



Canadian
Transportation
Agency

Office
des transports
du Canada

Code of Practice: Ferry Accessibility for Persons with Disabilities



Making Transportation Efficient and Accessible for All

available in multiple formats

Canada

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For more information about the Agency, please contact:

Canadian Transportation Agency

Ottawa, Ontario K1A 0N9

Telephone: 1-888-222-2592

TTY: 1-800-669-5575

Facsimile: 819-997-6727

E-mail: info@otc-cta.gc.ca

Web site: **www.cta.gc.ca**

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Introduction

A. The Canadian Transportation Agency

The Canadian Transportation Agency (formerly known as the National Transportation Agency of Canada) is a quasi-judicial administrative tribunal of the federal government. Under Canadian legislation, the Agency has the responsibility for ensuring that persons with disabilities obtain access to this country's federal transportation system by eliminating unnecessary or unjustified barriers. One way in which it can achieve this goal of accessible transportation is to develop and administer accessibility standards covering the transportation network under federal jurisdiction. Other ways include resolving complaints and consulting with stakeholders.

B. The Purpose of this Code

The purpose of this Code of Practice is to improve the accessibility of marine travel for persons with disabilities. Many aspects of this Code will also benefit frail seniors. In the 1995 TransAccess Information Base, it is estimated that 3.8 million Canadians 15 years of age and over have some level of disability. (Values in the TransAccess Information Base are age-adjusted projections of the figures for adults residing in households determined by Statistics Canada in its 1991 Health and Activity Limitation Survey). It is further estimated that 440,000 of these Canadians with disabilities travelled by ferry in 1995. Since the incidence of disability increases with age, the demand for accessible transportation will be even greater as Canada's population ages.

Two sets of regulations regarding accessible transportation were implemented by the Canadian Transportation Agency's predecessor. One set – ***Personnel Training for the Assistance of Persons with Disabilities Regulations*** – ensures that personnel in the federal marine (as well as the air and federal rail) transportation network have the knowledge, skills and attitudes necessary to assist passengers with disabilities in an effective and sensitive fashion. The other – ***Air Transportation Regulations***, Part VII, Terms and Conditions of

Carriage of Persons with Disabilities – ensures that air carriers provide uniform services to passengers with disabilities travelling in Canada on aircraft with 30 or more passenger seats. In addition, the Canadian Transportation Agency has introduced two Codes of Practice relating to the on-board accessibility of aircraft with 30 or more passenger seats and to passenger rail car accessibility and terms and conditions of carriage by carriage by rail of persons with disabilities.

With this Code of Practice, the Agency is now addressing the physical accessibility of equipment used in marine transportation. It deals with features to make ferries more accessible to persons with disabilities. Where possible, it avoids rigid descriptions of exact procedures to be followed and precise measurements. Instead, it offers practical, functional, operations-oriented solutions to problems faced by persons with disabilities who travel by ferry.

This Code has been produced by the Agency in close consultation with its Accessibility Advisory Committee. This Committee is made up of representatives of organizations of and for persons with disabilities as well as representatives of industry, manufacturers and other government departments. Its mandate is to provide input toward the development of the Agency's regulations and standards on the accessibility of transportation.

C. Administration

The Agency will conduct periodic surveys to monitor the progress on the implementation of this Code, and will report the findings to its Accessibility Advisory Committee.

In addition to these surveys, periodic reviews of the Code will also be undertaken. Any problems identified will be addressed through consultations with the Accessibility Advisory Committee, and any proposed amendments to be distributed to the public for comment will be made with input from this Committee.

Throughout this process, the Agency will continue to exercise its authority to deal with individual complaints to determine whether there are undue obstacles to the mobility of persons with disabilities.

The Code

Section 1 - General

1.1 Operators and Vessels Covered by this Code

It is expected that this Code of Practice will be followed by: Northumberland and Bay Ferries, Marine Atlantic, Northern Cruiser Limited, Owen Sound Transportation Company, *Coopérative de transport maritime et aérien* (CTMA), Victoria Clipper Lines and by any future ferry operator that the Agency may determine, for passenger service between provinces or territories or between Canada and the United States.

This Code applies to ferries of 1,000 gross tonnes or more that can transport passengers only or passengers and motor vehicles. Under exceptional circumstances, operators may apply to the Agency to have a vessel exempted from meeting certain provisions of the Code. This will be done on a case-by-case basis.

This Code only applies to those areas of a ferry that may be used by the general public.

1.2 When and How Operators Should Follow this Code

In general, this Code should be followed in respect of any ferry in service or coming into service on or after January 1, 2002. An exception relates to operator-provided wheelchairs (where ferry operators are expected to begin carrying at least one wheelchair per passenger deck as of September 1, 1999).

Although it is recognized that the Canadian Standards Association Standard CAN/CSA-B651-95 **Barrier-free Design** was developed as a standard for buildings, it contains many criteria that are just as applicable to accessibility features on ferries (To obtain a copy of this document, call the CSA at 1-800-463-6727). Therefore, ferry operators are invited to refer to this standard and, where it is appropriate to do so, to adopt the technical specifications contained in it.

It should be kept in mind that safety on board vessels is not the responsibility of the Agency. Ferry operators must continue to comply with the provisions of any safety regulation included in or made under the **Canada Shipping Act** and any applicable Department of Transport or international safety regulation as well as any applicable Health Canada directive.

It should also be emphasized that this Code presents minimum standards that ferry operators are expected to meet. Operators are urged, however, to exceed these standards wherever feasible and to consult with consumer groups when developing and testing new designs.

Section 2 - Accessibility Criteria

2.1 Signage

Signage provided on a ferry to aid passengers should satisfy the criteria set out below. (Since safety and crew signage are regulated by the Department of Transport, they are not covered by these specifications.)

- (a) Signage should be positioned at key decision-making points. It should be positioned over the path of travel at a height well above head level in high pedestrian traffic, but in a manner that it can be seen easily by a person in a wheelchair. Signage should be positioned to avoid shadow areas and glare. If signage is located at a doorway, it should be on the wall to the right of the door, with its centre at a height of 1500 mm plus or minus 25 mm above the floor.
- (b) Letters, numbers, symbols and pictographs should be glare-free and presented in high contrasting colours (e.g. a light colour on a dark background or a dark colour on a light background, with light on dark being preferable for signage.)
- (c) Illuminated signs where the text is lighted through a dark background should not be used.
- (d) Letters and numbers should be sans serif, and numbers should be Arabic. Letters and numbers should have at least a width-to-height

ratio between 3:5 and 1:1 and a stroke-width-to-height ratio between 1:5 and 1:10.

- (e) For general orientation and specific information signage, letters, numbers, symbols and pictographs should be at least 200 mm high for a maximum viewing distance of 6000 mm, 100 mm high for a maximum viewing distance of 2500 mm and 50 mm high for a maximum viewing distance of 1500 mm.
- (f) When tactile signage or markers are used, letters, numbers, symbols and pictographs should be raised at least 0.8 mm and should be between 16 mm and 50 mm high. If a tactile sign is mounted on a wall, its centre should be at a height of 1500 mm plus or minus 25 mm above the floor.
- (g) If signage is supplemented with braille, it should be located at the bottom of the sign and presented in Grade One Braille that meets the standards of the Canadian Braille Authority in English and in *Braille intégral* that meets the standards of *the Comité interministériel sur la normalisation du braille* in French.
- (h) If electronic signage is used, letters, numbers, symbols and pictographs should be slowly scrolled across the screen. Red letters on a black background should not be used.

2.2 Means to Communicate Verbal Messages

If a ferry operator makes announcements to passengers, such as announcements concerning delays, schedule changes, and on-board services, the operator should have the means onboard the vessel of visually and verbally providing these announcements to persons with disabilities.

Pen and paper should be made available at all points of contact between carrier staff and passengers in order to facilitate communication of a more individual nature.

2.3 Supplemental Passenger Briefing Cards

A ferry operator should provide large print and braille supplemental passenger briefing cards on a vessel that include a recommendation that passengers make sure they receive a personal briefing.

A sufficient number of these cards (at least two per deck is recommended) should be made available in 14 point or larger sans serif type with dark characters on a light background and in Grade Two Braille that meets the standards of the Canadian Braille Authority in English and in *Braille abrégé étendu* that meets the standards of the *Comité interministériel sur la normalisation du braille* in French.

2.4 Lighting

Lighting on a ferry, except reading and other lighting under the control of a passenger, should be directed and controlled so as to minimize glare and shadows.

Lighting should not result in any sharp contrasts in intensity throughout a ferry but should be used to accentuate stairs and their handrails.

2.5 Stairways

Stairs on a ferry should have uniform, closed riser heights and uniform tread depths. Where space permits, detectable, colour contrasting warning surfaces should be provided at the top of stairs and at landings.

The tread surfaces of the stairs and the landings should be firm and non-slippery and should not create glare. The top outer edge of each step should be marked by a contrasting colour strip that runs the full width of the leading edge of the tread and the vertical face of the nosing.

Stairways should have handrails on both sides, including at the landings.

If structural limitations of a ferry prevent any of the criteria concerning handrails and uniform riser heights and tread depths from being satisfied, and where an elevator is not provided or not available, a ferry operator should provide assistance, if requested, to a passenger with a disability in ascending and descending the stairs.

2.6 Handrails

Handrails on a ferry should be sturdy and of a height and length that permit use by all passengers including a person using a wheelchair.

Handrails should be continuous through the length of stairs, ramps, corridors or passageways, except where interrupted by other paths of travel or doorways.

Handrails should be rounded and free of any sharp or abrasive element. They should have an exterior diameter and a clearance from the wall surface to which they are attached that permit easy grasping. They should not have any obstructions that could break a handhold.

Handrails should be colour contrasted from their surrounding area or marked with a contrasting colour strip that runs the full length of the handrail.

Handrails should also return to the wall, floor or post in a smooth curve or have a tactile cue at the end. The method used should be consistent throughout the ship.

2.7 Corridors and Passageways

Corridors and passageways on a ferry should have a minimum clear headroom of 1980 mm from the floor. They should also have a minimum clear width that is maneuverable by a person in a wheelchair and not reduced by protruding fixed objects. ("Wheelchair" means a passenger-owned wheelchair that requires a minimum clear floor area of 750 mm by 1200 mm to accommodate a wheelchair and its occupant and a minimum clear turning space of 1500 mm in diameter.)

Any barriers, obstacles or projections should be colour contrasted from their surrounding area.

2.8 Floors

Floor surfaces on a ferry should be slip-resistant. Glare from floor surfaces should be reduced as far as practicable.

If carpeting is used on a ferry, it should be securely attached. It should have a short pile and a firm underpad or no underpad at all.

2.9 Doorways and Doors

Doorways on a ferry should be wide enough to accommodate a person in a wheelchair and should have enough space on both sides of the door to manoeuvre a wheelchair.

Full length glass doors or windows should be marked with colour contrasting decals.

Doors to cabins, washrooms and other enclosed spaces which have no other exit doors should not be equipped with deadbolts or other means of security which can only be manipulated from the inside. As an alternative they should be equipped with an easily manipulated push-lock door knob that can be released from the outside with a special tool or lock.

If door sills are necessary, they should be bevelled or ramped on a permanent or movable basis and should be marked with a colour contrasting strip.

Door handles, pulls, latches, locks and other operational devices should be operable with one hand and minimal force and should not require fine finger control, tight grasping, pinching or twisting of the wrist. They should be mounted at a height that permits use by a person in a wheelchair and be colour contrasted from their surrounding area.

If sliding doors are used, these operational devices should be exposed and usable from both sides when in a fully-open position.

Crew members should be available to assist passengers with the use of watertight doors, and fire rated doors designed to meet Transport Canada standards.

2.10 Counters

If counters for serving the public are provided on a ferry, they should have at least one section that is of a height and surface that permits use by a person in a wheelchair. This section should not have any obstructions that

could impede verbal or visual communications between the person and the counter personnel.

Counter surfaces should have a non-glare finish and be colour contrasted from their surrounding area.

2.11 Operator-provided Wheelchairs

As of September 1, 1999, each passenger deck on a ferry should be equipped at all times with at least one wheelchair provided by the ferry operator.

2.12 Telephones

If modular jack public telephones are provided on a ferry, at least one telephone should be installed at a height and with a shelf, and handset cord length that permit frontal access by a person in a wheelchair. The shelf should be large enough to accommodate a TTY. At least one TTY that can operate on this type of telephone should be available.

The telephone and TTY should be situated such that the instructions and shelf are adequately illuminated and noise from the surrounding environment is minimized.

The telephone and TTY should have their location indicated by directional signage and by a sign positioned perpendicular to the path of travel. The telephone and TTY should also be identified by the appropriate international symbols of access in pictograph and tactile form.

All telephones and TTYs should be situated so as not to obstruct the path of travel. In case of existing banks of telephones, it is recognized that structural limitations of the vessel may prevent relocation. In these instances, operators are urged to at least provide colour contrasting on the outer edge of the bank of telephones.

Telephones should have audible operational instructions and push-button dialing controls, a flux coil on the handset, and a volume control.

2.13 Alarms

If a ferry is equipped with an alarm system, the system should be visual and audible and, when activated, display continuously in all public places.

Visual alarms should be a flashing light that is strategically placed and significantly brighter than the ambient light.

2.14 Elevators

If a ferry has more than one deck, it should have at least one elevator that is accessible to persons with disabilities, including persons who use a wheelchair, that provides service from a vehicle deck to all the passenger decks except for the uppermost, open observation deck. (Elevators as a rule do not go to the uppermost, open observation deck. The elevator cab must have a housing to enclose it completely to protect it and the mechanical lifting device from the elements.)

Signs should be posted at each elevator explaining that there may be times when the elevator may not be operational due to conditions where the ship's roll exceeds the elevator manufacturer's safe operating criteria. Travellers should be directed to alternative routes or to locations where assistance is available.

An accessible elevator should satisfy the following criteria:

- (a) The elevator should have its location indicated by directional signage and by a sign positioned perpendicular to the path of travel. It should also be identified by the international symbol of access in pictograph and tactile form by the door.
- (b) The gap between the elevator sill and the deck floor should not interfere with the movement of a wheelchair.
- (c) The elevator should have doors that remain fully open for at least four seconds in response to a call, which time may be altered through the use of a door-opening or door-closing button. It should also have a device to stop and reopen the doors before they encounter an obstruction while closing.

- (d) The elevator should have a floor space that permits manoeuvring of a wheelchair.
- (e) Each wall in the elevator should have a handrail.
- (f) The control panel in the elevator should be located at a height that permits use by a person in a wheelchair. The buttons on the panel should be colour contrasted from their surrounding area and operable with minimal force. They should also have colour contrasted tactile markers to their left to indicate their purpose.
- (g) Visual, audible and tactile deck indicators should be provided. A visual indicator inside the elevator should show in contrasting colours which deck the elevator is passing or stopped at. An audible indicator should sound inside the elevator as the elevator passes or stops at a deck. A tactile indicator should be placed outside the elevator on both sides of the door jambs to identify the deck.

If structural limitations of a ferry prevent the installation of an accessible elevator as described above, the ferry operator is encouraged to explore the possibility of installing another type of elevating device that would permit persons with disabilities to access the various decks on the ferry. In any event, the ferry operator should provide assistance, if requested, to a person with a disability in accessing any deck that is open to the public.

2.15 Vehicle Decks

A ferry operator should ensure that a person who uses a wheelchair and boards a ferry by way of the vehicle deck equipped with a wheelchair-accessible elevator, or with another type of elevating device that is wheelchair-accessible, can freely get out of their vehicle and have access to the elevator or the elevating device.

2.16 Passenger Lounges

If there are any passenger lounges on a ferry, at least 5 per cent of the seating in each lounge should have a design and an adjacent clear floor space that permit easy transfer of a person to and from a wheelchair. The floor space should be large enough for a service animal to lie down. This

seating should be designated by signage for use by persons with disabilities. ("Service animal" means an animal that is required by a person with a disability for assistance and is certified, in writing, as having been trained to assist a person with a disability by a professional service animal institution.)

Passageways in a passenger lounge should satisfy the criteria in section 2.7. Counters in a passenger lounge should satisfy the criteria in section 2.10.

2.17 Cafeterias

If there are any cafeterias on a ferry, at least 5 per cent of the tables in each cafeteria should have a height and surface that permits use by a person in a wheelchair. These tables should be designated by signage for use by persons who use wheelchairs.

If the layout permits, a handrail should be provided along each side of a food service counter with a minimum clear floor width that is manoeuvrable by a person in a wheelchair.

Menu display boards should be large enough and positioned to avoid shadow areas and glare and in a manner that they can be easily seen by a person in a wheelchair. Letters, numbers, symbols and pictographs on the board should be glare-free and presented in contrasting colours. A ferry operator should provide assistance, if requested, to a person with a disability by either reading the menu display board or making available a large print and/or braille version of the display board. The large print version should be in 14 point or larger sans serif type with dark characters on a light background. The braille version should be in Grade Two Braille that meets the standards of the Canadian Braille Authority in English and in *Braille abrégé étendu* that meets the standards of the *Comité interministériel sur la normalisation du braille* in French.

Passageways and counters in a cafeteria should satisfy the criteria set out in sections 2.7 and 2.10.

2.18 Cabins

If cabins are provided on a ferry, at least 5 per cent of them, with a minimum of one cabin, should be accessible to persons with disabilities, including persons who use a wheelchair. This means that these cabins should satisfy the criteria that follow:

- (a) The cabin should have doorways and doors that satisfy the criteria set out in Section 2.9.
- (b) The floor space should permit a person in a wheelchair to enter the cabin and use all the facilities in the cabin.
- (c) The cabin should include a washroom that satisfies the criteria set out in Paragraphs 2.19 (b) to (e).
- (d) The cabin should have a call button that sends a signal that can reach staff at all times.
- (e) Controls and outlets, such as call buttons, thermostats, electrical switches and electrical and communication wall outlets, should be located adjacent to a clear floor space at a height that permits use by all passengers including a person in a wheelchair. They should be operable with one hand and minimal force and not require fine finger control, tight grasping, pinching or twisting of the wrist. They should also be colour contrasted from their surrounding area and capable of being adequately illuminated. Finally, at least the call button and the thermostat should be identified by a tactile marker.

As for the remaining cabins on a ferry, operators are encouraged to incorporate the accessibility criteria listed above into their designs for these cabins on new ferries or their refurbishment plans for these cabins on existing ferries.

2.19 Washrooms

(Operators are invited to refer to the Canadian Standards Association CAN/CSA-B651-95 *Barrier Free Design* and, where it is appropriate to do so, to adopt the technical specifications contained in it for washroom accessibility features.)

If public washrooms are provided on a deck of a ferry, at least one washroom for each sex with one toilet and one sink, or one gender neutral washroom with one toilet and one sink, on that deck should be accessible to persons with disabilities, including persons who use a wheelchair or who may require an attendant. This means that these washrooms should satisfy the criteria set out below:

- (a) The washroom should have its location indicated by directional signage and by a sign positioned perpendicular to the path of travel.
- (a) It should also be identified by the international symbol of access in pictograph and tactile form by or on the door.
- (b) The washroom should afford privacy to a person in a wheelchair.
- (c) The washroom should have a doorway and door that satisfy the criteria set out in Section 2.9.
- (d) The washroom should have a floor space that permits manoeuvring of a wheelchair.
- (e) The toilet should have a height and location that allow easy transfer for a person in a wheelchair.

The toilet should have a flush control that is colour contrasted from its surrounding area. The flush control should be operable on the transfer side of the toilet with a closed fist and minimal force, or be electronically or automatically controlled.

The toilet should have a back support where there is no seat lid or tank, and a toilet paper dispenser within reaching distance that does not interfere with the grab bars.

- (f) The washroom should have fixed or flip-up grab bars that are sturdy, non-obstructive and conveniently located on the wall behind the toilet and on the wall closest to the toilet. They should have a height and length that permit use by a person in a wheelchair.

Grab bars should be rounded, free of any sharp or abrasive element and slip-resistant. They should have an exterior diameter and a

clearance from the wall surface to which they are attached that permit easy grasping.

Grab bars should be colour contrasted from their surrounding area or marked with a contrasting colour strip that runs the full length of the bar. They should also return to the wall in a smooth curve.

- (g) The washroom should have a coat hook that has rounded edges. It should be mounted on a side wall and positioned such that it is usable by a person in a wheelchair.

- (h) The washroom should have a call button that is colour contrasted from its surrounding area and identified by a tactile marker.

The call button should be positioned such that it is usable by a person in a wheelchair. It should be operable with one hand and minimal force and not require fine finger control, tight grasping, pinching or twisting of the wrist.

The call button should send a signal that can reach staff at all times.

- (i) The sink should be positioned such that it is usable by a person in a wheelchair. The trap should be offset to the rear to ensure that the knee-space is clear of obstructions. If this is not possible, the trap should be insulated to prevent heat injuries to the legs.

Faucets and other controls on the sink should be colour contrasted from their surrounding area. They should have handles of the lever type that are operable with a closed fist and minimal force, or they should be electronically or automatically controlled.

- (j) Accessories, such as soap dispensers, towel dispensers and waste receptacles, should be easy to use and positioned such that they are usable by a person in a wheelchair.

These accessories should be colour contrasted from their surrounding area and identified by tactile markers.

- (k) The mirror should be mounted such that it is usable by a person in a wheelchair.

If a washroom that is accessible to persons with disabilities, including persons who use a wheelchair, has toilet stalls, at least one toilet stall should have an outward-swinging door with inside and outside pulls, a floor space, a toilet, grab bars, a coat hook and a call button that satisfy the criteria set out in Paragraphs (c) to (h) above. If a washroom has more than one sink, at least one sink should satisfy the criteria set out in Paragraph (i). In addition, at least one of each type of washroom accessory and at least one mirror should satisfy the criteria set out in Paragraphs (j) and (k).

As for the other public washrooms on a ferry, operators are encouraged to incorporate the accessibility criteria listed above into their designs for these washrooms on new ferries or their refurbishment plans for these washrooms on existing ferries.

Section 3 – Maintenance

A ferry operator should have procedures in place to ensure that all accessibility features on a ferry are maintained in good working order.

For further information:

Canadian Transportation Agency
Ottawa, Ontario K1A 0N9
Tel: 1-888-222-2592
TTY: 1-800-669-5575
Web: **www.cta.gc.ca**
E-mail: info@otc-cta.gc.ca