

Aarsleff Ground Engineering

"Smart Sustainable Solutions"

WHY CHOOSE OFFSITE CONSTRUCTION

TIME SAVING



By relocating a significant proportion of the construction work to an off-site facility, the time spent on-site is lessened. The more calculable conditions of the factory and the economies of scale that they generate can also ensure that construction deadlines are met more effectively than in a traditional on-site environment.

QUALITY IMPROVEMENT



Factory controlled conditions mean a better quality of build; better finish; fewer defects; all snagging complete and all services tested. Elements made off-site in a factory are more consistent and have gone through a greater degree of quality control and rigorous testing than elements made on site. Due to standardisation, products constructed off-site can be continuously improved and enhanced as time goes by.

SKILLS SHORTAGES



Off-site construction relieves skills shortages in the construction industry. Off-site construction essentially enables the construction process to be outsourced; to another environment, requiring the remaining labour to be invested in other traditional on-site construction environments.

COST CERTAINTY



Improved cost certainty is a major driver when choosing offsite construction. Off-site construction is more predictable and less likely to suffer from cost overrun caused by unknown factors such as inclement weather, plus storage space required on-site is significantly less.

REDUCED CARBON FOOTPRINT



Offsite products such as precast concrete piles generate no spoil or arisings or hazardous waste to dispose of during installation, thus reducing traffic movements to and from the site. For example, the minimum diameter CFA pile (300mm), would need approximately 29 cubic metres of concrete which is 5 No. deliveries. In addition, a CFA pile generates bore spoil which usually the client has pay to remove from the site (and pay landfill tax on). This would result in about another 7 No. lorry loads (includes 20% bulking. So for an equivalent meterage of pile in the ground:

Pre-cast concrete piling = 2 lorries, CFA piling = 12 lorries.

GOVERNMENT INITIATIVE



The government gave a nod to offsite construction in the 2017 Autumn Budget, stating that modern methods of construction would be favoured for public infrastructure schemes from 2019. The Government will use its purchasing power to drive adoption of modern methods of construction, such as offsite manufacturing in order to improve the cost-effectiveness, productivity and timeliness of infrastructure delivery