THE A.P. BUILDING AND OTHER CONSTRUCTION WORKERS' (REGULATION OF EMPLOYMENT AND CONDITIONS OF SERVICE) RULES, 1999

[G.O.Ms.No. 69, LET&F (Lab. II), dt. 3-12-1999][1]

In exercise of the powers conferred by Section 62 read with Section 40 of the Building and other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 (Central Act 27 of 1996), the Governor of Andhra Pradesh hereby makes the following rules, in consultation with expert committee, as required under sub-section (1) of Section 62 and sub-section (1) of Section 40 of the said Act.

PART I

CHAPTER I

1. Short title, application and extent:– (1) These rules may be called the Andhra Pradesh Building and other Construction Workers' (Regulation of Employment and Conditions of Service) Rules, 1999.

(2) They shall apply to the building or other construction workers relating to any establishment in relation to which appropriate Government is the State Government under the Act.

(3) They shall extend to and be in force in the whole of the State of Andhra Pradesh.

2. Definitions:– (1) In these Rules, unless the subject or context otherwise requires,–

(a) "*Act*" means the Building and Other Construction Workers' (Regulation of Employment and Conditions of Service) Act, 1996 (27 of 1996);

(b) "*access*" or "*egress*" means passageways, corridors, stairs, platforms, ladders and any other means to be used by a building worker for normally entering or leaving the workplace or for escaping in case of danger;

(c) "*approved*" means acceptance in writing Chief Inspector of the inspection of building and other construction or by the State Government as the case may be ;

(d) "*base plate*" means a plate for distributing the load from a standard in the case of metal scaffolds;

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(e) "*bay*" in relation to scaffolds, means that portion of the scaffold between horizontal or vertical supports whether standards or supports from which the portion is suspended, which are adjacent longitudinally;

(f) "*brace*" means a member incorporated diagonally in a scaffold for stability;

(g) "*bulkhead*" means an airtight structure separating the working chamber from free air or from another chamber under a lower pressure than the working pressure;

(h) "*ciasson*" means an air and watertight chamber in which it is possible for men to work under air pressure greater than atmospheric pressure at sea level to excavate material below water level;

(i) "*cofferdam*" means a structure constructed entirely or in part below water level or below the level of the water table in the ground and intended to provide a place for work that is free of water;

(j) "*competent person*" means a person so approved by the Central Government, who belongs to a testing establishment in India, possessing adequate qualification, experience and skill for the purposes of testing, examination or annealing and certification of lifting appliances, lifting gears, wire ropes or pressure plant or equipment;

(k) "*compressed air*" means air mechanically raised to a pressure higher than atmospheric pressure at sea level;

(l) "*construction site*" means any site at which any of the processes or operations, related to building or other construction work, are carried on;

(m) "*conveyor*" means a mechanical device used in building or other construction work for transport of building material, articles, or packages or solid bulk from one point to another point;

(n) "*danger*" means danger of accident or of injury or to health;

(o) "*decanting*" means the rapid decompression of persons in a man-lock to atmospheric pressure at sea level followed promptly by their recompression in a decant lock, where they are then decompressed according to the appropriate decompression table in accordance with approved decompression procedures;

(p) "*demolition work*" means the work incidental to or connected with the total or partial dismantling or razing of a building or a structure

other than a building and includes the removing or dismantling of machines or other equipment;

(q) "*excavation*" means the removal of earth, rock or other material in connection with construction or demolition work;

(r) "*falseworks*" means the structural supports and bracing for formworks or forms;

(s) "*flashpoint*" means the minimum liquid temperature at which a spark or flame causes an instantaneous flash in the vapour space above the liquid;

(t) "*frame or modular scaffold*" means a scaffold manufactured in such a way that the geometry of the scaffold in predetermined and the relative spacing of the principal members are fixed;

(u) "*guard rail*" means a horizontal rail secured to uprights and erected along the exposed sides of scaffolds, floor openings, runways and gangways to prevent persons from falling;

(v) "*hazard*" means danger or potential danger;

(w) "*hazardous substance*" means any substance which due to its explosiveness, inflammability, radioactivity, toxic or corrosive properties, or other similar characteristics, may-

(i) cause injury; or

(ii) affect adversely the human system; or

(iii) cause loss of life or damage to property on work-environment, while handling, transporting or storing and classified as such under the national standards or in case such national standards do not exist to the generally accepted international standards;

(x) "*high pressure air*" means air used to supply power to pneumatic tools and devices;

(y) "*independent tied scaffold*" means a scaffold, the working platform of which is supported from the base by two or more rows of standards which apart from the necessary ties stands completely free of the building;

(z) "*ledger*" means a member spanning horizontally and tying scaffolding longitudinally and which acts as support for putlogs or transoms ;

(za) "*lifting appliance*" means a crane, hoist, derrick, which, ginpole, sheer legs, jack, pulley block or other equipment used for lifting materials, objects or building worker;

(zb) "*lifting gear*" means ropes, chains, hooks, slings and other accessories of a "lifting appliance";

(zc) "*lock attendant*" means the person in charge of a man-lock or medical lock and who is immediately responsible for controlling the compression, recompression or decompression of persons in such locks;

(zd) "*low pressure air*" means air supplied to pressurise working chambers and man-locks and medical locks;

(ze) "*magazine*" means a place in which explosives are stored or kept whether above or below ground;

(zf) "*man-lock*" means any lock, other than a medical lock, used for the compression or decompression of persons entering or leaving a working chamber;

(zg) "*material hoist*" means a power or manually operated and suspended platform or bucket operating in guide rails and used for raising or lowering material exclusively and operated and controlled from a point outside the conveyance;

(zh) "*materials lock*" means a chamber through which materials and equipments pass from one air pressure environment into another;

(zi) "*medical lock*" means a double compartment lock used for the therapeutic recompression and decompression of persons suffering from the ill-effects of decompression;

(zj) "*national standards*" means standards as approved by Bureau of Indian Standards and in the absence of such standards of Bureau of Indian Standards, the standards approved by the Central Government for a specific purpose;

(zk) "*outrigger*" means a structure projecting beyond the facade of a building with the inner end being anchored and includes a cantilever or other support;

(zl) "*plant or equipment*" includes any plant, equipment, gear, machinery, apparatus or appliance, or any part thereof;

(zm) "*pressure*" means air pressure in bars above atmospheric pressure;

(zn) "*pressure plant*" means the pressure vessel along with its piping and other fittings operated at a pressure greater than the atmospheric pressure;

(zo) "*putlog*" means a horizontal member on which the board, plank or decking of a working platform are laid;

(zp) "*responsible person*" means a person appointed by the employer to be responsible for the performance of specific duty or duties and who has sufficient knowledge and experience and the requisite authority for the proper performance of such duty or duties;

(zq) "*reveal tie*" means the assembly of a tie tube and a fittings used for tightening a tube between two opposite surfaces;

(zr) "*right angle coupler*" means a coupler, other than a swivel or putlog coupler, used for connecting tubes at right angles;

(zs) "*rock bolt*" means a mechanical expansion bolt or a bolt used with cementitious or resin anchoring system which is set in drilled hole in the arch or wall of a tunnel to improve rock competency;

(zt) "*roofing bracket*" means a bracket used in sloped roof construction and having sharp points or other means for fastening to prevent slipping;

(zu) "*safety screen*" means an air and water tight diaphragm placed across the upper part of a compressed air tunnel between the face and bulkhead, in order to prevent flooding the crown of the tunnel between the safety screen and the bulkhead to provide a safe means of refuge and exit from a flooding or flooded tunnel;

(zv) "*safe working load*" in relation to an article of lifting gear or lifting appliance, means the load which is the maximum load that may be imposed on such article or appliance with safety in the normal working conditions as assessed and certified by a competent person;

(zw) "*scaffold*" means any temporarily provided structure on or from which building workers perform work in connection with building or other construction work to which these rules apply, and any temporarily provided structure which enables building workers to obtain access to or which enables materials to be taken to any place at which such work is performed, and includes any working platform, gangway, run, ladder or step-ladder (other than a ladder or step-ladder which does not form part of such structure) together with any guardrail, toe board or other safeguards and all fixings.

but does not include lifting appliance or a lifting machine or a structure used merely to support such an appliance or such a machine or to support other plant or equipment;

(zx) "*Schedule*" means a Schedule appended to these rules;

(zy) "*segment*" includes a cast iron or precast concrete segmented structure formed to the curvature of the tunnel cross-section and used to support the ground surrounding the tunnel;

(zz) "*service shaft*" means a shaft for the passage of building workers or materials to or from a tunnel under construction;

(zza) "*shaft*" means an excavation having a longitudinal axis at an angle greater than forty-five degree from the horizontal-

(i) for the passage of building workers or materials to or from a tunnel; or

(ii) leading to an existing tunnel;

(zzb) "*shield*" means a movable frame which supports the working face of a tunnel and the ground immediately behind it and includes equipment designed to excavate and support the excavated areas in a tunnel;

(zzc) "*sole plate*" means a member used to distribute the load from the base plate or the standard of wooden scaffolds to the supporting surface;

(zzd) "*sound or good construction*" means construction conforming to the relevant national standards or in case such national standards do not exist, to other generally accepted international engineering standards or code of practices;

(zze) "*sound or good material*" means materials of a quality conforming to the relevant national standards do not exist, to other generally accepted international engineering standards or code of practices;

(zzf) "*standard*" means a member used as a vertical support or column in the construction of scaffolds which transmits a load to the ground or to the solid construction;

(zzg) "*standard safe operating practices*" means the practice followed in building and other construction activities for the safety and health of workers and safe operation of machineries and equipment used in such activities and such practices conforms to all or any of the following, namely:–

(i) relevant standards approved by Bureau of Indian Standards;

(ii) national building code;

(iii) manufacturer's instructions on safe use of equipment and machinery;

(iv) code of practice on safety and health in construction industry published by International Labour Organisation and amended from time to time;

(zzh) "*steel rib*" includes all steel beams and other structural members shaped to conform to the requirements of a particular tunnel cross section, used for the purpose of supporting and stabilising the excavated areas;

(zzi) "*suspended scaffold*" means a scaffold suspended by means of ropes or chains and capable of being raised or lowered but does not include a boatswain's chair or similar appliance;

(zzj) "*testing establishment*" means an establishment with testing and examination facilities, as approved by the Central Government for carrying out testing, examination, annealing or similar other test or certification of lifting appliances or lifting gear or wire rope as required under these rules;

(zzk) "*tie*" means an assembly used to connect a scaffold to a rigid anchorage;

(zzl) "*toe board*" means a member fastened above a working platform, access landing, access way, wheel barrow run, ramp or other platform to prevent building workers and materials falling therefrom;

(zzm) "*transom*" means a member placed horizontally and used to tie transversely one ledger to another, or one standard to another in an independent tie scaffold;

(zzn) "*trestle scaffold*" includes a scaffold in which the supports for the platform are any of the following which are self-supporting, namely:–

(i) split heads;

(ii) folding;

(iii) step-ladder;

(iv) tripods; or

(v) moveable contrivances similar to any of the foregoing;

(zzo) "*tubular scaffold*" means a scaffold constructed from tubes and couplers;

(zzp) "*tunnel*" means a subterranean passage made by excavating beneath the over burden into which a building worker enters or is required to enter to work;

(zzq) "*underground*" means any space within the confines of a shaft, tunnel, caisson or cofferdam;

(zzr) "*vehicle*" means a vehicle propelled or driven by mechanical or electrical power and includes a trailer, traction engine, tractor, road-building machine and transport equipment;

(zzs) "*working chamber*" means the part of the construction site where work in a compressed air environment is carried out, but does not include a man-lock or medical lock;

(zzt) "*working platform*" means a platform which is used to support building workers or materials and includes a working stage;

(zzu) "*working pressure*" means pressure, in a working chamber, to which building worker is exposed;

(zzv) "*workplace*" means all places where building workers are required to be present or to go for work and which are under the control of an employer.

3. Interpretation of words not defined:– Words and expressions not defined in these rules but defined or used in the Act shall have the same meaning as assigned to them in the Act.

4. Savings:– The provisions of these rules shall be in addition to and not in substitution for or in diminution of the requirements imposed by the Act.

CHAPTER II

Responsibilities and Duties of employers, architects, project Engineers and designers, building workers, etc.

5. Duties and responsibilities of employers, employees and others:– (1) It shall be the duty of every employer who is undertaking any of the operations or works related to or incidental to building or other construction work to which these rules apply–

(a) to comply with such of the requirements of these rules as are related to him:

Provided that the requirements of this clause shall not affect any building worker if and so long as his presence in any place of work is not in the course of performing any work on behalf of his employer and he is not expressly or impliedly authorised or permitted by his employer to do the work; and

(b) to comply with such of the requirements of these rules, as are related to him in relation to any work, act or operation performed or about to be performed by him.

(2) It shall be the duty of every employer who erects or alters any scaffold to comply with such requirements of the provisions of these rules as related to the erection or alteration of scaffolds having regard to the purpose or purposes for which the scaffold is designed at the time of erection or alteration; and such employer, who erects, installs, works or uses any plant or equipment to which any of the provisions of these rules apply, shall erect, install, work or use such plant or equipment in a manner which complies with those provisions.

(3) Where a contractor, who is undertaking any of the operations or works to which these rules apply, appoints any artisan, tradesman or other person to perform any work or services of the contractor to comply with such of the requirements of these rules as affect that artisan, tradesman or other person and for this purpose any reference in these rules to an employee shall include a reference to such artisan, tradesman or other person and the contractor shall be deemed to be his employer.

(4) It shall be the duty of every employee to comply with the requirements of such of these rules as are related to the performance of or the refraining from an act by him and to co-operate in carrying out these rules.

(5) It shall be the duty of every employer to do anything not in accordance with the generally accepted principles of standard safe operating practices connected with building and other construction work as specified by the State Government.

(6) No employee shall do anything which is not in accordance with the generally accepted principles of standard safe operating practices connected with building and other construction work as specified by the State Government.

(7) No person related with any building and other construction work shall wilfully do any act which may cause injury to himself or to others.

(8) It shall be the duty of every employer not to allow lifting appliance, lifting gear, lifting device, transport equipment, vehicles or any other device or equipment to be used by the building workers which does not comply with the provisions given in these rules.

(9) It shall be the duty of the employer to maintain the latrines, urinals, washing facilities and canteen in a clean and hygienic condition. The canteen shall be located in a place away from the latrines and urinals and polluted atmosphere and at the same time be easily accessible to the building workers.

(10) It shall be the duty of the employer to abide by the dates fixed and notified by him for payment of wages for a period in accordance with these rules and no change in such dates and such period shall be effected without notice to the building workers and the Inspector. The employer shall ensure timely payment of wages as specified under these rules and at the place and time notified by him. Where the employer is a contractor, he shall ensure that the wages of building workers are paid in the presence of a representative of the employer of establishment or owner of premises from whom he has taken the work on contract and obtain signatures of such representative in token of having witnessed the payment of wages.

(11) It shall be the duty of the employer to ensure that the lifting appliance, lifting gear, earth moving equipment, transport equipment or vehicles used in the building or other construction work undertaken by him conforms to the requirements relating to testing, examination and inspection of equipment as provided in these rules. It shall be the duty of every person in the service of the Government or any local or other public authority to comply with the requirements relating to him as given in these rules.

6. Responsibilities of project engineers and designers:– (1) It shall be the duty of the project engineer or designer responsible for the design of any project or part thereof or any building or other construction work to ensure that, at the planning stage, due consideration is given to the safety and health aspects of the building workers who are employed in the erection, operation and execution of such projects and structures as the case may be.

(2) Adequate care shall be taken by the project engineer and other professionals involved in the project, not to include anything in the design which would involve the use of dangerous structures or other processes or materials, hazardous to health or safety of building workers during the course of erection, operation and execution as the case may be.

(3) It shall be the duty of the professionals, involved in designing the buildings, structures or other construction projects, to take into account the safety aspects associated with the maintenance and upkeep of the structures and buildings where maintenance and upkeep may involve special hazards.

7. Responsibilities of the person in the service of the State Government and the Board:– It shall be the duty of every person in the service of the Government of any State or a Board to comply with the directions given by the Central Government from time-to-time to carrying into execution in that State the provisions of the Act and these rules.

8. Duties and responsibilities of workers:– (1) It shall be the duty of every building worker to comply with the requirements of such of these rules as relate to him, and act and co-operate in carrying out the requirements of these rules and if he discovers any defects in the lifting appliance, lifting gear, lifting device, concerning any transport equipment or other equipment, to report such defects without unreasonable delay to his employer or foreman or other person in authority.

(2) No building worker, shall unless duly authorised or except in case of necessity, remove or interfere with any fencing, gangway, gear, ladder, hatch covering, life-saving appliances, lighting or other things whatsoever required by the Act and these rules to be provided. If any of the aforesaid thing is removed, such thing shall be restored at the end of the period during which its removal was necessary, by the persons engaged in that work.

(3) Every building worker, shall use only means of access provided in accordance with these rules and no person shall authorise or order another to use means of access other than such means of access.

(4) It shall be the duty of a building worker to keep the latrines, urinals, washing points, canteen and other facilities provided by the employer for securing his welfare in a clean and hygienic condition.

9. Exemption:– The State Government may, by order in writing and subject to such conditions and for such period, as may be specified therein, exempt from all or any of the requirements of these rules to–

(a) any building or other construction work, if such Government is satisfied that such building work is confined to such workers, where it is not convenient to take measures as provided in these rules; or

(b) any appliance, gear, equipment, vehicle or other device if such Government is satisfied that the requirement of such appliance, gear, equipment, vehicle or other device is not necessary for use or equally effective measures are taken in lieu thereof :

Provided that such Government shall not grant exemption under these rules unless it is satisfied that such exemption would not adversely affect the safety, health and welfare of the building workers.

PART II

STATE ADVISORY COMMITTEE, REGISTRATION OF ESTABLISHMENTS

CHAPTER III

State Advisory Committee

10. Constitution of State Building and Other Construction Workers' Advisory Committee:– The State Building and Other Construction Workers' Advisory Committee (hereinafter referred to as the State Advisory Committee) shall consist of–

(a) A chairperson to be appointed by the State Government;

(b) Two members of the State Legislature– Members;

(c) A member to be nominated by the Central Government;

(d) The Chief Inspector – Member, *ex officio;*

(e) Two persons to be nominated by the State Government representing the building workers – Members;

(f) Two persons to be nominated by the State Government representing the employers connected with the building and other construction work – Members;

(g) Three persons to be nominated by the State Government representing one each from Associations of Architects, Engineers, Accident Insurance Institution – Members.

11. Term of Office:– (1) The Chairperson and other members of the State Advisory Committee in clauses (a), (e), (f) and (g) of Rule 10 shall hold office as such during the pleasure of the Governor.

(2) Each member referred to in clause (b) of Rule 10 shall hold office for three years or till he remains a member of the House of People or Council of State, as the case may be whichever is earlier.

(3) Each of the members referred to in clauses (a), (e), (f) and (g) of Rule 10 shall hold office as such for a period of three years commencing from the date on which this appointment is first notified in the Official Gazette:

Provided that the successor of any such member has not been notified in the Official Gazette on or before the expiry of the said period of three years, such member shall, notwithstanding the expiry of the period of this office, continue to hold such office until the appointment of his successor has been notified in the Official Gazette.

(4) If a member is unable to attend a meeting of the Board, the State Government or the body which appointed or nominated him may by notice in writing signed on its behalf and by such member and addressed to the Chairman of the Board nominate a substitute in his place to attend the meeting and such a substitute member shall have all the rights of a member in respect of that meeting and any decision taken at the meeting shall be binding on the said body;

The State Advisory Committee shall be reconstituted after every three years.

12. Resignations:– A member of the State Advisory Committee not being of *ex-officio* member may resign his office by a letter signed by him and addressed to the Government, his office shall fall vacant on the date on which such resignation is accepted.

13. Cessation of Membership:– If any member of the Committee not being an *ex-officio* member, fails to attend three consecutive meetings of the Committee without obtaining the leave of the Chairman of such absence, he shall cease to be a member of the Committee.

Provided that the Government may, if it is satisfied that such member was prevented by sufficient cause from attending three consecutive meetings of the Committee direct that such cessation shall not take place and on such direction being made, such member shall continue to be a member of the Committee.

14. Disqualification of Membership:– (1) A person shall be disqualified for being appointed and for being a member of the Committee,–

(i) If he is of unsound mind and stands so declared by a competent Court; or

(ii) If he is an undischarged insolvent; or

(iii) If he has been or is convicted of an offence which, in the opinion of the Government involves moral turpitude.

(2) If a question arises as to whether a disqualification has been incurred under sub-rule (1), the Government shall decide the same.

15. Removal from Membership:– The Government may remove from office any member of the Committee if in its opinion such a member has ceased to represent the interest which he purports to represent on the Committee.

Provided that no such member shall be removed unless a reasonable opportunity is given to him of making any representation against the proposed action.

16. Manner of filling vacancies:– (1) When a vacancy occurs or is likely to occur in the membership of the Committee the Chairman shall submit a report to the Government and on receipt of such report the Government shall take steps to fill the vacancy by making an appointment from amongst the category of persons to which the person vacating membership belonged and the person so appointed shall hold office for the reminder of the term of office of the member in whose place he is appointed.

If any vacancy occurs in the membership of the Committee by reasons of death of, or resignation by a member, it shall be filled by the Government by making an appointment from amongst the category of persons to which the deceased or the resigned member, as the case may be, belonged and the person so appointed shall hold office for the reminder of the term of office of the member in whose place he is appointed.

17. Staff of State Advisory Committee:– (1)(i) The State Government may appoint an officer not above the rank of Joint Commissioner of Labour as Secretary to the State Advisory Committee and appoint such other staff being in the service of the State Government, as it may think necessary, to enable such committee to carry out its functions.

(ii) The pay and allowances of such staff shall be on par with the State Government Employees.

(2) The Secretary of the State Advisory Committee,–

(i) shall assist the Chairperson of such committee in convening meetings of the Committee;

(ii) may attend the meetings of such Committee but shall not be entitled to vote at such meetings;

(iii) shall keep a record of the minutes of the meetings of such Committee; and

(iv) shall take necessary measures to carry out the decisions taken at the meetings of such Committee.

18. Allowances of Members:– (1) The T.A. and D.A. of an official member, shall be governed by Rules applicable to him for journey performed by him on official duties and shall be paid by the authority paying his salary.

(2) Each non-official member of the Committee shall be entitled to draw T.A. and D.A. for any journey performed by him in connection with the performance of his duties, at the rates admissible to non-official member of first class Government Committee under A.P.T.A. Rules.

19. Disposal of business:– Every question which the Committee is required to take into consideration shall be considered at a meeting, or, if the Chairman so desired by sending the necessary papers to every member for his opinion, and the question shall be disposed off in accordance with the decision of the majority.

Provided in case of equality of votes, the Chairperson shall have a second or a casting vote.

Explanation:– "Chair Person" for the purposes of this rule shall include Chair Person nominated under Rule 20 to preside over meeting.

20. Meetings:– (1) The Committee shall meet at such places and times as may be specified by the Chairperson.

The Chairperson shall preside over every meeting of the Committee at which he is present and in his absence, nominate a member of the Committee to preside over such meeting in his place and in the absence of such nomination by the Chairperson, the members of such committee present in such meeting may choose from amongst themselves a member to preside over such a meeting.

21. Notice of Meeting and list of Business:– (1) Ordinarily, 15 days notice shall be given to the members of a proposed meeting.

Provided that a Chairperson of such Committee, if he is satisfied that it is expedient to do so, may give notice of longer period for such meeting which shall not exceed one month.

(2) No business which is not on the list of business shall not be considered at the meeting without the permission of the Chairperson of the Committee.

22. Quorum:– No business shall be transacted at any meeting unless at least five members are present in that meeting, which shall include at least one member of the legislature.

Provided that in any meeting of such Committee less than five members are present, the Chairperson of such Committee may adjourn the meeting to another date informing member present and giving notice to the other members that he proposes to dispose of the business at the adjourned meeting whether there is prescribed quorum or not, and it shall thereupon be lawful for him to dispose of the business at the adjourned meeting irrespective of the number of members attending.

CHAPTER IV

Registration of Establishments

23. Manner of making application for registration of establishments:– (1) The application referred to in sub-section (1) of Section 7 of the Act shall be made in triplicate, in Form I annexed to these rules to registering officer of that area appointed under Section 6 of the Act in which the building or other construction work is to be carried on by the establishment.

(2) Every application referred to in sub-rule (1) shall be accompanied by a demand draft showing payment of the fees for the registration of the establishment.

(3) Every application referred to in sub-rule (1) shall be either personally delivered to the registering officer or sent to him by registered post.

(4) On receipt of the application referred to in sub-rule (1), the registering officer shall, after noting thereon the date of receipt by him of the application, grant an acknowledgement to the applicant.

24. Grant of certificate of registration:– (1) The registering officer, after receiving application under sub-rule (1) of Rule 23 shall register the establishment and issue a certificate of registration to the applicant within fifteen days of receipt of application if such applicant has complied with all the requirements as laid down in these rules and has made the application within such period as specified under clause (a) and clause (b) of sub-

section (1) of Section 7 of the Act. The certificate of registration to be granted by the registering officer shall be in Form II annexed to these rules.

(2) The registering officer shall maintain a register in Form III annexed to these rules showing the particulars of establishments in relation to which certificates of registration have been issued by him.

(3) If, in relation to an establishment, any change occurs in the ownership or management or other particulars specified in the certificate of registration, the employer of the establishment shall intimate the registering officer, within thirty days from the date when such change takes place, the date and particulars of such change, and the reasons thereof.

25. Payment of additional fees and amendment of register, etc.:– (1) Where on receipt of the intimation under sub-rule (3) of rule 24, the registering officer is satisfied that an amount higher than the amount, which has been paid by the employer as fees for the registration of the establishment is payable, he shall require such employer to pay additional sums which, together with the amount already paid by such employer, would be equal to such higher amount of fees payable for the registration of the establishment.

(2) Where, on receipt of the intimation referred to in sub-rule (3) of rule 24, the registering officer is satisfied that there has occurred a change in the particulars of the establishment, as entered in the register in Form III annexed to these rules, he shall amend the said register and record therein the change which has occurred:

Provided that the registering officer shall not carry out any amendment in the register in Form III annexed to these rules unless the appropriate fees have been deposited by the employer.

26. Conditions of registration:– (1) Every certificate of registration issued under rule 24 shall be subject to the following conditions, namely:

(a) the certificate of registration shall be non-transferable;

(b) the number of workmen employed as building workers in an establishment shall not, on any day, exceed the maximum number specified in the certificate of registration; and

(c) save as provided in these rules, the fees paid for the grant of registration certificate shall be non-refundable.

(2) The employer shall intimate the change, if any, in the number of workmen or the conditions of work to the registering office within fifteen days.

(3) The employer shall, before thirty days of the commencement and completion of any building or other construction work, submit a written notice to the Inspector, having jurisdiction in the area where the proposed building or other construction work is to be executed, intimating the actual date of the commencement or, as the case may be, completion of such building or other construction work in Form IV annexed to these rules.

(4) The certificate of registration of an establishment shall be valid only for such building and other construction work carried out by such establishment for which intimation required under sub-rule (3) has been given.

(5) A copy of the certificate of registration shall be displayed at the conspicuous place at the premises where the building and other construction work is being carried on.

27. Fees:– (1) The fees to be paid for the grant of a certificate of registration under rule 24 shall be as specified below, namely:

If the number of workers proposed to be employed as building workers, for a building or other construction work on one day:

(a) is upto 100	Rs. 100-00
(b) exceeds 100 but does not exceed 500	Rs. 500-00
(c) exceeds 500	Rs. 1000-00

CHAPTER V

Appeals, Copies of Orders, Payment of Fees, etc.

28. Filing of appeal before the appellate officer:– (1) Every appeal under sub-section (1) of Section 9 of the Act shall be preferred in the form of a memorandum signed by the aggrieved person or his authorised advocate and presented to the appellate officer in person or sent to him by registered post.

(2) The memorandum shall be accompanied by a certified copy of the order appealed against and a demand draft for rupees one hundred.

(3) The memorandum shall set forth concisely and under distinct heads the grounds of appeal.

(4) Where the memorandum of appeal does not comply with the provisions of sub-rule (2) and sub-rule (3), it may be returned to the

appellant for the purpose of being amended within a time to be fixed by the appellate officer which shall not exceed thirty days from the date on which the order appealed against has been communicated to the appellant.

(5) Where the memorandum of appeal is in order, the appellate officer shall admit the appeal, endorse thereon the date of hearing of such appeal, and shall register the appeal in a book to be kept for the purpose called the register of appeals.

(6)(i) When the appeal has been admitted, under sub-rule (5), the appellate officer shall send the notice of the appeal to the registering officer against whose order the appeal has been preferred and the registering officer shall thereupon send the record of the case to the appellate officer.

(ii) On receipt of the record, the appellate officer shall send a notice to the appellant to appear before him at such date and times as may be specified in the notice for the hearing of the appeal.

29. Failure to appear on the date of hearing:– If on the date fixed for hearing, the appellant does not appear, the appellate officer may dismiss the appeal for default of appearance of the appellant.

30. Restoration of appeals:– Where an appeal has been dismissed under rule 29, the appellant may apply to the appellate officer for the restoration of the appeal and if the appellate officer is satisfied that the appellant was prevented by sufficient cause from appearing, the appellate officer shall restore the appeal on its original number:

Provided that an application for restoration under this rule shall not be entertained by the appellate officer after thirty days from the date of such dismissal.

31. Hearing of appeal:– (1) If the appellant is present when the appeal is called on for the hearing, the appellate officer shall proceed to hear the appellant or his authorised advocate and pass an order on the appeal, either confirming, reversing or varying the order appealed against.

(2) The order of the appellate officer shall state the points for determination, the decisions thereon and reasons for such decisions.

(3) The order shall be communicated to the appellant and copy thereof shall be sent to the registering officer against whose order the appeal has been preferred.

32. Copy of Order of registration or of order in appeal:– Copy of the order of the registering officer or of the appellate officer may be

obtained by the person concerned or a person authorised by him on payment of fees of rupees fifty for each order on making application to the registering officer or the appellate officer, as the case may be, specifying the date and other particulars of the order made by the officer concerned. A copy of the certificate, of registration on loss or mutilation of such certificate may also be obtained in the like manner and on payment of like fees.

33. Payment of Fees:– (1) All amounts of money payable on account of registration, appeal, supply of copies or duplicate copies of certificate of registration shall be paid through a crossed demand draft in favour of the registering officer and appellate officer, as the case may be, and made payable at the branch of the Bank specified by the State Government from time-to-time at the headquarters of the concerned registering officer or appellate officer.

(2) The registering officer or the appellate officer, as the case may be, on receipt of the demand draft under sub-rule (1) shall arrange to deposit the amount in the appropriate account in the Bank specified by the State Government from time-to-time in the relevant head of account.

[1][CHAPTER V-A

33-A. Registration of Workers as beneficiaries:– (1) Any building worker who is entitled to be registered as per Section 12 of the Act may register his name with the Officer authorised by the Board for the purpose of the benefits under the Act.

(2) Application for such registration shall be made in Form XXVII together with the certificate of employment (containing the details of name, age, father's name and residential address, number of days worked as Building Worker during the preceding 12 months), issued by any of the persons or authorities specified below:–

(a) Any Officer of the Labour Department not below the rank of an Assistant Labour Officer upon his personal verification on the request made by the worker or by a Trade Union of Construction Workers ;

(b) Registered Establishment under the Act; and

1. Chapter V-A and V-B added by G.O.Ms.No. 57, LET&F (Lab. II) Department, dt. 26-6-2007.

(c) Government organisations or agencies engaged in building industry

Two passport size photographs of the applicant should accompany each application. One of the passport size photographs should be pasted on the application in the place provided for it. The second passport size photograph should be enclosed in a cover and attached to the application. The applicant should write his/her name on the reverse of the photograph. The person issuing the certificate of employment under this clause should attest both the photographs. The age proof by way of a school certificate or doctor's certificate should also be enclosed.

(3) The fee for such registration shall be Rs. 50/-.

(4)(a) If the Application for Registration is not accepted, the Registering Officer shall communicate the decision to refuse the registration duly supported by the reasons for such refusal with an express clause that an Appeal may lie to the specified Officer within 30 days from the date of communication of his decision. Such decision shall be communicated by Registered post with Acknowledgement Due or personal service or such other reasonable method to ensure that the communication reaches the addressee in the normal circumstances. The Appellate Officer's Designation and Address should also be incorporated in such communication. In order to comply with the provisions of Section 12(4) of the Act, the worker shall be given an opportunity of personal hearing as well to submit a written reply before taking a decision to reject. The Registering Officer shall maintain a register of rejected applications with necessary details such as date of receipt of application, date of issuance of Show Cause Notice, date of receipt of reply, date of personal hearing, orders passed and communicated etc.

(b) The aggrieved worker may submit his appeal to the next higher officer to the Registering officer, by way of simple memorandum enclosing the orders of the Registering Authority along with such other records as are necessary to decide the appeal. The appeal shall be disposed off and the orders communicated to the Building Worker, after affording an opportunity of hearing, if necessary not later than 30 days from the date of receipt of appeal. If there is a delay, the Appellate Officer shall record the reasons for such delay and communicate to the Building Worker along with his orders. The appellate officer shall maintain a register of appeals with necessary details such as date of receipt of appeal, date of issuance of notice of hearing to the Appellant and to the Registering Officer, date

of receipt of reply, date of personal hearing, orders passed and communicated etc.

(5) *Nomination:*– (i) Every building worker, shall at the time of making the application for his/her registration with the Board make a nomination, specifying the names of dependents, in Form XXVIII for the purpose of delivery of benefits in case of death of the worker.

(ii) A building worker may, in his/her nomination, distribute the amount payable under the Act amongst one or more dependents.

(iii) "Dependents" shall have the same meaning assigned to it under Section 2 (1)(d) of the Workmen's Compensation Act, 1923 (Central Act No. 8 of 1923).

(iv) Only when there are no "dependents" on the building worker, others may be nominated under item (i).

(v) A nomination may be modified by a building worker at any time after giving to the Board a written notice of his/her intention to do so.

(vi) If a nominee predeceases the building worker, the interest of the nominee shall revert to the building worker who shall make a fresh nomination, in Form XXVIII in respect of such interest, and

(vii) Every nomination, fresh nomination, or alteration of nomination, as the case may be, shall be sent by the registered building worker to the Registering Officer, who shall keep the same in safe custody.

(6) *Register of Beneficiaries to be maintained by the Registering Officer:*– The particulars of Workers registered as Beneficiaries shall be entered in the Register of Beneficiaries in Form XXIX by the Officer authorised by the Board under sub-rule (1) above.

(7) *Contribution of Building Worker:*– (a) A Building Worker who has been registered as a beneficiary under this Act shall, until he attains the age of 60 years, contribute to the fund at such rate per mensem, as may be specified by the State Government, by notification in the Official Gazette and different rates of contribution may be specified for different classes of Building Workers:

Provided that the Board may, if satisfied that the beneficiary is unable to pay his contribution due to any financial hardship, waive the payment of contribution for a period not exceeding three months at a time.

(b) A beneficiary may authorize his employer to deduct his contributions from his monthly wages and to remit the same, within fifteen days from such deduction, to the Board.

33-B. (1) Issuance of Identity Card:– Every building worker whose name has been registered under this clause shall be issued with an identity card in Form XXX at free of cost, as provided for in Section 13 of the Act.

(2) Supply of Duplicate Identity Card:– In the case of loss of identify card issued under sub-clause (i) above, a duplicate identify card will be issued by the Board either on an application by the registered building worker concerned, or, in the event of his death, by his nominee. The fee for the issue of a duplicate card shall be rupees twenty only.

(3) Every employer shall enter the details of Building Workers registered as beneficiaries in the Form XV Register maintained under Rule 240.

CHAPTER V-B

33-C. (1) The Government may, by notification, Constitute a Board to be known as **Andhra Pradesh Building and other Construction Workers Welfare Board.**

(2) **Constitution of the Board:–** The Board shall consist of the following members, namely:–

(a) A person nominated by the Government – Chairman

(b) Two persons representing the State Government as indicated below:

(i) Secretary to Government, Labour Department. – *Ex- Officio Member*

(ii) Commissioner of Labour – *Member-Convenor*

(c) Two persons representing the employers nominated by the Government in consultation with the Organisations of the employers functioning in Andhra Pradesh

(d) Two persons representing the building Workers nominated by the Government in consultation with the Organisations of the employees functioning in Andhra Pradesh ; and

(e) One person to be nominated by the Central Government to represent them:

Provided that atleast one member of the board shall be a woman.

(f) The terms of the Board shall be three years from the date of publication in the Andhra Pradesh Gazette.

(g) Casual vacancies of the members of the Board shall be filled in by the Government in the same manner as the regular non-official members are appointed.

(3) Procedure regarding Board meeting:– (a) The Board shall meet as often as may be necessary but not less than once in every three months commencing from the first meeting convened.

(b) The Secretary shall in consultation with the Chairman fix a date, time and place as well as agenda for, each meeting of the Board and give not less than seven days' notice thereof to each member:

Provided that seven days' notice shall not be necessary where, in the opinion of the Chairman that the business to be transacted at the meeting is of a very urgent nature requiring immediate attention and members are informed accordingly.

(c) The Chairman shall preside over all the meetings of the Board and no matter other than those included in the agenda shall be discussed at any meeting except with the permission of the Chairman:

Provided that if, for any other reason the Chairman is unable to attend a meeting, the provisions of Section 20 (2) of the Act shall be followed.

(d) No business shall be transacted in any meeting of the Board unless there is quorum of not less than one third of the number of members of the Board:

Provided that if a meeting adjourned by the Chairman for lack of quorum even after waiting for not less than thirty minutes from the appointed time, the Secretary shall, with the same agenda as fixed for the original meeting, fix a date not earlier than seven days from the date of that meeting and give notice in this behalf to all members and it shall thereupon be lawful to dispose off the business included in the agenda in the meeting irrespective of members present.

(e) All matters at the meeting of the Board shall be decided by majority of votes of members present and voting :

Provided that in case of equality of votes the Chairman shall have a casting vote or a second vote.

(f) Votes on any issue shall be taken by show of hands at the meeting of the Board and the names of the persons voting in favour and against on any proposal be recorded only if any member requests the Chairman to do so.

(4) Minutes of the meeting:– (a) The Secretary shall arrange for preparing the minutes of the proceedings of each meeting of the Board showing *inter alia* the names of the members present and shall forward a copy of such minutes to each member of the Board as soon after the meeting as possible.

(b) The minutes of the proceedings of each meeting shall be confirmed with such modification, if any, as may be decided upon at the next meeting of the Board and signed by the Chairman at that meeting by way of authentication.

(c) The minutes of the proceedings of each meeting of the Board authenticated by the Chairman under clause (b) shall be kept in a separate minutes book and the Secretary shall send a copy of such authenticated minutes of the proceedings of each meeting to the Government for information as early as possible.

(d) The minutes book shall be kept in safe custody of the Officer authorised by the Secretary who shall be responsible for recording the minutes of the meetings.

(5) Salaries and Allowances of Chairperson and Members:– (a) Travelling allowance and daily allowance of an official member shall be governed by rules applicable for journey performed by him on official duties and shall be paid by the authority paying his salary or by the Board, as per the instructions of the Government in force.

(b) Chairman and each non-official member of the Board shall be entitled to salaries and other allowances as prescribed by the Government.

(6) Budget of the Board:– The Secretary shall cause the budget estimates of the fund containing estimated receipts and expenditure for every financial year to be prepared and laid before the Board by 31st January every year and the Board will approve the budget before the 15th March.

The details of the all immovable and movable assets of the Board including the Bank deposits, expenditure incurred on Welfare Schemes, administration and other sub-heads against the current year's approved budget, and a detailed progress report on the functioning of the Board during the current year, shall be placed before the Board as annexure to the Budget. Thereafter, the budget copies shall be forwarded to the Central Government and State Government.

(7) Additional Expenditure:– If during the course of financial year, it becomes necessary to incur expenditure over and above the provision made in the budget, the Secretary shall submit additional demands to the Board for its approval. In case of urgency, for the reasons to be recorded in writing, the Secretary may obtain approval of the Chairman for such urgent additional expenditure, which is permissible under the Act and the Rules, and seek ratification in the next Board Meeting.

(8) Maintenance and Audit of Accounts of the Fund:– (a) The Board shall maintain proper accounts and other relevant records and prepare annual statement of accounts including statement of Income and Expenditure and balance sheet, in such form as may be notified by the Government in consultation with the Comptroller and Auditor General of India.

(b) The accounts of the Board shall be balanced on the 31st March of each year.

(c) The Accounts of the fund shall be maintained by the Secretary of the Board and shall be audited by the Comptroller and Auditor General of India.

(d) The Government may, also at any time, order special audit of the accounts of the Board.

(e) The expenses for the audit shall be as may be approved by the Government.

(9) Annual report:– (a) The Secretary of the Board shall prepare an Annual Report in a descriptive form explaining all the welfare and other activities of the Board during the Financial Year and submit the same to the Central and State Governments alongwith the Auditor's Report and Balance Sheet, duly approved by the Board, before the 15th July succeeding the Financial Year.

(b) The State Government shall cause the Annual Report and Auditor's Report to be laid, as soon as may be after they are received, before the State Legislature.

33-D. Appointment of Secretary, Other Officers, Clerical and other staff by the Board and their service conditions:– (1) The Board may, create all posts of and appoint from among the existing Officers and Staff of the Labour Department of the State Government, a Secretary not below the rank of Joint Commissioner of Labour, such number of other officers, clerical and other staff as may be necessary for carrying out its functions under the Act, in the Head Office. The entire field work to carry out the functions under this Act shall be done by regular staff and officers of the Labour Department. All appointments shall be as per the allotment of officers and Staff made by the Government in this regard. In case of clerical and other subordinate staff, the Board may, depending on the exigencies of work, resort to Contract appointments for a specific period in accordance with the Government instructions in force. The Board shall obtain approval of the Government for creation of posts, appointments and other matters incidental thereto. The Commissioner of Labour shall have administrative control over the Secretary, and other officers appointed in the Board.

(2) The salaries and other allowances of the Officers and other staff of the Board shall be governed by the existing rules of the Government.

(3) The Board may outsource the operations such as Maintenance of Beneficiary Accounts, Issuance of Identity Cards, receipt of contributions, registration fee, Cess etc; and implementation of welfare measures, as a cost effective measure, taking proper care about the safety of funds, control over implementation and such other measures as are essential to effectively implement the provisions of the Act. However, such proposals shall be approved by the Government, before they are implemented.

33-E. (1) The Board may open Accounts in State Bank of India or other Nationalised Banks to operate the transactions pertaining to the "Andhra Pradesh Building and Other Construction Workers Welfare Fund" constituted under Section 24 of the Act.

(2) The Accounts shall be operated by the Secretary, who is the chief executive of the Board.

(3) The Accounts with each of the Bank shall be reconciled once in every quarter with the Cash Book of the Board. The consolidated debits and credits of Bank Accounts shall tally with the Income and Expenditure of the Fund. A Bank Reconciliation Statement shall be made as at the end

of every quarter to explain the inconsistencies between the fund Account maintained in the Board and the Bank Accounts.

(4) The Secretary of the Board shall prepare, at the end of every quarter, an estimated cash inflow and outflow statement for the next quarter and accordingly invest the amounts lying to the credit of savings Bank accounts in fixed deposit for appropriate period which yield higher rate of interest.

(5) In the contingency of non-availability of the Secretary and in case of emergencies, for reasons to be recorded in writing and communicated to the Bank, the accounts may be operated by another two officers of the Board or the State Labour Department approved by the Board for this purpose on the recommendations of the Commissioner of Labour. However, such transactions shall be ratified by the Secretary, as soon as he is available, under intimation to the concerned Bank.

33-F. (1) No person shall be chosen as or continue to be, a member of the Board who,–

(a) is an officer of the Board; or

(b) is or at any time has been adjudged insolvent; or

(c) is found to be a lunatic or of unsound mind; or

(d) is or has been convicted of any offence involving moral turpitude.

(2) The Government may remove from office any member who,–

(a) is or has become subject to any of the disqualifications specified in sub-section (1); or

(b) is absent without leave of the Board for more than three consecutive meetings of the Board.

33-G. Any member of the Board may at any time, resign his office by writing under his hand addressed to the Government, and his office shall, on acceptance of resignation by the Government, become vacant.

33-H. In the event of any vacancy in the office of member of the Board on account of death, resignation, disqualification or removal or otherwise, the Board shall forthwith communicate the occurrence to the Government and the vacancy shall be filled not later than ninety days from the date of the occurrence of the vacancy, and the person so nominated

to fill the vacancy shall hold office so long as the member in whose place he is nominated would have held it if the vacancy had not occurred:

Provided that during any such vacancy, the continuing members may act as such members if no vacancy has occurred.

33-I. (1) The Government may at any time appoint any person to investigate or enquire into the working of the Board or any scheme and submit a report to the Government in that behalf.

(2) The Board shall give to the person so appointed all facilities for the proper conduct of the investigation or inquiry, and furnish to him such documents, accounts or information in possession of the Board as he or she may require.

(3) Any person so appointed to investigate or inquire into the working of any Board or scheme may also exercise all the powers of an Inspector appointed under this Act.

33-J. (1) If the Government on consideration of the report referred to in sub-rule (1) of Rule 33-J is of the opinion,–

(a) that the Board is unable to perform its functions; or

(b) that the Board has persistently made default in the discharge of its functions or has exceeded or abused its powers,–

the Government may, by notification, supersede the Board in question and reconstitute it in the prescribed manner.

(2) When the Board is superseded, the following consequences shall follow:–

(a) All the members of the Board shall, from the date of publication of the notification vacate their office,

(b) The Vehicle, furniture, stationery or other movable or immovable property under the control or custody of the Chairman or Members of the Board shall immediately be restored to the Secretary under proper acknowledgement.

33-K. The Government may give directions to the Board as to the carrying into execution of any provisions of the Act and Rules, schemes and notifications issued and the Board shall be bound by such directions.

The Commissioner of Labour is competent to call for any records, reports or other particulars pertaining to the functioning of the Board and the Secretary shall furnish such information with reasonable deligence.

33-L The Andhra Pradesh Building and Construction Workers Welfare Board may formulate welfare schemes for building workers in furtherance of the functions mentioned in Section 22 of the Act. The Board may also adopt such procedures, forms and registers etc., as are required for carrying out the said functions and for application of the Andhra Pradesh Building and other Construction Workers welfare Fund constituted by the Board under Section 24 of the Act. Such schemes, procedures, forms and registers etc., shall be approved by the Government, before they are implemented.]

PART III

SAFETY AND HEALTH

CHAPTER VI

General Provisions

34. Excessive noise, vibration, etc.:– An employer shall ensure at a construction site of a building or other construction work that adequate measures are taken to protect building workers against the harmful effects of excessive noise or vibration at such construction site and the noise level in no case exceeds the limits laid down in Schedule VI annexed to these rules.

35. Fire protection:– An employer shall ensure at a construction site of a building or other construction work that–

(a) such construction site is provided with–

(i) fire extinguishing equipment sufficient to extinguish any probable fire at such construction site;

(ii) an adequate water supply at ample pressure as per national standards;

(iii) number of trained persons required to operate the fire extinguishing equipment provided under sub-clause (i);

(b) fire extinguishing equipment provided under sub-clause (i) of clause (a) is properly maintained and inspected at regular intervals of not less than once in a year by the responsible person and a record of such inspections is maintained;

(c) in case of every launch or boat or other craft used for transport of building workers and the cabin of every lifting appliance including mobile crane, adequate number of portable fire extinguishing equipment of suitable type shall be provided at each of such launch or boat or craft or lifting appliance.

36. Emergency action plans:– An employer shall ensure at a construction site of a building or other construction work that in case more than five hundred building workers are employed at such construction site emergency action plan to handle the emergencies like–

(a) fire and explosion;

(b) collapse or lifting appliances and transport equipment;

(c) collapse of building, sheds or structures, etc.;

(d) gas leakage or spillage of dangerous goods or chemicals;

(e) drowning of building workers sinking of vessels; and

(f) land slides getting building worker buried, floods, storms and other natural calamities, is prepared and submitted for the approval of the Director General.

37. Fencing of motors, etc.:– An employer shall ensure at a construction site of a building or other construction work that–

(a) all motors, cogwheels, chains and friction gearing, flywheels, shafting, dangerous and moving parts of machinery (whether or not driven by mechanical power) and steam pipes are securely fenced or lagged;

(b) the fencing of dangerous parts of machinery is not removed while such machinery is in motion or in use;

(c) no part of any machinery which is in motion and which is not securely fenced is examined, lubricated, adjusted or repaired except by a person skilled for such examination, lubrication, adjustment or repairs;

(d) machine parts are cleaned when such machine is stopped;

(e) when a machine is stopped for servicing or repairs, adequate measures are taken to ensure that such machine does not restart inadvertently.

38. Lifting and carrying of excessive weight:– An employer shall ensure at a construction site of a building or other construction work that–

(a) no building worker lifts by hand or carries overhead or over his back or shoulders any material, article, tool or appliances exceeding in weight the maximum limits set out in the following table:

Table

Person	Maximum Weight Load
Adult man	55 kg
Adult woman	30 kg
Adolescent male	30 kg
Adolescent female	20 kg

unless aided by any other building worker or a mechanical device.

(b) no building worker aided by other building workers, lift by hand or carry overhead or over their back or shoulders, any material, article, tool or appliance exceeding in weight the sum total of maximum limits set out for each building worker separately under clause (a), unless aided by a mechanical device.

39. Health and safety policy:– (1)(a) Every establishment employing fifty or more building workers shall prepare a written statement of policy in respect of safety and health of building workers and submit the same for the approval of the Director General;

(b) the policy referred to in clause (a) shall contain the following namely:

(i) the intentions and commitments of the establishment regarding health, safety and environmental protection of building workers;

(ii) organisational arrangements made to carry out the policy referred to in clause (a) specifying the responsibility at different levels of hierarchy;

(iii) responsibilities of the principal employer, contractor, sub-contractor, transporter or other agencies involved in the building or other construction work;

(iv) techniques and methods for assessment of risk to safety, health and environmental and remedial measures therefor;

(v) arrangements for training of building workers, trainers, supervisors or other persons engaged in the construction work;

(vi) other arrangements for making the policy referred to in clause (a), effective;

(c) the intention and commitment referred to in sub-clause (a) of sub-rule (1), signed by an authorised signatory shall be sent to the State Government.

(2) A copy of the policy referred to in clause (a) of sub-rule (1), signed by an authorised signatory shall be sent to the State Government for information.

(3) The establishment shall revise the policy referred to in clause (a) of sub-rule (1) as often as necessary under the following circumstances, namely:

(i) whenever any expansion or modification having implication on safety and health of the building workers is made in such building or other construction work; or

(ii) whenever any new building or other construction work, substances, articles or techniques are introduced having implication on health and safety of building workers.

(4) A copy of the policy referred to in sub-clause (a) of sub-rule (1) shall be displayed at the conspicuous places in Hindi and a local language understood by the majority of building workers at a construction site.

40. Dangerous and harmful environment:– An employer shall ensure at a construction site of a building or other construction work that,–

(a) when an internal combustion engine exhausts into a confined space or excavation or tunnel or any other workplace where neither natural ventilation nor artificial ventilation system is adequate to keep the carbon monoxide content of the atmosphere below fifty parts per million, adequate and suitable measures are taken at such workplace in order to avoid exposure of building workers to health hazards;

(b) no building worker is allowed to enter any confined space or tank or trench or excavation wherein there is given off any dust, fumes or other impurities of such nature and to such extent as is likely to be injurious or offensive to the building worker or in which explosives, poisonous, noxious or gaseous material or other harmful articles have been carried or stored or in which dry ice has been used as a refrigerant, or which has been fumigated or in which

there is a possibility of oxygen deficiency, unless all practical steps have been taken to remove such dust, fumes, or other impurities and dangers which may be present and to prevent any further ingress thereof, and such work place or tank or trench or excavation is certified by the responsible person to be safe and fit for the entry of such building workers.

41. Overhead Protection:– (1) The employer shall ensure at the building or other construction work that overhead protection is erected along the periphery of every building under construction which shall be of fifteen metres or more in height when completed.

(2) Overhead protection referred to in sub-rule (1) shall not be less than two metres wide and shall be erected at a height not more than five metres above the base of the building and the outer edge of such overhead protection shall be one hundred fifty millimetres higher than the inner edge thereof or shall be erected at an angle of not more than twenty degrees to its horizontal sloping into the building.

(3) The employer shall ensure at the building and other construction work that any area exposed to risk of falling material, article or objects is roped off or cordoned off or otherwise suitably guarded from inadvertent entry of persons other than building workers at work in such area.

42. Slipping, tripping, cutting, drowning and falling hazards:– (1) All passageways, platforms and other places of construction work at the building or other construction work shall be kept by the employer free from accumulations of dust, debris or similar material and from other obstructions that may cause tripping.

(2) Any sharp projections or protruding nails or similar projections which may cause any cutting hazard to a building worker at the building or other construction work shall be removed or otherwise made safe by taking suitable measures by the employer.

(3) No employer shall allow any building worker at building or other construction work to use the passageway, or a scaffold, platform or any other elevated working surface which is in a slippery and dangerous condition and shall ensure that water, grease, oil or other similar substances which may cause the surface slippery, be removed or sanded, saw dusted or covered with suitable material to make it safe from slipping hazard at a building or other construction work.

(4) Wherever building workers at a building or other construction work are exposed to the hazard of falling into water, they shall be provided by

the employer with adequate equipment for saving themselves from drowning and rescuing from such hazard and if the Director General considers necessary, well-equipped boat or launch manned with trained personnel shall be provided by the employer at the site of such work.

(5) Every open side or opening into or through which a building worker, vehicle or lifting appliance or other equipments may fall at a building or other construction work shall be covered or guarded suitably by the employer to prevent such fall except where free access is necessary by reasons of the nature of the work.

(6) Wherever building workers at a building or other construction, work are exposed to the hazards of falling from height while employed on such work, they shall be provided by the employer with adequate equipment or means for saving them from such hazards. Such equipment or means shall be in accordance with the national standards.

(7) Whenever there is a possibility of falling of any material, equipment or building worker at a construction site relating to a building or other construction work, adequate and suitable safety net shall be provided by employer in accordance with the national standards.

43. Dust, gases, fumes etc.:– An employer shall prevent concentration of dust, gases or fumes by providing suitable means to control their concentration within the permissible limit so that they may not cause injury or pose health hazard to a building workers at a building or other construction work.

44. Corrosive substances:– The employer shall ensure that corrosive substances, including alkalis and acids, shall be stored and used by a person dealing with such substances at a building or other construction work in such a manner that it does not endanger the building worker and suitable protective equipment shall be provided by the employer to a building worker during handling or use of such substances at a building or other construction work and in case of spillage of such substances on the building worker, immediate remedial measures shall be taken by the employer.

45. Eye protection:– Suitable personal protective equipment for the protection of eyes shall be provided by an employer and used by the building worker engaged in operations like welding, cutting, chipping, grinding or similar operations which may cause hazard to his eyes at a building or other construction work.

46. Head protection and other protective apparel:– (1) Every building worker required to pass through or work within the areas at

building or other construction work where there is hazard of his being struck by falling objects or materials shall be provided by the employer with safety helmets of type and tested in accordance with the national standards.

(2) Every building worker required to work in water or in wet concrete or in other similar work at a building or other construction work, shall be provided with suitable waterproof boots by the employer.

(3) Every building worker required to work in rain or in similar wet condition at building or other construction work, shall be provided with water-proof coat with hat by the employer.

(4) Every building worker required to use or handle alkalies, acid or other similar corrosive substances at a building or other construction work shall be provided with appropriate protective equipment by an employer, in accordance with the national standards.

(5) Every building worker engaged in handling sharp objects or materials at a building or other construction work which may cause hand injury, shall be provided with suitable hand-gloves by the employer, in accordance with the national standards.

47. Electrical hazards:– (1) Before commencement of any building or other construction work, the employer shall take adequate measures to prevent any worker from coming into physical contact with any electrical equipment or apparatus, machines or live electrical circuit which may cause electrical hazard during the course of his employment at a building or other construction work.

(2) The employer shall display and maintain suitable warning signs at conspicuous places at a building or other construction work in Hindi and in a local language understood by the majority of the building workers.

(3) In workplaces at a building or other construction work where the exact location of underground electric power line is not known, the building workers using jack hammers, crow bars or other hand-tools which may come in contact with a live electrical line, shall be provided by the employer with insulated protective gloves and footwear of the type in accordance with the national standards.

(4) The employer shall ensure that, as far as practicable, no wiring, which may come in contact with water or which may be mechanically damaged, is left on ground or floor at a building or other construction work.

(5) The employer shall ensure that all electrical appliances and current carrying equipment used at a building or other construction work are made of sound material and are properly and adequately earthed.

(6) The employer shall ensure that all temporary electrical installations at a building or other construction work are provided with earth-leakage circuit breakers.

(7) The employer shall ensure that all electrical installations at a building or other construction work comply with the requirements of any law for the time being in force.

48. Vehicular Traffic:– (1) Whenever any building or other construction work is being carried on, or is located in close proximity to a road or any other place where any vehicular traffic may cause danger to building workers, the employer shall ensure that such building or other construction work is barricaded and suitable warning signs and lights displayed or erected to prevent such danger and if necessary, he may make a request in writing to the concerned authorities to control such traffic.

(2) The employer shall ensure that all vehicles used at construction site of a building or other construction work comply with the requirements of the Motor Vehicles Act, 1988 (59 of 1988) and the rules made thereunder.

(3) The employer shall ensure that a driver of a vehicle of any class or description operating at a construction site of a building or other construction work holds a valid driving licence under the Motor Vehicles Act, 1988 (59 of 1988).

49. Stability of structures:– The employer shall ensure that no wall, chimney or other structure or part of a structure is left unguarded in such condition that it may fall, collapse or weaken due to wind pressure vibration or due to any other reason at a site of a building or other construction work.

50. Illumination of passageways, etc.:– The employer shall ensure that illumination sufficient for maintaining safe working conditions at a site of a building or other construction work is provided where building workers are required to work to pass and for passageway, stairways and landing, such illumination is not less than that provided in the relevant national standards.

51. Stacking of materials:– The employer shall ensure, at a construction site of a building or other construction work that–

(a) all building materials are stored or stacked in a safe and orderly manner to avoid obstruction of any passageway or place of work;

(b) material piles are stored or stacked in such a manner as to ensure stability;

(c) material or equipment is not stored upon any floor or platform in such quantity as to exceed its safe carrying capacity;

(d) material or equipment is not stored or placed so close to any edge of a floor or platform as to endanger the safety of persons below or working in the vicinity.

52. Disposal of debris:– The employer shall ensure at a construction site of a building or other construction work that–

(a) debris are handled and disposed off by a method which does not cause danger to the safety of a person;

(b) debris are not allowed to accumulate so as to constitute a hazard;

(c) debris are kept sufficiently moist to bring down the dust within the permissible limit;

(d) debris are not thrown inside or outside from any height of such building or other construction work;

(e) on completion of work, left over building material, article or other substance or debris are disposed off as soon as possible to avoid any hazard to any traffic or person.

53. Numbering and marking of floors:- The employer shall ensure that each floor or level of a building or other construction work is appropriately numbered or marked at the landing of such floor or level.

54. Use of safety helmets and shoes:– The employer shall ensure that all persons who are performing any work or services at a building or other construction work, wear safety shoes and helmets conforming to the national standards.

CHAPTER VII

Lifting Appliances and Gear

55. Construction and maintenance of lifting appliances:– The employer shall ensure at a construction site of a building or other construction work that–

(a) All lifting appliances, including their parts and working gear, whether fixed or moveable and any plant or gear used in anchoring or fixing of such appliances, are–

(i) of sound construction, sound material, and of adequate strength to serve the purpose for which these are to be used and all such appliances shall be free from patent defects; and

(ii) maintained in good repair and working condition.

(b) (i) every drum or pulley around which the rope of any lifting appliance is carried, is of adequate diameter and sound construction in relation to such rope;

(ii) any rope which terminates at the winding drum of a lifting appliance is securely attached to such drum and at least three dead turns of such rope remain on such drum in every operating position of such lifting appliance;

(iii) the flange of drum projects twice the rope diameter beyond the last layer of such rope and if such projection is not available, other measures like anti-slackness guards shall be provided to prevent such rope from coming off such drum;

(c) Every lifting appliance is provided with adequate and efficient brakes which–

(i) are capable of preventing fall of a suspended load (including any test load) and of effectively controlling such load while it is being lowered;

(ii) act without shock;

(iii) have shoes that can be easily removed for running; and

(iv) are provided with simple and easily accessible means of adjustment:

Provided that nothing contained in this clause shall apply to steam winch which can be operated as safely as with brakes as provided in accordance with this clause;

(d) Controls of every lifting appliance–

(i) are so situated that the driver of such appliance at his stand or seat has ample room for operating and has an unrestricted view of building or other construction work, as far as practicable, and that he remains clear of the load and ropes, and that no load passes over him;

(ii) are positioned with due regard to ergonometric considerations for proper operation of such appliance;

(iii) are so located that the driver of such appliance remains above the height of the heel block during the whole operation of such appliance;

(iv) have open them or adjacent to them clear markings to indicate their purpose and mode of operations;

(v) are provided, where necessary, with a suitable locking device to prevent accidental movement or displacement;

(vi) move, as far as practicable, in the direction of the resultant load movement; and

(vii) wherever automatic brakes are provided, automatically come to the neutral position in case of power failure.

56. Test and periodical examination of lifting appliances:– The employer shall ensure at construction site of a building or other construction work that–

(a) all lifting appliances including all parts and gears thereof, whether fixed or moveable, are tested and examined by a competent person before being taken into use for the first time or after it has undergone any alterations or repairs liable to affect its strength or stability or after erection on a construction site and also once at least in every five years, in the manner specified in Schedule I annexed to these rules;

(b) all lifting appliances are thoroughly examined by a competent person once at least in every twelve months and where the competent person making such examination forms the opinion that the lifting appliance cannot continue to function safely, he shall forthwith give notice in writing of his opinion to the owner of the lifting appliance.

Explanation:– For the purpose of this rule, thorough examination means a visual examination, supplemented, if necessary, by other means such as hammer test, carried out as carefully as the conditions permit, in order to arrive at a reliable conclusion as to the safety of the parts examined; and, if necessary, for such examination, parts of the lifting appliance and gear, shall be dismantled.

57. Automatic safe load indicators:– (a) The employer shall ensure at a construction site of a building or other construction work that–

(i) every crane, if so constructed that the safe working load may be varied by raising or lowering of the jib or otherwise, is attached with an automatic indicator of safe working loads which gives a warning to the operator wherever the load exceeds the safe working load;

(ii) cut-out is provided which automatically arrests the movements of the lifting parts of every crane if the load exceeds the safe working load, wherever possible;

(b) the provisions of sub-clause (i) of clause (a) apply, except where it is not possible to install an automatic safe load indicator, in which case, provision of a table showing the safe working loads at the corresponding inclinations or radii of the jib on the crane shall be considered sufficient.

58. Installation:– The employer shall ensure at a construction site of a building or other construction work that–

(a) fixed lifting appliances are installed;

(i) by competent persons;

(ii) in a manner that such appliances cannot be displaced by the load, vibration or other influences;

(iii) in a manner that the operator of such appliances is not exposed to danger from loads, ropes or drums; and

(iv) in a manner that the operator can either see over the zone of operation or communicate with all loading and unloading points by signal, or other communication systems;

(b) adequate clearance is provided between parts or loads of lifting appliances, and–

(i) the fixed objects such as walls and posts; or

(ii) electrical conductors;

(c) the lifting appliances, when exposed to wind loading are given sufficient additional strength, stability and rigidity to withstand such loading safely;

(d) no structural alterations or repairs are made on any part of the lifting appliances that affect the safety of such appliances without obtaining the opinion of the competent person to this effect.

59. Winches:- The employer shall ensure at a construction site of a building or other construction work that-

(a)(i) winches are not used if control levers operate with excessive friction or play;

(ii) double gear winches are not used unless a positive means of locking the gear shift is provided;

(iii) there is no load other than the fall and the hook assembly on the winch while changing gears on a two gear winch;

(iv) adequate protection is provided to winch operator against abnormal weather;

(v) temporary seats or shelters for winch operators which may pose hazard to the winch operator or any other building workers are not allowed to be used;

(vi) control levers are secured in the neutral position and, whenever possible, the power is shut-off whenever winches are left unattended.

(b) in use of every steam winch–

(i) measures are taken to prevent escaping steam from obscuring any part of the construction site or other work place or from otherwise hindering or injuring any building worker;

(ii) extension control levers which tend to fall of their own weight are counter-balanced;

(iii) winch operators are not permitted to use the winch control extension levers except for short handles on wheel type controls and that such levers are of adequate strength, secure and fastened with metal connections at the fulcrum and at the permanent control lever;

(c) electric winches are not used for building work where–

(i) the electro-magnetic brake is unable to hold the load; or

(ii) one or more control points, either hoisting or lowering, are not operating properly.

60. Buckets:– The employer shall ensure at a construction site of a building or other construction work that tip-up buckets are equipped with a device that effectively prevents accidental tipping.

61. Identification and marking of safe working load:– The employer shall ensure at a construction site of a building or other construction work that–

(a) every lifting appliance and loose gear is clearly marked for its safe working load and identification by stamping or other suitable means;

(b) (i) every derrick (other than derrick crane) is clearly marked for its safe working load when such derrick is used either in single purchase with a lower block or in union purchases in all possible block positions;

(ii) the lowest angle to the horizontal, to which the derrick may be used, is legibly marked;

(c) every lifting appliance having more than one working load is fitted with effective means to enable the operator to determine safe working load at each point under all conditions of use;

(d) means to ascertain the safe working load for lifting gears under such conditions in which such gears may be used are provided to enable a worker using gears and such means shall consist of–

(i) marking the safe working load in plain figures or letters upon the sling or upon a table or ring of durable material attached securely thereto in case of chain slings; and

(ii) either the means specified in sub-clause (i) or notices so exhibited as can be easily read by any concerned building worker stating the safe working load for the various sizes of the wire rope slings used in case of wire rope slings.

62. Loading and lifting appliances and lifting gears:– The employer shall ensure at a construction site of a building or other construction work that–

(a) no lifting appliance, lifting gear or wire rope is used in an unsafe way and in such a manner as to involve risk to life of building workers, and that they are not loaded beyond their safe working load except for testing purposes under the direction of a competent person in the manner as specified in Schedule I annexed to these rules.

(b) no lifting appliance, lifting gear or any other material handling appliance is used, if–

(i) the Inspector having jurisdiction is not satisfied with reference to a certificate of test or examination or to an authenticated record maintained as provided under these rules; and

(ii) in the view of such Inspector, the lifting appliance, lifting gear or any other material handling appliance is not safe for use in building or other construction work;

(iii) no pulley block is used in building or other construction work unless the safe working load and its identification are clearly marked on such block.

63. Operator's cab or cabin:– The employer shall ensure at a construction site of a building or other construction work that-

(a) the operator of every lifting machine in outdoor service is provided with a cab or cabin which–

(i) is made of fire resistant material;

(ii) has a suitable seat, a footrest and protection from vibration;

(iii) affords the operator an adequate view of the area of operation;

(iv) affords the necessary access to working parts in cab;

(v) affords the operator adequate protection against the weather;

(vi) is adequately ventilated; and

(vii) is provided with a suitable fire extinguisher.

64. Operation of lifting appliances:– The employer shall ensure at a construction site of a building or other construction work that–

(a) every crane driver or lifting operator possess adequate skill and training in the operation of the particular lifting appliance;

(b) no person under eighteen years of age is in control of any lifting appliance, scaffold winch, or to give signals to the operator;

(c) precaution is taken by the trained operator to prevent lifting appliance from being set in motion;

(d) the operation of lifting appliance is governed by signals, in conformity with the relevant national standards;

(e) the lifting appliance operator's attention is not distracted while he is working;

(f) no crane, hoist, winch or other lifting appliance or any part of such crane, hoist, winch or other lifting appliance is, except for testing purposes, loaded beyond the safe working load;

(g) during the hoisting operations effective precaution is taken to prevent any person from standing or passing under the load in such operations;

(h) operator does not leave lifting appliance unattended while power is on or load is suspended to such appliance;

(i) no person rides on a suspended load or on any lifting appliance;

(j) every part of a load in course of being hoisted or lowered is adequately suspended and supported to prevent danger;

(k) every receptacle used for hoisting bricks, tiles, slates or other material is suitably enclosed as to prevent the fall of any such materials;

(l) the hoisting platform is enclosed when loose materials or loaded wheel-barrows, are placed directly on such platform or lowering, such materials or wheel-barrows;

(m) no material is raised, lowered or slowed with any lifting appliance in such a way as to cause sudden jerks to such appliance;

(n) in hoisting a barrow, any wheel of such barrow is not used as a means of support unless adequate steps are taken to prevent the axle of such wheel from slipping out of its bearings;

(o) long objects like planks or girders are provided with a tag line to prevent any possibility of danger while raising or lowering such objects;

(p) during the process of landing of material, a building worker is not permitted to lean out into empty space for finding out the loading and unloading of such materials;

(q) the hosting of loads at places where there is regular flow of traffic is carried out in an enclosed space, or in case such hoisting is impracticable in enclosed space, measures are taken to hold up or divert the traffic during the time of such hoisting;

(r) adequate steps are taken to prevent a load, in the course of being hoisted or lowered from coming into contact with any object to avoid any displacement of such load;

(s) appliances are provided and used for guiding heavy loads when raising or lowering heavy loads to avoid crushing of hands of building workers during such raising or lowering of loads.

65. Hoists:– The employer shall ensure at a construction site of a building or other construction work that–

(a) hoist towers are designed according to relevant national standards;

(b) hoist shafts are provided with rigid panels or other adequate fencing–

(i) at the ground level on all sides of such shafts; and

(ii) at all other levels on all sides of the access to such shafts;

(c) the walls of hoist shafts, except at approaches, extend to at least two metres above the floor or platform of access to such shafts;

(d) approaches to a hoist are provided with gates which are–

(i) gridded to maintain visibility;

(ii) at least two metres height; and

(iii) equipped with a device which requires such gate to be closed before the platform of such hoist can leave the landing and prevents the gate from being opened unless such platform, is at the landing;

(e) approaches to a hoist are adequately lit;

(f) the guides of hoist platforms offer sufficient resistance to bending and, to bucking, in the case of jamming, by providing a safety catch;

(g) overhead beams and their supports are capable of holding the total maximum live and dead loads that such beams and supports will be required to carry, with a safety factor of at least five;

(h) a clear space is provided–

(i) above the highest stopping place of a cage or platform to allow sufficient unobstructed travel of such cage or platform in case of over-winding; and

(ii) below the lowest stopping place of such cage or platform;

(i) adequate covering is provided above the top of hoist shafts to prevent materials from falling into such shafts;

(j) outdoor hoist towers are erected on adequately firm foundations and are securely braced, guided and anchored;

(k) a ladder way extends from the bottom to the top of every outdoor hoist tower in case no other ladder way exists within easy reach and such ladder way comply with the relevant national standards;

(l) the rated capacity of a hoisting engine is at least one and half times the maximum load that such engine will be required to move;

(m) all gearing on a hoisting engine is securely enclosed;

(n) steam piping of a hoisting engine is adequately protected against accidental contact of such piping with a building worker;

(o) electrical equipment of a hoisting engine is effectively earthed;

(p) a hoist is provided with suitable devices to stop a hoisting engine as soon as the platform of such hoist reaches its highest stopping place;

(q) a hoisting engine is protected by a suitable cover against weather and falling objects;

(r) a hoisting engine set up in a public thoroughfare is completely enclosed;

(s) all exhaust steam pipes discharge steam in such a manner that the steam so discharged, does not scald any person or obstruct the operator's view;

(t) the motion of a hoist is not reversed without first bringing it to rest to avoid any harm from such reverse motion;

(u) a hoist, not designed for the conveyance of persons, is not set in motion from the platform of such hoist;

(v) pawls and ratchet-wheels of a hoist, requiring disengagement of such pawls from such ratchet-wheels, before the platform of such hoist is lowered, are not used;

(w) a platform of a hoist is capable of supporting such maximum load, that such platform may carry, with a safety factor of at least three;

(x) a platform of a hoist is equipped with suitable safety gear which can hold such platform with its maximum load in case its hoisting rope breaks;

(y) on platform of a hoist, the wheelbarrows or truck are efficiently blocked in a safe position;

(z) a cage of a hoist or a platform, where the building workers are required to enter into such cage or to go on such platform at landing level, is provided with a locking arrangement to prevent such cage or platform from moving during the time a worker enters or leaves such cage or platform;

(za) the sides of a platform of a hoist which, are not used for loading or unloading, are provided with toe-board and enclosures of a wire mesh or any other suitable means to prevent the fall of any part of a load from such platform;

(zb) a platform of a hoist, which has any probability of falling and part of load from it, is provided with an adequate covering with such fall;

(zc) the counter-weights of a hoist consisting of an assemblage of several parts are so constructed that such parts are rigidly connected together;

(zd) the counter-weights of a hoist run between guides;

(ze) at every level of work the building workers are provided with adequate platforms for performing such work;

(zf) a legible notice in Hindi as well as in a local language is displayed at–

(i) a conspicuous place of the platforms of a hoist and that such notice states the maximum carrying capacity of such hoist in kilograms;

(ii) a conspicuous place on the hoisting engine and that such notice states maximum lifting capacity of such hoist in kilograms;

(iii) a conspicuous place on a hoist authorised and certified for the conveyance of the person on the platform or cage and such notice states the maximum number of persons to be carried on such hoist at one time;

(iv) a conspicuous place on a hoist carrying goods and other materials and such notice states that such hoist is not meant for carriage of persons.

66. Fencing of and means of access to lifting appliances:– The employer shall ensure at a construction site of a building or other construction work that–

(a) safe means of access is provided to every part of a lifting appliance;

(b) the operator's platform on every crane or tip driven by mechanical power is securely fenced and is provided with safe means of access and where access to such platform is by a ladder–

(i) the sides of such ladder extend to a reasonable height beyond such platforms or some other suitable handhold is provided in lieu thereof to prevent any falling of persons from such platforms;

(ii) the handling place on such platform is maintained free from obstruction and slipping; and

(iii) in case the height of such ladder exceeds six metres, the resting platforms are provided on such ladder at every six metres of its height and where the distance between last platform so provided and the top end of such ladder is more than two metres then on such top end.

67. Rigging of derricks:– The employer shall ensure at a construction site of a building or other construction work that every derrick has current and relevant rigging plans and any other information necessary for the safe rigging of such derricks and its gear.

68. Securing of derrick foot:– The employer shall ensure at a construction site of a building or other construction work that appropriate measures are taken to prevent the foot of a derrick being lifted out of its socket or support.

69. Construction and maintenance of lifting gear:– The employer shall ensure at a construction site of a building or other construction work that–

(a) every lifting gear is–

(i) of good design and construction, sound material and adequate strength to perform the work for which it is used;

(ii) free from patent defects; and

(iii) properly maintained in good repair and working order;

(b) components of the loose gear, at the time of its use, are renewed if one of its dimensions at any point has decreased by ten per cent or more by user;

(c) a chain is withdrawn from use when it is stretched and increased in length which exceeds five per cent of its length or when a link of such chain is deformed or is otherwise damaged or raised scarves of defective welds is appeared on it;

(d) rings, hooks, swivels and end links attached to a chain are of the same material as that of such chain;

(e) the voltage of electric supply to any magnetic lifting device does not fluctuate by more than plus ten per cent or minus ten per cent.

70. Test and periodical examination of lifting gears:– The employer shall ensure at a construction site of a building or other construction work that–

(a) a lifting gear is initially tested for the manufacturer by a competent person, in a manner specified in Schedules I annexed to these rules before taking into use or after undergoing any substantive alterations which renders its any part liable to affect its safety and such gear alters such test shall subsequently be retested for the use of its owner at least once in every five years;

(b) a lifting gear in use is thoroughly examined once at least in every twelve months by a competent person;

(c) a chain in use is thoroughly examined once at least every month by a responsible person for its use;

(d) certificates of initial and periodical tests and examinations of loose gears under these rules are obtained in Form VII annexed to these rules.

71. Ropes:– The employer shall ensure at a construction site of a building or other construction work that–

(a) no rope is used for building or other construction work unless–

(i) it is of good quality and free from patent defects; and

(ii) in the case of wire rope, it has been tested and examined by a competent person in the manner specified in Schedule I annexed to these rules,

(b) every wire rope of lifting appliance or lifting gear used for building or other construction work is inspected by a responsible person for such use, once at least in every three months:

Provided that after any such wire is broken in such rope, it shall thereafter be inspected once at least in every month by the responsible person;

(c) no wire rope is used for building or other construction work if in any length of eight diameters of such wires, the total number of visible broken wires exceed ten per cent of the total number of wires in such rope, or such rope shows sign of excessive wear, corrosion or other defects which in the opinion of the person who inspects it or Inspector, having jurisdiction is unfit for use;

(d) eye splices and loops of ropes for the attachment of hooks, rings and other such parts to wire ropes are made with suitable thimble;

(e) a thimble or loop splice made in any wire rope sling conforms to the following standards, namely;

(i) wire rope sling shall have at least three tucks with full strand of rope and two tucks with one-half of the wires cut out of each of such strand in all cases, such strands shall be tucked against the lay of the rope;

(ii) protruding ends of such strands in any splice of wire rope slings shall be covered or treated so as to leave no sharp points;

(iii) a fibre rope or a rope sling shall have at least four tucks; tail of such tuck being whipped in a suitable manner; and

(iv) a synthetic fibre rope or a rope sling shall have at least four tucks with full strand followed by further tuck with one-half filaments cut out of each of such strand and final tuck with one-half of the remaining filaments cut out from such strands. Any portion of the splices containing such tucks, with reduced number of filaments, shall be securely covered with suitable tape or other materials :

Provided that nothing contained in this sub-clause shall apply where any other form of splice, which may be shown to be as efficient as the splice with above standards, is used.

72. Heat treatment of lifting gears:– The employer shall ensure at a construction site of a building or other construction work that–

(a) all chains other than briddle chains attached to derricks and all rings, hooks, shackles and swivels used in hoisting or lowering of such derricks are effectively annealed under supervision of a competent person and at the following intervals, namely:

(i) such chains, rings, hooks, shackles and swivels which are not more than twelve and a half millimetre of length are so annealed at least once in every six months; and

(ii) all other such chains, rings, hooks, shackles and swivels are so annealed at least once in every twelve months :

Provided that such annealing as referred to in sub-clause (i) and sub-clause (ii) shall not be required if the Inspector, having jurisdiction, after obtaining the approval of the Director General, directs that such chains, rings, hooks, shackles and swivels undergo some other treatment and in such cases the treatment directed by such Inspector shall be followed:

Provided further that in case of such chains, rings, hooks, shackles and swivels used solely on such derricks and other hoisting appliances which are worked by hand, the provisions of sub-clause (i) and sub-clause (ii), as the case may be, shall apply as if for the period of six months and twelve months the periods of twelve months and two years have respectively been substituted therein:

Provided also that in case where the Inspector, having jurisdiction, is of the opinion that owing to the size, design material or frequency of use, of any such chains, rings, hooks, shackles and swivels, the requirement of this clause for annealing is not necessary for the protection of building worker, he may after obtaining the approval of the Director General, certify in writing to such employer that subject to the conditions specified in such certification, such chains, rings, hooks, shackles and swivels are exempted from such annealing and thereafter the provision of this clause shall apply subject to such exemption:

Provided also that this clause shall not apply to–

(i) pitched chains, working on sprocket or sprocketed wheels;

(ii) rings, hooks and swivels permanently attached to pitched chains, pulley blocks or weighing machines; and

rules;

(iii) in case of test and examination of wire ropes under rule 62 in Form VIII annexed to these rules;

(iv) in case of heat treatment and examination of loose gears under rule 72 in Form IX annexed to these rules;

(v) in case of annual thorough examination of the loose gears under clause (b) of rule 70, except where required particulars of such exemption have been enclosed in the register referred to in clause (a), in Form XXVI, annexed to these rules, and such certificates are attached to the register referred to in clause (a);

(c) the register referred to in clause (a) and the certificates relate to lifting appliances, loose gear and wire ropes ;

(i) kept at such construction site in case such register and certificate relate to lifting appliances, loose gear and wire ropes;

(ii) produced on demand before an Inspector having jurisdiction, and

(iii) retained for at least five years after the date of the last entry made in such register;

(d) no lifting appliance or lifting gear in respect of which an entry is required to be made in register referred to in clause (a) and certificate of test and examination are required to be attached in such register in the manner as specified in clause (a) or clause (b), as the case may be, is used for building or other construction work unless the required entries have been made in such register and certificates.

75. Vacuum and magnetic lifting gear:– The employer shall ensure at a construction site of a building or other construction work that–

(a) no vacuum lifting gear, magnetic lifting gear or any other lifting gear where the load on it is held by adhesive power, is used while workers are performing operations beneath such gear;

(b) a magnetic lifting gear used in connection with building or other construction work is provided with an alternative supply of power, such as batteries, which may come into operation immediately in the event of failure of the main power supply;

(c) no building worker shall work within the swinging zone of the lifting gear or load or building or other construction material suspended to such lifting gear.

76. Knotting of chains and wire ropes:– The employer shall ensure at a construction site of a building or other construction work that no chain or wire rope with a knot in it is used in building or other construction work.

77. Carrying of persons by means of lifting appliances, etc.:– (1) The employer shall ensure at a construction site of a building or other construction work that no building worker is raised, lowered or carried by a power-driven lifting appliance except–

(a) on the driver's platform in the cage of a crane; or

(b) on a hoist; or

(c) on a approved suspended scaffold:

Provided that a building worker may be raised, lowered or carried by a power-driven lifting appliance–

(i) in circumstances where the use of a hoist or of a suspended scaffold is not reasonably practicable and the requirements of sub-rule (2) are complied with; or

(ii) on an aerial cableway or aerial ropeway in case where the requirements of sub-rule (2) are complied with.

(2) The requirements referred to in proviso to sub-rule (1) are as below, namely:

(i) that the appliance referred to in such proviso can be operated from one position only ;

(ii) that any winch used in connection with the appliance referred to in such proviso comply with the requirements of rule 59;

(iii) that no person shall be carried by the appliance referred to in such proviso except–

(a) in a chair or cage, or

(b) in a skip or other receptacle at least three feet deep which is suitable for safe carriage of a person and any such chair, cage, skip or other receptacle is made of good construction, sound material, and has adequate strength and is properly maintained with suitable means to prevent any occupant; therein from falling out of it and is free from any material or tools which may interfere with the handhold or foothold of such occupant or otherwise endanger him; and

(iv) that suitable measures shall be taken to prevent the chair, cage, skip or other receptacle from spinning or tipping in a manner dangerous to any occupant therein.

78. Hoists carrying persons:– The employer shall ensure at a construction site of a building or other construction work that–

(a) no building worker is carried by a hoist unless it is provided with a cage which–

(i) is so constructed as to prevent, when its gates are shut, any building worker carried by such hoist from falling out of it or from being trapped between any part of such cage and any fixed structure or other moving part of such hoist or from being struck by articles or materials falling down the hoistway on which such hoist is moving; and

(ii) is fitted on each of its side from which, access is provided to a landing place with a gate which has efficient interlocking or other devices to secure so that such gate cannot be opened except when such cage is at a landing place and that such cage cannot be moved away from any such place until such gate is closed.

(b) every gate in the hoistway enclosure of such hoist used for carrying persons is fitted with efficient interlocking or other devices to secure so that gate cannot be opened except when the cage of such gate is at the landing place, and that such cage cannot be moved away from the landing place until such gate is closed.

(c) in every hoist used for carrying building workers these are provided suitable and efficient automatic devices to ensure that the cage of such hoist comes to rest at a point above the lowest point to which such cage may travel.

79. Attachment of loads:– The employer shall ensure at a construction site of the building or other construction work that–

(a) when a sling is used to hoist long materials, a lifting beam is used to space the sling legs for proper balance and when a load is suspended at two or more points with slings, the eyes of the lifting legs of such slings are shackled together and such shackle or eyes of the shackled slings are placed on the hook or the eyes of such lifting legs are shackled directly to the hoisting block, ball or balance beam, as the case may be ;

(b) every container or receptacle used for raising or lowering stone, bricks, tiles, slates or other similar objects is so enclosed with the hoist as to prevent the fall of such objects;

(c) a loaded wheelbarrow placed directly on a platform of a hoist for raising or lowering of such wheelbarrows is so secured that such wheelbarrows cannot move and such platform is enclosed to prevent the fall of the contents kept in such wheelbarrows;

(d) landings of a hoist are so designed and arranged that building workers on such hoist are not required to lean out into empty space for loading and unloading any material from such hoist.

80. Tower Cranes:– The employer shall ensure at a construction site of a building or other construction work that–

(a) no person other than the operator trained and capable to work at heights are employed to operate tower cranes;

(b) the ground on which a tower crane stands has adequate bearing capacity;

(c) bases for tower cranes and trucks for rail-mounted tower cranes are firm and levelled and such cranes are erected at a reasonably safe distance from excavations and are operated within gradient limits as specified by the manufacturer of such cranes;

(d) tower cranes are sited where there is a clear space available for erection, operation and dismantling of such cranes;

(e) tower cranes are sited in such a way that the loads on such cranes are not handled over any occupied premises, public, thoroughfares, railways or near power cables, other than construction works for which such cranes are used;

(f) where two or more tower cranes are sited and operated, every care is taken to ensure positive and proper communication between operators of such cranes to avoid any danger or dangerous occurrences;

(g) tower cranes are used for loading magnet or demolition ball service, piling operation or other similar operations which could impose excessive load stresses on the crane structure of such cranes;

(h) the instructions of the manufacturer of a tower crane and standard safe practices regarding such crane are followed while operating or using such crane.

81. Qualification of operator of lifting winches and of signaller, etc.:– The employer shall ensure at a construction site of a building or other construction work that no person is employed to drive or operate

a lifting appliance, whether driven by mechanical power or otherwise or to give signals to drive or operator of such lifting appliance or to work as an operator of a rigger or derricks unless he–

(i) is above eighteen years of age;

(ii) is sufficiently competent and reliable;

(iii) possesses the knowledge of the inherent risks involved in the operation of lifting appliances; and

(iv) is medically examined periodically as specified in Schedule VII annexed to these rules.

CHAPTER VIII

Runways and Ramps

82. Use of runways and ramps by building worker:– The employer shall ensure at a construction site of a building or other construction work that–

(a) runway or ramp provided for use by building workers is not less than four hundred and thirty millimetres in width and is constructed of not less than twenty-five millimetres thick planking or any other material of adequate strength to withstand the required load supported substantially in relation to the span and braced of such runway or ramp and design and construction of such runway or ramp is in accordance with the relevant national standards;

(b) every runway or ramp provided for use of building workers located more than three metres above the floor or ground is on open sides provided with a guard rail of adequate strength and height of not less than one thousand millimetres.

83. Use by vehicles:– The employer shall ensure at a construction site of a building or other construction work that–

(a) all runways and ramps are of sound construction, strength and are securely braced and supported;

(b) every runway or ramp for the use of transport equipment like trailers, trucks or heavier vehicles has a width of not less than three point seven metres and is provided with timber curbs or any other material of adequate strength with not less than two hundred millimetres by two hundred millimetres in width placed parallel to, and secured to, the sides of such runway or ramp and such runways or ramps are designed in accordance with the relevant national standards.

84. Slope of Ramps:– The employer shall ensure at a construction site of a building or other construction work that every ramp has a slope not exceeding one in four and the total rise of a continuous ramp used by building workers carrying material or using wheelbarrows does not exceed three points seven metres, unless broken by horizontal landing of at least one point two metres in length or as provided in accordance with the relevant national standards.

85. Use by wheelbarrows, etc.:– The employer shall ensure at a construction site of a building or other construction work that–

(a) every runway or ramp used for wheelbarrows, hand carts or hand trucks is not less than one metre in width and is constructed of not less than fifty millimetres thick planking and is supported and braced suitably for such use;

(b) every runway or ramp located more than three metres above the floor or ground is provided on the open sides with suitable guard rails of adequate strength.

CHAPTER IX

Work on or Adjacent to Water

86. Transport by water:– The employer shall ensure at a construction site of a building or other construction work that–

(a) when any building worker has to proceed to or from any working place by water for purposes of carrying on a building or other construction work, proper measures are taken to provide for his safe transportation and vessels used for such purpose are used in charge of a responsible person, and are properly equipped for safe navigation and are maintained in good condition;

(b) maximum number of persons which can be safely carried in a vessel as certified under the relevant law in force is marked plainly and conspicuously on such vessel and such number is not exceeded during use of such vessel for carrying persons.

(2) The vessel referred to in clause (a) of sub-rule (1) shall conform to the following, namely:

(i) that adequate protection is provided to the building workers in such vessel from inclement weather;

(ii) that such vessel is manned by adequate and experienced crew, as per the relevant law for the time being in force;

(iii) that in case the bulwarks of such vessel are lower than sixty centimetres from the level of the deck of such vessel, the open edges of such bulwarks are fitted with suitable fencing to a height of at least one metre above such deck and the post and stanchions and similar parts used in such fencing are not spaced more than two metres apart;

(iv) that the number of lifebuoys on deck of such vessel is at least equal to the number of crew members of such vessel and is not less than two;

(v) that all lifebuoys on deck of such vessel are kept in good state of maintenance and are so placed that if such vessel sinks then they remain to float and one of such buoys is within the immediate reach of the Steerman of such vessel and another is situated after part of such vessel; and

(vi) that the position of the Steerman of the vessel is such that he has a reasonably free view of all sides.

87. Prevention from drowning:– The employer shall ensure at a construction site of a building or other construction work that where, on or adjacent to the work place of any construction site to which these rules apply, there is water into which a building worker employed for work on such site is, in the course of his employment, may fall and has the risk of drowning, suitable rescue equipment is provided and kept in an efficient state for ready use and measures are taken to arrange for the prompt rescue of such building worker from the danger of drowning and where there is a special risk of such fall from the edge of adjacent land or from a structure adjacent to or above the water or from floating stage on such water, secure fencing is provided near the edge of such land, structure or floating stage, as the case may be, to prevent such fall, and such fencing may be removed or allowed to remain unerected for the time being and to the extent necessary for the access of building workers to such work or the movement of material for such work.

CHAPTER X

Transport and Earth Moving Equipment

88. Earth moving equipment and vehicles:– The employer shall ensure at a construction site of a building or other construction work that–

(a) all vehicles and earth moving equipment are made of good material, proper design and sound construction and are sufficiently strong for the purpose for which such equipment are used and are

maintained in good state of repair and are properly used in accordance with standard safe operating practices:

Provided that the truck or trailer employed for transporting freight containers are of the size sufficient to carry the containers, without overhanging and are provided with twist locks conforming to national standards, at all the four corners of each of such truck or trailers and such truck or trailers are certified for such use by an authority under the relevant law for the time being in force and is inspected by a responsible person, at least once in a month and record of such inspection is maintained;

(b) all transport or earth moving equipment and vehicles are inspected at least once a week by a responsible person and in case any defect is noticed in such equipment or vehicle, it is immediately taken out of use;

(c) power trucks and tractors are equipped with effective brakes, head lights and tail lamps and are maintained in good repair and working order;

(d) side stanchions on power trucks and trailers for carrying heavy and long objects are–

(i) of sound construction and free from defects;

(ii) provided with tie chains attached to the top across the loads for preventing such stanchions from spreading out, and

(iii) kept in position while loading and unloading;

(e) safe gangways are provided for to and fro movement of building workers engaged in loading and unloading of lorries, trucks, trailers and wagons;

(f) trucks and other equipment are not loaded beyond their safe carrying capacity which shall be clearly marked on such trucks and other equipment;

(g) handles of hand trucks are so designed as to protect the hands of the building workers working on such trucks, or such handles are provided with knuckle guards;

(h) no unauthorised person rides the transport equipment employed in such work;

(i) a driver of a transport equipment manoeuvres such equipment under the direction of a signaller;

(j) adequate precaution such as isolating the electric supply or erecting overhead barriers of a safe height is taken when earth moving

equipment or vehicles are required to operate in dangerous proximity to any live electric conductor;

(k) vehicles and earth moving equipments are not left on a slope with the engine of such vehicles or equipment running;

(l) all earth moving equipments, vehicles or other transport equipment are operated only by such person who are adequately trained and possess such skill as are required for safe operation of such equipment, vehicle or other transport equipment.

89. Power shovels and excavators:– The employer shall ensure at a construction site of a building or other construction work that–

(a) a shovel or an excavator whether operated, by steam or electric or by internal combustion, used for such work is constructed, installed, operated, tested and examined as required under any law for the time being in force and the relevant national standards;

(b) excavator equipped for use as a mobile crane is–

(i) examined and tested in accordance with the requirements for such mobile crane under these rules; and

(ii) fitted with an automatic safe working load indicator;

(c) buckets or grabs of power shovels are propped to restrict the movement of such buckets or grabs while being repaired or while the teeth of such buckets or grabs are being changed.

90. Bulldozers:– The employer shall ensure at a construction site of a building or other construction work that–

(a) an operator of a bulldozer before leaving such bulldozer–

(i) applies the brakes;

(ii) lowers the blade and sipper; and

(iii) puts the shift lever into neutral;

(b) a bulldozer is left on level ground at the close of the work for which such bulldozer is used;

(c) the blade of a bulldozer is kept low when such bulldozer is moving uphill;

(d) the bulldozer blades are not used as brakes except in an emergency.

91. Scrapers:– The employer shall ensure at a construction site of a building or other construction work that–

(a) a tractor and scraper is joined by safety line at the time of its operation;

(b) the scraper bowls are propped while blades of such scraper are being replaced;

(c) a scraper moving downhill is left in gear.

92. Mobile asphalt layers and finishers:– The employer shall ensure on a construction site of a building or other construction work that–

(i) a mixture elevator is within a wooden or sheet metal enclosure with a window for observation, lubrication and maintenance;

(ii) bitumen scoops have adequate covers;

(iii) when asphalt plants are working on a public road, adequate traffic control is established on such road and the building workers working with such plant are provided with reflecting jackets;

(iv) a sufficient number of fire extinguishers are kept in readiness on such work place where fire hazards may exist;

(v) the materials are loaded on the elevator after the drying drain has warmed up of such elevator;

(vi) no open light is used for ascertaining the level of asphalt;

(vii) inspection opening is not opened till there is a pressure in the boiler which may cause injury to a building worker.

93. Pavers:– The employer shall ensure at a construction site of a building or other construction work that pavers are equipped with guards suitable to prevent building workers from walking under the skip of such pavers.

94. Road rollers:– The employer shall ensure at a construction site of a building or other construction work that–

(a) before a road roller is used on the ground, such ground is examined for its bearing capacity and general safety, especially at the edges of slopes such as embankments on such grounds;

(b) a roller is not moved downhill with the engine out of gear.

95. General safety:– The employer shall ensure at a construction site of a building or other construction work that–

(a) every vehicle or earth moving equipment is equipped with–

(i) silencers;

(ii) tail lights;

(iii) power and hand brakes;

(iv) reversing alarm; and

(v) search light for forward and backward movement, which are required for safe operation of such vehicle or earth moving equipment;

(b) the cab of vehicle or earth moving equipment is kept at least one metre from the adjacent face of a ground being excavated;

(c) when a crane or shovel are travelling, the boom of such crane or shovel is in the direction of such travel and the bucket or scoop attached to such crane or shovel is raised and without load, except when such travelling is downhill.

CHAPTER XI

Concrete Work

96. General Provisions regarding use of concrete:– The employer shall ensure at a construction site of a building or other construction work that–

(a) all construction with the use of concrete or reinforced concrete are based on plans as–

(i) include specifications of steel and concrete and other material to be used in such construction;

(ii) give technical details regarding methods for safe placing and handling of such materials as specified in sub-clause (i);

(iii) indicate the type, quality and arrangement of each of a structure of such construction; and

(iv) explain the sequence of steps to be taken for completion of such construction;

(b) formwork and shores used for concrete work are structurally safe and are properly braced or tied together so as to maintain position and shape of such formwork or shores;

(c) formwork structure used for concrete work has sufficient cat-walks and other secure access for inspection of such structure if such structure is in two or more tiers.

97. Preparation and pouring of concrete and erection of concrete structures:– The employer shall ensure at a construction site of a building or other construction work that–

(a) a building worker handling cement or concrete–

(i) wears close-fitting clothing, gloves, helmet or hard hat, safety goggles, proper footwear and respirator or mask to protect him from danger in such handling;

(ii) keep as much of his body covered as is required to protect him from danger in such handling;

(iii) takes all necessary precautions to keep cement and concrete away from his skin in such handling.

(b) lime pits are fenced or enclosed;

(c) lime pits are filled and emptied by such devices which do not require workers to go into the pit;

(d) moving parts of the elevators, hoists, screens, bunkers, chutes, grouting equipment used for concrete work and of other equipment used for storing, transport and other handling ingredients of concrete are securely fenced to avoid contact of building workers with such moving parts;

(e) screw conveyors used for cement, lime and other dusty materials are completely enclosed.

98. Buckets:– The employer shall ensure at a construction site of a building or other construction work that–

(a) concrete buckets used with cranes or aerial cableways are free from projections from which accumulations of concrete could fall;

(b) movements of concrete buckets are governed by signals necessary to avoid any danger by such movements.

99. Pipes and Pumps:– The employer shall ensure at a construction site of a building or other construction work that–

(a) a scaffolding carrying a pipe for pumped concrete is strong enough to support such pipe at time when such pipe is filled with concrete or water or any other liquid and to bear all the building workers who may be on such scaffold at such time, safely;

(b) every pipe for carrying pumped concrete is–

(i) securely anchored at its end point and at each curve on it;

(ii) provided near the top of such pipe with an air release valve; and

(iii) securely attached to a pump nozzle by a bolted collar or other adequate means;

(c) the operation of concrete pumps are governed by standard signals relevant in accordance with the relevant national standards;

(d) building workers employed around a concrete pump wear safety goggles.

100. Mixing and pouring of concrete:– The employer shall ensure at a construction site of a building or other construction work that–

(a) the concrete mixture does not contain any material which may unduly affect the setting of such concrete, weaken such concrete or corrode steel used with such concrete;

(b) when dry ingredients of concrete are being mixed in confined spaces such as silos–

(i) the dust shall be exhausted at the time of such mixing; and

(ii) in case the dust cannot be exhausted, as specified in sub-clause (i), the building workers shall wear respirators at the time of such mixing;

(c) when concrete is being tipped from buckets, building workers are kept out of the range of any kickbacks of such buckets;

(d) loads are not dumped or placed on setting concrete.

101. Concrete panels and slabs:– The employer shall ensure at a construction site of a building or other construction work that–

(a) all parts of a concrete panel or concrete slab are hoisted uniformly;

(b) concrete panels are adequately braced in their final positions and such bracings shall remain in such position until such panels are adequately supported by other parts of the construction for which such panels are used;

(c) temporary bracing of concrete panels are securely fastened to prevent any part of such panels from falling when such panels are being moved.

102. Stressed and tensioned elements:– The employer shall ensure at a construction site of a building or construction work that–

(a) building workers do not stand directly over jacking equipment while stressing of concrete girders and beams is being done;

(b) a pre-stressed concrete unit is not handled except at points on such unit and by the devices specified for such work by the manufacturer of such devices;

(c) during transport, pre-stressed concrete girders or concrete beams are kept upright by bracing or other effective means;

(d) anchor fittings pre-tensioned strands of pre-stressed concrete girders or concrete beams are kept in a safe condition in accordance with the instructions of manufacturer of such anchor fittings;

(e) building workers do not stand behind jacks or in line with tensioning elements and jacking equipment during tensioning operations of pre-stressed concrete girders or concrete beams;

(f) building workers do not cut wires of pre-stressed concrete girders or beams under tension before such concrete used for such girders or beams is sufficiently hardened.

103. Vibrators:– The employer shall ensure at a construction site of a building or other construction work that–

(a) a building worker, who is in good physical condition, operates vibrators used in concreting work;

(b) all practical measures are taken to reduce the amount of vibration transmitted to the operator working in concreting work;

(c) when electric vibrators are used in concreting work–

(i) such vibrators shall be earthed;

(ii) the leads of such vibrators shall be heavily insulated; and

(iii) the current shall be switched off when such vibrators are not in use.

104. Inspection and supervision:– The employer shall ensure at a construction site of a building or other construction work that–

(a) a person responsible for a concreting work supervises the erection of the formwork, shores, braces and other supports used for such concreting work;

(b) a person responsible for concreting work makes a thorough inspection of every formwork after erection of such formwork in such concreting work to ensure that such formwork is safe;

(c) a person responsible for a concreting work regularly inspects the formwork, shores, braces, reshores and other supports during the placing of concrete;

(d) any unsafe condition which is discovered during the inspections mentioned under clauses (b) and (c) is remedied immediately;

(e) a person responsible for a concreting work keeps all records of inspections referred to in clause (a) and clause (b) at the workplace relating to such inspection and produces them for inspection upon the demand of an Inspector having jurisdiction.

105. Beams, floors and roofs:– The employer shall ensure at a construction site of a building or other construction work that–

(a) horizontal and diagonal bracings are provided in both longitudinal and transverse directions as may be necessary to provide structural stability to formwork used in concreting work and shores used in such concreting work are properly seated top and bottom and are secured in their places;

(b) where shores used in concreting work rest upon the ground, base plates are provided for keeping such shores firm and in level;

(c) where the floor to ceiling height of a concreting work exceeds nine metres or where the formwork deck used in such concreting work is supported by shores constructed in two or more tiers, or where the dead, live and impact loads on the formwork used in such concreting work exceed seven hundred kilogram per square metre, the structure of such formwork is designed by a professional engineer in the relevant field and the specifications and drawings of such formwork are kept at such construction site and produced on demand before the Inspector having jurisdiction;

(d) where the structure of the formwork used in concreting work is designed by a professional engineer, such engineer shall be responsible for the supervision of construction and stability of such structure.

106. Stripping:– The employer shall ensure at a construction site of a building or other construction work that–

(a) Stripping of formwork used in concreting work commences until the concrete on such formwork is fully set, examined and certified to this effect by the responsible person and record of such examination and certification is maintained;

(b) stripped forms in concreting work are removed or stock-piled promptly after stripping from all areas in which building workers are required to work or pass;

(c) protruding nails, wire ties and other formwork accessories not required for subsequent concreting work are pulled, cut or otherwise made safe.

107. Reshoring:– The employer shall ensure at a construction site of a building or other construction work that–

(a) reshoring used in concreting work is provided to a slab or beam for its safe support after its stripping or where such slab or beam is subjected to superimposed loads due to construction above such slab or beam;

(b) the provisions applicable to shoring in a concreting work under this chapter shall also be applicable to reshoring in such work.

CHAPTER XII

Demolition

108. Preparation:– The employer shall ensure at a construction site of a building or other construction work that all glass or similar material or article in exterior openings are removed before commencing any demolition work and all water, steam, electric, gas and other similar supply lines are put-off and suitably capped and the concerned department of the appropriate Government or local authority is informed and permission obtained wherever required before commencing such demolition work and wherever it is necessary to maintain water, gas or electric line or power during such demolition, such line shall be so located or protected with substantial coverings so as to protect it from damage and to afford safety to the building workers and the general public.

109. Protection of adjacent structures:– The employer responsible for a demolition work at a construction site of a building or other construction work shall, during demolition process of such demolition work, examine the walls of all structures adjacent to the structure to be demolished to determine the thickness, method of support to such adjacent structures and in case, such employer has reason to believe that any of such adjacent structure is unsafe or may become unsafe during such demolition process, he shall not perform demolition activity affecting such unsafe adjacent structure unless and until remedial measures like sheet piling, shoring, bracing, or similar other means so as to ensure safety and stability to such unsafe adjacent structure from collapsing are taken.

110. Demolition of walls, partitions etc.:– The employer shall ensure at a construction site of a building or other construction work that–

(a) any demolition of walls or partitions is proceeded in a systematic manner as per the standard safe operating practices and all work above each tier of any floor beams is completed before the safety of the support of such beam is impaired;

(b) masonry is neither loosened nor permitted to fall in such masses or volume or weight as to endanger the structural stability of any floor or structural support;

(c) no wall, chimney or other structure or part of a structure is left unguarded in such a condition that it may fall, collapse or weaken due to wind pressure or vibration;

(d) in the case of demolition of exterior walls by hand, safe footing is provided for the building workers employed for such demolition, in the form of sound flooring or scaffolds;

(e) walls or partitions which are to be demolished by hand are not left standing more than one storey high above the uppermost floor on which persons are working.

111. Method of operation:– The employer shall ensure at a construction site of a building or other construction work that debris, bricks and other materials or articles are removed–

(i) by means of chutes;

(ii) by means of buckets or hoists;

(iii) through openings in the floors; or

(iv) by any other safe means.

112. Access to floor:– The employer shall ensure at a construction site of a building or other construction work that safe access to and egress from every building is provided at all times in the course of demolition of such building by means of entrances, hallways, stairways or ladder runs which are so protected as to safeguard the building workers using such means from falling material or articles.

113. Demolition of structural steel:– The employer shall ensure at a construction site of a building or other construction work that–

(a) all steel structures are demolished column by column and tier by tier and every structural member which is being demolished is not under any stress and such structural member is suitably lashed to prevent it from any uncontrolled swinging or dropping or falling;

(b) larger structural members are not thrown or dropped from the building but are carefully lowered by adopting suitable safe method;

(c) where a lifting appliance like a derrick is used for demolition, the floor on which such lifting appliance rests is completely

planked over or supported and such floor is of adequate strength to sustain bearing load for such lifting appliance and its operation.

114. Storage of material or article:– The employer shall ensure at a construction site of a building or other construction work that–

(a) all materials or articles are not stored or kept on platform, floor, or stairways of a building being demolished:

Provided that this clause shall not apply to the floor of a building when such floor is of such strength as to support safely the load to be superimposed by storing such materials or articles;

(b) an access to any stairway or blocked by storing any material or article;

(c) suitable barricades are provided so as to prevent materials or articles from sliding or rebounding into any space used by the building workers.

115. Floor openings:– The employer shall ensure at a construction site of a building or other construction work that every opening used for the removal of debris from every floor which is not closed to access, except the top or working floor, is provided with an enclosure from such floor to its ceiling, or such opening is so barricaded that no building worker has access to within a horizontal distance of six metres from such opening through which debris is being dropped.

116. Inspection:– The employer shall ensure at a construction site of a building or other construction work that a person responsible for demolition work makes continuous inspections during demolition process of such demolition work so as to detect any hazard resulting from weakened or deteriorated floors or walls or loosened materials or articles during such demolition process and that no building worker is permitted to work where such hazard exists unless remedial measures like shoring or bracing are taken to prevent such hazards.

117. Warning signs, barricades, etc.:– The employer shall ensure at a construction site of a building or other construction work that–

(a) barricades and warning signs are erected along every side throughout the length and breadth of a building or other construction work to be demolished to prevent unauthorised persons from entering into the site of such building or other construction work during demolition operations;

(b) during the demolition of an exterior masonry wall or a roof from a point more than twelve metres above the adjoining ground level

of such wall or roof, if persons below such wall or roof are exposed to falling objects, suitable and safe catch platforms shall be provided and maintained at a level not more than six metres below the working level except where an exterior built-up scaffold is provided for safe and adequate protection of such persons;

(c) suitable and standard warning signs in accordance with national standards are displayed or erected at conspicuous places or position at the workplace.

118. Mechanical method of demolition:– The employer shall ensure at a construction site of a building or other construction work that the following requirements are fulfilled in case the mechanical method of demolition like use of swinging weight, clamshell bucket, power shovel, bulldozer or other similar mechanical methods are used for the purpose of demolition, namely:

(a) that the building or structure or remaining portion thereof shall be not more than twenty-four metres in height;

(b) that where a swinging weight is used for demolition, a zone of such demolition having a radius of at least one and a half times the height of the structure or portion thereof being so demolished shall be maintained around the points of impact of such swinging weight;

(c) where a clamshell bucket is being used for demolition, a zone of demolition shall be maintained within eight metres of the line of travel of such bucket;

(d) that where other mechanical methods are being used to affect total or partial collapse of a building or other construction work, there shall be maintained, in the area into which the affected portion of such building or other construction work may fall, a zone of demolition at least one and a half times the height of such affected portion thereof; and

(e) no person other than building workers or other persons essential to the operation of demolition work shall be permitted to enter a zone of demolition referred to in clause (a) which shall be provided with substantial barricades.

CHAPTER XIII

Excavation and Tunnelling Works

119. Notification of intention to carry out excavation and tunnelling work:– (1) Every employer carrying out any excavation or tunnelling work

at a construction site of a building or other construction site of a building or other construction work shall, within thirty days, prior to the commencement of such excavation or tunnelling work, inform in writing the detailed layout plans, method of construction and schedule of such excavation or tunnelling work, to the Director General.

(2) In case compressed air is used in such excavation or tunnelling work or any work incidental to or required for such excavation or tunnelling work, the technical details and drawings of all man-locks and medical locks, together with names and addresses of all construction medical officers having qualification as laid down in Schedule XI annexed to these rules and so appointed by such employer for the purpose of such excavation or tunnelling work shall be sent to the Director General.

120. Project Engineer:– (1) Every employer undertaking any excavation or tunnelling work shall appoint a project engineer for safe operation of such projects of such excavation or tunnelling work for which such engineer is appointed.

(2) Such project engineer shall exercise overall control of the operations and the activities at such project and be responsible for carrying out the activities safely.

121. Responsible person:– (1) Every employer undertaking excavation or tunnelling work at a construction site of a building or other construction work shall appoint a responsible person for safe operation for such excavation or tunnelling work.

(2) Duties and responsibilities of the responsible person referred to in sub-rule (1) person shall include–

(a) to carry out smoothly such excavation or tunnelling work;

(b) to inspect and rectify any hazardous situation relating to such excavation or tunnelling work;

(c) to take remedial measures to avoid any unsafe practice or conditions relating to such excavation or tunnelling work.

(3) The name and address of the responsible person referred to in sub-rule (1) shall be forwarded to the Director General.

122. Warning signs and notices:– The employer shall ensure at a construction site of a building or other construction work that–

(a) suitable warning signs or notices, required for the safety of building workers carrying out the work of an excavation or tunnelling, shall be displayed or erected at conspicuous places in Hindi and in a language understood by the majority of such building workers at such excavation or tunnelling work;

(b) such warning signs and notices with regard to compressed air working shall include–

(i) the danger involved in such compressed air work;

(ii) fire and explosion hazards;

(iii) the emergency procedures for rescue from such danger or hazards.

123. Register of employment etc.:– (1) Every employer shall ensure that at a construction site of a building or other construction work where an excavation or tunnelling work is being carried on, a register of employment of building workers carrying out such excavation or tunnelling work, is maintained and produced on demand to the Inspector having jurisdiction.

(2) Periods of work of such excavation or tunnelling work, in which such building workers are employed, shall be maintained in a register on day-to-day basis and such register shall be produced on demand to the Inspector having jurisdiction.

124. Illumination:– (1) The employer shall ensure at a construction site of a building or other construction work that all workplaces where excavation or tunnelling works are carried out shall be adequately illuminated in accordance with the relevant national standards.

(2) Every employer carrying out excavation or tunnelling works at a construction site of a building or other construction work shall provide for emergency generators on such construction site to ensure adequate illumination at all workplaces where such excavation or tunnelling work is being carried out, in case of power failure.

125. Stability of structure:– The employer shall ensure at a construction site of a building or other construction work that–

(a) where there is any doubt as to the stability of any structure adjoining the work-place or other areas to be excavated or where tunnelling work is to be carried out, the project engineer referred to in rule 120 arranges for measures like underpinning, sheet piling, shoring, bracing or other similar means to support such structure and to prevent injury to any building worker working adjacent to such structure or damage to property or equipment adjacent to such structure;

(b) where any building worker engaged in excavation is exposed to hazard of falling or sliding material or article from any bank or side of such excavation which is more than one and a half metres above his footing, such worker is protected by adequate piling and bracing against such bank or side;

(c) the excavation and its vicinity are checked by a responsible person referred to in rule 121 after every rain, storm or other occurrences carrying hazards and in case a hazard is noticed at such checking, adequate protection against slides and cave-in to prevent such hazard is provided;

(d) temporary sheet piling installed for the construction of a retaining wall after excavation is not removed except on the advice of the responsible person referred to in rule 121 after an inspection carried out by such responsible person;

(e) where banks of an excavation are undercut, adequate shoring is provided to support the material or article overhanging such bank;

(f) excavated material is not stored at least zero point six five metres from the edge of an open excavation or trench and the banks of such excavation or trench are stripped of loose rocks and other materials which may slide, roll or fall upon a building worker working below such bank;

(g) adequate and suitable warning signs are put-up at conspicuous places at the excavation work to avoid any person falling into the excavations or trenches;

(h) the responsible person referred to in rule 121, ensures at the excavation work that no building worker is permitted to work where such building worker may be struck or endangered by the excavation machinery or material or article used in such excavation.

126. Piling, shoring and bracing:– The employer shall ensure at a construction site of a building or other construction work that–

(a) plank used for sheet piling in excavation or tunnelling work is of sound material with adequate strength;

(b) shores and braces used in excavation or tunnelling work are of adequate dimensions and are so placed as to be effective for their intended purposes;

(c) earth supported shores or braces used in excavation or tunnelling work bear against a footing of sufficient area and stability to prevent the shifting of such shores or braces.

127. Safe access:– The employer shall ensure at a construction site of a building or other construction work that ladders, stair cases or ramps are provided, as the case may be, for safe access to and egress from excavation where the depth of such excavation exceeds one point five metres

and such ladders stair cases or ramps comply with the relevant national standards.

128. Trenches:– The employer shall ensure at a construction site of a building or other construction work that a trench or excavation is protected against falling of a person, by suitable measures if the depth of such trench or excavation exceeds one and a half metres and such protection is an improved protection in accordance with the design and drawing of a professional engineer, where such depth exceeds four metres.

129. Depth of trenches:– The employer shall ensure at a construction site of a building or other construction work that–

(a) where the depth of a trench requires two lengths of sheet piling, one above the other, the lower piling is set inside the bottom strings or wales of the upper piling and such sheet piling is driven down and braced as the excavation continues;

(b) all metal sheet piles used in excavation or a trench are welded end to end and secured by other similar means.

130. Positioning and use of machinery:– The employer shall ensure at a construction site of a building or other construction work that any machinery used in excavation and tunnelling work is positioned and operated in such a way that such machinery does not endanger the operator of such machinery or any other person in the vicinity.

131. Breathing apparatus:– The employer shall ensure at a construction site of a building or other construction work that–

(a) suitable breathing apparatus is provided to a building worker while working in compressed air environment for his use at excavation or tunnelling work; and

(b) such breathing apparatus is maintained in good working condition at all times.

132. Safety measures for tunnelling operation:– The employer shall ensure at a construction site of a building or other construction work that–

(a) where there is a danger of falling or sliding of material from the roof face or wall of a tunnel, adequate measures such as shoring, supporting by means of rock bolts, segments or steel sets are taken for the safety of building workers;

(b) the excavated areas are made safe by use of suitably designed and installed steel sets, rock bolts or similar other safe means;

(c) the responsible person referred to in rule 121 examines and inspects the workplaces in a tunnel before the commencement of

work in such tunnel, and at regular intervals thereafter, to ensure safety of the building workers in such tunnel;

(d) the portal areas of a tunnel with loose soil, or rock, likely to cause injury to a person are adequately protected with supports.

133. Pneumatic tools:– The employer shall ensure at a construction site of a building or other construction work that supply lines to pneumatic tools used within a tunnel are fitted with watertrap or safety chain or safety wire, as the case may be.

134. Shafts:– The employer shall ensure at a construction site of a building or other construction work that–

(a) surroundings of a shaft used in excavation or tunnel work are protected from being washed away by construction of sufficient height;

(b) where a building worker is required to enter a shaft at an excavation or tunnelling work, safe means of access is provided for such entry;

(c) every shaft at excavation or tunnelling work is provided with a steel casing, concrete piping, timber shoring or other materials of adequate strength for the safety of building workers working in such shaft;

(d) such casing and bracing are provided to a shaft at an excavation or tunnelling work upto the depth of such shaft at an excavation or tunnelling work according to the appropriate design for such casing and bracing;

(e) a reinforced concrete raft and beam is provided around the opening of a shaft at an excavation or tunnelling work if the ground surrounding such opening is unstable or unsafe.

135. Lift for shaft:– The employer shall ensure at a construction site of a building or other construction work that lift is provided for transport of building workers and materials or articles at an excavation or tunnelling work required to descend more than fifty metres in a shaft.

136. Means of communication:– The employer shall ensure at a construction site of a building or other construction work that–

(a) reliable and effective means of communication such as telephone or walkie-talkie are provided and are maintained in working order for arranging better and effective communication at an excavation or tunnelling work at the following locations, namely:

(i) working chamber at the face of an excavation;

(ii) intervals of hundred metres along the tunnel;

(iii) working chamber side of a man lock near the door of such man lock;

(iv) interior of each chamber of a man lock;

(v) location conspicuous a lock attendant's station;

(vi) a compressor plant;

(vii) a first-aid station; and

(viii) outside the portal or the top of a shaft.

(b) such number of bells and whistles are made available at all times at the locations referred to in sub-clause (i) to sub-clause (viii) of clause (a) as are necessary for the safety of persons at such locations.

137. Signals:– The employer shall ensure at a construction site of a building or other construction work that the standard audio or video signals are used in excavation or tunnelling work and are conspicuously located or displayed near entrance to the workplace and in such other locations as may be necessary to bring such signals to notice of all building workers employed in such excavation or tunnelling work.

138. Clearances:– The employer shall ensure at a construction site of a building or other construction work that–

(a) the minimum lateral clearance of half a metre is maintained between any part of a vehicle and any fixture or any equipment used in an excavation or tunnelling work after allowing the throw or swing of such fixture or equipment;

(b) the overhead clearance for a locomotive drive at excavation or tunnelling work is not less than one point one zero metres above the seat of such driver and not less than two metres above the platform where such driver stands or of any other dimension in accordance with the relevant national standard.

139. Shelters:– The employer shall ensure at a construction site of a building or other construction work that the adequate number of shelters for the safeguard of the building workers are provided where, in the course of working, they are liable to be struck by a moving vehicle or other material handling equipment in a tunnel.

140. Use of internal combustion engine:– The employer shall ensure at a construction site of a building or other construction work that no internal combustion engine is used underground in excavation or tunnelling work unless such engine is so constructed that–

(a) the air entering the engine gets cleared before entry; and

(b) no fumes or sparks are emitted by the engine.

141. Inflammable oils:– The employer shall ensure at a construction site of a building or other construction work that inflammable oils with the flash point below the working temperature that is likely to be encountered in a tunnel are not used in excavation or tunnelling work.

142. Coupling and hoses:– The employer shall ensure at a construction site of a building or other construction work that only high pressure hydraulic hoses and couplings are used on hydraulic plants underground and such hoses and couplings are adequately protected against any possible damage in excavation or tunnelling work.

143. Hose installation:– The employer shall ensure at a construction site of a building or other construction work that all hydraulic lines and plants working at a temperature exceeding seventy degree centigrade are protected by adequate insulation or otherwise against accidental human contact in excavation or tunnelling work.

144. Fire resistant hoses:– The employer shall ensure at a construction site of a building or other construction work that no fire hydraulic hoses other than fire resistant hydraulic hoses are used when hydraulically activated machinery and equipment is employed in tunnels.

145. Flame proof equipment:– The employer shall ensure at a construction site of a building or other construction work that only flame proof equipment of appropriate type as per relevant national standards is used where there is a danger of flammable or explosive atmosphere being prevalent inside the tunnel.

146. Storing of oil and fuel underground:– The employer shall ensure at a construction site of a building or other construction work that–

(a) all oils, greases or fuels stored underground in excavation or tunnelling work are kept in tightly sealed containers and in fire resistant areas at safe distances away from explosive and other flammable chemicals;

(b) appropriate flame proof installation is used in such storage areas as specified in clause (a).

147. Use of Gases underground:– The employer shall ensure at a construction site of a building or other construction work that–

(a) petrol or liquefied petroleum gas or any other flammable substances are not used, stored inside the tunnel except with the prior approval of the project engineer under rule 120;

(b) after the use of the petroleum or liquefied petroleum gas, or highly inflammable substances are removed immediately from such tunnel;

(c) no oxy-acetylene gas is used in a compressed air environment in excavation or tunnelling work.

148. Water for fire-fighting:– The employer shall ensure at a construction site of a building or other construction work that–

(a) adequate number of water outlets are provided on excavation or tunnelling work and are readily made accessible throughout the tunnel for fire-fighting purposes and such water outlets are maintained for effective fire-fighting;

(b) all air locks are equipped with fire-fighting facilities at excavation or tunnelling work;

(c) an audible fire alarm is provided to warn the building workers whenever a fire breaks out on an excavation or tunnelling work;

(d) adequate number and types of fire extinguishers, in accordance with relevant national standards, are provided and made readily available to fight any outbreak of fire at an excavation or tunnelling work;

(e) fire extinguishers with vaporising liquids and high pressure carbon dioxide are not used in tunnels or other confined spaces;

(f) the instructions regarding steps to be followed to fight outbreak of fire, at an excavation or tunnelling work, written in Hindi or local language understood by the majority of the building workers employed on such excavation or tunnelling work, are displayed at conspicuous and vulnerable places of such excavation or tunnelling work.

149. Flooding:– The employer shall ensure at a construction site of a building or other construction work that–

(a) watertight bulkhead doors are installed at the entrance of a tunnel to prevent flooding during a tunnelling work where more than one tunnel is driven from a shaft;

(b) all necessary measures are taken to ensure that no building worker is trapped in any isolated section of a tunnel when any bulkhead door of such tunnel is closed;

(c) where there is likelihood of flooding or water rushing into a tunnel during a tunnelling work, arrangements are made for immediate starting of water pumps to take out water of such flooding or water rushing and for giving alert signals to the building workers and other persons to keep them away from danger.

150. Steel curtains:– The employer shall ensure at a construction site of a building or other construction work that air tight steel curtains are provided in areas liable to flooding at tunnelling work and in case of descending tunnel such curtains are provided in the top half of such tunnels to ensure the retention of pockets of air for rescue purpose.

151. Rest shelters:– The employer shall ensure at a construction site of a building or other construction work that–

(a) where building workers employed in a compressed air environment in a tunnelling work are required to remain at the work site for one hour or more after decompression from pressure exceeding one bar, adequate and suitable facilities are provided for such building workers to rest;

(b) every man-lock, medical-lock and any other facility inside these locks at an excavation a tunnelling work is maintained in a clean state and in good repairs;

(c) a first-aid room is provided and is readily available at a construction site of a tunnelling work;

(d) each man-lock attendant station is provided with a first-aid box at a construction site of a tunnelling work.

152. Permissible limit of exposure of chemicals:– The employer shall ensure at a construction site of a building or other construction work that–

(a) the working environment in a tunnel or a shaft in which building workers are employed does not contain any of the hazardous substances in concentrations beyond the permissible limits as laid down in the Schedule XII annexed to these rules:

(b) the responsible person referred to in rule 121 conducts necessary test before the commencement of a tunnelling work for the day and at suitable intervals as fixed by the Director General to ensure that the permissible limits of exposure are not exceeded and a

record of such test is maintained and is made available for inspection to the Inspector having jurisdiction, on demand.

153. Ventilation:– The employer shall ensure at a construction work that all working areas in a free air tunnel are provided with ventilation system as approved by the Director General and the fresh air supplied in such tunnel is not less than six cubic metres per minute for each building worker employed underground in such tunnel and the free-air-flow movement inside such tunnel is not less than nine metres per minute.

154. Air supply intake point:– The employer shall ensure at a construction site of a building or other construction work that the air intake points for all air compressors are located at places where such intake air does not get contaminated with dust, fumes, vapour and exhaust gases or other contaminants.

155. Emergency generators:– The employer shall ensure at a construction site of a building or other construction work that–

(a) every compressed air system in a tunnel is provided with emergency power supply system for maintaining continued supply of compressed air in such compressed air system and is capable of operating air compressor and ancillary systems of such compressed air system;

(b) the emergency power supply system is maintained and is readily available at all times at an excavation or tunnelling work.

156. Air mains:– The employer shall ensure at a construction site of a building or other construction work that every air main supplying air to the working chamber, man-lock or medical-lock used at an excavation or tunnelling work is protected against accidental damage and where it is not practicable to provide such protection, a stand-by air main is provided.

157. Bulk head and air-locks:– The employer shall ensure at a construction site of a building or other construction work that–

(a) a bulk head or air tight diaphragms retaining compressed air, when used within a tunnel or a shaft, is constructed to withstand the maximum pressure at one point two five times the maximum working pressure of such bulk head or diaphragm and such bulk head or diaphragm is tested before its each use by a responsible person referred to in rule 121 to ensure that such bulk head or diaphragm is in proper working order;

(b) such responsible person keeps the record of each test referred to in clause (a) and such record is produced for inspection to the Inspector having jurisdiction on demand;

(c) the bulk head or diaphragm referred to in clause (a) are made of sound material of adequate strength and are able to withstand to maximum pressure on which they are subjected to at any time of their use;

(d) a bulk head anchorage and air lock is tested at its workplace at an excavation or tunnelling work immediately after their installation at such place.

158. Diaphragms:– The employer shall ensure at a construction site of a building or other construction work that all diaphragms which are in the form of horizontal decks across a shaft used at excavation or tunnelling work are securely anchored.

159. Portable electrical hand tools:– The employer shall ensure at a construction site of a building or other construction work that all portable electrical hand tools and inspection lamps used underground or in a confined space at an excavation or tunnelling work are operated at a voltage not exceeding twenty-four volts.

160. Circuit breaker:– The employer shall ensure at a construction site of a building or other construction work that–

(a) adequate number of differential ground fault circuit breakers are installed for every electrical distribution system and its sub-systems used at an excavation or tunnelling work and the sensitivity of each of circuit breaker is adjusted in accordance with the requirement set out in accordance with the relevant national standards;

(b) no semi-enclosed fuse unit is used in underground place at an excavation or tunnelling work.

161. Transformer:– The employer shall ensure at a construction site of a building or other construction work that no transformer is used in any section of a tunnel under compressed air unless such transformer is of the dry type and conforms to the relevant national standards.

162. Live wires:– The employer shall ensure at a construction site of a building or other construction work that there is no exposed live wire in working areas at an excavation or tunnelling work which are accessible to building workers other than those authorised to work on such live lines.

163. Welding sets:– The employer shall ensure at a construction site of a building or other construction work that all welding sets used in a tunnel are of adequate capacity and of suitable type approved by Director General.

164. Quality and quantity of air:– The employer shall ensure at a construction site of a building or other construction work that–

(a) every working chamber at an excavation or tunnelling work where compressed air is used, the supply of such air is maintained not less than zero point three cubic metres per minute per person working therein;

(b) a reserve supply of compressed air is made available at all times for man-locks and medical locks used at a tunnelling work;

(c) the air supplied in a compressed air environment at a tunnelling work is as far as practicable free from odour and other contaminants, namely, dust, fumes and other toxic substances.

165. Working temperature:– The employer shall ensure at a construction site of a building or other construction work that the temperature in any working chamber at an excavation or tunnelling work where building workers are employed does not exceed twenty-nine degree centigrade and that the arrangement is maintained for keeping records in which the temperatures measured by dry bulb and wet bulb inside such working chamber once in every hour and to produce such records for inspection on demand to the Inspector having jurisdiction.

166. Man-locks and working in compressed air environment:– The employer shall ensure at a construction site of a building or other construction work that–

(a) man-locks used at a tunnelling work are of adequate strength, made of sound material and designed to withstand any air pressure, internal or external, to which it may be subjected to in the normal use or in an emergency;

(b) (i) doors of man-locks at an excavation or tunnelling work are made of steel;

(ii) man-locks used at a tunnelling work are airtight and devices are provided for sealing the doors when such locks are under pressure;

(iii) the anchorage of a man-lock used at tunnelling work have adequate strength to withstand the pressure exerted by air on the man-lock;

(iv) there is adequate room available for the building worker for working in the man-lock used at tunnelling work;

(v) where work is carried out in any compressed air tunnel, a man-lock in accordance with the relevant national standards is used for such tunnel;

(c) (i) where a man-lock is used at tunnelling work, safety instructions in Hindi and in local language understood by majority of building workers employed therein are displaced at conspicuous place at such tunnelling work;

(ii) except in an emergency, compression and decompression operations are carried out in a man-lock used at tunnelling work;

(iii) in an emergency any material lock may be used at tunnelling work for compression and decompression of building worker and a record is kept in writing and produced for inspection on demand to the Inspector having jurisdiction;

(iv) material-lock is used with the permission of Director General for compression and decompression of building workers, where it is impracticable to install both the man-lock and the material-lock at a tunnelling work;

(v) decompression of all building workers to atmospheric condition at tunnelling work is carried out in accordance with a decompression procedure approved by the Director General;

(vi) the man-lock at tunnelling work is not used for any purpose other than compression or decompression procedure approved by the Director General;

(vii) no decanting of building workers at tunnelling work is carried out without prior approval of Director General, except in an emergency;

(viii) in case a building worker collapses or is taken ill during his decompression in a man-lock used at tunnelling work, the lock attendant of such man-lock raises the pressure in such man-lock until such pressure is equal to the maximum pressure which that building worker was exposed to in the working chamber prior to such decompression and such lock attendant immediately reports the matter relating to such collapse to the medical lock attendant and medical officer on duty at such tunnelling work;

(ix) a building worker who had previously received training with a trained building worker to work in a compressed air environment at tunnelling work is employed to work independently in such a compressed air environment;

(x) a building worker who had undergone three decompressions from a pressure exceeding one bar in a period of eight hours at tunnelling work is not allowed to enter a compressed air environment except for the purpose of carrying out rescue work;

(xi) a building worker employed in a compressed air environment for a period of eight hours in a day at tunnelling work is not employed again in such environment unless he has spent not less than twelve consecutive hours of rest at atmospheric pressure;

(xii) no building worker is engaged in a compressed air environment at a pressure which exceeds three bars at tunnelling work unless prior permission, in writing, has been obtained from the Director General for such engagement;

(xiii) no building worker is employed in a compressed air environment for more than fourteen consecutive days in a month at tunnelling work;

(xiv) a register of employment of all building workers employed in compressed air environment at tunnelling work, is maintained;

(xv) an identification badge is supplied to a building worker employed in compressed air environment at tunnelling work;

(xvi) the badge of a building worker referred to in sub-clause (xv) contains particulars of his name, location of the medical lock allotted to him for work, the telephone number of the Construction Medical Officer concerned for his treatment and the instructions in case of his illness of unknown and doubtful causes;

(xvii) record of all identification badges supplied to building workers under sub-clause (xvi), is kept in a register;

(xviii) every building worker whose name appears in the register referred to in sub-clause (xvii) wears the badge supplied to him under sub-clause (xv) at all times during his duty hours at tunnelling work;

(xix) suitable warning signs are displayed, in the compressed air environment at tunnelling work, for the prohibition of following, namely:–

(a) use of alcoholic drinks;

(b) use and carrying of lighters, matches or other sources of ignition;

(c) smoking; and

(d) an entry to person who has consumed alcoholic drinks.

167. Safety instruction:– The employer shall ensure at a construction site of a building or other construction work that all building workers employed in compressed air environment at tunnelling work follow the instructions issued for their safety in the course of such employment.

168. Medical lock:– The employer shall ensure at a construction site of a building or other construction work that–

(a) a suitably constructed medical lock is maintained at tunnelling work where building workers are employed in a working chamber at a pressure exceeding one bar;

(b) where more than one hundred building workers are employed in a compressed air working environment exceeding one bar at tunnelling work, one medical lock is provided for every one hundred building workers or part thereof and such medical lock is situated as near as possible to the main lock used at such tunnelling work.

CHAPTER XIV

Construction, Repair and Maintenance of Steep Roof

169. Work on steep roofs:– The employer shall ensure at a construction site of a building or other construction work that all practicable measures are provided to protect the building workers against sliding when carrying out work on steep roofs.

170. Construction and installation of roofing brackets:– The employer shall ensure at a construction site of a building or other construction work that–

(a) roofing brackets are constructed to fit the pitch of steep roof and such brackets are used to provide level working platform;

(b) a roofing bracket referred to in clause (a) is secured in its place by nailing pointed metal projections attached to the underside of such bracket and securely driven into a steep roof on which it is used or secured by a rope passed over the ridge pole and tie of such roof.

171. Crawling boards:– The employer shall ensure at a construction site of a building or other construction work that–

(a) all crawling boards used for work on steep roofs are of adequate strength, made of sound material and of the type approved for the purpose of their use as per relevant national standards;

(b) crawling board referred to in clause (a) are kept in good repairs and inspected by a responsible person before being taken into use;

(c) crawling board referred to in clause (a) is secured to a steep roof on which it is used by ridge hooks or other effective means;

(d) a firmly fastened lifeline of adequate strength is strung beside each crawling board referred to in clause (a) throughout its length while using such crawling boards.

CHAPTER XV

Ladders and Step-Ladders

172. Construction and safe use:– The employer shall ensure at a construction site of a building or other construction work that–

(a) every ladder or step-ladder used in building or other construction work is of good construction, made of sound material and of adequate strength for the purpose for which such ladder or step-ladder is used;

(b) when a ladder is used as a means of communication, such ladder is lashed to a fixed structure so that while working on such ladder it does not slip;

(c) a ladder or step-ladder does not stand on loose bricks or other loose packing and has a level and firm footing;

(d) where it is required, in case of use of fixed ladders, sufficient foot-hold and hand-hold are provided for use by the building worker;

(e) every ladder is–

(i) secured so as to prevent undue swaying;

(ii) equally and properly supported on each of its upright;

(iii) so used as not to cause undue sagging; and

(iv) placed as nearly as possible at an inclination of four in one;

(f) the use of all ladders and step-ladders conform to the relevant national standards for their use.

173. Rungs:– The employer shall ensure at a construction site of a building or other construction work that no ladder is used which has a missing or defective rung or a rung which depends for its support solely on nails, spikes or other similar fixing.

174. Materials for ladders:– The employer shall ensure at a construction site of a building or other construction work that all wooden ladders used in building work–

(a) are constructed upright of adequate strength and are made of straight-grained wood, free from defects and having the grain of such wood running lengthwise;

(b) have rungs made of straight-grained wood free from defects and mortised or securely notched into the upright; and

(c) have reinforcing metal ties, if the tenons of such ladders are not secured by wedges.

CHAPTER XVI

Catch Platform and Hoardings, Chutes, Safety Belts and Nets

175. Catch platforms:– The employer shall ensure at a construction site of a building or other construction work that–

(a) catch platform is not used for storage of material or as a working platform;

(b) catch platform is at least two metres wide and is inclined so that the position of outer edge of such platform is fifteen hundred millimetres higher than the inner edge;

(c) the open end of catch platform is properly fenced to the height not less than one metre.

176. Hoardings:– The employer shall ensure at a construction site of a building or other construction work that hoardings are constructed when the Director General considers it necessary for protection of building workers and directs such employer to construct such hoardings.

177. Chutes, its construction and use:– The employer shall ensure at a construction site of a building or other construction work that–

(a) wooden or metal chutes which are at an angle of more than forty-five degrees to the horizontal and used for the removal of materials are closed on all sides except at their openings used for receiving or discharging of materials or articles;

(b) all openings of chutes except their top openings are closed when not in use;

(c) every chute–

(i) is constructed of sound material, adequate strength and is suitable for the purpose it is intended for use;

(ii) exceeding twelve metres in height is constructed in accordance with the design and drawings of a professional engineer for such construction and approval of the Director General;

(d) a suitable warning notice is displayed at conspicuous location, written in Hindi, and in a local language, at the discharge end of every chute;

(e) every chute is cleared when debris has accumulated to a height which can pose danger to building worker but such clearance is done in no case less frequently than once a day.

178. Safety belt and its use:– The employer shall ensure at a construction site of a building or other construction work that–

(a) safety belt, lifelines and devices for the attachment of such lifelines conform to the relevant national standards;

(b) every building worker is supplied with safety belt and safety lifelines for his protection and such building worker uses such belts and lifelines during the performance of his work;

(c) all building workers using safety belts and safety lifelines have the knowledge of safe use and maintenance of such belts and lifelines and are supplied with necessary instructions;

(d) the responsible person for supervising the use of safety belts and safety lifelines referred to in clause (b) inspects and ensures that such safety belts and lifelines are fit for use before taken into use at every time.

179. Safety net and its use:– The employer shall ensure at a construction site of a building or other construction work that–

(a) every safety net is of adequate strength, made of sound material and is suitable for use and conforms to the relevant national standards;

(b) the responsible person for maintenance of safety nets and their use ensures safe fixing of such safety nets and provides such safety nets with suitable and sufficient anchorage so that the purposes for which such safety net is intended for use, is served.

180. Storage of safety belts and nets, etc.:– The employer shall ensure at a construction site of a building or other construction work that proper arrangement is made for the safe storage of safety belts, safety lifelines and safety nets when they are not in use and are protected against mechanical damage, damages from chemicals and damages from biological agents.

CHAPTER XVII

Structural Frame and Form work

181. General provision:– The employer shall ensure at a construction site of a building or other construction work that–

(a) the trained building worker under the direct supervision of a person, responsible for structural frame and formwork, are employed for erection of such structural frame or formwork, dismantling of building and structure and performance of an engineering work, formwork, false work and shoring work;

(b) adequate measures are taken to guard against hazards arising from any temporary state of weakness or unsuitability of a structure.

182. Form work, false work and shoring:– The employer shall ensure at a construction site of a building or other construction work that–

(a) form work and false work are so designed, constructed and maintained that such form work and false work support the load that may be imposed on them;

(b) such form work is so erected that working platform, means of access, bracing, means of handling and stabilising could easily be fixed with such form work.

183. Erection of dismantling of steel and prefabricated structure:– The employer shall ensure at a construction site of a building or other construction work that–

(a) the safety of building workers employed for the erection or dismantling of steel structures and prefabricated structures is ensured from danger by using appropriate means such as the following, namely:

(i) ladder, gangways or fixed platforms;

(ii) platforms, buckets, boatswain's chair or other appropriate means suspended from lifting appliances;

(iii) safety harness, lifelines, catch net or catch platform;

(iv) power-operated mobile working platform.

(b) the work of erection or dismantling of buildings or structures or form work or false work or shoring or any other civil engineering work is carried out by trained building workers under the supervision of a person responsible for such work;

(c) steel or prefabricated structures are so designed and made that such structures can be safely transported or erected; and weight of each unit of such structures is clearly marked on such unit;

(d) the design of each such part maintains stability of each part of the structures referred to in clause (a), clause (b) and clause (c), when erected, and to prevent danger, the design shall explicitly take into account–

(i) the relevant conditions and methods of attachment in the operations of stripping, transport, storing and temporary support during erection of such parts; and

(ii) safeguards, such as provision of railings with working platforms, and for mounting such railings and platforms easily on the structural steel or prefabricated parts;

(e) the hooks and other devices built in or provided on the structural steel or prefabricated parts that are required for lifting and transporting such parts are so shaped, dimensioned and positioned to withstand the stresses to which such hooks or other devices are subjected;

(f) prefabricated parts made of concrete are not stripped or erected before such concrete has set and hardened sufficiently to the extent provided for in the plans, and such parts are examined by the responsible person for any sign of damage before their use;

(g) store places are so constructed that–

(i) there is no risk of structural steel or prefabricated parts falling or overturning;

(ii) storage conditions generally ensure stability and avoid damage having regard to the method of storage and atmospheric conditions; and

(iii) racks are set on firm ground and designed so that units cannot move accidentally in such store places;

(h) structural steel or prefabricated parts are not subjected to stresses prejudicial to their stability while they are stored or transported or raised or set down;

(i) tongs, clamps and other appliances for lifting structural steel and prefabricated parts are–

(a) in such shape and dimensions as to ensure a secure grip without damaging such parts; and

(b) marked with the maximum permissible load in the most unfavourable lifting conditions;

(j) structural steel or prefabricated parts are lifted by such methods and appliances that prevent them from spinning accidentally;

(k) structural steel or prefabricated parts are provided with railings and working platforms before raising such parts to prevent any danger of falling of building workers, materials or articles at the time of any work with such parts;

(l) all reasonably practical measures are taken to avoid injury to building workers, building structure or equipment while structural steel or prefabricated parts are handled or stored or transported or raised or lowered;

(m) structures are not worked on during violent storms or high winds or any other such hazardous situation;

(n) the risk of falling to which building workers, moving on high or sloping girders, may be exposed is limited by all means of adequate collective protection or by the use of a safety harness which is well secured to a sufficiently strong support;

(o) structural steel parts which are to be erected at a great height are, as far as practicable, assembled on the ground;

(p) when structural steel or prefabricated parts are being erected, a sufficiently extended area underneath the workplace shall be barricaded or guarded;

(q) steel trusses which are being erected are adequately shored, braced or guyed until they are permanently secured in position;

(r) structural members are not forced into place by the hoisting machine while any building worker is in such a position that he is likely to be injured by such operation.

184. Form work:– The employer shall ensure at a construction site of a building or other construction work that–

(a) all form works are properly designed keeping in view the safety of building workers, building or structures;

(b) a responsible person for structural frame and form work–

(i) inspects and examines the material, timber, structural steel and scaffolding for its strength and suitability before being taken into use;

(ii) lays down procedures to cover all stages of such structural frame and form work;

(iii) supervises such structural frame and form work;

(iv) take all necessary steps or measures to correct any situation with a view to prevent accident or dangerous occurrence during performances of such structural frame and form work.

185. Deshoring:– The employer shall ensure at a construction site of a building or other construction work that–

(a) when shoring is removed, sufficient props are left in place of such shoring to prevent any possible hazard; and

(b) deshoring is adequately braced or tied together with support to prevent any hazard.

CHAPTER XVIII

Stacking and Unstacking

186. Stacking and unstacking of materials and articles:– The employer shall ensure at a construction site of a building or other construction work that–

(a) where stacking, unstacking, stowing or unstowing of construction material or article, or handling in connection therewith cannot be safely carried out unaided, reasonable measures to guard against accident or dangerous occurrences are taken by shoring or otherwise to prevent any danger likely to be caused by such handling.

(b) stacking of material or article is made on firm foundation not liable to settle and deviate such material or article and does not overload the floor on which such stacking is made;

(c) the materials or articles, are not stacked against partition or walls of a warehouse or store place unless it is known that such partition or the wall is of sufficient strength to withstand the pressure of such materials or articles;

(d) the materials or articles are not stacked to such a height and in such a manner as would render the pile of such stack unstable and cause hazards to the building workers or the public in general;

(e) where the building workers are working on stack exceeding one point five metres in height, safe means of access to the stack is provided;

(f) all stacking or unstacking operations are performed under the supervision of a responsible person for such stacking or unstacking;

(g) the stacking of construction materials or articles is not made near the site of excavation, shaft, pit or any other such opening;

(h) stacks which may lean heavily or become unstable or collapse are barricaded.

187. Stacking of cement and other material bags:– The employer shall ensure at a construction site of a building or other construction work that–

(a) a stack pile is not more than ten bags in height unless such stack pile is stacked in a suitable enclosure or otherwise adequately supported;

(b) while removing bags from the stack pile, the stability of such stack pile is ensured;

(c) bags containing cement or lime are stored in dry places;

(d) the materials like bricks, tiles or blocks are stored on a firm ground;

(e) reinforcing steel is stored according to its shape, size and length;

(f) stack of reinforcing steel is kept as low as possible;

(g) no pipe is stored on rack or in stack where such pipe is likely to fall by rolling;

(h) the angle of repose is maintained where loose materials are stacked;

(i) when dust-laden material is to be stored or handled, measures are taken to suppress the dust produced by such storing or handling and suitable personal protective equipment are supplied to and used by the building workers working for such storing or handling.

CHAPTER XIX

Scaffold

188. Scaffold construction:– The employer shall ensure at a construction site of a building or other construction work that–

(a) every scaffold and every component thereof is of adequate construction, made of sound material and free from defects and is safe for the purposes for which it is intended for use;

(b) in case bamboo is used for scaffolding, such bamboo is of suitable quality, good condition, free from protruding knots and stripped off to avoid any injury to building workers during handling such bamboo;

(c) all metal scaffolds used in building or other construction work conform to be relevant national standards.

189. Supervision by a responsible person:– The employer shall ensure at a construction site of a building or other construction work that no scaffold is erected, added, altered or dismantled except under the supervision of a responsible person for such erection, addition, alteration or dismantling.

190. Maintenance:– The employer shall ensure at a construction site of a building or other construction work that–

(a) the scaffold used in building or other construction work is maintained in good repairs and the measures are taken against its accidental displacement or any other hazard;

(b) no scaffold or part thereof is partly dismantled and allowed to remain in such a condition unless–

(i) the stability or safety of the remaining portion of such scaffold has been ensured by a responsible person for the safety of such scaffolds;

(ii) in case the remaining part of such scaffold cannot be used by the building workers, necessary warning notice written in Hindi and in a language understood by the majority of the building workers that such scaffold is unfit for use, is displayed at the place where such scaffold is erected.

191. Standards, ledger, putlogs:– The employer shall ensure at a construction site of a building or other construction work that–

(a) standards of a scaffold are–

(i) plumb, where practicable;

(ii) fixed sufficiently close together to secure the stability of such scaffold having regard to all the possible working situations and conditions for the intended use of such scaffold;

(iii) spaced, as close as practicable, to ensure safety and stability of such scaffold;

(b) adequate measures are taken to prevent displacement of a standard of a scaffold either by providing sole plate or a base plate, as necessary;

(c) ledgers of metal scaffold are placed at vertical intervals with due regard to safety and stability of such scaffold;

(d) bamboo ledgers are kept as nearly as possible and are placed and fastened to the standards of a scaffold with due regard to the stability of such scaffold.

192. Working platform:– The employer shall ensure at a construction site of a building or other construction work that–

(a) working platform is provided around the face or edge of a building adjoining at every uppermost permanent floor of such building under construction and at any level where construction work of such building is carried out;

(b) a platform is designed to suit the number of building workers to be employed on each bay of a scaffold work on such platform and the materials or articles and tools to be carried with them in such bay;

(c) the safe working load and the number of building workers to be employed in each bay of a scaffold are displayed for the information of all the building workers employed at such construction site.

193. Board, plank and decking:– The employer shall ensure at a construction site of a building or other construction work that–

(a) board, plank and decking used in the construction of a working platform is of uniform size and strength and is capable of supporting the load and number of building workers in accordance with the relevant national standards keeping in view of the safety of such building workers;

(b) metal decking, which forms part of a working platform, is provided with non-skid surface;

(c) no board or plank which forms the working platform is projected beyond its end support unless it is effectively prevented from tripping or lifting;

(d) board, plank or decking is fastened and secured;

(e) at any one time, not more than two working platforms per bay, are used to support building workers or materials or articles at such bay;

(f) adequate measures are taken to prevent injury which may be caused by falling material and objects by using safety nets or other suitable means;

(g) concrete, other debris or materials are not allowed to accumulate at any platform on a scaffold;

(h) where a work is to be done at the end of a wall, working platform at such workplace is faced or, wherever practicable, at least zero point sixty metres beyond the end of such wall.

194. Repair of damaged scaffold:– The employer shall ensure at a construction site of a building or other construction work that–

(a) no building worker is permitted to work on a scaffold which has been damaged or weakened unless adequate safety measures have been taken to ensure the safety of such building worker;

(b) necessary warning signs are displayed at such places where repairs of scaffold are undertaken.

195. Opening:– The employer shall ensure at a construction site of a building or other construction work that–

(a) there is no opening in any working platform except for allowing access to such working platform;

(b) wherever opening on a platform is unavoidable, necessary measures for protection against falling of objects or building workers from such platform are taken by providing suitable safety nets, belts or any other similar means;

(c) access from one working platform to another platform on a scaffold, if required, is provided with suitable and safe ladder for the use of building workers working on such platforms.

196. Guardrails:– The employer shall ensure at a construction site of a building or other construction work that every side of a working platform from which a person is liable to fall is provided with suitable and safe guardrails and toeboard of adequate strength to prevent fall of any building worker, material or tools from such platform.

197. Scaffold used by building workers of different employers:– The employer shall ensure at a construction site of a building or other construction work that–

(a) where a scaffold or a part of a scaffold is used, which has previously been used by another employer for his building workers, such a scaffold or part thereof is used only after its inspection and examination by a responsible person for its use that such scaffold or part is safe and fit for such use;

(b) if any rectification, alteration or modification in a scaffold or part thereof is needed to suit its use, such rectification, alteration or modification is made in consultation with the responsible person referred to in clause (a) before using such scaffold or part.

198. Protection against electric power line:– The employer shall ensure at a construction site of a building or other construction work that all necessary and practical measures for protection are taken to prevent any building worker, working on a scaffold, from coming into contact with the electric wires or dangerous equipment.

199. Screening net and wirenets:– The employer shall ensure at a construction site of a building or other construction work that where a scaffold is erected in an area where the construction activities may pose hazards to pedestrians or vehicular traffic nearby from the falling of objects, wire nets or screening nets are used to envelope such scaffold.

200. Tower scaffold:– The employer shall ensure at a construction site of a building or other construction work that–

(a) the height of every tower scaffold used in building or other construction work is not more than eight times, the lesser of a base dimension of such scaffold;

(b) a tower scaffold is lashed to a building or a fixed structure before being used by the building workers;

(c) any tower scaffold which can be moved or castered is–

(i) constructed with due regard to the stability and, if necessary, adequately weighted at the base;

(ii) used only on plain and even surface; and

(iii) has casters provided with positive locking devices to hold such scaffold in position;

(d) no building worker remains on board scaffold, tools, material when it is being shifted from one position to another position.

201. Gear for suspension of scaffold:– The employer shall ensure at a construction site of a building or other construction work that–

(a) chains, ropes or lifting gears used for suspension of a scaffold are of adequate strength, made of sound material and suitable for the purposes of their use and are maintained in good repairs;

(b) chains, wires, ropes or metal tubes used for the suspension of a scaffold are–

(i) properly and securely fastened to every anchorage point and to the scaffold ledgers of other main supporting members used for the support of such scaffold; and

(ii) so positioned as to ensure stability of the scaffold.

202. Trestle scaffold and cantilever scaffold:– The employer shall ensure at a construction site of a building or other construction work that–

(a) no trestle scaffold is constructed with more than three tiers or if its working platform is more than four point five metres above the ground or floor or other surface upon which such scaffold is erected, such trestle scaffold is designed by professional engineer and has the approval of Director General before being taken into use;

(b) no trestle scaffold is erected on a suspended scaffold;

(c) no cantilever or jib scaffold is used unless it is adequately supported, fixed and anchored on opposite side of its support has out-riggers of adequate length and where necessary sufficiently supported and braced to ensure safety and stability of such scaffold;

(d) no working platform resting on bearers let into a wall at one end and without other support is used unless such bearers are of adequate strength, braced through the wall and securely fastened on the other side.

203. Scaffold supported by building:– The employer shall ensure at a construction site of a building or other construction work that–

(a) no part of a building is used as support or part of a scaffold unless such part of the building is made of sufficient strength and made of sound material to afford safe support;

(b) overhanging eaves gutters are not used for supporting scaffold;

(c) suspended scaffold is made of in accordance with the relevant national standards before being used by the building workers.

204. Use of winches and climbers for suspended scaffold:– The employer shall ensure at a construction site of a building or other construction work that–

(a) no suspended scaffold is raised or lowered by winches or climbers unless such scaffold is made of sound material, adequate strength and has been tested and certified safe for use of winches or climber for such raising or lowering by a competent person before being taken into use;

(b) all suspended scaffolds counter-balanced by counter weights are of types, approved by the Director General before being taken into use for building or other construction work;

(c) the working platform of a suspended scaffold is securely fastened to the building or structure as to be safe and to prevent such platform from swinging;

(d) the safe working load which a suspended scaffold can carry, is displayed where such scaffold is being used.

205. Safety devices for suspended scaffold:– The employer shall ensure at a construction site of a building or other construction work that every suspended scaffold, raised or lowered by the winches or climbers, is provided at each of its suspension point with a safety rope with automatic safety device mounted on each of such rope so that such safety rope with such automatic safety device supports the platform of such scaffold in the event of failure of the primary suspension wire ropes, winches, climbers or any part of the mechanism used for raising or lowering such suspended scaffold:

Provided that this rule shall not apply–

(a) where the platform of such scaffold is supported with two independent suspension wire ropes at or near each end of such platform so that in the event of failure of one of such suspension wire rope, the other wire rope is capable of sustaining the weights of such platform and its load and prevent it from tilting; or

(b) where a system is incorporated which operates automatically to support the platform of such scaffold and its load in the event of a failure of the primary suspension wire rope of such scaffold.

CHAPTER XX

Cofferdams and Caissons

206. General Provisions:– The employer shall ensure at a construction site of a building or other construction work that–

(a) every cofferdam and caisson is–

(i) of good construction, sound material and of adequate strength;

(ii) provided with adequate means for building workers to reach safely at the top of such cofferdam or caisson, as the case may be, in the event of an inrush of water;

(iii) provided with safe means of access to every place where building workers are employed in such cofferdam and caisson, as the case may be;

(b) the work relating to construction, positioning, modification or dismantling of cofferdams or caissons is carried out under the supervision of a responsible person;

(c) all cofferdams and caissons are inspected by a responsible person at intervals as specified by the Director General;

(d) a building worker is allowed to work in a cofferdam or caisson after such cofferdam or caisson is inspected and found safe by responsible person within such preceding period as approved by the Director General and a record of such inspection is maintained in a register;

(e) the work in compressed air in a cofferdam or caisson is–

(i) carried out in accordance with the procedure laid down in the relevant national standards;

(ii) carried out by such building workers who have completed eighteen years of age and are medically examined as required under rule 223;

(iii) carried out under the supervision of a responsible person ;

(f) if the work in cofferdam or caisson is carried out in shifts, a record of the time spent by each building worker in each such shift for carrying out the work is maintained in a register with particulars of time taken for the compression of such building worker, if any;

(g) at every work site or project in a cofferdam or caisson, where building workers are employed to work in compressed air environment, a construction medical officer assisted by a nurse or trained first-aid attendant, is available at all times at such site or project during such work;

(h) there is one stand by reserve compressor to meet the emergency at each work-place or project in a cofferdam or caisson.

207. Pressure plant and equipment:– The employer shall ensure at a construction site of a building or other construction work that–

(a) the pressure plant and equipment–

(i) are examined and tested by the competent person before being put into use for such work;

(ii) is of proper design and construction, sound material and adequate strength to perform the work for which it is used;

(iii) is properly maintained in good repairs and working condition.

(b) the pressure plant and equipment referred to in clause (a) is fitted with–

(i) a suitable safety-valve or other effective device to provide maximum safe discharge pressure from being exceeded at any time;

(ii) a suitable pressure gauge with a dial range not less than one point five times and not exceeding twice the maximum working pressure, easily visible and designed to show at all times, the internal pressure in kilogram per square centimetre and marked with the maximum safe working pressure at such plant and equipment;

(iii) a suitable stop valve or valves by which the pressure plant or the system of the pressure plant may be isolated from the source of supply of pressure or otherwise ;

(c) every pressure plant or equipment shall be thoroughly examined by the competent person–

(i) externally, once in every period of six months;

(ii) internally, once in every period of twelve months and;

(iii) by hydraulic test once in a period of four years.

CHAPTER XXI

Safety Organisation

208. Safety Committees:– (1) Every establishment wherein five hundred or more building workers are ordinarily employed, there shall be a Safety Committee constituted by the employer which shall be represented by equal number of representatives of employer and building workers employed in such establishment. In no case the number of representatives of the employer shall exceed the representatives of building workers. The Committee shall be represented by representatives of the recognised unions wherever such unions exist.

(2) The main functions of the Safety Committee shall be–

(a) to identify probable causes of accident and unsafe practices in building or other construction work and to suggest remedial measures;

(b) to stimulate interest of employer and building workers in safety by organizing safety weeks, safety competition, talks and film shows on safety, preparing posters or taking similar other measures as and when required or as necessary;

(c) to go round the construction site with a view to check unsafe practices and detect unsafe conditions and to recommend remedial measures for their rectification including First Aid Medical and Welfare Facilities;

(d) to look into the health hazards associated with handling different types of explosives, chemicals and other construction materials and to suggest remedial measures including use of proper personal protective equipment;

(e) to suggest measures for improving welfare amenities in the construction site and other miscellaneous aspects of safety, health and welfare in building or other construction work;

(f) to bring to the notice of the employer the hazards associated with use, handling and maintenance of the equipment used during the course of building and other construction work.

(3) The Safety Committee shall meet at regular intervals at least once in a month and it shall be chaired by the senior person having overall control over the affairs of the construction site.

(4) The agenda and minutes of the meeting shall be circulated to all concerned and it shall be in the language understood by majority of the building workers and shall be produced to the Inspector on demand for inspections.

(5) The decisions and recommendations of the Safety Committee shall be complied with by the employer within reasonable time.

209. Safety Officer:– (1) In every establishment wherein five hundred or more building workers are ordinarily employed, the employer shall appoint Safety Officers as per the scale laid down in Schedule VIII annexed to these rules. Such Safety Officers may be assisted by suitable and adequate staff.

(2) Duties, qualifications and the conditions of service of Safety Officers appointed under sub-rule (1) shall be as provided in Schedule VIII annexed to these rules.

(3) Wherever number of workers employed by single employer is less than five hundred, such employers may form a group and appoint a common Safety Officer for such group of employers with prior permission of Director General.

210. Reporting of accidents:– (1) Notice of any accident on the construction site which either-

(a) Causes loss of life; or

(b) disables a building worker from working for a period of forty-eight hours or more immediately following the accident, shall forthwith be sent by telegram, telephone, fax or similar other means including special messenger within four hours in case of fatal accidents and seventy-two hours, in case of other accidents involving building workers, to–

(i) the Regional Labour Commissioner (Central), having jurisdiction in the area in which the establishment in which such accident or dangerous occurrence took place is located. Such Regional Labour Commissioner (Central), shall be the authority appointed under Section 39 of the Act;

(ii) the Board with which the building worker involved in accident was registered as a beneficiary;

(iii) the Director General; and

(iv) the next of kin or other relative of building worker involved in accident.

(2) Notice of any accident at a construction site of a building or other construction work which–

(a) causes loss of life; or

(b) disables such building worker from work for more than ten days following the accident, shall also be sent to–

(i) the officer incharge of the nearest police station;

(ii) the District Magistrate or if the District Magistrate by order so desires to the Sub-Divisional Magistrate.

(3) In the case of an accident falling under clause (b) of sub-rule (1), or clause (b) of sub-rule (2) the injured building worker shall be given first-aid and immediately thereafter be transferred to a hospital or other place for medical treatment.

(4) Where any accident causing disablement subsequently results in death of a building worker, notice in writing of such death shall be communicated to the authorities as mentioned in sub-rule (1) and sub-rule (2) within seventy-two hours of such death.

(5) The following classes of dangerous occurrence shall be reported to the Inspector having jurisdiction, whether or not any death or disablement is caused to a building worker, in the manner prescribed in sub-rule (1), namely:–

(a) collapse or failure of lifting appliances or hoist or conveyors or other similar equipment for handling building or construction material or breakage or failure of rope, chain or loose gears; overturning of cranes used in building or other construction work; falling of objects from height;

(b) collapse or subsidence of soil, any wall, floor, gallery, roof or any other part of any structure, platform, staging, scaffolding or any means of access including formwork;

(c) contact work, excavation, collapse of transmission;

(d) explosion of receiver or vessel used for storage, at a pressure greater than atmospheric pressure, of any gas or gases or any liquid or solid used as building material;

(e) fire and explosion causing damage to any place on construction site where building workers are employed;

(f) spillage or leakage of hazardous substances and damage to their container;

(g) collapse, capsizing, toppling or collision of transport equipment;

(h) leakage or release of harmful toxic gases at the construction site.

(6) In case of failure of a lifting appliance, loose gear, hoist or building and other construction work machinery and transport equipment at a construction site of a building or other construction work, such appliances, gear, hoist, machinery or equipment and the site of such occurrence shall, as far as practicable, be kept undisturbed until inspected by the Inspector having jurisdiction.

(7) Every notice given under sub-rule (1), or sub-rule (2) or sub-rule (4) shall be followed by a written report to the Inspector, authority under Section 39 of the Act, the Board and the Director General in Form XIV under proper acknowledgement.

211. Procedure for enquiry into causes of accident or dangerous occurrence:– (1) The enquiry under sub-section (2) or sub-section (3) of Section 39 of the Act, as the case may be, shall be conducted by the authority referred to in sub-clause (i) of clause (b) of sub-rule (1) of rule 210, in the following manner, namely :

(a) the enquiry shall be commenced as early as it may be, and in any case, within fifteen days of the receipt of notice of accident or dangerous occurrence under rule 210;

(b) the enquiry may be conducted by the authority referred to in sub-clause (i) of clause (b) of sub-rule (1) of rule 210 himself or by an enquiry officer appointed by such authority;

(c) the authority or enquiry officer, as the case may be, shall serve or cause to be served, notices in writing, informing the date, time and place of such enquiry to all persons entitled to appear in such enquiry and whose names and addresses are known to such authority or enquiry officer;

(d) notwithstanding the provision of clause (b), for the purpose of notifying other persons who may in any way be concerned or be interested in such enquiry, the authority or enquiry officer, as the case may be, may publish notice of such enquiry in one or more local newspapers, informing the date, time and place of such enquiry.

(2) The person entitled to appear at the enquiry may include–

(a) an Inspector or any officer of the Central Government or the State Government or an undertaking or public body, concerned with the enforcement or compliance of safety provisions of the Act and these rules in the concerned establishment;

(b) a trade union or a workers' association or an employers' association;

(c) the worker involved in the accident or his legal heir or authorised representative;

(d) the owner of the premises in which the accident took place;

(e) any other person, at the discretion of the authority or the enquiring officer, as the case may be, who may be interested in or be concerned with the cause of an accident or may have knowledge about such cause or likely to give material evidence or produce a relevant document in connection with such accident or dangerous occurrence.

(3) In case the entitled person referred to in sub-rule (2) is a body corporate, a company, or any other orgnisation, association, group of persons such group may be represented through an authorised representative including a counsel or a solicitor.

(4) Subject to the provisions of sub-rule (5), the enquiry shall be held in public.

(5) In cases where–

(a) the Central Government is of the opinion that the matter of the enquiry or any part of it are of such nature that it would be against the interests of national security to hold the enquiry in public and directs the said authority or the enquiry officer, as the case may be, to hold the enquiry in camera; or

(b) on an application made by any party to the enquiry, the authority or the enquiry officer, as the case may be, referred to in sub-rule (1), if it or he is of the opinion that the holding of the public enquiry will lead to disclosure of information relating to a trade secret, decides to hold the enquiry of such part of it in camera, such enquiry shall not be held in public.

(6) Information disclosed by any person during the course of hearing or evidence in the cases covered under sub-rule (5) shall not be disclosed to any person except for the purpose of the enquiry.

(7) The person entitled to appear under sub-rule (2), called for evidence or representing in an enquiry shall be entitled to make an opening statement, give evidence, request the enquiry officer to call for specified document or evidence, cross-examine other person or to the extent and at the stage permitted by the authority or enquiry officer holding the enquiry.

(8) any evidence in an enquiry may be admitted at the discretion of the authority or enquiry officer during the enquiry, who may, also direct that documents to be tendered in evidence may be inspected by any person entitled or permitted to appear at such enquiry and that facilities be afforded to such person to take or obtain copies thereof.

(9) The authority or the enquiry officer holding an enquiry may authorise any person, being an officer of the Central Government, to assist such authority or enquiry officer where necessary, for the purpose of conducting the enquiry, and the officer so authorised may enter the premises of the concerned establishment during working hours, inspect the records relevant to such enquiry, investigate and take such evidence as may be required to conduct such enquiry.

(10) The findings of the enquiry along with all evidence, in original, including statements of witnesses shall be forwarded to the authority specified under Section 39 of the Act within five days of the completion of the enquiry in cases where sub-enquiry was not conducted by such authority itself.

(11) A copy of the findings along with a brief statement of facts relating to an enquiry conducted under this rule shall be forwarded to the Director General and the Central Government by the authority referred to in sub-rule (1) of rule 210.

CHAPTER XXII

Explosives

212. Handling of explosives:– The employer shall ensure at a construction site of a building or other construction work that–

(a) all explosives are handled, used or stored in accordance with the instructions and the material data sheet supplied by the manufacturer of such explosives;

(b) the use of explosives is carried out in safe manner to avoid injury to any person and under the direct supervision of a responsible person;

(c) before using any explosive, necessary warning and danger signals are erected, at conspicuous places of such use to warn the building workers and the general public of the danger involved in such use.

213. Precautions:– The employer shall ensure at a construction site of a building or other construction work that–

(a) notwithstanding the provisions of rule 212, the following precautions are observed at the places of transporting, handling, storage and use of such explosives, namely:

(i) prohibition of smoking, naked lights and other sources of ignition in the vicinity where explosives are handled, stored and used;

(ii) to keep safe distance and to use non-sparking tools while opening packages containing explosives;

(iii) to stop the use of explosives and handling thereof while the weather conditions are not suitable for such use or handling;

(b) in addition to the provisions of this chapter, all measures and precautions required to be observed for use, handling, storing or transportation of explosives under the rules framed under the Explosives Act, 1884 (Central Act 1884) are observed.

CHAPTER XXIII

Piling

214. General Provisions:– The employer shall ensure at a construction site of a building or other construction work that–

(a) all pile-driving equipments are of good design and sound construction, taking into account the ergonomic principles and are properly maintained;

(b) a pile driver is firmly supported on a heavy timber sill, concrete bed or other secured foundation;

(c) in case a pile driver is required to be erected in dangerous proximity to an electrical conductor all necessary precautions are taken to ensure safety;

(d) the hoses of steam and air hammer are securely lashed to such hammer so as to prevent them from whipping in case of connection or break;

(e) adequate precaution is taken to prevent the pile driver from over turning;

(f) all necessary precaution is taken to prevent hammer from missing the pile;

(g) a responsible person for inspecting pile-driving equipment, inspects such equipment before taking it into use and takes all appropriate measures as required for the safety of building workers before commencing piling work by such equipment.

215. Stability of adjacent structure:– The employer shall ensure at a construction site of a building or other construction work that where there is any question of stability of a structure for its adjoining areas to be piled, such structure is supported, where necessary, by underpinning, sheet piling, shoring, bracing or by other means to ensure safety and stability of such structure and to prevent injury to any person.

216. Protection of operator:– The employer shall ensure at a construction site of a building or other construction work that an operator of every pile-driving equipment is protected from falling objects, steam, cinders or water by substantially covering or otherwise or by other means.

217. Instruction to and supervision of building workers working on a pile driving equipment:– The employer shall ensure at a construction site of a building or other construction work that every building worker working on a pile-driving equipment is given instructions regarding safe

work procedure to be followed in piling operation and is supervised by a responsible person throughout such work.

218. Entry of unauthorised person:– The employer shall ensure at a construction site of a building or other construction work that all piling areas where pile-driving equipment is in use are effectively cordoned off to prevent entry of unauthorised persons.

219. Inspection and maintenance of pile-driving equipment:– The employer shall ensure at a construction site of a building or other construction work that–

(a) pile-driving equipment is not taken into use until it has been inspected by a responsible person and found to be safe for such use;

(b) pile-driving equipment in use is inspected by a responsible person for such inspection at suitable intervals to ensure safety to the building workers working on such equipment;

(c) all pile lines and pulley blocks are inspected by a responsible person before the beginning of each shift of piling operations.

220. Operation of pile-driving equipment:– The employer shall ensure at a construction site of a building or other construction work that–

(a) only experienced and trained building worker operates pile-driving so as to avoid any probable danger from such operation;

(b) pile-driving operations are governed by generally prevalent and accepted signals so as to prevent any probable danger from such operations;

(c) every building worker employed in pile-driving operation or in the vicinity of such pile-driving operation wears ear protection and safety helmet or hard hat and safety shoes;

(d) piles are prepared at a distance, at least equal to twice the length of the longest pile, from the place of pile-driving operations;

(e) when a pile driver is not in use, the hammer of such pile driver is blocked at the bottom of the heads of such pile driver.

221. Working platform on piling frames:– The employer shall ensure at a construction site of a building or other construction work that where a structural tower supports the lead of a pile driver, suitable working platforms of adequate strength are provided on levels of such leads at which it is necessary for the building workers to work and such platforms are provided with a safety railing and toe boards on each side of such platforms,

except on the hammer of such pile driver or lead sides of such platform and where such platforms cannot be provided with such railing and toe boards, a safety belt is provided to each such building worker.

222. Pile testing:– The employer shall ensure at a construction site of a building or other construction work that–

(a) the testing of pile is conducted under the supervision of a responsible person for such testing;

(b) all practicable measures like displaying of warning notices, barricading the area and other similar measures are taken to protect the area where the pile testing is carried out;

(c) entry to a pile-testing area is prohibited to general public to ensure safety.

CHAPTER XXIV

Medical Facilities

223. Medical examination of building workers, etc.:– The employer shall ensure at a construction site of a building or other construction work that–

(a) (i) a building worker who is employed for a work involving such risk or hazards, inherent in such work as the Director General considers appropriate for the periodical medical examination of such worker, is medically examined at such intervals as the Director General may direct from time-to-time;

(ii) every operator of a crane, winch or other lifting appliance, transport equipment or vehicle, is medically examined before employing such operator and again periodically, at such intervals as the Director General may direct from time-to-time;

(iii) the medical examination referred to in sub-clause (i) and sub-clause (ii) is in accordance with Schedule VII, annexed to these rules and is conducted by such medical officers or at such hospitals as are approved by the Central Government for the purpose from time-to-time;

(iv) in case of a building worker who is exposed to special occupational health hazard owing to job or work assigned to such worker, the periodical medical examination referred to in sub-clause (i) or sub-clause (ii) includes such special

investigation as may be deemed necessary by the construction medical officer examining such building worker for the diagnosis of occupational disease.

(b) no building worker is charged for the medical examination referred to in sub-clause (i) or sub-clause (ii) of clause (a) and the cost of such examination is borne by the employer employing such building worker;

(c) certificate of medical examination referred to in sub-clause (i) or sub-clause (ii) of clause (a) is issued in Form XI annexed to these rules;

(d) the record of the medical examination referred to in sub-clause (i) or sub-clause (ii) of clause (a) of every building worker employed by him is maintained in a register in Form XII annexed to these rules and such register shall be made available to the inspector having jurisdiction, on demand;

(e) in case a construction medical officer examining a building worker under sub-clause (i) or sub-clause (ii) of clause (a) is of the opinion that such building worker so examined is required to be taken away from the building or other construction work at which he is employed for health protection, such medical officer shall inform the employer of such building worker accordingly and such employer shall inform such opinion to the Board where such worker is registered as a beneficiary.

224. Duties of construction medical officers:– (1) The medical examination referred to in sub-clause (i) or sub-clause (ii) of clause (a) of rule 223 shall be carried out by a construction medical officer.

(2) The duties and responsibilities of such construction medical officer shall be as given below, namely:–

(a) medical examination of building workers;

(b) first-aid care including emergency medical treatment;

(c) notification of occupational diseases to the concerned authorities in accordance with these rules;

(d) immunisation service;

(e) medical record upkeep and maintenance;

(f) health education including advisory services on family planning, personal hygiene, environmental sanitation and safety;

(g) referral services.

225. Occupational health centres:– The employer shall ensure at a construction site of a building or other construction work involving hazardous processes specified under Schedule IX annexed to these rules that–

(a) an occupational health centre, mobile or static, is provided and maintained in good order at such site;

(b) services and facilities as per the scale laid down in Schedule X, annexed to these rules are provided at the occupational health centre referred to in clause (a);

(c) a construction medical officer appointed at an occupational health centre possesses the qualification as laid down in Schedule XI, annexed to these rules.

226. Ambulance Room:– The employer shall ensure at a construction site of a building or other construction work that–

(a) in case five hundred or less workers are employed at such construction site there is an ambulance room at such construction site or an arrangement with a nearby hospital for providing an ambulance room and such ambulance room is in the charge of a qualified nurse and the service of such ambulance room is available to building worker employed at such construction site at every time when he is at work;

(b) in case more than five hundred building workers are employed at such construction site there is an ambulance room with effective communication system and such ambulance room is in the charge of a qualified nurse and the service of such ambulance room is available to a building worker employed at such construction site at every time when he is at work; and such ambulance room is in overall charge of a construction medical officer;

(c) an ambulance room referred to in clause (a) or clause (b) is equipped with the articles specified in Schedule IV annexed to these rules;

(d) record of all cases of accidents and sickness treated at the ambulance room referred to in clause (a) or clause (b) is maintained and produced to the inspector having jurisdiction on demand.

227. Ambulance van:– The employer shall ensure at a construction site of a building or other construction work that an ambulance van is provided at such construction site or an arrangement is made with a nearby hospital for providing such ambulance van for transportation of serious cases of accident or sickness of the building workers to the hospital promptly

and such ambulance van is maintained in good repair and is equipped with standard facilities specified in Schedule V annexed to these rules.

228. Stretchers:– The employer shall ensure at a construction site of a building or other construction work that sufficient number of stretchers is provided at such construction site so as to be readily available in an emergency.

229. Occupational health services for the building workers:– The employer shall ensure at a construction work, where more than five hundred building workers are employed that–

(a) a special medical service or an occupational health service is available at such construction site at all times and such service shall–

(i) provide first-aid and emergency treatment;

(ii) conduct special medical examination for occupational hazards to such building workers before their employment and thereafter at such intervals as may be specified by the Director General from time-to-time;

(iii) conduct training of first-aid personnel of such medical service;

(iv) render advice to such employer on conditions of work and improvement required to avoid hazards to the health of such building worker;

(v) promote health education, including family welfare among such building workers;

(vi) cooperate with the inspector having jurisdiction in the detection, measurement and evaluation of chemical, physical or biological factors suspected of being harmful to such building workers;

(vii) undertake immunisation for all such building workers against tetanus, typhoid, cholera and other infectious diseases.

(b) the special medical service referred to in clause (a) collaborates with the labour department or any other concerned department or service of the Government of India in matters of treatment, job placement, accident prevention and welfare of such building workers.

(c) the special medical service referred to in clause (a) is headed by a construction medical officer and is provided with adequate staff, laboratory and other equipments.

(d) the premises of the special medical service referred to in clause (a) are conveniently accessible, comprise at least a waiting room, a consulting room, a treatment room, a laboratory and suitable accommodation for nurses and other staff of such service.

(e) the special medical service referred in clause (a) maintains records pertaining to its activities referred to in sub-clauses (i) to (vii) of clause (a) and sends to the Director General, once in every three months, information in writing on-

(i) the state of health of such building workers; and

(ii) the nature and causes of occupational injuries or disease suffered by any of such building workers and measures taken to prevent recurrence of such injury or disease.

230. Notice of poisoning or occupational diseases:– The employer shall ensure at a construction site of a building or other construction work that–

(a) when a building worker contracts any disease specified in Schedule II annexed to these rules, a notice in Form XIII annexed to these rules is sent without delay to the Inspector, having jurisdiction, and to the Board with which such building worker is registered as a beneficiary;

(b) if any medical practitioner or construction medical officer attends on a building worker suffering from any disease referred to in clause (a), such medical practitioner or construction medical officer sends information regarding the name and full particulars of such building worker and the disease suffered by him, to the Director General without delay.

231. First-aid boxes:– The employer shall ensure at a construction site of a building or other construction work that–

(a) sufficient number of first-aid boxes or cupboards are provided and maintained for providing first-aid to the building workers;

(b) every first-aid box or cupboard is distinctly marked "First-aid" and is equipped with the articles specified in Schedule III annexed to these rules;

(c) nothing except appliances or requisites for first-aid is kept in a first-aid box or cupboard and such box or cupboard is so kept as to protect it against contamination by dust or other foreign matter and against penetration of moisture and such box or cupboard is kept in the charge of a person trained in first-aid and is always readily available during working hours.

232. Emergency care services or emergency treatment:– The employer shall ensure at a construction site of a building or other construction work that–

(a) essential life-saving aides and appliances required to handle–

(i) head injuries and spinal injuries;

(ii) bleeding;

(iii) fractures and dislocations of bones and joints;

(iv) crush injuries;

(v) shock, including electric shock;

(vi) dehydration due to any cause;

(vii) snake bite, insect bite, scorpion and bee stings;

(viii) burns, including chemical burn;

(ix) bends or divers paralysis;

(x) other surgical gynaecological, obstetric or paediatric emergencies;

(xi) drowning;

(xii) sunstroke and frost bite to building workers,

are provided and properly maintained under the supervision of a construction medical officer.

(b) the essential life-saving aids for any emergent situation referred to in sub-clauses (i) to (xii) of clause (a) are provided to an injured or a sick building worker during his transportation from such building site to a hospital and till such building worker is attended by a doctor in such hospital;

(c) any other equipment or facilities required for emergency care or treatment to the building workers arising from special local conditions and construction processes at such building site, as specified by the Central Government from time-to-time, are provided.

CHAPTER XXV

Information to Bureau of Indian Standards

233. Furnishing of information to Bureau of Indian Standards:- The employer shall ensure at a construction site of a building or other construction work that–

(a) every architect and other professional like structural engineer or project engineer involved in the execution of a building or other construction project, furnishes to the Bureau of Indian Standards, the details regarding the performance of and deviations or short-comings, if any, of the building materials, articles or processes used in such building and other construction project for which the Indian Standards are already available;

(b) the architect and other professional referred to in clause (a) informs to the Bureau of Indian Standards, the details of the building materials, articles or processes used in the building and other construction activities for which the Indian Standards do not exist, with the Bureau of Indian Standards and the performance of such materials, articles or processes along with the suggestions for their improvement to enable the Bureau of Indian Standards to consider and form necessary standards.

PART IV

HOURS OF WORK, WELFARE, PAYMENT OF WAGES, REGISTERS AND RECORDS, ETC.

CHAPTER XXVI

Hours of Work, Rest Intervals and Weekly Off, etc.

234. Hours of work, intervals of rest and spread over etc.:– (1) No building worker employed in building or other construction work shall be required or allowed to work for more than nine hours a day or forty-eight hours a week.

(2) No building worker employed in building or other construction work shall be required or allowed to work continuously for more than five hours unless he had an interval of rest of not less than half an hour.

(3) The working day of a building worker employed in building or other construction work shall be so arranged that inclusive of the intervals of rest, if any, shall not spread over more than twelve hours on any day.

(4) When a building worker works in any building or other construction work for more than nine hours on any day or for more than forty-eight hours in any week, he shall, in respect of overtime work, be entitled to wages at double the ordinary rate of wages.

235. Weekly rest, payment for work done on the day of rest at overtime rate, etc.:– (1) Subject to the provisions of these rules, each building worker employed in building and other construction work shall

be allowed a day of rest every week (hereinafter referred to as the rest day which shall ordinarily be Sunday, but the employer may fix any other day of the week as the rest day :

Provided that the building worker shall be informed of the day fixed as the rest day and of any subsequent change in such rest day before the change is effected, by display of a notice to that effect in the place of employment at the place specified by the Inspector having jurisdiction in this behalf.

(2) No building worker employed in building or other construction work shall be required or allowed to work on a rest day for a whole day on one of the five days immediately before or after such rest day;

Provided that no substitution shall be made which results in a building worker working for more than ten days consecutively without a rest day for a whole day.

(3) Where a building worker employed in building or other construction work has worked on a rest day and has been given a substituted rest day on any one of the five days before or after the rest day, as provided in sub-rule (1) and sub-rule (2), such rest day shall, for the purpose of calculating the weekly hours of work, be included in the week in which such substituted rest day occurs.

(4) A building worker employed in building or other construction work shall be granted wages for a rest day, calculated at the rate applicable to the day preceding such rest day and in case he has worked on a rest day and has been given a substituted rest day he shall be paid wages for such rest day on which he worked, at the overtime rate and wages for such substituted rest day at the rate applicable to the day preceding such substituted rest day.

Explanation I:– For the purpose of this rule "preceding day' means the last day preceding a rest day or a substituted rest day, as the case may be, on which a building worker had worked and where such substituted rest day falls on a day immediately after such a rest day, such "preceding day" means the last day preceding such rest day on which such building worker had worked.

Explanation II:– For the purposes of this rule "week" shall mean a period of seven days beginning at midnight on a Saturday night.

236. Night Shifts:– Where a building worker employed in building or other construction work works on a shift which extends beyond midnight–

(a) a rest day for the purposes of rule 235 shall mean a period of twenty-four consecutive hours beginning from the time when such shift ends;

(b) the hours after midnight during which such building worker has worked shall be counted towards the previous day; and

(c) the following day shall be deemed to be the period of twenty-four hours beginning from the time when such shift ends.

237. Application of provisions of this Chapter to certain classes of building workers:– (1) The provisions of this Chapter shall apply to the classes of building workers specified under clauses (a) to (d) of sub-section (2) of Section 28 of the Act, subject to the following, namely:

(a) no building worker employed in building or other construction work shall be required or allowed to work continuously for more than fifteen hours a day inclusive of intervals of rest of sixty hours in a week;

Provided that intervals of rest not less than half-an hour are given after every five hours of continuous work as laid down in sub-rule (2) of rule 234;

(b) no building worker employed in building or other construction work shall be required or allowed to work for more than fourteen consecutive days unless a rest of twenty-four hours is given for rest to such worker.

(2) Where the working hours in respect of a building worker employed in building or other construction work have exceeded the hours of work as laid down in sub-rule (1) of rule 234 or where such worker shall be paid at double the rate of normal wages in respect of the work done in excess of such daily or weekly hours and for work done on such rest day.

CHAPTER XXVII

Notices, Registers, Records and Collection of Statistics

238. Notice of wage periods, etc.:– (1) Every employer shall cause to display at the conspicuous place of the work pace of an establishment under his control, notice showing the rates of wages of the building workers working in such establishment, hours of work of such worker, their wage periods, date of payment of such wages, names and addresses of the Inspectors having jurisdiction to such establishment and date of payment of unpaid wages to such workers, in English, Hindi and in the local language understood by the majority of such building workers.

(2) A copy of the notice referred to in sub-rule (1) shall be sent to the Inspector having jurisdiction and whenever any change occurs relating to facts contained in such notice, such change shall be communicated by the employer to such Inspector.

239. Notice of commencement and completion:– (1) Every employer shall, at least thirty days before the commencement of any building or other construction work under his control, send or cause to be sent to the Inspector having jurisdiction, a written notice intimating the actual date of the commencement, the probable date of completion and other such particulars as referred to in sub-section (1) of Section 46 of the Act relating to such building or other construction work in Form IV, annexed to these rules.

(2) Where any change occurs in any of the particulars furnished under sub-rule (1), the employer shall intimate such change to the Inspector having jurisdiction within two days of such change.

(3) Nothing contained in sub-rule (1) shall apply in case of such class of building or other construction work as the Central Government may by notification specify to be emergent work.

240. Register of persons employed as building workers:– Every employer shall maintain in respect of each registered establishment, where he employs building workers, a register in Form XV, annexed to these rules.

241. Muster-roll, wages register, deduction register, overtime register and issue of wage books and service certificates:– (1) Every employer shall, in respect of each work on which he employs building workers, maintain–

(a) muster-roll and a register of wages in Form XVI and Form XVII, respectively, annexed to these rules;

Provided that a combined register of wage-cum-muster-roll in Form XVIII, annexed to these rules shall be maintained by the employer where the wage period for such building worker is a fortnight or less;

(b) a register of deductions for damage or loss, register of fines and register of advances in Form XIX, Form XX and Form XXI, respectively, annexed to these rules;

(c) a register of overtime in Form XXII annexed to these rules, for recording therein the number of hours of, and the wages paid for, overtime work, if any.

(2) Every employer shall, in respect of each work on which he engages building workers–

(a) issue where the wage period is one week or more, wage book to each of such building worker in Form XXIII annexed to these rules to such building workers in which entries shall be made at least a day prior to the disbursement of wages to them;

(b) issue a service certificate to each of such building worker in Form XXIV annexed to these rules to such building workers on termination of his service on account of completion of such work or for any other reason;

(c) obtain signature or thumb-impression of each such building worker against entries relating to him on the register of wages or muster-roll-cum-wages register, as the case may be, and such entries shall be authenticated by the employer or his authorised representative.

(3) In respect of an establishment to which the Payment of Wages Act, 1936 (4 of 1936), or Minimum Wages Act, 1948 (11 of 1948) or the Contract Labour (Regulation and Abolition) Act, 1970 (37 of 1970) applies the following registers and records required to be maintained by an employer under any of such Acts or the rules made thereunder, shall be deemed to be the registers and records maintained by the employer under these rules, namely:

(a) muster-roll;

(b) register of wages;

(c) register of deductions;

(d) register of overtime;

(e) register of fines;

(f) register of advances;

(g) combined register of wages-cum-muster-roll.

(4) Notwithstanding anything contained in these rules, where a combined or alternative form, in lieu of any of form specified under these rules, is sought to be used by an employer to avoid duplication of work for compliance with the provisions of any other Act or the rules framed thereunder or for administrative convenience, such combined or alternative form may be used with the prior approval of the Central Government.

(5) Every employer shall display at the conspicuous place of the work site where he employs building workers, an abstract of the Act and these rules in English and in Hindi and in a language understood by the majority of such building workers.

(6) Every employer shall ensure that the registers and other records required to be maintained complete and up-to-date, and, unless otherwise provided for, are kept at an office or the nearest convenient building within the precincts of the concerned work place.

(7) The registers and other records relating to an establishment and required to be maintained under the Act or these rules, shall be maintained legibly in English and in Hindi or in a language understood by the majority of the building workers employed in such establishment.

(8) Every register or other record referred to in sub-rule (7) shall be preserved by the employer, with whom such register or other record belongs, in original for a period of three calendar years from the date of last entry therein.

(9) Every register, record or notice maintained under the Act, or these rules shall be produced or caused to be produced by the employer concerned on demand before the Inspector or any other authority under the Act or any other person authorised by the Central Government for such purpose.

(10) In case, where during a wage period, no deduction has been made from the wage of a building worker or no fine has been imposed on such building worker or no overtime work has been performed by such building worker or no payment has been made for overtime work to such building worker, a 'nil' entry shall be made against such wage period at the appropriate place in the relevant register maintained in Form XIX, XX, XXI or XXII, as the case may be.

242. Returns:– Every employer of a registered establishment shall send annually, a return relating to such establishment in duplicate in Form XXV annexed to these rules to the registering officer having jurisdiction so as to reach him not later than the fifteenth February following the end of each calendar year with a copy to the Inspector having jurisdiction.

CHAPTER XXVIII

Welfare of Building workers

243. Latrine and urinal accommodation:– Latrines or urinals, as the case may be, required to be provided under Section 33 of the Act shall be of the types as specified below, namely:

(a) every latrine shall be under cover and so partitioned off as to secure privacy, and shall have a proper door and fastenings;

(b) (i) where both male and female building workers are employed, there shall be displayed outside each block of latrines or

urinals a notice containing therein "For Men Only" or "For Women Only", as the case may be, written in the language understood by the majority of such workers;

(ii) such notice shall also bear the figure of a man or of a woman, as the case may be;

(c) every latrine or urinal shall be conveniently situated and accessible to building workers at all times;

(d) every latrine or urinal shall be adequately lighted and shall be maintained in a clean and sanitary condition at all times;

(e) every latrine or urinal other than those connected with a flush sewage system shall comply with the requirements of the public health authorities;

(f) water shall be provided by means of a tap or otherwise so as to be conveniently accessible in or near every latrine or urinal;

(g) the walls, ceilings and partitions of every latrine or urinal shall be whitewashed or colour-washed once in every period of four months.

244. Canteens:– (1) In every place wherein not less than two hundred and fifty building workers are ordinarily employed, the employer of such building workers shall provide an adequate canteen in the manner as specified in this rule for the use of such building workers.

(2) The canteen, referred to in sub-rule (1) shall consist of a dining hall with furniture sufficient to accommodate building workers using such canteen, a kitchen, store-room, pantry and washing places separately for building workers and for utensils.

(3) (i) The canteen referred to in sub-rule (1) shall be sufficiently lighted at all times when any person has access to it;

(ii) the floor of such canteen shall be made of smooth and impervious material and inside walls of such canteen shall be lime-washed or colour-washed at least once in every six months.

Provided that such inside walls of the kitchen of such canteen shall be lime-washed once in every three months.

(4) (i) The precincts of the canteen referred to in sub-rule (1) shall be maintained in a clean and sanitary condition;

(ii) waste water from such canteen shall be carried away in suitable covered drains and shall not be allowed to accumulate in the surroundings of such canteen;

(iii) suitable arrangements shall be made for the collection and disposal of garbage from such canteen.

(5) Building of the canteen referred to in sub-rule (1) shall be situated at the distance not less than fifteen point two metres from any latrine or urinal or any source of dust, smoke or obnoxious fumes.

245. Foodstuff to be served in the Canteen:– The foodstuffs and other items to be served in the canteen, referred to in sub-rule (1) of rule 244, shall be in conformity with the normal dietary habits of the building workers.

246. Serving of tea and snacks at the work places:– At a building or other construction work where a work place is situated at a distance of more than zero point two kilometres from the canteen provided under sub-rule (1) of Rule 244, arrangement shall be made by the employer employing building workers at such place for serving tea and light refreshment to such building workers at such place.

247. Charges of foodstuff:– (1) The charges for food stuffs, beverages and other items served in the canteen provided under sub-rule (1) of Rule 244, shall be based on "no profit no loss" and the price list of such items shall be conspicuously displayed in such canteen.

(2) In arriving at the prices of items referred to in sub-rule (1), the following shall not be taken into consideration as expenditure, namely:

(a) the rent for the land and building of such canteen;

(b) the depreciation and maintenance charges for the building and equipment provided in such canteen;

(c) the cost of purchase, repairs, and replacement of equipment including furniture, crockery, cutlery, utensils and uniforms provided to the employees of such canteen;

(d) the water charges and other charges incurred for lighting and ventilation of such canteen; and

(e) the interest on the amounts spent for providing and maintaining furniture and other equipment for such canteen.

CHAPTER XXIX

Wages

248. Payment of wages:– An employer shall ensure at a construction site of a building or other construction work that–

(a) the wages of every building worker employed at such construction site where less than one thousand such building workers are employed are paid before the expiry of the seventh day and in other cases before the expiry of tenth day after the last day of the period in respect of which such wages are payable;

(b) in case the employment of such building worker is terminated by or on behalf of such employer, the wages earned by such building worker are paid before the expiry of the second working day from the day on which employment of such building worker is terminated;

(c) all payments of wages are made on a working day at such construction site and during the working time and on a date notified in advance and in case the work is completed the final payment of wages is made within forty-eight hours of such completion of work.

249. Display of notice of wage regarding date of payment of wages:– An employer shall ensure at a construction site of a building or other construction work that a notice showing the period for which wages are to be paid, place and time of disbursement of such wages is displayed at a conspicuous place of such construction site in English, in Hindi and in a local language understood by the majority of building workers employed at such construction site.

PART V

MISCELLANEOUS PROVISIONS

CHAPTER XXX

Powers of Director General And Inspectors

250. Power to engage experts, agencies:– (1) The Director General may engage experts or agencies, as deemed necessary, from the fields of civil engineering, structural engineering, architecture, and other disciplines of occupational safety, health and environment, as and when required, for the purpose of conducting any inspection, investigation or enquiry into the cause of an accident or a dangerous occurrence or otherwise.

(2) The experts referred to in sub-rule (1) shall–

(a) possess a degree in the relevant field from a recognised university;

(b) possess not less than ten years' experience of working in the relevant field out of which at least five years shall be in the field of occupational safety, health and environment.

(3) Agencies referred to in sub-rule (1) shall be of national standing in the relevant field and registered under the relevant law.

(4) The Central Government may, from time-to-time, prepare a panel of experts and agencies referred to in sub-rule (1).

(5) An engineer or expert or agency employed under sub-rule (1) shall be paid such travelling allowances and daily allowances as are allowed to him by his organisation where he is employed or such travelling allowance and daily allowance as is admissible to officer of the rank of a Deputy Secretary to the Government of India.

(6) In addition to travelling allowance and daily allowance referred to in sub-rule (5) to an engineer or architect or agency, they shall also be paid honorarium at the rates as may be specified by the Central Government by notification in the Official Gazette from time-to-time.

251. Powers of Inspectors:– (1) An Inspector may, at a construction site of a building or other construction work within local limits for which he is appointed–

(i) examine such construction site or place or premises used or to be used for such building or other construction work;

(ii) take on the spot or otherwise such evidence of any person which he may deem necessary for the purpose of any examination or inquiry connected with such building and other construction work directly or indirectly :

Provided that such person shall not be compelled to answer any question or give any evidence tending to incriminate him;

(iii) take photographs, video clips, sample weight or measure or record or make such sketches as he may consider necessary for the purpose of any examination or inquiry under these rules;

(iv) hold an inquiry into the cause of any accident or dangerous occurrence which he has reasons to believe was the result of any operation connected with or incidental to such building or other construction work, or of non-compliance with any of the provisions of the Act or these rules.

(2) An Inspector may, within the local limits for which he is appointed issue show cause notice or warning to employers regarding the safety, health or welfare of building workers provided under the Act or the rules.

(3) An Inspector may, within the local limits for which he is appointed, file in a court having jurisdiction a complaint or other proceeding relating to an offence under the Act.

(4) An Inspector may, within the local limits for which he is appointed, direct any contractor or any employer for getting the building workers medically examined in accordance with the provisions of these rules.

(5) An Inspector may, within the local limits for which he is appointed require a person having power of supervision and control of a construction site of a building or other construction work or the employer, project in-charge or site in-charge of such construction site, as the case may be, to provide such means or assistance as may be required by such Inspector for entry, inspection, examination or inquiry for the exercise of his powers under sub-section (1) of Section 43 of the Act or this rule in relation to such construction site, or project.

252. Prohibition Order:– (1) If it appears to the Inspector that any site or place at which any building or other construction work is being carried on, is in such condition that it is dangerous to life, safety or health of building workers or the general public, he may, in writing serve on the employer of building workers or on the owner of the establishment or on the person in charge of such site or place an order prohibiting any building or other construction work at such place until measures have been taken to remove the cause of the danger to his satisfaction.

(2) An Inspector serving an order under sub-rule (1), shall endorse a copy to the Director General.

(3) Such prohibition order shall be complied with by the employer forthwith.

(4) Any person aggrieved by an order under sub-rule (1), may, within fifteen days from the date on which the order is communicated to him, may prefer an appeal to the Director General or where such order is by the Director General or the Secretary, as the case may be, shall, after giving the appellant an opportunity of being heard, dispose of the appeal as expeditiously as possible :

Provided that the Director General or the Secretary to the Government of India in the Ministry of Labour, as the case may be, may entertain the appeal after the expiry of the said period of fifteen days if he is satisfied that the appellant was prevented by sufficient cause from filing the appeal in time :

Provided further that the prohibition shall be complied with, pending the decision of the Director General or the Secretary to the Government of India in the Ministry of Labour.

SCHEDULE I

[*See rules 56(a), 71(a) and 72*]

Manner of Test and Examination before Taking Lifting Appliance, Lifting Gear and Wire Rope into use for the First Time

Test Loads :

(1) Lifting Appliance:– Every lifting appliance with its accessory gear, shall be subjected to a test load which shall exceed the safe working load (SWL) as specified in the following table:–

Table

Safe working load	Test load
Upto 20 tonnes	25 per cent in excess of safe working load
20 to 50 tonnes	5 tonnes in excess of safe working load
Over 50 tonnes	10 per cent in excess of safe working load

(2) Lifting Gear:– (a) Every ring, hook, chain, shackle, swivel, eye-bolt, plate clamp, triangular plate or pulley block (except single sheave block) shall be subjected to a test load which shall not be less than the load as specified in the following table:–

Table

Safe working load (in tonnes)	Test load (in tonnes)
Upto 25	2 x safe working load
Above 25	(1.22 x safe working load) + 20

(b) In the case of a single sheave block, the safe working load shall be the maximum load which can safely be lifted by the block when suspended by its head fitting and the load is attached to a rope which passes around the sheave of the block and a test load not less than four times the proposed safe working load shall be applied to the head of the block.

(c) In the case of a multi sheave block, the test load shall not be less than the load as specified in the following table:–

Table

Proposed safe working load (in tonnes)	Test load (in tonnes)
Upto 10	2 x safe working load
10 to 160	(1.04 x safe working load) + 9.6
Above 160	1.1 x safe working load

(d) In the case of hand-operated pulley blocks used with pitched chains and rings, hooks, shackles or swivels, permanently attached thereto, a test load not less than 50 per cent in excess of the safe working load shall be applied.

(e) In the case of a pulley block fitted with a bucket, the bucket shall be tested and the load applied to the bucket when testing that block will be accepted as test load of the bucket.

(f) In the case of a sling having two legs, the safe working load shall be calculated when the angle between the legs is 90 degree. In case of multi-legged slings the safe working load shall be calculated as per national standards.

(g) Every lifting beam, lifting frame, container spreader, bucket, tub, or other similar devices shall be subjected to a test load which shall not be less than the load as specified in the following table:–

Proposed safe working load (in tonnes)	**Test load (in tonnes)**
Upto 10	2 x safe working load
10 to 160	(1.04 x safe working load) + 9.6
Above 160	1.1 x safe working load

(h) **Wire ropes:–** In the case of wire ropes a sample shall be tested to destruction. The test procedure shall be in accordance with recognised national standards. The safe working load of the rope is to be determined by dividing the load at which the sample broke by a co-efficient of utilisation, determined as specified in the following table:–

Table

Item	**Co-efficient of utilisation**
1	2
(a) Wire Rope forming part of Sling, Safe working load of the Sling : Safe working load upto and equal to 10 tonnes. Safe working load above 10 tonnes and upto and equal to 160 tonnes.	5 10
	(8.85 x SWL) + 1910
Safe working load above 160 tonnes	3
(b) Wire Rope as integral part of a Lifting Appliance : SWL of the lifting appliance : Safe working load upto and equal to 160 tonnes.	10 (8.85 x SWL) + 1910
Safe working load above 160 tonnes.	3

(i) Before any test is carried out, a visual inspection of the lifting appliance, or lifting gear involved shall be conducted and any visible defective gear shall be replaced or renewed.

(j) After being tested, all the lifting gears shall be examined to see whether any parts have been injured or permanently deformed by the test.

Procedure for testing:

(3) *Derricks:–* (a) A derrick shall be tested with its boom at the minimum angle to the horizontal for which the derrick is designed (generally 15 degrees) or at such greater angle as may be agreed. The angle at which the test has been carried out shall be applied by hoisting movable weights. During the test, the boom shall be swung with the test load, as far as practicable, in both directions.

(b) A derrick boom, designed to be raised with power, with the load suspended, shall, in addition to the tests at (a), be raised (with the load suspended) to its maximum working angle to the horizontal and the two outermost positions.

(c) While test loading of a heavy lift derrick, the competent person responsible for tests using movable weights shall ascertain from the owner of the vessel or floating platform that the stability of the vessel or platform is adequate for the test.

(4) The derricks tested under clause (3) shall not be used in union purchase rig unless :

(a) the derricks rigged in union purchase are tested with the test load appropriate to the SWL in union purchase (at the designed headroom and with the derrick booms in their approved working positions);

(b) the safe working load of that derrick in union purchase rig has also been specified by a competent person in a report in Form V ;

(c) any limitations or conditions specified in the said report are complied with ; and

(d) the two hoist ropes are coupled together by a suitable swivel assembly.

Note:– The safe working loads of derricks (for each method of rig including union purchase) shall be shown on the Certificate of Test and marked on the derrick booms.

(5) *Lifting appliances:*– (a) The test load shall be lifted and swung, as far as possible, in both directions. If the jib or boom of the crane has a variable radius, it shall be tested with test loads at the maximum and minimum raddi. In case of hydraulic cranes when owing to the limitation of pressure, it is impossible to lift a test load in accordance with table under item (1), it will be sufficient to lift the greatest possible load which shall be more than safe working load.

(b) The test shall be performed at maximum, minimum and intermediate radius points as well as such points in the arc of rotation, as the competent person may decide. The test shall consist of hoisting, lowering, breaking and swinging of and swinging through all positions and operations normally performed. An additional test shall be made by operating the machinery at maximum working speed with the safe working load suspended.

(6) Use of spring or hydraulic balances, etc., for test loading:– All tests shall normally be carried on with the help of dead weights. In case of periodical test, replacements or renewals, test load may be applied by means of suitable springs or hydraulic balances. In such case, test load shall be applied with the boom, as far out as practicable, in both directions. The test shall not be taken as satisfactory unless the balance has been certified for accuracy by the competent authority within 2.0 per cent and the pointer of the machine has remained constant at the test load for a period of at least five minutes.

(7) Testing machines and dead weights:– (a) A suitable testing machine shall be used for testing of chains, wire ropes and other lifting gears.

(b) Testing machines and balances to be used in test loading, testing and checking shall not be used unless they have been certified for accuracy at least once in the preceding twelve months by the competent authority.

(c) Movable weights used for the test loading of the lifting appliances having a safe working load not exceeding twenty tonnes shall be checked for accuracy by means of suitable weighing machine of certified accuracy.

(8) Thorough examination after testing or test loading:– After being tested or test loaded, every lifting appliance and associated gear shall be thoroughly examined to see that no part has been damaged or permanently deformed during the test. For this purpose, the lifting appliance or gear shall be dismantled to the extent considered necessary by the competent person.

SCHEDULE II

Notifiable Occupational Diseases in Building and Other Construction Work

[*See Rule 230(a)*]

1. Occupational dermatitis
2. Occupational cancer.
3. Asbestosis
4. Silicosis
5. Lead poisoning including poisoning by any preparation or compound of lead or their sequelae.
6. Benzene poisoning, including poisoning by any of its homologues, their nitro or amino derivatives or its sequelae.
7. Occupational asthama
8. Pesticide poisoning
9. Carbon monoxide poisoning
10. Toxic jaundice
11. Toxic anaemia
12. Compressed air illness (Caissons disease)
13. Noise induced hearing loss
14. Isocyanates poisoning
15. Toxic nephritis

SCHEDULE III

Contents of a First Aid Box

[*See Rule 231(b)*]

(i) A sufficient number of eye wash bottles filled with distilled water or suitable liquid clearly indicated by a distinctive sign which shall be visible at all times.

(ii) 4 per cent xylocaine eye drops, and boric acid eye drops and soda bicarbonate eye drops.

(iii) Twenty-four small sterilised dressings.

(iv) Twelve medium sized sterilised dressings.

(v) Twelve large sized sterilised dressings.

(vi) Twelve large sized sterilised burn dressings.

(vii) Twelve (fifteen cm) packets of sterilised cotton wool.

(viii) (Two hundred ml.) bottle of certimide solution (1 per cent) or suitable antiseptic solution.

(ix) One (two hundred ml.) bottle of mercurochrome (2 per cent) solution in water.

(x) One (one hundred twenty ml.) bottle of salvolatile having the doses and mode of administration indicated on the label.

(xi) One pair of scissors.

(xii) One roll of adhesive plaster (six cm x one metre).

(xiii) Two rolls of adhesive plaster (two cms x one metre).

(xiv) Twelve pieces of sterilised eye pads in separate sealed packets.

(xv) A bottle containing hundred tablets (each of three hundred twenty five mg.) of aspirin or any other analgesic.

(xvi) Twelve roller bandages ten cms. wide.

(xvii) Twelve roller bandages five cms. wide.

(xviii) One tourniquet.

(xix) A supply of suitable splints.

(xx) Three packets of safety pins.

(xxi) Kidney tray.

(xxii) A snake bite lancet.

(xxiii) One (thirty ml.) bottle containing potassium permanganate crystals.

(xxiv) One copy of first-aid leaflet issued by the Directorate General.

(xxv) Six triangular bandages.

(xxvi) Two pairs of suitable, sterilised, latex hand gloves.

SCHEDULE IV

Articles for Ambulance Room

[*See Rule 226(c)*]

(i) A glazed sink with hot and cold water always available.

(ii) A table with a smooth top at least 180 cm x 105 cm.

(iii) Means for sterilising instruments.

(iv) A couch.

(v) Two stretchers.

(vi) Two buckets or containers with close fitting lids.

(vii) Two rubber hot water bags.

(viii) A kettle and spirit stove or other suitable means of boiling water.

(ix) Twelve plain wooden splints 900 cm x 100 cm x 6 cm.

(x) Twelve plain wooden splints 350 cm x 75 cm x 6 cm.

(xi) Six plain wooden splints 250 cm x 50 cm x 12 cm.

(xii) Six woollen blankets.

(xiii) Three pairs of artery forceps.

(xiv) One bottle of spiritus annemia aremations (120 ml.).

(xv) Smelling salt (60 gm.).

(xvi) Two medium size sponges.

(xvii) Six hand towels.

(xviii) Four kidney trays.

(xix) Four cakes of toilet, preferably antiseptic soap.

(xx) Two glass tumblers and two wine glasses.

(xxi) Two clinical thermometers.

(xxii) Two tea spoons.

(xxiii) Two graduated (120 ml.) measuring glasses.

(xxiv) Two minimum measuring glasses.

(xxv) One wash bottle (1000 cc) for washing eyes.

(xxvi) One bottle (one litre) carbolic lotion 1 in 20.

(xxvii) Three chairs.

(xxviii) One screen.

(xxix) One electric hand torch.

(xxx) Four first-aid boxes or cupboards stocked to the standards prescribed in Schedule VII.

(xxxi) An adequate supply of tetanus toxide.

(xxxii) Injections – morphia, pethidine, atrophine, adrenaline, coramine, novocaine (6 each).

(xxxiii) Cramine liquid (60 ml.).

(xxxiv) Tablets – antihistaminic antispasmodic (25 each).

(xxxv) Syringes with needles – 2cc, 5cc, 10cc and 500cc.

(xxxvi) Three surgical scissors.

(xxxvii) Two needle holders, big and small.

(xxxviii) Suturing needles and materials.

(xxxix) Three dissecting forceps.

(xl) Three dressing forceps.

(xli) Three scalpels.

(xlii) One stethoscope and a BP apparatus.

(xliii) Rubber bandage – pressure bandage.

(xliv) Oxygen cylinder with necessary attachments.

(xlv) Atropine eye ointments.

(xlvi) I.V. Fluids and sets 10 nos.

(xlvii) Suitable, foot operated, covered, refuse containers.

(xlviii) Adequate number of sterilised, paired, latex hand gloves.

SCHEDULE V

Contents of Ambulance Van or Carriage

[*See Rule 227*]

The Ambulance Van shall have equipments prescribed as under :

(a) *General:*– A portable stretcher with folding and adjusting devices with the Head of the stretcher capable of being tilted upward. Fixed suction unit with equipment. Fixed oxygen supply with equipment. Pillow with case, sheets, blankets, towels, emergency bag, bed pan, urinal glass.

(b) *Safety Equipment:*– Flaros with life of three thousand minutes, floor lights, flash lights, fire extinguishers (dry power type), insulated guntlets.

(c) *Emergency Care Equipment:*–

(i) *Resuscitation:*– Portable suction unit, portable oxygen unit, bagvalve mask, hand operated artificial ventilation unit, airways, mouthgag tracheostomy adapters, short spine board, I.V. fluids with administration unit, B.P. manometer cuff stethoscope.

(ii) *Immobilisation:*– Long and short padded boards, wire ladder splints, triangular bandage – long and short spine boards.

(iii) *Dressing:*– Gauze pads – 100m x 100 mm universal dressing 250 x 1000 mm, roll of alluminium foils – soft roller bandages 150mm x 5mm yards adhesive tape in 75mm roll safety pins, bandage sheets, burn sheets.

(iv) *Poisoning:*– Syrup of Ipecac, activated charcoal prepacketed dose, snake bite kit, drinking water.

(v) *Emergency medicines:*– As per requirement (under the advice of Construction Medical Officer).

SCHEDULE VI

Permissible Exposure in Cases of Continuous Noise

[*See Rule 34*]

Total time of exposure (continuous or a number of short-term exposures) per day (in hours)	Sound pressure level (in dBA)
1	2
8	90
6	92
4	95
3	97
2	100
1½	102
1	105
¾	107
½	110
¼	115

Notes:– 1. No exposure in excess of 115 dBA is to be permitted.

2. For any period of exposure falling in between any figure and the next higher or lower figure as indicated in column (1), the permissible sound pressure level is to be determined by extrapolation on a proportionate basis.

SCHEDULE VII

Periodicity of Medical Examination of Building Workers

[*See Rules 81(iv) and 223(a)(iii)*]

1. The employer shall arrange a medical examination of all the building workers employed as drivers, operators of lifting appliances and transport equipment before employing, after illness or injury, if it appears that the illness or injury might have affected his fitness and, thereafter, once in every two years up to the age of forty and once in a year, thereafter.

2. Complete and confidential records of medical examination shall be maintained by the employer or the physician authorised by the employer.

3. The medical examination shall include–

(a) full medical and occupational history ;

(b) clinical examination with particular reference to–

(i) General Physique.

(ii) *Vision:*– Total visual performance using standard orthorator like Titmus vision tester should be estimated and suitability for placement ascertained in accordance with the prescribed job standards.

(iii) *Hearing:*– Persons with normal hearing must be able to hear a forced whisper at twenty-four feet. Person using hearing aids must be able to hear a warning shout under noisy working conditions.

(iv) *Breathing:*– Peak flow rate using standard peak flow meter and the average peak flow rate determined out of these readings of the test performed. The results recorded at pre-placement medical examination could be used as a standard for the same individual at the same altitude for reference during subsequent examination.

(v) *Upper limbs:*– Adequate arm function and grip (both arms).

(vi) *Lower limbs:*– Adequate leg and foot function.

(vii) *Spine:*– Adequately flexible for the job concerned.

(viii) *General:*– Mental alertness and stability with good eye, hand and foot coordination.

(c) Any other tests which the examining doctor considers necessary.

SCHEDULE VIII

Number of Safety Officers, Qualification, Duties, etc.

[*See Rules 209(1) and 209(2)*]

Appointment of Safety Officers

Number of Safety Officers:– Within six months of coming into operation of these rules, every establishment employing more than five hundred building workers and every other employer of building worker shall appoint safety officers, as laid down in the scale given below:–

1. Up to 1000 building workers – one safety officer.
2. Up to 2000 building workers – two safety officers.
3. Up to 5000 building workers – three safety officers.
4. Up to 10,000 building workers – four safety officers.

For every additional 5000 building workers or part thereof – one safety officer.

Any appointment, when made shall be notified to the Inspector having jurisdiction in the area, giving full details of the qualifications, terms and conditions of service of such safety officer.

Qualification:– (a) A person shall not be eligible for appointment as a safety officer unless he:

(i) possesses a recognised degree in any branch of engineering or technology or architecture and had a practical experience of working in a building or other construction work in a supervisory capacity for a period of not less than two years or possesses a recognised diploma in any branch of engineering or technology and has had practical experience of building or other construction work in a supervisory capacity for a period of not less than five years ;

(ii) possesses a recognised degree or diploma in industrial safety with at least one paper in construction safety (as an elective subject);

(iii) has adequate knowledge of the language spoken by majority of building workers from the construction site in which he is to be appointed.

(b) Notwithstanding the provision contained in clause (a), any person who–

(i) possesses a recognised degree or diploma in engineering or technology or architecture and has had experience of not less than five years in the field, dealing with the Administration of Factories Act, 1948 or the Dock Workers (Safety, Health and Welfare) Act, 1986 or the Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996.

(ii) possesses a recognised degree or diploma in engineering or technology and has had experience of not less than five years or has undergone training in education, consultancy or research in the field or accident prevention in industry, port, or in any institution or an establishment dealing with building or other construction work,

shall also be eligible for appointment as a safety officer:

Provided that, in case of person who has been working as safety officer in industry or port, institution or an establishment dealing with building or other construction work for a period of not less than three years on the date of commencement of these rules, the Director General may, subject to such conditions that he may specify, relax all or any of the abovesaid qualification.

Condition of service:– (a) Where number of safety officers appointed exceeds one, one of them shall be designated as Chief Safety Officer and shall have the status higher than the others. The Chief Safety Officer shall be in overall charge of the safety functions as envisaged in sub-clause (iv) and also other safety officers working under his control.

(b) The Chief Safety Officer or Safety Officer, where only one safety officer is appointed, shall be given the status of a Senior Executive and he shall work directly under the control of his Chief Executive. All other safety officers shall be given appropriate status to enable them to dispatch their functions effectively.

(c) The scale of pay and allowances to be granted to the safety officers including the Chief Safety Officer and the other conditions of their service shall be the same as those of the officers of corresponding status of the establishment in which they are employed.

Duties of Safety Officer:– (a) The duties of a safety officer shall be to advise and assist the employer in the fulfilment of his obligations, statutory or otherwise concerning prevention of personal injuries and maintaining a safe working environment. These duties shall include the following, namely:–

(i) to advise the building workers in planning and organising measures necessary for effective control of personal injuries ;

(ii) to advise on safety aspects in a building or other construction work and to carry out detailed safety studies of selected activities;

(iii) to check and evaluate the effectiveness of action taken or proposed to be taken to prevent personal injuries ;

(iv) to advise purchasing and ensuring quality of personal protective equipment confirming to national standards ;

(v) to carry out safety inspections of building or other construction work in order to observe the physical conditions of work and the work practices and procedures followed by building workers and to render advice on measures to be adopted for removing unsafe physical conditions and preventing unsafe actions by building workers ;

(vi) to investigate all fatal and other selected accidents ;

(vii) to investigate the cases of occupational diseases contracted and reportable dangerous occurrences ;

(viii) to advise on the maintenance of such records as are necessary with regard to accidents, dangerous occurrences and occupational diseases ;

(ix) to promote the working of safety committees and to act as an advisor to such committees ;

(x) to organise, in association with concerned departments, campaigns, competitions, contests and other activities which will develop and maintain the interest of building workers in establishing and maintaining safe conditions of work and procedures ;

(xi) to design and conduct, either independently or in collaboration with other agencies, suitable training and educational programmes for prevention of accidents to building workers ;

(xii) to frame safe rules and safe working practices in consultation with senior officials of the establishment ;

(xiii) supervise and guide safety precautions to be taken in building and other construction work of the establishment ;

Facilities to be provided to safety officers:– The employer shall provide each safety officer with such facilities, equipment and information that are necessary to enable him to dispatch his duties effectively.

Prohibition of performance of other duties:– No safety officer shall be required or permitted to do any work which is unconnected to, inconsistent with or detrimental to the performance of the duties prescribed in this Schedule.

Exemptions:– Director General may, in writing, exempt any employer or group of employers from any or all of the provisions of these rules subject to compliance with such alternative arrangements as may be approved and notified by him in the order of such exemption.

SCHEDULE IX

[*See Rule 225*]

Hazardous process :

(1) Roof work.

(2) Steel erection.

(3) Work under and over water.

(4) Demolition.

(5) Work in confined spaces.

SCHEDULE X

[*See Rule 225(b)*]

Services and facilities to be provided in occupational health centres:– (1) One full time construction medical officer for building or other construction work, employing workers up to one thousand and one additional construction medical officer for every additional one thousand workers or part thereof.

(2) The staff, including one nurse, one dresser-cum-compounder, one sweeper-cum-ward boy with each construction medical officer for full work hours.

(3) The occupational health centre with a floor area of minimum fifteen square metres constituting two rooms with smooth walls and intern service, adequately illuminated and ventilated.

(4) Adequate equipment for day-to-day treatment.

(5) Necessary equipment to manage any medical emergency.

SCHEDULE XI

[*See Rules 119(2) and 225(c)*]

Qualification of construction medical officer:– (1) MBBS degree from a medical institute recognised by the Medical Council of India.

(2) Diploma in industrial health or equivalent post-graduate certificate of training in industrial health or health.

(3) A medical officer having working experience in organisation/ establishments involved in policy, execution and advice and safety and health of workers employed in mines, ports and docks, factories and building and other construction work, for a period of not less than three years may, subject to the satisfaction of the Director General, not be required to possessing the training referred to in item (2) above.

(4) The syllabi of the courses leading to the above certificates and the organisation conducting such courses shall be approved by the Central Government who may also from time to time prepare a panel of such organisations.

(5) Complete particulars including name, qualification and experience of the construction medical officer will be intimated to the Inspector having jurisdiction.

SCHEDULE XII

[*See Rule 152(a)*]

Permissible Levels of Certain Chemical Substances in the Work Environment

Sl. No.	Substance	Permissible limits of exposure			
		Time-weighted average concentration (TWA) (8 hrs.)		Short-term exposure limit (STEL) (15 min.)*.	
		Ppm	Mg/m^3**	Ppm	Mg/m^3**
1	2	3	4	5	6
1.	Acetaldehyde	100	180	150	270
2.	Acetic acid	10	25	15	37
3.	Acetone	750	1780	1000	2375
4.	Aerolein	0.1	0.25	0.3	0.8
5.	Acrylonitrile-skin (SC)	2	4.5	–	–
6.	Aldrin – skin	–	0.25	–	–
7.	Allylchloride	1	3	2	6
8.	Ammonia	25	18	35	27
9.	Aniline – skin	2	10	–	–
10.	Anisidine (o-p-isomers) Skin	0.1	0.5	–	–
11.	Arsenic & soluble compounds (as As)	–	0.2	–	–
12.	Benzene (SC)	10	30	–	–
13.	Beryllium & compound (as Be) (SC)	–	0.002	–	–
14.	Boron trifluoride-C	1	3	–	–
15.	Bromine	0.1	0.7	0.3	2
16.	Butane	800	1900	–	–
17.	2-Butanone (methylethyl Ketone-MBK)	200	590	300	885
18.	n-Butylacetate	150	710	200	950
19.	n-Butyl alcohol – Skin C	50	150	–	-

Sl. No.	Substance	Permissible limits of exposure			
		Time-weighted average concentration (8 hrs.)		Short-term exposure limit (15 min.)*	
		Ppm	Mg/m^3**	Ppm	Mg/m^3**
1	2	3	4	5	6
20.	Sec./tert. Butyl acetate	200	950	–	–
21.	Butyl mercaptan	0.5	1.5	–	–
22.	Cadmium dusts and salts (as Cd)	–	0.05	–	–
23.	Calcium oxide	–	2	–	–
24.	Carbaryl (Sevin)	–	5	–	–
25.	Carbofuran (Furadan)	–	0.1	–	–
26.	Carbon disulphide – Skin	10	30	–	–
27.	Carbon monoxide	50	55	400	440
28.	Carbon tetrachloride – Skin (SC)	5	30	–	–
29.	Chlordene – Skin	–	0.5	–	–
30.	Chlorine	1	3	3	9
31.	Chlorobenzene (Monochloro benzene)	75	350	–	–
32.	Chloroform (SC)	10	50	–	–
33.	Bis (Chloromethyl) ether (HC)	0.001	0.005	–	–
34.	Chromic acid chromates (as Cr.) (water soluble)	–	0.05	–	–
35.	Chromous salts (as Cr.)	–	0.5	–	–
36.	Copper Fume	–	0.2	–	–
37.	Cotton dust, raw*	–	0.2*	–	–
38.	Creosol, all isomers – Skin	5	22	–	–
39.	Cyanides (as CN) – Skin	–	1	–	–

Sl. No.	Substance	Permissible limits of exposure			
		Time-weighted average concentration (8 hrs.)		Short-term exposure limit (15 min.)*	
		Ppm	Mg/m³**	Ppm	Mg/m³**
1	2	3	4	5	6
40.	Cyanogen	10	20	–	–
41.	DDT (Dichlorodiphenyl trichloroethane)	–	1	–	–
42.	Demeton – Skin	0.01	0.1	–	–
43.	Diazinon – Skin	–	0.1	–	–
44.	Dibutyl phthalate	–	5	–	–
45.	Dicholorvos (DDVP) – Skin	0.1	1	–	–
46.	Dieldrin – Skin	–	0.25	–	–
47.	Dinitrobenzene (all isomers) – Skin	0.15	1	–	–
48.	Dinitrotoluene – Skin	–	1.5	–	–
49.	Diphenyl – (Biphenyl)	0.2	1.5	–	–
50.	Endosulfan (Thiodan) – Skin	–	0.1	–	–
51.	Endrin – Skin	–	0.1	–	–
52.	Ethylacetate	400	1400	–	–
53.	Ethyl alcohol	1000	1900	–	–
54.	Ethylamine	10	18	–	–
55.	Fluorides (as F)	–	2.5	–	–
56.	Fluorine	1	2	2	4
57.	Formaldehyde (SC)	1.0	1.5	2	3
58.	Formic acid	5	9	–	–
59.	Gasoline	300	900	500	1500
60.	Hydrazine – Skin (SC)	0.1	0.1	–	–
61.	Hydrogen Chloride – C	5	7	–	-

Sl. No.	Substance	Permissible limits of exposure			
		Time-weighted average concentration (8 hrs.)		Short-term exposure limit (15 min.)*	
		Ppm	Mg/m^3**	Ppm	Mg/m^3**
1	2	3	4	5	6
62.	Hydrogen Cyanide – Skin – C	10	10	–	–
63.	Hydrogen fluoride (as F) – C	3	2.5	–	–
64.	Hydrogen peroxide	1	1.5	–	–
65.	Hydrogen sulphide	10	14	15	21
66.	Iodine C	0.1	1	–	–
67.	Iron oxide fume (as Fe)	–	5	–	–
68.	Isoamyl acetate	100	525	–	–
69.	Isoamyl alcohol	100	360	125	450
70.	Isobutyl alcohol	50	150	–	–
71.	Lead, inorg, dusts and fumes (as Ph)	–	0.15	–	–
72.	Lindane – Skin	–	0.5	–	–
73.	Malathion – Skin	–	10	–	–
74.	Manganese dust and compounds (as Mn) C	–	5	–	–
75.	Manganese fume (as Mn)	–	1	–	–
76.	Mercury (as Hg) – Skin –				
	(i) Alkyl compounds	–	0.01	–	0.03
	(ii) All forms except alkyl vapour	–	0.05	–	–
	(iii) Atyl and inorganic compounds	–	0.1	–	–
77.	Methyl alcohol (Methanol) – Skin	200	0.260	250	310

Sl. No.	Substance	Permissible limits of exposure			
		Time-weighted average concentration (8 hrs.)		Short-term exposure limit (15 min.)*	
		Ppm	Mg/m^3**	Ppm	Mg/m^3**
1	2	3	4	5	6
78.	Methyl Collosolve (2-Methoxy ethanol) – Skin	5	16	–	–
79.	Methyl isobutyl ketone	50	305	75	300 80
80.	Methyl isocyanate – Skin	0.02	0.05	–	–
81.	Naphthalene	10	50	15	75
82.	Nickel carbony (as Ni)	0.05	0.35	–	–
83.	Nitric acid	2	5	4	10
84.	Nitric oxide	25	30	–	–
85.	Nitrobenzene – Skin	1	5	–	–
86.	Nitrogen dioxide	3	6	5	10
87.	Oil mist – mineral	–	5	–	10
88.	Ozone	0.1	0.2	0.3	0.6
89.	Parathion – Skin	–	0.1	–	–
90.	Phenol – Skin	5	19	–	–
91.	Phorate (Thimet) – Skin	–	0.05	–	0.2
92.	Phosgene (Carbonyl chloride)	0.1	0.4	–	–
93.	Phosphine	0.3	0.4	1	1
94.	Phosphoric acid	–	1	–	3
95.	Phosphorus (yellow)	–	0.1	–	–
96.	Phosphorus pentachloride	0.1	1	–	–
97.	Phosphorus trichloride	0.2	1.5	0.5	3

Sl. No.	Substance	Permissible limits of exposure			
		Time-weighted average concentration (8 hrs.)		Short-term exposure limit (15 min.)*	
		Ppm	Mg/m³**	Ppm	Mg/m³**
1	2	3	4	5	6
98.	Pieric acid – Skin	–	0.1	–	0.3
99.	Pyridine	5	15	–	–
100.	Silane (Silicon tetrahydride)	5	7	–	–
101.	Sodium Hydroxide – C	–	2	–	–
102.	Styrene, monomer (Phenylethylene)	50	215	100	425
103.	Sulphur dioxide	2	5	5	10
104.	Sulphur hexaflouride	1000	6000	–	–
105.	Sulphuric acid	–	1	–	–
106.	Tetraethyl lead (as Pb) – Skin	–	0.1	–	–
107.	Toluene (Toluol)	100	375	150	560
108.	O-Toluidine – Skin (SC)	2	9	–	–
109.	Tributyl phosphate	0.2	2.5	–	–
110.	Trichloroethylene	50	270	200	1080
111.	Uranium, natural (as U)	–	0.2	–	0.6
112.	Vinyl chloride (HC)	5	10	–	–
113.	Welding fumes	–	5	–	–
114.	Xylene (o, m, p-isomers)	100	435	150	655
115.	Zinc oxide				
	(i) Fume	–	5	–	10
	(ii) Dust Total dust	–	10	–	–
116.	Zirconium compounds (as Zr)	–	5	–	10

ppm — Parts of vapour or gas per million parts of contaminated air by volume at 25°C and 760mm of mercury.

mg/m^3 — milligrams of substance per cubic metre of air.

* — Not more than 4 times a day with at least 60 min. interval between successive exposures.

**

$$mg/m^3 = \frac{\text{Molecular weight}}{24.45} \times ppm$$

C — Denotes ceiling limit.

Skin — denotes potential contribution to the overall exposure by the cutaneous route including mucous membranes and eye.

SC — denotes Suspected Human Carcinogens.

HC — denotes Confirmed Human Carcinogens.

Stance – Permissible time-weighted average concentration (TWA) (8 hours)

A, SiO_2

(a) Crystalline

(i) Quartz

(1) In terms of dusts count $\frac{10600}{\%\ Quartz + 10}$ mppcm

(2) In terms of respirable dust $\frac{10}{\%\ respirable\ Quartz + 2}$ mg/m^3

(3) In terms of total dust $\frac{30}{\%\ Quartz + 3}$ mg/m^3

(ii) Cristobalite — Half the limits given against quartz

(iii) Tridymite — Half the limits given against quartz

(iv) Silica, fused — Same limits as for quartz

(v) Tripoli — Same limit as in formula in item (2) given against quartz

(b) Amorphous silicates — $10mg/m^3$, total dust

Asbestos (HC)	*2 fibres/ml, greater than 5 μm in length and less than 3 μm in breadth with length to breadth ratio equal to or greater than 3:1
Portland cement	10 mg/m^3, total dust containing less than 1% quartz.
Coal dust	2 mg/m^3, respirable dust fraction containing less than 5% quartz.

mppcm Million particles per cubic metre of air, based on impinger samples counted by light-field techniques.

*As determined by the membrane filter method at 400 – 450 x magnification (4 mm objective) phase contrast illumination.

Respirable Dust :

Fraction passing a size-selector with the following characteristics :

Aerodynamic Diameter (μm) (Unit density sphere)	% passing selector
< 2	90
2.5	75
3.5	50
5.0	25
10	00

FORM I

[*See Rule 23(1)*]

Application for Registration of Establishments Employing Building Workers

1. Name and location of the Establishment where building or other construction work is to be carried on.
2. Postal address of the Establishment.
3. Full name and permanent address of the Establishment, if any.
4. Full name and address of the Manager or person responsible for the supervision and control of the Establishment.
5. Nature of building or other construction work carried/is to be carried on in the Establishment.
6. Maximum number of building workers to be employed on any day.
7. Estimated date of commencement of building or the other construction work.
8. Estimated date of completion of the building or other construction work.
9. Particulars of demand draft, enclosed (name of the Bank amount, demand draft No. and date).

Declaration by the Employer

(i) I hereby declare that the particulars given above are true to the best of my knowledge and belief.

(ii) I undertake to abide by the provisions of the Building and other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 and the Rules made thereunder :

Principal Employer

Seal and Stamp

Date of Receipt of application : Office of the Registering Officer appointed under Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 and A.P. Building and other Construction Workers (ROE & COS) Rules, 1999.

FORM II

[*See Rule 24(1)*]

No. Date :

Government of A.P. Office of the Registering Officer

A certificate of Registration is hereby granted under sub-section (3) of Section 7 of the Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 and the rules made thereunder, to M/s. ..... having the following particulars subject to conditions laid down in the Annexure :

1. Postal Address/location where building or other construction work is to be carried on by the Employer.
2. Name and address of employer including location of the building and other construction work.
3. Name and permanent address of the establishment.
4. Nature of work in which building workers are employed or are to be employed.
5. Maximum number of building workers to be employed on any day by the employer.
6. Probable date of commencement and completion of work.
7. Other particulars relevant to the employment of building workers.

Signature of Registering Officer
with Seal

Annexure

The registration granted hereinabove is subject to the following conditions, namely:–

(a) the certificate of registration shall be non-transferable ;

(b) the number of workmen employed or building workers in the establishment shall not, on any day, exceed the maximum number specified in the certificate of registration ;

(c) save as provided in these rules, the fees paid for the grant of registration certificate shall be non-refundable.

(d) the rates of wages payable to building workers by the employer shall not be less than the rates prescribed under the Minimum Wages Act, 1948 (11 of 1948) for such employment where applicable, and where the rates have been fixed by agreement, settlement or award, not less than the rates so fixed ; and

(e) the employer shall comply with the provisions of the Act and the rules made thereunder.

FORM III

[*See Rule 24(2) and 25(2)*]

Register of Establishments

Sl. No.	Registration No. and date	Name and address location of the establishment registered where a building or other construction work is to be carried on	Name of the employer and his address	Nature of building or other construction work
1	2	3	4	5

Name and permanent address of Establishment	Probable date of commencement of work	Maximum No. of building workers to be employed on any day	Probable duration of building or other construction work and probable date of Completion	Remarks
6	7	8	9	10

FORM IV

[See Rules 26(3) and 239(1)]

Notice of Commencement/Completion of Building or Other Construction Work

(1)(i) Name and address (Permanent) of the establishment .....

(ii) Name of the employer and address .....

(2) Name and situation of place where the building and other construction is proposed to be carried on.

(3) No. and date of Certificate of registration .....

(4) Name and address of the person incharge of the construction work.

(5) Address to which the communications relating to building or other construction work may be sent.

(6) Nature of work involved and the facilities including plant or machinery provided.

(7) The arrangement storage of explosives, if any, to be used in building or other construction work.

(8) In case the notice is for commencement of work, the approximate duration of work.

I/We hereby intimate that the building or other construction work (Name of work) having registration No. ..... dated ..... is likely to commence/is likely to be completed with effect from ..... (date)/ on (date).

Signature of the Employer

To
The Inspector,
.....
.....

FORM V

[See Rules 56 and 74(b), Schedule I]

Certificate of Initial and Periodical Test and Examination of Winches, Derricks and their Accessory Gear

Test Certificate No. .....

(a) In case of construction site, name of the construction site where lifting appliances are fitted/installed/located :

Situation and description of lifting appliances and Gear with distinguishing number or marks (if any), which have been tested, thoroughly examined	Angle to the horizontal of derrick boom at which test load applied (Degrees)	Test load applied (Tonnes)	Safe working load for at the angle shown in column (2) (Tonnes)
1	2	3	4

Name and address of public service, association, company, or firm or testing establishment conducting the test and examination	Name and position of the Competent Person of Public Service, association, company or firm or testing establishment
5	6

I certify that on the ..... day of 19 .... the lifting appliances shown in column (1) together with its necessary gear was tested in the manner set forth overleaf in my presence ; that a careful examination of the said lifting appliances after the test showed that it had withstood the test load without injury or permanent deformation ; and that the safe working load of the said lifting appliance and accessory gear is as shown in column (4).

Signature of the Competent Person

Seal Date :

FORM VI

[*See Rules 56 and 74(b)*]

Certificate of Initial and Periodical Test and Examination of Cranes or Hoists and their Accessory Gear

Test Certificate No. .....

(a) Name of the construction site, where cranes or hoists are fitted/ installed/located :

Situation and description	For jib cranes radius at the test load was applied (Metres)	Test load applied (Tonnes)	Safe working load for jib cranes at radius shown in column (2) (Tonnes)
1	2	3	4

Name and address of public service, association, or firm or testing establishment making the test and examination	Name and position of the Competent Person of Public Service, association, company or firm or testing establishment
5	6

I certify that on the ..... day of 19 .... the above lifting appliances together with its accessory gear, was tested in the manner set forth overleaf; that a careful examination of the said lifting appliance and gear after the test showed that it had withstood the test load without injury or permanent deformation; and the safe working load of the said lifting appliance and gear is as shown in column (4).

Signature of the Competent Person

(See Note 3) Seal Date :

Registration/Authority number of the Competent Person.

FORM VII

[*See Rules 70 and 74(b)*]

Certificate of Initial and Periodical Test and Examination of Loose Gears

Test Certificate No. .....

(a) Name of the construction site, where loose gears are fitted/installed/ located :

Distinguishing Number or Mark	Description, dimension and material of gear/ device	Number tested	Date of test	Test load applied (tones)	Safe working load (SWL) (tonnes)
1	2	3	4	5	6

Name and address of manufacturer or suppliers	Initial test and examination certificate No. and date (only in case of periodical test and examination)	Name and address of public service association, company or firm or testing establishment making the test and examination	Name and position of Competent Person in public service, association, company or firm or testing establishment
7	8	9	10

I certify that on the ..... day of 19 .... the above gear was tested and examined in the manner set forth overleaf ; that the examination showed the said gear/device withstood the test load without injury or deformation; and that the safe working load of the said gear/device is as shown in column 6.

Signature of the Competent Person

Seal Date :

Registration/Authority number of the Competent Person.

FORM VIII

[*See Rules 62 and 74(b)*]

Certificate of Test and Examination of Wirerope before being taken into Use

Test Certificate No. .....

(1) Name and address of maker or supplier :

(2) (a) Circumference/diameter of rope

(b) Number of strand

(c) Number of wires per strand

(d) Lay

(e) Core

(3) Quality of wire (e.g. Best Plough steel)

(4) (a) Date of test of samples of rope

(b) Load at which sample broke (tonnes)

(c) Safe working load of rope (tonnes)

(d) Intended use.

(5) Name and address of public service, association, company or firm or testing establishment making the test and examination.

(6) Name and position of Competent Person in public service, association, company or firm or testing establishment making the test and examination.

I certify that the above particulars are correct and that the test and examination were carried out by me and no defect effecting its safe working load (SWL) were found.

Signature of the Competent Person

Seal Date :

Registration/Authority number of the Competent Person.

FORM IX

[*See Rules 72 and 74(b)*]

Certificate of Annealing of Loose Gears

Test Certificate No. .....

(a) Name of the construction site where loose gears are fitted/installed/ located :

Distinguishing Number or Mark	Description, of gear	Number of the certificate of test and examination	Number annealed	Date of annealing	Defects found at careful inspection after annealing
1	2	3	4	5	6

Name and address of public service association, company or firm or testing establishment carrying out the annealing and inspection	Name and position of the Competent Person of public service, association, company or firm or testing establishment
7	8

I certify that on the date shown in column (5), the gear described in columns (1) to (4) was effectually annealed under my supervision that after being so annealed every article was carefully inspected, and that no defects affecting its safe working condition were found other than those indicated in column (6).

Signature of the Competent Person

Seal Date :

Registration/Authority of the Competent Person.

FORM X

[*See Rules 69 and 73*]

Certificate of Annual thorough Examination of Loose Gears exempted from Annealing

(a) Name of the construction site, where loose gears are fitted/installed/ located :

Distinguishing Number or Mark	Description of Gear	Number of certificate of initial and periodical test and examination	Remarks
1	2	3	4

Name and address of public service, association, company or firm or testing establishment making the test and examination	Name and position of the Competent Person of Public Service, association, company or firm or testing establishment
5	6

I certify that on the ..... day of ..... 19 ....., the above gear described in column (2) was thoroughly examined ; and that no defects affecting its safe working condition were found other than those indicated in column (4).

Signature of the Competent Person

Seal Date :

Registration/Authority of the Competent Person.

FORM XI

[*See Rule 223(c)*]

Certificate of Medical Examination

1. Certificate Serial No. ..... Date :

   Date :

2. Name .....

   Identification marks 1.

   2.

3. Father's Name .....
4. Sex .....
5. Residence ..... son/daughter of .....
6. Date of birth, if available .....

   and/or certificate age .....

7. Physical Fitness.

   I hereby certify that I have personally examined (name) ..... son/daughter/wife of ..... residing at ..... who is desirous of being employed in building and construction work and that his/her age as nearly as can be ascertained from my examination is ..... years and that he/she is fit for employment in ..... as an adult/ adolescent.

8. Reason for–

   (1) refusal of certificate .....

   (2) certificate being revoked .....

Signature/Lefthand Thumb
impression of building worker

Signature with Seal
Medical Inspector/CMO

Notes:– 1. Exact details of cause of physical disability should be clearly stated.

2. Function/productive abilities should also be stated if disability is stated.

FORM XII

[*See Rule 223(d)*]

Health Register

(In respect of persons employed in Building and other construction work involving hazardous processes)

Name of the Construction Medical Officer/Medical Inspector

(a) Mr. ..... From ..... to .....

(b) Mr. ..... From ..... to .....

(c) Mr. ..... From ..... to .....

Sl. No.	Works No.	Name of building worker	Sex	Age (Last birthday)	Date of employment of present work	Date of leaving or transfer to other work
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.						
2.						
3.						
4.						

Reason for leaving transfer or discharge	Nature of job or occupation	Raw Material or by-product handled	Date of medical examination by certifying Surgeon Medical Inspector/CMO	Results of medical examination
(8)	(9)	(10)	(11)	(12)

If suspended from work, state period of suspension with detailed reasons	Certified fit to resume duty on with signature	If certificate of unfitness or suspension issued to worker of Medical Inspector/CMO
(13)	(14)	(15)

Signature with date of Medical Inspector/CMO

Notes:– (i) Column (8) – Detailed summary of reason for transfer or discharge should be stated.

(ii) column (12) should be expressed as fit/unfit/suspended.

FORM XIII

[*See Rule 230(a)*]

Notice of Poisoning or Occupational Notifiable Diseases

1. Name and address of the employer :
2. Name of the building worker and his work No., if any :
3. Address of the building worker :
4. Sex and Age :
5. Occupation :
6. State exactly what the patient was doing at the time of contracting the disease :
7. Nature of poisoning or disease from which the building worker is suffering from :

Date : Signature of the employer/CMO

Note:– When a building worker contracts any disease specified in Schedule XII, a notice in this form shall be sent forthwith to the Chief Inspector of Inspections of Building and Other Construction.

FORM XIV

[*See Rule 210(7)*]

Report of Accidents and Dangerous Occurrences

1. Name of the project/work :
2. Location of project/work :
3. Stage of construction work :
4. Particulars of Employer
   (a) Main contractor firm/Co. :
   Name
   Address
   Phone Nos.
   Nature of business
   (b) Sub-contractor's particulars :
   Name
   Address
   Phone Nos.
   Nature of business
5. Particulars of injured person
   (a) Name
   (First) ..... (Middle) ..... (Surname)
   (b) Home Address
   (c) Occupation
   (d) Status of the worker
   Casual
   Permanent
   (e) Sex : Male Female
   (f) Age
   (g) Experience
   (h) Marital status : Married/Unmarried/Divorced
6. Particulars of Accident
   (a) Exact place where accident occurred
   (b) Date
   (c) Time
   (d) What the injured person was doing at the time of accident?

(e) Weather condition

(f) How long employed by you for this particular job?

(g) Particulars of equipment/machine/tool involved and condition of the same after the accident occurred.

(h) Brief description of the accident

7. Nature of injuries

(a) Fatal

(b) Non-fatal

(c) If non-fatal, state precisely the nature of injuries (Describe in detail the nature of injury, for instance fracture of right arm, sprain, etc.)

(d) First-Aid : Given ; Not given ;

(e) If not, give the reasons

(f) Name and designation of the person by whom first-aid was given

(g) If admitted to hospital

Name of the hospital

Address of the hospital

Phone No.

Name of the Doctor

8. Mode of transport used

Ambulance Truck Tempo Taxi Private Car

9. (a) How much time was taken to shift the injured person? If very late, state the reasons

(b) How the reporting was made?

Telephone Telegram Special Messenger Letter

(c) Who visited the accident site first and what action was proposed by him?

(d) What are the actions taken for the investigation of the accident by the employer? (Describe about photographs/Video film/ measurements taken, etc.)

10. Particulars of the person given witness :

(a) Name Address Occupation

1.

2.

3.

4.

(b) Whether Temporary Permanent

11. Particulars in case of fatal :

Date : Time :

Whether registered with Building and other Construction Workers' Welfare Board. If yes give Reg. No.

12. Dangerous Occurrences as covered under the Regulation No. (Give details)

(a) collapse or failure of lifting appliances, hoist, conveyors, etc.

(b) collapse or subsidence of soil, all wall, floor, gallery, etc.

(c) collapse of transmission towers, pipeline, bridges, etc.

(d) explosion of receiver, vessel, etc.

(e) fire and explosion

(f) spillage or leakage of hazardous substances.

(g) collapse, capsizing, toppling or collision of transport equipment.

(h) leakage or release of harmful toxic gases at the transport equipment.

(i) failure of lifting appliance, loose gear, hoist or building and other construction work machinery, transport equipment, etc.

13. Certificate from the Employer or authorised signatory.

I certify that to the best of my knowledge and belief, the above particulars are correct in every respect.

Place : Signature

Date : Designation

C.C. forwarded for information and follow up action :

1.

2.

3.

Note:– If more than one person is involved, then for each person, information is to be filled up in separate forms.

FORM XV

[*See Rule 240*]

Register of Building Workers Employed by the Employer

Name and address of establishment where building and other construction work is to be carried on .....

Name and permanent address of establishment .....

Nature and location of work .....

Sl. No.	Name and Surname of workman	Age and Sex	Father's/ Husband's name	Nature of Employment/ Designation	Permanent Home address of workman (Village and Taluk and Distt.)
1	2	3	4	5	6
1.					
2.					
3.					
4.					

Local address	Date of commencement of employment	Signature or thumb impression of workman	Date of termination of employment	Reasons for termination
7	8	9	10	11

If the building worker is/was beneficiary, the date of registration as a beneficiary, the registration No. and the name of Welfare Board	Remarks
12	13

FORM XVI

[*See Rule 241(1)(a)*]

Muster Roll

Name and permanent address of the establishment

Name and address of establishment where building or other construction work is carried on/is to be carried on .....

Nature of building or other construction work

Name and address of the employer
For the month of .....

Sl. No.	Name of the building worker	Father's/ Husband's name	Sex	Dates	Remarks
1	2	3	4	5	6
1.					
2.					
3.					
4.					

FORM XVII

[*See Rule 241(1)(a)*]

Register of Wages

Name and address of the establishment where building or other construction work is carried on

Name and permanent address of establishment

Name of building or other construction work

Name and address of the Employer
Wage period : Monthly

Sl. No.	Name of workman	Serial No. in the register of workman	Designation/ nature of work done	No. of days worked	Units of work done
1	2	3	4	5	6

Daily rate of wages/ piece rate	Amount of wages earned				
	Basic wages	Dearness allowances	Overtime	Other cash payments (Nature of payment to be indicated)	Total
7	8	9	10	11	12

Deductions, if any, (indicate nature)	Net amount paid	Signature/ Thumb impression of workman	Initial of employer or his representative
13	14	15	16

FORM XVIII

[*See Rule 241(1)(a)*]

Form of Register of Wages-cum-Muster-Roll

Name and address of the establishment where building or other construction work is carried on/is to be carried on

Name and permanent address of establishment

Nature of building or other construction work

Sl. No.	Sl. No. in register of building workers	Name of employee	Designation /nature of work	Daily attendance/ units worked	Total attendance/ units of work done
1	2	3	4	5	6

Daily rate of wages/ piece rate	Amount of wages earned				
	Basic wages	Dearness allowances	Overtime	Other cash payments (Nature of payment to be indicated)	Total
7	8	9	10	11	12

Deductions, if any, (indicate nature)	Net amount paid	Signature/Thumb impression of workman	Initial of employer or his representative
13	14	15	16

FORM XIX

[*See Rule 241(1)(b)*]

Register of deductions for damage or loss

Name and address of establishment where building or other construction work is carried on/ is to be carried on

Name and permanent address of building workers

Name and permanent address of the employer

Nature of building or other construction work

Sl. No.	Name of work	Father's/ Husband's name	Designation/ nature of employment	Particulars of damage or loss	Date of damage or loss
1	2	3	4	5	6

Whether building worker showed cause against deduction	Name of person in whose presence building worker's explanation was heard	Amount of deduction imposed	No. of instal-ments	Date of recovery	
				First instal-ment	Last instal-ment
7	8	9	10	11	12

FORM XX

[*See Rule 241(1)(b)*]

Register of Fines

Name and address of establishment where building or other construction work is carried on/is to be carried on

Name and permanent address of establishment

Nature of building or other construction work

Name and address of the employer

Sl. No.	Name of the building worker	Father's/ Husband's name	Designation/ nature of employment	Act/omission for which fine imposed	Date of offence
1	2	3	4	5	6

Whether building worker showed cause against fine	Name of person in whose presence building worker's explanation was heard	Wage periods and wages payable	Amount of the fine imposed	Date on which fine realized	Remarks
7	8	9	10	11	12

FORM XXI

[*See Rule 241(1)(b)*]

Register of Advances

Name and address of establishment where building or other construction work is carried on/is to be carried on

Name and permanent address of establishment

Nature of building or other construction work

Name and address of the employer

Sl. No.	Name	Father's/ Husband's name	Nature of employment/ Designation	Wage period and wages payable	Date and amount of advance given
1	2	3	4	5	6

Purpose(s) for which advance given	No. of instalments by which advance to be repaid	Date and amount of each instalment repaid	Date on which last instalment was repaid	Remarks
7	8	9	10	11

FORM XXII

[*See Rule 241(1)(c)*]

Register of Overtime

Name and address of establishment where building or other construction work is carried on/is to be carried on

Name and permanent address of establishment

Sl. No.	Name of the building worker	Father's/ Husband's name	Sex	Designation/ Nature of employment	Date on which overtime worked
1	2	3	4	5	6

Total overtime worked or production in case of piece rated	Normal rates of wages	Overtime rates of wages	Overtime earnings	Date on which overtime wages paid	Remarks
7	8	9	10	11	12

FORM XXIII

[*See Rule 241(2)(a)*]

Wage Book

Name and address of Employer	Name and permanent address of establishment
Name and address of the establishment where building or other construction work is carried on	Nature of building or other construction work

For the Week/Fortnight/Month ending .....

1. No. of days worked .....
2. No. of units worked in case of piece-rate workers .....
3. Rate of daily/monthly wages/piece-rate .....
4. Amount of overtime wages .....
5. Gross wages payable .....
6. Deductions, if any, on account of the following:–
   (a) fines,
   (b) damage or loss,
   (c) loans and advances,
   (d) subscription towards provident fund,
   (e) subscription towards the Building Workers' Welfare Fund
   (f) any other deduction e.g., subscriptions to Co-operative Society or account of loans from Cooperative Society/housing loan, or contribution to any relief fund as per provision of clause (P) of sub-section (2) of Section 7 of the Payment of Wages Act or for payment of any premium of Life Insurance Corporation.
7. Net amount of wages paid .....

Initials of the employer or his Representative

FORM XXIV

[*See Rule 241(2)(b)*]

Service Certificate

Name and permanent address of the establishment

Name and address/location where the building or other construction work carried on/to be carried on

Nature and location of work .....

Name and address of the workman .....

Age or Date of Birth .....

Identification Marks .....

Father's/Husband's name .....

Sl. No.	Total period for which employed		Nature of work done	Rate of wages (with particulars of unit in case of piece work)	If the building worker was a beneficiary his registration No., date and the name of the Board
	From	To			
1	2	3	4	5	6

Reasons/grounds on which the employment terminated	Remarks
7	8

Signature

FORM XXV

[*See Rule 242*]

Annual Return of Employer to be sent to the Registering Officer

Year ending 31st December .....

1. Full name and full address of the establishment of the building and other construction work (Place, Post Office, District).
2. Name and permanent address of the establishment.
3. Name and address of the employer.

4. Nature of building and other construction work carried on.

5. Full name of the Manager or person responsible for supervision and control of the establishment.

6. Number of building workers ordinarily employed.

7. Total number of days during the year in which building workers were employed.

8. Total number of man-days worked by building workers during the year.

9. Maximum number of building workers employed on any day during the year.

10. The number of accidents that took place during the year as under :

    (a) The total number of accidents.

    (b) The number of accidents resulting in disablement of building workers for less than 48 hours, the number of building workers involved and the number of man-days lost.

    (c) The number of accidents resulting in disablement of building workers beyond 48 hours but not resulting in any permanent partial or permanent total disablement, the number of building workers involved, and the number of man-days lost on account of such accidents.

    (d) The number of accidents resulting in permanent partial or total disablement, the number of building workers involved and the number of man-days lost on account of such accidents.

    (e) The number of accidents resulting in deaths of building workers and the number of resultant deaths.

The Chief Inspector or Inspectors appointed by a State Government under the Act shall direct the owners of establishments registered under this Act to send the copies of Annual Returns submitted by the employers of registered establishments in respect of the concerned State Government or appropriate Government to the Director General of Inspections by virtue of provisions of Section 60 of the Act.

The Chief Inspector or Inspectors appointed under this Act by a State Government shall direct the owners of such establishments as are registered under this Act by registering officers appointed by the concerned State Government to send copies of the Annual returns to the Director General by virtue of provisions of Section 60 of the Act.

11. Change, if any, in the management of the establishment, its location, or any other particulars furnished to the Registering Officer in the application for Registration indicating also the dates.

Place :

Date : Employer

FORM XXVI

[*See Rule 74(b)*]

Register of Periodical Test – Examination of Lifting Appliance and Gears, etc.

Part I – Initial and Periodical Load Test of Lifting Appliances and their annual thorough Examination

"Thorough examination" means a visual examination, supplemented, if necessary, by other means such as a hammer test, carried out as carefully as the conditions permit, in order to arrive at a reliable conclusion as to the safety of the parts examined, and if necessary, for such examination parts of the lifting appliances and gear shall be dismantled.

A. Initial and Periodical Load Tests of Lifting Appliance

Situation and description of lifting appliances tested with distinguishing number of marks, if any	No. of certificate of test and examination of competent person	I certify that on the date on which I have appended by signature the lifting appliance shown in column (1) was tested and no defects affecting its safe working condition were found other than those shown in column (5)		Remarks (to be signed and dated)
		Date and signature with seal	Date and signature with seal	
1	2	3	4	5
1.				
2.				

B. Annual Thorough Examination

I certify that on the date to which I have appended my signature, the lifting appliance shown in column (1) was thoroughly examined and no defects affecting its safe working conditions were found other than those shown in column (12)

Remarks to be signed and dated

Date and signature with seal	Date and signature with seal	Date and signature with seal	Date and signature with seal	Date and signature with seal	Date and signature with seal	
6	7	8	9	10	11	12
1.						
2.						

Note:– If all the lifting appliances are thoroughly examined on the same date, it will be sufficient to enter in column (1) "All lifting appliances". If not, the parts which have been thoroughly examined on the dates must be clearly indicated.

PART II

Initial and Periodical Load Test of Loose Gears and Annual Thorough Examination

List of loose gears

The following classes of loose gears namely:–

1. Chains made of malleable cast iron ;
2. Plate link chains ;
3. Chains, rings, hooks, shackles and swivels made of steel ;
4. Pitched chains ;
5. Rings, hooks, shackles and swivels permanently attached to pitched chains, pulley blocks, container, spreaders, trays, slings, baskets, etc., and any other similar gear.
6. Hooks and swivels having screw-threaded parts or ball bearings or other case-heardened parts ; and
7. Bordeaux connections.

→

Initial Test and Periodical Load Test of Loose Gears

Distinguishing No. or marks	Description of loose gear tested and examined	No. of certificates of test and examination of competent person	I certify that on the date to which I have appended my signature the loose gears shown in columns (1) and (2) were tested and no defects affecting the safe working condition were found other than those shown in column (6)	
			Date and signature with seal	Date and signature with seal
1	2	3	4	5
1. 2. 3. 4. 5.				

Annual thorough examination of loose gears

Remarks (to be signed and dated)	I certify that on the date to which I have appended my signature the loose gears shown in columns (1) and (2) were thoroughly examined by me and no defects affecting their safe working conditions were found other than those shown in column (1)			
	Date and signature with seal	Date and signature with seal	Date and signature with seal	Remarks (to be signed and date)
6	7	8	9	10
1. 2. 3. 4. 5.				

PART III

Annealing of Chains, Rings, Hooks, Shackles and Swivels (Other than those exempted)

[See Part II]

12.5 mm and smaller chains, rings, hooks, shackles and swivels in general use.	If used with lifting appliance driven by power, must be annealed once If used solely with lifting appliance worked by hand, must be annealed once at least in every twelve months.
Other chains, rings, hooks, shackles and swivels in general use.	If used with lifting appliance driven by power, must be annealed once at least in twelve months. If used solely with lifting appliance worked by hand, must be annealed once at least in every two years.

Note:– It is recommended though not required by rules that annealing should be carried out in a suitably constructed furnace heated to temperature between 1100 degrees and 1300 degrees Fahrenheit or 600 degrees and 700 degrees centigrade, for a period between 30 and 60 minutes.

Distinguishing No. or mark	Description of gear annealed	No. of the certificate of test and examination	I certify that on the date to which I have appended my signature, the gear described in Columns 1 and 2 was effectually annealed under my supervision ; that after being so annealed every article was carefully inspected and that no defects affecting its safe working condition were found other than those shown in Column 7			Remarks (to be signed and dated)
			Date and signature with seal	Date and signature with seal	Date and signature with seal	
1	2	3	4	5	6	7

[1]FORM XXVII

[See Rule 33-A(2)]

Application for the Registration of Building Workers

Registration Number (To be filled in by office)

Affix Passport size Photograph

1. Name of the worker :
2. Age and Date of Birth :
   (Proof to be enclosed)
3. Name of Father/Husband :
4. Details of Dependents (Name, Age and Relation-ship with the building worker) :
5. Permanent address :
6. Present address :
7. Are you a member of any Trade Union ?
   If so, state the name of the Union and its Regn.No.:
8. The place of work with location in detail
   (the Certificate of Employment to be enclosed):
9. Nature of employment and skill :

Place :

Date : Signature of the Building Worker

Certificate

This is to certify that Sri/Smt./Kum. ..... is a building worker as defined in Section 2(e) of the Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 and he is eligible for Registration as Beneficiary.

Place : Signature of the Authorised

Date : Signatory

1. Forms XXVII, XXVIII, XXIX, and XXX added by G.O.Ms.No. 57, LET&F (Lab. II), dt. 26-6-2007.

FORM XXVIII

[See Rule 33-A(5)]

Nomination Form

Registration Number :

I hereby nominate the persons/person below to receive the claims due to me under Building and other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 in the event of my death any amount due to me becomes payable. The nominee(s) are also entitled to receive any other amounts that may become payable under Building and other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996.

Name and Address of the worker	Name and relationship of the nominee(s) with the building worker	Age of the Nominee(s)	Percentage of share to be paid to each nominee
	1.	2.	3.

Place :

Date :

Signature or left-hand thumb-impression of the Building worker.

Certified that the above declaration has been signed/thumb impression has been impressed by Sri/Smt./Kum.....after he/she has read the entries (or) after the entries have been read over to him/her by me and understood by him/her.

Place :

Date :

President/Secretary of a Registered Trade

Union/ Labour Department Officer not below the rank of an Assistant Labour Officer/Employer of a Registered

Establishment/ Chief Executive of the Government Organisation involved in building or other construction activity.

FORM XXIX

[See Rule 33A(6)]

Register of Beneficiaries

Sl. No.	Name and Address of the Building Worker	Name and address of the establishment in which employed (not applicable in case of self-employed worker)	Date of Application	Date of Registration	Registration No.	Remarks and initials of Authorised officer

FORM XXX

[*See Rule 33-B(i)*]

Identity Card

Registration Number :

Date :

Affix Passport size Photograph

1. Name of the worker :
2. Name of Father/Husband :
3. Age :
4. Permanent Address :
5. Details of Dependents (Name, Age and Relation-ship with the building worker):
6. Present Address :
7. Occupation :
8. If he is a member of any Trade Union, the Registration Number of the Union :

Registration should be renewed before :

Secretary,

Andhra Pradesh Building and Other Construction Workers Welfare Board

Details of Work done by the Building Worker

(During the Year From 1-4-20... to 31-3-20...)

From	To	Worked as	Name and address of the Employer/ Establishment	Remarks	Signature of Employer]