

## CONSTRUCT Award for a Project Under £2.5m

### Getjar Ltd

Winners of the Award for a Project Under £2.5m

(Kindly sponsored by Square Mile Broking Ltd)

Getjar Ltd are the winners of the 2017 Award for a Project Under £2.5m, winning the Award for the Royal Academy of Arts, Mayfair, London



For further information contact:

CONSTRUCT • Riverside House • 4 Meadows Business Park • Station Approach • Blackwater • Camberley • Surrey GU17 9AB  
01276 38444 • enquiries@construct.org.uk • www.construct.org.uk

## Background

To celebrate its 250<sup>th</sup> Year of exhibiting Art, the RAA has commissioned a major refurbishment and improvement which includes two new extensions and a 'Link Bridge' which connects the two, previously separate, parts of the galleries.

## Introduction

Getjar Ltd are entering their project at the Royal Academy of Arts for consideration into the Construct awards due to its unparalleled use of exposed, entirely insitu, concrete to create the structure and cladding of two new extensions and the Link Bridge. The extensions are formed with in-situ, twin skin reinforced concrete walls sandwiching layers of insulation in one process. Due to the structural complexity of the link bridge, the suspended and ground bearing slabs, walls and roofs are formed in two separate layers, with waterproofing and insulation being added between pours to create an insulated and watertight structure. The insulation has been specified to provide exceptional thermal properties to create a sustainable development. As well as producing high quality exposed concrete, using self-compacting concrete and phenolic faced plywood to meet the arduous design requirements, the finished product must offer the complete solution in terms of the structural stability, waterproofing and insulation requirements for the new construction. Through collaboration with Sisk, the Architect (DCA and Barr Gazetas) and the Structural Engineer (ABA), we have devised new solutions to new problems brought about by using insitu concrete to create this project, such as

- The use of Thermomass® ties to allow insitu RC sandwich panel

walls to be poured with a layer of insulation embedded to create an effective 'cavity wall' in one operation

- The use of ingenious temporary works designs to allow cladding walls to be formed insitu using single sided shutters at height, where there is not a proprietary solution for providing restraint as you would with traditional formwork systems, but also where the internal and external skins must remain structurally disconnected and the layer of internal waterproofing remaining un-penetrated.
- The use of self-compacting concrete to achieve high quality exposed concrete while achieving tall pour heights to minimise construction joints and ensure full compaction despite narrow walls (150mm)
- The use of phenolic faced ply to achieve uniform colour as far as possible whilst avoiding the wood grain effect showing on struck surface due to different levels of absorbency across each sheet (as is typical with MDO).
- Exacting attention to detail of our Foreman, Project Manager and all operatives involved on site (attached photos show a typical wall shutter being prepared using string lines to line up nail heads)
- Collaboration between all parties to agree in advance a realistic programme and budget to achieve the high-quality works required.

## Beneficial Impact

Getjar have completed many different projects involving exposed concrete over its 37-year history, but the RAA project is the pinnacle

of what we have ever achieved due to its complexity and high standards. This project will further our reputation as being a company who is able to achieve very high-quality aesthetic forms within challenging constraints. Due to it being in a well-known and public location, it will also act as a testament to what can be achieved with reinforced concrete and highlight it as a material suitable for use in more than just the skeleton of a building.

Our Resident Project Manager, In-House QA Adviser and myself have learnt a great deal about the characteristics and properties of concrete and how they can be modified and manipulated to improve finishes, as well as understanding what causes it to fail to achieve the required finish. This also applies to our choice of plywood and mould oils. These products are taken for granted on typical jobs, but a much deeper understanding of how they worked was necessary to avoid issues, or overcome problems when they arose. This knowledge has already been put to beneficial use on our other projects currently underway involving exposed concrete by influencing our choice of concrete mix designs and formwork systems.

Novel temporary works solutions have also been found, the knowledge of which will be beneficial to our company in the future where we are faced with similar problems involving lack of space, single sided shuttering solutions and complicated waterproofing details.

## For further information contact:

CONSTRUCT • Riverside House • 4 Meadows Business Park • Station Approach • Blackwater • Camberley • Surrey GU17 9AB  
01276 38444 • enquiries@construct.org.uk • www.construct.org.uk



**For further information contact:**

CONSTRUCT • Riverside House • 4 Meadows Business Park • Station Approach • Blackwater • Camberley • Surrey GU17 9AB  
01276 38444 • enquiries@construct.org.uk • www.construct.org.uk