# Proposals for Revision of AS3850

## Revise Clauses

2.5.2 Typical rigging configurations

Typical rigging configurations include but are not limited to the following: (See Note 1)

(a) Flat lifting of elements.

(b) Edge lifting of elements.

(c) Face lifting of elements.

(d) Mid-air rotation of elements.

### Revise the third paragraph of 2.5.2 to read:

The rigging system shall be designed to suit the spacing and layout of the lifting inserts which shall be designed to meet the requirements of the handling methods, erection plan and procedures taking into consideration the types and capacities of cranes required for all handling and erection operations.

### Add new clauses

**2.10.3.2** The erection documentation shall include detailed specifications for the rigging system required by the erection design including an arrangement drawing of the required rigging configuration with the type and length of slings, spreader beam and load equalisation devices, sheave arrangements and details of the specified lifting inserts and attachment devices (e.g.lifting clutches).

**4.3.1** Where erection requires mid air rotation of elements refer fig 2.6 by a single crane fitted with two hoists, the capacity of the crane shall be sufficient to lift the full load by each hoist.

**4.4.2** Ensure that the rigging system is in accordance with the rigging details in the erection documentation (see Appendix A).

### C2.10 (b) remove this clause which is replaced by 2.10.3.2

## Revise Appendix A

Revisons shown in red

|  |  |  |  |
| --- | --- | --- | --- |
| **Required information1** | **Drawings (may be combined)** | | |
| Structural layout plans(Note2) | Manufacture (shop) | Erection |
| Date and issue number of the drawing | Y | Y | Y |
| Project location | Y | Y | Y |
| Plans and elevations clearly indicating the structural framing and location and orientation of each element on a layout (marking) plan | Y | Y | Y |
| Structurally critical dimensions | Y |  | Y |
| Erection sequence including the order of loading, delivery, unloading, stacking and erection of each element | Y |  | Y |
| Minimum crane capacities3  and any special crane requirements including requirements for erection requiring mid-air rotation or multi-crane operations. |  |  | Y |
| Crane position3 ) and details of the site for setup and dismantling of the crane with details providing proximity to powerlines, adjacent excavations and other special requirements. |  |  | Y |
| Truck and crane access and exclusion zones for all construction operations. |  |  | Y |
| Position of any critical supports required for the erection of the elements (e.g. support walls, columns and beams) | Y |  | Y |
| Details of any support requirements for the delivery and construction vehicles and cranes |  |  | Y |
| Element reinforcement required for in-service loadings and conditions | Y | Y |  |
| Framing connection locations and required type (e.g. cast-in) and the capacity of fixing inserts | Y | Y | Y |
| Levelling pad details | Y |  | Y |
| Structural design criteria affecting construction  (e.g. composite flooring systems)—this might include loads from temporary bracing that is to be transmitted to any prefabricated concrete elements | Y |  | Y |
| The concrete specification, including all special requirements to meet in-service loadings and conditions, and the minimum cover to reinforcing | Y | Y |  |
| Base connection details | Y | Y | Y |
| Making base connection (i.e. grouting dowels) | Y |  | Y |
| Element number for each element |  | Y | Y |
| The mass of each element |  | Y | Y |
| Element dimensions and centre of gravity |  | Y | Y |
| The location, orientation, type, make, capacity and technical specifications of lifting inserts |  | Y | Y |
| The location, orientation, type, make, capacity and technical specifications of temporary props, frames and braces |  |  | Y |
| The location, orientation, type, make, capacity and technical specifications of required secondary supports, including knee braces and lateral restraints |  |  | Y |
| The location, orientation, type, make, capacity and technical specifications of temporary support (e.g. bracing, props, frames or brackets) fixing inserts cast into the element |  | Y | Y |
| The location, orientation, type, make, capacity and technical specifications of temporary support fixing inserts (e.g. to bracing, props, frames or brackets) where the fixing is made on site to a non-precast element (i.e. a deadman) |  |  | Y |
| The location, orientation, type, make, capacity and technical specifications of cast in inserts for strongbacks |  | Y |  |
| Detailed manufacture (shop) drawings of any brace, prop, bracket or strongback manufactured for the specific project (i.e. not a hire item) (Note 3)  NOTE:. |  | Y |  |
| Indication of elements requiring the attachment of strongbacks for transportation |  | Y |  |
| Indication of elements requiring the attachment of strongbacks for erection |  |  | Y |
| The configuration and cover of any component reinforcement that is required for controlling loads imposed during transport, lifting and erection of temporary supports |  | Y |  |
| The size, configuration and cover of any additional reinforcement required for the transport and lifting of the element |  | Y |  |
| The requirements for temporary support footings, if cast off site |  | Y | Y |
| The requirements for temporary support footings, if cast on site |  |  | Y |
| The concrete specification of the elements, minimum concrete strength for lifting, handling and the connection of temporary supports during erection |  | Y | Y |
| Concrete strength of the footings and temporary support elements (e.g. deadmen) required at the time of erection |  |  | Y |
| Surface finish of each element |  | Y |  |
| Special tolerance limits for the element if required |  | Y |  |
| Rigging details for handling prior to delivery with a diagram of the rigging arrangement showing required load equalising devices and specifications of the lifting inserts and attachment devices (e.g.lifting clutches). |  | Y |  |
| Rigging details for delivery, unloading, handling and erection with a diagram of the rigging arrangement for each required operation showing required load equalising devices and specifications of the lifting inserts and attachment devices (e.g.lifting clutches). |  |  | Y |
| The maximum value of the initial lift load, including an allowance for suction when lifting off the casting beds (Note 5) |  | Y (in factory lifting) | Y (on-site lifting) |
|  | | | |