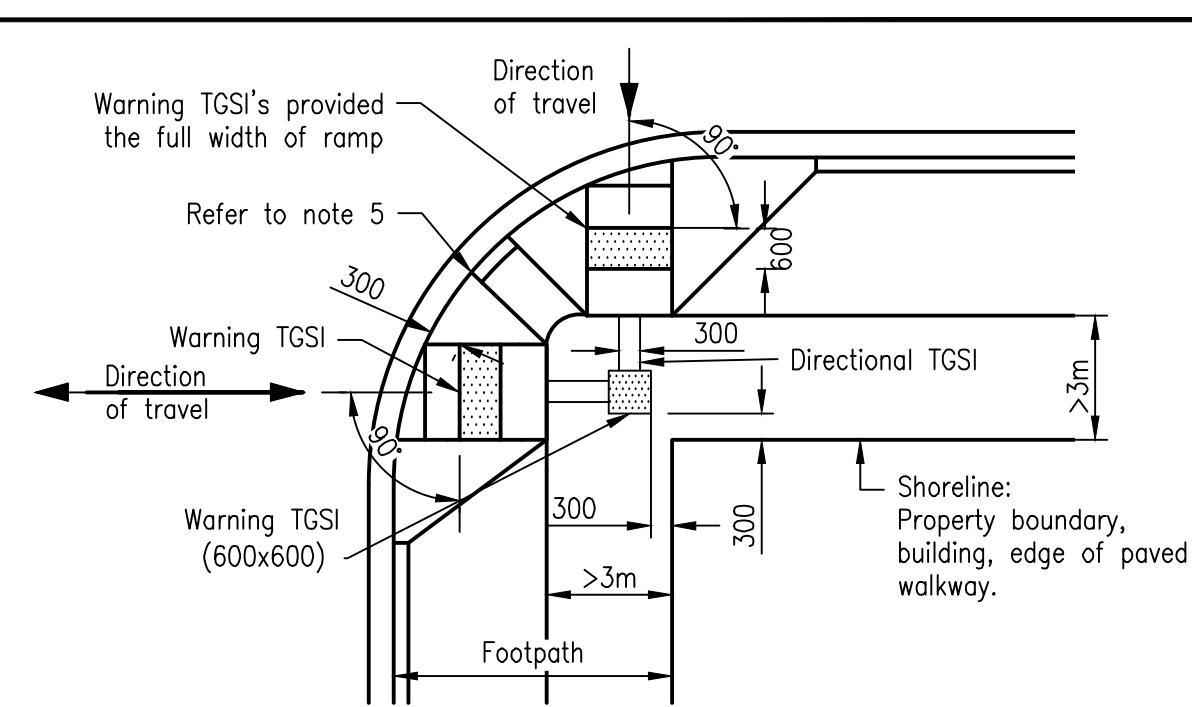


COMPLIANT KERB RAMP AND TGSIs APPLICATION EXAMPLE
PLAN VIEW

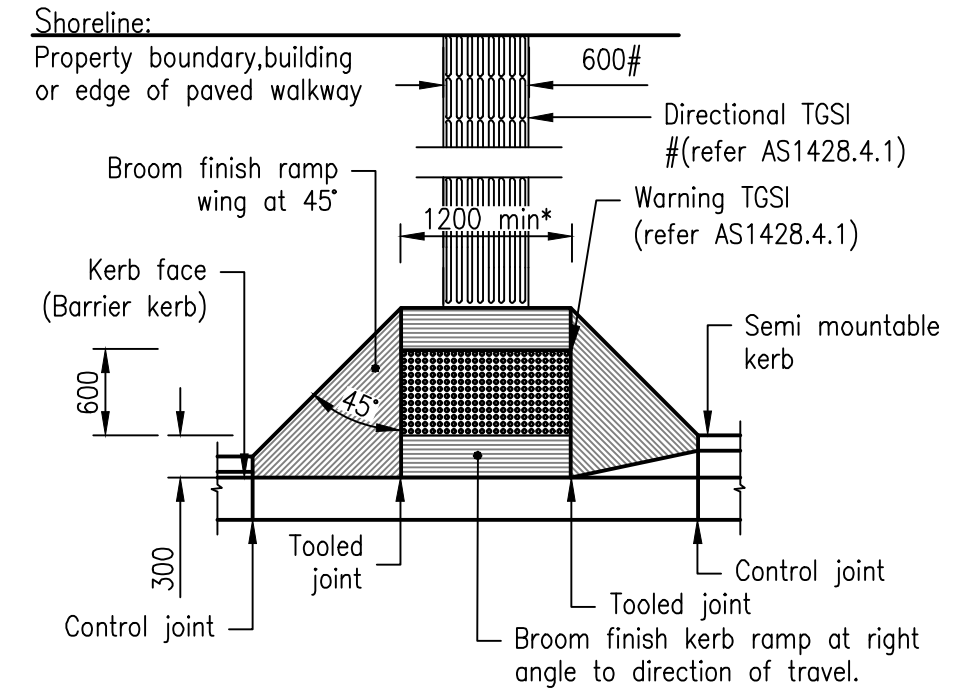
GUIDELINES

- For the installation of Tactile Ground Surface Indicators (TGSIs) for pedestrians with a vision impairment at ramped kerb crossings (kerb ramps):
- A. Warning and directional TGSIs shall conform with AS/NZS 1428.4.1 Design for Access and Mobility – Part 4: Tactile Indicators.
 - B. Tactile indicators shall have luminance contrast in all conditions (eg wet/dry, day/night). Tactile indicators and their base shall be slip resistant. Refer AS/NZS 1428.4.1 for luminance contrast and slip resistance requirements.
 - C. Warning TGSIs shall be installed (dimensions in brackets are warning TGSIs dimensions):
 - a) to warn pedestrians with a vision impairment of hazards.
 - b) 300 from any hazard e.g. roadway (600 deep x full width of kerb ramp, path of travel or cut through median/island)
 - c) perpendicular to the direction of travel.
 - d) at the intersection of 2 (or more) directional indicator strips to indicate a change of direction (600 x 600).
 - e) When kerb ramp gradient is shallower than 1:8.5.
 - D. Directional TGSIs shall be installed (dimensions in brackets are directional TGSIs dimensions):
 - a) to give directional guidance to pedestrians with a vision impairment in the absence of normally available cues.
 - b) along the centreline of the direction of travel.
 - d) at mid-block kerb ramps or street crossings to direct pedestrians with a vision impairment to the crossing point (600 x property boundary to top of kerb ramp).
 - e) between a warning indicator pad indicating a choice of directions and the top of kerb ramps where 2 pedestrian crossings exist on a corner of an intersection.
 - E. The installation of TGSIs should be prioritised as follows:
 - a) NO TGSIs REQUIRED when all criteria at Note G are satisfied;
 - b) Multiple entry kerb ramp treatment installed (Dual entry or Dual separate). Multiple entry kerb ramps must only be installed when there is sufficient space on both sides of the crossing (see AS/NZS 1428.4.1 for details of multiple entry treatments);
 - c) Warning TGSIs on the face of a compliant kerb ramp.
 - F. If a warning TGSIs treatment is installed, a warning TGSIs treatment must be installed on the other side of the crossing.
 - G. TGSIs are not required at a crossing point if:
 - a) a compliant kerb ramp is installed refer to RS-090.
 - b) the top of ramp is within 3 metres of the end of the shore line (property boundary, building line or edge of paved walkway), and
 - c) the ramp is in direct continuous accessible path of travel from the shore line (property line, building line or paved walkway) orientated in terms of normally available cues.
 In these situations, a colour treatment of the full width and length of the face of the ramp may assist pedestrians with a vision impairment.
 - H. Examples of normally available cues that aid people with a vision impairment are:
 - a) sharp transitions in grade between surfaces eg top and bottom of a 1 on 8 kerb ramp; change in grade between ramp and ramp wings.
 - b) audio tactile push buttons, refer MUTCD Parts 10 and 14 for location and orientation of pedestrian push buttons. Note, an audio tactile push button alone is an insufficient cue for a pedestrian with a vision impairment to find the crossing point.
 - c) a detectable edge of a paved walkway or cut through island.

These drawings have been developed in consultation between the participating Councils.
BEFORE USE, the user shall confirm that the drawing has been adopted by the appropriate Council.



COMPLIANT KERB RAMP ALIGNMENT – incl. TGSIs

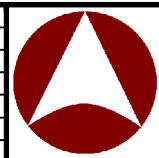


COMPLIANT MID BLOCK KERB RAMP incl. TGSIs

NOTES:

1. For details of compliant kerb ramps refer to RS-090 and RS-091.
2. Warning indicators required adjacent to shoreline (property boundary) to indicate change/choice of direction.
3. Directional indicators are required from the warning indicator pad to the top of the kerb ramps.
4. Warning indicators are required on the kerb ramp to warn of the hazard (the road/traffic). Can be omitted if kerb ramp is in accordance with AS 1428.1 & < 3 metres from the building line.
5. Kerb ramp wings may be angled at less than 45 degrees if required to be clear of signals hardware, other kerb ramps or utility pits/manholes. Kerb ramp wings may also be reduced at obtuse angled intersections, wings shall have a width between 600mm and 1500mm. A maximum of 1:4 slope on kerb ramp wings should be maintained (600mm wide wing for a 150mm kerb). A 1m kerb upstand is desirable between adjacent ramp wings (which may necessitate reduced wing angles).
6. All Dimensions are in millimetres unless shown otherwise

Rv.	DATE	REVISIONS
H	12/16	Kerb Ramp Angle Changed
G	02/16	Amendment to Guideline B
F	06/14	Review
E	03/14	Amended Drawing Number
D	12/11	Drawing number changed from SEQ R-092 to RS-092.
C	06/11	Review



INSTITUTE OF PUBLIC WORKS ENGINEERING AUSTRALASIA
STANDARD DRAWINGS

KERB RAMP
INSTALLATION OF TGSIs
ON RAMPED KERB CROSSINGS

RS-092

H
G
F
E
D
C
Rv.