



TITLE	D4A Design for Adaptation  Exploring radical and innovative solutions to address the impacts of extreme weather.
PREAMBLE	In an era increasingly defined by the challenges of climate change and extreme weather events—where floods, cyclones, and bushfires threaten communities with growing frequency and intensity—the imperative for resilient architecture has never been more pressing.  As architects and designers, we are called to envision innovative solutions that not only withstand the forces of nature but also ensure the safety and well-being of communities during and after such disasters. These challenges demand designs that go beyond traditional approaches, embracing radical innovation to redefine what it means for a building to be resilient.  In this Super Studio, we seek to inspire bold thinking and practical solutions that redefine resilience in architecture. By reimagining the role of architecture in safeguarding lives and promoting sustainability, we aim to foster a future where buildings not only endure but thrive amidst adversity.
PROVOCATION	We are living through a time marked by increasingly frequent and severe climatic events—floods, cyclones, and bushfires—that pose unprecedented challenges to our built environment and communities. The profound impact of these shifts on the safety, security, and resilience of our habitats is

We are living through a time marked by increasingly frequent and severe climatic events—floods, cyclones, and bushfires—that pose unprecedented challenges to our built environment and communities. The profound impact of these shifts on the safety, security, and resilience of our habitats is undeniable, demanding innovative responses that transcend conventional approaches. Fortunately, as architects and designers, we possess the unique ability to navigate these challenges through creative reorientation and adaptive design solutions. By reimagining the built environment to withstand these events, we not only safeguard lives but also foster sustainable and flourishing communities, which might outherwise be displaced

How might we reimagine our buildings to endure the forces of nature, ensuring that communities can thrive amidst adversity?

By harnessing the potential of cutting-edge technologies, integrating nature inspired design principles, or drawing upon indigenous knowledge systems, your proposals should push the boundaries of what is possible in resilient architecture.

Through your visionary designs, we aim to counteract the escalating impact of climate change, empowering communities to weather these storms with resilience and dignity. By prioritising human safety, environmental sustainability, and community well-being, your solutions should not only withstand the test of nature but also inspire a future where architecture becomes a beacon of hope and resilience in the face of uncertainty.



## **CHALLENGE**

In recent years, the frequency and severity of climatic events such as floods, bushfires, and cyclones have increased dramatically. These extreme weather events pose significant threats to communities, often leading to widespread displacement.

Your challenge is to design an innovative, resilient, and adaptable solution to safely and quickly accommodate 100 people whose houses have been destroyed due to an extreme weather event. Your chosen location is to be a regional or remote area above the Tropic of Capricorn where all three climatic events are likely to occur.

What does the architectural response need to do?

- Must be able to withstand bushfires, floods & cyclones with minimal post event recovery requirements
- Accommodate 100 people in single or multiple structures
- Be suitable for any Australian regions facing similar challenges
- Deployable within 2 weeks of the event and must provide accommodation for a minimum of 6 months whilst houses are reconstructed.

This is your chance to think big and push the boundaries of architectural design. Embrace conceptual freedom and radical ideas. Be creative!

# JUDGING CRITERIA

Entries will be judged based on the below criteria

- Originality / creativity (10%)
- Innovative / new ideas (15%)
- Response to cyclone (15%)
- Response to flood (15%)
- Response to bushfire (15%)
- Aesthetics, delight, livability (10%)
- Environmental performance / biomimetic and/or indigenous considerations (10%)
- Professional submission and presentation (10%)

State/territory Jury note: The jury is not permitted to tie first place state/territory Super Studio winner

# SUPER STUDIO BRIEF

# SUBMISSION & PRESENTATION

To be eligible to participate in the state/territory level of Super Studio and for the chance to progress to the national level of judging, teams must fulfill **both** of the following requirements:

- 1. Digital submission: Due 9.00 am AEST (7.00 am AWST, 8.30 am ACST) Wednesday 7 August (See 'Digital submission requirements' below.)
- 2. In-person presentation: 5-minute (plus 2-minute Q&A) presentation to the state/territory jury on Wednesday 7 August. Check the presentation day program (here) as start times and presentation day locations vary in each state/territory.

<u>Digital submission requirements:</u> Must be submitted as one PDF document A3 landscape, less than 20MB, that includes:

- 2 x Illustrated A3 landscape panels
- An additional page with all sources referenced and documented appropriately (if applicable).
- An additional page with a 300 (maximum) word description of your design intent and proposal.

Important considerations for your digital submission & presentation:

- Submissions will be downloaded by the Super Studio coordinator in each state & territory and provided back to participants to be used for the presentation.
- No additional digital or hardcopy materials are permitted for use for the presentation.
- Final ideas and submissions must be original. Refer to judging criteria on 'Originality/creativity'.

Additional Submission to help SONA promote your project on socials and for consideration in the <u>student zine de-PICT</u> you will also be asked to submit:

 2 x original images that best represent your concept Accepted file types: PNG & JPG/JPEG Size: 1080x1080pixels

#### **SUBMIT HERE**

### PROGRESSION TO NATIONAL LEVEL OF JUDGING

National shortlist | announced Thursday 8 August

The digital submissions from the State/Territory winners (first place) will be assessed by the national jury. Four teams will be shortlisted by the national jury. Shortlisted teams will be notified on Thursday 8 August.

 $\frac{\text{National winner presentations \& announcement | Monday 12 August, 5.30}}{\text{pm AEST (3.30pm AWST, 5.00pm ACST)}}$ 

Should your team be shortlisted for national judging, you will be invited to present online to the national jury. Your digital submission can support your presentation (no changes can be made to this). If you cannot attend, you should submit a recorded presentation. Failure to present live or submit a recorded presentation will result in disqualification from the national level of judging. Following all shortlisted presentations, the national jury will deliberate and announce the national winner of Super Studio.

This is a new component of Super Studio; we are excited to make this session free and open to all Super Studio participants and supporters.

Register here

## SUGGESTED READINGS

#### Climate change and extreme weather

- State of the Climate 2022

http://www.bom.gov.au/state-of-the-climate/

- CSIRO Research | Predicting and preparing for bushfires

https://www.csiro.au/en/research/disasters/bushfires

- CSIRO Research | Floods

https://www.csiro.au/en/research/disasters/floods

- CSIRO Research | Tropical Cyclones

https://www.csiro.au/en/research/disasters/FAQs-on-tropical-cyclones

 Climate Council | 2024's Climate Crisis: Extreme Weather around the globe signals the urgent need for action

 $\underline{https://www.climatecouncil.org.au/2024s-climate-crisis-extreme-weather-around-the-globe/}$ 

- Climate Council | One in 25 Australian Homes uninsurable by 2030: Climate Council launches cutting edge digital climate-risk map

https://www.climatecouncil.org.au/resources/australian-homes-uninsurable-2030-climaterisk-map/

#### Design for adaptation and resilience

Pursuit | Designing homes for extreme weather

https://pursuit.unimelb.edu.au/articles/designing-homes-for-extreme-weather

Your Home | Adapting to Climate change

https://www.yourhome.gov.au/live-adapt/adapting-climate-change

Suncorp | One house to Save Many

https://resilience-onehouse.suncorp.com.au/

 QLD Government | Improve your homes resilience (with specific guides for flood, bushfire and storm resilience)

https://www.getready.qld.gov.au/getting-ready/improve-your-homes-resilience

- Arch daily | inspiring examples of post disaster architecture

https://www.archdaily.com/894734/10-inspiring-examples-of-post-disaster-architecture

#### Bushfire

- CSIRO | Bushfire best practice guide

https://research.csiro.au/bushfire/new-builds/

Your Home | Bushfire protection

https://www.yourhome.gov.au/live-adapt/bushfire-protection

- Sanctuary Magazine | Phoenix House

https://renew.org.au/sanctuary-magazine/house-profiles/phoenix-house/

- Sanctuary Magazine | Trial by Fire

https://renew.org.au/sanctuary-magazine/house-profiles/trial-by-fire/

#### Cyclone

 Queensland Reconstruction Authority | Cyclone Resilient Building Guidance for Queensland Homes

https://www.qra.qld.gov.au/sites/default/files/2019-12/cyclone\_resilience\_building\_quidelines\_-\_dec19.pdf

- Sanctuary Magazine | Right as Rain

https://renew.org.au/sanctuary-magazine/house-profiles/right-as-rain/

#### Flood

- Climate Council | Is your home at risk of flooding?

https://www.climatecouncil.org.au/is-your-home-at-risk-of-flooding/

- Brisbane City Council | How to improve flood resilience

https://www.sustainablebrisbane.com.au/home-flood-resilience/

- Sanctuary Magazine | High Water Haven

https://renew.org.au/sanctuary-magazine/house-profiles/high-water-haven/

- Sanctuary Magazine | High Water Haven

https://renew.org.au/sanctuary-magazine/house-profiles/flood-fast/

#### **Acumen Practice Notes**

- Super Studio 2024 Acumen Note Pack

https://acumen.architecture.com.au/notepacks/student-sona/super-studio-2024/

# SUPER STUDIO BRIEF

# DESIGN DAY TALK

The Design Day talk is an optional activity for Super Studio participants, this is an opportunity to dive deeper into the themes of the brief, spark creativity, and connect with design professionals and other students participating in Super Studio.

Designing for Disaster: How Australian architects can create resilient and sustainable housing for future generations.

Tuesday 6 August, 5.30 pm AEST (3.30pm AWST, 5.00pm ACST)

#### Connect here

Climate change is not a distant threat, but a present reality. Australia is facing more frequent and intense heatwaves, droughts, floods, bushfires, and storms. How can architects and designers respond to these challenges and create resilient, adaptable, and sustainable housing solutions? In this Design Talk, Alison Cunningham and Michelle Cramer will have you imagine the Australian homes and households of the future and challenge you to think differently about housing in extreme conditions, and how you can contribute to creating more livable and sustainable environments for future generations.

### **BRIEF WRITERS**

Matthew Sabransky SONA | SONA Vice President for Professional Development | Master of Architecture student at Deakin University

**Dr Chris Jensen Affiliate RAIA** | Lecturer in Construction Management, The University of Melbourne

**Erika Bartak Associate RAIA** | ESD Consultant and PhD candidate, The University of Melbourne

Allison Stout RAIA | Architect, GHD Design

### **SPONSOR**

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