



“Zero tolerance” - demanding project case studies and designer requirements

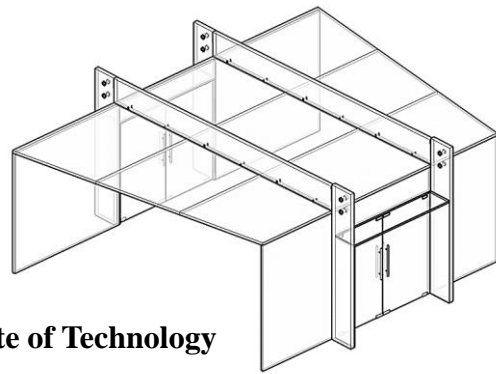
MALISHEV
ENGINEERS

Glass Performance Days 2018, March 07-09, 2018, Istanbul, Turkey, © Malishev Engineers Ltd

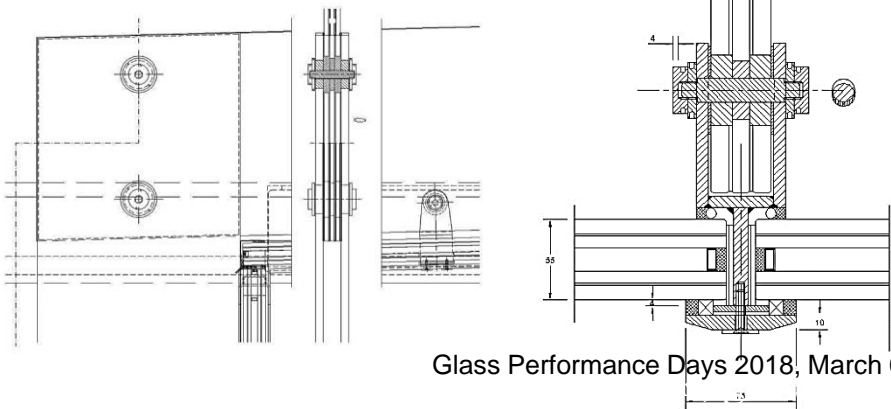


visible 380nm -750 nm
UV 170 nm - 380 nm;
UVA 320 - 380 nm;
UVB 280 - 320 nm
UVC 170 - 280 nm





Crown Hall, at the Illinois Institute of Technology (IIT)



Glass Performance Days 2018, March 07-09, 2018, Istanbul, Turkey, © Malishev Engineers Ltd

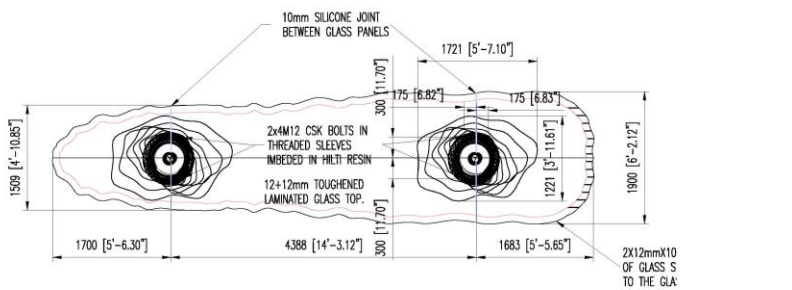
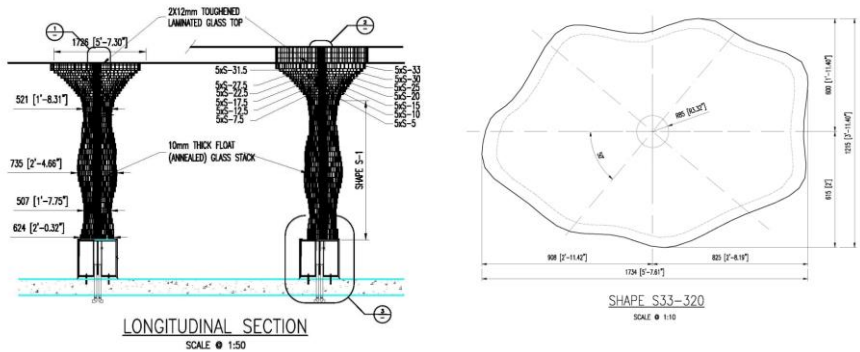


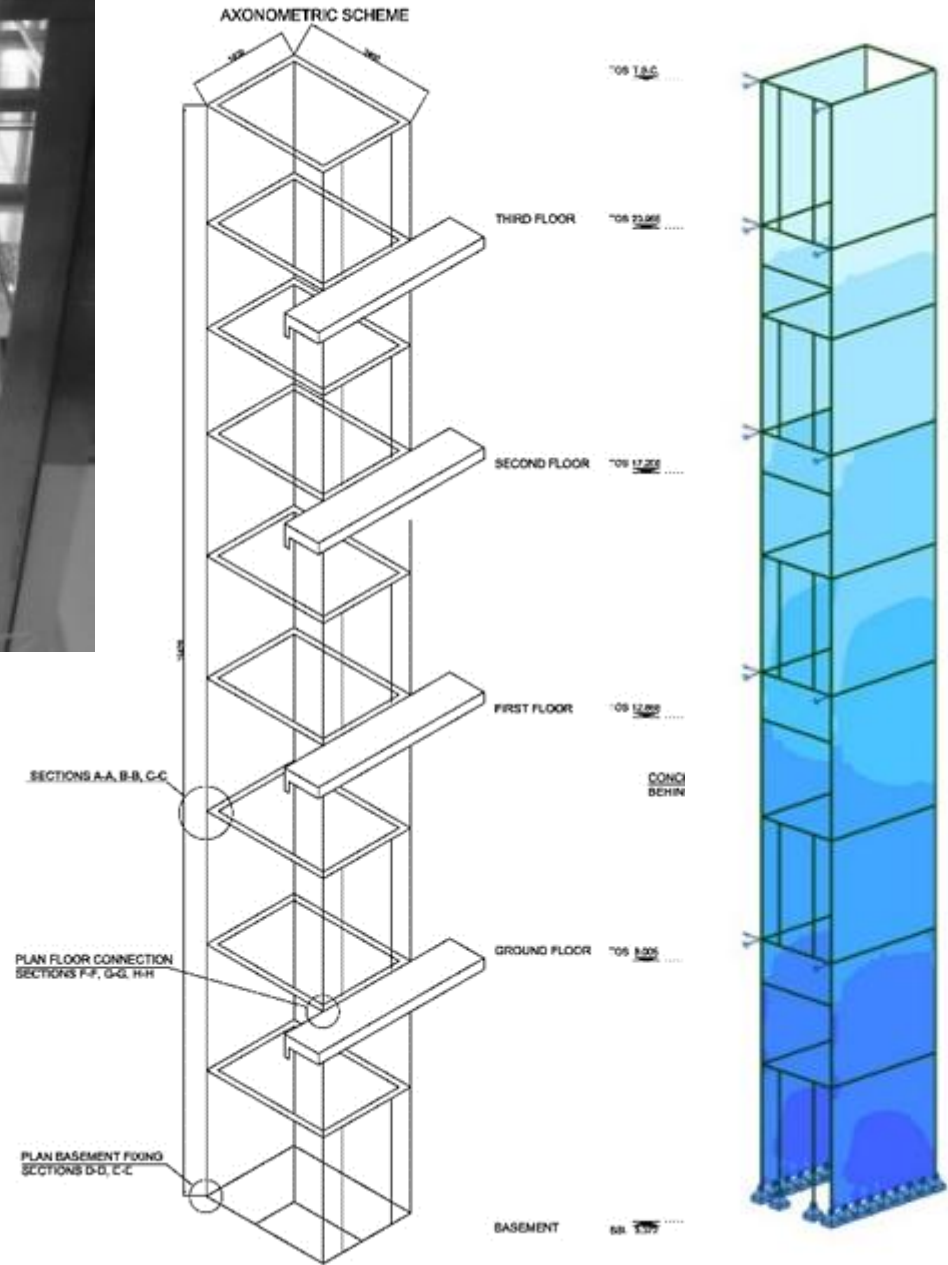
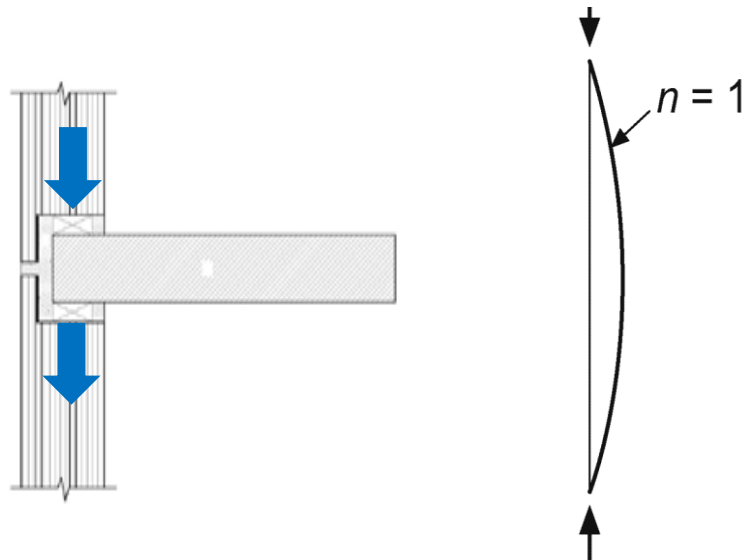
shortlisted for the Structural Awards 2008





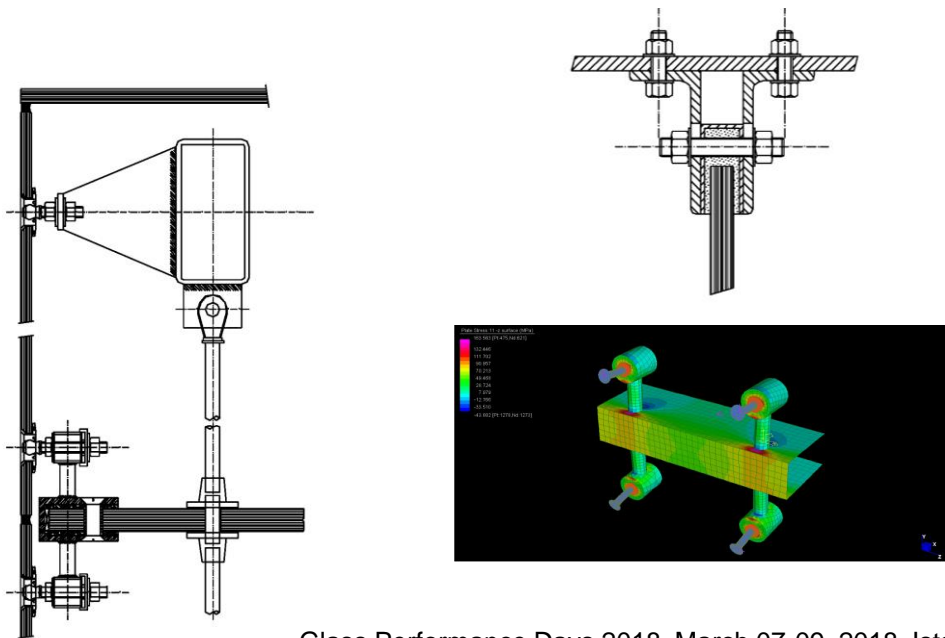
Structural glass water feature, Pompano Park, Florida, USA, 2006





Load bearing, 20m tall glass lifts, Boltions Place, London, UK, 2006



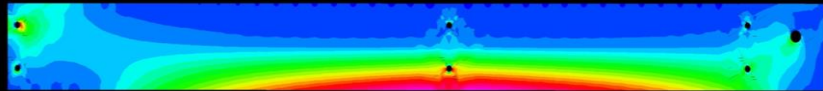
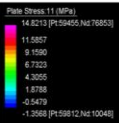
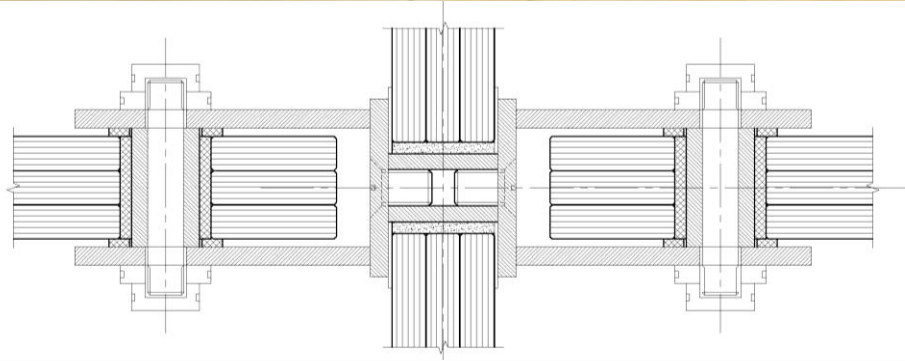




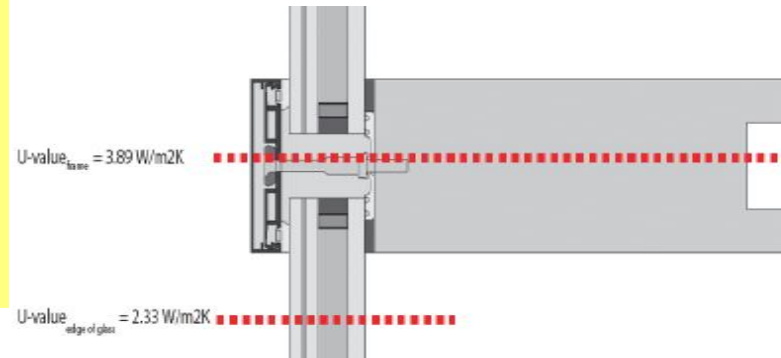
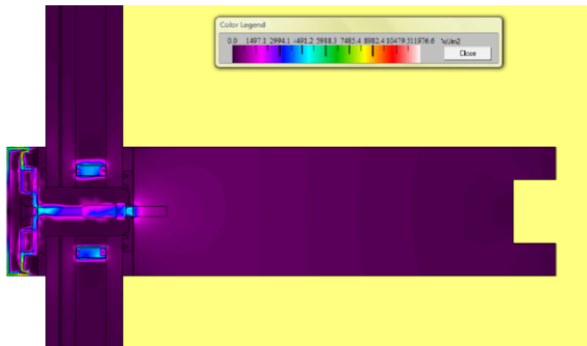
18m glass walkway, 150 Cheapside, 2007-2008



Shortlist at World Architecture Festival 2009



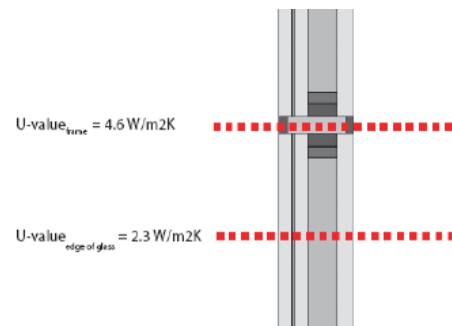
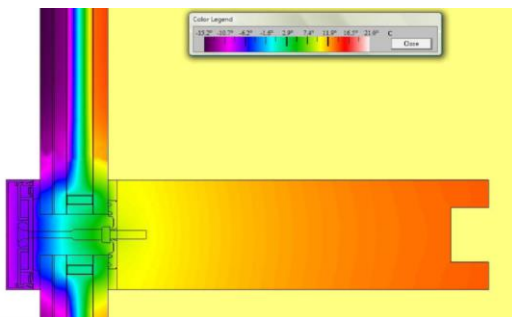





$U = 1.3 \text{ W/m}^2\text{K}$, using
Cool Light SKN
165II

$U_{av} = 1.45 \text{ W/m}^2\text{K}$ (for
the curtain wall
system)

$U_{tot.av.} = 1.55 \text{ W/m}^2\text{K}$
(including
vestibule)



AD Part L2A , average
 $U_{tot.av.} = 2.2 \text{ W/m}^2\text{K}$

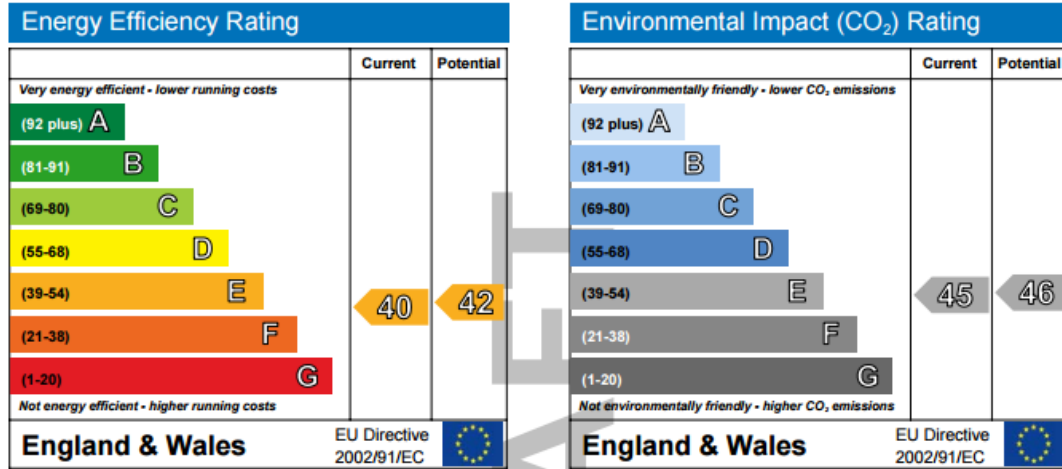


180 square meters of high-performance glazing was used over 140 square meters of the area of extension. The sliding doors are measured around 3m wide by 5.8m tall, high performance triple glazed units incorporating special structural spacer in the glass are possibly the largest size panels of this nature ever used in the UK, each weighing around 2 tonnes!

- LT : min 60%
- SHGC (g) : max 0.48
- U-value : min 0.8 W/m²K

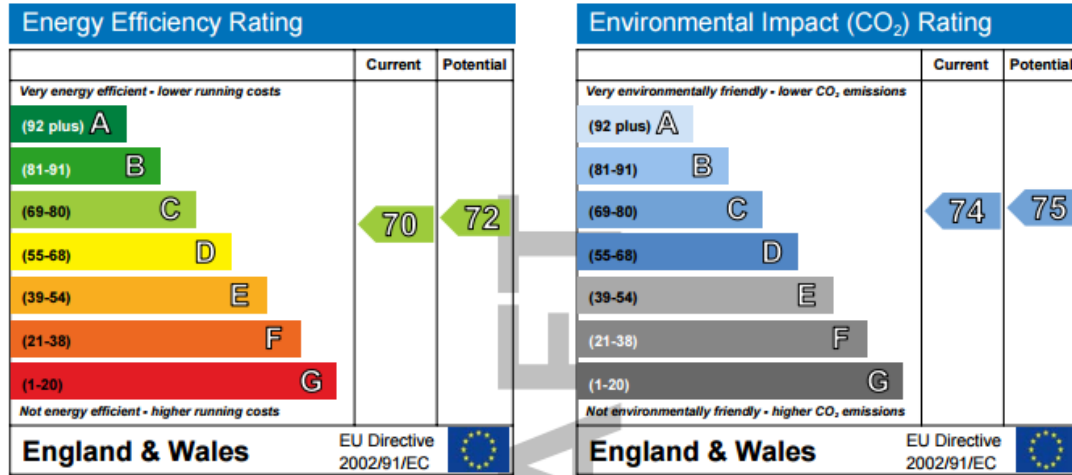
Total floor area: 555 m²

This home's performance is rated in terms of the energy use per square metre of floor area, energy efficiency based on fuel costs and environmental impact based on carbon dioxide (CO₂) emissions.



Total floor area: 695 m²

This home's performance is rated in terms of the energy use per square metre of floor area, energy efficiency based on fuel costs and environmental impact based on carbon dioxide (CO₂) emissions.

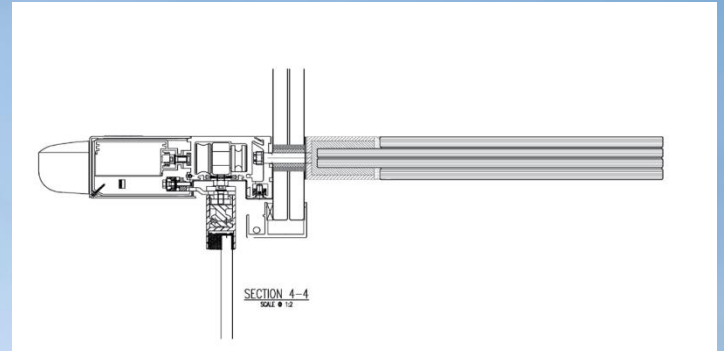


RIBA SOUTH WEST TOWN AND COUNTRY AWARDS 2011
HOUSING AWARD & PROJECT OF THE YEAR AWARD

Woodchester House, II listed building, Stroud, 2008



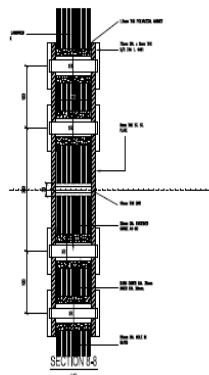
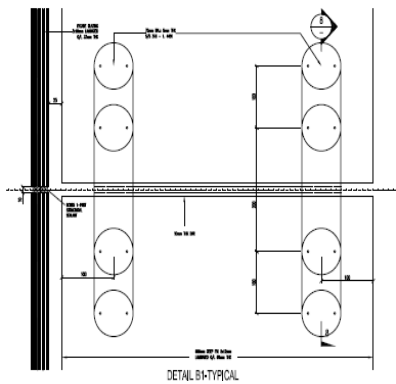
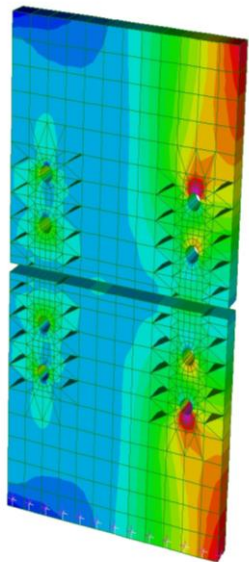
Tesco glass entrance, Gerard's Cross, UK, 2010





Materials	mTonnes	CO2/t	total CO2	%
Steel (rolled sections)	1662	1.4	2327	14.4%
Concrete	43000	0.12	5160	31.9%
Stainless steel	42	6.15	258	1.6%
Brick	3450	0.23	794	4.9%
Toughened Glass	36.18	0.41	15	0.1%
Titanium	0.22	30	7	0.04%
Annealed Glass	54	0.86	46	0.3%
Aluminium	49.3	8.24	406	2.5%
Carbon-fibre	0.08	16.8	1.3	0.01%
Plywood	56.95	1	57	0.4%
Plastics	299	2.73	816	5.0%
Wood (general)	540	0.6	324	2.0%
paper (A4, 80sqm)	403	2.2	887	5.5%
Silicone sealants, mastics etc.	1170	4.3	5070	31.4%





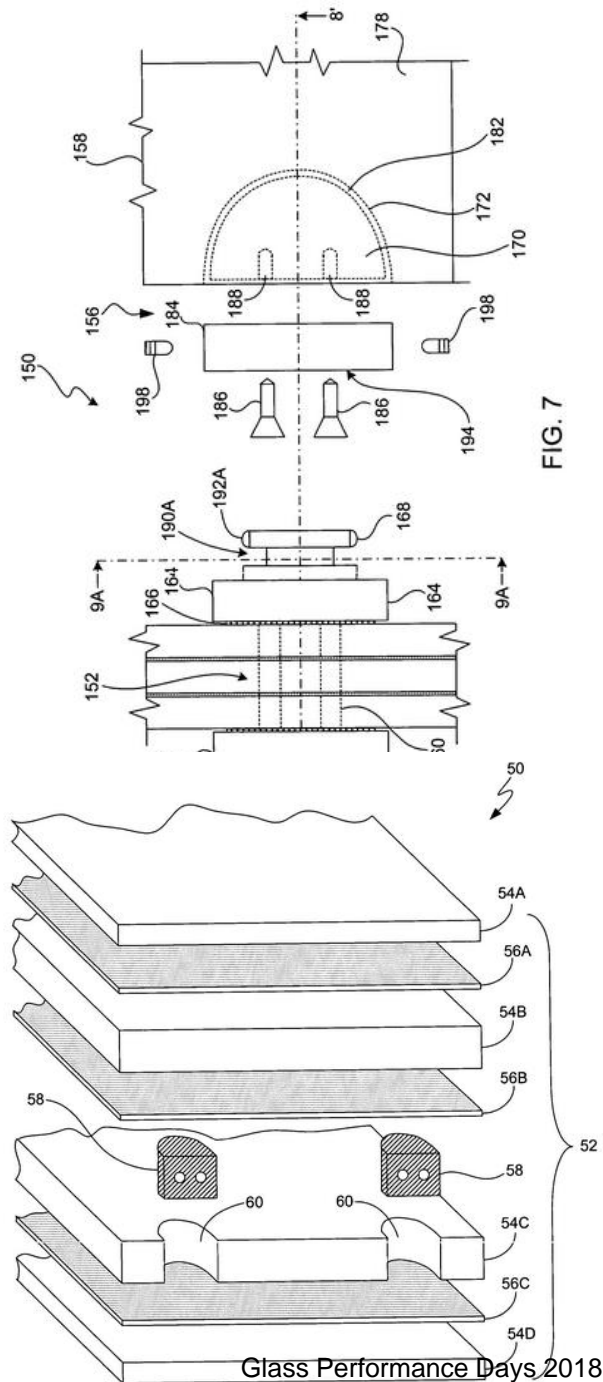
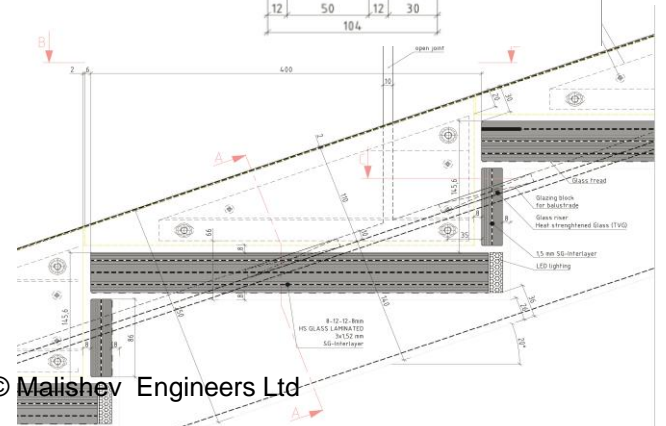
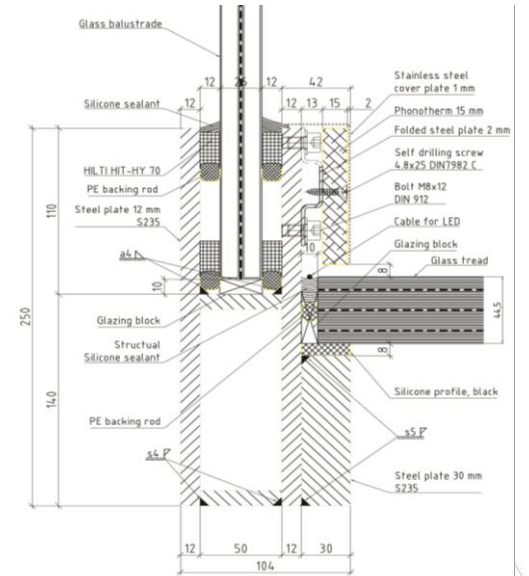


FIG. 7

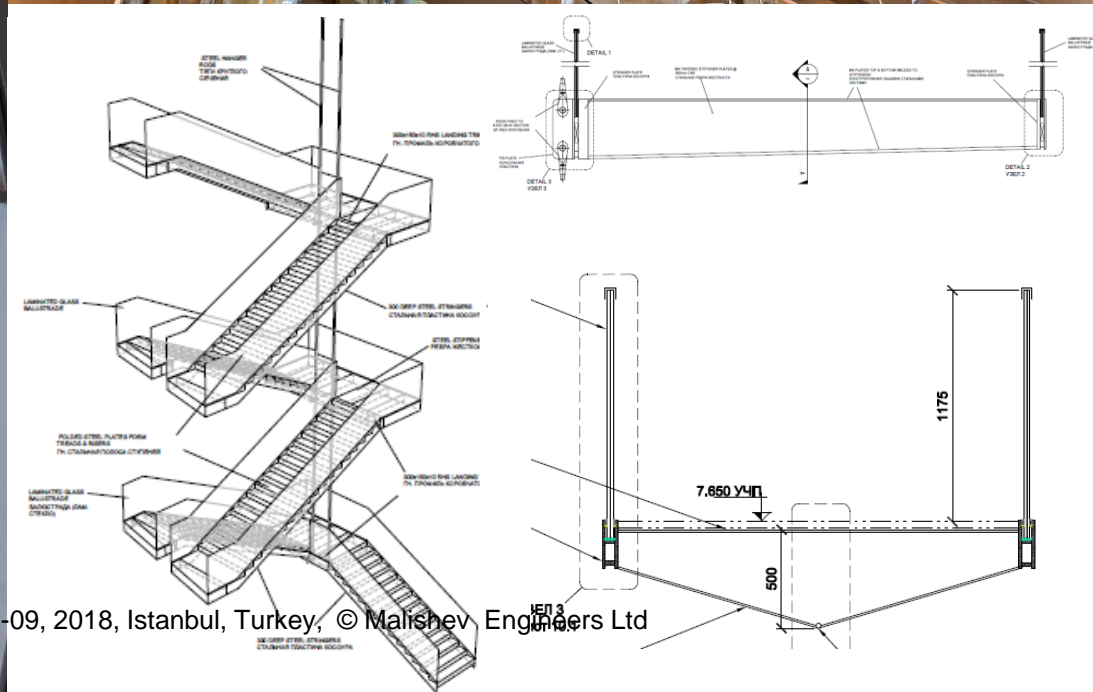




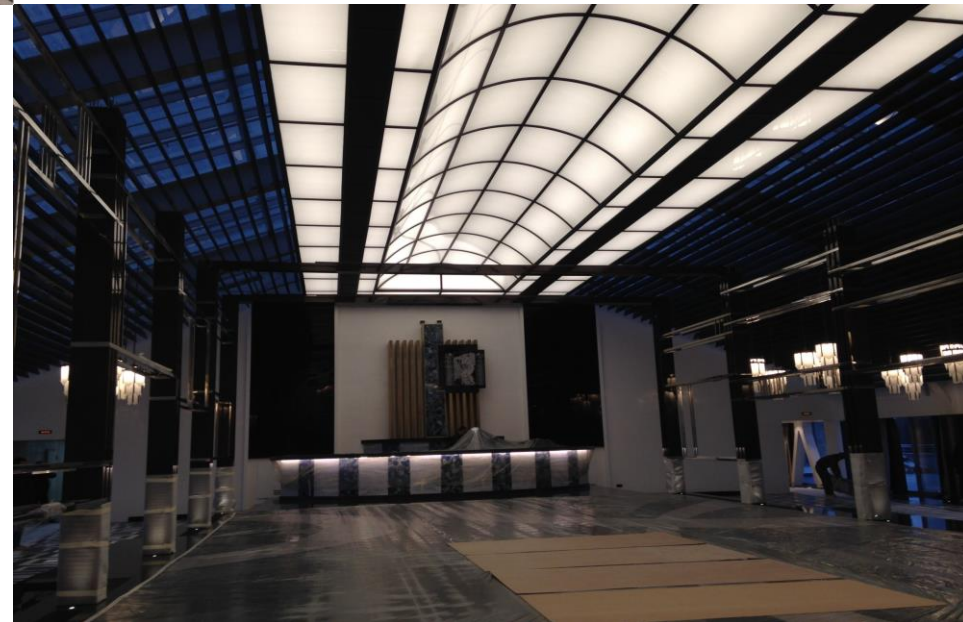
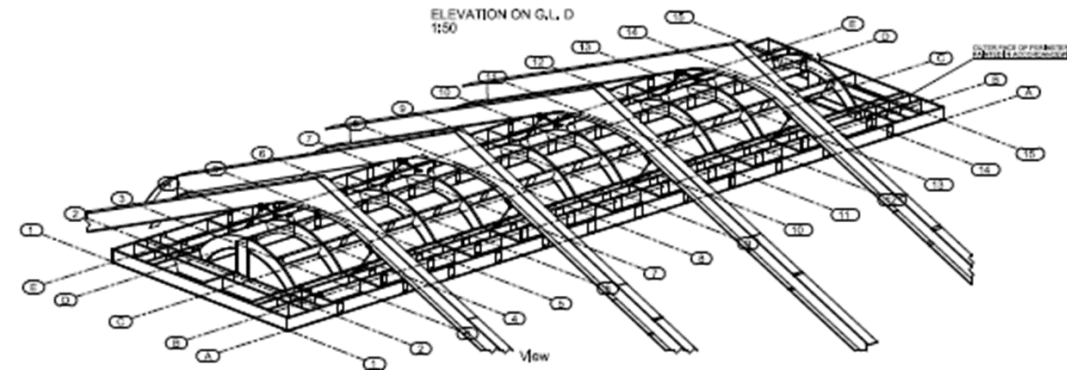
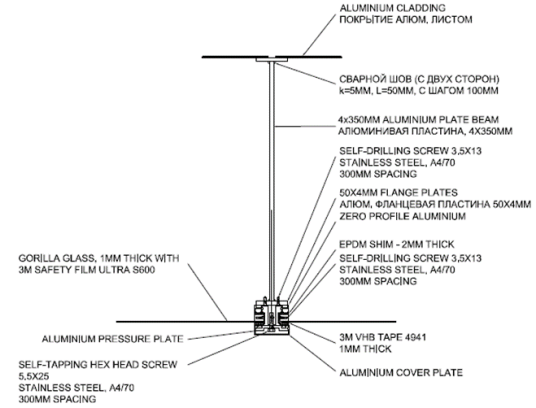
Glass Stair For The New Mariinsky Theatre



Glass Stair For The New Mariinsky Theatre

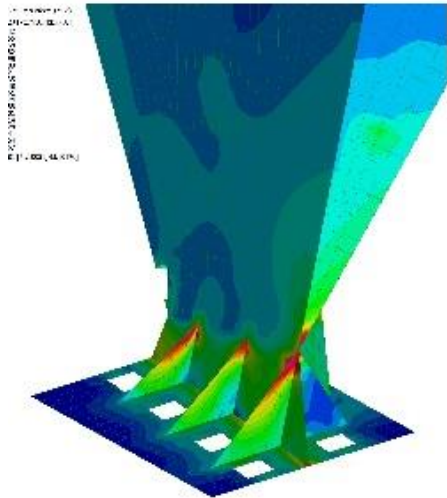
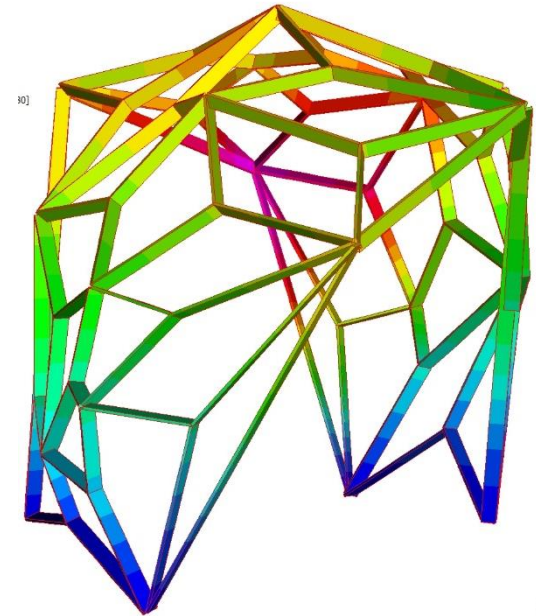
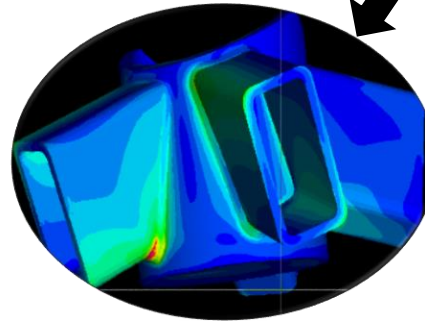
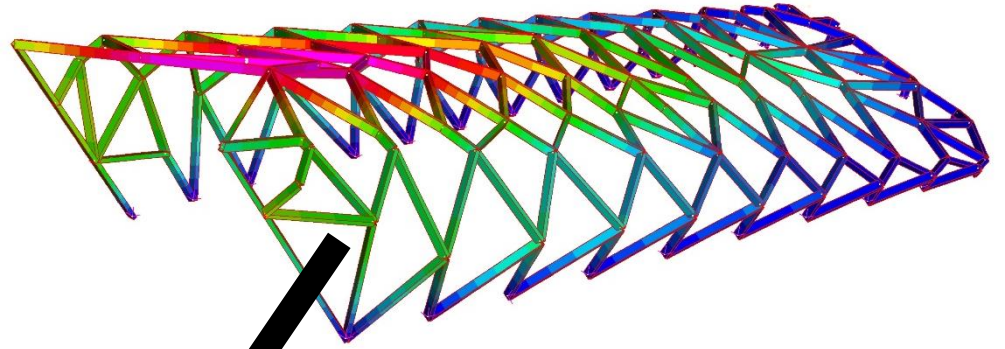
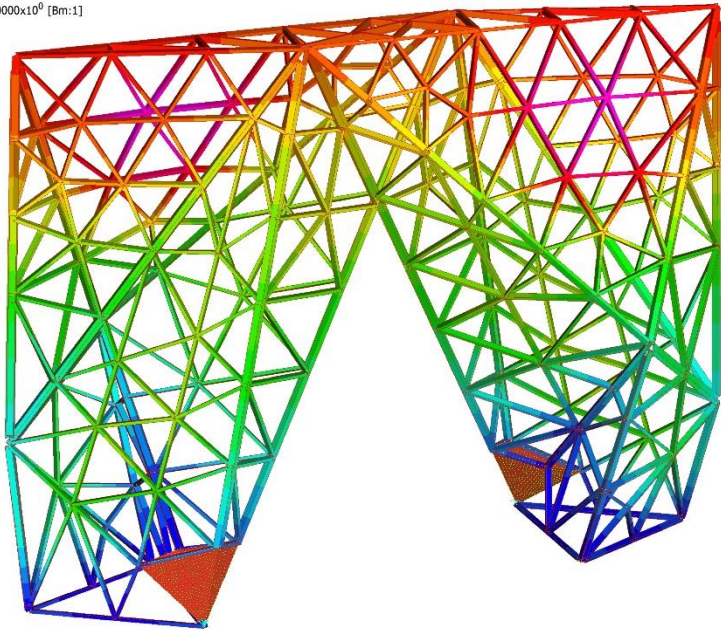


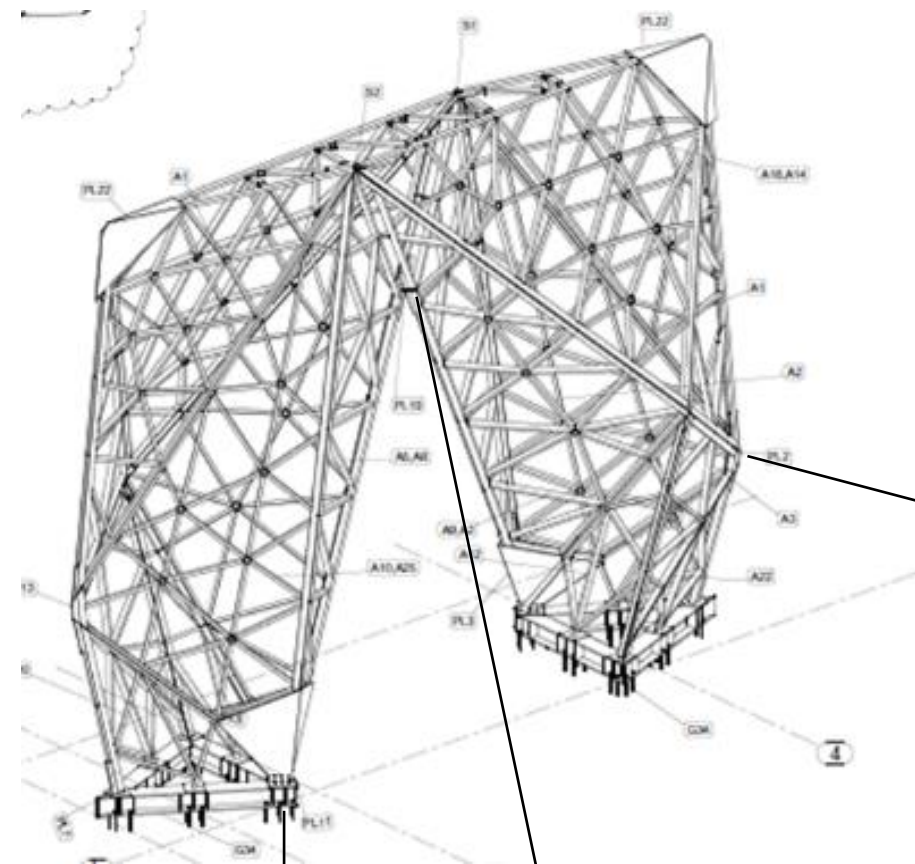
Glass Performance Days 2018, March 07-09, 2018, Istanbul, Turkey, © Mairishev Engineers Ltd



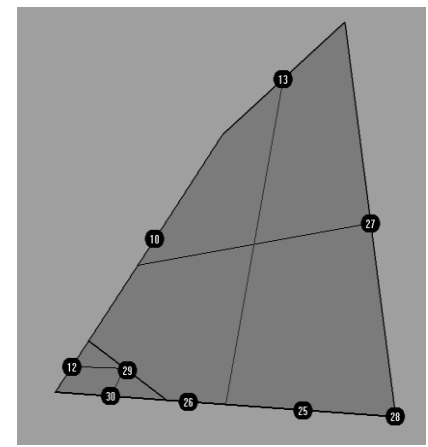
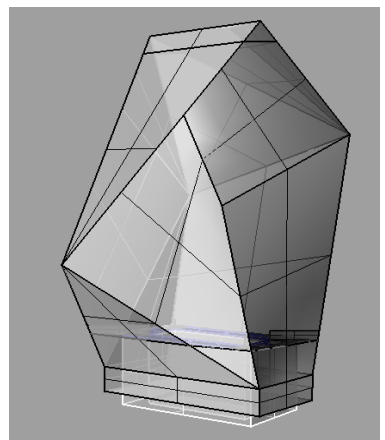
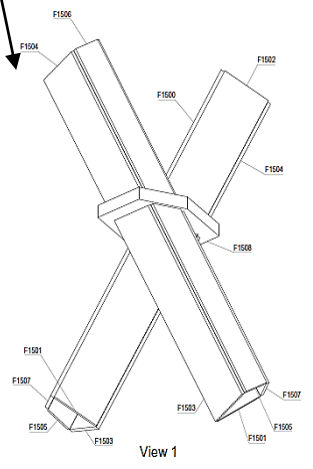
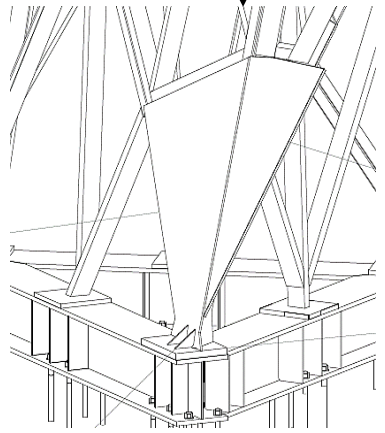
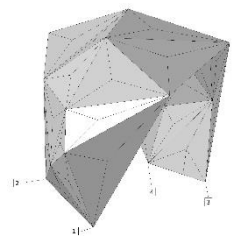
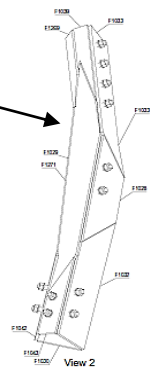
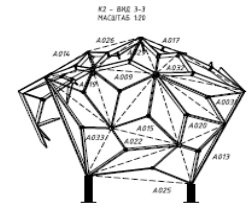
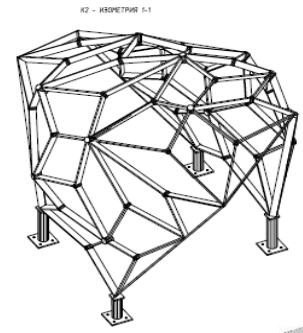
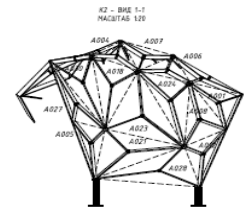
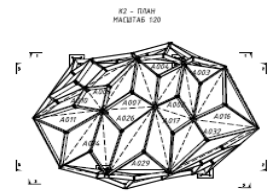
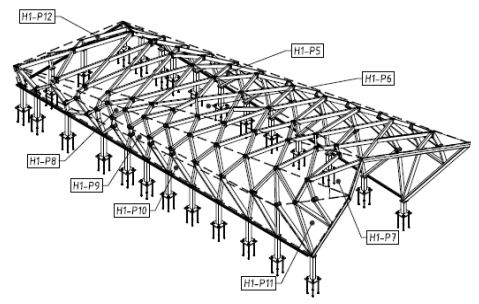


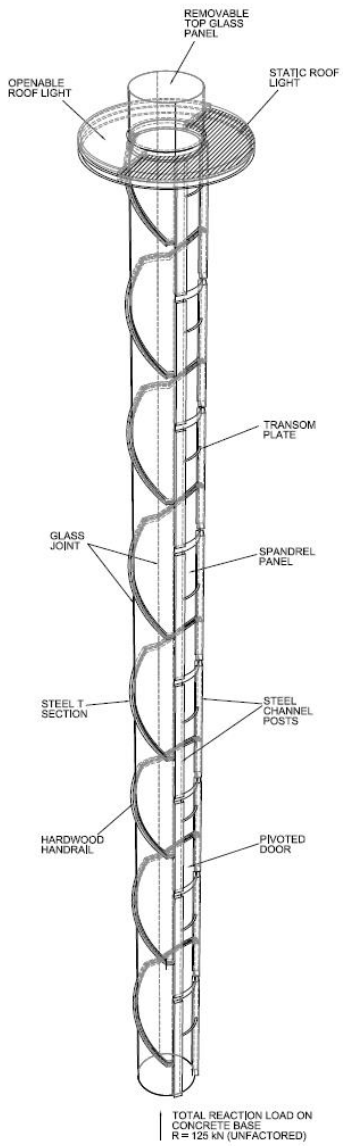
000000x10⁰ [Bm:1]



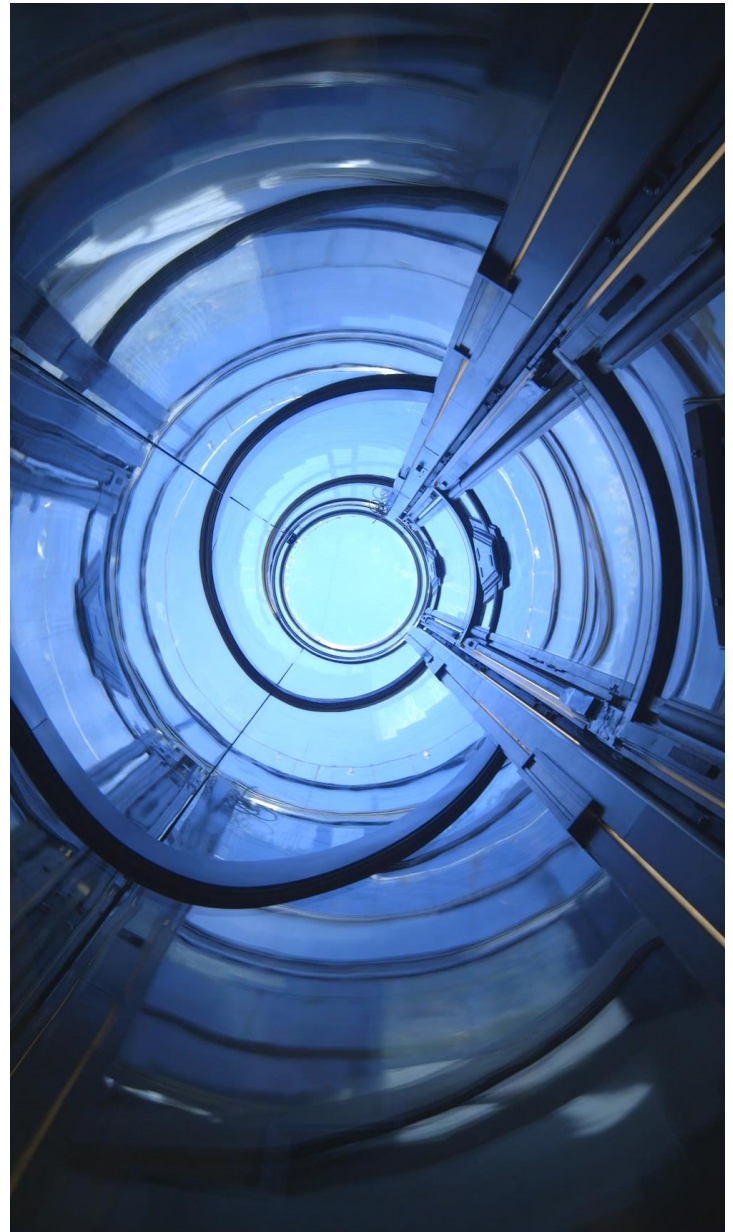
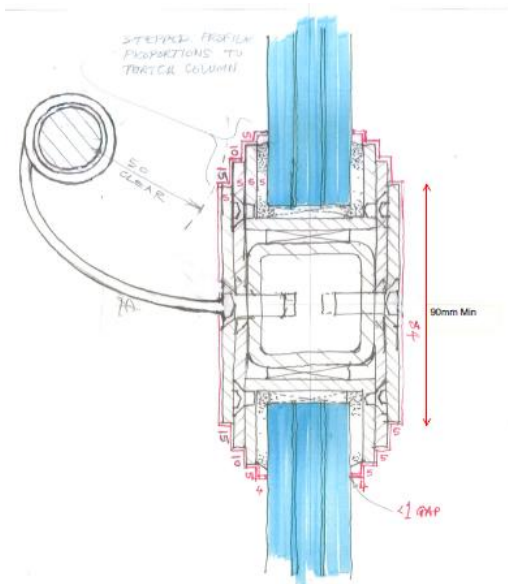


H1 - NORTH WEST VIEW
SCALE 1:50



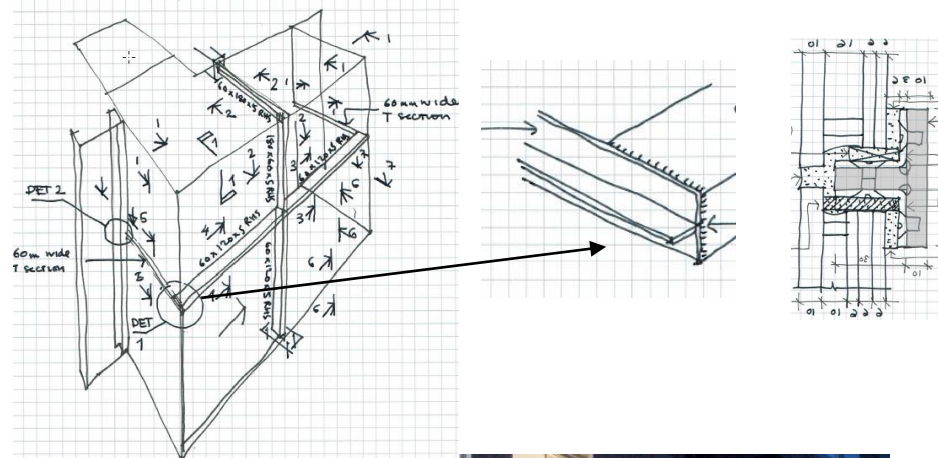


ISOMETRIC OF LIFT SHAFT
NTS



Load bearing, 28m tall glass lift enclosure, London, UK, 2012-2015

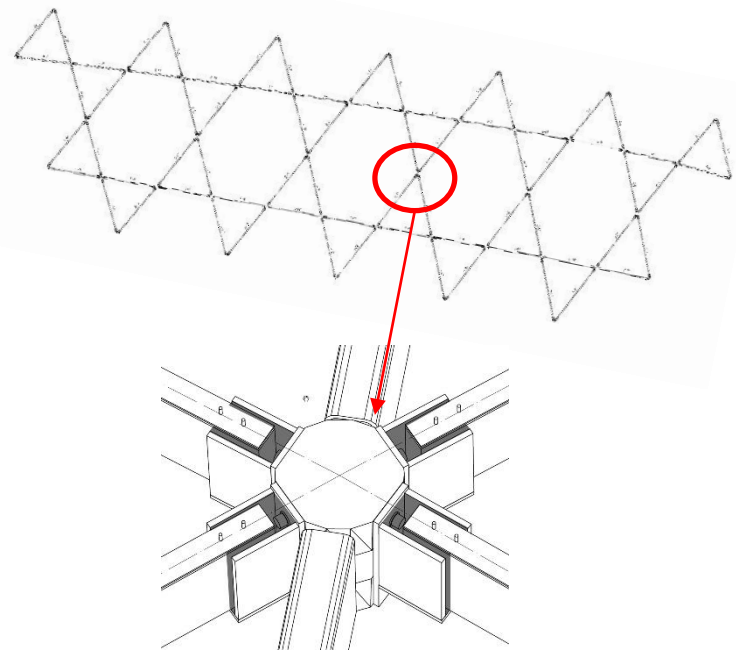
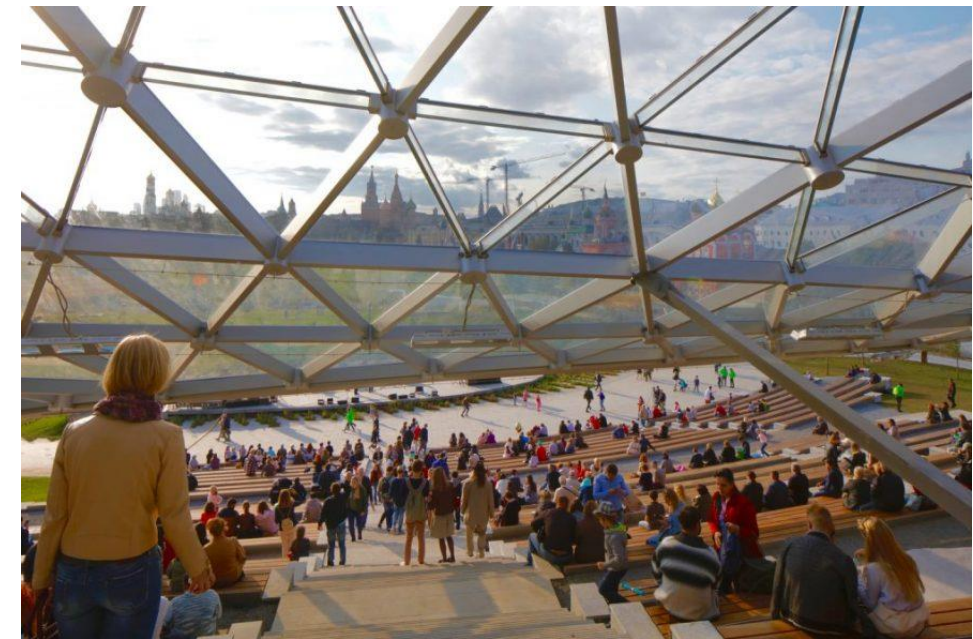
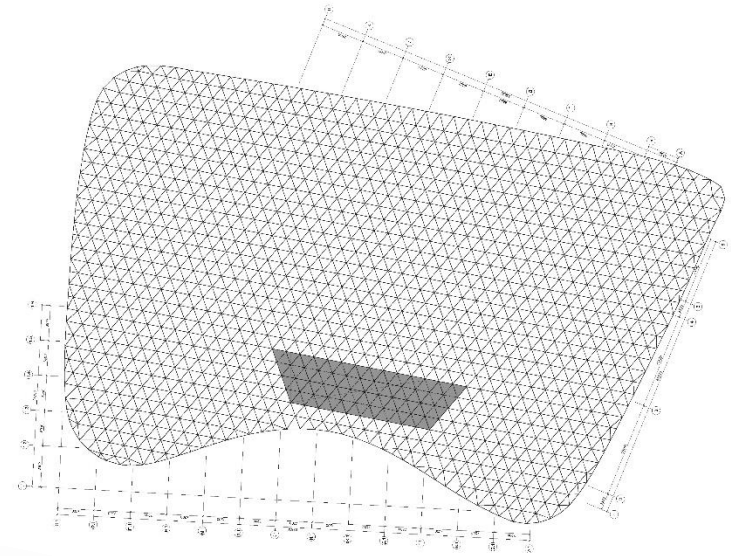




Glass Performance Days 2018, March 07-09, 2018, Istanbul, Turkey, © Malishev Engineers Ltd

Clapham common south side, London, UK, 2016





Zaryadye park, Moscow, 2017





1800 Arch street, Philadelphia

