LSAA 2007 Conference
25th & 26th October 2007

# Stretching the boundaries of Membrane and film

Peter Lim - Tensys

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1

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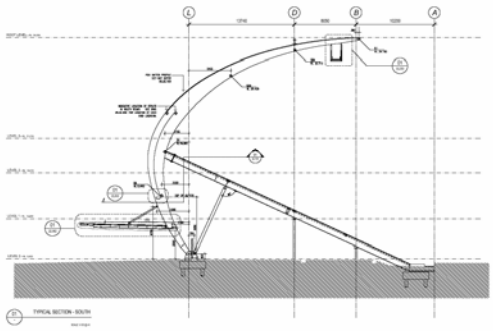
2

## Stadium Section – South & East typical



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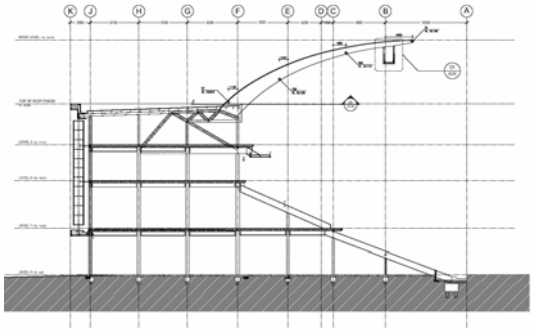
3

## Stadium Section – West Typical



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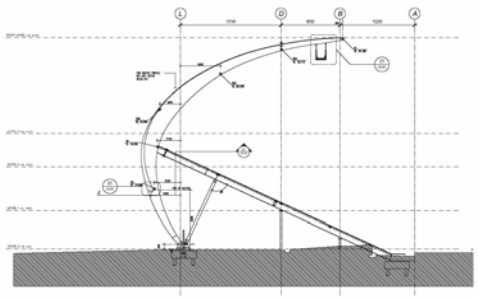
4

## Stadium Section – North Typical



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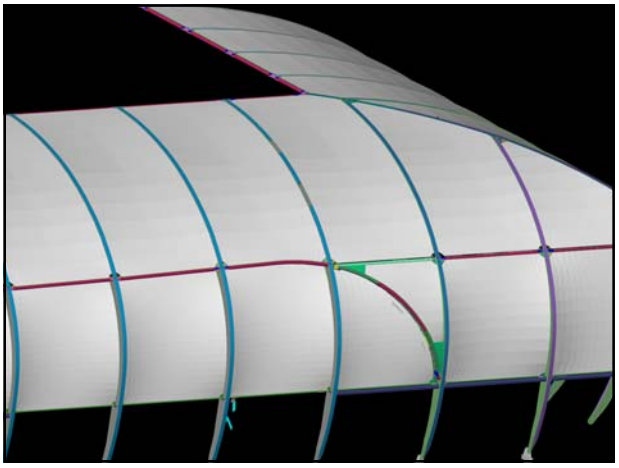

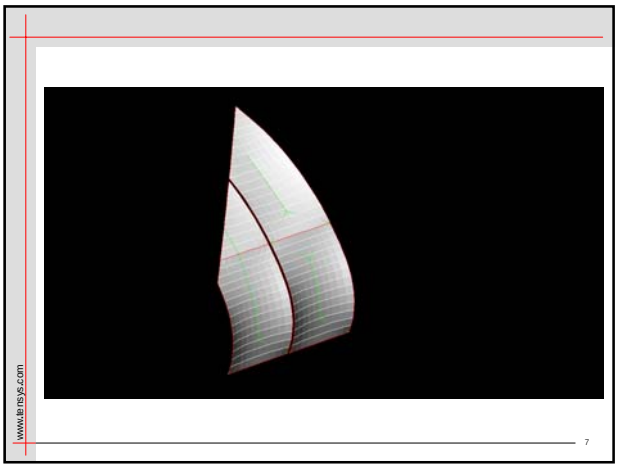
www.lbtsys.com
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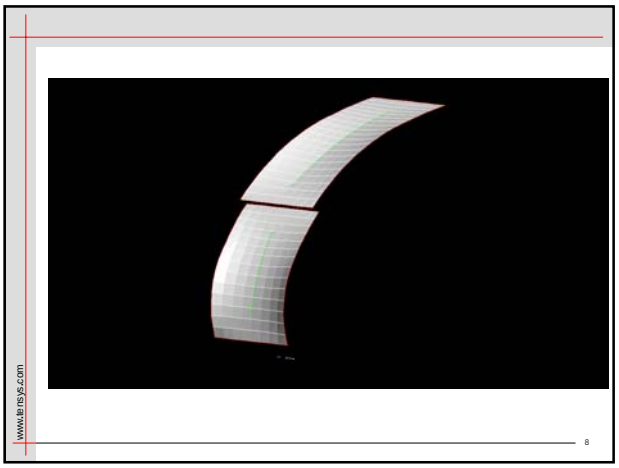
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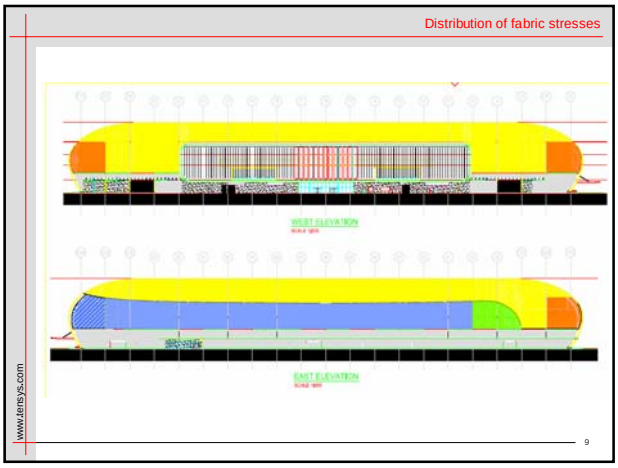
Distribution of fabric stresses
WEST ELEVATION
EAST ELEVATION
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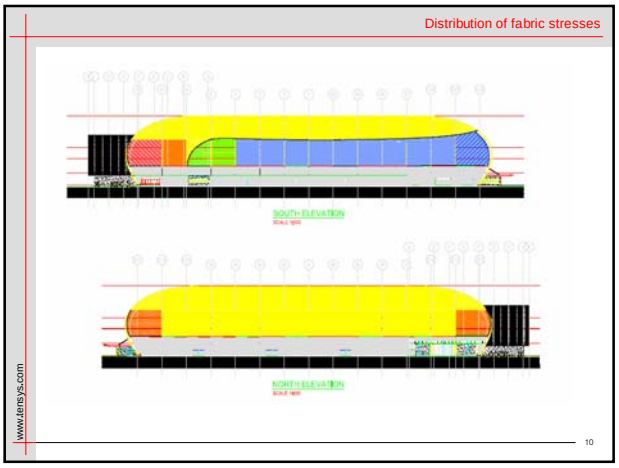
9


Distribution of fabric stresses
SOUTH ELEVATION
NORTH ELEVATION
www.lbtsys.com
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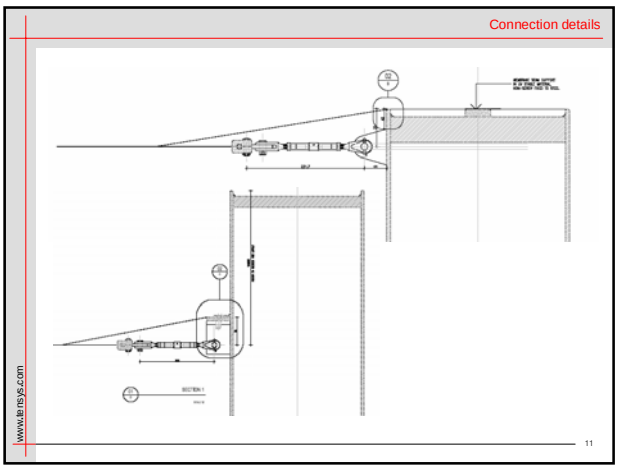
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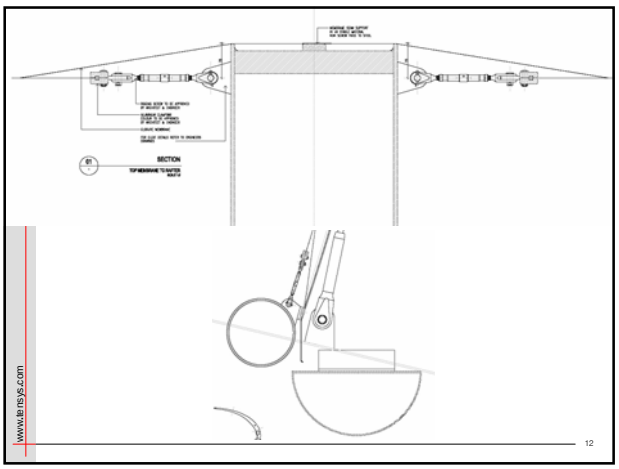
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www.lbtsys.com
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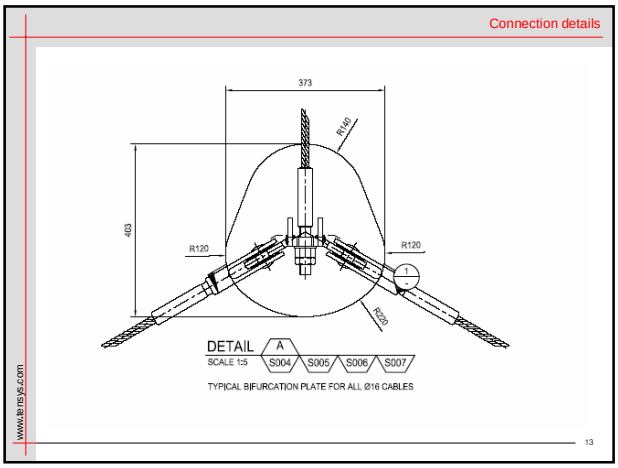
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R140
403
R120
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R200
DETAIL A
SCALE 1:5
S004
S005
S006
S007
TYPICAL BIFURCATION PLATE FOR ALL Ø16 CABLES
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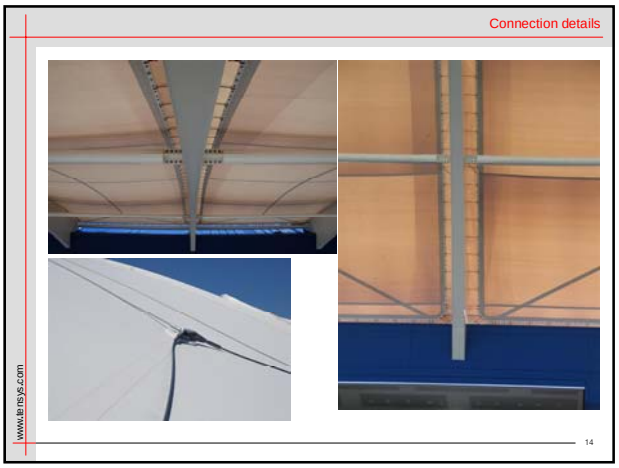
13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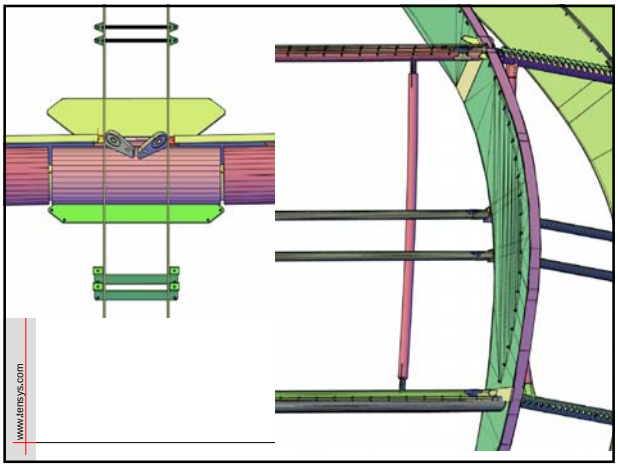
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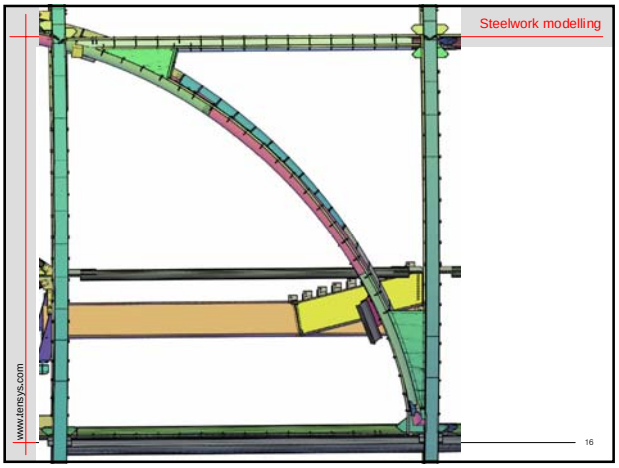
Steelwork modelling
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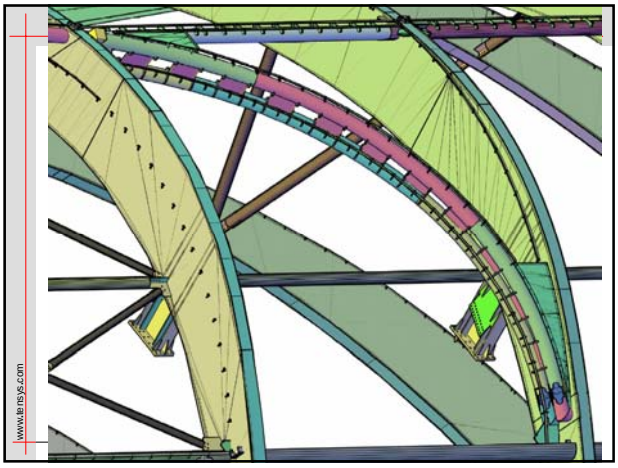
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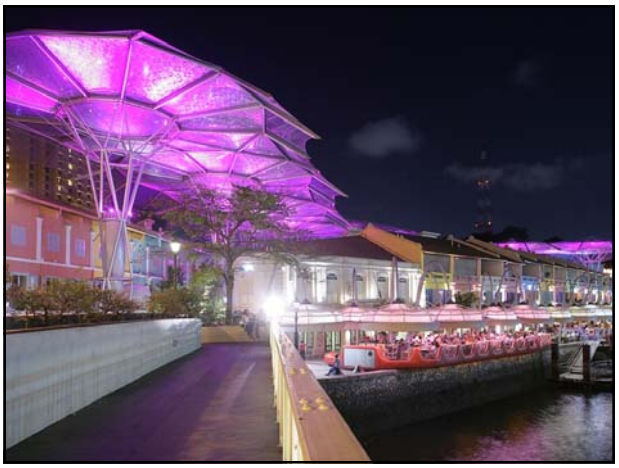

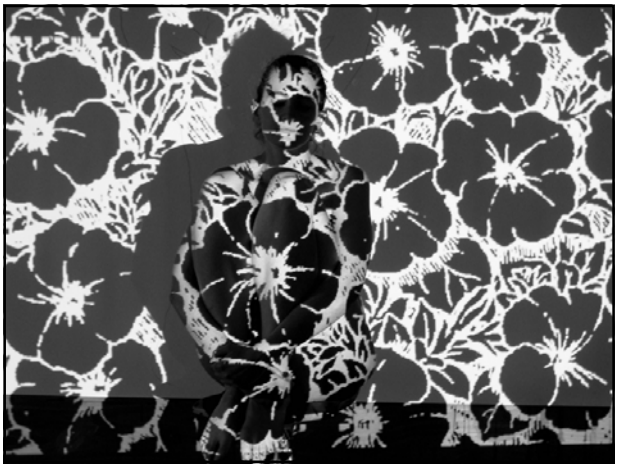

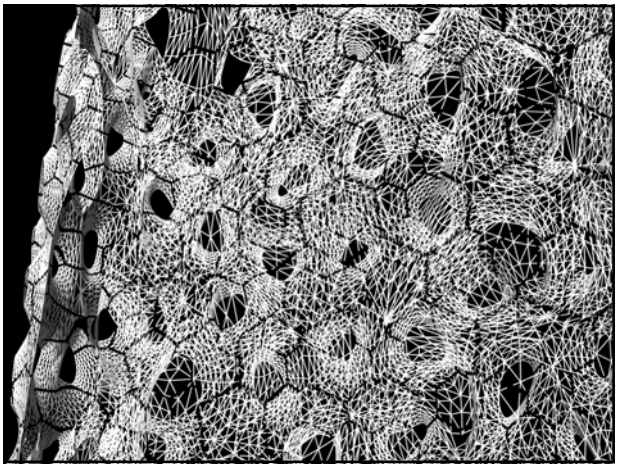

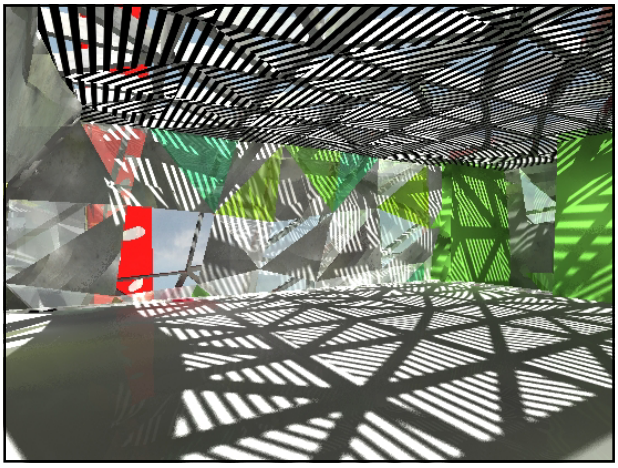

Nature
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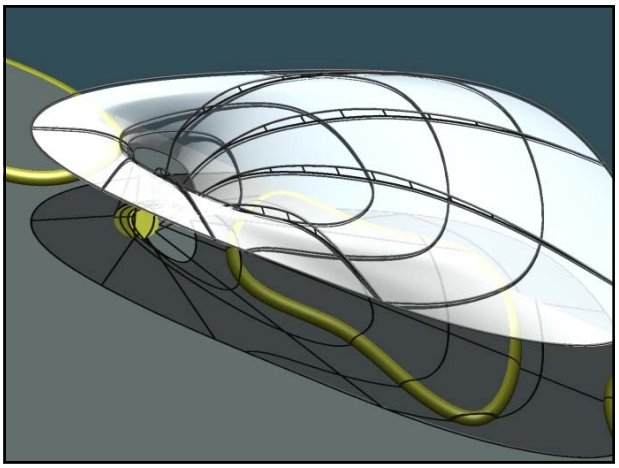
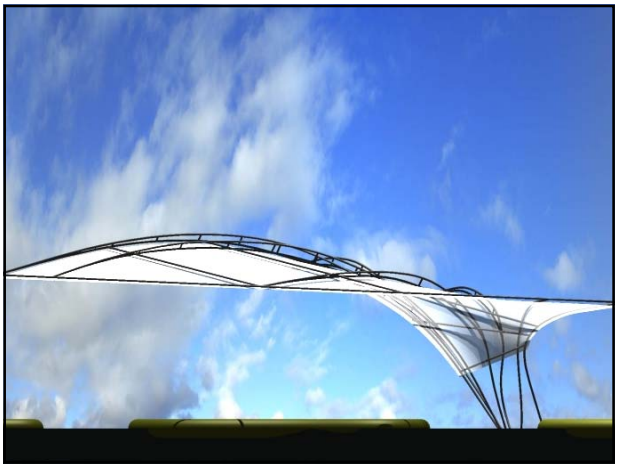
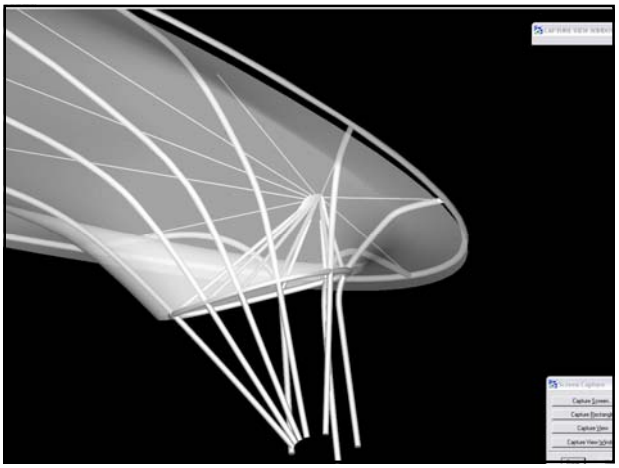
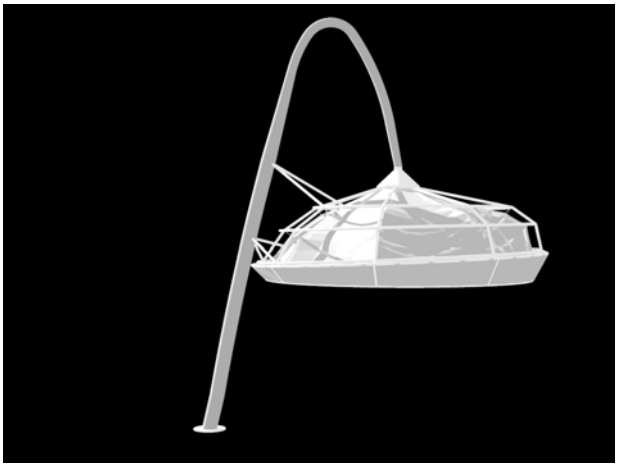
25

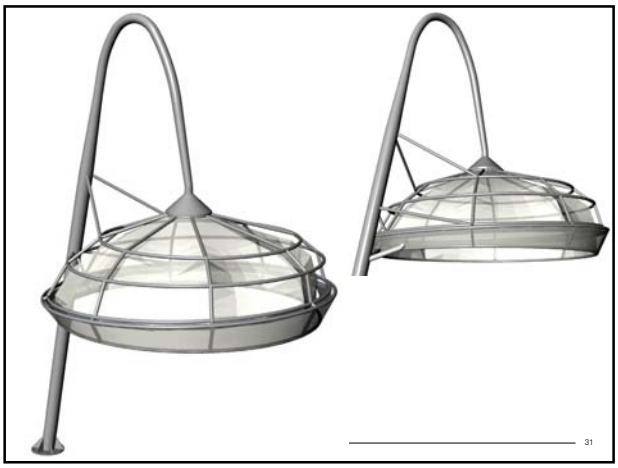






BBC Cymru Wales
www.bbc.co.uk/w

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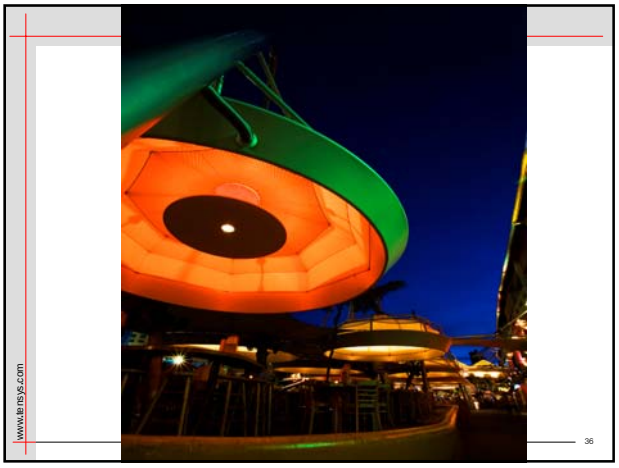
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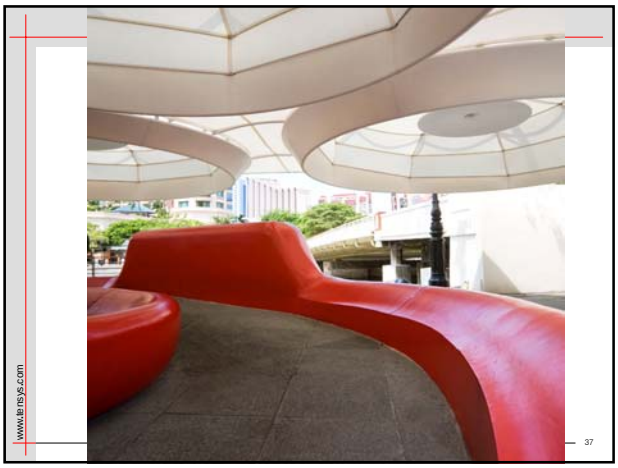
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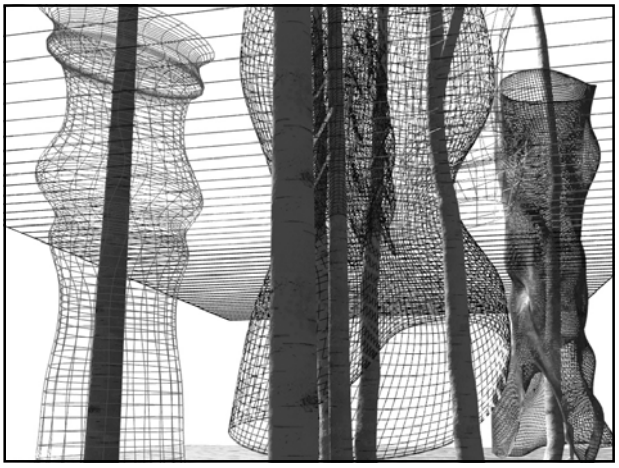

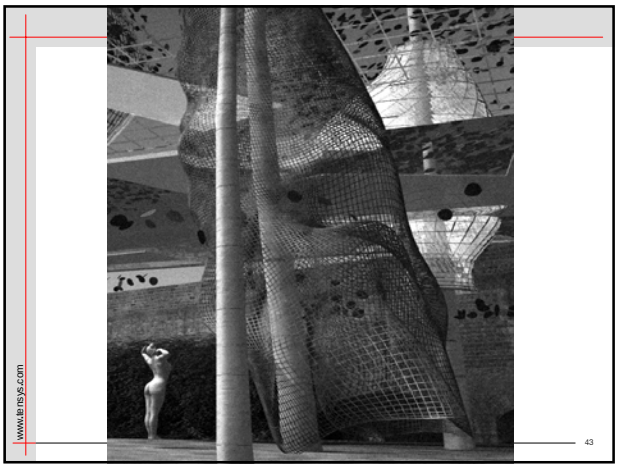
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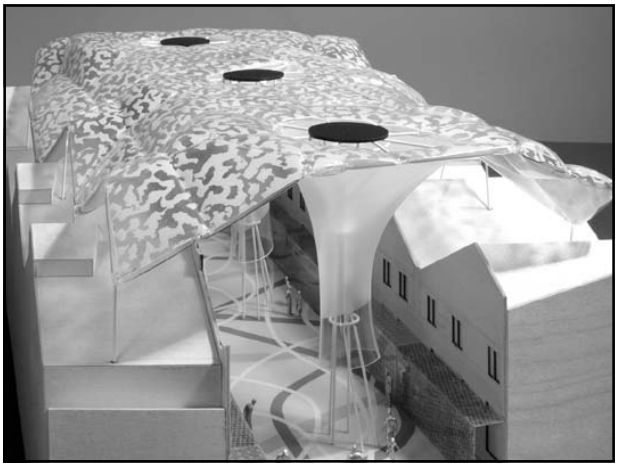

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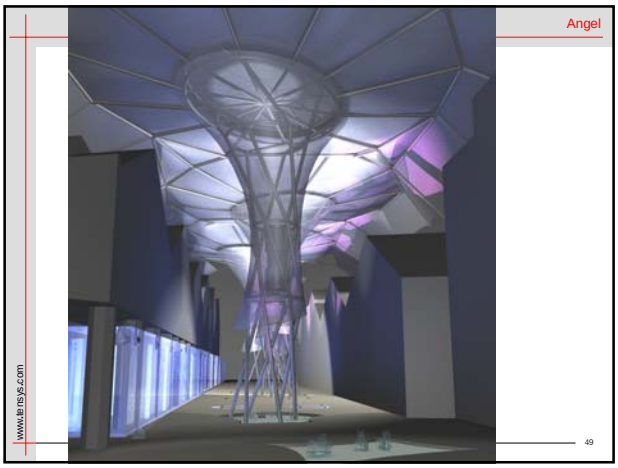
Angel
www.lbtsys.com
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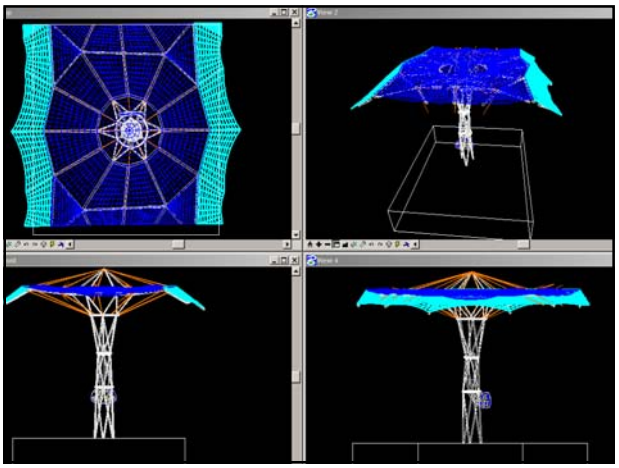

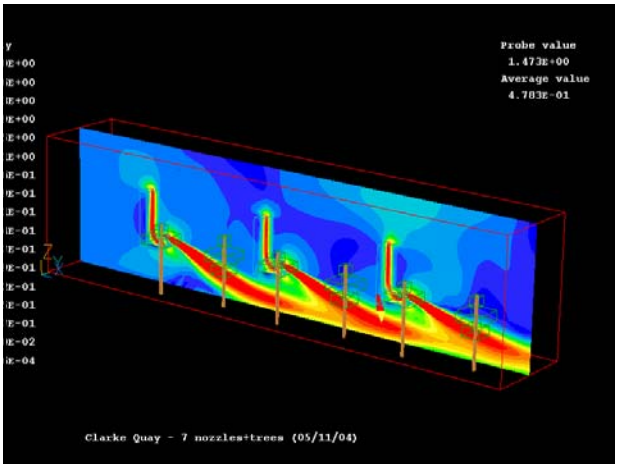
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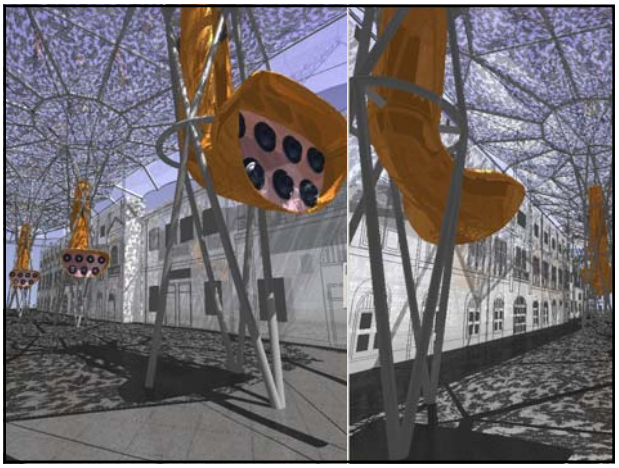
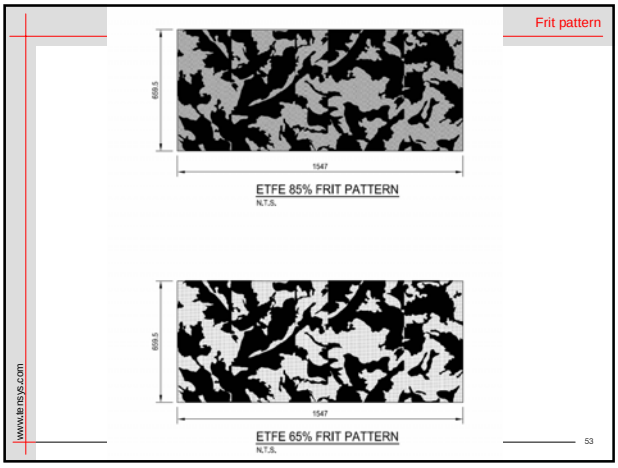
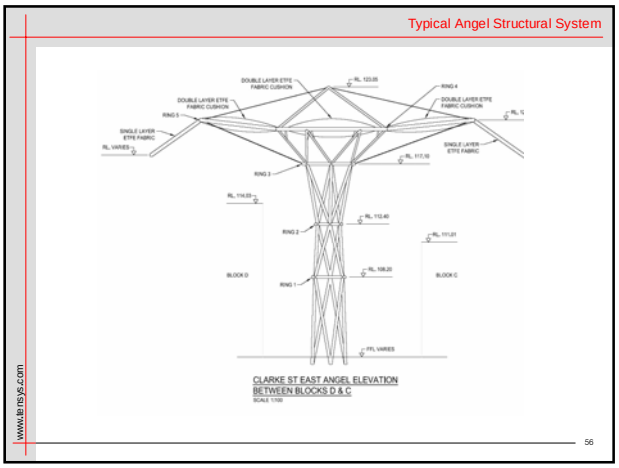
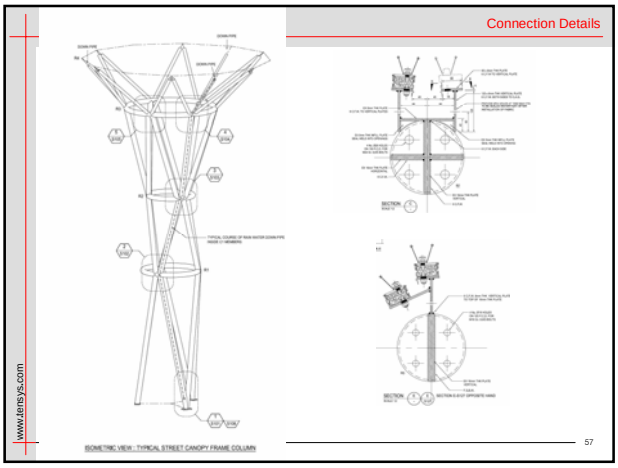
1.473E+00
Average value
4.783E-01
Clarke Quay - 7 nozzles+trees (05/11/04)




Frit pattern
ETFE 85% FRIT PATTERN
N.T.S.
ETFE 65% FRIT PATTERN
N.T.S.
www.lbtsys.com
53

Frit pattern


Typical Angel Structural System
CLARKE ST EAST ANGEL ELEVATION
BETWEEN BLOCKS D & C
www.lensys.com
56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www.lensys.com
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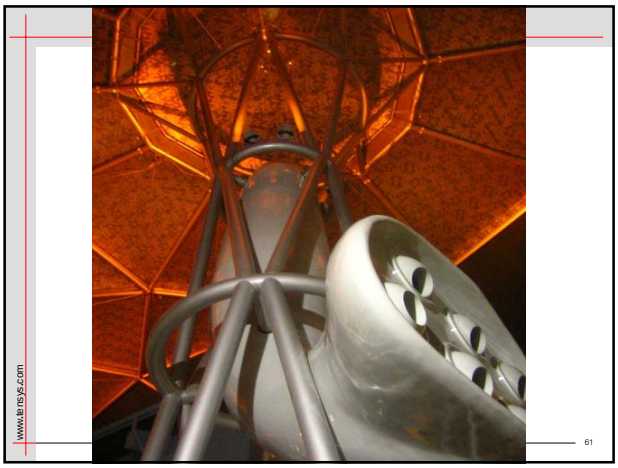
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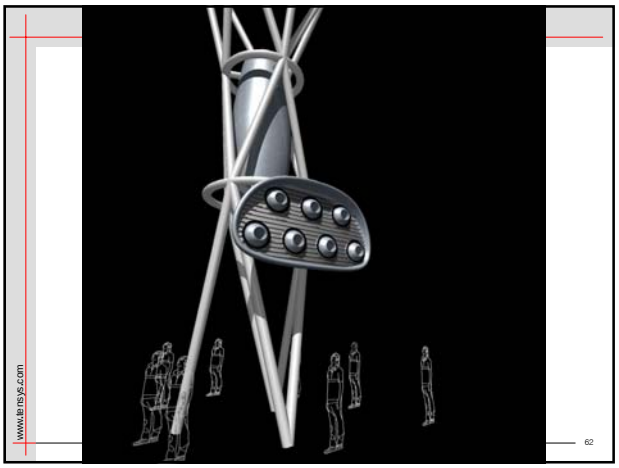
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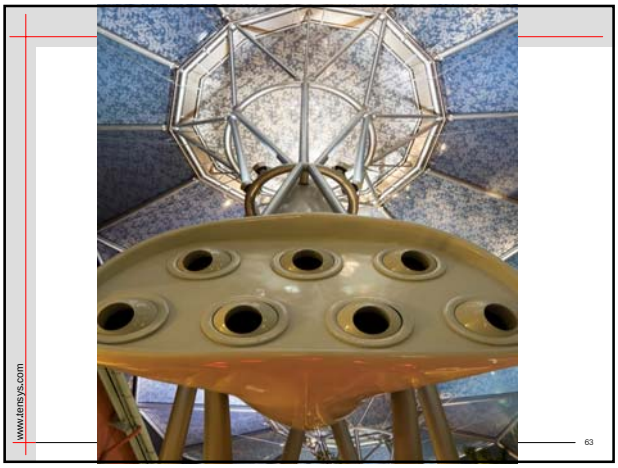
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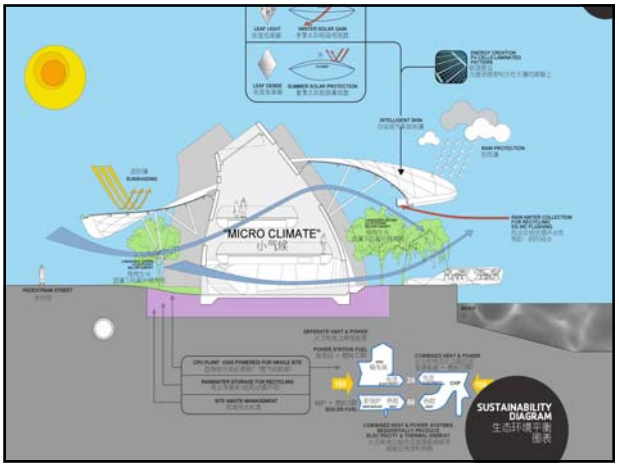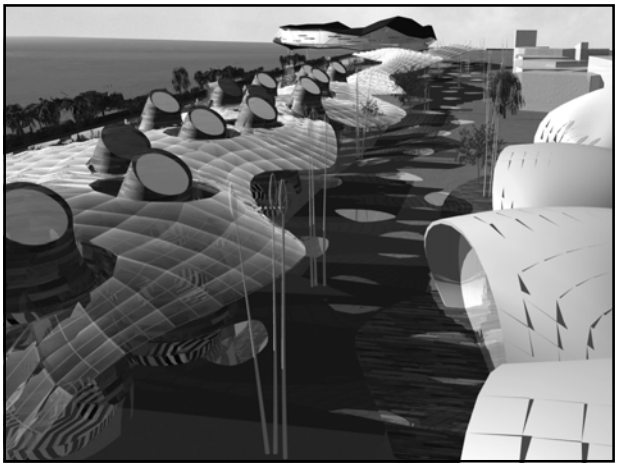
"MICRO CLIMATE"
SUSTAINABILITY DIAGRAM