

Embodied Carbon - New Extension Options

- + Approx. 50-60% overall embodied carbon in a building is structure.
- + To achieve significant carbon reductions look to reuse existing structure first
- + Where rebuilding or extending an existing building, look to low carbon material e.g. timber or concrete with high percentages of cement replacement.
- + Thorough assessment of record information and site investigations to exploit the potential of the existing structure.

Embodied Carbon Targets

Retain + extend:

~55 kgCO₂e/m²

- Well within RIBA Target

Demolish + rebuild:

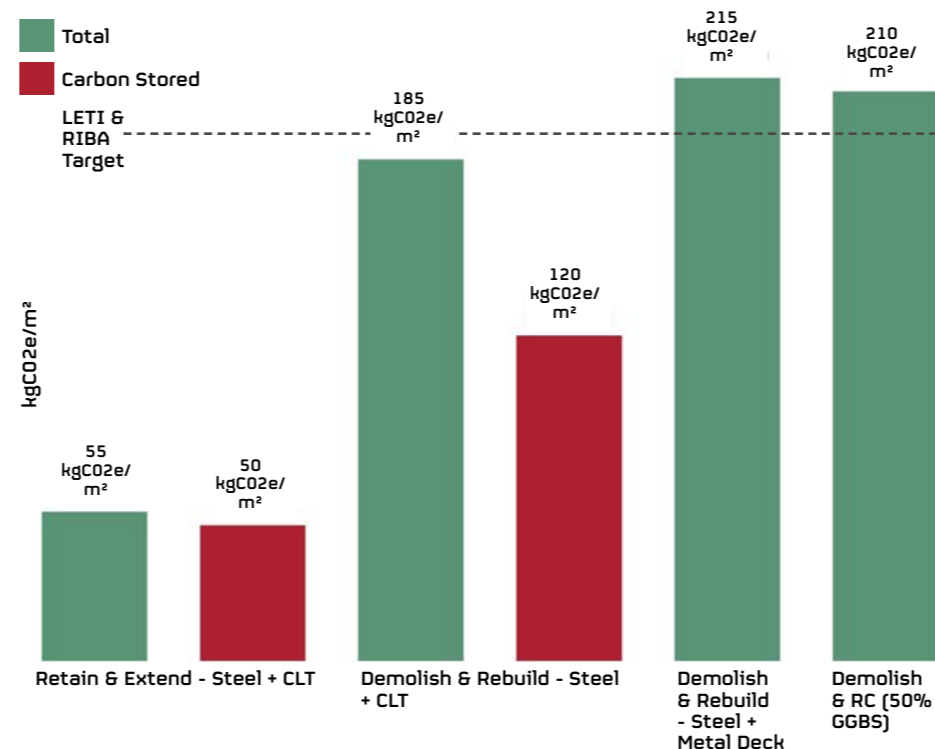
~180-220 kgCO₂e/m²

- Over target

- + Preference to retain and extend with lightweight and sustainable materials (e.g. Steel + CLT)



Existing Block Options - Carbon Assessment



Carbon Emitted vs. Carbon Stored

