

LSAA 2013 Conference and Design Awards Theme “Touching the Earth Lightly”



Lightweight Structures have geometric forms that generally have large surfaces which are doubly curved. Many structures also use modern materials such as fabrics, foils and cables which can only carry loads by tensile forces – the most efficient load carrying action.

This conference will look at the most efficient use of materials & resources to have a marked effect on our planet, our lives and our future. We want to help get people thinking about building better, building for the environment and living lightly on the planet.

Lightweight structures can not only be light they can be relocatable, reusable, recyclable and offer many sustainable advantages for architects, engineers and developers. Presentations will explore these features.

CONFERENCE PROGRAM

Optional Pre-Conference Day, Wednesday 13th November 2013

11 am – 5.30 pm Pre-Conference Visit to Alan Gibbs Farm

6.30 – 9 pm Pre-Conference Registration and Reception in the Exhibition Area

Download PDF Registration Form [HERE](#)



The LSAA is privileged to have organized a private visit to Alan Gibbs's Farm, a 1,000-acre sculpture park on New Zealand's Kaipara Harbour.

Since purchasing the site in 1991, Alan has commissioned some epic works by Neil Dawson, Anish Kapoor, Richard Serra, Andy Goldsworthy, Leon van den Eijkel and Bernar Venet amongst others.

A large tensioned fabric structure sculpture by Anish Kapoor moulds into the hill top. It was a worthy winner of an LSAA Design Award in 2009.

We will travel an hour each way to the farm by bus. Meeting time is at 11.30 at the Conference Hilton Hotel.

Delegates have a leisurely 3-4 hours to explore the Farm and sculptures before returning to the main hotel.

Overseas delegates wishing to avail themselves of this unique opportunity are advised to arrive in Auckland the day before.

The pre-conference visit to Alan Gibbs Farm, which is being Sponsored by Structurflex New Zealand has only limited spaces. Space is available for the first 50 fully conference paid registrants only

CONFERENCE PROGRAM – FIRST DAY, Thursday 14th November 2013

Start	Session: Activity, Presentation	Author / Chair
8.30	Registrations	
	S1 Welcome, Opening, Keynote	Dr Kourosch Kayvani LSAA President
9.00	Conference Welcome	Dr Kourosch Kayvani
9.10	S1A Keynote Address Alastair Richardson Director, Cox Architecture Design Matters - Creating The Bliss Point in Architecture and Engineering	Alastair Richardson Director, Cox Architecture
10.00	Morning Tea / Networking	
	S2 Recent International Projects	Murray Higgs Structurflex – Gold sponsor
10.25	S2A Three Stadiums for Brazil 2014	Mike Lester - Makmax
10.45	S2B Retractable Roof over Margaret Court Tennis Arena	Peter Murenu - Aurecon
11.05	S2C London Olympics – Review of use of PVC fabrics in tensile architecture - what has changed in the decade?	Farid Sahnoune Serge Ferrari
11.25	S2D Te Waka O Maori Re-locatable Pavilion	Nick Dalton Toa Architects Ren Blair - Evitan
11.45	S2E Westlake Girls Netball Centre	Harry Street - Creative Spaces
12.05	S2F Questions to Session Authors	
12.05	Lunch / Networking	
	S3 Title Facades, Sustainability, Energy Saving Projects	Brian O'Flaherty Mehler – Platinum sponsor
13.00	S3 Platinum Sponsor Welcome	Paolo Giugliano - Mehler
13.10	S3A The Feature ETFE and Timber Diagrid Roof - Coastland Aquatic Centre	Toby Mason - CREATE
13.30	S3B Design Elements of the World's Largest Free Spanning Dome, Singapore	Scott Rathie - Arup
13.50	S3C Lightweight Facades Systems	James Marr - Tensys
14.10	S3D Case studies of cable supported façade structures	Rowan Murray - Ronstan
14.30	S3E Parametric Infrastructure Design	Dean Mackenzie Warren & Mahoney
14.50	S3F Questions for Session Authors	

LSAA Conference & Design Awards

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Start	Session: Activity, Presentation	Author / Chair / Status
15.00	Afternoon Tea / Networking Public Lecture Registrations	
	S4 Public Session: Earthquake Engineering Designs and the Greater Christchurch Recovery	Dr Kourosch Kayvani LSAA President
15.20	S4A Welcome to Public and brief introduction to LSAA and this session	Dr Kourosch Kayvani
15.25	S4C-1 Overview of Recovery: Progress, milestones, challenges	Sheila McBreen-Kerr CERA
	S4C-2 Opportunities for Re-building Christchurch in Wood	Prof Andy Buchanan University of Canterbury
	S4C-3 Post Earthquake – Impact on Structural Design	Stephen Hogg Aurecon, Christchurch
	S4C-4 What will the New Architecture be like and Why?	Daryl Maguire Warren and Mahoney
17.25	S4D Questions for the Session Authors	

Pre-dinner drinks & Design Awards Conference Dinner

Dress Code: Jacket and tie suggested

Hilton Auckland - 7.00pm for 7.30pm

CONFERENCE PROGRAM – SECOND DAY, Friday 15th November 2013

Start	Session: Activity, Presentation	Author / Chair
	S6 Keynote	Peter Lim LSAA VP
09.00	S6A Keynote Address Touching the Earth Lightly: A Responsive Architecture	Alex Matovic / Neil Stonell Grimshaw Architects
10.00	Morning Tea / Networking	
	S7 Recent Projects / LSAA News	Bob Cahill - Hiraoka – Gold sponsor
10.30	S7A Waitomo Caves Visitors Centre	Chris Kelly Architecture Workshop
10.50	S7B The Cloud	Joseph Dean Wade Design Engineers
11.10	S7C Innovating the Process - Adelaide Oval Roof Structures	Joachim Clauss Cox Architecture
11.30	S7D Abdullah Bin Khalifa Stadium, Doha Qatar	Peter Lim Tensys
11.50	S7D Questions for the Session Authors	
12.00	S7E Summary of LSAA Activities Design Guidelines & Shadecloth issues Details for Site visits. Conference Close	Dr Kourosch Kayvani & Murray Higgs
12.10	Lunch / Networking / Pack up	
	S8 Title – Site Visits (Optional)	Murray Higgs Structurflex – Gold Sponsor
12.45	S8A The Cloud, Queens Wharf Westlake Girls Sports Centre Eden Park Stadium	Travel by Bus from Hilton. Potential drop off at airport after Westlake Girls visit.

2013 LSAA “DESIGN AWARDS”

INVITATION FOR ENTRIES – CLOSING DATE SEPTEMBER 30 2013

The Lightweight Structures Association of Australasia (LSAA) invites entries for the 2013 LSAA Design Awards given in recognition of excellence in design, innovation, construction and application of Lightweight Structures.

Entries in the following categories are invited from individuals, companies and institutions.

LSAA members and non-members may enter. The Awards are also open to companies/ individuals who may not have acted as the “designer”. Fabricators or Installers may also enter but only one entry per project will be considered.

CATEGORIES

Awards will be considered in the following categories:

- 1 SMALL STRUCTURES
Domestic, Project area < 250m²
- 2 MEDIUM STRUCTURES
Project area between 250m² and 1,000m²
- 3 SHADECLOTH APPLICATIONS
External tensioned structures from knitted polyethylene shade cloth material.
- 4 LARGE STRUCTURES
Project or component area exceeds 1,000m²
- 5 GLAZING AND VERTICAL FACADES
Large span glazing walls or roofs, other forms of lightweight facades (cable nets etc) to control interior environments.
- 6 DESIGN AND CONSTRUCTION COLLABORATION
Completed projects whose success is attributed to close collaboration between multiple members of a team and where extensive use was made of emerging collaborative tools. Entries in this category are to be signed off by at least three different team members.
- 7 SPECIAL APPLICATIONS AND INNOVATIONS
Includes applications of lightweight structures used in an interior environment, manufactured as a product, and can be either temporary, demountable, relocatable or permanent structures. (Interior structures, large awnings, shelter structures, are some examples). Applications using new technology and sustainability principles. Innovations in the teaching of collaborative design.

ENTRY CONDITIONS

Entries must be Lightweight Structures which may be an entire building structure (for instance an exhibition building) or a component of a building (for instance an atrium roof in a shopping complex). Structures may be of permanent or temporary use and may be constructed from any material. Typical Lightweight Structures include: membrane structures (prestressed tent and air-structures), large span planar or curved glazing or other façade type structures, space frame, cable, shell, monocoque and folded structures as well as arched and stayed structures in metals (steel, aluminium), timber, concrete, fabric and foils, plastics and composites.

The following design criteria are typical of lightweight structures:

- the shape of the structure is determined through an optimisation process, such as a particular load case (selfweight, wind etc) and other parameters (environmental and/or energy control etc.)
- the structure seeks to minimise material usage
- many aspects of the final structure such as connections are highly visible
- a larger than normal degree of collaboration is required during the design process.

ENTRY RULES

1. An entrant may submit any number of additional entries for **different** projects.
2. A particular project may only be entered once (ie. either by the Architect, Engineer, Designer, fabricator, installer etc). It is permissible to enter distinctly different parts of the same project such as a membrane / steel roof and separately to enter a cablenet glazing section of the project.
3. Entries must be of predominantly Australasian origin or content. (i.e. the design and/or fabrication and/or construction must predominantly have been conducted by an Australasian firm.) Entrants must indicate the percentage of work for which their firm was responsible.
4. To be eligible for entry, the project must have been completed during the 24-month period prior to the submission date for the awards. (Design concepts, feasibility studies or proposals, or partly completed projects cannot be entered.)
5. Entrants will retain all rights to the entries submitted, except that the LSAA may use any entry for publication, educational material and/or to promote the aims of the Awards or the Association. All material including digital pictures are to be cleared for such use.
6. It shall be the responsibility of the entrants to protect their design by copyright or patent. The entrant shall bear the costs of transporting entries for the purpose of judging, and return to the entrant, and the costs relating to insurance of entries during transport or judging.

The decision of the judges will be final. No correspondence will be entered into. In the event of a decision being unable to be reached in any category, or lack of entries with sufficient merit, the judges may divide, reduce, or withhold awards at their absolute discretion. Receipt of an entry will be deemed to mean acceptance of the Entry Rules by the entrant.

JUDGING

A multidiscipline panel of independent judges will judge the awards.

The judging panel will assess entries according to the following criteria:

- Compliance with the entry conditions
- Overall quality of the design against the stated design brief
- Functionality for the stated purpose
- Overall quality of the execution of the design (choice of materials, construction & detailing)
- Innovation from a design, material use, construction technology etc viewpoint
- Economy of the executed design (use of materials, energy use, maintenance, establishment cost)
- Degree of effectiveness in collaboration between team members vs. the quality of the executed outcome
- Aesthetic quality of the executed design
- The judges reserve the right to determine or change the category classification for any entry.
- Each entry will be considered in one category only.
- Awards may not be awarded any category if the standard of entries is considered unsuited.

ENTRIES

Complete entries will comprise the following:-

- Completed Entry Form - Parts A & B
- High resolution colour digital photographs
- Entry Form Questionnaire Part C
- Additional information, photos, CD (optional)
- Registration fee

ENTRY FORM

Part A	Provides name and details of entrant and other credits. (Not given to judges.) Must also declare that Copyright clearance has been obtained and that LSAA may use the information for publication or educational material
Part B	Shows entry identification number and entry details for judging.
Part C	Required questionnaire giving details of the project.

Entry forms may be obtained from the website www.LSAA.org or by contacting the Awards Convenor.

Link to website page : <http://www.lsa.org/index.php/2013-conference/lsaa-design-awards>

ENTRY IDENTIFICATION

Each entrant is to choose a four-digit number and use this number to name the digital images submitted and to put in the subject line of any related emails.

The first digit of this number should identify the category, ie. 2XXX for Category 2, Medium Structures.

HIGH RESOLUTION COLOUR PHOTOGRAPHS

Design Awards entries and winners will be published on the LSAA website and a CD. A printed booklet is being considered.

At least eleven colour digital images of reproduction (by printing) quality are to be submitted with each entry. Digital image filenames are to start with the same 4 digits as the entry identification plus a sequence number with a 3 letter extension (jpg) to indicate the image format. Example 2XXX_01.jpg Images are to be in PC format

Images must be clear, sharp and true to colour and of at least 2048x1536 pixel resolution (High quality JPEG format preferred, second choice is TIFF). Be careful to limit the overall size of an email to approximately 5Mb.

Images are to illustrate the building or structure fully within its environment setting and are to include the following:

- at least three (3) images of the exterior of the building/structure showing its setting from different angles;
- at least three (3) images of the interior of the building/structure showing clearly the quality of the overall internal space;
- preferably two (2) images taken during the erection of the structure
- at least three (3) images of close-up details showing the quality of execution. Long distance or fuzzy shots with no detail visible will be considered adversely during judging.

ADDITIONAL INFORMATION

In addition to the reproduction quality digital images detailed above, entrants may submit additional video files, digital images (no more than 20 per entry) in electronic format on CD to assist the judges overall appreciation of the entry. Entrants are encouraged to provide additional information, such as drawings (PDF), technical notes, as well as the Required Questionnaire Part C of the entry form to aide the judges.

A maximum of five (5) pages of additional information may be submitted and entrants are to provide them in A3 or A4 format in an unsecured PDF format. (CAD files will only be accepted in PDF form without any means of identification – such as might exist in title blocks on drawings.)

PAYMENTS AND CHECK LIST

Remember

1. to include good quality digital photographs and captions as described in the Entry Rules.
2. to include a cheque for the entry fee made out to "LSAA Design Awards" for the appropriate amount (current LSAA Financial Members are \$NZ150/\$AUD 120 per entry or Non-members at \$NZ200 /\$AUD 160 per entry).
3. Direct Deposit of Entry Fees **is preferred.**

For Australian entries

LSAA Bank Details (for direct deposit, email details):

ANZ, Account: Lightweight Structures Association of Australasia,

BSB: 013 267, Account: 3524 14135

For New Zealand entries (to avoid international transaction fees)

Account name:	LSAA Conference 2013 A/c
Account number	01 1159 0020550 002
Bank	ANZ Bank
BSB	011159

If using Direct Deposits, please use as a Reference
"DA plus your mobile phone number", for example DA0428414093
and then email confirmation receipt to awards@LSAA.org

4. Submit this form (in MSWord format) after completing the spaces.
5. When emailing images, ensure you have named the files using your entry ID Code + sequence number (for example: 2167_02.jpg) and limit total email sizes to 5Mb each please and use the ID Code somewhere in the subject line of the emails.

6. Closing Date is September 30th 2013

Website link <http://www.lsa.org/index.php/2013-conference/lsa-design-awards>

Download the MSWord Entry Form Document [HERE](#)

Guidelines for Speakers

The LSAA appreciates your valuable time and technical contribution by way of a paper and presentation to our 2013 Conference “Touching the Earth Lightly”.

There are a few guidelines that we would appreciate you to follow:

1. We must have final Paper titles, abstracts, short bios (in MSWord) and a good head/shoulders image (800x800 pixels or larger) available no later than October 25 2013 for promotion and printing purposes.
2. We should receive a copy of your Presentation in MS PowerPoint format by November 1 2013. This is because it needs to be loaded onto the conference computer and checked ahead of time. In some cases, we may expect a later “tweaked” version. There are additional notes below.
3. Authors must register and attend the Conference.
The registration is necessary for our insurance purposes. As a minimum we need to know contact details (names and affiliation for badges, email and mobile phone number) and the period you intend to stay during the Conference (for catering purposes).
4. Authors must introduce themselves to their Session Chairperson at the break before the session. Bring along your contributions as 2 copies on USB drives.
5. Any changed presentations must be given to the AV operator well before the session in which you are presenting.
6. The Paper abstracts and program will be printed for the conference.
7. Presentations must not be considered to be “Commercial” but rather be informative in a technical and generic context.
Any blatant commercial promotional material can be handled through your sponsorship and exhibition facilities and not enter into the technical program.
8. Only one data projector and screen will be available.

Some Details

Your PowerPoint presentation and paper will be published or made available to Conference delegates following the Conference. Delegates will be able to download the material from the LSAA website. The documents will be in the form of PDF files.

Notes about your PowerPoint Presentations

The PowerPoint presentations will be printed as a PDF as 4 or 6 slides per page. This is a means of protecting your high quality images. However, it does mean that any “animations” on a slide will be lost as only the final view is saved onto the PDF. As an example a sequence of overlapping images on the one slide will only show the last image. Similarly a sequence of bullet points that appear will only show the last state.

PowerPoint presentations should have all images and media embedded into the file rather than as links to a file on your computer. Any video or audio files should be of a common standard that can be viewed/heard on a PC and Mac.

All images used in your presentation or paper must be cleared of any copyright restrictions.

Alternatively, if there are isolated images with such restrictions that permit viewing during the conference, but not publication, then we should have a separate version of your PowerPoint that skips these images.

Your PowerPoints slides should be free of any company or product logos except for the Title slide with your affiliation and an ending slide that may have “credits”.

Keep your PowerPoint designs simple:

- Do not use a large number of different fonts and only use standard fonts
- Be careful with colours – for example black typing on a dark blue background is a no-no. Red on black is equally bad
- Do not have too much text on a slide – 8-10 lines max. Your paper can elaborate on the points raised
- Showing of a detailed CAD drawing during the presentation may detract rather than add value. Drawings should be free of clutter and only show key elements. Keep more complex drawings etc for your paper.

Rehearse your presentation aloud beforehand. It is quite surprising how many minutes go by when you start off speaking. Imagine the extra time that might be taken up in simply pointing to a feature on an image on the screen behind you compared to flipping through your presentation in silence on the familiar screen of your laptop. Also you will lose some time using the remote control device compared to doing it at home.

Use bullet points on your PowerPoint as reminders – not to simply read out as the audience can do that.

You might consider that 20-30 slides is a guideline for a 20 minute presentation.

Consider how to cut short your presentation should you run overtime and the Session Chair starts making all sorts of signs. There is likely to be a following speaker who will not appreciate you running over.

Notes about your Papers

Because we will be making your papers (submit in MSWord format) as PDF files rather than physically printing, we are not imposing any page limits however 6 pages might be taken as a minimum. Again, because of no limits, there is no need to spend a lot of time squeezing things to fit on a page etc.

Notes about Submitting your Contributions

You may send your PowerPoints and Paper by email to conference@LSAA.org if the files are smallish.

For larger files, many people have adopted using a “drop box” or similar and inviting the recipient to share a folder in your Dropbox.

Alternatively, an FTP account called speakers@LSAA.org has been created. Ask for the password when ready if this is the best option.

Name your files in a unique fashion – NOT “LSAA Presentation”. Use the Session Number and your name. For example S7B_Dean_Presentation.ppt or S7B_Dean_Paper.doc