

Landfills are not what come to mind as the most glamorous of places. On the contrary the wine country of Sonoma and Napa counties paint a different picture.

The upcycling and enjoyment of the embodied energy of a vineyard should not be limited to a glass of wine or the common re-used/re-purposed wine barrels. This shade structure is meant to re-purpose landfill destined materials in a completely different way.

Playing with shadows and light, the deconstructed modular cube creates a grid of frames made of recycled vineyard posts – a pressure treated wood unsuitable for composting. Each square is in-filled with either retired irrigation tubing, or perforated portions of ½ ton micro-bins used for grape collection. Huge amounts of irrigation tubes are often replaced when replanting vines. Cracked bins are at best reused for storing dirt (and every recycling center in the area has indicated they do not take them).

The cube is composed of panels four modules high by four modules wide. Select hinged panels and a sliding door provide shade flexibility and interaction amongst the users. Additional comfort is added by replacing certain tubes in the ceiling with misters, which are fed by a recycled tank hidden underneath the multi-person bench.

Each square is constructed off-site, transported and then assembled into the final cube. Basic Simpson A34 and A35 brackets tie each prefabricated panel together, which allows a multitude of different arrangements and patterns. Lateral support comes from recycled vineyard trellis wire (used to support vine rows) and turnbuckles which run diagonally along each facade. The roof structure is supported by similar wire, creating a tensile truss that pushes up on the roof via a central compression strut.

This shade structure is intended to bring attention to the role of waste in the climate crisis, and bring hope by creative design solutions. To spark innovative solutions to market these materials efficiently, and give them a new beginning. To re-imagine, re-purpose and re-vive the industry trade waste.







