

SCAPE System Build Limited

The SCAPE system and potential increase in offsite content to improve efficiency and value in Local Authority projects

Why should SCAPE consider increasing the use of offsite?

Cost saving

A significant reduction of management costs and the costs of the provision of health and welfare facilities can be achieved through using offsite solutions. The principal cost savings through offsite are in the indirect costs of a project.

By using the offsite options of partition wall systems and flooring cassettes significant saving can be achieved over traditional methods. Typically these offsite systems use standard connections which aid ease of delivery. This leads to reduced movement of scaffolding, reduced time and effort in collecting and changing tools and reduced time in setting up 110v power.

Time

The time benefits gained from using offsite techniques come from a reduction in overlapping activities which outweighs the increase in pre-construction time.

Quality

Offsite has a considerable advantage in providing a much higher level of quality and for meeting customer requirements and information management flow. The impact of defects and damage are significantly reduced and often eliminated. The cost issues associated with snagging and repair can be accurately controlled.

Health and safety

The safety risks are significantly lower using offsite techniques. Fewer people working in difficult or dangerous conditions and activities, being moved offsite to be undertaken in cleaner and more controlled environments.



Business Relevance

Risk management

Managing risk well is important for a successful outcome. An early identification of the risks by the team and how they are to be managed is essential. The use of offsite techniques increases certainty and reliability. SCAPE appreciates the capability of the unitised Kawneer window system, manufactured and glazed offsite. This allows a very rapid installation process and reduces the time to achieve a weather tight envelope. This is more efficient than a traditional glazing installation.

The use of offsite glazing units allow the work to proceed as normal and the Client's loss and disruption can be greatly reduced.

SCAPE and Offsite

The extent of offsite application in the SCAPE system is currently limited to the Kawneer window system and pre-assembled, insulated timber and plasterboard partitions for internal walls on some projects. Potential opportunities for increasing use of offsite include: M&E installation; floor and roof cassettes and unitised cladding.

A value management tool such as IMPREST (a cost and value comparison tool for offsite construction) would need to be used to evaluate which of these offsite products would be most appropriate for the various applications of the SCAPE system, identify the nature and location of the benefits gained and learn how to ensure that these are realised across the project.

SCAPE System Build Ltd

is a Local Authority controlled company whose shareholders are Derby City, Derbyshire County, Gateshead, Nottingham City, Nottinghamshire County and Warwickshire County Councils. SCAPE is a trading company for the CLASP Consortium and is licensed to deliver the Consortium's intellectual property supporting it with consultancy services.



The existing SCAPE technology

SCAPE has recently undertaken a major review of its technology. Significant developments have taken place to ensure that buildings when constructed using the SCAPE technology meet all the current regulations:

- The foundation is a semi rigid raft
- The steel frame is lightweight and designed to provide the maximum flexibility in the initial design and future refurbishments
- The standard roof shapes within the system include pitched to take tiles or sheets, curved and flat
- External walls are masonry, composite panels and a panel which is masonry faced.
- Windows are based on the Kawneer range of products
- The upper floor is cast insitu concrete on steel deck
- The SCAPE technology works around a 100mm internal grid with a structural grid of 1.8m

"To embrace sustainability the design includes features for recovery of grey water and off site construction techniques"

SCAPE System build Ltd has entered into a framework arrangement with Willmott Dixon Construction Ltd for the purposes of providing public sector organisations with an efficient and economic method of procurement for construction work. SCAPE, a Central Procurement Body appointed Willmott Dixon in accordance with the EU Procurement Directives.

Existing processes of SCAPE

The Framework Agreement sets out procedures by which a project can be delivered. On contractual matters the framework is prescriptive, however there are options and alternatives:

The design team. The Customer determines the strategy for the bringing together of the design team. It can be the Customer's nomination or part of the Contractor's Activity Schedule.

Project technology. The project can be undertaken using either the SCAPE Technology or one bespoke for the project.

Additional services. The Framework provides for inclusion of facilities management, information and communication technologies, design and finance in addition to construction.



Tips for a successful project delivery

The customer's own high performance is the cornerstone of achieving a successful project delivery. It is essential that the Customer is:

- fully engaged in the processes to get the best out of the framework and the contractor. This will mean selecting the people for its client side team with care. If the customer's team are not supportive of a partnered approach reaching a satisfactory outcome will be difficult
- clear as to what it wishes to achieve in the project, can prepare a thorough brief and define its values
- led by a person with the required authority to bring stakeholders together, reconcile opposing views and make decisions.

"The whole team, comprising the Customer SCAPE, the Customer's technical advisors, the framework contractor, and their key suppliers must be mindful of their joint responsibility. This will require the team to develop trust and common ownership of the project and practise openness sharing information with an open book attitude on both sides"