eight associates

Summary
Embodied Carbon
Stone Tower

Summary

By specifying quarried stone to be used within the building, the embodied carbon from its inclusion are solely caused through the extraction, transportation, and installation. To have any additional processes such as polishing, etc, will result in a higher embodied carbon. It is possible that the specification of cross-laminated timber (CLT) will result in a much more favourable embodied carbon, due to the nature of timber sequestering carbon throughout its lifetime as a tree. In comparison, a building constructed primarily from quarried stone will result in a carbon reduction when compared to a concrete (approximately 60% reduction) or steel frame structure (approximately 80% reduction).

However, even this embodied carbon can be further improved on. The specification of CLT floors in place of stone floors will offset the embodied carbon of the entire original structure (stone exoskeleton, core walls, and floors), as well as a further 4,500 tCO_2e. This will allow for a greater chance of a wider berth of credits to be achieved for various certification bodies, resulting in an enhanced image of the development.