

TensiNewsflash

SUMMER 2024

Dear TensiNet member,

Please find the latest TensiNewsflash.

End of May the General Assembly took place during Textile Roofs 2024. At this meeting, the Permanent Members voted unanimously in favour of Architekten Landrell and Pfeifer joining the association as Partner Members. See [link](#) to the ppt presentations and the minutes. Also for this edition, Textile Roofs was an interesting informal event that combined expert talks with software hands-on, a prototype build and demonstrations.

Enjoy your reading as well as the summer season which promise to be interesting and busy!



Workshops on the ecofriendly Seminarship during Textile roofs 2024 © Marijke Mollaert

TENSINNEWS

Call for contribution TensiNews 47 – deadline Friday 26th July

We invite our members to submit for the next TensiNews issue 47 an article, project description, upcoming event, new development, research report or book review*. Send your contribution to 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.

WORKING GROUP EUROCODE -----



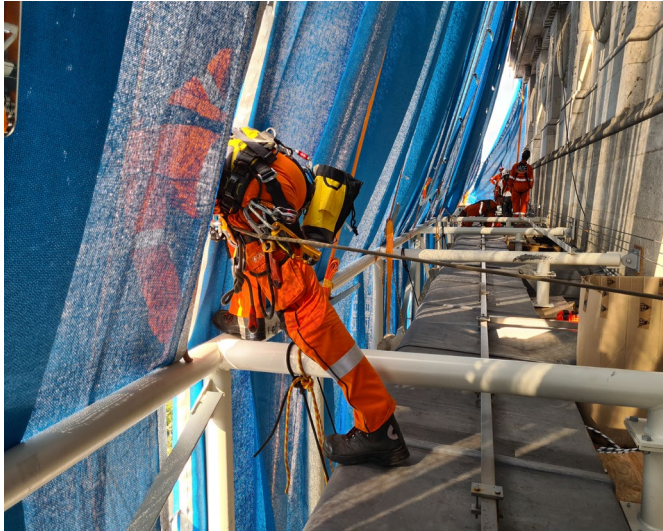
WG leader: Marijke Mollaert

To support the conversion of **CEN/TS 19102:2023 Design of tensioned membrane structures** into a new EN Eurocode, there is a need for execution rules, to underpin the corresponding design provisions, to be included in a European Standard.

CEN/TC 250's principles concerning execution standards are as follows:

- CEN/TC 250 has a legitimate interest in ensuring that execution provisions upon which the Eurocodes directly rely, such as certain tolerances, are included in a European standard.
- CEN/TC 250's general preference is that execution standards are developed by other CEN/TCs, in liaison with CEN/TC 250.
- In special cases, CEN/TC 250 may propose to develop execution rules (upon which Eurocodes directly rely) if no other TC will undertake the work.
- **Work on execution standards should be performed with input from all relevant stakeholders, including constructors.**
- Execution provisions should be presented in a manner that is clear to those who must apply them.

CEN/TC250 Working Group 5 Membrane structures is currently working on the conversion of the 'CEN/TS 19102:2023 Design of tensioned membrane structures' into an EN Eurocode.



Wrapping the Arc de Triomphe © bfl-tr.com/Jörg Tritthardt

In parallel, Working Group 5 is developing a draft document on execution rules to support the design provisions specified in the TS. The draft is based on the information in Annex H of the TS (which will not be included in the EN 19102) and considers 'EN 10204 Metallic Products: Types of inspection documents' as a further reference.

We invite key experts in the design and construction of membrane structures, whose input would be of great value, to let us know if they would like to contribute to the development of the execution rules at any stage. Please send an email to info@tensinet.com.

WORKING GROUP SUSTAINABILITY & COMFORT -----



WG leader: Carol Monticelli

The Working Group Sustainability & Comfort submitted to IBU (Institut Bauen und Umwelt) the **Product Category Rules Part B: Requirements on the EPD for structural membranes** (fabrics, coated fabrics and foils). It was published beginning of 2024. See [link](#).

The next step is the writing of **2 Environmental Product Declarations (EPD): a group EPD for PVC coated polyester fabric and a group EPD for ETFE-foils**. A subgroup EPD for PVC/PES and one for ETFE will be set up for this purpose. A call has been recently sent to the TensiNet members involved in this matter.

Not yet active in this WG and interested to join? Send an email to info@tensinet.com

WORKING GROUP DIGITAL -----



WG leader: Maxime Durka

This new working group was launched last year. The aim is to give TensiNet a higher visibility on digital platforms. We have started to improve the TensiNet website and have committed to more regular LinkedIn posts. Today, we reach more than 2040 followers!

ACTIVITIES AND NETWORKING -----

SYMPOSIA 2024

IASS 2024 REDEFINING THE ART OF STRUCTURAL DESIGN – 28-30.08.2024 Zurich

IASS 2024 is hosted by the National Centre of Competence in Research Digital Fabrication at the Institute of Technology in Architecture (ITA) of ETH Zurich. IASS has several Working Groups of which WG6 “**Tension and Membrane Structures**” is chaired by Ken'ichi Kawaguchi and Marijke Mollaert. [Link](#)

Essener Membranbau Symposium 2024 – 20.09.2024 Essen

The 6th Essener Membranbau Symposium is organised by the Institut für Metall- und Leichtbau. A detailed program will follow soon. [Link](#)

IMS BAUHAUS® Symposium 2024 – 27-29.09.2024 Dessau-Rosslau



For the institute's 25th anniversary, a symposium is scheduled from 27th till 29th September 2024. The organisers will be happy to welcome you at their institute where they have trained so many students in membrane construction coming from all over the world. [Link](#)

VIII Latin American Tensile structure Symposium – 14-16.10.2024 Buenos Aires

Topics related to design, project, calculation, engineering, manufacturing and specific assembly of technology will be covered, as well as its relationship with technical and environmental aspects that involve them in the concerns of current architecture. [Link](#)

Still two more years of waiting for the next TensiNet symposium **SHAPING THE PATHWAY TO FUTURE TENSIONED MEMBRANE DESIGN**. It 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.

MISC -----

INVOICES 2024 It seems that some of the invoices 2024 weren't paid before the indicated deadline. To facilitate our work please do not wait with your payment. Thank you in advance for your understanding.

Kind regards,

Evi Corne & Marijke Mollaert