



**WESTERN SYDNEY
UNIVERSITY**



Centre for
Smart Modern Construction

c4SMC INTER-UNIVERSITY ACADEMIC ROUND TABLE

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Optimising the Use of Prefabrication on Projects

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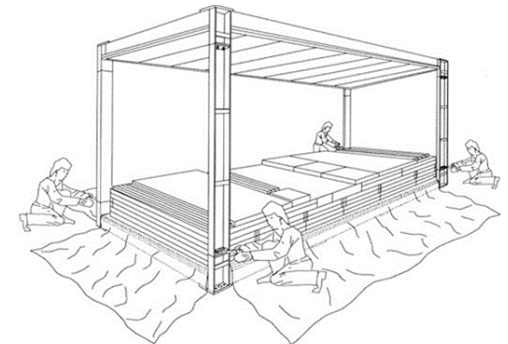
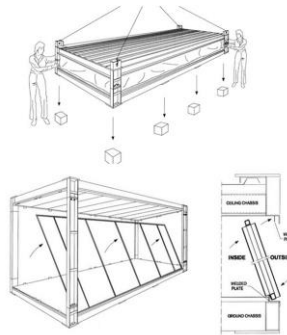
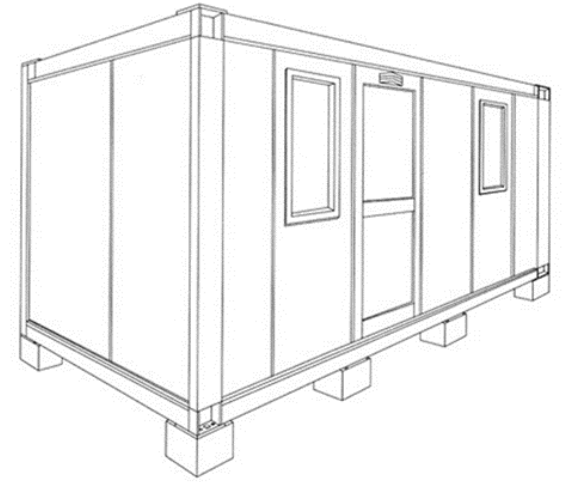
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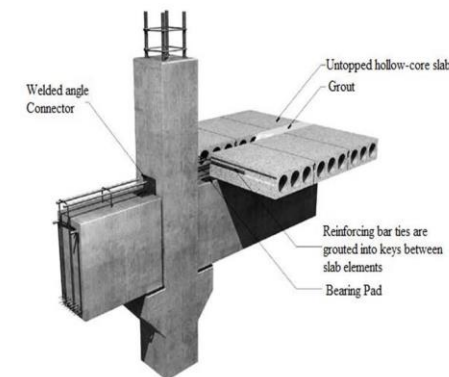
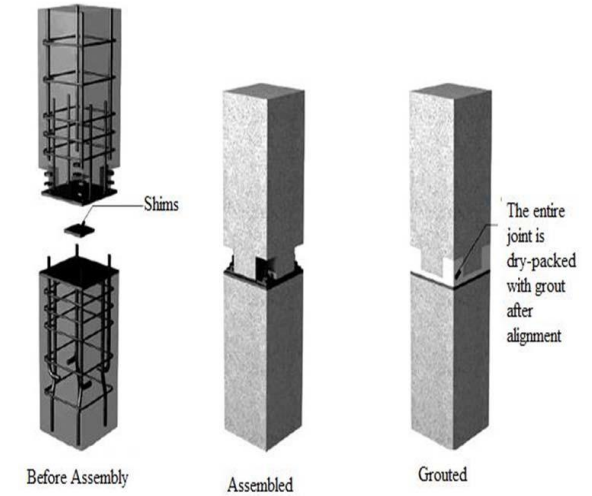
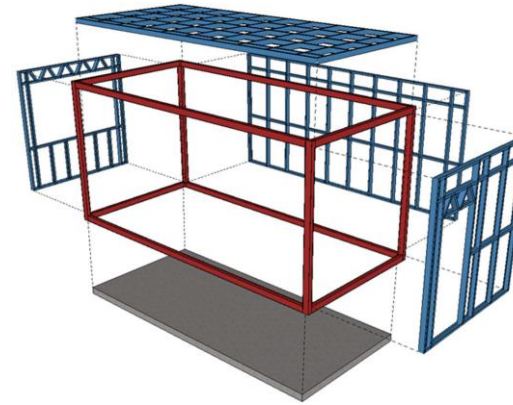
Optimising OSM

- At the project level the consideration and the extent of application of prefabricated techniques are somewhat subjective to project scopes
- Building components such as slabs, vertical structural elements, façades, partitions, stairs and sanitary units have been developed using prefabrication

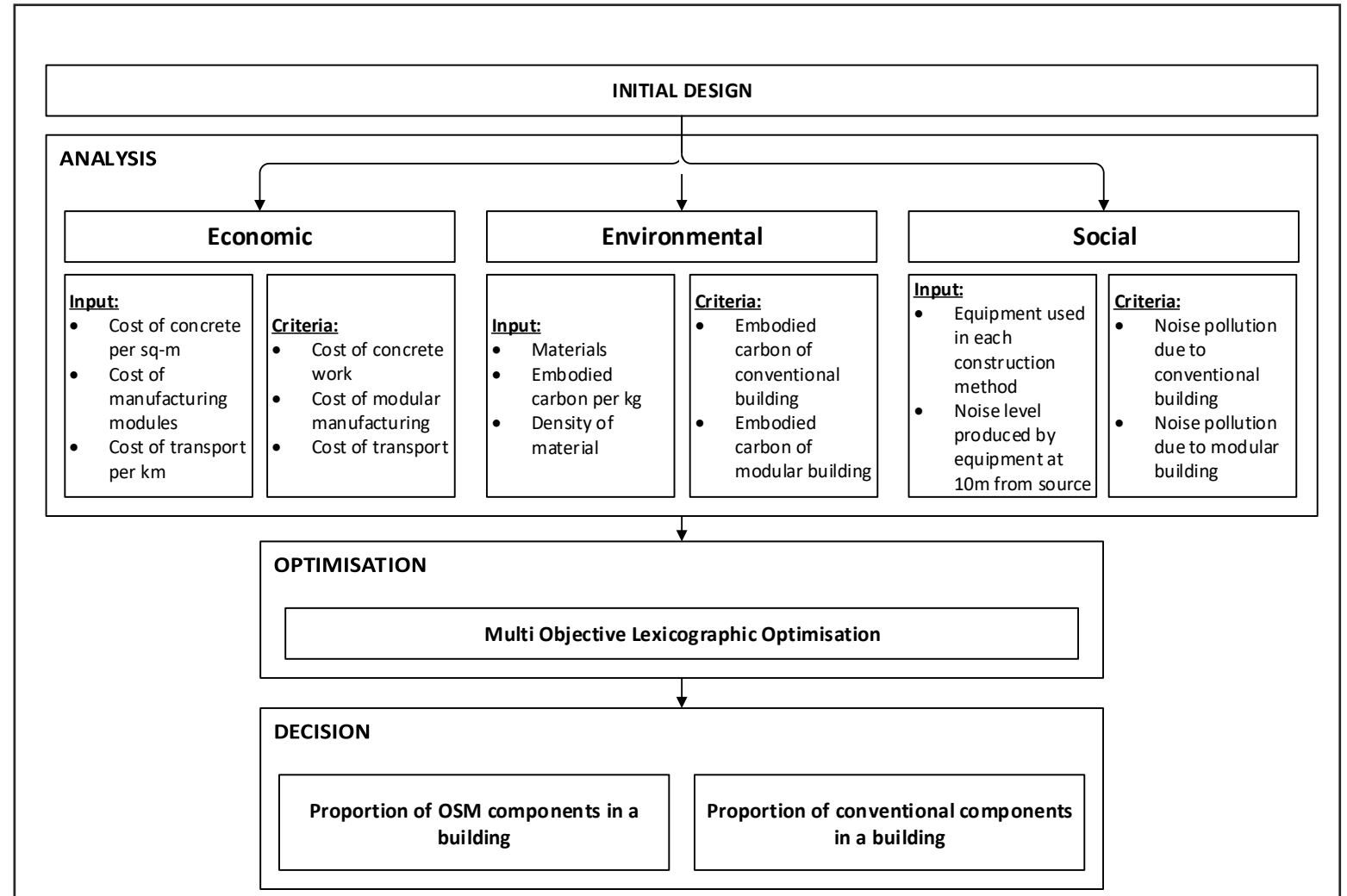


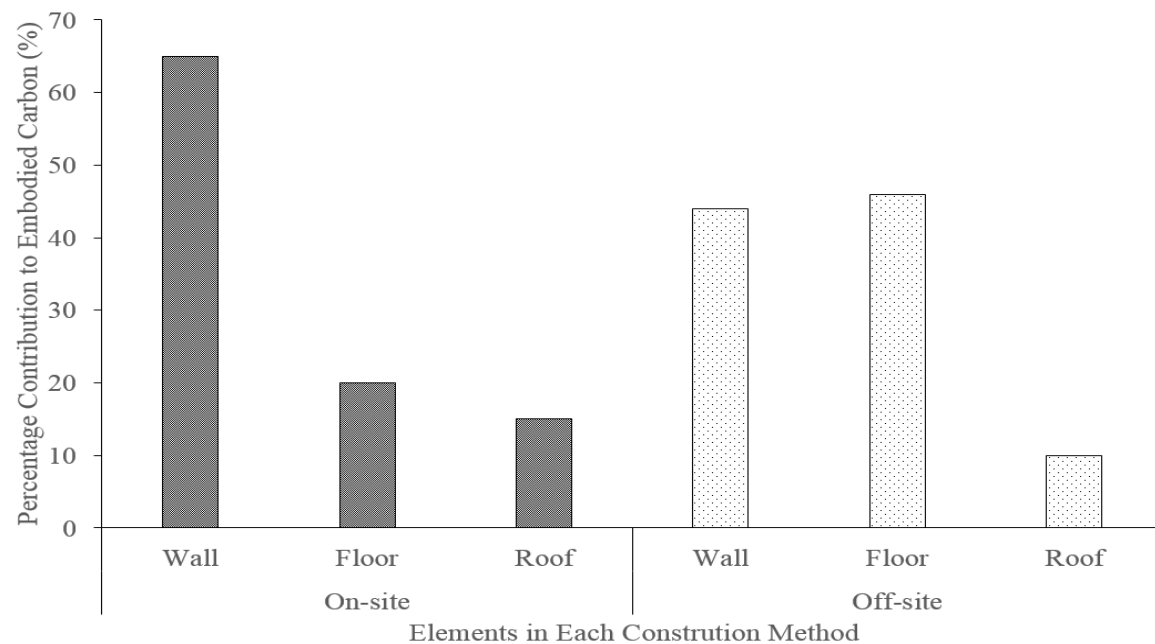
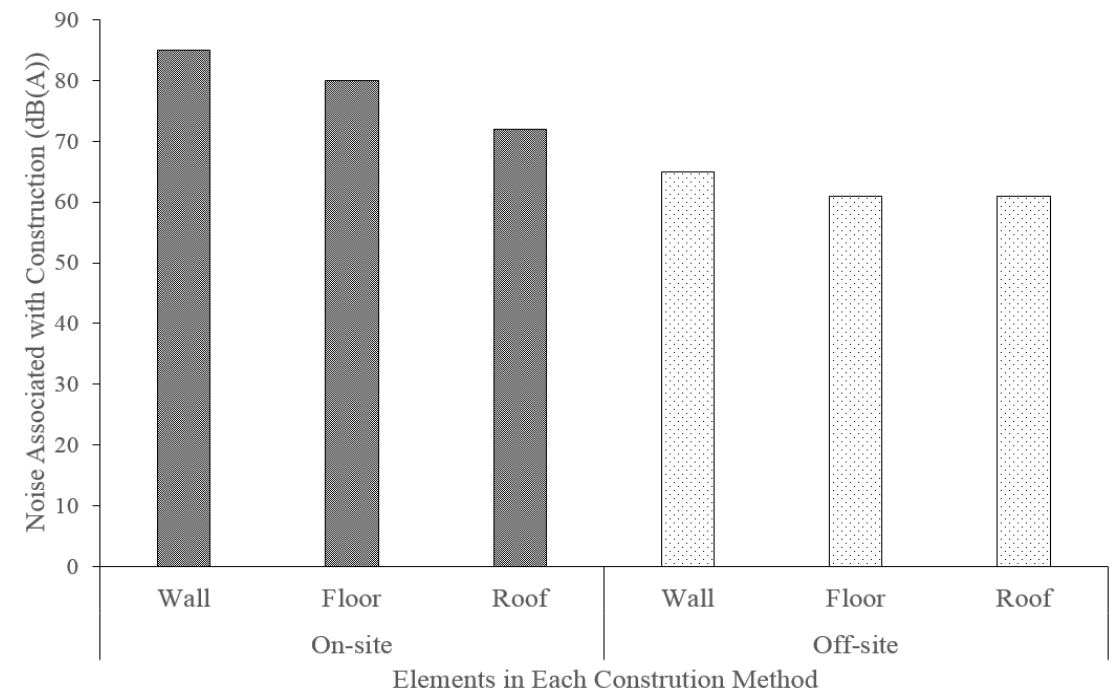
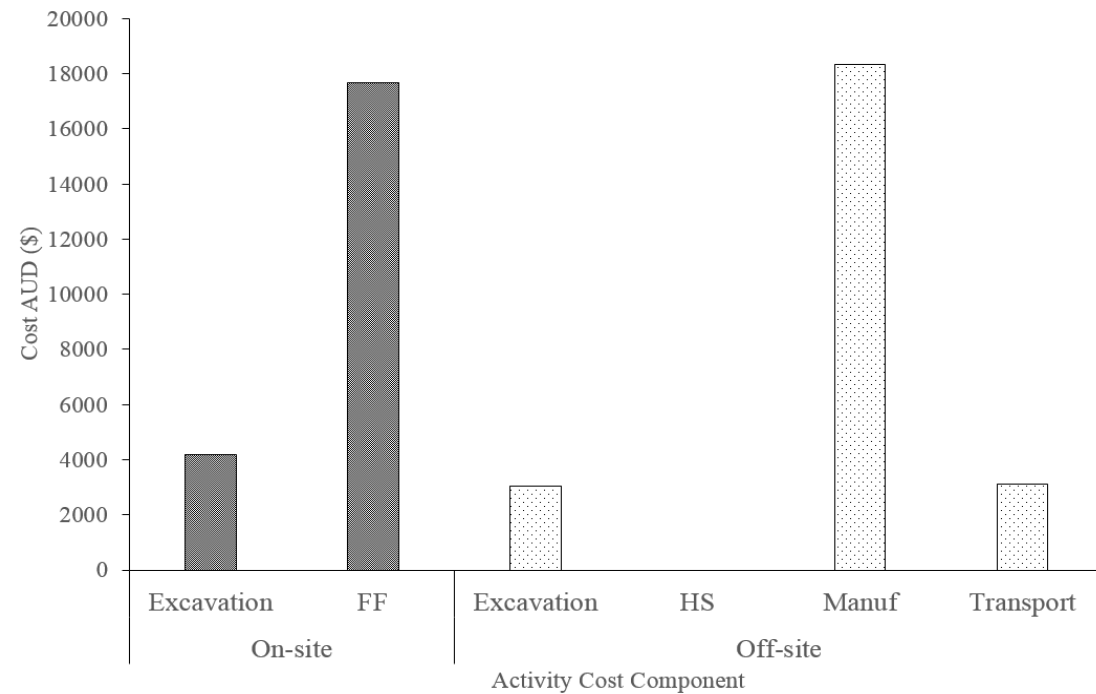
OSM Building Component Standardisations

- Standard buildings (completely off-the-shelf)
- Customised buildings (use standard components and systems)
- Hybrid buildings (use standard components and sub-assemblies)
- Bespoke buildings (no standard systems or sub-assemblies and no standard interfaces)

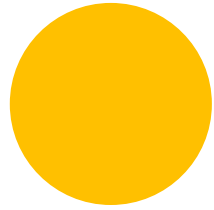
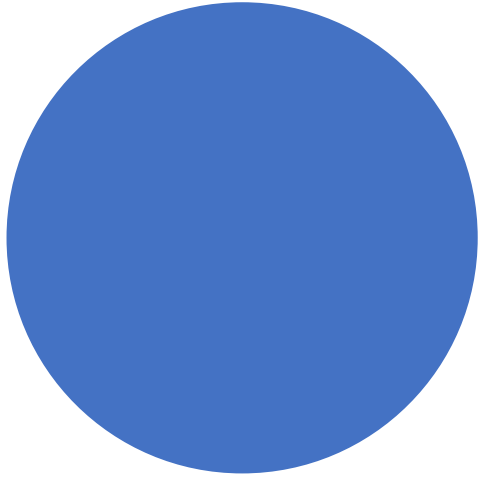


Sustainable Procurement





	Building elements		
	Walls	Floor	Roof
Economic Cost	100% on-site	100% off-site	100% off-site
Embodied Carbon	74% on-site; 26% off-site	90% off-site; 10% on-site	92% off-site; 8% on-site
Noise	74% on-site; 26% off-site	90% off-site; 10% on-site	92% off-site; 8% on-site



Thank You

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