

# **10 YEARS OF PERFORMANCED BASED REGULATIONS IN AUSTRALIA**

**by**

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**OBJECTIVE  
FUNCTIONAL  
PERFORMANCE**

- Deemed to satisfy specifications
- Appraisal
- ABCB Certification



# BCA Compliance



# EVIDENCE OF SUITABILITY

- **Test report by registered testing authority**
- **Certificate of Conformity or Certificate of Accreditation**
- **Documentation from a professional engineer**
- **Certificate issued by a JAS-AND accredited body**
- **Product listing from an accredited fire testing laboratory**
- **Any other documentation that demonstrates suitability**



# RECYCLING

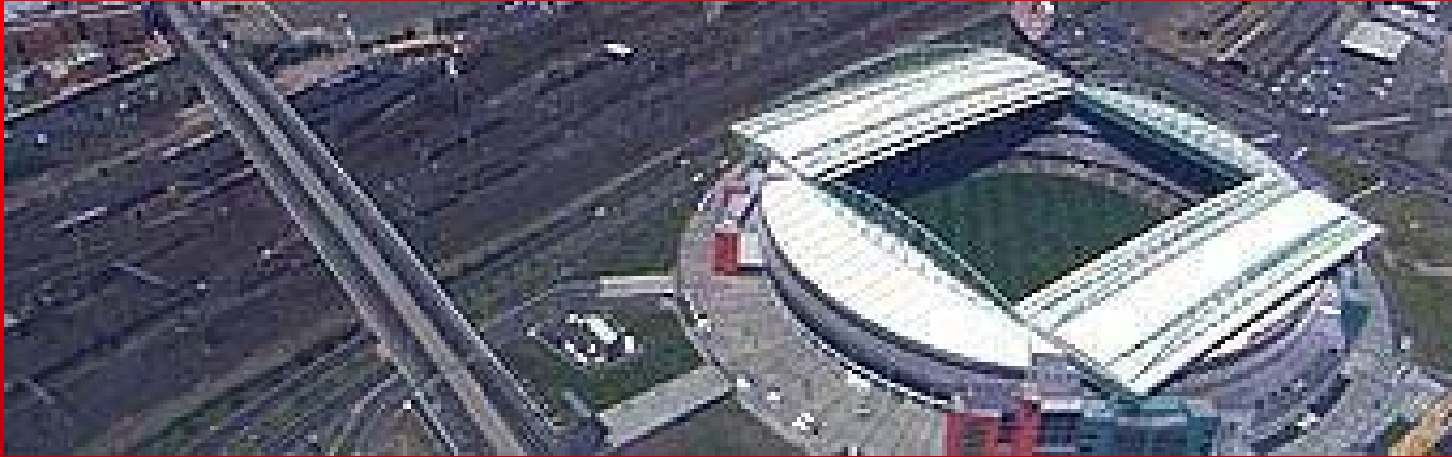


**Dampness in walls**

**Change of use  
places higher  
requirement of  
moisture transfer  
in external walls**



# NEW STADIUM



**Playing surface  
175 x 142 yards**



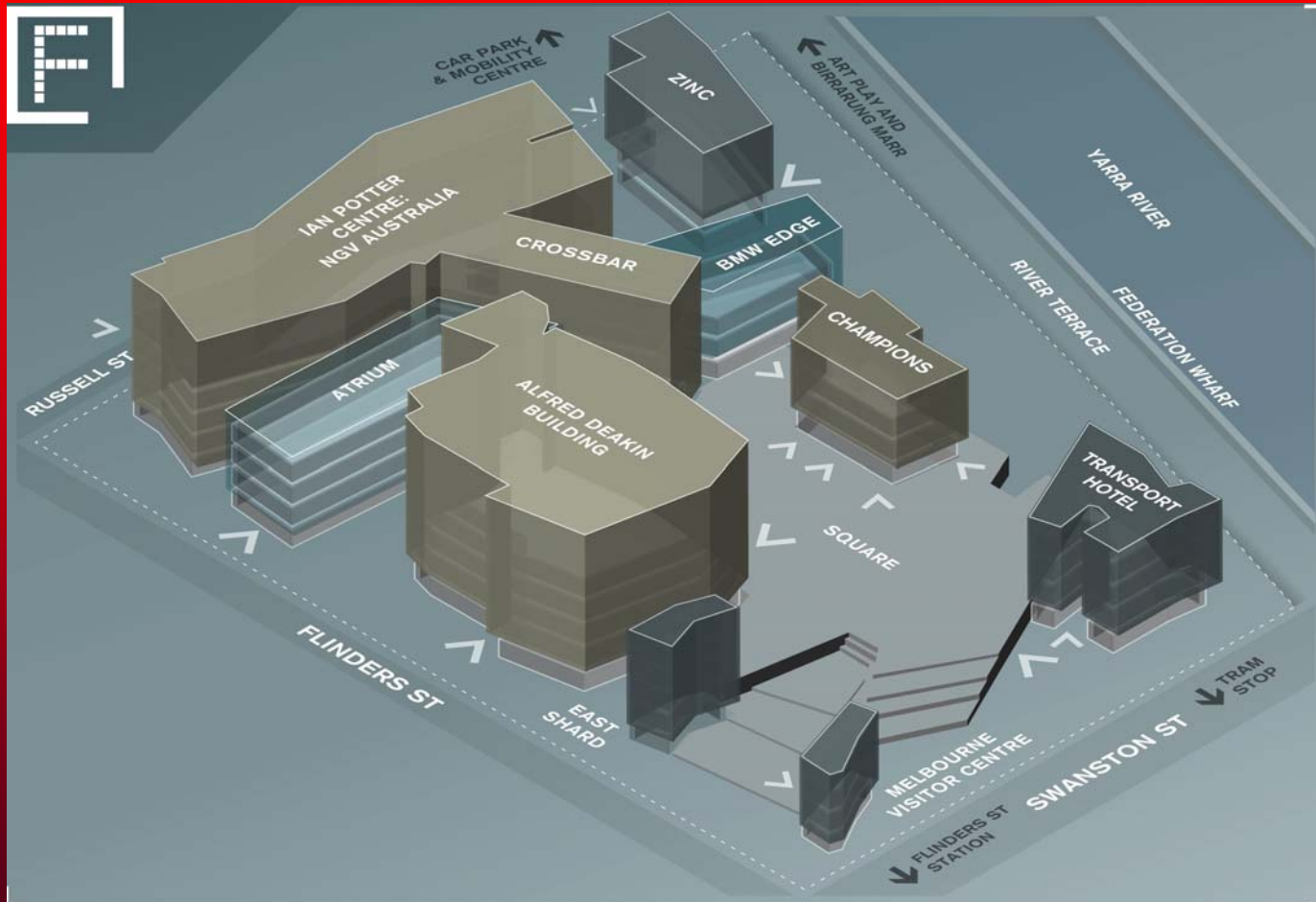
# EVACUATION

**Deemed-to-satisfy when whole playing surface is in use**

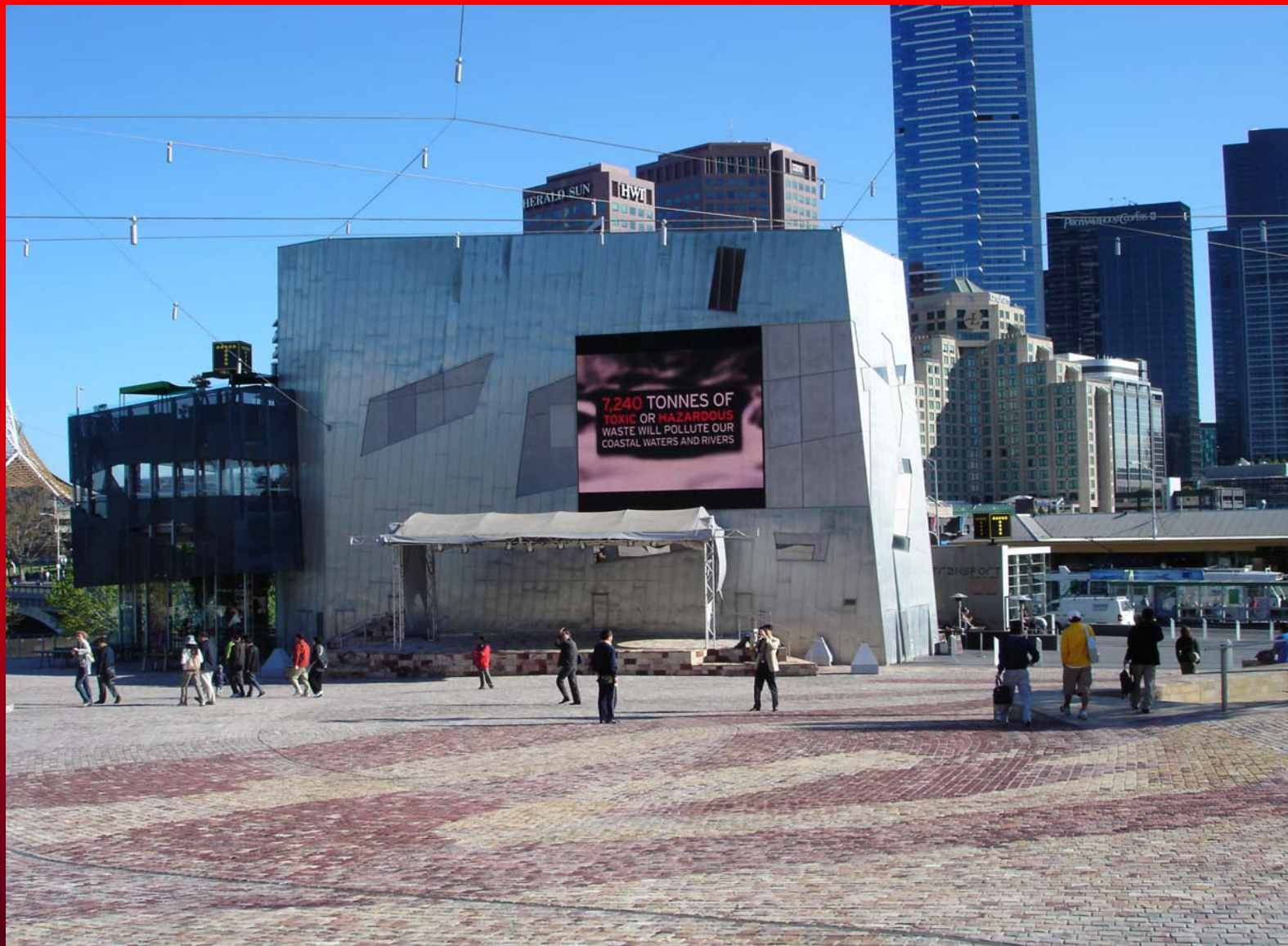
**Extra exit path lengths required  
performance fire modeling to show  
safe evacuation when seating  
extended onto playing surface**

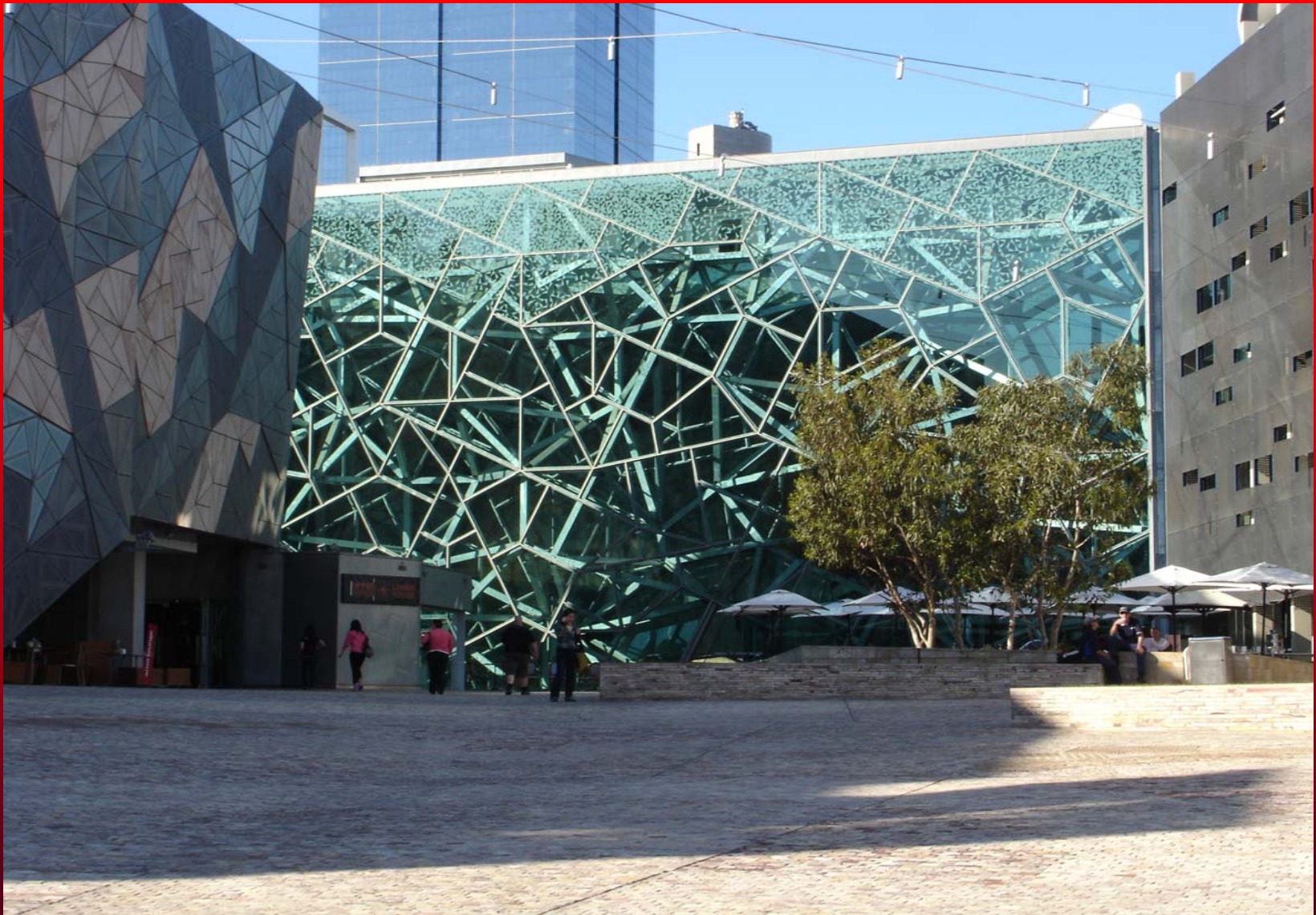


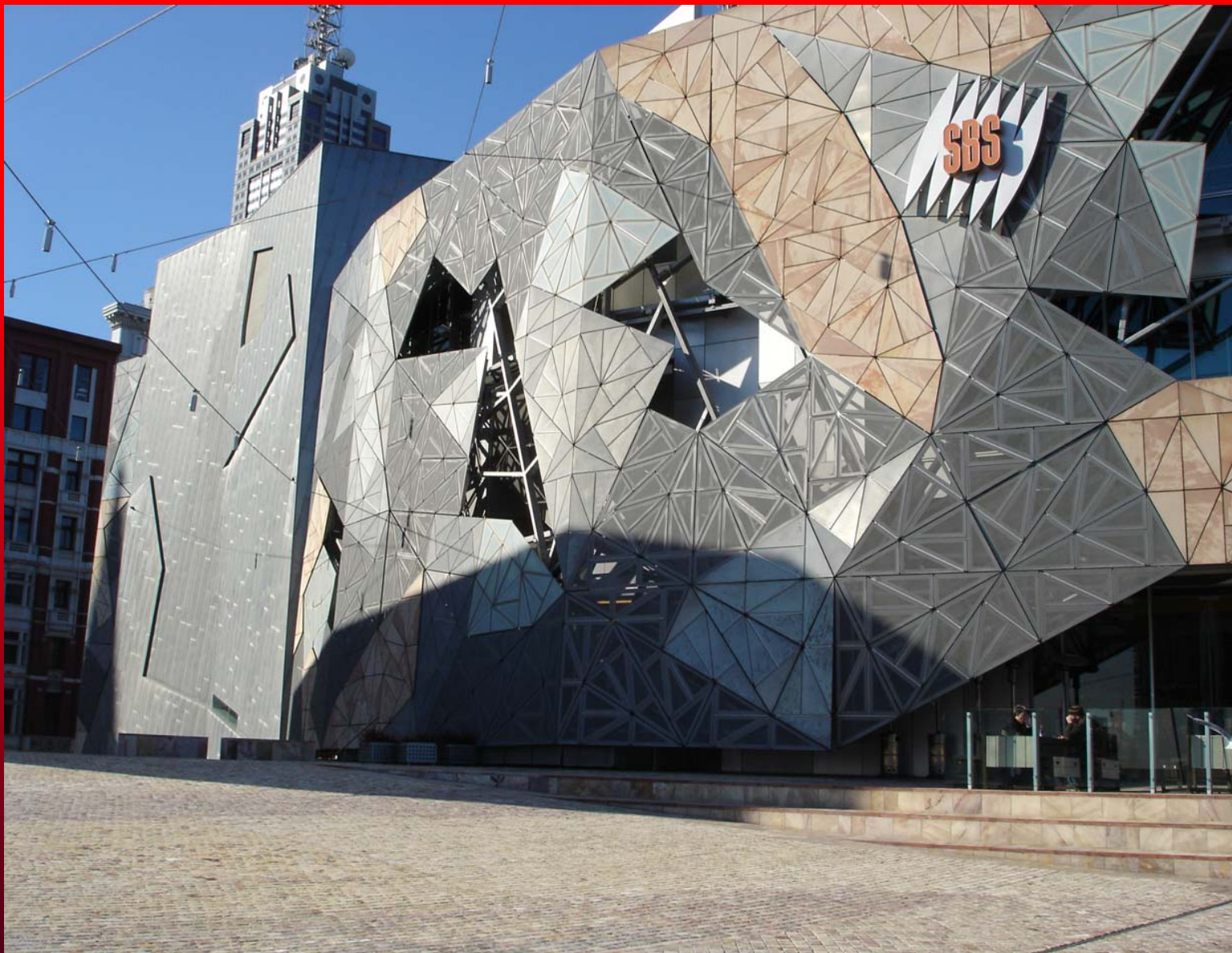
# FEDERATION SQUARE













# **BUILDING WRAPS**

**Australian Standard AS/NZS 4200.1:1994**

**Classifies for wind exposure based on  
tensile strength**

**Tensile strength is related to tear  
strength when you are in one medium**



# Load Test 1 Bag



**Paper – Medium**



**Polyethylene – extra light**

# Load Test 2 Bags



**Paper – Medium**



**Polyethylene – extra light**

# Load Test 3 Bags



**Paper – Medium**



**Polyethylene – extra light**

# Load Test 4 Bags



**Paper – Medium**



**Polyethylene – extra light**

# Load Test 5 Bags



**Paper – Medium**  
**Failed at 4**



**Polyethylene – extra light**  
**Failed at 5**

# Failure tear at fixing



**Paper – Medium**

**Failed at 4**



**Polyethylene – extra light**

**Failed at 5**

# **BCA – Fire Deemed-to-Satisfy**

## **AS 1530.2**

**‘Method for fire testing of building materials’**

**Polyethylene wraps not possible to test to this method**



# EMBEDDED ENERGY

- **Currently codes only regulate daily energy usage**
- **Embedded energy ignored**

## **Embedded energy**

- **Manufacture**
- **Transport**
- **Installation**
- **Demolition**



**From a WOBO perspective embedded energy is significant when assisting undeveloped countries in upgrading their housing stock**

**These countries with largest homeless populations tend to be located in temperate to tropical climates where embedded energy makes a major contribution to the total energy used over the life of a building**



**Performance based regulations  
will allow for innovation in  
construction and materials used  
in the increasing need of the  
homeless**



# SUMMARY

- 1. Deemed to satisfy solutions will always be the most used path through a performance code**
- 2. Allow the use of innovative designs and materials**
- 3. Will assist in lowering green house gas contribution from the construction industry**
- 4. Assist in freeing up trade in construction between countries**
- 5. Allow building professionals to use their full ability in ensuring correct level of safety is maintained**

