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SECURITY ARRANGEMENTS

7.1 INTRODUCTION

The precautions taken to prevent the possibility of accidents is called “Security Arrangements”. In this lesson you will know about the arrangements which are made at the construction site for various types of security. The aim of this lesson is not only to let you know as to what measures should be taken to prevent the accidents at work site such as what to do and what not to do, rather it is also to let you know as to how such good habits can be inculcated among all the workers starting right from top officers to ordinary workers, which minimizes the chance of accidents, that may cause loss of life/ any of the body parts and also creates hindrances in the construction work.

7.2 OBJECTIVES

After going through this lesson you will be able to:

- explain the necessity of security at work site;
- describe the details of security measures which are required to be taken for the security at work-site.

7.3 PLAN ABOUT THE SECURITY PROGRAM

At the time of first appointment each employee will be got acquainted with the basic principles of security fully. In this program following things will be explained in detail:

1. Who should comply with the security requirements.
2. Role and responsibilities of security supervisor.
3. General requirement of security during work.
4. Symbols of different types of security alerts and their observance.
5. Self Protection Equipment and their use.
6. Security Boards for machines, wire mesh, guard etc. their importance and use.
7. Special security zones.

7.4 WHO SHOULD OBSERVE THE SECURITY INSTRUCTION AND GUIDELINES

Security instruction and guidelines should be observed by each and every person religiously in full manner as non-observance of statutory orders of security by any person causes accidents and accidents do not differentiate between the level of the person, i.e. whether he is a worker or a top officer.

7.5 ROLE AND RESPONSIBILITY OF SECURITY SUPERVISOR

Security officer is required to be alert at all the times during working hour and also after the working hour and see that no lapses occur in the security system at the construction site. If required the employee, who is lax and unaware of the security requirement should be alerted by him and any ignorance on the part of the employee about the security requirement should be removed at once. It is the responsibility of the security supervisor to train the worker about security directives and about the Personal Protective Equipment.

He has the further responsibility to:

- Impart training at the work site about the security requirements.
 - Procure all types of general and personal security devices for each and every employee.
 - Untrained and unauthorized person should not be allowed to run any equipment or machinery.
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7.6 GENERAL PROVISIONS OF SECURITY DURING WORK

- No security equipments should be removed or disabled.
 - The security boards, wire mesh and guard etc. of the running machine should always be kept at proper place and should not be removed.
 - At the time of necessity the personal security equipment must be used.
 - Compulsory observance of security warning symbols must be observed.
 - Prohibited drugs and alcohol must not be brought at work site.
 - Arms, ammunitions and explosives should not be brought at work site.
 - Smoking, alcohols drinking and fighting etc. is strictly prohibited at work site.
 - During work don't do anything which is harmful or dangerous.
 - If the work appears to be dangerous security supervisor or safety supervisor should be informed at once. They will explain the method of performing the job safely.
 - Don't adopt any short cuts, it may be dangerous. Ramps, stair case or regularly provided steps should be used for movements.
 - Do not remove or tamper with any security symbol or instruction.
 - Any security system should not be tampered irrespective of any fact, whether it is being used by any staff or yourself.
 - Do not forget to wear Helmet, Safety belt, and safety shoes at work site (Ref. Fig. 7.1)
 - The safety should be maintained by the contractor by giving information regarding safety precautions. Any lapse in this will make the contractor responsible for payment of compensation etc.
 - Highly visible paint should be used for writing instructions on warning boards.
 - Red flat or Red light
 - Intermittent lights for use in night
 - Arrangements as per the instructions of traffic police
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- Providing barriers around the trenches
- Proper barricading of open spaces in Roofs, shafts, left for different purposes such as lift, pipes etc. In the same way Balcony, stair cases etc should also be barricaded.
- Scaffolding made for doing the construction works should also be strong enough. They should not bend or sag.
- 6.0 m strong mesh should be tied around all the four sides of the building so that no article and person should fall all of a sudden.
- Movement spaces should be kept free of debris and any thing kept randomly.
- The rope used for lifting of materials should be strong enough so as not to cause breakage of the rope.
- Children should not be allowed at the work place.
- Other temporary arrangements should be made for the safety of workers as required.

7.7 SECURITY WARNING SIGNS AND THEIR OBSERVANCE

Security symbols are installed for safety against accidents in special circumstances such as: Warning Boards, Red Flag, Red light etc.

7.8 SELF SECURITY EQUIPMENT AND THEIR USES

* These are: helmets, safety belt, and safety shoes

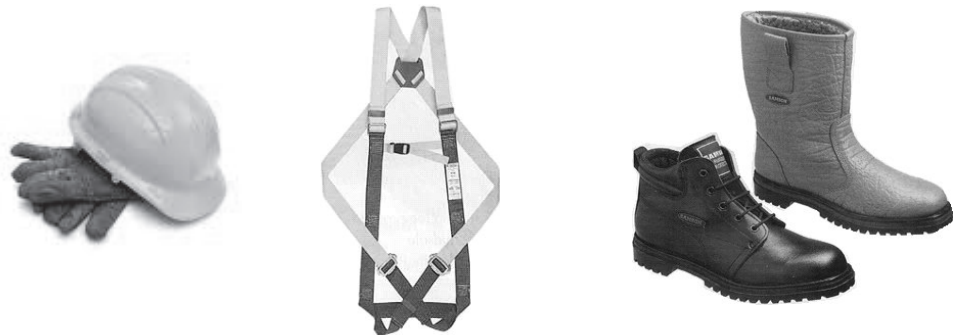


Fig. 7.1: Personal safety Equipment

7.9 PERSONALIZED SAFETY EQUIPMENT

- For protection of different parts of the body:
 - Helmet for protection of head,
 - Specticals/glass for protection of eyes,
 - Special shoes for protection of legs
 - Ear plug for protection or ear drums
 - Mouth mask for protection of lungs
 - Rope for safety against surprise faults
 - Glazed Jackets
 - Almira for keeping the safety equipment and devices, Medicines
- Special Protection devices
 - Eyes shields to be used during gas welding
 - Rubber gloves
 - Apron
- Personal security devices have been developed on the basis of large experiences. However they can be developed fresh for future needs. Keeping in view the requirement of the technology.

7.10 IMPORTANCE OF SECURITY BOARDS, WIRE MESH & GUARD ETC

Security Boards, Wire Mesh and Guard should always be present on running machines, carelessness in these matters may lead to body harm, or harm to the machinery.

7.11 AREAS REQUIRING SPECIAL ATTENTION

- No spark should be allowed in the vicinity of inflammable material
 - The hose or string attached to a machinery should not pulled using the same.
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7.12 ELECTRICAL WORKS

- Single worker should not be allowed to work on a running line.
- The voltage should always be checked when working on running line.
- On running line the electrical work should be carried out in adequate light.
- No electrical repair/new work should be carried on running line in open when it is raining.
- The wet cloth and tools should not be used while working or running line.

7.13 WHAT HAVE YOU LEARNT

- Types of dangers which can exist at work site.
- Types of injuries which can occur on different parts of body during work at work site.
- How to prevent the accidents.

7.14 TERMINAL QUESTIONS

1. What type of preventions can be achieved by using Helmet, special shoes, special specs?
 2. What types of security arrangements are needed?
 3. Why security mesh are provided in machines?
 4. What type of security arrangement should be provided on roofs and balcony?
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