

# The Assembly

## An Responsive Icon for a New Tomorrow

The Assembly is an icon for San Jose that integrates its history of ingenuity, sustainability, and diversity while looking to its future. It is an open source civic building that builds community. Its iconic status will derive from its purpose to address critical issues of its time through adaptability, interaction and innovation. The form of The Assembly is engaging memorable. It is an abstracted form designed to be welcoming and open to interpretation. This allows each individual to engage with it in a personal way. The Assembly can be both anything, and everything. The Assembly will be an incubator to connect design, culture, and nature into the fabric of San Jose. Enabling creativity that is not just geared towards the prevalent tech industry, but aims to collect and generate the creative problem solvers to today and tomorrow's challenges.

## A Community & Systems Approach

To create a vibrant quality of place, the ASSEMBLY celebrates difference both programmatically and architecturally. From this, a platform is created that allows users to transform and contribute to the public realm as it is created for the people, by the people. The ASSEMBLY app has been created to enhance the experience of the building. As well as allowing the user to configure their space, it informs occupiers and the wider community about the events calendar. It and provides an augmented reality platform.

## Structural Ingenuity

To capture the creative imaginations of the design, considerations to material strength, production and cost-effectiveness are vital. The building is proposed to be modular and constructed using offsite fabricated cuboid modular frames with the maximum dimension of ca. 20ft. The cuboid frames can be stacked and joined to form a large continuous moment frame structure for the ASSEMBLY.

## A Culture of Sustainability, Optimised Materials & Construction

A good architecture should live longer than its initial use and achieve sustainability through strategic design, constructability and materiality. The cuboid modular frames (steel-CLT) was selected for this project as it has approximately 45% lower embodied carbon content than traditional steel-concrete construction. The modular approach is also adopted in the design of mechanical and electrical building services utilising principles of Design for Manufacture and Assembly (DfMA) as vertical risers, horizontal distributions, and assembled plant rooms. Reconstituted materials like Hempcrete and recycled steel components will contribute to bolster the sustainable values of the ASSEMBLY.