# Tensairity®

## The new lightweight structure



The new structural concept Tensairity  $^{(\!R\!)}$  is a synergetic combination of an airbeam with conventional cables and struts. The role of the airbeam is to pretension the cables and to stabilize the struts against buckling. The load is carried by the struts and cables. The patented technology has many very interesting properties and enables new solutions in civil engineering, structural engineering and architecture.



Tensairity® demonstration bridge, 8 m span



Transparent Tensairity® girder

#### **Properties**

- · light weight
- · heavy loads / low pressure
- wide span
- deployable
- adaptable
- compact storage volume
- · approved technology
- new formal language
- new lighting options
- floating
- self healing / bionic



Dismantled Tensairity® girder



Self healing in plan



Lightning options I



Lightning options II



Tensairity® advertisement pillaeight

### **Applications**

- Roof structures for stadiums
- Roofs for parking garages
- Foot bridges
- · Advertisement pillars
- · Green houses
- Swimming platforms
- Tennis halls
- Temporary bridges
- Tents
- Hangars
- Canopies
- Factory buildings
- Observatory buildings
- Exhibition stands
- High altitude kites
- Actuators

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Tensairity® skiers bridge, 52 m span, 200,Lnselevillard France



Tensairity $^{\circledR}$  roof for parking garage, 28 m span, 2004, Montreux - CH



Tensairity® canopy, 2005, Pieterlen Switzerland



Tensairity $^{(\!\scriptscriptstyle R\!\!)}$  exhibition stand, 2004

#### Contac

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