

## Appendix J: Example of a lift design request form\*

# Lift design

This form to be completed by the relevant PCBUs.

This form would usually be filled out and sent in together with the drawings of the element to be lifted.

### 1. Project details

Project name:
Job reference:
Date design required: DD / MM / YEAR
Drawing or design number/reference:

### Contact details of person requesting design

Name:
Company:
Mobile phone:
Email:

### 2. Precast, tilt-up or prestress details

	PRECAST/TILT-UP	PRESTRESS
<b>Note:</b> Additional reinforcing may be added to support the lifting anchors		
Mass unit weight at time of lift		
Designed compressive strength of concrete at time of first lift		
Designed compressive strength of concrete at time of installation		
Concrete cover required for lifting anchors (if different to drawing)		
Type of lift	<input type="radio"/> Edge-lift <input type="radio"/> Face-lift <input type="radio"/> Both edge and face	<input type="radio"/> Edge-lift <input type="radio"/> Face-lift <input type="radio"/> Both edge and face
Orientation of panel	<input type="radio"/> Edge-lift <input type="radio"/> Face-lift <input type="radio"/> Mid-air rotation	<input type="radio"/> Edge-lift <input type="radio"/> Face-lift <input type="radio"/> Mid-air rotation
Location of pour	<input type="radio"/> On-site <input type="radio"/> Factory <input type="radio"/> Civil <input type="radio"/> Tilt-up <input type="radio"/> Precast	<input type="radio"/> On-site <input type="radio"/> Factory <input type="radio"/> Civil <input type="radio"/> Tilt-up <input type="radio"/> Precast
Type of lifting inserts (threaded, lifting hoop, foot or eye)		
Prestress force (kiloNewtons)		
Prestress transfer strength (MPa)		
Position of lifting inserts (to be shown on shop drawings/construction drawings/design drawings/lifting design)		

\* Form adapted with permission from Ancon.

	PRECAST/TILT-UP	PRESTRESS
<b>Note:</b> Additional reinforcing may be added to support the lifting anchors		
Can lifting inserts be moved with the permission of the design engineer to allow a more practical design to be completed?		
Preferred number of load-bearing anchors		

### 3. Rigging requirements

#### Number and type of cranes for demould or first lift

Dynamic factor required: (eg for straight lift, or pick-and carry)

Terrain category (see Section 6.6 of these guidelines)

#### Preferred sling angle

Sling/rigging height restriction?  Yes  No

Max sling angle is 60°?  Yes  No

Preferred strengthening method:  
 Strongbacks  Extra reinforcement

Spreader/lifting beams available?  Yes  No

Additional info/special lifting requirements  
 (eg rotation in air or with contact to ground; limit on sling length due to height restriction; use special rigging like spreader beam; load equalisation not possible)

#### Number and type of cranes to install on-site

Dynamic factor required: (eg for straight lift, or pick-and carry)

Terrain category (see Section 6.6 of these guidelines)

#### Preferred sling angle

Sling/rigging height restriction?  Yes  No

Max sling angle is 60°?  Yes  No

Preferred strengthening method:  
 Strongbacks  Extra reinforcement

Spreader/lifting beams available?  Yes  No

Additional info/special lifting requirements  
 (eg rotation in air or with contact to ground; limit on sling length due to height restriction; use special rigging like spreader beam; load equalisation not possible)

### 4. Specify any design and/or certification requirements (eg producer statement, batch/test certificates for lifting equipment)

### 5. Additional requests

**Note:** Drawings for non-symmetrical elements should include the location of the centre of gravity (CoG).