**Business Unit: Concrete** 

Date Of Issue: 15th April 2008

## HARD STANDING FOR SOUTHAMPTON CONTAINER TERMINAL EXPANSION

Sika, working in close partnership with Hanson Premix, Southampton plant, have been supplying high grade, steel fibre reinforced concrete, to Raymond Brown Construction for use in their latest contract for Pentalver Transport, at Southampton Docks. Continually needing to adapt to the ever-increasing volume in containerised transport worldwide, Pentalver Transport, has recently increased its footprint by some 23 acres. The deep-water port uniquely with 'double tides' handles many of today's largest container ships, and in turn the largest containers. Container service providers, Pentalver are leasing the site from Associated British Ports. Hanson Premix using Sika admixtures were chosen to supply the concrete for this new container storage area.

The concrete mix for the 23 acre slab was critical, as it would have to withstand continual vehicle and container movements on top of the stacking and storing of the containers themselves. Sika and Hanson technical staff, with the assistance of Propex Concrete Systems, designed a reinforced concrete that had high flexural and compressive strength, good freeze/thaw resistance with high abrasion qualities and capable of coping with the aggressive marine environment.

A C40 concrete mix was specified incorporating Novocon FE1050 steel fibres and Sika Fibrepack polypropylene fibres to provide increased flexural toughness and resistance to early and long term cracking. Granulated blastfurnace slag (GGBS) at 40% was also incorporated in the mix to further increase the durability of the concrete together with Sikament 10 superplasticiser for water reduction.

Starting in August 2007, Hanson Premix supplied main contractor Raymond Brown Construction Ltd with up to 1,100 cubic metres of the concrete per week from their Southampton plant two miles from the site. Now nearing completion, the total supply has been in the region of 26,000 cubic metres. With its double loading plant and 90 cubic metre and hour capacity, Hanson were more than capable of supplying this project whilst still servicing their other customers.

CPR102 Highcross
Continued/...



Sika and Hanson technical staff have been closely monitoring the project throughout, ensuring a good finished product and a close working relationship with the client.

Mark Watts, district sales manager for Hanson Premix said: "This has been a great project for ourselves and Sika. Working together we have been closely monitoring the project throughout, enabling us to meet all of the project's challenges. Hanson plant supervisors Martin Glasspool and Steve Briggs worked extremely hard to produce the mix and volume of concrete required throughout the project."

Sika can be contacted at <a href="mailto:concrete@uk.sika.com">concrete@uk.sika.com</a> or telephone 01707 394444.

End

CPR102 Highcross

For further Information Contact:

Tom Forsyth
Concrete Business Unit Manager, Sika Limited

Tel: 01707 394444 Fax: 01707 329129 www.sika.co.uk

Issued By:

Brian Gough Communications 29 Welbeck Avenue Aylesbury Bucks HP21 9BH

Tel: 01296 392157 Fax: 01296 392157

brian.goughcom@btinternet.com





## HARD STANDING FOR SOUTHAMPTON CONTAINER TERMINAL EXPANSION

**CPR102 Highcross** 

**Caption:** High grade, steel fibre reinforced concrete being poured into a drainage gully at Southampton Container Terminal

Picture Ref: KD570-53. Digital image available on request from Brian Gough Communications

