



**Manakula Vinayagar Institute of Technology**

**Kalitheerthal kuppam, Puducherry – 605 107**

**(Approved by AICTE, New Delhi, and affiliated to Pondicherry University)**

# **Barrier Free Environment Policy**

Approved in the Governing body meeting held on **April 16, 2018**

## PREFACE

The main objectives of the “Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1996 enacted by the Government of India on January 1, 1996 are to create barrier free environment for persons with disabilities and to make special provisions for the integration of persons with disabilities into the social mainstream.

Chapter VII of the Act, Sections 44 to 46 deal with non-discrimination in transport on the roads and in the built environment. It enjoins upon the governments and local authorities to ensure within their economic capacity provision for installation of auditory signals at red lights in the public roads for the benefit of persons with visual challenges, kerbs and slopes to be made in pavements for the easy access of wheel chair users, devising appropriate symbols of disability and warning signals at appropriate places.

In regard to non-discrimination in the built environment, the Institute adhere the provisions made in this Act for ramps in Institute buildings constructed and Similarly, it also ensures the adaptation of toilets for wheel chair users, Braille symbols and auditory signals in lifts / elevators as per the stipulations in the Act.

In order to create a barrier free environment in consonance with the provisions of the Act, Manakula Vinayagar Institute of Technology has formulated the policy, which would be applicable to all buildings and facilities constructed.

With this MVIT ensures that everyone, including the physically disabled and elderly persons, should have easy / hassle free access to entire facilities installed in the Institute.

This Policy has been framed to give guidelines for barrier free environment for disabled and elderly persons.

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## POLICY

ACADEMIC INSTITUTIONS should hire / recruit architects/planners with an awareness of creating barrier free environment for physically handicapped.

### 1. OBJECTIVES

- i. To enable people with disabilities to move about safely and freely and to use the facilities within the built environment.
- ii. To provide an environment that supports the independent functioning of differently-abled persons in everyday activities in the Institute.
- iii. To observe and follow standards / norms / principles, in creating various facilities to meet the standards of safety, convenience and usability for differently-abled people.
- iv. To implement “Barrier free design standards” in buildings, the choice of hardware and equipment, and the arrangement in outside space for enabling mobility and functioning of a differently-abled persons.

### 2. TYPE OF DISABILITIES

Various, disabilities which have been considered while preparing the guidelines for barrier free built environment are broadly classified under four categories

- i. **Non-Ambulatory:** Impairments that, regardless of cause or manifestation, for all practical purposes, confine individuals to wheel & chairs.
- ii. **Semi-Ambulatory:** Impairments that cause individuals to walk with difficulty or insecurity. Individual using braces or crutches, amputees, arthritics, spastics & those with pulmonary & cardiac ills may be semi-ambulatory.
- iii. **Sight:** Total blindness or impairments affecting sight to the extent that the individual functioning in public areas is insecure or exposed to danger.
- iv. **Hearing:** Deafness or hearing handicaps that might make an individual insecure in public areas because he is unable to communicate or hear warning signals.

### **3. FACILITIES FOR DIFFERENTLY-ABLED PERSONS**

- Adequate space should be provided in all moving (Walking) areas for persons using mobility devices. e.g. wheelchairs, crutches and walkers, as well as those walking with the assistance of other persons.
- The Space should be given by considering the range of reach (forward and side; with or without obstruction) of a person in a wheelchair should be taken into consideration.
- Attention should be given to dimensions of wheelchairs used locally. Standard size of wheel chair has been taken as 1050mm x 750mm (as per ISI).

### **4. SPECIAL NEEDS FOR THE DIFFERENTLY ABLED PERSONS**

With regard to the design guidelines the special needs of the differently-abled persons for construction of built environment are as follows.

#### **4.1. NON-AMBULATORY DISABILITIES**

- Persons restricted on wheel chair should use the facilities within the built environment alone without a helper's assistance.
- Wheelchair Users – A wheelchair may be operated by the user alone or with a helper's assistance. However, wheelchair design must assume that the user should be able to operate the wheelchair without help.

#### **4.2. SEMI-AMBULATORY DISABILITIES**

- Persons with impaired walking Persons in this category who use walking aids such as crutches or canes, who are amputees, who have chest ailments or heart disease.
- The persons in this category include those who cannot walk without a cane and those who have some trouble in their upper or lower limbs although they can walk unassisted.

#### **4.3. SIGHT DISABILITIES**

- Persons with impaired vision
- Persons in this category are totally blind or with impaired vision. Visually impaired persons make use of other senses such as hearing or touch to compensate for the lack of vision. It is necessary to give instructions accessible through the sense of touch (hands, fingers or legs).
- While walking with a white cane to spot their feet near the tip of the cane the persons may bump his or her head or shoulder against protruding objects.
- Persons with limited vision may be able to discriminate between dark and bright shades and difference in primary colors

#### **4.3.1. DESIGN REQUIREMENTS**

- i. Use of guiding blocks for persons with impaired vision to guide them within the buildings and facilities and outside the building.
- ii. Installation of information board in Braille in almost all the public facilities like lifts, stairs, etc, built in the Institute.
- iii. Installation of audible signages (announcements) at entrance and other vulnerable points in the building.
- iv. Removal of any protruding objects and sufficient walking space for safe walking in all pathways in and around the Institute.
- v. For persons with limited vision use of contrasting color arrangements in the accession points would be ensured.

#### **4.4. HEARING DISABILITIES**

- Persons with impaired hearing
- Persons in this category are totally deaf or have difficulty in hearing. They generally use their sight to gather information in public places.

#### **4.4.1. DESIGN REQUIREMENTS**

- i. Provision of information boards denoting basic Codes of conduct / rules to be observed in the Institute in an easily understandable manner.
- ii. Provision of illuminated signages, layout diagrams, etc., at the identified locations, to help the persons easily reach the desired places (like Dignitaries rooms, Toilets, Common Rooms, Rest rooms, etc.)

#### **4.5. ELDERLY PERSONS**

- Elderly persons may suffer impaired mobility, sight disabilities (partially or fully), hearing disabilities or any other physical difficulties, for which the design guidelines for them within and outside the buildings and facilities shall be similar like other physically disabled persons.

The above design guidelines would be observed even for elderly persons who are likely have above disabilities, in all the Institute's existing and future constructions and installations to ensure Barrier free Environment.

## **5. DESIGN ELEMENTS WITHIN THE BUILDING PREMISES (PUBLIC BUILDINGS)**

The following facilities to be considered to create the Barrier free Environment in the College Premises.

- i. Site Planning
  - \* Walks and Paths
  - \* Levels and Grooves
  - \* Kerb Ramp
- ii. Parking
- iii. Approach to Plinth Level
  - \* Ramped Approach
  - \* Stepped Approach
- iv. Entrance Landing
- v. Corridor
- vi. Entrance / Exit Door
- vii. Windows
- viii. Stair Ways
- ix. Lift
- x. Toilet
- xi. Signages
- xii. Other Facilities
  - \* Counter
  - \* Telephone
  - \* Mailbox / Suggestion Box / Complaint Box .



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