

1 Introduction

Queen's University at Kingston is committed to facilitating the integration of persons with disabilities into the university community.

The Canadian Charter of Rights, the Canadian Human Rights Act and the Ontario Human Rights Act all exist to provide protection from discrimination and protect the rights of people with disabilities. The Ontario Human Rights Act, amended in 1988, requires that persons with disabilities be accommodated at work, at play and in all public buildings and services.

Several initiatives to address the accessibility of the campus have been undertaken by Campus Planning and Development and Residence Services in collaboration with the Office for Special Needs. The Physical Accessibility Review Committee, a multi-departmental committee, was established in 1993 to undertake a review of the process for allocating access-related funding. The Queen's Access Review Committee was appointed in 1994 with the mandate to implement the recommendations of the former committee.

1.1 Purpose

This document which has been prepared under the direction of the Queen's Access Review Committee. The goals for the Development of Queen's Accessibility Guidelines were:

- (1) to develop a specific accessibility document that would work for Queen's University.
- (2) to meet regulatory requirements and anticipate future requirements in the field of barrier-free design.

The document describes the technical requirements for accessibility which are to be applied in the design, evaluation and modification of university facilities. These requirements set out the accessibility goals to be achieved within project budget; and make the distinction between minimum Code requirements which are mandatory, and preferred standards which are subject to project budget and University reviews.

This document is intended to be used by staff and students as well as consultants that are hired by the University to assist in the development of facilities. Following these guidelines will ensure that both new construction and retrofits will comply with the minimum requirements of the Ontario Building Code and, where a higher level of accessibility is desired and can be supported by project budget, other specifications--preferred standards--excerpted from the documents listed in 1.8 of this section are included. Project architects/consultants are required to comply with minimum Code requirements. Implementation of the preferred standards are, however, the decision of the University. The

priority of implementation will also be determined by the applicable responsibility centre according to the University's project management process.

1.2 Scope

1.2.1 This guide which describes the technical requirements for accessibility which are to be applied in the design, evaluation and modification of university grounds appears in the following three forms:

- 1) **Standard text** - The minimum acceptable standards (including the Ontario Building Code) for use in evaluating existing facilities or for the design of new properties.
- 2) **Bold text** - **The preferred standards for renovations and all new construction.**
- 3) *Italics* - *Commentary and background information.*

1.2.2 The importance of each requirement for various persons with disabilities will be indicated by International symbols (Mobility, Hearing, Vision, Cognitive or a combination) in the margin.

1.2.3 The Ontario Building Code (OBC) requirements, when stated, will be followed by the paragraph number in brackets.

1.2.4 The Guideline contains minimum requirements based on adult dimensions. Dimensions are given in SI (metric) units and, where converted from imperial units, they have been rounded off with respect to critical dimensions.

1.3 People with Disabilities

Statistics Canada estimates that over 15% of the population of Canada have disabilities which interfere with their daily living. The functional limitations are manifested as, in descending order of frequency: mobility, dexterity, hearing, vision, memory, emotional, learning and speaking disabilities. The severity of disability increases with age. Seniors comprise the largest sector of people with disabilities and are more likely to have a combination of disabling conditions. In addition, many people experience temporary disabilities as a result of accidents or a temporary condition such as pregnancy.

1.4 Mobility / Agility

1.4.1 People who have mobility impairments may use a walker, crutches or a wheelchair to assist them. Many wheelchair users have limited upper body strength and dexterity which affects their ability to operate controls and latches. People with mobility impairments will benefit from universal design of all facilities.

1.4.2 People with mobility impairments who are not wheelchair users include people with arthritis, cerebral palsy, multiple sclerosis, etc. Frequent seating opportunities (with back and armrests) and close access to parking are two considerations which will be appreciated by this group.

1.5 Hearing Impairments

1.5.1 People with hearing impairments consist of three main groups; those who consider themselves deaf, deafened and those who consider themselves hard of hearing.

1.5.2 Deaf people will not benefit from any audible components but will rely heavily on the visual experience. Well designed signage, good illumination, and TTY access will assist persons who are hearing impaired.

1.5.3 Flux coils and volume control devices make telephones accessible to hard of hearing people.

1.5.4 Sign language interpretation will provide access to communication for deaf persons who use sign language to communicate.

1.6 Visual Impairments

1.6.1 People with visual impairments have a wide variety of visual abilities: those who consider themselves blind and those who consider themselves with low vision. The majority of people who are considered legally blind have some vision and are able to detect changes in light or colour.

1.6.2 People who are blind or visually impaired require a safe environment, free of obstacles and hazards. People who are totally blind will rely heavily on wayfinding cues such as audible and tactile components to assist them in using a facility.

1.6.3 People who have limited vision will be able to benefit from visual cuing that is well contrasted, appropriately located and well illuminated. Signage must be provided in large print on a well contrasted background and be well illuminated. Information should be available at a height and location which will allow people to get very close to the print.

1.7 Other Disabilities

1.7.1 People with cognitive impairments may range from developmentally delayed children to adults who have had a stroke or are simply elderly and easily confused. People with learning disabilities also benefit from consistent, well designed facilities. Consistent use of

multiple cues such as colour and sound is recommended e.g. colour coordination of signage, departments, faculties, etc.

1.7.2 Some people may have multiple disabilities such as agility and breathing difficulties or be deaf and blind. Some people who are elderly may have a combination of visual, hearing and agility impairments. A diverse, well planned facility will ensure maximum safety and accessibility for all persons.

Some people with very severe physical disabilities may have requirements beyond the level described in this manual.

1.8 Base Documents

The base documents used in the development of the Queen's Accessibility Manual include:

"Accessibility Guidelines for Buildings and Facilities, Americans with Disabilities Act";
"Barrier-Free Exterior Design" by Gary Robinette; Universities and Colleges of Ontario
"Barrier-Free Design Supplement to the Canadian Standards Association Barrier-Free Design 1990 Manual", British Columbia Educational Association of Disabled Students.

British Columbia Building Code, 1992, Ministry of Municipal Affairs, Recreation and Housing.

Canadian Standards Association B44-94, Safety Code for Elevators

Canadian Standard Association B-651-M95 "Barrier-Free Design Standard".

Canadian Standards Association CAN/CSA B355-M-94 "Lifts for Persons with Physical Disabilities".

Canadian Standards Association CAN3-T515-M-85, "Requirements for Handset Telephones Intended for Use by the Hard of Hearing".

"Design Guidelines for Meeting the Accessibility Needs of Blind and Visibility Impaired Travellers in Transportation Terminals", CNIB/Transport Canada.

Ontario Building Code, 1990, Ontario Ministry of Housing.

BS5305 Part a:1977, Code of Practice for the Design of Straight Stairs