# **OTHER MATTER Decals**<sup>TM</sup>

Other Matter Decals<sup>™</sup> are a world-first patent-pending innovation in non-petrochemical signage.

Designed for use in exhibitions, retail and events, this innovative application can be repurposed and reused following each application removing PVC materials from these environments and resulting in a self-sustaining closed-loop system.

When applied to glass, the material has been designed to not require an adhesive, removing harmful VOCs and harsh adhesive chemicals. This also allows the decals to be reinstalled or repositioned easily.

It can be made in any colour and transparency, printed on and cut just like regular computer-cut vinyl (CCV).





## Understanding the Issues with PVC Decals

Traditional PVC decals, commonly used in art exhibitions and commercial signage, pose significant environmental and health concerns. PVC, or polyvinyl chloride, is a widely used plastic that, during its production and disposal, releases harmful chemicals known as dioxins. These toxins can cause long-term harm to human health and the environment.

## **Research Partners**





The production process of PVC not only involves phthalates, additives that increase flexibility and are linked to numerous health issues including reproductive problems and increased cancer risk, but it also significantly impacts marginalised communities.

Other Matter Decals<sup>™</sup>, crafted from a sustainable and renewable algae-based polymer, offer a responsible alternative that avoids the health and ethical pitfalls of conventional PVC. These innovative decals provide a safer, environmentally responsible option, reflecting a commitment to both human health and the planet.

#### COOPER C/O HEWITT Smithsonian Design Museum c/o Studios - Care of Studios The Metropolitan Museum of Art Cooper Hewitt Smithsonian Design Museum Melbourne-based conservation specialists c/o Studios lead Other **Cooper Hewitt Smithsonian Design** Matter's material research. Museum have been a valued research

polymers.

partner since 2022, engaging with Other Matter's material research through conservators specialised in Decals.

Starting in 2024, The Met's conservation scientists specialised in atmospheric chemistry have led testing into emissions related to Other Matter's materials, including

### Can it be made in any colour?

The material's base-state is clear, and easily dyeable to black or white. Other colours can be mixed in though it isn't an exact science (we can colour-match by eye, not be science at this stage of production scaling).

There is also the potential to use pigments that have a more meaningful link to the project as part of material production. For some, this may be soil from a site relevant to an exhibition, or a byproduct of production that may be used as a colourant for the decals. Note: any pigment must be able to be supplied as a liquid or fine powder for use.

#### Can we supply our own textures/designs?

The marbling texture is a hand-made process and while there is some degree of control in the colour-mix and translucency, some of this does come down to chance. Solid colours will also exhibit some surface texture and variation throughout at this stage of production scaling. We think that this level of uniqueness is something to be valued and helps to highlight that this material is not petrochemical.

#### What sizes/thicknesses can be produced?

The material comes in sheets sized at around 2300mm to 1100mm. Designs can be cut with a maximum size within this area. The material can be made in a variety of thicknesses from 0.5mm to 0.8mm. For CCV we recommend going for the former, and if using the materialin a more build/self-supported sense we recommend the latter.

We do note the material is not a perfectly uniform thickness throughout at this stage in production scaling.

#### What surfaces can it be applied to?

Glass is recommended as smooth, metho-cleanable surfaces help the adhesion of the material (even without app tape). Plasterboard/painted walls can hold the material though require the use of an application tape.

#### Can we put it outside?

Indoor use is recommended as the material hasn't been weather tested, though it is best to avoid humid environments as the material absorbs moisture over time.

#### How long does it last?

As this is a world-first material still undergoing testing in real-world environments it is under no guaranteed for a specific time-frame, though we have seen results of the substrate lasting up-to 2-years.

#### Can it be reused/stored?

If it hasn't had a petrochemical based backing applied to it the material can be taken down, stored in backing paper and reinstalled at a later date, though some wear may occur.

#### Does it produce any harmful VOCs?

We don't think so. This is currently being throughly tested as part of research conducted by The Metropolitan Museum of Art (NY) conservation science team. Comprehensive emissions test results are pending but predictions from conservation experts are that it is likely to produce 'pass, permanent' results from Oddy testing.

That said, we have plans to provide identical material in future, which doesn't appear with any surface variations.

What's the texture/smell of it?

Some clients love the more organic look of the surface having visible bubbles, though we can make these far less obvious, nearing smooth & glossy if the project requires it!

The substance does not smell, though we have experimented with infusing scents (like honey) into the mix for a more immersive brand experience.



#### Can we print onto it?

After plenty of trials we have found a workable solution to printing on the material using UV-cured flatbed printers.

The material is currently designed for flatbed printing and has not been trialled in a roll-to-roll format.

#### Can it be cut and replace CCV text?

Yes, it can be cut and turned into a CCV-like text. It's a little harder to work with and install (see above re: surfaces).

If you're aiming to install without app-tape the material offcut acts as a good pounce, though absolute alignment might be tricky. We'd recommend a minimum x-height of 10mm (depending on font weight) and no more than 50 word paragraphs.

#### What does it cost?

With our current manufacturing set-up and processes each run is hand-made and bespoke meaning each sheet is around four times the price of off-the-shelf self-adhesive vinyl.

#### Who produces it?

Other Matter work in partnership with production house Boom Studios. BOOM STUDIOS is a print and fabrication company specialising in custom activation builds, store fit-outs and popup spaces for high-performance clients in the sports, retail, arts and creative industries. Boom Studios has partnered with Other Matter to help R&D a commercial application of the algae based material across Australia, New Zealand and beyond.

Patent pending 2024900061

