



Sand ladders – getting you to the beach!

The increasing numbers of people visiting the beaches in the Bay of Plenty have significant impacts on the dunes and dune vegetation. The vegetation is vital to dune stability as the plants trap windblown sand. Damage to these plants results in erosion and destruction of the dunes and beaches. This kind of damage shown (right) is a direct result of people walking on the sand dunes. Natural recovery is impossible without excluding people from areas like these.



Dune erosion – a result of people walking on the sand dunes.

Board and chain walkways known as ‘sand ladders’ prevent the lowering of dunes and the development of blowouts. Ease of access to and from the beach is also improved. Strategic placement of these timber boardwalks provide effective access to the beach whilst preventing further damage to the precious dune plants.

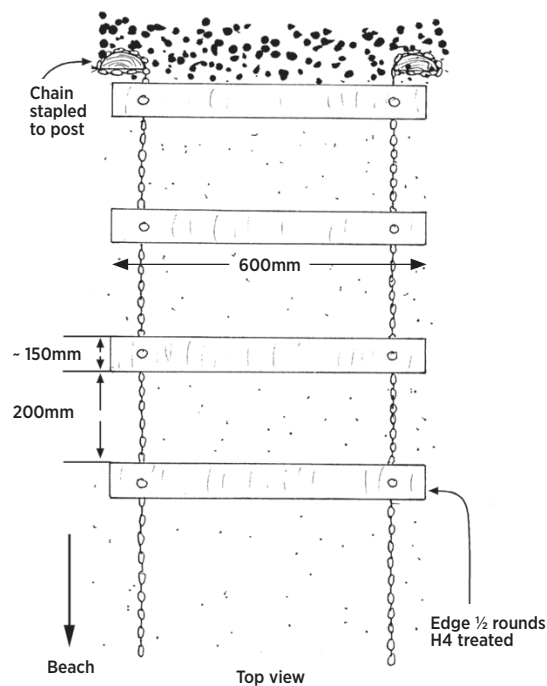
Construction

Sand ladders are constructed from timber and chain and placed perpendicular to the beach and dune to provide key access points. The ladder is anchored landward of the dune with no anchorage seaward, this provides for sand movement and creates a ‘floating’ effect.

Step 1: Find the loose ends of the chain and wrap each one around the top of the anchor post. Attach each chain with at least two staples.

Step 2: Dig out any vegetation in the path of the ladder. Then, level off the sand before running out the chain.

Step 3: Bolt the first edged 1/2 round so it is level across the slope (this is **very** important). Use a 200mm spacer to get the right spacing for the steps. You may need to increase or decrease the spacing on one side slightly to go around bends on the track.



Location

The sand ladders need to be conveniently placed so that they will be used by the public. Pedestrian access tracks should be between 1.2 m and 2.4 m wide and located where the dune slopes are no greater than 30-60 percent (17-31°). Wider access tracks can be created for surf rescue boats or vehicle access (see Coast Care Fact Sheet 4). Suitable signs advising of the location of these ladders and access points should also be provided.



Control of sand dune erosion

Planting with native sand dune plants beside the sand ladder will help to control wind erosion on the sides of the accessways. Fences may be constructed in high impact areas to restrict the human impact on this fragile environment. Past experience has shown that the combination of controlled beach access (sand ladders), exclusion of people from some dune areas (fences), replanting and education can reverse past trends of erosion and destruction to provide a stable beach environment for us all to enjoy.



Getting involved

About 3,500 coastal residents like you are members of a programme called Coast Care. This is a partnership between local communities and local government agencies in the Bay of Plenty to restore and protect dunes, both for their biodiversity value and their role as a natural buffer from the hazards of the sea.

We do things like:

- Weed and rabbit control
- Planting of native dune plants
- Temporary fencing

We'd love it if you joined us.



Find out more

For more information on Coast Care groups and programmes contact:

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Bay of Plenty Regional Council in partnership with Tauranga City Council; Whakatāne, Western Bay of Plenty, and Ōpōtiki District Councils; and the Department of Conservation.