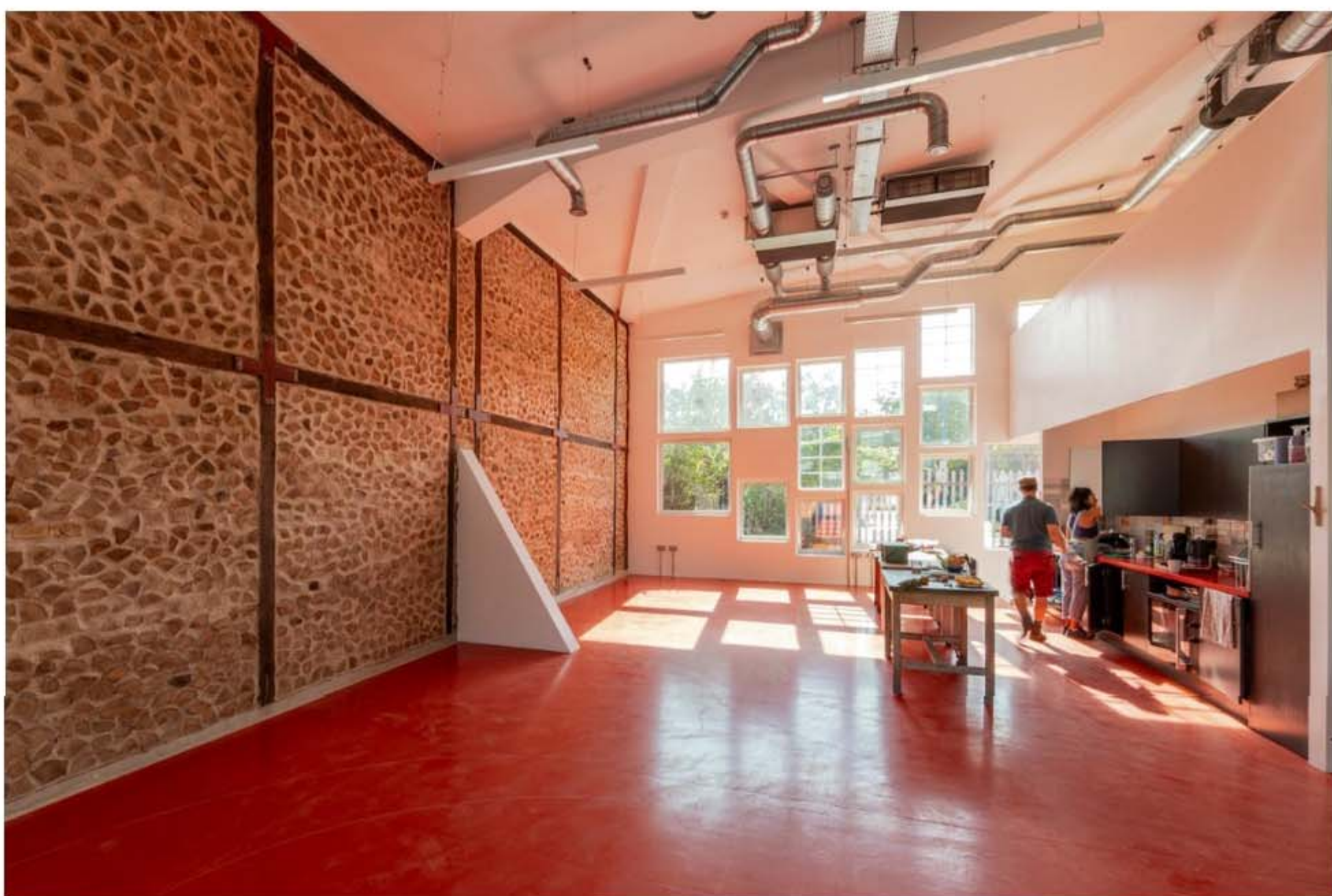


Building with what you have

The 'Paper Garden' in Canada Water, London, by Jan Kattein Architects is one of the UK's most successful circular building projects to date.



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Why do we associate craft with tradition rather than innovation? When did we start considering craft a distraction rather than a profession? Who turned the craftsman into a tradesperson? And how does craft relate to our practise as architects?

Heloise Desaissement, an architect at Jan Kattein Architects is asking these questions in relation to the 'Paper Garden' – an ambitious project in London's Canada Water that lays down a marker on how to build to circular principles.

Forming part of the wider Canada Water redevelopment by British Land, The Paper Garden has been designed for local charity Global Generation, and occupies an industrial shed once used as a printworks for the Daily Mail. It doesn't look like one might expect a new building to look. Perhaps that's because not much of it is new at all. But does that mean it is not worthy of merit? Far from it. In fact, quite the opposite, for 60 per cent of the building uses materials and products that have either been reused, retained or reclaimed.



A charming menagerie of surplus and unwanted building products have been used construct the Paper Garden building, and its form celebrates this fact rather than hides it, as seen with the facade that looks out onto an ecology garden.

This is a building that is incredibly cheap, costing just £200,000 for 225-square-metres of internal space (across two floors), which is joined by a 770-square-metre garden (formerly a car park and loading bay). But cost, or lack of it, is just a by-product of building in a way that is as sustainable as this, a way that embeds craft deep into the process.

Notions of craft are immediately apparent: a cordwood wall spans three sides of the building, which sees stacked logs and lime mortar infill form a double-layered wall. "Cord" is an old measurement unit of wood and this form of vernacular construction dates back to the 1600s when it was employed in North America and central Europe. Old oak railway sleepers, donated by Network Rail and used for corner quoins hold the wall frame in place. The logs used in the wall come from Epping Forest, from that trees were either naturally felled or taken down as part of forestry maintenance.

Craft is also embedded into the project in ways that might not jump out to the casual onlooker. Writer Richard Sennett allies 'craft' with engagement, something Jan Kattein Architects has been demonstrating how to do well for quite some time. Of course building in this way requires significant buy-in, a skill in the architect's arsenal that is sometimes forgotten. Aecom, Watermans, Sweco, Mace, Wates, Galldris, BRCS and some 3,000 volunteers have contributed to the project. For this to all work, a flexible design framework had to be put in place to allow construction to begin as and when materials became available.



Such engagement with locals and professionals has paid dividends, garnering both civic pride in the building and free construction materials. Floors have been made from 300 both reclaimed from a former police station, and windows have been sourced from rejected stock donated by Scandinavian supplier NorDan. Meanwhile, interior plywood panelling makes use of surplus from a HSI site. Low-tech construction methods have employed as well, with these being easy to learn and accessible for volunteers and teenagers.

"We quickly found out why no one had attempted our approach previously," explains the architect. "The entire design and statutory process in the UK is conceived to predict and foresee the visual and performative attributes of a building. This becomes an impossibility when you don't actually know what materials will become available as you proceed with the build."

As for the occupants, Global Generation will use the premises for its administrative offices and for its community programme, which entails workshops for arts and crafts, as well as gardening and cooking programmes which will make use of the adjacent ecology garden where ingredients are being grown.