Disability Steps

I have a step at the front of my shop. Can I ramp on to the pavement?

Unless the pavement is particularly wide you are unlikely to get planning permission because it could equally be a hazard for blind people. The pavement is designated as "highway" and highway considerations would apply. Of course, if you have your own front concrete apron, for example, it might be a different matter. There would still be some things to check out.

Can I put a steep ramp in place if there isn't much room?

Steep ramps should be avoided. The maximum gradient you should use is one in twelve. If it's any steeper a wheelchair user could tip backwards. Also remember that in the rain steep ramps could be slippery and dangerous.

Can I have a portable ramp?

It could solve a few problems but remember that they tend to be pretty heavy. The main problem is that wheelchair users often find themselves stranded outside the building because they can't get inside to ask someone to put the ramp out... a classic "catch 22" situation.

Are there rules about ramp dimensions?

Yes. Imagine wheeling yourself up a ramp. You would not want to roll off the edge - that's why there should be a 100mm lip (eg a brick height) on both sides. Neither would you want to roll backwards while you are reaching for the door handle. That is why there should be a level area at least 1200mm square adjacent to the door. It might need to be bigger if the door swings outwards or the approach requires a turn. Long ramps need to become shallower:

Length	Max Gradient	Max Rise
2m	1:12	166mm
5m	1:15	333mm
10m	1:20	500mm

You will need an intermediate level area of 1500mm for long ramps exceeding these dimensions. Handrails are also needed in many cases and should be at a height of 900-1000mm with a round cross-section around 45mm. The ramp width should be 1500mm. Provide a slip-resistant surface. You can have a 1 in 40 'cross fall' to help rainwater run off. Make sure that the doorway does not have a threshold greater than 10mm, or 15mm if chamfered.

Remember that where you provide a ramp you should also provide a stepped alternative. Some people find it a lot easier to cope with steps. Aim for a "going" of at least 280mm and a riser of 150mm or less.

Is my doorway suitable?

If you have a self-closing door the closing force should not exceed 20 Newtons. In plain English this simply means that the door should be easy to open and close and no-one should have to wrestle with the door to get through it. Any security systems such as keypads should be at a height suitable for a wheelchair user to use. Thresholds should not exceed 10mm, 15 if chamfered. Door handles should be easy to grip. External doors should have a clear width of at least 775mm for existing buildings (preferably wider) and 1000mm for new buildings. Internal doors could be slightly less but it depends on the approach to the doorway and whether a turn has to be made from (say) a corridor. There needs to be a clear 300mm space to the door-handle side of the door to facilitate opening. Remember to include vision panels in the doors at heights of 500-800mm and 1150-1500mm. Revolving doors are definitely NOT suitable. When designing lobbies, remember that a wheelchair user has to be able to clear the first set of doors before tackling the second set.

Should I install an accessible toilet?

If you provide a service to the public that includes toilet facilities then you should consider making that facility available to all. It can be difficult in an existing building because of lack of available space but nonetheless try to find a way of overcoming the difficulty. The standard specification for a 'disabled toilet' can be seen below.

You can download a standard specification for a disable toilet (PDF 91.5kb).

Note that the doorway need not be 1000mm wide. If the approach and door opening angle are satisfactory, other sections of part M cover the minimum widths required. If in doubt, make it 1000mm. These toilets should be unisex. They should not be less than 1500mm by 2200mm and the door must open outwards. Grab rails should be fixed firmly enough to be able to take someone's weight and not fixed to a flimsy partition.

An 'ambulant' disabled toilet is one where the user is able to stand. It should be 800mm wide and there should be 750mm clearance between the door and the front of the pan. If the disabled toilet will be the only toilet in the building then you also need to have a hand basin at standing height.

What about people with sight or hearing impairments?

You need to remember that 'disability' doesn't just mean people in wheelchairs. A visually impaired or hearing impaired person can face insurmountable barriers that others are unaware of. Doors or doorframes should contrast with walls, reception counters should have an induction loop facility to assist people with (most but not all) hearing aids. Carpeting should not be too 'busy' and waiters should be able to provide a large print menu if requested. These are just some of the examples of eliminating unnecessary barriers.

What about getting upstairs?

Lifts:

Passenger lifts are the best option but they are not cheap. There needs to be sufficient manoeuvring room adjacent to the lift. The lift buttons need to be at a height of 900-1100mm with raised symbols with good contrast for the buttons and panels. For small lifts where a wheelchair user cannot turn round inside the lift, provide a mirror on the top half of the back wall of the lift to enable the person to reverse out of the lift safely. There should also be a handrail on at least one wall. There should be sound announcements to announce the level and whether going up or down.

Platform lifts:

These can sometimes offer a useful alternative where a passenger lift cannot be installed. The occupant keeps a button pressed to raise the platform to the higher level.