

A Study on India's Legal Requirements for Construction Safety

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Abstract: In India, the construction industry employs over 8.5 million people. Construction workers make up a sizable portion of the unorganized labour force and are distinguished by their sporadic employment, transient relationship with their employers, lengthy and unpredictable work hours, lack of safety and health precautions, and inadequate access to basic amenities and welfare facilities. In India, there are numerous legal provisions that offer protections for contract workers. The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act of 1996 and the Central Rules of 1998 have made construction safety legally enforceable. The BOCW Act, Central Rules, and State Rules are specifically mentioned as examples of the many statutory provisions for construction safety in India that are covered in this article.

Keywords: Construction safety, legal requirements, BOCW Act.

1. Introduction

The health and safety of the construction workers is a key factor in the long-term viability of the construction process and its improvement. India's construction industry is a key indication of progress since it generates investment opportunities in a variety of linked industries. With indirect employment, the sector employs more than 35 million people and is labor-intensive. At different levels, health and safety management procedures in the construction process might be improvised.

Clients, project managers, architects, engineers, contractors, subcontractors, suppliers, and manufacturers all play a part in various stages of construction. As construction accidents continue to dominate the sector, efforts have been made to solve this issue, but the outcomes have been anything but satisfactory. Despite the policies and programs put into place by the government, Companies themselves still report an extremely high incidence of construction accidents. It is quite disappointing that the adoption of health and safety regulations in the construction sector has not led to a corresponding improvement in the sector. To address industry difficulties, the construction sector needs more practical strategies involving improved processes [4]. The BOCW Act, Central Rules, and State Rules are specifically mentioned in this paper to provide an understanding of the various statutory provisions for construction safety in India.

2. Objectives of the Study

The study analysis examines worker safety issues in order to give construction workers a secure working environment.

- Regulate the employment and working circumstances of construction workers.
- Offer safety, health, and welfare measures
- Address related issues.

The three most significant stakeholders in bearing responsibility for safety.

- Employees who carry out the physical duties,
- Employers who hire the employees, and
- The government, which establishes the legal framework that regulates S & H policies and practices.

3. Safety Provisions and Safety Laws

A. Excessive Noise (Rule 34)

The permissible noise levels for different times of exposure are presented in Table 1.

Table 1
Permissible noise levels

Total time of exposure per day (in hours)	Noise level in DbA
8	90
6	92
4	95
3	97
2	100
1	105
3/4	107
1/2	110
1/4	115

The permissible exposure limit (PEL) set by OSHA is 90 dBA for an 8-hour workday for all employees.

B. Fire Protection (Rule 35)

An employer must make sure that such construction sites have enough fire extinguishing equipment to put out any potential fires.

- Ample water pressure and a supply that meets national standards.
- The number of individuals with training in using fire extinguishing equipment.

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Provision of fire extinguishing equipment in a launch or boat for the transportation of employees & cabin of lifting appliances and mobile crane Regular maintenance and inspection by a responsible person at least once a year.

C. Emergency Action Plans (Rule 36)

Construction companies that employ more than 500 building workers are required to create emergency action plans for the following situations:

- Explosions and fires
- The failure of lifting and transportation devices
- The collapse of buildings, sheds, or other structures, etc.
- Drowning of construction workers or the sinking of vessels; gas leaks and the spilling of hazardous materials or chemicals; landslides burying construction workers; storms and other natural calamities

D. Lifting & Carrying of Excessive Weight (Rule 38)

No building worker lifts or carries anything by hand that is heavier than the weight restrictions listed in Table 2 over his head, back, or shoulders.

Table 2
Permissible load

Persons	Maximum wt. load
Adult man	55 Kilograms
Adult woman	30 Kilograms
Adolescent male	30 Kilograms
Adolescent female	20 Kilograms

15.4 KG is the maximum weight that an Indian woman worker should carry.

E. Health & Safety Policy (Rule 39)

Businesses with 50 or more construction employees on staff should create a health and safety policy and submit it for approval to the director general.

F. Dangerous & Harmful Environment (Rule 40)

Employer must take adequate and appropriate efforts to keep atmospheric CO content below 50 ppm.

Until safety precautions have been implemented and a certificate has been provided by the responsible party, workers cannot be allowed to enter confined spaces, tanks, trenched areas, or excavation sites.

In a similar manner, provisions are made for overhead protection (rule 41), electrical hazards (rule 47), structural stability (rule 49), test and periodic inspection of lifting appliances (rule 56), lifting gear (rule 70), operator's cabin (rule 63), transport and earth moving equipment (rules 88 to 95), concrete work (rule 96 to 107), demolition (rule 108 to 118), demolition of walls, partitions, etc. (rule 110), ladders and step ladders (rules 169–171), catch platforms and hoardings, chutes, safety belts, and nets (rules 175–180), safety belts, Safety Officer (Rule 209), Safety Net (Rules 178 to 180), Hazardous Process (Rule 225), and Notifiable Risky processes, occupational disorders (rule 230) (Schedule IX).

Rule 45: Eye Protection

Rule 46: Head Protection and other protective apparel

Rule 47: Electrical Hazards

Rule 54: Use of Safety Helmets and Shoes

Rule 56(1): Test of Lifting Appliances

Rule 56(2): Periodical Examination of lifting appliances

Rule 61: Identification and marking of safe working load

Rule 64: Operation of lifting appliances

Rule 108-118: Safety precautions during demolition of walls, partition etc.

Rule 208: Safety Committee

Rule 209: Safety Officer over every 500 workers

Rule 213: Precautions during handling of explosives

Rule 223: Medical examination of building workers.

THE BOCW ACT, 1996

An act to govern the employment and working circumstances of building and other construction workers, to provide provisions for their welfare, health, and safety, and to address other issues related to or incidental to the foregoing.

There is an exception for residential homes built for private use with a budget under 10 lakh and for other operations to which the Mines Act of 1952 and the requirements of the Factories Act of 1948 apply. It is applicable to every business that currently employs or had employed 10 or more construction employees on any given day over the previous 12 months.

In accordance with ILO Convention No. 167 about Safety & Health in Construction, provisions are provided for health and safety measures for construction employees. The Central Government has issued detailed Central Rules for this purpose (1998). According to Article 18, safety precautions must be taken to protect personnel, tools, materials, and other things from falling and from accidentally treading on or falling through delicate materials when working at heights that are higher than what is permitted.

The main provisions are as follows: i) establishment of advisory committees (at the central and state level); ii) establishment registration; iii) registration of employees as beneficiaries (under the welfare board); iv) establishment of welfare boards at the state level; v) safety and health measures; and vii) welfare measures.

In the event of: i) accidents; ii) senior pension; iii) loans for home construction; iv) group insurance premium; v) financial aid for schooling; vi) to cover medical expenses; vii) maternity benefits, etc., provisions for prompt help by the board are supplied.

The main legislation provides for the establishment of welfare boards to earn money for the provision of various assistance programs. The collection of tax at rates not exceeding 2% of the entire building costs paid by an employer shall be a significant source of funding. The relevant state governments are in charge of collecting money and managing the welfare boards.

- The Head of Department or the authority specified (in case of construction work is carried out directly by any department of the Government).

- The Chief Executive Officer (in case of construction work is carried out directly by local authorities or other establishments), or
- The Contractor (in case of construction work is carried by or through contractors)

4. Conclusion

The purpose of the statutory construction safety requirements is to safeguard construction employees from the risks present at building sites by providing them with occupational safety and health. The statutory regulations also include procedures for data gathering regarding accidents with the goal of identifying fault and carrying out corrective measures. By passing state regulations, the majority of states have begun putting the BOCW Act and Rules into effect in their own jurisdictions.

Construction employees will be greatly protected from occupational hazards by the enforcement of safety regulations on construction sites. It is essential that all holders of stacks make a contribution to the legal requirements' effective implementation in order to ensure the safety of construction workers.

References

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