

Boat Handling Facilities

Boating facilities can include fixed and floating facilities.

Facilities can vary in size from one boat slip (for example, at a small campsite facility) to several thousand slips, and can handle boats ranging in size from small canoes to large yachts and powerboats.

Facilities may be located in the same waterfront area or even in the same site and include marinas, launching facilities, piers, and docks that are designed for recreational use. This includes private boats, hire boats, small river/lake people ferries and trip boats. This guide does not include provisions for sea going vessels, car ferries etc.

Offices, club houses, shops, workshops sanitary facilities are all covered by standard design requirements with regard to access and evacuation.

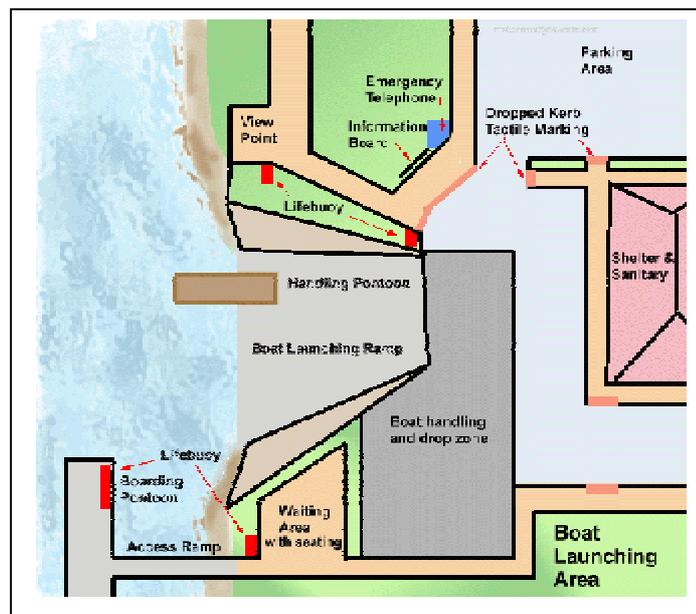
Routes to, paths, walkways etc. all must comply with standard design criteria. Certain routes such as canoe portages may have special conditions applied, see 'Country Pathways and Surfaces' and 'Country Waterways'.

There are no specific requirements for making the water and boats accessible. The following are not specified by regulations, these represent Best Practice at the time of writing.

Boat Handling Facilities

Rivers, lakes and canals should have boat launching and handling areas where boating is permitted. The onshore facilities provided should be similar to those at path heads and picnic areas.

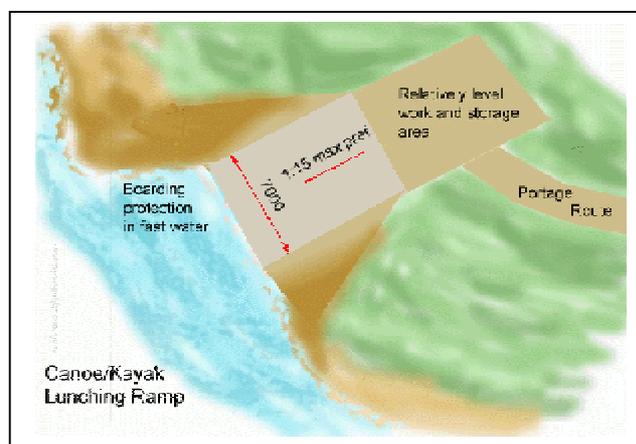
- Good signage and information notices, are an essential component. Knowing that an accessible launching or docking area is available and where it can be found is half the story.
- Shelter and Sanitary facilities are essential. Changing rooms are preferable where possible. People messing about with boats get wet and cold. Older and disabled people as well as children can be sensitive to cold and wet clothing.



- Outdoor potable water faucet, for use when sanitary facilities are closed. People using boats may not be able to dock at set times when facilities are open. Drinking water is essential for many people, some needing more than others.
- A boat handling area on level ground, a level area where boats can be rigged and checked before launching makes the process easier for everyone. People with mobility, sight and manipulative impairments find working on a level site easier and safer.
- Parking for vehicles and trailers, accessible parking near the launching ramp improves the facility for everyone.
- A launching ramp 1:20 max preferred, there is no regulation setting the incline of a ramp. A shallow angle, where there is space, makes launching easier and safer for everyone, people with limited mobility and strength are placed at risk on steep slopes.
- A handling & rigging pontoon, with ramped access. This aids people making final adjustments to balance and rigging and allows lone sailors with disabilities to board.
- A passenger waiting area with a ramped access boarding pontoon, these ramps may be steeper than usual dependent on space availability; 1:15 (6.5%) should be the target maximum slope.
- An accessible public transport stop nearby, signage at the shelter should give service times. Not everyone has use of personal transport, only 60%, less in some areas, have use of a car.
- An emergency telephone with text and hearing amplification capability, clear directions for calling the rescue service.
- Emergency life buoys mounted near water access, clearly recognisable, no higher than 1200 mm, number should be based on how busy or hazardous the area is,

Canoes and Kayaks

- Canoes and kayaks need safe launching and portage routes on rivers, lakes and other waterways.
- These need to be sited at the head and foot of a route, with parking and other facilities similar to those for boating.
- Landing places for camp sites should be available every 30 Kilometres.
- Landings should also be provided at the start and finish of a portage section.



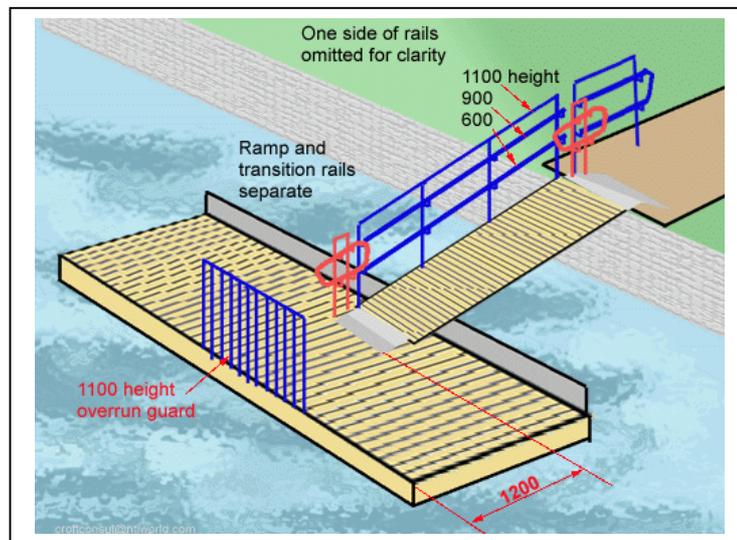
- Providing an embayment or land projection to provide additional protection in fast water landings should be considered to assist people with mobility impairments to board.
- Signage along the route should give directions and cautions about the route.

See also – Country pathways and surfaces.

Gangways and Boarding Ramps

Floating structures designed to rise and fall with changes in water level can pose a problem for designers. The following should be included in the design

- These should be designed to provide a maximum incline of 1:12 (8.33%) when water is at its (nominal) lowest level. This means the ramp may be less than 1:20 at higher water levels. In principle gangways should not be longer than 10 metres.



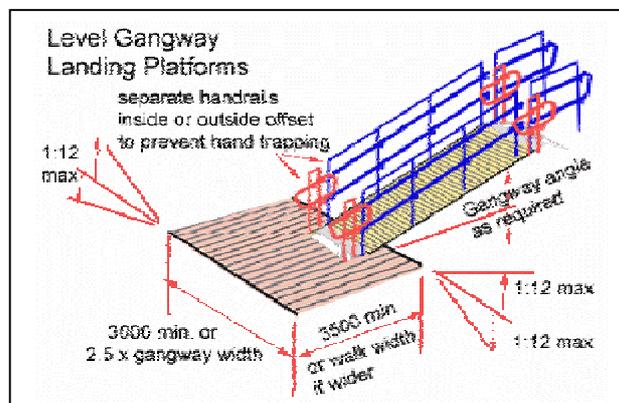
- Boarding gangways in tidal areas in general are not covered by the regulations regarding length and pitch as these are mobile items. However, if a gangway serves a boarding pontoon or accessible slips or a view point it is regarded as an extension of the walkway and should comply with all directives.

Cross fall of gangways must not exceed 1:50 (2%)

Where the gangway serves a promenade with or without buildings it is regarded as part of the walkway and should comply in full.

Only one gangway need comply with incline regulations for each area serving accessible slips and boarding, other routes may be as dictated by space and height constraints.

As an alternative to long ramps an accessible lift can be installed. Any lift should be capable of handling mobility scooters and powered wheelchairs.



Where the gangway has to be used at greater than 1:20 assistance for wheelchair riders must be available.

- Transition plates at head and foot of the gangway should help smooth the join between the ramp and the pontoon or land surface.

Where a transition plate during part of water levels range provides a slope of more than 1:20 a level landing platform must be provided on the non-gangway surface.

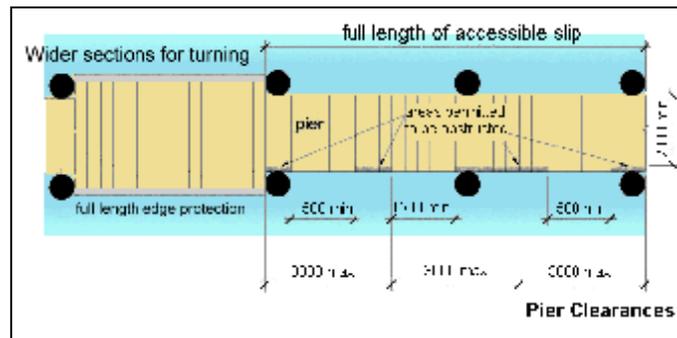
Where the landing pier/slip is a ramp and more than 1:40 a level platform must be provided at the gangway head/foot area.

- Handrails should be fitted on both sides of the gangway at 900 mm (pref. for people with low mobility and short stature) and 600 mm (children and adults in wheelchairs) heights. Handrails should extend 300 mm beyond the transition plate. Handrail joins between the ramp rails, the transition rail and the pontoon and land handrails should be designed to prevent hands and arms becoming trapped. A tapping and slip protection rail should be provided up to 150 mm height. For best use handrails should have underside supports and project into the walkway this aids people who rest their lower arms on the rail and wheelchair riders. Handrails on transition plate areas and joins do not have to be parallel with the ramp surface due to water levels and wave movements.
- Ramp width should be no more than 1400 mm, 1200 mm width provides space for most mobility aids and vehicles and for a person being carried.
- Surface must be slip resistant and reasonably smooth.
- Some people with mobility impairments cannot negotiate a ramp organisations should provide an alternate route or have a manual wheelchair and helper for their use.
- Gangway ramps should have a guardrail opposite the lower end of the ramp to catch runaways.
- On gangways with high rises or are subject to wave movement 1100 to 1300 mm high guard rails should be provided along the gangway ramp.

Turning and manoeuvring

- A 180° turning/passing space for wheelchairs, powered wheelchairs and scooters should be available every 30 metres and at the end of a pier. This space also serves for turning space for manual handling goods trolleys and delivery equipment. 2400 mm x 2800 mm min. preferred.

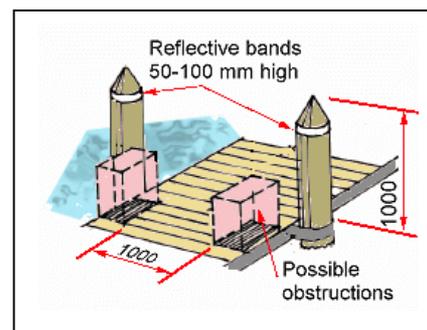
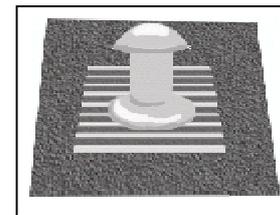
- Slips intended for use by disabled people should be 2000 mm (or more) wide where possible. Occasional wider sections should be available for tuning and boarding.



Dock Bollards

These are special purpose and will not necessarily comply fully with accessibility rules. However,

- Where these are sited on a harbour wall or similar, they should have barriers or tactile changes to provide warning if they are attached to ropes/cables that intrude into walkways without fencing.
- Bollards should contrast with their background and reflective bands should help them stand out during low light conditions.
- On slips mooring bollards should be tall enough for visibility by people with low vision. A reflective band at the top helps recognition in poor light conditions.



Slips, finger Piers etc.

- Joints between planks should be slip resistant, and rise no more than 5 mm above the surface of the walkway.
- Where flexible joints/transition plates are needed these should not form a hazard to people's feet or wheelchair movement at any state of the tide. A 1:20 slope on transition plates should be the maximum. Transition plates should not become slippery when wet.
- These should be 2000 mm wide with limited narrowing for bollards, cleats, and other obstructions. The minimum width should be 1200 mm and of no more than 1000 mm length. Turning space for wheelchairs 1800 mm diameter should be available at the end of pontoons and at 30000 mm intervals on long runs.
- Where powered wheelchairs and scooters are likely pier users a 2800 x 2800 mm level turning area should be provided. This is also useful for delivery trolleys etc.
- The clear walking space should be outlined with a 100 mm wide white or contrasting coloured line.

- Where electrical outlets are provided along the slips these should be at 500 to 1100 mm above the deck level. Outlets must be protected from water and have RCD/MCB protection. Meter readouts must be visible and any coin operation should be suitable for people with low strength or poor manipulation. On/off switches should be contrasted to the background, and have large operating levers. People with poor manipulation either from a disability or cold need to operate them.
- Slips should be lighted at night and in poor light conditions to at least 50 lux at deck level. Up lighters should not be used as these can cause problems for people with low vision or other sight impairments.
- Commercial and courtesy piers – Where commercial trip boats or small passenger ferries operate from a slip the route and boarding area should be lighted to 150 lux minimum.
- In marinas and harbours management should consider having trolleys and hand trucks available to help boat owners and marina staff to move heavy items about the piers and slips.
- Marinas etc. should consider providing at least one accessible courtesy pier with a davit or crane to lift heavy items or passengers.
- Commercial trip and ferry operators where people may have to wait or queue should consider providing a waiting shelter or room at the dock.

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