24 ($R_{2,k,350}$), is adjusted using the density correction factor (k_{dens}). The characteristic density for BauBuche ($\rho_k = 730$ kg/m³) can be taken from ETA-14/0354. Pre-tabulated values are provided in the SHERPA design guide.

As an alternative to the standard screw lengths used in connector series M (6.5

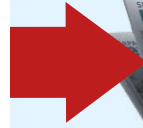
x 65) and L (8.0 x 100), an increase in load capacity can be achieved by using the system screws in series M (6.5 x 85) and L (8.0 x 120). For connector series XL and XXL (standard screw length 8.0 x 160), the use of 8.0 x 120 mm system screws is sufficient.

Whenever the screw length deviates from the standard value, the load capacity must be adjusted. This is taken into account in determining the characteristic load capacity $R_{2,k}$ by means of the screw length factor n_s . Because of the exceptionally high load capacity of SHERPA system connectors in BauBuche, this is often limited by the tensile load capacity of the system screws $R_{2,d,max}$ (see also the SHERPA design guide). When the overall load capacity of the connection node is considered, additional local cross-section checks (e.g. perpendicular-to-grain tension verification, etc.) may also become governing.

Conclusion

By combining SHERPA system connectors with BauBuche, the advantages of this high-performance engineered timber can also be fully exploited in the connections – thanks to the significantly higher load capacity and the fact that, apart from the horizontal screws, no pre-drilling is required.

SHERPA NEWS: REGISTER NOW FOR A FREE SUBSCRIPTION



SHERPA NEWS

ALWAYS UP TO DATE



NOAH KELLER

**A WARM
WELCOME**

Name Dipl.-Ing.
Noah Keller, BSc

Year of birth 1998

Education and professional experience

- Degree in civil engineering at Karlsruhe Institute of Technology (BSc) and TU Wien (Dipl.-Ing.).
- During his studies he gained practical experience in timber construction, worked as a tutor for engineering mechanics at KIT and was employed in the department for noise control and acoustics at TU Wien.
- His diploma thesis took him to Kyoto University (Japan) for a research stay, giving him in-depth insights into Japanese timber design and standardisation.

Additional activities

Voluntary work on children's camps; enthusiastic about endurance sports (cycling, running) and musically active (guitar).

**NEW
IN THE
TEAM**

With Noah Keller on board, our customers benefit from an additional technically skilled point of contact alongside our established expert team. With his open manner, the trained civil engineer brings his technical understanding directly into customer support.

His focus is on active market development and customer development. In doing so, Noah combines technical consulting with commercial foresight, helping to further strengthen SHERPA's position in the market and unlock new potential in timber construction.

"What motivates me is combining practical technical approaches with close customer contact," explains Keller.

For planners, fabricators and customers, he is an additional expert point of contact, offering support with technical know-how, openness and a down-to-earth approach – whether on projects, with specific technical questions or in one-to-one consultations.

As a link between the customer service centre and our partner dealers, he strengthens relationships with solution-focused thinking and a personal touch.

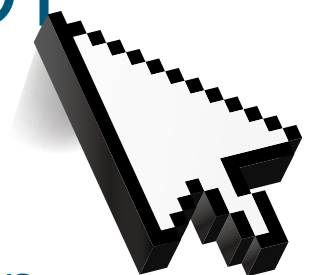
With Noah Keller, SHERPA has further expanded its technical and commercial capabilities – for connecting solutions and an even stronger focus on close customer relationships.

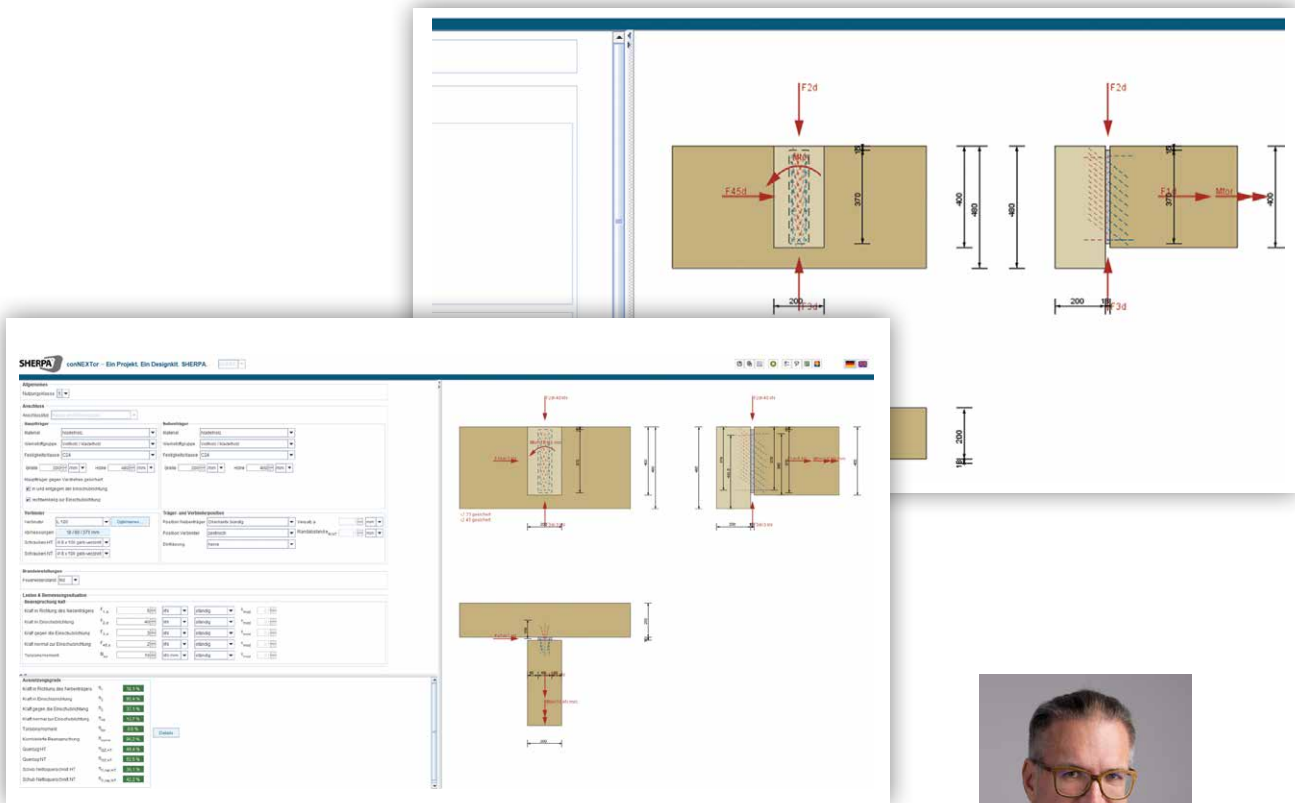


NOW AVAILABLE!

conNEXTor

The future of
connection design
in timber construction
starts now





With conNEXTor, we've created a platform that fundamentally rethinks the way timber connections are designed and calculated. Developed by holz.bau forschungs gmbh in cooperation with SHERPA, it brings cutting-edge research, practical application and digital intelligence together in a seamless tool for modern timber construction.

What makes conNEXTor special is its holistic approach: it's not just a calculation program, but a complete design kit that enables both experienced structural engineers and occasional users to design, optimise and verify connections in line with the relevant standards – intuitively and efficiently.

All current SHERPA connectors are already integrated on the basis of the latest ETA – including fire resistance up to R120, the DUO series and variable screw lengths. National design rules are being

added on an ongoing basis – at launch, Austria and Germany are available. The user interface is available in German and English. An instant graphical view of the connection helps you find your bearings quickly; built-in suggestions for perpendicular-to-grain reinforcement and automatic positioning optimisation make the design process easier. In addition, verifiable calculation output and stored construction details provide extra confidence and transparency.

conNEXTor is already AI-ready today and is being continuously developed – as a tool for a new generation that shapes timber construction in a digital, precise and practice-oriented way.

Start your first design, stay informed and discover new features as they are added!

One project. One design kit. conNEXTor.



“CONNEXTOR UNITES DESIGN, STRUCTURAL DESIGN AND AI IN A SINGLE TOOL, GIVING THE CONNECTION ITS RIGHTFUL PLACE AS A CENTRAL ELEMENT OF PLANNING.”

BERND STRAHAMMER,
MARKET AND PRODUCT MANAGEMENT
– SHERPA CONNECTION SYSTEMS

INTERVIEW

When structural design connects and acoustics separates

In search of balance in timber construction



A conversation with Dr Georg Flatscher and Dr Maximilian Neusser about sound insulation, connectors and the search for balance in timber construction.

Mr Flatscher, Mr Neusser – you come from different disciplines. Where do you see the biggest overlaps and points of conflict between structural design and building acoustics in timber construction?

Flatscher: The biggest challenges, in my view, lie in the nodes and joints. Structural design calls for the most effective possible connection between components, while building acoustics aims for separation.

Neusser: That's exactly where the contradiction lies. We building acoustics specialists want to prevent vibrational energy – whether speech, footsteps or vibration – from being transmitted. Structural design, on the other hand, relies on continuous, stiff load paths. Reconciling both requirements means getting everyone involved at an early stage.

Connectors are, at first glance, small details – why do they have such a big impact in both fields?

Neusser: They're the critical interfaces. Even sophisticated sound insulation measures lose their effectiveness if a connector acts as an acoustic short circuit.

Flatscher: And they also influence the cross-sections of adjacent components. Building three-dimensional timber structures without connectors would be virtually impossible. Because of timber's material properties, these details are far more important than their size would suggest.

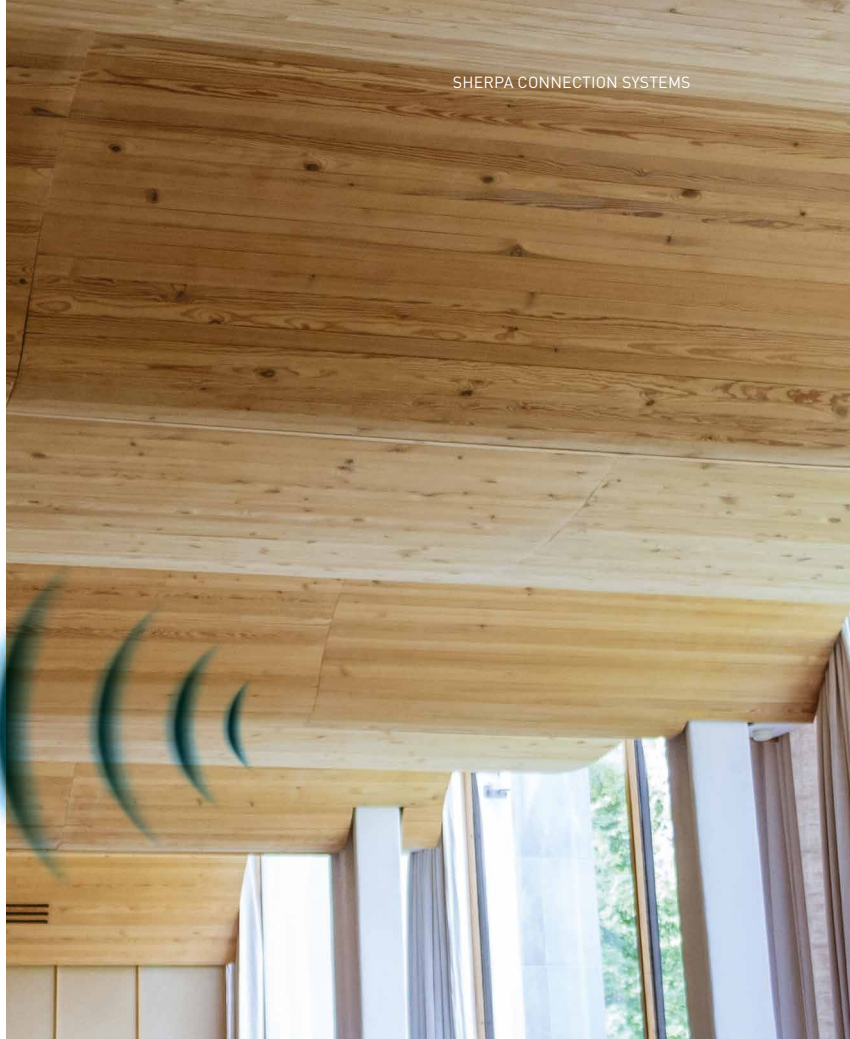
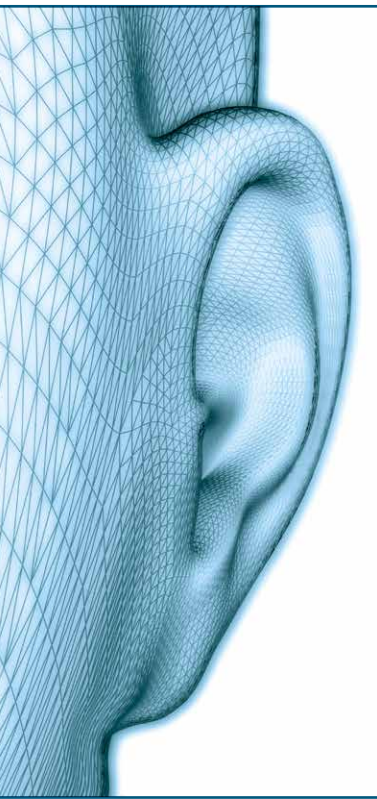


“THE MORE CLOSELY STRUCTURAL DESIGN, BUILDING PHYSICS, ARCHITECTURE AND BUILDING SERVICES WORK TOGETHER ALREADY IN THE PLANNING PHASE, THE FASTER AND HIGHER-QUALITY THE EXECUTION WILL BE.”

DR GEORG FLATSCHER,
FREIRAUM ZT GMBH

Mr Flatscher, where do you, as a structural engineer, run up against limits when acoustic requirements are added? And, Mr Neusser, what makes connectors so acoustically sensitive from your perspective?

Flatscher: Especially when several internal forces have to be transferred at the same time. Bearing compression is relatively straightforward to deal with, but when it comes to shear and tension forces, it becomes difficult to find solutions that are structurally safe, acoustically effective and still economical.



^ Acoustics made visible: sound transmission often travels unnoticed through connectors.

Neusser: Connectors are acoustically sensitive because they determine the effectiveness of entire measures. Even high-quality decoupling systems lose their impact as soon as a rigid connection is created. Planners need reliable parameters and products that remain robust even when site tolerances come into play.

On site, compromises are often made. What typical “weak points” arise in the process – and how do they affect structural design and sound insulation respectively?

Flatscher: A good compromise is the result of early coordination. Weak points tend to appear when decisions are only taken during the construction phase – usually under time pressure. Short-term fixes can then undermine the work of the trades before or after in the sequence.

Neusser: In acoustics, I see execution as the biggest weak point. Demanding connectors require precise installation.

If they aren’t installed correctly, sound insulation suffers – even if the component still works structurally.

With SONUS, there is now a targeted solution for acoustic challenges. How do you both assess the value of such developments – more as a special solution, or as a new standard?

Neusser: SONUS closes the gap between theory and practice. It can be installed like a conventional angle bracket, but at the same time provides acoustic decoupling. That massively reduces the potential for error.

Flatscher: For us as structural engineers, it’s a valuable new tool. Whether it becomes standard remains to be seen – but given rising requirements in residential construction, it’s certainly more than a niche solution.

When load capacity and sound insulation are brought into harmony: what does that mean for day-to-day design practice and for collaboration between



structural engineers and building acoustics specialists?

Flatscher: It means the client gets an optimised overall package. What previously seemed like an unavoidable conflict can actually be resolved.

Neusser: Integrated design is crucial. If you think structurally first and only then about acoustics, you risk inefficiency or even damage to the building. Both disciplines need to develop solutions together right from the start.

Looking ahead: where do you personally see the greatest opportunities when timber construction, structural design and sound insulation are considered even more closely together?

Neusser: In robust connectors that still perform reliably under real on-site tolerances. Then sound insulation will stop being a special topic and become a natural part of structural design.

Flatscher: In reducing makeshift solutions on site. The more closely structural design, building physics, architecture

and building services are integrated already in the planning phase, the faster and higher-quality the execution will be.

Conclusion

Structural design seeks to connect, acoustics to separate – a seeming contradiction that can ultimately become an opportunity. Where both disciplines are considered together from an early stage, solutions emerge that make timber construction robust, quiet and future-proof.



“CONNECTORS ARE ACOUSTICALLY SENSITIVE BECAUSE THEY DETERMINE THE EFFECTIVENESS OF ENTIRE MEASURES. EVEN HIGH-QUALITY DECOUPLING SYSTEMS LOSE THEIR IMPACT AS SOON AS A RIGID CONNECTION IS CREATED.”

DR MAXIMILIAN NEUSSER,
TU WIEN

INVITATION

Ingenieur- Holzbau-Tage 2026

The Ingenieur-Holzbau-Tage 2026 ("Engineered Timber Construction Days" – IHBT) invite you to take part: an event series for everyone who not only calculates structures, but also wants to understand the background to structural design. Engineers, planners and practitioners will come together at five events to share knowledge, network, and collaboratively shape the future of timber construction. The event will be held in German.

Connecting knowledge.
Shaping timber construction.
Expanding perspectives.

**REGISTER
NOW!**

More information at
www.ihbt.at



BERLIN
21 January 2026

Enjoy Rooftop,
Rognitzstraße 8, 14057 Berlin

ZURICH
3 March 2026

chez Smith
Grubenstrasse 27, 8045 Zurich

STUTTGART
5 March 2026

OutOfOffice
Am Fruchtkasten 3
70173 Stuttgart

INNSBRUCK
10 March 2026

Das Innsbruck
Innrain 3, 6020 Innsbruck

GRAZ
12 March 2026

STEIERSMARKHOF
Ekkehard-Hauer-Straße 33
8052 Graz

SHERPA

SHERPA Connection Systems GmbH
Badl 31, A-8130 Frohnleiten

SHERPA-HOTLINE:

Service: +43 3127 41 983 - 0

Technical Support: +43 3127 41 983 - 311

office@sherpa-connector.com
www.sherpa-connector.com

