

Preparatory Work

The Engineer's approval in writing shall always be obtained before any concrete is placed in the Works. All constructional plant and materials required, or which may be required during the concreting work and for curing shall be on site and the Contractor shall be fully prepared for the work. The Engineer's approval to place concrete shall only be given after such preparations and other relevant requirements of the Herewith Employer's Requirements have been carried out and complied with.

If necessary and/or directed by the Engineer, the Contractor shall cool any shuttering that has become overheated or exceptionally dry through prolonged exposure to the sun. The Contractor shall ensure that all shuttering retains a sufficient amount of humidity and has not become shrunk or warped. All soaking or spraying of shuttering shall be done with potable water.

The Engineer may completely forbid the placing of concrete in any shuttering which he believes has become too hot and/or dry and the condition of which could harm the quality and strength of the concrete. No extra payment for cooling or soaking of shuttering shall be made.

All shuttering, area of deposition, reinforcement and exposed surfaces of adjoining concrete surface shall be thoroughly cleaned and free from dust, debris, oil any other substance that may be harmful to fresh concrete.

Depositing in Work

The methods of conveying and depositing concrete shall be such as to prevent segregation of the materials and shall be approved by the Engineer before concreting begins. The placing and compaction of concrete shall be carried out under the direct supervision of a competent member of the Contractor's staff.

Concrete shall be placed directly in the Works as soon as possible without the need for re-handling and not more than 45 minutes after mixing and, in any case, before the initial setting has taken place. If any delay has occurred after mixing and the concrete has begun to set, it shall not be used in the Works and shall be removed from the site. Unless otherwise agreed by the Engineer on the basis of satisfactory site trials, concrete shall not be dropped into place from a height exceeding 2 m.

Concreting of any section or unit shall be carried out in one continuous operation up to the construction joints. No interruption of the concreting will be allowed without the approval of the Engineer. Where deposition of concrete has to be interrupted, precautions shall be taken to ensure satisfactory adhesion of later batches of concrete to that previously placed.

Where a delay of more than one hour has occurred between concreting operations in one section or unit of work, concreting shall only be resumed when, in the opinion of the Engineer, the previously placed concrete has had ample time to harden and the resulting joint shall be treated as a construction joint. At all times when concrete is being placed, a competent steel fixer shall be in continuous attendance to adjust and correct the position of any reinforcement which may become displaced.

Transportation of concrete directly over fixed reinforcement steel during concreting shall not be allowed unless proper provisions are made to avoid displacing or damage to the reinforcement.

Depositing in Layers

Concrete shall be deposited in approved quantities and horizontal layers of such depth as to permit thorough incorporation with the layers below by vibration, spading, ramming and working. If, for unforeseen reasons, it is necessary to stop concreting before completion of a section, then construction joints as specified shall be formed and further concreting shall be suspended for at least 24 hours.