



City of Perth

Design and Construction Note

403.00

Standard Kerb Types and Installation Details

In-situ Concrete Kerbs

General Specification

Reviewed: 09/06/2021

In-situ Concrete Kerbs

1) Use of In-situ Concrete Kerbs

In-situ concrete kerbs is the preferred method of construction for semi-mountable and mountable kerbs in areas where concrete kerbs are to be used.

Generally, in-situ kerbs shall only be used in locations when there is no possibility of using standard precast kerbs; for reasons such as precast radius pieces do not fit (and cannot be altered to fit) for on-site requirements.

2) Concrete

All concrete used in the manufacture of in-situ kerbing shall have a minimum compressive strength of 32MPa at 28 days in accordance with AS1379 with Fibre Reinforcement at a mixing rate of 0.9kg/m³. It shall have a maximum aggregate size of 10mm & slump 60mm maximum.

3) Bedding and Keying In

In-situ concrete kerbs shall be laid directly on to the base course material. Surface to receive kerb shall be swept clean of sand, loose stone and other foreign material prior to installation. Kerbs shall be keyed at curve radii less than 40m, car embayments and traffic islands.

4) Tolerances

The kerb shall have no deviation exceeding 5mm to the design line & level.

5) Shrinkage Joints

Shrinkage joints shall be provided at 1000mm intervals, sawn at right angles to the longitudinal line of the kerb.

6) Expansion Joints

Expansion joints shall be provided at 2000mm intervals and are to be sawn with a diamond saw, not less than 12 hours after the kerbing has been initially placed. The width of the joint shall be 7mm, extending the full section of the kerb except at gully pits and tangent points, where the expansion joints should be formed to be 13mm wide.

All expansion joints shall be sealed with a strip of 'Sarmprene' foam to a depth of 25mm and top sealed with 'Butyle' mastic seal. The seal shall finish 3mm below the face and top of the kerb.

6) Curing

After initial set, Concrete surfaces shall be cured for a minimum period of 7 days with a sprayed application of *CALCURE CR* or approved equivalent, applied by the method and rate specified by the manufacturer. Curing compound is to be applied not less than two hours after surface finishing of the concrete.

For more information about kerbing design refer to www.mainroads.wa.gov.au