

# TensiNewsflash

Almost **WINTER 2024**

Dear TensiNet member,

Please find below the latest TensiNewsflash. Our best wishes for a healthy and inspiring 2025!

## **TENSINEWS 48 CALL FOR CONTRIBUTIONS DEADLINE 31.01.2025 -----**

We invite our members to submit for the next TensiNews issue an article, project description, upcoming event, new development, research report or book review\*. Send your contribution to [evi.corne@vub.be](mailto:evi.corne@vub.be).

Please follow these simple rules:

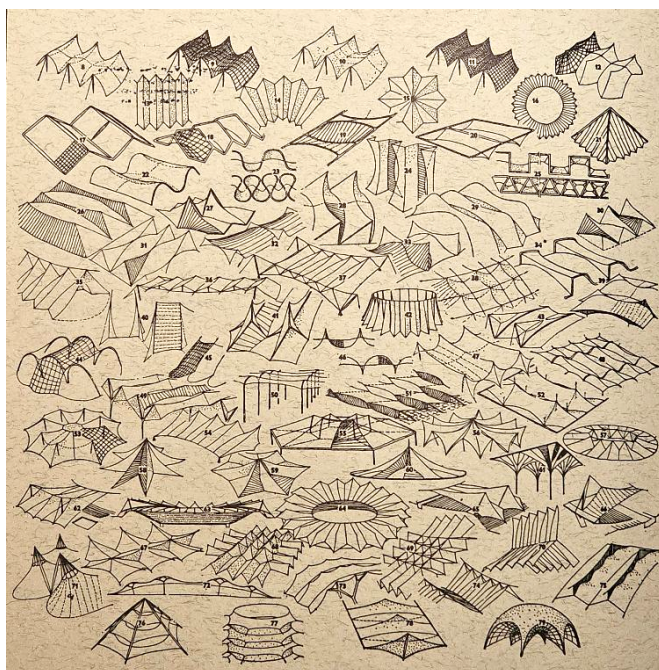
- The text should be written in English, submitted in Word-format
- Images are to be sent separately, with a resolution of 300dpi in .jpg-format (For easy reference during the layout process, it can be useful to include a copy of the pictures in the text file as well).
- For research articles the maximum word amount is set to 5000 words (equivalent of four pages in TensiNews layout).
- Project descriptions need to be accompanied by full contact details of the author, and other information such as architect, contractor, approx. span, height, membrane material, etc. This facilitates the inclusion of the project in the online database. (See below)

Name of the project:  
Location address:  
Client (investor):  
Function of building:  
Type of application of the membrane:  
Year of construction:  
Architects:  
Multi-disciplinary engineering:  
Structural engineers:  
Consulting engineer for the membrane:  
Engineering of the controlling mechanism:  
Main contractor:  
Contractor for the membrane (Tensile membrane contractor):  
Supplier of the membrane material:  
Manufacture and installation:  
Material:  
Covered surface (roofed area):

\* TensiNet and TensiNews provide to partners and members a platform to present projects, new developments and scientific results. The articles within TensiNews should have a scientific, technical or journalistic value, i.e. it should be informative, and not mainly marketing information.



WG5 continues to develop the 'Design of Tensioned Membrane Structures - Execution' and recently organised two online meetings on 6/11/24 and 11/12/24. In between, a report on the current work was presented at the CEN TC 250 plenary meeting on 28/11/24.



We know that every membrane structure is different. The execution rules should provide guidance for a wide variety of structures. At the end of the day, it has to be approved that the constructed tension membrane structure corresponds to the designed structure: the geometry has to be checked, and the prestress has to be checked. The designer knows whether geometry (curvature) or prestress is more critical for a particular structure. For this reason, it is not easy to discuss 'general' tolerance values ...

The next meeting of WG 5 is scheduled for 22/1/25.

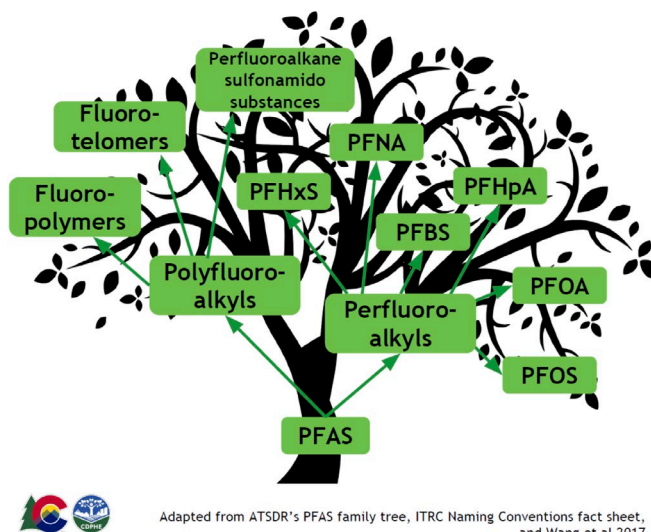


WG S&C continues, after the definition of the PCRs for Structural Membranes for Architecture, on the topic of the development of a grouped EPD for types of structural membranes and deepened in a specific meeting with IBU the technical feasibility and the advantages for all the TensiNet companies, producers of materials. We are in the process which takes time to collect the necessary.

The WG S&C also organized four specific meetings on the topic of the PFAS Ban in preparing for participation, as registered Association, in the European Chemical Agency ECHA Risk Assessment Meeting (RAC) and the Socio-Economical Assessment Meeting (SEAC).

The meetings for the discussion of the Construction products took part in November on the 26<sup>th</sup> and 27<sup>th</sup> of November 2024. Heidrun Bogner-Balz and Carol Monticelli were engaged to participate as stakeholders and represent TensiNet. At the end of the day, they caught the intention of the EU ECHA Committee to discuss structural membrane materials, their properties, risks and socio-economic impacts and any existing alternatives under the “Technical Textiles” future consultation.

The WG S&C group is therefore in the process of collecting the necessary information to submit to ECHA to raise awareness about the application of these materials and reduce the uncertainty resulting from the limited in-depth knowledge about these materials and their use.



The next WG meeting is scheduled for the second half of January. Not yet active in this WG and interested to join? Send an email to [info@tensinet.com](mailto:info@tensinet.com)

## WORKING GROUP DIGITAL



WG leader: Maxime Durka

The aim of this WG is to give TensiNet a higher visibility on digital platforms. We are optimising the TensiNet website and have committed to posting LinkedIn posts more regularly. Today, we reach more than 2314 followers!

## ACTIVITIES AND NETWORKING

### BAU 2025 The future of building 13<sup>th</sup> - 17<sup>th</sup> January 2025, München

BAU, the World's Leading Trade Fair for Architecture, Materials and Systems, takes place every two years. Everyone involved in the international community for planning, building and designing buildings comes together here—i.e. architects, planners, investors, representatives of the industrial and commercial sectors, the building trades, etc. Their primary interests include the latest techniques, materials and applications that can be used in actual practice. <https://bau-muenchen.com/en/trade-fair/>

### TEXTILE ROOFS 25<sup>th</sup> – 27<sup>th</sup> May 2025, Berlin

Information on the program, participation and presentation options and highlights will soon be available on [www.textile-roofs.com](http://www.textile-roofs.com)

## **FREI OTTO 100 The spirit of lightweight construction 5<sup>th</sup> – 6<sup>th</sup> June 2025, Stuttgart**



Frei Otto was a visionary innovative architect and master of lightweight structures. To commemorate his extraordinary spirit of experimentation, his works, methods, and international networks, the Institute for Lightweight Structures and Conceptual Design (ILEK) is organizing a two-day international symposium in collaboration with the Institut für

Architecturgeschichte (ifag). The two-day event will take place on 5<sup>th</sup> and 6<sup>th</sup> June in the ILEK "Tent" designed by Frei Otto. This provides an inspiring space for open reflection on past and present achievements in the field of lightweight construction. The symposium will include a historical reflection on Frei Otto's work, methods and networks, supported by the testimony of several contemporary witnesses. It will also focus on how different generations of researchers and practitioners interpret the legacy of Institute for Lightweight Structures at the University of Stuttgart. Invited keynote speakers include Achim Menges, Jenny Sabin, Werner Sobek and Georg Vrachliotis. <https://www.ilek.uni-stuttgart.de/>

## **STRUCTURAL MEMBRANES XII International Conference on Textile Composites and Inflatable Structures 8<sup>th</sup> – 10<sup>th</sup> October 2025, München**

The main objective of Structural Membranes 2025 is to collect and disseminate state-of-the-art research and technology for design, analysis, construction and maintenance of textile, tensile and inflatable structures. Contributions on other lightweight structural systems are also very welcome. The conference will address all aspects related to design, analysis, planning, manufacturing, testing, construction and maintenance of tensile structures. Contributions including advances in materials, life-cycle analysis, environmental conditions, monitoring and applications of machine learning and artificial intelligence are encouraged. Structural Membranes 2025 aims to be a forum of experts of all different fields related to tensile and lightweight structures for discussing recent progress and identifying future research directions within a relaxed environment. <https://structuralmembranes2025.cimne.com/>

## **IASS ANNUAL SYMPOSIUM 2025 The Living Past as a Source of Innovation 27<sup>th</sup> – 31<sup>st</sup> October 2025, Mexico**

Mexico has already held two previous editions of this symposium – the first time in 1967 in Mexico City and the second time in 2008 in Acapulco, Guerrero. The third edition would be at the Palacio de Minería, located in the historic center of Mexico City.



Mexico's cultural richness and constructive tradition have gone hand in hand since time immemorial. This is how the past and the present coexist daily in our territories, architectures, structures, and spatial solutions. The IASS 2025 theme symposium, "**The living past as a source of innovation,**" will look towards novelty: learning from good construction practices and using the new

technologies and materials of our time to project ourselves into the future. What lessons can we transmit from the historical tradition, from projection, technical, geometric, project, and structural solutions? What can we implement in the future in a world in perpetual transformation? The invitation opens to a rich discussion and deep reflection: let us raise, listen, and learn together from experiences worldwide. <https://iass2025.unam.mx/>

**TENSINET SYMPOSIUM 2026 SHAPING THE PATHWAY TO FUTURE TENSIONED  
MEMBRANE DESIGN 30<sup>th</sup> September –2<sup>nd</sup> October 2026, Essen**

The symposium will be hosted by the Institute for Metal and Lightweight Structures, University of Duisburg Essen, campus Essen. Initiators are Natalie Stränghoner and Jörg Uhlemann, supported by their team and the TensiNet Association. The main topics are 1/ Design, Modelling and simulation of structural membranes; 2/ Materials and executions and 3/ Sustainability and building physics. In the filled three-day programme, time is also set aside for various visits: visit to the test laboratories of the University of Duisburg-Essen, visit to the Ruhr Museum in Zeche Zollverein and the technical visits to Mehler Technologies and the Factory tour Zoom Erlebniswelt.

Kind regards and enjoy the winter season!

Evi Corne & Marijke Mollaert