



# SUSTAINABLE MATERIALS GUIDE

## MATERIALS SCORECARD

We know it sourcing materials can be exhausting at the best of times. We encourage you to consider what sustainable materials you have easily at your disposal as your design starting point, rather than trying to source materials and make compromises in the middle of the build.

Ultimately, materials that are not brand new are of top priority. As an example: while polycarbonate or PVC products are in the DO NOT USE category, they are encouraged if they have been sourced second-hand or repurposed. The consideration for materials in the DO NOT USE category if they are sourced in this manner, is to ensure you are able to repurpose them post-production, as many of them cannot be recycled.

We also understand that often in the independent arts, we don't always have the luxury of choice when it comes to materials or suppliers (whether due to time or money). That is okay. This is intended to guide your decisions where you can.

*NB: The below table has been primarily adapted from the Green Materials Scorecard from Mo'olelo Performing Arts company who were based in San Diego (with some additional information from other sources). Please note that the original scorecard was from 2009 so it may no longer be as accurate a representation of how environmentally friendly these materials are. We have also condensed and adapted it for brevity and an Australian context, so if you feel anything here is incorrect or inaccurate, please let us know.*

USE	USE WHERE NECESSARY	DO NOT USE
<b>WOOD PRODUCTS</b>		
<ul style="list-style-type: none"> <li>Reclaimed or recycled timber</li> <li><a href="#">FSC</a> or <a href="#">PEFC/Responsible Wood</a> Certified wood products</li> <li>Cork</li> <li>Strawboard</li> </ul>	<ul style="list-style-type: none"> <li>Bamboo</li> <li>MDF</li> <li>MDO</li> <li>Plywood</li> <li>Chipboard</li> </ul>	<ul style="list-style-type: none"> <li>Melamine laminate</li> <li>Imported or Tropical hardwood</li> <li>Non-certified wood products</li> </ul>
<b>CERAMIC, GLASS &amp; EARTHEN MATERIALS</b>		
<ul style="list-style-type: none"> <li>Reclaimed or recycled materials</li> <li>Materials with a recycled content over 75%</li> <li>Unfired clay products</li> </ul>	<ul style="list-style-type: none"> <li>Fiberglass (with non-formaldehyde resin)</li> <li>Granite</li> <li>Drywall (gypsum)</li> </ul>	<ul style="list-style-type: none"> <li>Concrete</li> <li>Glass and epoxy-resin laminates</li> <li>Leaded glass</li> </ul>
<b>METALS</b>		

<ul style="list-style-type: none"> <li>Scrap, reclaimed or recycled metal</li> </ul>	<ul style="list-style-type: none"> <li>Generally speaking, most virgin metals should be avoided due to environmentally intensive mining/processing.</li> <li>If necessary look for metals certified by <a href="#">GECA</a>, or <a href="#">Sustainable Constructional Steels Certification Scheme</a>.</li> </ul>	<ul style="list-style-type: none"> <li>Virgin steel</li> <li>Lead</li> <li>Aluminum</li> </ul>
<b>PLASTICS</b>		
<ul style="list-style-type: none"> <li>Reclaimed or recycled plastics</li> </ul>	<ul style="list-style-type: none"> <li>Polyethylene (if recyclable)</li> <li>Polyester/PET (if recyclable)</li> <li>Polypropylene (if not sent to landfill)</li> </ul>	<ul style="list-style-type: none"> <li>Latex</li> <li>Silicone</li> <li>Polycarbonate</li> <li>Acrylic</li> <li>PVC</li> <li>Polystyrene</li> <li>Polyurethane</li> <li>Melamine</li> <li>Single-use plastics</li> </ul>
<b>TEXTILES</b>		
<ul style="list-style-type: none"> <li>Reused or recycled textiles</li> <li>Textiles with a recycled content over 75%</li> <li>Certified organic fibers (<i>excluding</i> cotton and wool)</li> <li>Certified organic bio-polymers</li> <li>Textiles that are <a href="#">Oeko-Tex</a>, and <a href="#">Cradle-to-Cradle</a> certified</li> <li>For more comprehensive info regarding sustainable textiles options see <a href="#">GigNation Australia's guide</a>.</li> </ul>	<ul style="list-style-type: none"> <li>Hemp</li> <li>Linen</li> <li>Jute</li> <li>Sustainably and ethically sourced cotton</li> <li>Sustainably and ethically sourced wool</li> </ul>	<ul style="list-style-type: none"> <li>PVC textile</li> <li>Cotton</li> <li>Acetate</li> <li>Nylon</li> <li>Rayon</li> </ul>

*Adapted from: Mo'olelo Performing Arts Company (2009); with additional information from Julie's Bicycle (2013), Buro Happold (2021), and GigNation (2021).*

## OTHER HARMFUL MATERIALS AND CHEMICALS

### Adhesives

- Only use adhesives that have low or zero levels of VOCs (volatile organic compounds).
- Hot glue and contact cement will often damage materials so they cannot be disassembled, recycled or reused.

### **Eco Options:**

- Where you have to use glue, try to use low toxicity glues like PVA, or water-based adhesives.
- For structural fixings, use reversible fastenings like screws or nuts/bolts.

## Solvents

- Most industrial solvents like acetone are incredibly toxic. Methanol and ethanol based solvents are preferable where no other option is available.

## Paints and Coatings

- Look for a [Good Environmental Choice Australia \(GECA\)](#), or [Global GreenTag](#) certification on your paints, lacquers, and finishes.
- Only use paints and varnishes that have low or zero levels of VOCs (volatile organic compounds). Low-VOC paints generally have a shorter drying time which can result in an uneven finish, but can be avoided by following [some easy steps](#).
- Try using varnishes and lacquers that are based on non-petroleum wax, pure (not boiled) linseed or tung oil, or even water.
- Remember to dispose of any leftover paint at an approved disposal site, instead of pouring it down the drain or in the bin.

### **Eco Options:**

- Most major brands like Dulux or Wattyl have paint lines that meet the above certifications.
- [Bauwerk](#) paints are made from entirely natural pigments (meaning no plastic at all!), are certified by GECA, and use 100% renewable energy in production.
- [Ecolour](#) is both certified by GECA, and certified carbon neutral.
- Suppliers like [Tint Paint](#) may not be certified yet, but they do claim to be very low VOC and run their operations entirely using renewable energy.

## Glitter

- Most brands labelled as “eco-friendly” or “biodegradable” glitter should be avoided as they are still demonstrated to have an impact on aquatic ecosystems (Green, 2021).

### **Eco Options:**

- The only independently certified freshwater graded biodegradable glitter available in Australia can be found at [The Glitter Tribe](#).

## NO TAPE !

Here are some game-changing alternatives to plastic tape and cable ties.

NAME	USE	WHERE TO GET IT	NOTES
<b>Bongo Tie</b>	Tidying and securing cables	<a href="#">Online</a>	You can also make your own with elastic and pieces of dowel.
<b>Velcro Straps</b>	Tidying and securing cables	Bunnings, Mitre-10 and most good hardware stores	
<b>Paper-based tape</b>	Stage mark-up, labeling props and set-pieces	<a href="#">Online</a>	Only use recyclable tapes. Be wary, as just because a product is ‘paper-based’ doesn’t mean it’s recyclable. ‘Biodegradable’ is also a very broad term, and doesn’t mean it is environmentally safe.

			Generally paper tapes come in brown, so aren't great for spikes/stage marks.
<b>Clamps</b>	Rigging, securing set-pieces	Bunnings, Mitre-10 and most good hardware stores. Most venues with lighting rigs will have a stock of them.	
<b>Twine/rope</b>	Tying almost anything to almost anything	Supermarkets and hardware stores	Ensure the rope is graded to the weight you are securing, and knots are regularly checked and tightened
<b>Sash ties</b>	Tying almost anything to almost anything	Just cut up some old clothes or get some scraps from your production designer!	Avoid using near lights or heating elements.
<b>Builders Chalk</b>	Stage mark-up, labeling props and set-pieces	Bunnings, Mitre-10 and most larger hardware stores	Normal chalk is also useful, but quality varies and some chalks won't write on some materials.
<b>Chalk Pens</b>	Stage mark-up, labeling props and set-pieces	Hardware stores, craft supply stores, most big department stores	Ensure you test the pens on a surface first, as some brands may leave residue or discolor certain surfaces.

## SOURCES

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