
SAFETY CODE

1. Suitable scaffolds should be provided for workmen for all works that cannot be safely done from the ground, or from solid construction except such short period work as can be done safely from ladders, when a ladder is used, an extra mazdoor shall be engaged for holding the ladder and if the ladder is used for carrying materials. Suitable footholds and handholds shall be provided on the ladder and the ladder shall be given an inclination not steeper than 1/4 horizontal and 1 vertical.
2. Scaffolding or staging more than 3.6 m (12 feet) above the ground or floor, swung or suspended from an overhead support or erected with temporary support shall have a guard rail properly attached bolted, braced and otherwise secured atleast 90cm (3 feet) high above the floor or platform of such scaffolding or staging and extending along the entire length of the outside and ends thereof with only such opening as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened so as to prevent it from swaying from the building or structure.
3. Working platform, gangways and stairways should be so constructed that they should not sag unduly or unequally, and if the height of the platform or the gangway or the stairway is more than 3.6m (12 feet) above ground level or floor level, they should be closely braced, should have adequate width and should be suitably fastened as described in (2) above.
4. Every opening in the floor of a building or in a working platform be provided with suitable means to prevent the fall of persons or materials by providing suitable railing whose minimum height shall be 90cm (3 feet).
5. Safe means of access shall be provided to all working platform and other working places. Every ladder shall be securely fixed. No portable single ladder shall be over 9m (30 feet) in length while the width between side rails in rung ladder shall in no case be less than 29cm (11.5") for ladder upto and including 3m (10 feet) in length. For longer ladder this width should be increased atleast ¼" for each additional 30cm (1 feet) of length. Uniform step spacing shall not exceed 30 cm (12"). Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the sites of work shall be so stacked or placed as to cause danger or bad to any person or the public. The Contractor shall provide all necessary fencing and lights to protect the public from accident and shall be bound to bear the expenses of defence of every suit, action or other proceedings of law that may be brought by any persons or injury sustained owing to neglect of the above precautions and to pay any damages and cost which may be awarded in any such suit action or proceedings to any such persons or which may, with consent of the Contractor, be paid to compromise any claim by any such person.
6. Excavation and Trenching-All trenches, 1.2m (4 feet) or more in depth, shall at all times be supplied with atleast one ladder for each 30m (100 feet) in length or fraction thereof. Ladder shall be extended from bottom of the trench to atleast 90cm (3 feet) above the

surface of the ground. The sides of the trenches which are 1.5m (5 feet) or more in depth shall be stepped back to give suitable slope or securely held by timber bracing so as to avoid the danger of collapse of sides. The excavated materials shall not be placed within 1.5m (5 feet) of the edges of the trench or half of the depth of the trench whichever is more. Cutting shall be done from top to bottom. Under no circumstance undermining or undercutting shall be done.

7. Demolition: Before any demolition work is commenced and also during the process of the work:
 - i) All roads and open areas adjacent to the work site shall either be closed or suitably protected.
 - ii) No electric cable or apparatus which is liable to be a source of danger, used by the operator shall remain electrically charged.
 - iii) All practical steps shall be taken to prevent danger to person employed from risk of fire or explosion or flooding. No floor, roof or other part of building shall be so overloaded with debris or materials as to render it unsafe.
8. All necessary personal safety equipment as considered adequate by the Engineer-in-charge should be kept available for the use of the person employed on the site and maintained in a condition suitable for immediate use and the Contractor should take adequate steps to ensure proper use of equipment by those concerned.
 - i) Workers employed on mixing asphaltic materials, cement and lime mortars shall be provided with protective footwear and goggles.
 - ii) Those engaged in white washing and mixing or stacking of cement bages or any material which is injurious to the eyes shall be provided with protective goggles.
 - iii) Those engaged in welding works shall be provided with welder's protective eyesight lids.
 - iv) Stone breakers shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.
 - v) When workers are employed in sewers and manholes, which are in use, the Contracteros shall ensure that the manhole covers are opened and are ventilated atleast for an hour before the workers are allowed to get into the manholes, and the manholes so opened shall be cordoned off with suitable railing and provided with warning signals or boards to prevent accident to the public.
 - vi) The Contractor shall not employ men below the age of 18 years and women on the work of painting with products containing lead in any form. Wherever men above the age of 18 are employed on the work of lead painting the following precautions should be taken.

- a. No paint containing lead or lead products shall be used except in the form of paste or readymade paint.
 - b. Suitable face masks should be supplied for use by the workers when paint applied in the form of spray or a surface having lead paint dry rubbed and scrapped.
 - c. Overalls shall be supplied by the Contractors to the workmen and adequate facilities shall be provided to enable the working painters to wash during the cessation of work.
9. When the work is done near any place where there is risk of drowning, all necessary equipments should be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provision should be made for prompt first aid treatment of all injuries likely to be sustained during the course of the work.
10. Use of the hoisting machines and tackle including their attachments, anchorage and supports shall conform to the following standards or conditions.
- i) These shall be of good mechanical constructions, sound material and adequate strength and free from patent defects and shall be kept in good working order.
 - ii) Every rope used in hoisting or lowering materials or as a means of suspension shall be of durable quality and adequate strength and free from manufacturing defects.
 - iii) Every crane driver or hoisting appliance operator shall be properly qualified and no person under the age of 21 years should be incharge of any hoisting machine including any scaffolding winch or give signals to operator.
 - iv) In case of every hoisting machine and of every chain ring hook, shackle swivel and pulley block used in hoisting or any means of suspension the safe working load shall be ascertained by adequate means. Every hoisting machine and all gear referred to above shall be plainly marked with the safe working load, in case of hoisting machine having a variable safe working load, each safe working load and the conditions under which it is applicable shall be clearly indicated. No part of any machine or any gear referred to above in this paragraph shall be loaded beyond the safe working load except for the purpose of testing.
 - v) In case of Departmental machines the safe, working load shall be notified by the Electrical Engineer-in-charge. As regards Contractors machine, the Contractors shall notify the safe working load of the machine to the Engineer-in-charge, whenever he brings any machinery to site of work and get it verified by the Electrical Engineer concerned.

11. Motors, gears, transmission, electrical wiring and other dangerous part of hoisting appliance should be provided with sufficient safeguards. Hoisting appliances should be provided with such means as will reduce to the minimum, the risk of accidental decent of the load. Adequate precautions should be taken to reduce to the minimum risk of any part of a suspended load becoming accidentally displaced. When workers employed on electrical installations which are already energized, insulating mats wearing apparel, such as gloves, sleeves and boots as may be necessary should be provided. The workers should not wear any rings, watches and carry keys or other materials which are good conductors of electricity.
12. All scaffolds, ladders and other safety devices mentioned or described herein shall be maintained in safe conditions and no scaffold, ladder or equipment shall be altered or removed while it is in use. Adequate washing facilities should be provided at or near places of work.
13. These safety provisions should be brought to the notice of all concerned by display on a notice board at prominent place at work spot. The person responsible for compliance of the safety code shall be named therein by the Contractor.
14. To ensure effective enforcement of the rules and regulation relating to safety precautions the arrangements made by the Contractor shall be open to inspection by the Labour Officer, Engineer-in-charge of the IISER-TVM or their representatives.
15. Notwithstanding the above clauses from (1) to (14) there is nothing in these to exempt the Contractor from the operations of any other Act of Rule in force in the Republic of India.