

End-to-end processes

Off-site construction makes the maximum use of the efficiencies that can be extracted when the entire building process is run by a single team from one end to the other, final end, bringing design, manufacturing, material sourcing and construction together into one streamlined system.

Using this so-called end-to-end process, project managers can build high-quality, attractive and durable buildings, faster and at a lower cost than using traditional methods, with a whole series of disparate specialist trades.



DESIGN



ENGINEER



MANUFACTURE



SUPPLY



INSTALL

The main challenge for the construction sector is to meet individual customer specifications without sacrificing assembly and material efficiency. The solution is to create a building design system that, despite having a finite and controllable number of component parts, still allows for a wide range of customised configurations. These parts include wall and floor panels, kitchens, bathrooms and roofs.

The next challenge is to integrate the designs directly with the fabrication process and the supply chain to provide a seamless process.

Taking a cue from modern electronics and automobile manufacturing, a combination of scaled systems approaches used by those industries, along with new models in technology, design, material sourcing, logistics, manufacturing and construction results in an integrated design and construction platform that meets the demands of projects faster.

Having one single team working from a standard kit of parts and products provides great transparency into material ordering, tracking, and delivery.

Such integration provides the opportunity to aggregate demand for building materials, creating cost savings across multiple projects rather than having to buy key materials such as timber and steel project by project.

Shifting the construction sector to a modern manufacturing model will also transform the traditional construction job site and the skills required to run them. By shifting the work to highly controlled factory facilities, companies can provide greater schedule and product quality assurance. This closely mirrors a process of precision product assembly, fitting pieces together in a closely defined sequence.

