



Iconic Brisbane Lampshades

Michelle Brown, July 2023



State Library
of Queensland



Queensland
Government



Acknowledgement of Country

We acknowledge Aboriginal and Torres Strait Islander peoples and their continuing connection to land and as custodians of stories for millennia. We respectfully acknowledge the land on which we all meet today, and pay our respects to elders past, present and emerging.

WORKSHOP SUMMARY



There's a lot to love about Queensland architecture and our iconic heritage buildings.

Join us as we dive into State Library of Queensland's collections for inspiration and bring to life our designs through digital fabrication techniques and laser cutting.

This journey will see you:

- Inspired by Queensland architecture through the enormous wealth of the collections here at State Library of Queensland
- Learning to create vector files suitable for the laser cutter in free and open-source software (Inkscape).
- Preparing your lamp design so it's ready to be laser cut by the facilitator
- Assembling your lamp
- Taking your new lamp home with your new design skills!

Welcome

- Check in and get set up on a computer
- Why did you sign up for the workshop?
- What are you keen to learn?
- SLQ account logins

End goals

We will give the basic skills in vector design to be able to gain confidence for laser cutting your own creations or editing free and available designs.

In a follow up session, you will undertake a laser cutter induction, using your new design skills to complete safety training so you can book The Edge lasers.

INTRODUCTIONS



Hour 1

- State Library collection
- Research
- Introduction to Inkscape
- Designing with Inkscape

Hour 2

- File setup for laser
- Create your own design with template provided
- Break

Hour 3

- Laser demo
- Finalise lamp designs
- Facilitator begins to cut designs

Hour 4

- Laser Cutting
- Assembly
- If finished early, try designing an item for the laser induction

SESSION OVERVIEW

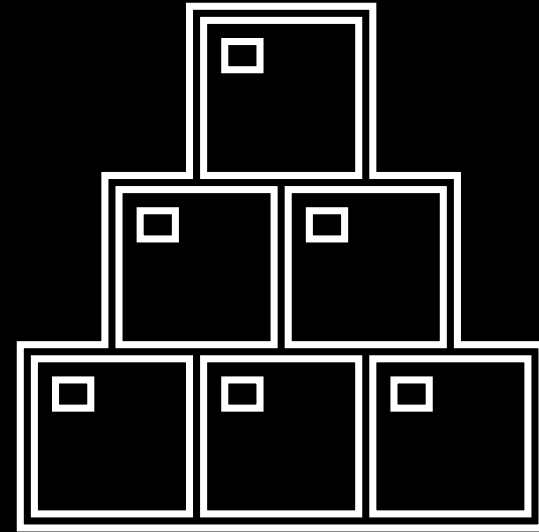


TOOLS

- Computer
- Inkscape design software
- USB stick
- Laser Cutter
- Clamp
- Rubber Mallet

Per participant

- An A2 sheet 4mm plywood
- An A2 sheet 3mm white acrylic
- Fast setting wood glue
- Lamp base electrics ([Ikea](#))
- Lightbulb ([LED e14](#))



MATERIALS

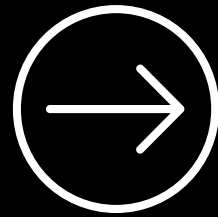
HEALTH & SAFETY



For all workshops at The Edge we like to familiarise participants with:

- Exit points
- Lab Risk Assessments
- Laser safe operating procedure (SOP)
- Any other SOP

LET'S GET
STARTED

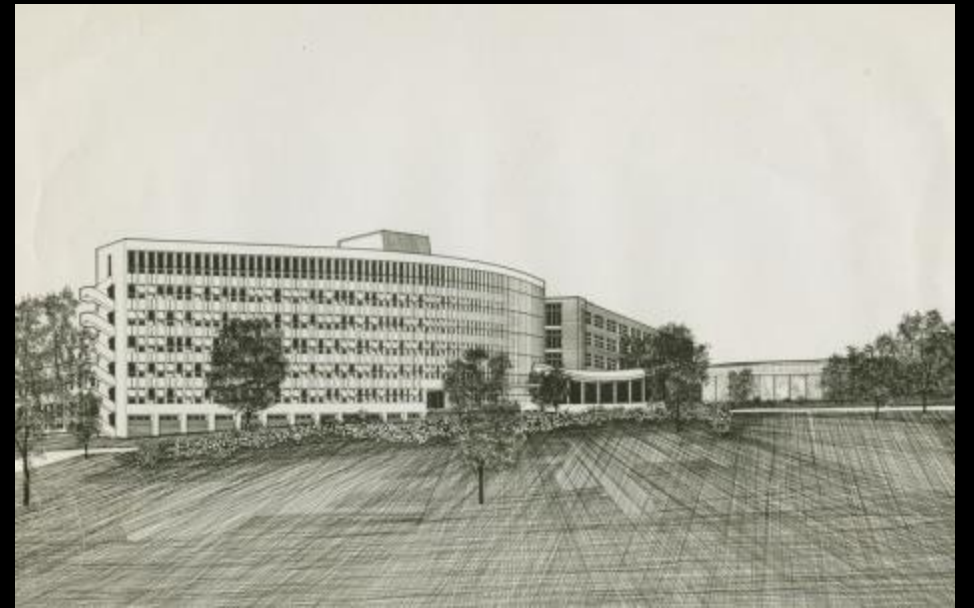


One Search

The John Oxley Library holds a vast collection of drawings, manuscripts, design plans, house plans, building designs and related materials with links to built heritage and architecture in Queensland. View a selection of them with digitised drawings, images and digital stories with architects as they talk about their work.



LINK



STATE
LIBRARY
COLLECTIONS

ICONIC BRISBANE BUILDINGS

James Birrell

Wickham Terrace Car Park



[James Peter Birrell \(1928-2019\)](#)

One of Queensland's eminent architects, responsible for many of the state's best-known buildings from the 1950s, and as Brisbane City Council Architect in 1955. He designed and oversaw many projects, including the Toowong Library, the Centenary Pool and the Car Park on Wickham Terrace. In 1961, he became University of Queensland Staff Architect and designed the J.D. Story Administration Building and the Union College Building at Queensland University and designed the campus plan at James Cook University in Townsville.

ICONIC BRISBANE BUILDINGS

Keith Frost

SGIO Building



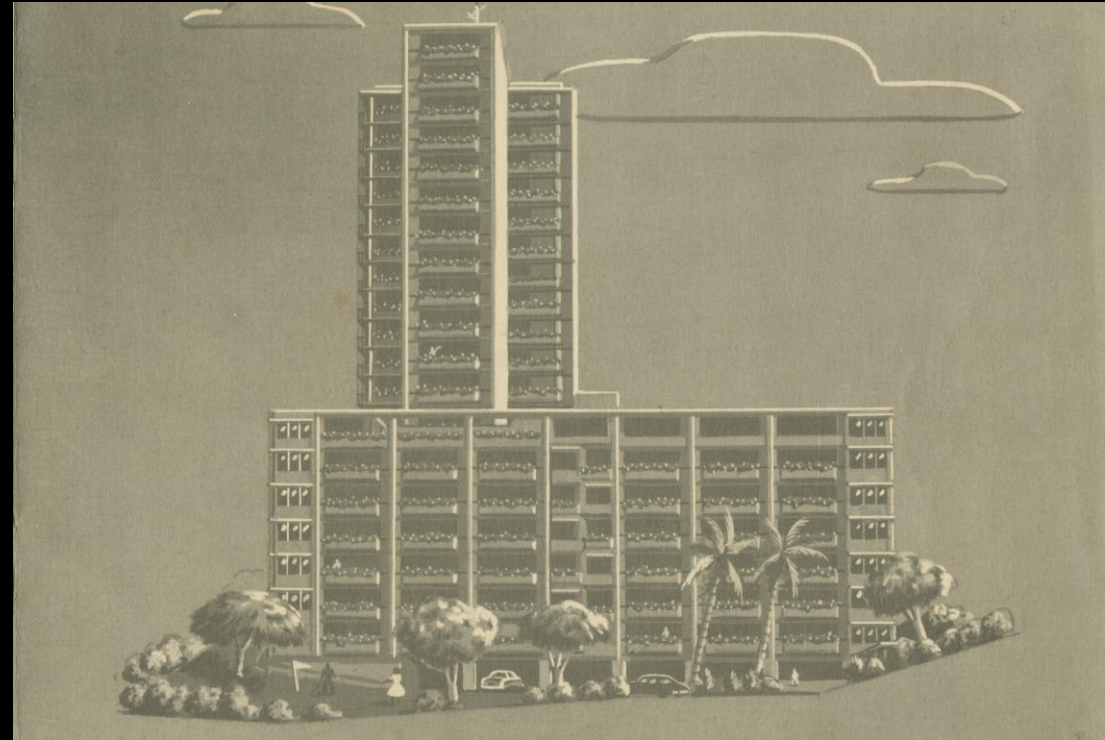
[SGIO Images](#)

The design of the State Government Insurance Office (SGIO) building was the result of an internal competition held in the architecture office of Conrad and Gargett in 1967. This competition was won by Keith Frost, who designed a stark 28-storey high concrete building with a steel frame, modelled after the PanAm building in New York.

ICONIC BRISBANE BUILDINGS

AH Job & RP Froud

Torbreck



Torbreck

Torbreck, located at 182 Dornoch Terrace in Highgate Hill, has historical significance as the first company-titled multi-storeyed home unit development erected in Queensland based on 1950s North American models. Torbreck was erected in 1958-1960 by NA Kratzmann Pty. Ltd. to the design of Brisbane architects AH Job and RP Froud.

ICONIC BRISBANE BUILDINGS

Unknown Architect

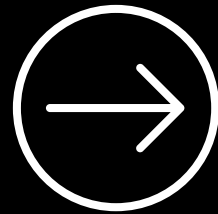
Parliamentary
Annexe



Parliamentary Annexe

Parliament House is located on the corner of George Street and Alice Street at Gardens Point in the CBD. Built in 1865-68 to the design of the Colonial Architect Charles Tiffin. A Parliamentary Annexe was added in the 1970s to provide additional offices and services, including meeting and function facilities and overnight accommodation for Members.

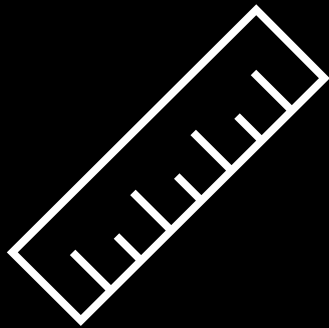
THE BASICS OF VECTOR DESIGN

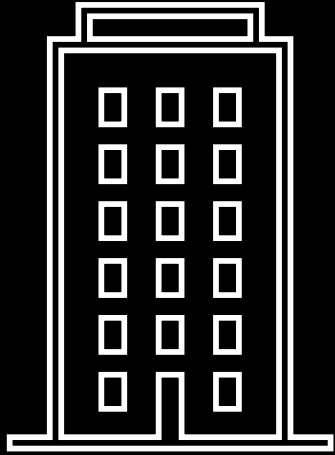


Inkscape 101

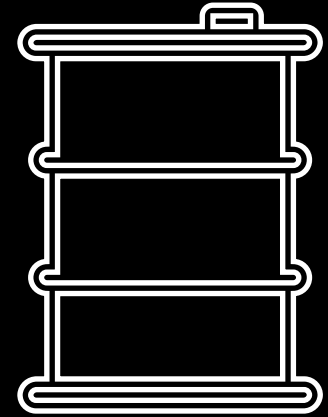
INKSCAPE TIPS

- Most important - check the size of your document and make sure you are working in A2 and millimeters
- Remember to group and ungroup as needed
- Keeping your 'parts' assigned to different layers can help
- Naming your layers will help keep you organised



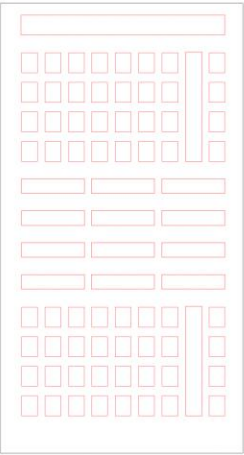
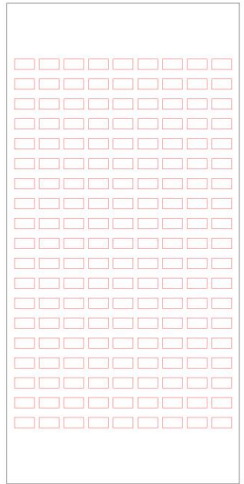
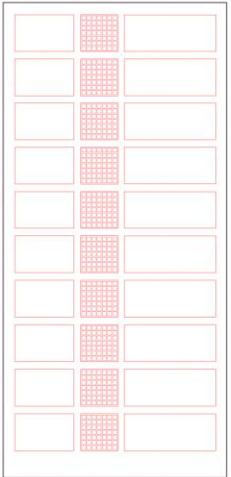


GEOMETRIC SHAPES IN ARCHITECTURE



For this workshop we are going to take inspiration from the windows and shapes of four Brisbane buildings and design and replicate the patterns to laser cut for our lamp panels.

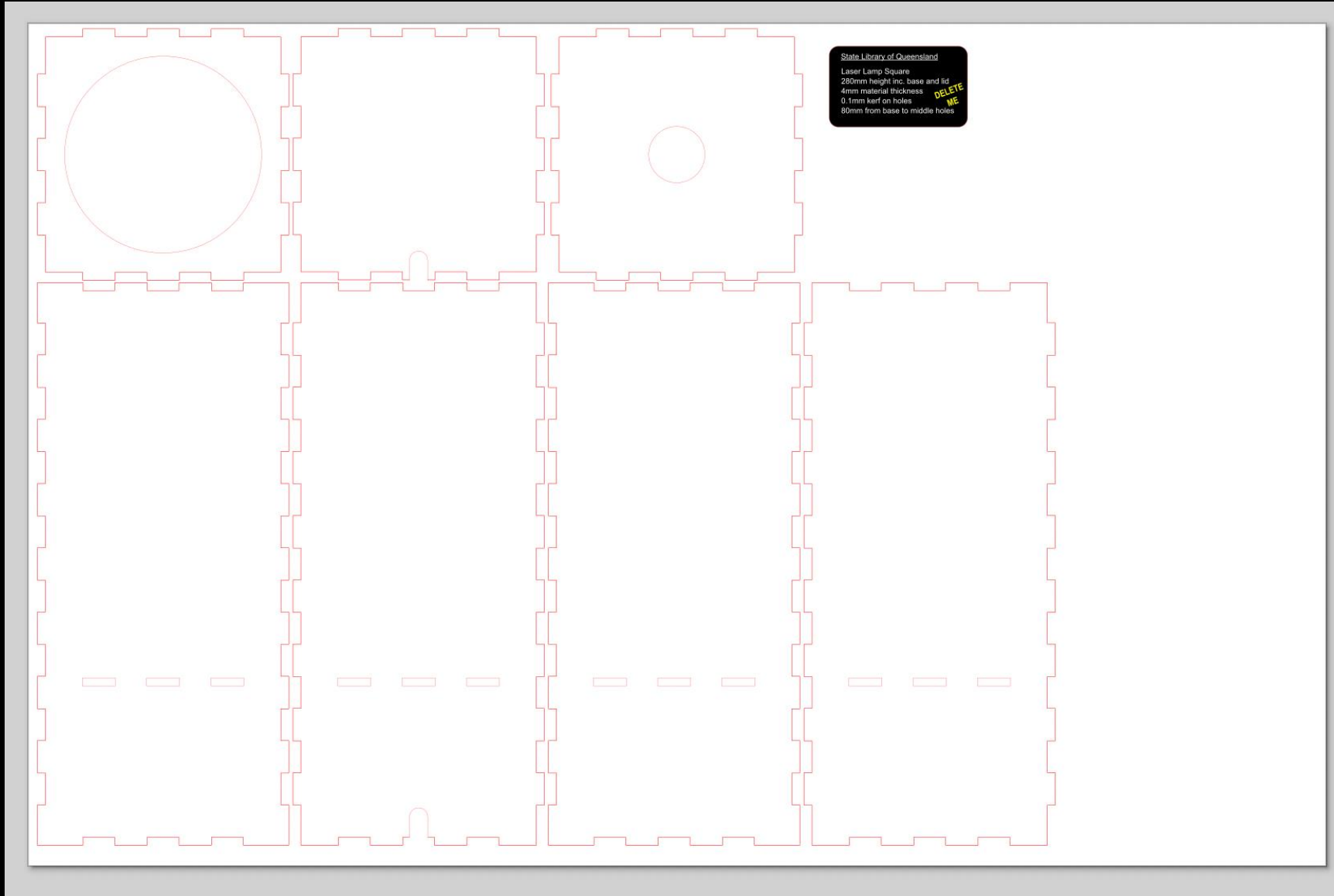
OUR FOUR BUILDINGS BASE DESIGNS



OUR LAMP DESIGNS



SQUARE LAMP DESIGN



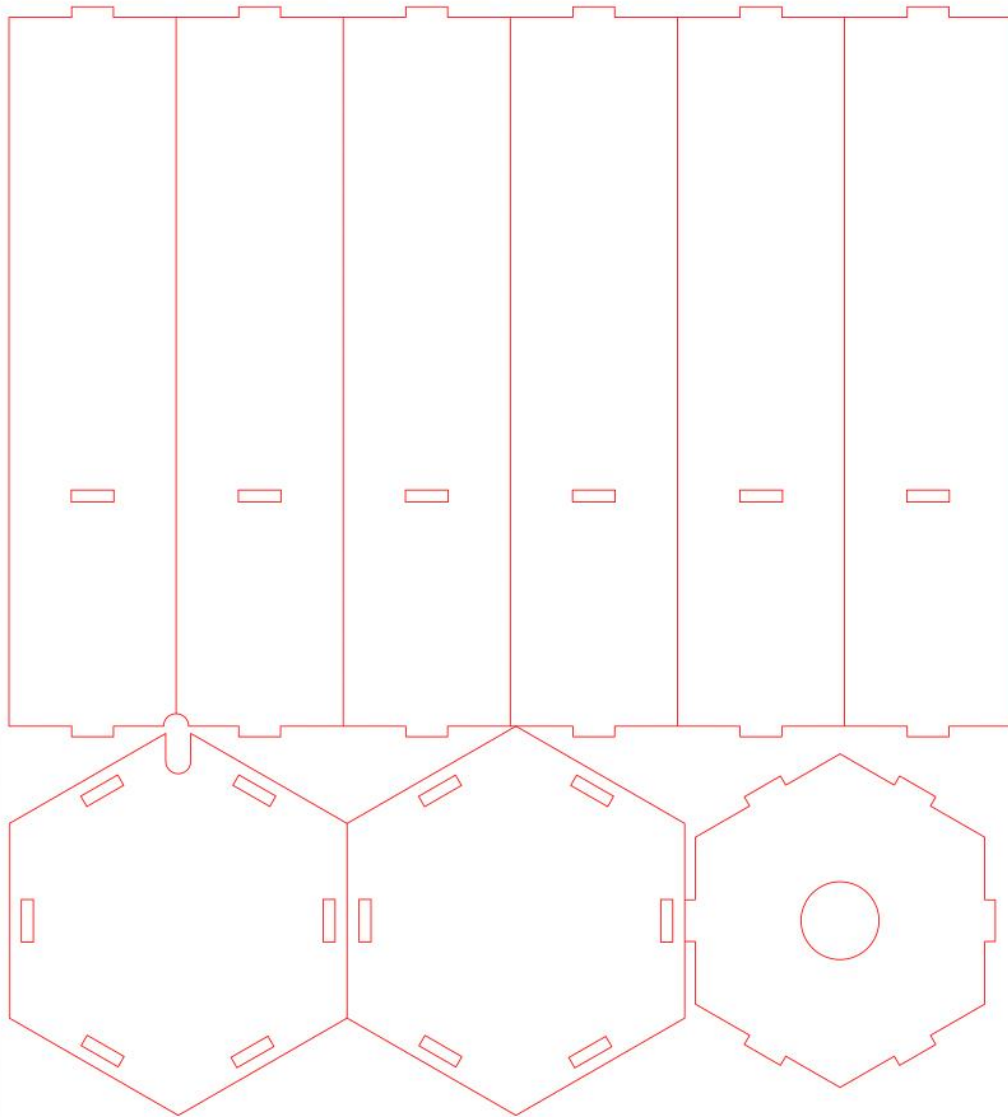
[Box maker website](#)
[quick guide](#)

Add all necessary
holes and cord gaps
if designing
something from
scratch.

HEXAGON LAMP DESIGN

State Library of Queensland
Laser Lamp Hexagonal
250mm height exc. base and lid
4mm material thickness
0.3mm kerf on holes
80mm from base to middle holes

DELETE
ME



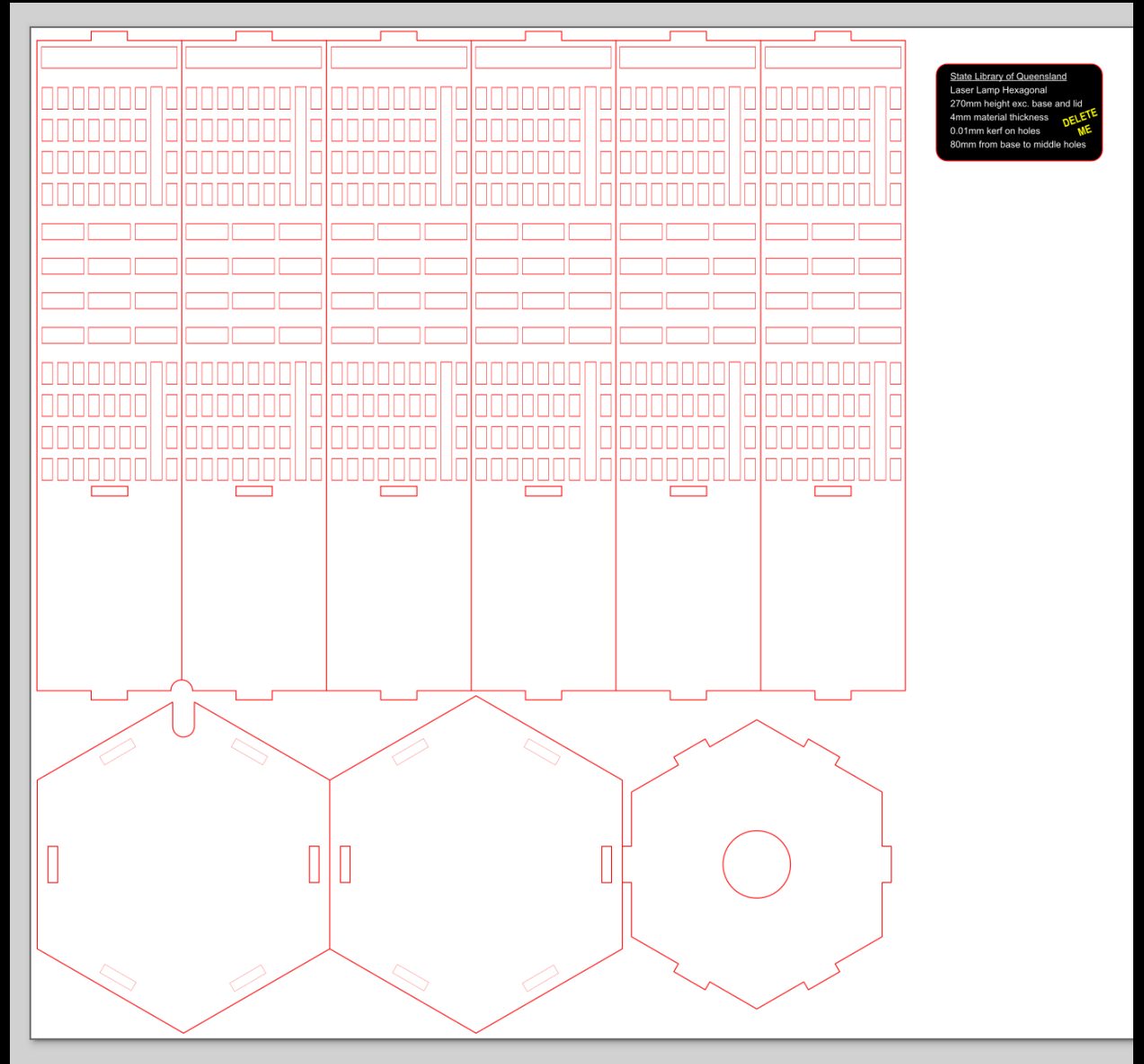
Add all necessary
holes and cord gaps if
designing from
scratch.

COMBINE DESIGNS

Choose which lamp shape and which building pattern you would like to use for your lamp and download those files from the [Wiki page](#).

Having run through our Inkscape 101, you should hopefully feel confident to use these templates to create your design.

Copy your chosen building pattern into your lamp template without the black outline and transform the pattern to fit in one of the side panel pieces, then duplicate and repeat into all remaining panel pieces.

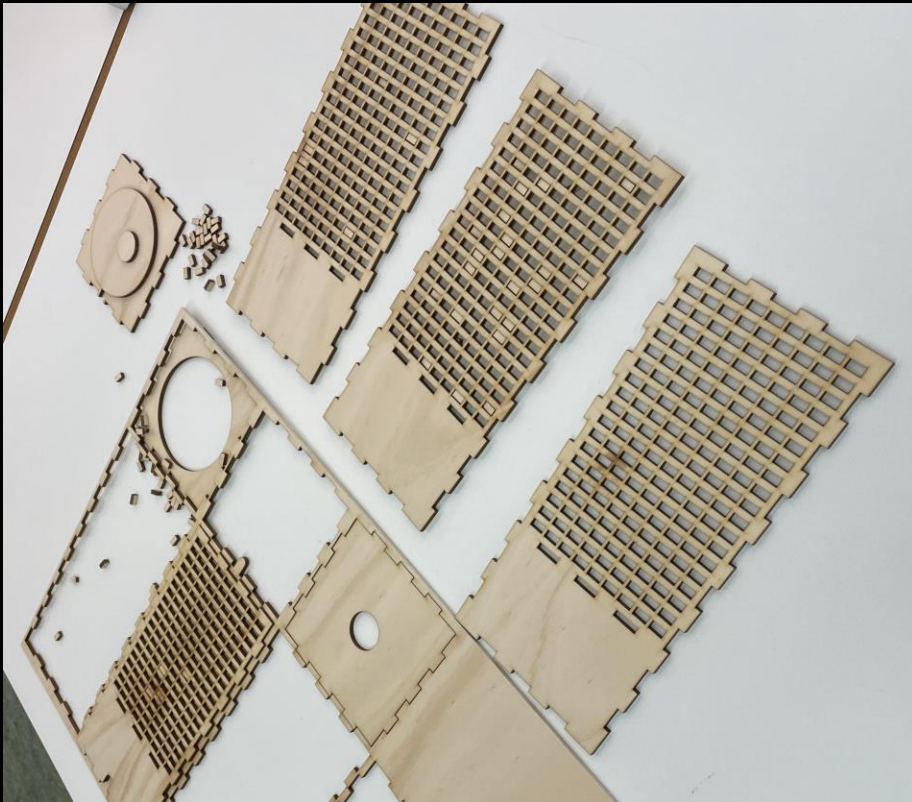


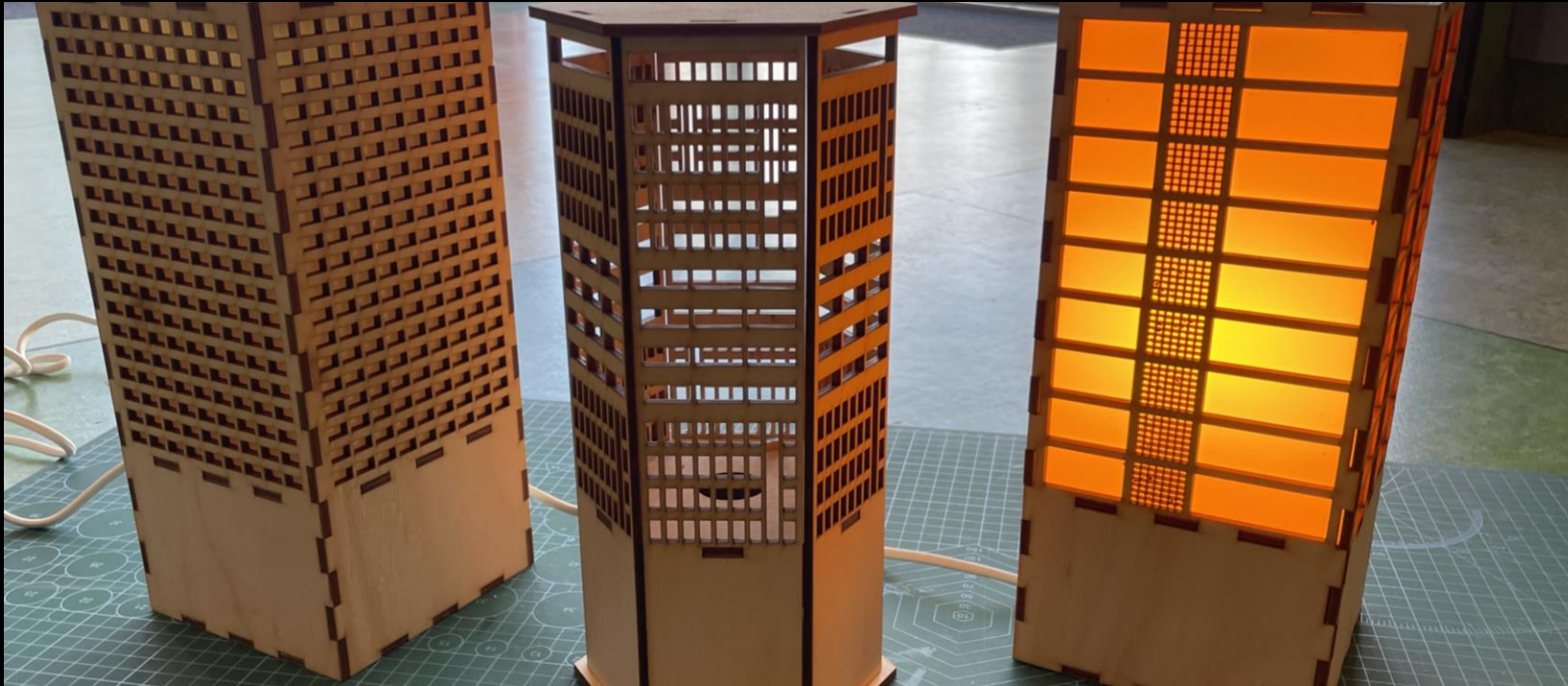
ASSEMBLE PIECES

Once your design has been laser cut and you have all your pieces, it's time to assemble your lamp.

Some notes & handy tips;

- Get someone to help you when putting the parts together, 2 sets of hands will be much easier.
- Pieces of plywood can expand and contract a little and warp, which may cause varying degrees of fit.
- Start with your centre piece where the light fitting will go and add the panels, making sure they face all the same way with the laser scored sides facing inwards.
- The square version is a tighter fit and you may need the rubber mallet to lightly tap things into place.
- Before you put on the base or top, make sure to unscrew the ring on top of the light cord and then insert into the centre piece, screwing the ring back into place, then screw in the light bulb and fit the remaining base and top pieces.





DIFFUSION PANELS

To make our lamps look great, we want to add some white or off-white acrylic to the insides to create diffusion, otherwise the light bulb can be too bright and you cannot see the details of the geometric patterns.

There are templates for each design cut and provided already, choose the appropriate one and some glue and we'll glue the pieces together before assembling our lamp.

THANKS FOR
ATTENDING

Please complete our survey that
will be sent out via Eventbrite.

Contact us on
appliedcreativity@slq.qld.gov.au





**Queensland
Government**

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