

WG Good Practice

TENSINET - Code of Conduct

TENSINET wants to ensure, that members committing to the code of conduct offer exclusively products and services on the market which fulfill the quality ordered by the client and which meet the applicable norms, standards and laws. In addition, they agree to take into account the state of the art (technology) and provide the highest possible quality.

Every member should be aware of his individual responsibility for the quality of the own work. The delivery of quality serves to avoid errors and deficiencies, to ensure the satisfaction of the customer and finally the trust in structures with membrane materials. This does not only serve the respective company, but also the sustained growth and well-being of the membrane construction market. This is a major goal of TENSINET formulated in the Memorandum of Understanding.

Everyone stating to follow the "Good practice" rules has to consider all general aspects mentioned below as well as the rules formulated for the individual party he or his company is belonging to.

1 General Aspects

The specification of the client is fulfilled in all issues.

Relevant standards, directives and laws are considered. Particularly, legal requirements for employed persons and for workplaces are achieved and considered. Employees and persons commissioned receive at least the mandatory minimum wage. The state of the art is applied.

Consumption of natural resources and any burdening of the environment has to be considered.

Offers shall be made according to legal requirements.

The member shall be ISO 9001 certified or follow comparable standards. The involved party has sufficient capacity (personnel and material) as well as sufficient professional knowledge to manufacture or deliver the ordered services and products in the ordered quality. The party may use appropriate subcontractors.

Subcontractors shall also follow all formulated rules in here.

The company shall have an adequate quality assurance system ensuring the quality of the ordered services, the products manufactured and the intermediate products used.

The company shall ensure the traceability of all products from the place of use back to the origin of the single components. An end of life treatment shall be taken into account.

Involved Parties in tensile architecture for which individual rules have been formulated in this document are:

- Raw material suppliers,
- Membrane material producers,
- Membrane manufacturers
- Architects
- Designers / Engineers

2 Individual Rules for involved parties

2.1 Raw material suppliers

Raw material suppliers (producers of thermoplastic materials) shall fulfill the following aspects:

- The company possesses a certification system according to ISO 9001 or comparable.
- Environmental aspects are considered in production. Thus rules for sustainable production have been formulated. Recycling systems have been installed.

2.2 Membrane Material producers

- The company is certified according to ISO 9001 or comparable.
- The company offers "structural membranes" for architectural application with the needed performances like e-g- durability and recyclability.
- Transparency about the performance of the material should be given; REACH conformity of the material has to be considered.
- The company demonstrates the material properties needed for the design of textile architecture.
- Innovation in structural membranes is provided.
- Reference projects are available.

- Qualified sales people with experience and who are able to give recommendations on the right use should be available.
- Traceability of product quality has to be given.
- Experience of reachable values for the used materials, details and techniques is given i.e.
 recommendations on joining techniques according to specific requirements can be provided.
- Personnel should therefore be provided the needed skills, experience and internal qualifying procedures.
- General rules and relevant standards are followed.

2.3 Membrane Manufacturers

- QA-System like e. g. Certification according to ISO 9001 or comparable has been established (covering all procedures (like e.g. joining methods, correct handling, dimension control...)), traceability of products, regular training of staff.
- Experience of reachable values for the used materials, details and techniques is available
 (i. e. defining the joining/ seam performances by dividing them into classes according to specific requirements).
- Personnel should be qualified according to personnel skills, work experience and internal qualifying procedures.
- In house Testing and / or regular checks with third party testing shall be provided.
- Quality manual for each project is created.
- General rules are followed e. g. Design Guide, SaP-Report etc.
- Only companies who are controlling themselves can deliver good and consistent quality.

2.4 Architects

- Registered Architect.
- Accounts for the unique nature of tensile structures.
- Has own experience of tensile architecture or involves an experienced designer or engineer.
- Development of the project and management of works with right expertise, or involving partners who have these skills.
- All conditions should be known before drafting the project: functional conditions, climatic conditions, structural conditions and construction conditions.
- Functional and technical issues should be known that may arise during the life of the cover, and design in the manner for being able to deal with them, reducing maintenance efforts and costs.

- Efforts should be made towards sustainable design, which means: the use of materials with low CO₂ production and recyclability; reduce maintenance to the minimum; bioclimatic behavior of the roof (taking into account the internal comfort).
- Plan of proper maintenance must be prepared, with minimum expenditure, and ensuring that
 the integrity and quality of the elements and materials remain throughout the life of the
 building.
- Local codes and restrictions should be taken into account.

2.5 Designers/ Engineers

- Registered Engineer, with knowledge and experience in building codes.
- Accounts for the unique nature of tensile structures.
- Should have experience of tensile architecture or involves an experienced colleague engineer, Development of the project and management of works with the right expertise, or involving partners who have these skills.
- Efforts should be made towards sustainable design, which means: the use of materials with .low CO₂ production and recyclability.
- Functional and technical issues should be known that may arise during the life of the cover,
 and design it to be able to deal with them.
- Plan of proper maintenance must be prepared, with minimum expenditure, and ensuring that
 the integrity and quality of the elements and materials remains throughout the life of the
 Building.