

PART R83**CONSTRUCTION OF SHARED PATHS****CONTENTS**

1. GENERAL
2. EARTHWORKS
3. COMPACTION
4. ASPHALT
5. CONCRETE
6. SURFACE FINISH
7. ELEVATED PATH
8. MISCELLANEOUS

1. GENERAL

- .1 This Part specifies the requirements for the construction of paths used for cycling and pedestrians ("**Shared Paths**").
- .2 The type, configuration and extent of the Shared Path must comply with (in order of precedence):
 - 1) the **Contract Specific Requirements** or/and the drawings;
 - 2) the manufacturer's instructions (if applicable);
 - 3) this Part R83.
- .3 In addition to the requirements specified in this Part, the construction of the Shared Path must comply with the recommended practice in DPTI Guide to Bikeway Pavement Design Construction & Maintenance for South Australia.
- .4 Documents referenced in this Part are listed below:

DPTI:	Guide to Bikeway Pavement Design Construction & Maintenance for South Australia, available from: http://www.dpti.sa.gov.au/contractor_documents/guidelines_and_miscellaneous .
Austrroads	AGPT04B-14 "Guide to Pavement Technology Part 4B: Asphalt"
Austrroads:	AP-G88 "Cycling Aspects of Austrroads Guides"
AS 2150:	Hot mix asphalt - A guide to good practice

2. SURFACE LEVELS

- .1 The finished surface of the Shared Path must:
 - (a) not vary more than 10 mm over a 3 m straight edge;
 - (b) where a design finished level is specified, be constructed within:
 - ± 10 mm for concrete and block paving
 - ± 20 mm for other surfaces.
 - (c) drain to the top of any adjoining kerb;
 - (d) be free draining so that water does not pond on the surface;
 - (e) be free of irregularities that could present tripping hazards to users; and
 - (f) smoothly abut any existing driveways and footpaths adjoining the new surface.

3. EARTHWORKS

- .1 This clause applies to minor earthworks undertaken solely for the construction of the Shared Path. Where the earthworks is constructed as part of roadworks or the cut / fill for the Shared Path exceeds 1.0 m, Part R10 "Earthworks" must apply.
- .2 All vegetation, loose material, rubbish and existing structures must be removed from the site and disposed of in an environmentally acceptable manner. Unless specified otherwise, topsoil must be stripped to a minimum depth of 100 mm.

- .3 Site preparation and topsoil stripping must be restricted to the minimum area practicable for construction of the works.
- .4 Where batters are not restrained by retaining walls, the batters must be constructed at a slope which is stable and erosion resistant. Unless specified otherwise, excavated topsoil must be respread on the batters.
- .5 Earthworks fill must be constructed and compacted in accordance with Clause 4 "Compaction".
- .6 The surface of the earthworks must be trimmed and compacted with at least 1 pass of the compaction plant prior to the construction of the Shared Path.
- .7 Fill material must not contain topsoil, highly plastic clay, soil classified as highly or very highly expansive, overwet material, peat or any organic material.

4. **COMPACTION**

- .1 Earthworks, rubble, Base course and Sub-base course must be compacted at OMC using the minimum number of passes specified in Table 4.

TABLE 4. - COMPACTION REQUIREMENTS		
PLANT	MIN NO OF PASSES	
	Thickness 50 – 120 mm	Thickness > 120 mm
Small Vibration Plate (approx mass 90 kg - Wacker VPA 90 or equiv.)	6	8
Large Vibration Plate (Approx mass 300 kg - Wacker BPU 3345 or equiv.)	3	4
Small Twin Drum Footpath Roller Minimum 1 t (eg Ingersoll Rand DD12)	2	3
3 tonne vibrating roller class VR10 (eg Ingersoll RandDD22)	2	3

- .2 Note: The Small Vibration Plate may only be used in areas inaccessible to larger plant.

5. **ASPHALT**

- .1 Asphalt Pavements used on Shared Paths must be designed in accordance with the requirements of Austroads AGPT04B-14 and comply with AS2150.
- .2 Asphalt compaction must be carried out using a minimum 2 passes of a steel double drum, vibrating footpath roller. The surface of the finished asphalt must be free of segregated or "bony" areas, soft and "fatty" areas, ravelling and loose material, surface cracking, shoving and ruts.
- .3 The asphalt must comply with the following:

Material:	AC7 (C170)
Minimum Thickness:	30 mm
Base Material:	PM2/20 compacted in accordance with Table 3.
Minimum Base Thickness:	150 mm

6. **CONCRETE**

- .1 Concrete Pavements used on Shared Paths must comply with the following:

Minimum concrete Class:	N25
Minimum Thickness:	100 mm
Reinforcing:	SL62
Base Material:	PM2/20 compacted in accordance with Table 3.
Spacing of contraction joints:	4 m
Minimum Sub-base Thickness:	100 mm

Notes:

- (a) The pavements must be constructed on a Subbase of PM2/20 or PM3/20 compacted in accordance with Table 4.
- (b) The Concrete must comply with:
 - i) Part CC26 "Normal Class Concrete"; or
 - ii) Part CC27 "Geopolymer Concrete"
- (c) Reinforcing must be placed centrally and on spacers.
- (d) All shrinkage grooves and edges must be tool finished.
- (e) The surface must be finished to a non-slip texture and be protected from damage for the first 2 days.
- (f) The length to width ratio of the distance between the shrinkage grooves must not exceed 1.3: 1. Expansion joints 12 mm wide and full depth of the concrete must be provided at not more than 6 m intervals and filled with bitumen or other flexible material.
- (g) 3 mm wide contraction joints must be sawn to 25mm depth during initial set.

7. ELEVATED PATH

- .1 Where the path consists of an elevated structure (ie boardwalk), it must comply with the following:
 - (a) capable of being trafficked by an light maintenance vehicle;
 - (b) designed and installed in accordance with the manufacturer's instructions;
 - (c) deck units must be placed perpendicular to the direction of travel;
 - (d) the gap between planks not exceed 5 mm;
 - (e) chamfer on the edge of the plank must not exceed 5 mm; and
 - (f) consist of:
 - i) recycled plastic (Replas Endroplank <http://www.replas.com.au/> or equivalent); or
 - ii) precast concrete.
- .2 Timber decking or products incorporating recycled timber are not permitted.

8. MISCELLANEOUS

- .1 Linemarking and signs must be installed in accordance with Austroads: AP-G88.
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