

# Safety on Site



DUFFY GROUP LTD

July 2009

## SAFETY ALERT-LIFTING WITH BEAM CLAMPS

An incident on one of our sites in the last month has highlighted several issues that need to be communicated across the Group.

A lift of a section of system formwork was being undertaken. The method of lifting the formwork was using a steel lifting beam (I-beam) with 2 beam clamps on the top side of the beam with chains to the crane, and 4 beam clamps connected to the underside of the beam with chains connected to the DOKA frame. The photo to the right shows an example of a lift of this type on the site.

When the shutter was approximately 1.5m off the ground one of the upper clamps failed and slid down the beam until it reached the second clamp, the beam went from horizontal to vertical and the shutter consequently fell to the ground. No one was injured.

A design for a lifting beam with welded plates including calculations had been drawn up by the temporary works designer. However, the lifting company



selected to fabricate the lifting beam, recommended the beam clamp system as shown above. When a deviation from an agreed method takes place, the risks of something going wrong are hugely increased, especially if the deviation is not subjected to the same checks and controls as the original method.

In this case, these beam clamps should not have been used in this manner. Beam clamps of this type have been designed for

lifting on a vertical axis only. No oblique loading should take place unless the clamps being used are designed for this purpose.

The original design has now been adhered to which incorporates a lifting method where any risk of movement of lifting accessories is minimized as far as reasonably practicable. This lifting beam (see photo below left) has six lifting eyes welded on to the beam - two at the top and four at the bottom. These welds have been fully tested, and the unit as a whole has been fully tested before it was put to use.

Any lifting operation must be fully planned and any design incorporated into the lifting configuration must include worked calculations showing the WLL of the lifting apparatus. All accessories must be used in the manner they were designed for. If you are in any doubt, contact the manufacturer or the Safety Department.

Remember, **any** deviation from **any** system of work, whether it be lifting shutters, laying blocks or installing drainage, needs to be newly assessed for risks and the new safe system of work recorded in an amended method statement.

This incident could have had horrific consequences and highlights the fact that proper planning is **essential** in minimizing the risks to our operatives.

### In Brief

#### ◆ Safety awards at South Acton/Garth Hill

Duffy Construction have been awarded the Catalyst Team Safety Award from Inspace Partnerships at South Acton.

Cubitt Building and Interiors have been awarded the Safety Award at Garth Hill from Mace Plus

Garth Hill College – May 2009



### Reportable incidents

Group-wide

0

### Safety Inspection

#### Ratings

Top ranked site:

Garth Hill 88.5%

Group Average 85.1%

