

# Towards Minimum Design Standards for Tensile Membrane Structures



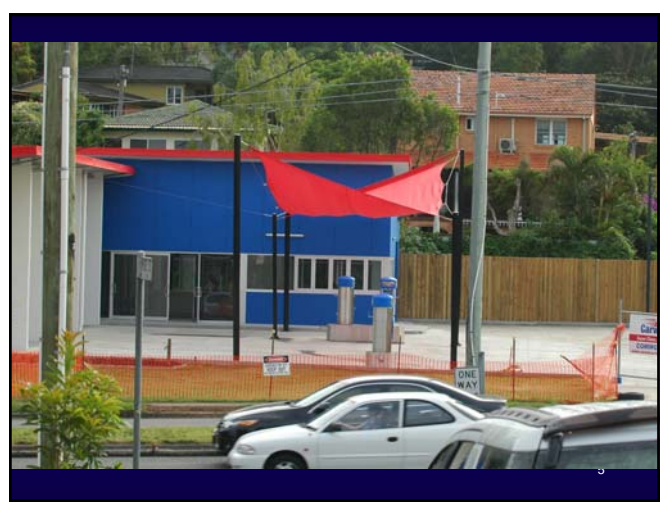
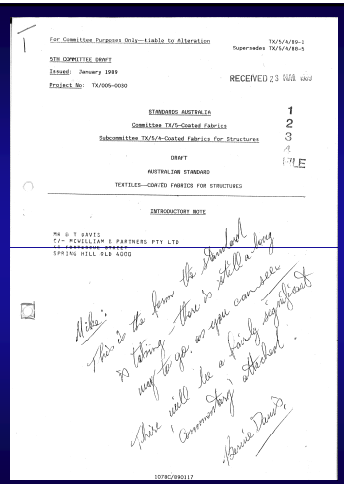
Joseph Dean  
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# Australian Fabric Industry

- Death and injury associated with shade structures
- Shade structures banned by SA Education
- NSW Education withdraws funding for fabric shade structures

# Draft Australian Standard Textiles – Coated Fabrics for Structures

(circa 1989)

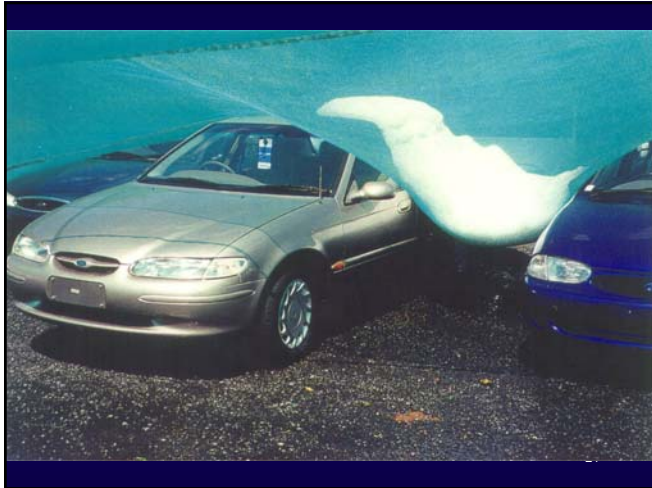






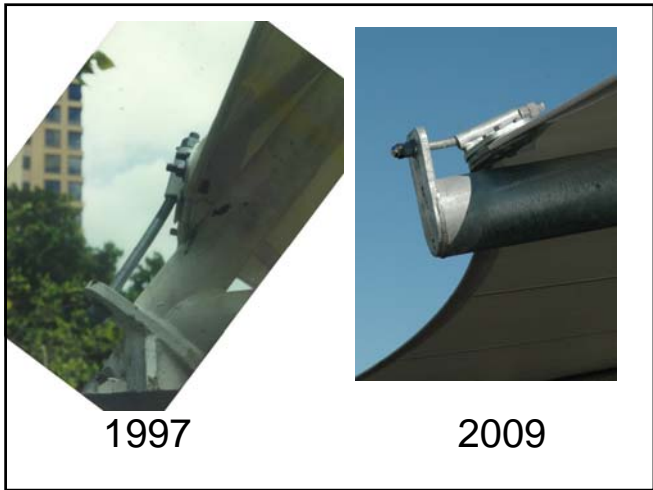
Insurance Companies are Slow Learners!











**Kazuo Ishii**

**Membrane Structures in Japan**

(1995)

**ASCE**

**Tensioned Fabric Structures**

**A Practical Introduction**

(1996)

**ASCE**

**Standard Tensile Membrane Structures**

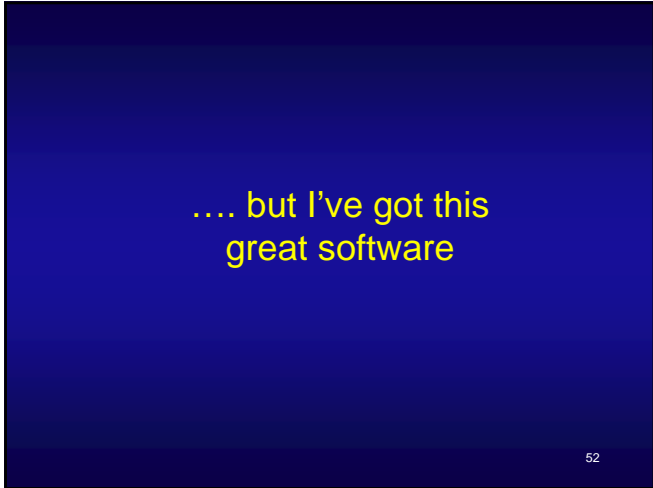
Public Comment Draft (2009)

**Key Elements of Fabric Structure Design Standard**

- Materials - properties
- Loads & load combinations
- Methods of analysis
- Safety Factors – fabric, cables, fittings
- Detailing guidelines and principles

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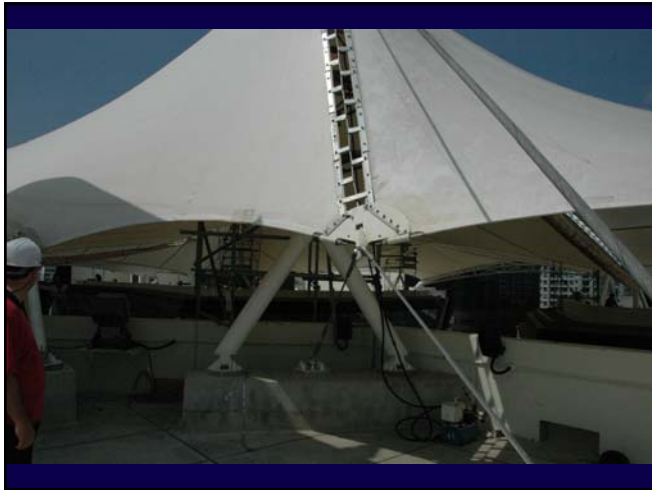
### The Right Mix

- Standards
- Software
- Experience
- Common sense
- Feedback from installers

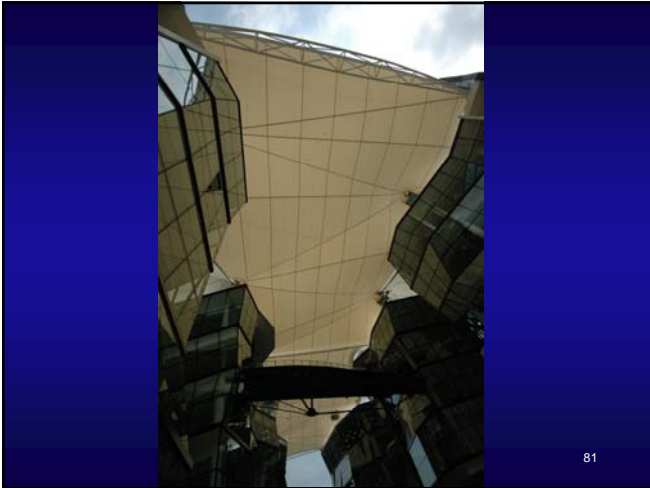
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