# safety alert.



May | 2019



## **Reid™ Lifting System Compatibility**

Reid Clutches are not designed to be used with other manufacturers' lifting products, as there is no guarantee of compatibility.

The purpose of this safety alert is to help minimise the likelihood of lifting failure in a precast or tilt-up concrete element where incompatible Clutches and Anchors are used.

Reid Clutches, Anchors, and Accessories are specifically designed, manufactured and tested to ensure that they perform together for the purpose of lifting precast or tilt-up concrete elements.

Reid Clutches shall only be used with compatible Reid Anchors and Accessories. Reid does not approve the use of Reid Clutches, Anchors, or Accessories with other manufacturers' products as there is no guarantee of compatibility.

It is recommended that all Clutches and Anchors are checked for compatibility prior to commencing any lifts. The following image can be used to check for compatibility, all Reid products have the Reid logo stamped on them for ease of identification and compatibility.

Please contact Reid for future information or for assistance with checking compatibility of Reid products.







# external distribution,



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## **0&A's**

- 1. An alternative manufacturer has told me that it is OK to use a Reid Clutch with their product. I have their approval, so why can't I use Reid's Clutch?
  - Reid does not approve the use of a Reid Clutch with other manufacturers' lifting products and this is clearly stated on Reid's website.
- 2. Why would a failure occur, the Reid Clutch looks similar to the alternative manufacturers' lifting product?
  - Reid Clutches have been exclusively designed, tested, and approved for use with all Reid Anchors and Accessories.
  - Reid Clutches are not designed to be used with other lifting products as there is no guarantee of compatibility.
- 3. Why would a failure occur, the drawings for the Reid Clutch and Anchor show the same dimensions as the alternative product?
  - The published drawings of Reid's products show general dimensional information only, and manufacturing tolerances are proprietary. Therefore, whilst the dimensions may appear similar they are not the same.
  - Small dimensional differences in manufacturers' products may make them incompatible and prone to failure of either the clutch or the anchor.





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## Reference – WorkSafe New Zealand

"Safe work with precast concrete: handling, transportation and erection of precast concrete elements" – Good Practice Guidelines, issued Oct 2018.

**Erecting- Section 10.0 of WorkSafe's Good Practice Guidelines** 

Extract 1: From section 10.4, Table 22 - Erection Planning: What to Consider

ERECTION PLANNING: WHAT TO CONSIDER

#### Other

- Are control measures in place for safely working at height?
- Are there enough properly trained erection crew members?
- Is a Manufacturer's Statement of Compliance required?

Reid's Comment: Reid will only provide a Manufacturer Statement of Compliance stating that the lifting system is compliant only when Reid Clutches are used with Reid Anchors and Accessories.

### Extract 2: From section 10.10, Table 24 – Lifting: What to Consider

#### LIFTING: WHAT TO CONSIDER

#### Lifting anchors and clutches

- Has the precast concrete element reached the specified strength for lifting, as detailed in the shop drawings?
- Is all lifting equipment certified and in good condition?
- Are the lifting clutches correctly engaged before lifting?
- Is the appropriate rigging equipment available?
  - This includes lifting beams and correct attachments for cast-in lifting anchors.
- Will lifting occur in the direction specified for the placement of the lifting anchors?
- Are lifting anchors in the correct location?
- Contact a competent person immediately if the location isn't correct or there are faulty or missing lifting anchors.
- Have recesses been cleaned out in preparation for lifting, so that lifting clutches can correctly engage?
- Is the lifting equipment compatible with the anchors cast in to the precast concrete element?
- If the lifting clutches and the lifting anchors are from different suppliers, has the supplier of the lifting clutches or the supplier of the lifting anchors confirmed that the clutches and anchors are compatible?

Reid's Comment: Reid does not approve the use of Reid Clutches with other manufacturers' lifting products.







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### Extract 3: From section 10.11 – Lifting Anchors & Clutches

### Lifting clutches

Lifting clutches should be designed so there is no chance of unintentional clutch release during operations such as rotation of precast concrete elements, particularly when clutches are fitted with remote-release lines.

Lifting clutches are to be:

- designed with a factor of safety of 5.0
- initially tested by the supplier to a factor of safety of 2.0
- visually inspected for damage or wear each day prior to use
- tested for loads in all directions
- used only with the type and size of anchors that they are compatible with

**Reid's Comment:** Reid does not approve the use of Reid Clutches, Anchors, or Accessories with other manufacturers' products, as there is no guarantee of compatibility.

Extract 4: From appendix K: Tilt-up and precast concrete panel checklist example

DESCRIPTION	- Include approved drawings, relevant standards, engineer's instructions, client specifications and manufacturer's instructions.  - Attach any item-specific checklists to this form.	INSPECTED BY/ACTIONED BY:		
		Name/role	Name/role	Name/role
Pre-erection checks	<ul> <li>Concrete panels have achieved the correct strength for lifting as specified in the shop drawings.         (Verification has been obtained from the builder or supplier.)</li> <li>Deadmen and/or floor slab have achieved required concrete strength as specified in drawings.</li> <li>Panels have been identified and marked with casting date and panel numbers.</li> <li>Spreader bar and/or rigging configuration used meets load requirements for type of panel.</li> <li>All lifting slings have working load limit (WLL) and current inspection tags displayed.</li> </ul>			
	<ul> <li>Lifting anchors and clutches are compatible.</li> </ul>			

Reid's Comment: Reid will only approve a lifting anchor and clutch design when Reid Clutches are used with Reid Anchors.



