

6.3 Ladders and platforms

6.3.1 Ladder

In communication towers the climbing facility can be provided by two ways.

- a) by providing climbing ladder with or without safety ring and
- b) by providing step bolts conforming to IS 10238:1982.

Generally for communication towers it is usual practice to provide climbing ladder with safety cage. The exposed area of ladder shall be considered while calculating the wind load on tower. The position of ladder will have impact on weight of tower. If ladder is provided internally its effect will be less and if it is provided externally it will have more effect. Protection ring is a safety requirement and may be replaced by fall arrest safety system.

Cable ladder is provided to support the cable wave-guide running from antenna to the equipment shelter. The cable ladder is provided inside and along the slope of the tower.

Step bolts are provided only for specific cases of narrow based towers of smaller heights as per user's requirements. The step bolts should be capable of withstanding a vertical load of not less than 1.5 kN.

6.3.2 Platforms

The platforms shall be provided at different levels as rest platforms or working platforms. The rest platforms are provided with chequered plate or

welded wire mesh along with suitable railing inside the tower and are provided for every 10m height, for all towers of height exceeding 20m.

The working platforms may be internal or external and these are provided with railings of 1000mm with toe, knee and hand rail protection.

