



# Standard Details of Road Elements

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Land Transport Authority

## GENERAL NOTES

- 1) THE STANDARD DETAILS OF ROAD ELEMENTS (SDRE) ARE APPLICABLE TO ALL ROAD INFRASTRUCTURE PROJECTS.
- 2) PRIOR APPROVAL SHALL BE SOUGHT FROM LTA FOR ANY CHANGES TO THE FORM, SHAPE & DIMENSIONS OF THE ELEMENTS IN SDRE.
- 3) FOR THE ADOPTION OF DETAILS IN THE SDRE THAT REQUIRES SUBMISSION TO THE BUILDING & CONSTRUCTION AUTHORITY (BCA) AS STIPULATED IN THE BUILDING CONTROL ACT, THE PE / QP SHALL BE RESPONSIBLE FOR THE DESIGNS OF ALL STRUCTURAL AND GEOTECHNICAL WORKS IN ACCORDANCE WITH THE REQUIREMENTS IN THE BUILDING CONTROL ACT.
- 4) FOR THE ADOPTION OF DETAILS IN THE SDRE THAT DO NOT REQUIRE SUBMISSION TO BCA AS STIPULATED IN THE BUILDING CONTROL ACT, THE QP/ PE SHALL CHECK THE SITE CONDITIONS AND VERIFY THAT THE STRUCTURAL / GEOTECHNICAL DETAILS FALL WITHIN THE DESIGN ASSUMPTION / PARAMETERS. HE SHALL ENDORSE THE AS-CONSTRUCTED DRAWINGS OF THE ELEMENT UPON COMPLETION AND SUBMIT TO LTA.
- 5) THE CHARACTERISTIC 10-MINUTE MEAN WIND VELOCITY FOR DESIGN OF STRUCTURES IN THE SDRE AND FIXINGS SHALL BE 22m/s. THE WIND ACTIONS SHALL BE DERIVED FROM SS EN 1991-1-4 AND IT'S SINGAPORE NATIONAL ANNEX.
- 6) THE SDRE SHALL BE READ IN CONJUNCTION WITH THE LTA MATERIALS AND WORKMANSHIP (M&W) SPECIFICATIONS AND DESIGN CRITERIA.
- 7) ALL CROSS REFERENCES BETWEEN STANDARD DETAILS SHALL BE TO THE LATEST REVISION.
- 8) ALL STANDARDS AND CODES REFERRED SHALL BE THE LATEST VERSION.
- 9) ALL DIMENSIONS SHOWN ARE IN MM UNLESS OTHERWISE STATED.
- 10) THE FOLLOWING CONCRETE GRADES SHALL BE USED, UNLESS OTHERWISE STATED:  
  
REINFORCED CONCRETE - C25/30  
MASS CONCRETE - C16/20  
LEAN CONCRETE - C12/15
- 11) THE MINIMUM CHARACTERISTIC YIELD STRENGTH OF THE REINFORCEMENT BARS SHALL BE 500 N/mm<sup>2</sup>.
- 12) ALL CORNERS OF TRAFFIC SIGNS ARE TO BE OF 50mm RADIUS AND ON EXPRESSWAYS THE 600mm X 600mm TRAFFIC SIGNS SHALL BE INCREASED TO HAVE DIMENSIONS OF 900mm X 900mm.
- 13) ALL ALUMINIUM SHEETS SHALL COMPLY WITH BS EN 485, BS EN 515 AND BS EN 573.



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