Accessible Tourism for All
In the Western Nordic Region; Iceland, the Faroe Islands & Greenland

Toolbox
Simple measuring devices
# Table of Contents

1. Simple measuring device: .......................................................... 3

2. How to measure ........................................................................ 4
   2.1 Doors .................................................................................. 4
   2.2 Operating space ................................................................... 4
   2.3 Heights and other distances .................................................... 4
   2.4 Outdoor and indoor access routes ......................................... 5
   2.5 Weight of opening doors ....................................................... 5
   2.6 Gradient ............................................................................. 5
   2.7 Noise levels ...................................................................... 5
   2.8 Light ................................................................................... 5
1 Simple measuring device

To make the measurements as simple as possible we recommend the following tools:

- Sticks (77cm, 80cm, 90cm and 150cm)
- A smart phone
- A tape measure
- A bag scale
- A suitcase on wheels
- An height adjustable office chair on wheels

For a more advanced evaluation one can add a blindfold and a stick to explore access for the blind, and a hearing protector to get an idea of access for people with reduced hearing.
2 How to measure

2.1 Doors

Using a 77 cm long stick for The Faeroe Island and Greenland and an 80 cm long stick for Icelandic buildings, is the easiest way to measure the width of doors and openings. If you can walk through the door holding the stick horizontally in front of you, the passage through the door is sufficient for all wheelchairs. The reason for the stick, is that there are many ways of where and how to measure doors, but only one way is right to get the actual result of free passing.

NB! The 90 cm long stick is to be used for measuring distances beside the toilet bowl and other places where 90 cm is required.

2.2 Operating space

Where there are requirements for an operating space for wheelchair users the simplest way to measure it is to use a stick of 150 or 180 cm, depending on the requirements (180 is for public buildings in Icelandic built after IBR112/2012), hold it in the middle, horizontally about 20 cm above floor level, and turn it half a circle (180°). If it doesn’t meet any barriers there should be enough operating space for wheelchairs to turn a full circle of 360°.

NB! When measuring small rooms where the doors swing into the room the free 180° turn of the stick/tube must be possible even when the door is opening or closing.

2.3 Heights and other distances

The tape measure is excellent to measure all kinds of heights, for example desks, chairs, toilet bowls, beds and corridors. One way of measuring heights is to use a height adjustable office chair and adjust the seat in about 50 cm from floor level. If you can see yourself in the mirror, easily communicate with people behind desks, easily get your legs under a dining table and so on, the height of the furniture is probably suitable for wheelchair users.
2.4 Outdoor and indoor access routes

One way of checking if the main access routes, both towards and inside the building, are manageable for wheelchair users, and people using aids for walking, is to take a “roller suitcase” and walk with it to all facilities outside and inside the building. If the suitcase bumps into something, or is difficult to pull at some point, that spot or area should be further investigated. The office chair can also be used to find out if the traffic routes, halls, doorways etc. are manageable for wheelchair users.

2.5 Weight of opening doors

A digital bag scale with a string, to attach to door handles, is the easiest way to measure the weight of opening doors. The string is fastened to the door handle or grip and the highest number on the screen shows the maximum weight the person opening the door has to use to push or pull the door open.

2.6 Gradient

Getting the accurate slope in degrees or percentages can be difficult to get if one does not have a digital level indicator. This is where the smart phone comes in handy. You can download a level indicator app to the smart phone and lay it down on the surface of the slope to be measured.

2.7 Noise levels

Most smart phones and tablets can import apps for measuring acoustics, decibel levels etc.

2.8 Light

Where there are requirements for minimum or maximum light there are possibilities to get some information through smart phone apps for LUX measurement.