SECTION 175 - REFERENCED DOCUMENTS FOR STANDARD SPECIFICATIONS FOR ROADWORKS AND BRIDGEWORKS

175.01 GENERAL

This section provides a list of current companion documents referenced in the Department of State Growth Standard Specifications for Roadworks and Bridgeworks.

The referenced documents in this section take precedent over any other referenced documents in other Standard Sections.

175.02 DEPARTMENT OF STATE GROWTH STANDARD SPECIFICATIONS FOR ROADWORKS AND BRIDGEWORKS SECTIONS

The Department of State Growth Standard Specification Series referred to in this section are as follows:

Section  100 Series – General

Section 200 Series – Formation

Section 300 Series – Flexible Pavements

Section 400 Series – Asphalt and Surface Treatments

Section 600 Series – Bridgeworks

Section 700 Series – Incidental Construction

Section 800 Series – Materials.

175.03 HIERARCHY OF DOCUMENTS

The following hierarchy of documents shall be used if there is conflict between any referenced documents and the specification whereby the higher listed documents shall take precedence over lower listed documents:

Acts of Parliament and Regulations (Federal / Tasmanian)

Contract Specific Clauses

Standard Section 175

All other Standard Specification Sections

VicRoads Codes of Practice and Bridge Technical Notes

Australian Standards (except test methods)

VicRoads Test Methods

Australian Standards Test Methods

Austroads Test Methods

Other Standards and Test Methods

VicRoads Technical Bulletins

Austroads Guideline Documents and Guides

Other Publications

175.04 APPLICATION AND ACCESS TO REFERENCED DOCUMENTS

**Acts of Parliament**

These documents shall be obtained through the appropriate level of Government, either Federal or Tasmanian and are statutory requirements referred in Standard Sections. A copy of the document can be viewed on the relevant Government web site. These documents are referenced in Table 175.051.

**Australian Standards**

Australian Standards are commonly referenced to reduce the size of the specification document. If only part of the Australian Standard is to apply, the relevant Standard Section will specify particular and/or alternative requirements. Whenever there is conflict between the Australian Standard and the Standard Section, the Standard Section shall take precedent over the Australian Standard. A list of current Australian Standards with a brief description of each can be viewed on the Standards web site <http://www.standards.org.au/>. These documents are referenced in Table 175.061.

**Australian Standard Test Methods**

Australian Standard Test Methods are also listed in this section and are to be used unless there is an applicable VicRoads Test Method listed. The Contractor is expected to become familiar with relevant Australian Standard Test Methods applicable to particular materials or groups of materials that are referenced by the Australian Standard or VicRoads Codes of Practice. Where there is choice of more than one Australian Standard Test Method, the Test Method to be used is specified in either VicRoads Code of Practice 500.05 or 500.16 or by separate reference within this section.

Australian Standard Test Methods shall be obtained directly from Standards Australia, GPO Box 476, Sydney NSW 2001. A list of current Australian Standard Test Methods with a brief description of each can be viewed on the Standards web site <http://www.standards.com.au/>.  These documents are referenced in Table 175.061.

**VicRoads Codes of Practice and Bridge Technical Notes**

VicRoads Codes of Practice and Bridge Technical Notes are companion documents to the VicRoads Standard Specifications and may or may not be referenced in the Standard Specifications. The Contractor is expected to obtain copies of the Codes of Practice or Bridge Technical Notes to be read in conjunction with the Standard Specifications. The relevant Codes of Practice or Bridge Technical Notes as applicable to each Standard Section are specified in this section. All current Codes of Practice and Bridge Technical Notes can also be accessed from the VicRoads website <http://www.vicroads.vic.gov.au/>. These documents are referenced in Table 175.071.

**VicRoads Test Methods**

All Testing Laboratories are expected to become familiar with the contents of the VicRoads Manual of Test Methods. The Test Methods to be used are specified in either VicRoads Code of Practice 500.05 or 500.16 or by separate reference within this section. VicRoads Test Methods, if applicable, shall take precedent over all other Test Methods.

All current VicRoads Test Methods can be accessed from the VicRoads website <http://www.vicroads.vic.gov.au/>. These documents are referenced in Table 175.081.

**Austroads Test Methods**

Austroads has produced a series of Test Methods for Bituminous Products. The Austroads Test Methods to be used will be either listed in this section or listed in VicRoads Code of Practice 500.16. If there is to be a variation in the Austroads Method, the variation will be described in Code of Practice 500.16 or in the relevant Standard Specification Section.

The current Austroads Test Methods can be obtained from the Austroads Web Site <http://www.austroads.com.au/>. These documents are referenced in Table 175.091.

**VicRoads Technical Bulletins**

VicRoads has produced a number of Technical Bulletins. These or parts of these documents may form part of this Specification if referenced in the relevant Standard Section.

VicRoads Technical Bulletins can be accessed from the VicRoads website <http://www.vicroads.vic.gov.au/>. These documents are referenced in Table 175.111.

**Austroads Guides and Specification Framework Documents**

Austroads has produced a number of specification framework and guideline documents listed in this section. These or parts of these documents may form part of this Specification as specified in the relevant Standard Section.

Austroads Specification Framework and Guideline documents can be purchased from the ARRB Group, 500 Burwood Highway, Vermont South. These documents are referenced in Table 175.121.

**Other Documents and International Standards**

Other referenced standards, test methods and documents produced by organisations not mentioned above, are also specified in this section, e.g. ASTM, BS, ISO, RTA and APAS.

These documents shall be obtained from Australian Standards or the relevant publishing authority responsible for the document.

These documents are referenced in Table 175.101 (standards and test methods) and Table 175.131 (for other referenced documents).

175.05 ACTS OF PARLIAMENT

Table 175.051 lists the Acts of Parliament that are applicable to the Standard Specification Section contained in this Specification.

**Table 175.051 Parliamentary Legislative Documents**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Document** | **Standard Specification Section** | | | | | | | |
| A New Tax System (Goods and Services Tax) Act 1999 | 160 |  |  |  |  |  |  |  |
| Aboriginal Relics Act 1975 | 176 |  |  |  |  |  |  |  |
| Australian Government Building and Construction Occupational Health and Safety Accreditation Scheme | 168 |  |  |  |  |  |  |  |
| Biosecurity Act 2019 |  |  |  |  |  |  |  |  |
| Dangerous Goods Act 1976 |  |  |  |  |  |  |  |  |
| Dangerous Goods (Road and Rail Transport) Act 2010 |  |  |  |  |  |  |  |  |
| Education Act 1994 | 160 |  |  |  |  |  |  |  |
| Environmental Management and Pollution Control Act 1994 | 160 |  |  |  |  |  |  |  |
| Explosives Act 2012 |  |  |  |  |  |  |  |  |
| Fair Work (Building Industry) Act 2015  Version incorporating amendments as at 27 November 2015 | 168 |  |  |  |  |  |  |  |
| Historic Cultural Heritage Act 1995 | 176 |  |  |  |  |  |  |  |
| Land Acquisition Act 1993 | 177 |  |  |  |  |  |  |  |
| Roads and Jetties Act 1935 | 160  177 |  |  |  |  |  | 706 |  |
| Traffic Act 1925 |  |  |  |  |  |  | 721 |  |
| Work Health and Safety Act 2012 | 168 |  |  |  |  | 602  606  608  612  613  614  622  687  688 | 713  765 |  |
| Work Health and Safety Regulations 2012 | 168 |  |  |  |  | 606  613  614  631  681  687  688  689 | 713  765 | 820 |

**175.06 AUSTRALIAN STANDARDS**

Table 175.061 lists the Australian Standards (including test methods) that are applicable to the Standard Specification Section contained in this Specification.

**Table 175.061 Australian Standards (including test methods)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Australian Standard** | **Standard Section** | | | | | | | |
| AS 1012 (series) : Methods of testing concrete  Part 1 : 2014 - Sampling of concrete  Part 2 : 2014 - Preparing concrete mixes in the laboratory  Part 3.1 : 2014 - Determination of properties related to the consistency of concrete - Slump test  Part 3.2 : 1998 (R2014) - Determination of properties related to the consistency of concrete – Compacting factor test  Part 3.3 : 1998 (R2014) - Determination of properties related to the consistency of concrete – Vebe test  Part 3.4 : 1998 (R2014) - Determination of properties related to the consistency of concrete – Compatibility test  Part 3.5 : 2015 - Determination of properties related to the consistency of concrete - Slip flow, T500 and J-ring test  Part 4.1 : 2014 - Determination of air content of freshly mixed concrete – Measuring reduction in concrete volume with increased air pressure  Part 4.2 : 2014 - Determination of air content of freshly mixed concrete – Measuring reduction in air pressure in chamber above concrete  Part 4.3 : 2014 - Determination of air content of freshly mixed concrete – Measuring air volume when concrete is dispersed in water  Part 8.1 : 2014 - Method of making and curing concrete – Compression and indirect tensile test specimens  Part 8.2 : 2014 - Method of making and curing concrete – Flexure test specimens  Part 9 : 2014 - Compressive strength tests - Concrete, mortar and grout specimens  Part 12.1 : 1998 (R2014) - Determination of mass per unit volume of hardened concrete – Rapid measuring method  Part 12.2 : 1998 (R2014) - Determination of mass per unit volume of hardened concrete – water displacement method  Part 13 : 2015 - Determination of drying shrinkage of concrete for samples prepared in the field or in the laboratory  Part 14 : 2018– Method for securing and testing cores from hardened concrete for compressive strength and mass per unit volume  Part 20.1 : 2016 - Determination of chloride and sulphate in hardened concrete and concrete aggregates-Nitric acid extraction  Part 20.2 : 2016 - Determination of water-soluble chloride in aggregates and hardened concrete  Part 21 : 1999 (R2014) - Determination of water absorption and apparent volume of permeable voids in hardened concrete  Part 24 : 2015 - Determination of the tensile bond strength of concrete - Repairs and strengthening systems  Part 25.1 : 2020 - Methods of testing concrete - Determination of the fibre content of plastic state concrete (wash-out test) |  |  |  |  | 503  520  521 | 607  610  619  683  684  688  689 | 703  708  711  716  730 |  |
| AS 1074 : 1989 - Steel tubes and tubulars for ordinary service |  |  |  |  |  |  | 707 |  |
| AS 1101.3 : 2005 (R2018) - Graphical Symbols for General Engineering - Welding and non-destructive examination |  |  |  |  |  | 630 |  |  |
| AS 1110.1:2015 ISO metric hexagon bolts and screws - Product grades A and B – Part 1: Bolts |  |  |  |  |  | 630 |  |  |
| AS 1110.2:2015 ISO metric hexagon bolts and screws - Product grades A and B – Part 2: Screws |  |  |  |  |  | 630 |  |  |
| AS 1111 (series) : ISO metric hexagon bolts and screws  Part 1 : 2015 - Product grade C – Bolts  Part 2 : 2015 - Product grade C – Screws |  |  |  |  |  | 630 | 707  708  760 |  |
| AS 1112 (series) : ISO metric hexagon nuts  Part 1 : 2015 - Style 1 Product grades A and B  Part 2 : 2015 - Style 2 Product grades A and B  Part 3 : 2015 - Product grade C  Part 4 : 2015 - Chamfered thin nuts - Product grades A and B |  |  |  |  |  | 630 | 707  708 |  |

**Table 175.061 Australian Standards (including test methods)** **… continued**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Australian Standard** | **Standard Section** | | | | | | | |
| AS 1141 (series) : Methods for sampling and testing aggregates  Part 3.1 : 2021 – Sampling - Aggregates  Part 3.2 : 2021 – Sampling – Rock spalls and boulders  Part 5 : 2000 (R2016) - Particle density and water absorption of fine aggregate  Part 6.1 : 2000 (R2016) - Particle density and water absorption of coarse aggregate – Weighing‑in‑water method  Part 6.2 : 2000 (R2016) - Particle density and water absorption of coarse aggregate - Pycnometer method  Part 8 : Method 8: Water-soluble fraction of filler  Part 11.1 : 2020– Particle size distribution – Sieving method  Part 15 : 1999 (R2018) - Flakiness Index  Part 17 : 2014 - Voids in dry compacted filler  Part 18 : 2022- Crushed particles in coarse aggregate derived from gravel  Part 20.3 : 2000 (R2013) - Average least dimension -Calculation (nomograph)  Part 22 : 2008- Wet/dry strength variation  Part 23 : 2021 - Los Angeles value  Part 25.1 : 2003 (R2013) - Degradation factor - Source rock  Part 26 : 2019 - Secondary minerals content in igneous rocks  Part 28 : 2014 - Ball mill value  Part 30.1 : 2022- Coarse aggregate quality by visual comparison |  | 205  290 | 307 | 404  405  407  409  417  418  421  423  427 | 503  520 | 610  619 | 701  702  703  706  713  715  760 | 801  802  811  812  815  818  820  831 |
| AS 1160 : 1996 - Bituminous emulsions for the construction and maintenance of pavements |  |  |  | 407  408 |  |  |  | 802 |
| AS/NZS 1163 : 2016 - Cold-formed structural steel hollow sections |  |  |  |  |  | 630 | 760  765 |  |
| AS/NZS 1170 (series) - Structural design actions  Part 1 : 2002- Permanent, imposed and other actions  Part 2 : 2021 (R2016) - Wind actions |  |  |  |  |  | 613 |  |  |
| AS 1191 : 2002 - Acoustics – Method for laboratory measurement of airborne sound transmission insulation of building elements (Reconfirmed 2016) |  |  |  |  |  |  | 765 |  |
| AS/NZS 1214 : 2016 - Hot-dip galvanized Coatings on threaded fasteners (ISO metric coarse thread series) (ISO 10684:2004, MOD) |  |  |  |  |  | 630  653 | 707  708  760 |  |
| AS 1237 (series)  Part 1 : 2002 (R2015) : Plain washers for metric bolts, screws and nuts for general purposes - General plan  Part 2 : 2016 – Tolerances for fasteners - washers for bolts, screws and nuts – product grades A, C, and F |  |  |  |  |  | 653 | 707 |  |
| AS/NZS 1252 (series) - High-strength steel fastener assemblies for structural engineering - Bolts, nuts and washers  Part 1 : 2016 - Technical requirements  Part 2 : 2016 - Verification testing for bolt assemblies |  |  |  |  |  | 630  653 |  |  |
| AS 1275 : 1985- Metric screw threads for fasteners |  |  |  |  |  |  | 751 |  |

**Table 175.061 Australian Standards (including test methods)** **… continued**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Australian Standard** | **Standard Section** | | | | | | | |
| AS 1289 (series) : Methods of testing soils for engineering purposes  Part 2.1.1 : 2005 (R2016) – Soil moisture content tests – Determination of the moisture content of a soil – Oven drying method (standard method)  Part 2.1.6 : 2005 (R2016) – Soil moisture content tests – Determination of the moisture content of a soil – Hotplate drying method–  Part 3.1.1 : 2009 (R2017)– Soil classification tests - Determination of the liquid limit of a soil - Four point Casagrande method  Part 3.1.2 : 2009 (R2017)– Soil classification tests - Determination of the liquid limit of a soil - One point Casagrande method (subsidiary method)  Part 3.3.1 : 2009 – Soil classification tests - Calculation of the plasticity index of a soil  Part 3.6.1 : 2009 – Soil classification tests - Determination of the particle size distribution of a soil - Standard method of analysis by sieving  Part 3.7.1 : 2002 (R2013) – Soil classification tests - Determination of the sand equivalent of a soil using a power-operated shaker  Part 3.8.1 : 2017 – Soil classification tests - Dispersion - Determination of Emerson class number of a soil  Part 4.3.1: 2021 – Soil chemical tests - Determination of the pH value of a soil - Electrometric method  Part 4.4.1:2017 – Soil chemical tests - Determination of the electrical resistivity of a soil - Method for fine granular materials  Part 5.1.1:2017 – Soil compaction and density tests - Determination of the dry density/moisture content relation of a soil using standard compactive effort  Part 5.2.1:2017– Soil compaction and density tests - Determination of the dry density/moisture content relation of a soil using modified compactive effort  Part 5.4.2:2007 (R2016) – Soil compaction and density tests - Compaction control test - Assignment of maximum dry density and optimum moisture content values  Part 5.7.1:2006 – Soil compaction and density tests - Compaction control test - Hilf density ratio and Hilf moisture variation (rapid method)  Part 5.8.1:2007 – Soil compaction and density tests - Determination of field density and field moisture content of a soil using a nuclear surface moisture–Density gauge - Direct transmission mode  Part 6.1.1 : 2014 – Soil strength and consolidation tests - Determination of the California Bearing Ratio of a soil - Standard laboratory method for a remoulded specimen  Part 6.2.2 : 2020 – Soil strength and consolidation tests - Determination of shear strength of a soil - Direct shear test using a shear box  Part 6.7.1 : 2001 (R2013) – Soil strength and consolidation tests - Determination of permeability of a soil  Part 6.7.2 : 2001 (R2013) – Soil strength and consolidation tests - Determination of permeability of a soil - Falling head method for a remoulded specimen |  | 204  205  210  290 | 304  306  307  308  310 | 407  423 | 520 | 610  632  682 | 701  702  706  712 | 801  802  811  812  815  818  820 |
| AS/NZS 1314 : 2003 (R2016) – Prestressing anchorages |  |  |  |  |  | 612 |  |  |
| AS 1319 : 1994 - Safety Signs for the Occupational Environment |  |  |  |  |  | 612  622 |  |  |
| AS/NZS 1365 : 1996 (R2016) – Tolerances for flat-rolled steel products |  |  |  |  |  |  | 708 |  |
| AS1366.2 : 1992 - Rigid cellular plastics sheets for thermal insulation - Rigid cellular polyisocyanurate (RC/PIR) |  |  |  |  |  |  | 765 |  |
| AS 1366.3 : 1992 - Rigid cellular plastics sheets for thermal insulation - Rigid cellular polystyrene – moulded (RC/PS ‑ M) |  |  |  |  |  | 613  614 | 765 |  |

**Table 175.061 Australian Standards (including test methods)** … **continued**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Australian Standard** | **Standard Section** | | | | | | | |
| AS 1379 : 2007 – Specification and supply of concrete |  |  |  |  | 503 | 610  619 | 703  704  708  711  760 |  |
| AS/NZS 1390 : 1997 - Cup head bolts with ISO metric coarse pitch threads |  |  |  |  |  |  | 707 |  |
| AS 1391 : 2020 - Metallic materials - Tensile testing at ambient temperature |  |  |  |  |  | 680 | 708 |  |
| AS 1397 : 2021 – Continuous hot-dip metallic coated steel sheet and strip– Coatings of zinc and zinc alloyed with aluminium and magnesium |  |  |  |  |  |  |  | 860 |
| AS 1443 : 2004 - Carbon and carbon-manganese steel - Cold-finished bars |  |  |  |  |  | 630 | 760 |  |
| AS 1478.1 : 2000 - Chemical admixtures for concrete, mortar and grout – Admixtures for concrete |  |  |  |  | 520 | 610  619  683  684  689 | 703  760 |  |
| AS 1478.2 : 2005 : Chemical admixtures for concrete, mortar and grout – Methods of sampling and testing admixtures for concrete, mortar and grout |  |  |  |  |  | 607  612  619  683  689 | 703  760 |  |
| AS 1530.4 : 2014 - Methods for fire tests on building materials, components and structures |  |  |  |  |  | 680 |  |  |
| AS 1530.8.1 : 2018 - Methods for fire tests on building materials, components and structures - Tests on elements of construction for buildings exposed to simulated bushfire attack - Radiant heat and small flaming sources |  |  |  |  |  |  | 765 |  |
| AS/NZS 1554 (series) – Structural steel welding  Part 1 : 2014 - Welding of steel structures  Part 2 : 2021 - Stud welding (steel studs to steel)  Part 3 : 2014 - Welding of reinforcing steel  Part 5 : 2014 - Welding of steel structures subject to high levels of fatigue loading  Part 6 : 2012 - Welding stainless steels for structural purposes |  |  |  |  |  | 605  608  611  620  630  632  640 | 708 |  |
| AS 1576.1 : 2010 – Scaffolding – General requirements |  |  |  |  |  | 613 |  |  |
| AS 1580 (series) – Paints and related materials – Methods of test  Part 108.2 : 2004 : Dry film thickness - Paint inspection gauge  Part 214.5 : 1997 (R2013) : Consistency – Rotational viscometer  Part 301.1 : 2005: Non-volatile content by mass  Part 408.4 : 2004 : Adhesion (cross-cut)  Part 408.5 : 2006 (R2016) : Adhesion - Pull-off test  Part 601.1 : 1995 - Paints and related materials - Methods of test |  |  |  |  | 520 | 685  686  691 |  |  |
| AS/NZS 1594 : 2002 (R2016) - Hot-Rolled Steel Flat Products |  |  |  |  |  | 614  630  685 | 708 |  |
| AS 1597 (series) - Precast reinforced concrete box culverts  Part 1 : 2010 - Small culverts (not exceeding 1200 mm span and 1200 mm height)  Part 2 : 2013 – Large culverts (exceeding 1200 mm span and 1200 mm height and up to and including 4200 mm span and 4200 mm height) |  |  |  |  |  | 619 |  |  |

**Table 175.061 Australian Standards (including test methods)** … **continued**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Australian Standard** | **Standard Section** | | | | | | | |
| AS/NZS 1604 (series) : Preservative treated wood based products  Part 1 : 2021 - Products and treatment  Part 2 : 2021 - Verification requirements  Part 3 : 2021 - Test methods |  |  |  |  |  |  | 707  765 |  |
| AS 1627 (series) - Metal finishing  Part 1 : 2003 (R2017) - Preparation and pretreatment of surfaces – Removal of oil, grease and related contamination  Part 2 : 2002 (R2017) – Power tool cleaning  Part 4 : 2005 (R2017)- Preparation and pretreatment of surfaces - Abrasive blast cleaning of steel  Part 9 : 2002 (R2017)- Pictorial surface preparation standards for painting steel surfaces |  |  |  |  |  | 631  685  686  688  689  691 | 708 |  |
| AS 1646 : 2007 Elastomeric seals for waterworks purposes |  |  |  |  |  |  | 701 |  |
| AS 1657 : 2018 - Fixed platforms, walkways, stairways and ladders - Design, construction and installation |  |  |  |  |  |  | 705 |  |
| AS 1672.1 : 1997 (R2016) : Limes and limestones - Limes for building |  | 290 | 307  308 | 407 |  | 610 | 704 | 815 |
| AS 1683.11 : 2001 - Methods of test for elastomers - Tension testing of vulcanized or thermoplastic rubber |  |  |  |  |  |  | 701 |  |
| AS 1720 (series) : Timber structures  Part 1 : 2010 - Design methods  Part 2 : 2006 - Timber properties  Part 4 : 2006 - Fire resistance for structural adequacy of timber members |  |  |  |  |  | 613 | 708 |  |
| AS 1725.1 : 2010 - Chain-link fabric fencing - Security fences and gates – General requirements |  |  |  |  |  |  | 707 |  |
| AS 1726 : 2017 - Geotechnical site investigations |  | 204 |  |  |  |  | 711 |  |
| AS/NZS 1734 : 1997 - Aluminium and aluminium alloys – Flat sheet, coiled sheets and plate |  |  |  |  |  |  |  | 860 |
| AS 1742 (series) Manual of uniform traffic control devices  Part 1 : 2021 General introduction and index of signs  Part 2 : 2022 Traffic control devices for general use  Part 3 : 2019 Traffic control for works on roads | 166 |  |  |  |  |  | 708  714  730  750  751 | 860 |
| AS 1743 : 2018 - Road signs – Specifications |  |  |  |  |  |  | 714 | 860 |
| AS 1744 : 2015 - Standard alphabets for road signs | 160  168 |  |  |  |  |  |  |  |
| AS/NZS 1906 (series) Retroreflective materials and devices for road traffic control purposes  Part 1 : 2017 - Retroreflective sheeting (available superseded)  Part 2 : 2007 - Retroreflective devices *(non pavement application)*  Part 3 : 2017 - Raised pavement markers *(retroreflective and non retroreflective)* (available superseded) | 166 |  |  |  |  |  | 708  709  710  711  712  721 | 853  860 |
| AS 1988.1 : 2006 - Welding of ferrous castings – Steel castings |  |  |  |  |  | 675 |  |  |
| AS 2008 : 2013 - Bitumen for pavements |  |  | 308 | 407  408  427 |  |  |  | 802 |
| AS/NZS 2009 : 2006 (R2016) - Glass beads for pavement marking materials |  |  |  |  |  |  | 721 |  |
| AS/NZS 2041(series) - Buried corrugated metal structures  Part 1 : 2011 - Design methods  Part 2 : 2011 - Installation  Part 4 : 2010 - Helically formed sinusoidal pipes  Part 6 : 2010 - Bolted plate structures |  |  |  |  |  | 632 | 701  702 |  |

**Table 175.061 Australian Standards (including test methods)** … **continued**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Australian Standard** | **Standard Section** | | | | | | | |
| AS/NZS 61386 (series) Conduit systems for cable management  Part 1 : 2015 - General requirements  Part 21 : 2015 – Particular requirements – Rigid conduit systems  Part 23 – 2015 – Particular requirements – Flexible conduit systems |  |  |  |  |  |  | 733 |  |
| AS 2062 : 1997 - Non-destructive testing - Penetrant testing of products and components |  |  |  |  |  | 611 |  |  |
| AS 2074 : 2003 - Cast Steels (Withdrawn) |  |  |  |  |  | 675 |  |  |
| AS 2082 : 2007 (R2017) - Timber - Hardwood - Visually stress-graded for structural purposes |  |  |  |  |  |  | 707 |  |
| AS/NZS 2106.1: 1999 - Methods for the determination of the flash point of flammable liquids (closed cup) Abel closed cup method |  |  |  | 408 |  |  |  |  |
| AS 2106.2 : 2005 - Methods for the determination of the flash point of flammable liquids (closed cup) Determination of flash point - Pensky-Martens closed cup method |  |  |  | 408 |  |  |  |  |
| AS 2144 : 2014 - Traffic signal lanterns |  |  |  |  |  |  | 751 |  |
| AS 2150 : 2020 - Hot mix asphalt - A guide to good practice |  |  |  | 407  427 |  |  |  | 802 |
| AS 2157 : 1997 - Cutback bitumen |  |  |  | 408 |  |  |  | 802 |
| AS 2159 : 2009- Piling - Design and installation |  |  |  |  |  | 603  604  605  606  607  608  640  682 |  |  |
| AS 2177: 2006 Non-destructive testing - Radiography of welded butt joints in metal |  |  |  |  |  | 630 |  |  |
| AS 2193 : 2005(R2017) - Calibration and classification of force-measuring systems |  |  |  |  |  | 612  619  622  680  683 |  |  |
| AS 2205 (series) : Methods for destructive testing of welds in metal  Part 4.2 : 2003 (R2018) - Fillet break test  Part 5.1 : 2003 (R2018) - Macro metallographic test for cross-section examination  Part 6.1 : 2003 Weld Joint Hardness Test |  |  |  |  |  | 611  630 |  |  |
| AS 2207 : 2007 Non-destructive testing - Ultrasonic testing of fusion welded joints in carbon and low alloy steel (*Reconfirmed 2017)* |  |  |  |  |  | 630 |  |  |
| AS 2239 : 2003 (R2016) - Galvanic (sacrificial) anodes for cathodic protection |  |  |  |  |  | 681 |  |  |
| AS/NZS 2269 (series): Plywood - Structural  Part 0 : 2012 - Specifications  Part 1 : 2012 - Determination of structural properties – Test methods  Part 2 : 2007 - Determination of structural properties - Evaluation methods |  |  |  |  |  |  | 765 |  |
| AS 2271 : 2004 (R2016) - Plywood and blockboard for exterior use |  |  |  |  |  | 603  614 |  |  |
| AS/NZS 2310 : 2002 (R2016) - Glossary of paint and painting terms |  |  |  |  |  | 631 |  |  |
| AS/NZS 2311 : 2017 - Guide to the painting of buildings |  |  |  |  |  | 685  686 |  |  |

**Table 175.061 Australian Standards (including test methods)** … **continued**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Australian Standard** | **Standard Section** | | | | | | | |
| AS/NZS 2312 (series) - Guide to the protection of structural steel against atmospheric corrosion by use of protective coatings  Part 1 : 2014 - Paint coatings  Part 2 : 2014 - Hot dip galvanizing |  |  |  |  |  | 631  683  685  686  688  691 |  |  |
| AS 2334 : 1980 (R2015) - Steel nails - metric series |  |  |  |  |  |  | 707 |  |
| AS/NZS 2341 (series) : Methods of Testing Bitumen and Related Road Making Products  Part 2 : 2015 - Determination of dynamic viscosity by vacuum capillary viscometer  Part 3 : 2020 - Determination of kinematic viscosity by flow through a capillary tube  Part 4 : 2023 - [Determination of dynamic viscosity by rotational viscometer](https://www.saiglobal.com/online/Script/Details.asp?DocN=EPCO0577141460)  Part 8 : 2016 - [Determination of matter insoluble in toluene](https://www.saiglobal.com/online/Script/Details.asp?DocN=stds000006387)  Part 10 : 2015 Determination of the effect of heat and air on a moving film of [bitumen (rolling thin film oven (RTFO) test)](https://www.saiglobal.com/online/Script/Details.asp?DocN=EPCO3139779116)  Part 12 : 2020 - Determination of Penetration (obsolescent)  Part 13 : 1997 (R2013) - Long-term exposure to heat and air  Part 18 : 2020 - Determination of softening point (ring and ball method) |  |  |  | 407  418  427 |  |  |  |  |
| AS/NZS 2425 : 2015 - Bar chairs in reinforced concrete – Product requirements and test methods  AS 2350.13 : 2006 - Methods of testing portland, blended and masonry cements – Determination of drying shrinkage of cement mortars  AS 2353 : 2018 - Pedestrian push-button assemblies |  |  |  |  |  |  | 610  689  751 |  |
| AS 2423 : 2002 - Coated steel wire fencing products for terrestrial, aquatic and general use |  |  |  |  |  |  | 707 |  |
| AS 2439 (series) : Perforated plastics drainage and effluent pipe and fittings  Part 1 : 2007 - Perforated drainage pipe and associated fittings  Part 2 : 2007 - Perforated effluent pipe and associated fittings for sewerage applications |  |  |  |  |  |  | 702 |  |
| AS 2700 : 2011 - Colour standards for general purposes |  |  |  | 431 |  | 631  685  686 |  | 860 |
| AS 2701 : 2001 (R2015) - Methods of sampling and testing mortar for masonry constructions |  |  |  |  |  | 607 |  |  |
| AS 2758.1 : 2014 - Aggregates and rock for engineering purposes – Concrete aggregates |  |  |  |  |  | 610  619 | 701  703 | 801 |
| AS 2832 (series) - Cathodic protection of metals  Part 1 : 2015 - Pipes and cables  Part 2 : 2003 (R2016) - Compact buried structures  Part 3 : 2005 (R2016) - Fixed immersed structures  Part 4 : 2006 (R2016) - Internal surfaces  Part 5 : 2008 (R2018) - Steel in concrete structures |  |  |  |  |  | 681 |  |  |
| AS 2858 : 2008 - Timber - Softwood - Visually stress-graded for structural purposes |  |  |  |  |  |  | 707 |  |
| AS 2876 : 2000 - Concrete kerbs and channels (gutters) - Manually or machine placed (withdrawn) |  |  |  |  |  |  | 703 |  |

**Table 175.061 Australian Standards (including test methods) … continued**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Australian Standard** | **Standard Section** | | | | | | | |
| AS/NZS 2891 (series) - Methods of sampling and testing asphalt  Part 1.1 : 2013 - Sampling - Loose asphalt  Part 1.2 : 2015 - Sampling - Coring method  Part 1.3 : 2008 - Sampling - Asphalt from slabs  Part 2.1 : 2014 - Sample preparation - Mixing, quartering and conditioning of asphalt in the laboratory  Part 2.2 : 2014 - Sample preparation - Compaction of asphalt test specimens using a gyratory compactor  Part 3.1 : 2013 - Binder content and aggregate grading - Reflux method  Part 3.3 : 2013 - Binder content and aggregate grading -Pressure filter method  Part 5 : 2015 - Compaction of asphalt by Marshall method and determination of stability and flow - Marshall procedure  Part 7.1 : 2015 - Determination of maximum density of asphalt - Water displacement method  Part 7.3 : 2014 - Determination of maximum density of asphalt - Methylated spirits displacement  Part 8 : 2014 - Voids and volumetric properties of compacted asphalt mixes  Part 9.1 : 2014 - Determination of bulk density of compacted asphalt - Waxing procedure  Part 9.2 : 2014 - Determination of bulk density of compacted asphalt - Presaturation method  Part 9.3: 2014 - Determination of bulk density of compacted asphalt - Mensuration method  Part 10 : 2015 - Moisture content of asphalt  Part 11 : 2014 - Degree of particle coating  Part 13.1 : 2013 - Determination of the resilient modulus of asphalt - Indirect tensile method  Part 14.1.1 : 2013 – Field density tests - Determination of field density of compacted asphalt using a nuclear surface moisture-density gauge - Direct transmission mode  Part 14.1.2 : 2013 – Field density tests - Determination of field density of compacted asphalt using a nuclear surface moisture-density gauge - Backscatter mode  Part 14.2 : 2013– Field density tests - Determination of field density of compacted asphalt using a nuclear thin-layer density gauge  Part 14.3 : 2013 - Field density tests - Calibration of nuclear thin-layer density gauge using standard blocks  Part 14.4 : 2013 - Field density tests - Calibration of nuclear surface moisture-density gauge - Backscatter mode  Part 14.5 : 2014 – Field density tests - Density ratio and percentage air voids of compacted asphalt |  |  | 308 | 404  405  407  409  417  418  421  423  427 |  |  |  | 802  831 |
| AS/NZS 2908.2 : 2000 - Cellulose-cement products - Flat sheets |  |  |  |  |  |  | 765 |  |
| AS/NZS 3000 : 20189- Electrical installations (known as the Australian/New Zealand Wiring Rules) |  |  |  |  |  | 681 | 711  733  751 |  |
| AS/NZ 3012 : 2010 - Electrical installations – Construction and demolition sites |  |  |  |  |  | 681 |  |  |
| AS ISO 3452.1 : 2020 Non-destructive testing – Penetrant testing Part 1: General Principles |  |  |  |  |  | 630 |  |  |
| AS 3568 : 2020 - Oils for reducing the viscosity of residual bitumen for pavements |  |  |  |  |  |  |  | 802 |
| AS 3569 : 2010 - Steel wire ropes – Product specification  AS 3571 : 2009 - Plastics piping systems |  |  |  |  |  |  | 708 |  |

**Table 175.061 Australian Standards (including test methods)** … **continued**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Australian Standard** | **Standard Section** | | | | | | | |
| AS 3580 (series) : Method for sampling and analysis of ambient air  Part 9.6 : 2015 - Determination of suspended particulate matter - PM10 high volume sampler with size selective inlet - Gravimetric method  Part 9.7 : 2009 - Determination of suspended particulate matter - Dichotomous sampler – (PM10 coarse PM and PM2.5) Gravimetric method  Part 9.8 : 2022 (R2018) - Determination of suspended particulate matter - PM10 continuous direct mass method using a tapered element oscillating microbalance analyser  Part 9.9 : 2017 - Determination of suspended particulate matter – PM10 low volume sampler - Gravimetric method  Part 9.11 : 2022 - Determination of suspended particulate matter - PM10 beta attenuation monitors  Part 10.1 : 2016 - Determination of particulate matter - Deposited matter - Gravimetric method  Part 10.2 : 2013 - Determination of particulate matter – Impinged matter - Gravimetric method | 176 |  |  |  |  |  |  |  |
| AS/NZS 3582 (series) : Supplementary cementitious materials  Part 1 : 2016 - Fly ash  Part 2 : 2016 - Slag - Ground granulated iron blast-furnace (AS only)  Part 3 : 2016 – Amorphous silica |  |  | 306  307  308 | 407 | 520 | 610  619 | 703  704 | 815 |
| AS 3597 : 2008 : Structural and pressure vessel steel - Quenched and tempered plate |  |  |  |  |  | 630 |  |  |
| AS 3600 : 2018 - Concrete Structures |  |  |  |  |  |  | 701  703  704  705  707  708  711  714 |  |
| AS 3610.1 : 2018 - Formwork for concrete – Documentation and surface finish (available superseded) |  |  |  |  |  | 603  613  614  619 | 703  708  711 |  |
| AS/NZS 3678 : 2016 - Structural steel - Hot‑rolled plates, floor plates and slabs |  |  |  |  |  | 608  620  630  685 | 765 |  |
| AS/NZS 3679 (series) : Structural steel  Part 1 : 2016 - Hot rolled bars and sections  Part 2 : 2016 - Welded I sections |  |  |  |  | 503 | 611  630  640  682 | 705  765 |  |
| AS 3700 : 2018 - Masonry Structures |  |  |  |  |  |  | 765 |  |
| AS 3705 : 2012 Geotextiles - Identification, marking and general data |  | 205  210 |  |  |  |  | 702 |  |
| AS 3706 (series) : Geotextiles - Methods of test  Part 2 : 2012 - Determination of tensile properties - Wide strip and grab method  Part 4 : 2012 - Determination of burst strength - California bearing ratio (CBR) - Plunger method  Part 5 : 2014 - Determination of puncture resistance - Drop cone method  Part 7 : 2014 - Determination of pore‑size distribution – Dry‑sieving method  Part 11 : 2012 – Determination of durability – Resistance to degradation by light, heat and moisture |  | 205  210 |  |  |  |  | 702 |  |

**Table 175.061 Australian Standards (including test methods)** … **continued**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Australian Standard** | **Standard Section** | | | | | | | |
| AS 3743 : 2003 - Potting mixes |  |  |  |  |  |  | 720 |  |
| AS/NZS 3750 (series) : Paints for steel structures  Part 6 : 2009 - Full gloss polyurethane (two-pack)  Part 9 : 2009 - Organic zinc-rich primer  Part 13 : 1997 (R2013) - Epoxy primer (two-pack)  Part 14 : 1997 (R2013) - High-build epoxy (two-pack  Part 15 : 1998 (R2013) - Inorganic zinc silicate paint  Part 18 : 2002 (R2013) - Moisture cure urethane (single-pack) systems |  |  |  |  |  | 631 | 707  708  765 |  |
| AS 3799 : 1998 - Liquid membrane-forming curing compounds for concrete |  |  |  |  | 503 | 610  619  681  689 | 703  708  711 |  |
| AS/NZS ISO 3834 : 2008 Quality requirements for fusion welding of metallic materials  Part 2 - Comprehensive quality requirements (*Reconfirmed 2018*)  Part 3 - Standard quality requirements (*Reconfirmed 2018*) |  |  |  |  |  | 630 |  |  |
| AS/NZS 3845 (series) - Road safety barrier system and devices  Part.1 : 2015 – Road safety barrier systems  Part 2 : 2017 - Road safety devices | 169 |  |  |  |  |  | 708  711  716 |  |
| AS 3894 (series) : Site testing of protective coatings  Part 3 : 2002 (R2013) - Determination of dry film thickness  Part 4 : 2002 (R2013) - Assessment of degree of cure  Part 5 : 2002 (R2013) - Determination of surface profile  Part 6 : 2002 (R2013) - Determination of residual contaminants  Part 10 : 2002 - Inspection report – Daily surface and ambient conditions  Part 11 : 2002 - Equipment report  Part 12 : 2002 - Inspection report – Coating  Part 13 : 2002 - Inspection report – Daily  Part 14 : 2002 - Inspection report – Daily painting |  |  |  |  |  | 631 |  |  |
| AS 3972 : 2010 : General purpose and blended cements |  |  | 307  308 | 407 | 520 | 607  610  612  619  683 | 701  703 | 815 |
| AS 3978 : 2003 - Non-destructive Testing - Visual Inspection of Metal Products and Components  AS 3996 : 2019 - Access covers and grates |  |  |  |  |  | 675 | 705 |  |
| AS 4049 (series) : Paints and related materials – Pavement marking materials  Part 1 : 2005 (R2016) - Solvent-borne paint – For use with surface applied glass beads  Part 2 : 2005 (R2016) - Thermoplastic pavement marking materials – For use with surface applied glass beads  Part 3 : 2005 (R2016) - Waterborne paint - For use with surface applied glass beads  Part 4 : 2006 (R2016) - High performance pavement marking systems |  |  |  |  |  |  | 721 |  |
| AS/NZS 4058:2007 - Precast concrete pipes (pressure and non-pressure) |  |  |  |  |  |  | 701  705  733 |  |
| AS 4100 : 2020 (R2016) – Steel Structures |  |  |  |  |  | 613  630 | 708 |  |
| AS 4115 : 1993 Hand torque tools (withdrawn) |  |  |  |  |  | 660 |  |  |
| AS 4130 : 2018 Polyethylene (PE) pipes for pressure applications |  |  |  |  |  | 683 | 733 |  |
| AS 4133.4.1 : 2007 (R2016) – Methods of testing rocks for engineering purposes – Rock strength tests - Determination of point load strength index |  | 205 |  |  |  |  |  |  |

**Table 175.061 Australian Standards (including test methods)** … **continued**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Australian Standard** | **Standard Section** | | | | | | | |
| AS 4139 : 2003 - Fibre reinforced concrete pipes and fittings |  |  |  |  |  |  | 701 |  |
| AS/NZS 4233.1 : 2013 - High pressure water jetting systems - Safe operation and maintenance |  |  |  | 428 |  |  |  |  |
| AS 4373 : 2007 - Pruning of amenity trees |  |  |  |  |  |  | 720  750 |  |
| AS 4419 : 2018 - Soils for landscaping and garden use |  |  |  |  |  |  | 720 |  |
| AS 4454 : 2012 - Composts, soil conditioners and mulches |  |  |  |  |  |  | 720 |  |
| AS/NZS 4455.1 : 2008 – Masonry units, pavers, flags and segmental retaining wall units – Masonry units |  |  |  |  |  |  | 713  765 |  |
| AS/NZS 4456 Masonry units, segmental pavers and flags – Methods of test  Part.1 : 2003 – Sampling for test  Part 4 : 2003 - Determining compressive strength of masonry units |  |  |  |  |  |  | 713 |  |
| AS 4489.6.1 : 1997 (R2016) - Test methods for limes and limestones - Lime index - Available lime |  | 290 | 307 |  |  |  |  | 815 |
| AS 4489.8.1 : 1997 (R2016) - Test methods for limes and limestones - Free moisture - Convection oven |  |  |  | 407 |  |  |  |  |
| AS/NZS 4534 : 2006 (R2017) - Zinc and zinc/aluminium-alloy coatings on steel wire  AS/NZS 4548.5 : 1999 - Guide to long-life coatings for concrete and masonry Part 5: Guidelines to methods of test |  |  |  |  |  | 685 | 707 |  |
| AS 4663 : 2013 - Slip resistance measurement of existing pedestrian surfaces |  |  |  | 431 |  |  |  |  |
| AS/NZS 4671 : 2019 - Steel for the reinforcement of concrete |  |  |  |  | 503 | 611  683 | 703  705 |  |
| AS/NZS 4672 (series) Steel prestressing materials  Part 1 : 2007 - General requirements  Part 2 : 2007 - Testing requirements |  |  |  |  |  | 612  622 |  |  |
| AS 4678 : 2002 - Earth retaining structures |  |  |  |  |  | 682  683 |  |  |
| AS/NZS 4680 : 2006 (R2017) - Hot-dip galvanized (zinc) coatings on fabricated ferrous articles |  |  |  |  | 503 | 611  620  630  631  632  670  671  675  682  683  684 | 703  705  707  708  714  765 |  |
| AS 4738.1 : 2007 - Metal castings – Ferrous sand moulded (withdrawn) |  |  |  |  |  | 675 |  |  |
| AS/NZS 4801: 2001 - Occupational Health and Safety – Management Systems – Specification with guidance for use | 160 |  |  |  |  |  |  |  |
| AS 4848.1 : 2019 - Application specifications for coating systems  Single coat inorganic (ethyl) zinc silicate – Solvent-borne |  |  |  |  |  | 631 |  |  |

**Table 175.061 Australian Standards (including test methods)** … **continued**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Australian Standard** | **Standard Section** | | | | | | | |
| AS 5100 (series) : 2017 - Bridge Design  Part 1 - Scope and general principles  Part 2 - Design loads  Part 3 - Foundation and soil-supporting structures  Part 4 - Bearings and deck joints  Part 5 - Concrete  Part 6 - Steel and composite construction  Part 7 - Bridge assessment  Part 8 - Rehabilitation and strengthening of existing bridges  Part 9 – Timber |  |  |  |  |  | 603  604  605  606  607  608  610  611  612  613  614  619  630  640  652  653  656  660  671  682  683  689 | 705  715  765 |  |
| AS 5101 (series) – Methods for preparation and testing of stabilized materials  Part 3.3 : 2008 (R2017) - Cement content of cement stabilized materials  Part 4 : 2008 - Unconfined compressive strength of compacted materials |  |  | 306  307 |  |  |  |  | 815 |
| AS/NZS 5131:2016 – Structural steelwork – Fabrication and erection |  |  |  |  |  | 630 | 760 |  |
| AS 5216 : 2021 - Design of post-installed and cast-in fastenings in concrete |  |  |  |  |  | 680 |  |  |
| ATIC-SPEC 38 : 2009 – Metal anchors for use in concrete (published by the Australian Technical Infrastructure Committee (ATIC) |  |  |  |  |  | 680 |  |  |
| AS/NZS ISO 5817 : 2019 - Welding - Fusion-welded joints in steel, nickel, titanium and their alloys (beam welding excluded) – Quality levels for imperfections |  |  |  |  |  | 630 |  |  |
| AS/NZS ISO 9000:2016 - Quality management systems – Fundamentals and vocabulary | 160  161  162  163 |  |  |  |  | 630  691 |  |  |
| AS/NZS ISO 9001:2016 - Quality management systems - Requirements | 160  161  162  163 |  |  |  |  | 630  691 |  |  |
| AS ISO 9934.1 : 2019 - Non-destructive testing - Magnetic particle testing Part 1 - General principles |  |  |  |  |  | 630 |  |  |
| AS/NZS ISO 14001:2016 - Environmental management systems- Requirements with guidance for use | 160 |  |  |  |  |  |  |  |
| AS/NZS ISO/IEC 17065 : 2013 - Conformity assessment - Requirements for bodies certifying products, processes and services |  |  |  |  |  | 630 |  |  |
| AS/NZS ISO 19011:2019 - Guidelines for auditing management systems  ICC-ES (USA) – International Code Council Approvals, Evaluation service for post installed anchors and other building products  ITA Guidelines for Structural Fire Resistance of Road Tunnels (International Tunneling Association) (2004) | 161  163 |  |  |  |  | 680  680 |  |  |

**175.07 DTP CODES OF PRACTICE AND BRIDGE TECHNICAL NOTES**

Table 175.071 lists the DTP Codes of Practice and Bridge Technical Notes that are applicable to the Standard Section contained in this Specification.

**Table 175.071 DTP Codes of Practice and Bridge Technical Notes**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **DTP Codes of Practice** | **Standard Section** | | | | | | | |
| RC 500.00 : December 2012 : Code of Practice for Source Rock Investigations |  |  |  |  |  | 610 |  | 801  812  815  818  820 |
| RC 500.01 : December 2021 : Code of Practice for Registration of Bituminous Mix Designs |  |  |  | 404  405  407  409  417  421  423  427 |  |  |  |  |
| RC 500.02 : June 2017 : Code of Practice for Registration of Crushed Rock Mix Designs |  |  | 304 |  |  |  |  | 812  815  820 |
| RC 500.05 : June 2017 : Code of Practice for Acceptance of Field Compaction | 173 | 204  205  290 | 304  306  307  308 | 407 |  |  | 701  706 |  |
| RC 500.09 : July 2018 : Code of Practice for Testing Aggregates for Sprayed Bituminous Surfacing |  |  |  |  |  |  |  | 831 |
| RC 500.11 : September 2014 : Code of Practice for Surveillance and Testing of Materials and Work | 160  161  162  163 |  |  |  |  |  |  |  |
| RC 500.16 : July 2018 : Code of Practice for Selection of Test Methods for Testing of Materials and Work | 160  161  162  163 | 204  290 | 304  306  307  308 | 407 | 503 | 610 | 701 | 801  802  811  812  815  818  820  831 |
| RC 500.20 : October 2019 : Code of Practice for Assignment of CBR Strength and Percentage Swell to Earthworks Fill and Pavement Materials |  | 204  290 |  |  |  |  |  | 811  812  818 |
| RC 500.23 : April 2016 : Code of Practice for Lime Stabilised Earthworks Materials – Available Lime Content, Assignment of CBR and Swell |  | 290 |  |  |  |  |  |  |
| **Bridge Technical Notes** | **Standard Section** | | | | | | | |
| BTN004 : June 2018 - Bridge joints |  |  |  |  |  | 660 |  |  |
| BTN006 : March 2022 - Bonded anchor |  |  |  |  |  | 680 |  |  |
| BTN007 : June 2018 - Noise attenuation walls |  |  |  |  |  |  | 765 |  |
| BTN008 : October 2022 – Mechanical anchors |  |  |  |  |  |  |  |  |
| BTN009 : January 2018 - RC panels for reinforced soil structures |  |  |  |  |  | 682 |  |  |
| BTN014 : October 2022 – Road sign and lighting structures |  |  |  |  |  |  | 760 |  |
| BTN015 : January 2018 - Buried corrugated metal structures |  |  |  |  |  | 632 |  |  |
| BTN023 : May 2022 – AS 5100 Part 3 |  |  |  |  |  | 605  682 | 765 |  |
| BTN025 : October 2022 – AS 5100 Part 3 |  |  |  |  |  | 611 |  |  |
| BTN033 : March 2023 - Structural Requirements for Reinforced Concrete Drainage Pits |  |  |  |  |  |  | 705 |  |

**175.08 DTP TEST METHODS**

Table 175.081 lists additional DTP Test Methods to be used that are not mentioned in DTP Codes of Practice 500.05 or 500.16.

**Table 175.081 DTP Test Methods**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **DTP Test Method** | **Standard Section** | | | | | | | |
| RC 211.01 : June 2013 - Moisture Content of Mixed Asphalt Products |  |  |  | 407 |  |  |  |  |
| RC 212.01 : June 2013 - Recovery of Bituminous Binder from Asphalt for Measurement of Viscosity |  |  |  | 407 |  |  |  |  |
| RC 253.01 : June 2013 - Determination of Aggregate Moisture Content and Estimated Free Water (Using Microwave or Hot Plate) |  |  |  |  |  | 610 |  |  |
| RC 301.04 : June 2017 - Lime Stabilised Earthworks Materials – Available Lime, Assigned CBR and Swell |  | 290 |  |  |  |  |  |  |
| RC 316.00 : February 2022 - Density ratio and moisture ratio lot characteristics  RC 316.10 : January 2020 - Selection of test sites within a test lot (random stratified sampling method) |  | 204  205  290 | 304  306  308  310 | 407  431 |  |  |  |  |
| RC 316.14 : June 2013 - Moisture Ratio Determination for Assessment of Dry-Back of Granular Pavement Materials |  |  | 310 |  |  |  |  |  |
| RC 317.01 : October 2012 - Surface Texture by Sand Patch  RC 317.03 : December 2012 - Stripping of Aggregate from Sprayed Seals |  |  |  | 408  427  428  430  431 |  |  |  |  |
| RC 324.01 : October 2019 – Calculation of Assigned CBR and Assigned Percent Swell |  | 290 |  |  |  |  |  |  |
| RC 326.01 : April 2016 – Weighted Plasticity Index – PI x Percent passing 0.425mm sieve |  | 290 |  |  |  |  |  |  |
| RC 330.01 : December 2012 - Cementitious Binder and Granular Additive Content for the Stabilisation of Pavement Materials  RC 330.02 : July 2019 - Determination of the Maximum Allowable Working Time for a Cementitious Binder  RC 330.03 : July 2019 - Decay Correction Factor for Granular Materials Stabilised with Cementitious Binder |  | 290 | 306  307  308 |  |  |  |  | 815 |
| RC 370.05: June 2013 - Degradation Factor - Fine Aggregate |  |  |  | 407 |  |  |  | 801  812  815  820 |
| RC 372.01 : October 2016 - Coarse Aggregate Quality by Visual Assessment |  |  |  | 407  ~~408~~  423  427 | 520 |  | 701  702 | 801  802  812  815  818  820  831 |
| RC 372.04 : June 2013 - Foreign Materials in Crushed Concrete |  | 204 |  |  |  |  |  | 820 |
| RC 374.01 : February 2022 - Polished Stone Value  (*based on BS EN 1097-8:2009*) |  |  |  | 407  430  431 |  |  |  | 801  831 |
| RC 376.03 : April 2016 - Potential Aggregate‑Silica Reactivity (Accelerated Mortar Bar Method)  RC 376.04 : June 2013 – Alkali Aggregate Reactivity Assessment using the Concrete Prism Test  RC 377.01 : March 2019 - Determination of the Fibre Content of Fresh Concrete (Wash-out Method) |  |  |  |  |  | 610  684 |  | 705 |

**Table 175.081 DTP Test Methods** … **continued**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **DTP Test Method** | **Standard Section** | | | | | | | |
| RC 421.02 : March 2018 - Skid Resistance of a Road Pavement using a SCRIM ® Machine |  |  |  | 430  431 |  |  |  |  |
| RC 422.03 : June 2001 - Pavement Roughness (Inertial Laser Profiler Method)  RC 422.06 : June 2001 - Pavement Roughness (ARRB TR Walking Profiler Method) | 180 |  |  |  |  |  |  |  |
| RC 423.02 : June 2004 - Measurement of Surface Levels of Pavement Layers  RC 423.02B : October 2019 - Selection of Random Sites for Surface Levels of Pavement Layers | 173 | 204 | 304  306  308 | 407 |  |  |  |  |
| RC 424.01 : December 2012 - Determination of Retroreflectivity of Pavement Markings (using the Mirolux 30 reflectometer) |  |  |  |  |  |  | 721 |  |

175.09 AUSTROADS TECHNICAL SPECIFICATIONS AND AUSTROADS TEST METHODS

Table 175.091 lists Austroads Technical Specifications (ATS). Table 175.091 also lists Austroads Test Methods (ATM) to be used that may not be listed in DTP Codes of Practice 500.05 or 500.16.

**Table 175.091 Austroads Technical Specifications and Austroads Test Methods**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Austroads Technical Specifications and Austroads Test Methods** | **Standard Section** | | | | | | | |
| ATS-3110 : 2023 Austroads Technical Specification: Supply of Polymer Modified Binders |  |  |  | 407  408 |  |  |  |  |
| ATS-3450 : 2023 Microsurfacing |  |  |  | 427 |  |  |  |  |
| ATS-3470 : 2022 Austroads Technical Specification: Bituminous Pavement Crack Sealing |  |  |  | 407 |  |  |  |  |
| ATS-5420-20: June 2020 - Supply of Bolts, Nuts and Washers (Austroads Technical Specification, |  |  |  |  |  | 630 |  |  |
| ATM 453: February 2022 - Austroads Test Method - Surface Deviation Using a Straightedge |  |  | 304 |  |  |  |  |  |
| AGPT/T101 : July 2022 - Method of Sampling Polymer Modified Binders, Polymers and Crumb Rubber |  |  |  | 404  407  417  421 |  |  |  |  |
| AGPT/T103 : July 2022 – Mass Change or Loss of Heating of Polymer Modified Binders after Rolling Thin Film Oven (RTFO) Treatment |  |  |  | 418 |  |  |  |  |
| AGPT/T143 : December 2010 : Particle Size and Properties of Crumb Rubber |  |  |  | 421 |  |  |  |  |
| AGPT/T144 : March 2006- Morphology of crumb rubber – Bulk density test |  |  |  | 421 |  |  |  |  |
| AGPT/T192 : 2015 - Characterisation of the Viscosity of Reclaimed Asphalt Pavement (RAP) Binder Using the Dynamic Shear Rheometer (DSR) |  |  |  | 407 |  |  |  |  |
| AGPT/T193 : 2015 - Design of Bituminous Binder Blends to a Specified Viscosity Value |  |  |  | 407 |  |  |  |  |
| AGPT/T221 : May 2018 - Sampling of Bituminous Slurry |  |  |  | 427 |  |  |  |  |
| AGPT/T231 : January 2006 - Deformation Resistance of Asphalt Mixes by the Wheel Tracking Test |  |  |  | 418 |  |  |  |  |
| AGPT/T232 : January 2007 - Stripping Potential of Asphalt – Tensile Strength Ratio |  |  |  | 409 |  |  |  |  |
| AGPT/T234 : 2005 - Asphalt Binder Content (Ignition Oven Method) |  |  |  | 407 |  |  |  |  |

**Table 175.091 Austroads Technical Specifications and Austroads Test Methods**… **continued**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Austroads Technical Specifications and Austroads Test Methods** | **Standard Section** | | | | | | | |
| AGPT/T235 : June 2006 : Asphalt Binder Drain Off |  |  |  | 404  417 |  |  |  |  |
| AGPT/T251 : January 2010 : Ball Penetration Test |  |  | 310 |  |  |  |  |  |
| AGPT/T271 : May 2018 : Determination of Set and Cure for Bituminous Slurry (Cohesion Test) |  |  |  | 427 |  |  |  |  |
| AGPT/T272 : May 2018 - Determination of Abrasion Loss of Bituminous Slurry (Wet Track Abrasion Test) |  |  |  | 427 |  |  |  |  |
| AGPT/T274 : January 2016 - [Characterisation of Flexural Stiffness and Fatigue](http://www.austroads.com.au/images/pavement-test-methods/AGPT-T274-15_Characterisation_of_Flexural_Stiffness_and_Fatigue_Performance_of_Bituminous_Mixes.pdf) Performance of Bituminous Mixes |  |  |  | 418 |  |  |  |  |
| AGPT/T530: September 2019 - Calibration of Bitumen Sprayers – General Introduction and List of Methods  AGPT/T531: June 2018 - Volumetric Calibration of Bitumen Pumping Systems  AGPT/T532: June 2018 - Transverse Distribution by Fixed Pit Facility  AGPT/T533: June 2018 - Transverse Distribution by Field Mat  AGPT/T534: June 2018 - Transverse Distribution by Portable Trough  AGPT/T535: November 2012 - Road Speed Calibration  AGPT/T536: June 2018 - Viscosity of Calibration Fluid  AGPT/T537: June 2005 - Field Calibration of Aggregate Spreaders |  |  |  | 408 |  |  |  |  |

175.10 OTHER STANDARDS AND TEST METHODS

Table 175.101 lists standards and test methods, other than DTP, Australian Standards or Austroads, published by other authorities or agencies and which are applicable to the Standard Specification Section contained in the Specification. These include ASTM, BS and RTA Test Methods.

**Table 175.101 Other Standards and Test Methods**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Document** | **Standard Section** | | | | | | | |
| American Public Health Association (APHA), American Water Works Association (AWWA) and Water Environment Federation (WEF) : Standard Methods for the Examination of Water and Wastewater - Conductivity, Edition 24 January 2023 |  |  | 304  306  307 |  |  |  |  | 811  812  815  818  820 |
| AS/CA S009 : Installation requirements for customer cabling (Wiring Rules) |  |  |  |  |  |  | 733  751 |  |
| ATIC‑SP39 : September 2009 - Fasteners for Structural Purposes |  |  |  |  |  |  | 765 |  |
| ATIC‑SP43 : July 2019 - Cementitious Materials for Use with Concrete |  |  |  |  |  | 610 |  |  |
| Australian Paint Approval Scheme (APAS) Specifications  APAS 0041/2 : February  2023 - Road marking paint, solvent borne  APAS 0041/5 : February  2023 - Road marking paint, water borne  APAS 0042 : February 2023 - Glass beads for use in pavement marking paints  APAS 2908 : September 2021 - Inorganic zinc coating for the long term protection of steel  APAS 2911September 2021 - Polyurethane coating for the protection of steel in atmosphere  APAS 2916: June 2022 - Organic zinc rich primer for the long term protection of steel  APAS 2930 : September  2021 - Single pack moisture cure urethane coating for the long term protection of steel  APAS 2971 : September 2021 – Durable two-pack epoxy primer for the long term protection of steel  APAS 2973 : September 2021 Medium build two-pack epoxy coating for the long term protection of steel in atmosphere |  |  |  |  |  | 631 | 721 |  |
| **Table 175.101 Other Standards and Test Methods**…**continued** | | | | | | | | |
| American Concrete Institute (ACI)  ACI 440.3R-12 - Test Method B.6 - Accelerated test method for alkali resistance of FRP bars  ACI 440.3R-12 - Test Method B.8 - Test method for creep rupture of FRP bars  ACI 440.6M‑08(17) - Specification for Carbon and Glass Fiber-Reinforced Polymer Bar Materials for Concrete Reinforcement |  |  |  |  |  | 683 |  |  |
| ASTM D86 Standard Test Method for Distillation of Petroleum Products and Liquid Fuels at Atmospheric Pressure |  |  |  | 408 |  |  |  |  |
| ASTM D93 Standard Test Methods for Flash Point by Pensky-Martens Closed Cup Tester |  |  |  | 408 |  |  |  |  |
| ASTM D276 Standard Test Methods for Identification of Fibers in Textiles |  |  |  | 408 |  |  |  |  |
| ASTM D445 Standard Test Method for Kinematic Viscosity of Transparent and Opaque Liquids (and Calculation of Dynamic Viscosity) |  |  |  | 408 |  |  |  |  |
| ASTM D1298 Standard Test Method for Density, Relative Density, or API Gravity of Crude Petroleum and Liquid Petroleum Products by Hydrometer Method |  |  |  | 408 |  |  |  |  |
| ASTM D3828 Standard Test Methods for Flash Point by Small Scale Closed Cup Tester |  |  |  | 408 |  |  |  |  |
| ASTM D4052 Standard Test Method for Density, Relative Density, and API Gravity of Liquids by Digital Density Meter |  |  |  | 408 |  |  |  |  |
| ASTM D6140 Standard Test Method to Determine Asphalt Retention of Paving Fabrics used in Asphalt Paving for Full-Width Applications |  |  |  | 408 |  |  |  |  |
| ASTM A802 (2019) - Standard Practice for Steel Castings, Surface Acceptance Standards, Visual Examination |  |  |  |  |  | 675 |  |  |
| ASTM A820/A820M (2022) - Standard Specification for Steel Fibers for Fiber-Reinforced Concrete |  |  |  |  |  | 684 | 705 |  |
| ASTM A1059/A1059M (2018) - Standard Specification for Zinc Alloy Thermo-Diffusion Coatings (TDC) on Steel Fasteners, Hardware, and Other Products |  |  |  |  |  | 683 |  |  |
| ASTM B265 (2020) - Standard Specification for Titanium and Titanium Alloy Strip, Sheet, and Plate |  |  |  |  |  | 681 |  |  |
| ASTM C295/C295M(2019) - Standard Guide for Petrographic Examination of Aggregates for Concrete |  |  |  |  |  | 610 |  |  |
| ASTM C603 (2014)- Standard Test Method for Extrusion Rate and Application Life of Elastomeric Sealants |  |  |  |  | 503 |  |  |  |
| ASTM C679-15 - Standard Test Method for Tack-Free Time of Elastomeric Sealants |  |  |  |  | 503 |  |  |  |
| ASTM C793-05(2017) - Standard Test Method for Effects of Laboratory Accelerated Weathering on Elastomeric Joint Sealants |  |  |  |  | 503 |  |  |  |
| ASTM C794-18 - Standard Test Method for Adhesion-in-Peel of Elastomeric Joint Sealants |  |  |  |  | 503 |  |  |  |
| ASTM C940‑16 - Standard Test Method for Expansion and Bleeding of Freshly Mixed Grouts for Preplaced-Aggregate Concrete in the Laboratory |  |  |  |  |  | 683 |  |  |
| ASTM C1116/C1116M‑10a(2015) - Standard Specification for Fiber-Reinforced Concrete |  |  |  |  |  |  | 705 |  |
| ASTM C1399/C1399M‑10(2015) - Standard Test Method for Obtaining Average Residual-Strength of Fiber- Reinforced Concrete |  |  |  |  |  |  | 705 |  |
| ASTM C1609/C1609M‑12 - Standard Test Method for Flexural Performance of Fiber-Reinforced Concrete (Using Beam With Third-Point Loading) |  |  |  |  |  |  | 705 |  |

**Table 175.101 Other Standards and Test Methods** … **continued**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Document** | **Standard Section** | | | | | | | |
| ASTM D5/D5M-13 - Standard Test Method for Penetration of Bituminous Materials |  |  |  |  |  |  |  | 853 |
| ASTM D36/D36M-14e1 - Standard Test Method for Softening Point of Bitumen (Ring-and-Ball Apparatus) |  |  |  |  |  |  |  | 853 |
| ASTM D92-16b - Standard Test Method for Flash and Fire Points by Cleveland Open Cup Tester |  |  |  |  |  |  |  | 853 |
| ASTM D146 / D146M-04(2012)e1 - Standard Test Methods for Sampling and Testing Bitumen-Saturated Felts and Woven Fabrics for Roofing and Waterproofing |  |  |  |  |  | 691 |  |  |
| ASTM D412-16 - Standard Test Methods for Vulcanized Rubber and Thermoplastic Rubbers and Thermoplastic Elastomers – Tension |  |  |  |  | 520 |  |  |  |
| ASTM D792-13 - Standard Test Methods for Density and Specific Gravity (Relative Density) of Plastics by Displacement – (Method A) |  |  |  |  | 503  520 |  | 705 |  |
| ASTM D1621-16 – Standard Test Method for Compressive Properties of Rigid Cellular Plastics |  |  |  |  |  | 682 |  |  |
| ASTM D1777-96(2019) – Standard Test Method for Thickness of Textile Materials |  |  |  |  |  | 682 |  |  |
| ASTM D2171/D2171M-10 - Standard Test Method for Viscosity of Asphalts by Vacuum Capillary Viscometer |  |  |  |  |  |  |  | 853 |
| ASTM D2240-15e1 - Standard Test Method for Rubber Property – Durometer Hardness |  |  |  |  | 503  520 |  |  |  |
| ASTM D2628-91(2016) - Standard Specification for Preformed Polychloroprene Elastomeric Joint Seals for Concrete Pavements |  |  |  |  | 503  520 |  |  |  |
| ASTM D2669-16 - Test Method for Apparent Viscosity of Petroleum Waxes Compounded with Additives (Hot Melts) |  |  |  |  |  |  |  | 853 |
| ASTM D2835-89(2017) - Standard Specification for Lubricant for Installation of Preformed Compression Seals in Concrete Pavements |  |  |  |  | 503  521 |  |  |  |
| ASTM D3822/D3822M‑14 (2020) - Standard Test Method for Tensile Properties of Single Textile Fibers |  |  |  |  |  |  | 705 |  |
| ASTM D4262-05(2012) - Standard Test Method for pH of Chemically Cleaned or Etched Concrete Surfaces |  |  |  |  |  | 686 |  |  |
| ASTM D4263-83(2012) - Standard Test Method for Indicating Moisture in Concrete by the Plastic Sheet Method |  |  |  |  |  | 685  686  691 |  |  |
| ASTM D4414-95(2013) - Standard Practice for Measurement of Wet Film Thickness by Notch Gages |  |  |  |  |  | 685  686  691 |  |  |
| ASTM D5329-16 - Standard Test Methods for Sealants and Fillers, Hot-Applied, For Joints and Cracks in Asphalt Pavements and Portland Cement Concrete Pavements |  |  |  |  |  |  |  | 853 |
| ASTM D7205/D7205M‑06 (2016) - Standard Test Method for Tensile Properties of Fiber Reinforced Polymer Matrix Composite Bars |  |  |  |  |  | 683 |  |  |
| ASTM D7337/D7337M-12 - Standard Test Method for Tensile Creep Rupture of Fiber Reinforced Polymer Matrix Composite Bars  ASTM E 488 (2022) - Standard Test Methods for Strength of Anchors in Concrete and Masonry Elements  ASTM E 1512 (2015) - Standard Test Methods for Testing Bond Performance of Adhesive-Bonded Anchors |  |  |  |  |  | 683  680  680 |  |  |
| BD 47/99 – Design Manual for Roads and Bridges, Volume 2 Section 3 Part 4 - Waterproofing and Surfacing of Concrete Bridge Decks |  |  |  |  |  | 691 |  |  |

**Table 175.101 Other Standards and Test Methods** … **continued**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Document** | **Standard Section** | | | | | | | |
| BS EN 1109 : 2013 - Flexible Sheets For Waterproofing - Bitumen Sheets For Roof Waterproofing - Determination Of Flexibility At Low Temperature  BS EN 1110 : 2010 - Flexible Sheets For Waterproofing - Bitumen sheets for roof waterproofing. Determination of flow resistance at elevated temperature.  BS EN 12310-1 : 2000 - Flexible Sheets For Waterproofing - Determination Of Resistance To Tearing (Nail Shank) - Bitumen Sheets For Roof Waterproofing  BS EN 12311-1 : 2000 - Flexible sheets for waterproofing. Determination of tensile properties. Bitumen sheets for roof waterproofing |  |  |  |  |  | 691 |  |  |
| EN 1363-2 : 1999 - Fire resistance tests - Part 2: Alternative and additional procedures |  |  |  |  |  | 680 |  |  |
| BS 1881-208: 1996 - Testing concrete. Recommendations for the determination of the initial surface absorption of concrete |  |  |  |  |  | 686 |  |  |
| BS EN 1881: 2006 - Products and systems for the protection and repair of concrete structures. Test methods. Testing of anchoring products by the pull-out method. |  |  |  |  |  | 686 |  |  |
| BS 6319 (series) - Testing of resin and polymer/cement compositions for use in construction.  Part 1 : 1983 - Method for preparation of test specimens  Part 2 : 1983 – Method for measurement of compressive strength  Part 3 : 1990 – Methods for measurement of modulus of elasticity in flexural and flexural strength  Part 7 : 1985 – Method for measurement of tensile strength |  |  |  |  |  | 687  688  689 |  |  |
| BS 6744: 2016 - Stainless steel bars for the reinforcement of and use in concrete. Requirements and test methods |  |  |  |  |  | 611 |  |  |
| BS 8006 (series)  Part 1 : 2010+A1:2016 - Code Of Practice For Strengthened/Reinforced Soils And Other Fills  Part 2 : 2011+A1:2017 - Code of practice for strengthened/reinforced soils. Soil nail design |  |  |  |  |  | 683 |  |  |
| BS EN 1097-8 : 2020 - Tests for mechanical and physical properties of aggregate. Determination of the polished stone value |  |  |  | 430 |  |  |  |  |
| BS EN 10088 (series) - Stainless steels  Part 1 : 2014 – List of stainless steels  Part 2 : 2014 – Technical delivery conditions for sheet/plate and strip of corrosion resisting steels for general purposes  Part 3 : 2014 – Technical delivery conditions for semi-finished products, bars, rods, wire, sections and bright products of corrosion resisting steels for general purposes  Part 4 : 2009 – Technical delivery conditions for sheet/plate and strip of corrosion resisting steels for construction purposes  Part 5 : 2009 – Technical delivery conditions for bars, rods, wire, sections and bright products of corrosion resisting steels for construction purposes |  |  |  |  |  | 611 |  |  |
| BS EN 14490:2010 - Execution of special geotechnical works. Soil nailing |  |  |  |  |  | 683 |  |  |
|  |  |  |  |  |  |  |  |  |
| EOTA TR 048 : 2016 – Details of tests for post-installed fasteners in concrete (https://www.eota.eu/en-GB/content/technical-reports/28/) |  |  |  |  |  | 680 |  |  |
| EOTA EAD 330499-00-0601 : 20192193- Bonded fasteners for use in concrete (https://www.eota.eu/en-GB/content/eads/56/212/) |  |  |  |  |  | 680 |  |  |

**Table 175.101 Other Standards and Test Methods** … **continued**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Document** | **Standard Section** | | | | | | | |
| CSA-S806-12  Annex H - Test methods for creep of FRP Rods  Annex M - Test method of alkali resistance of FRP rods |  |  |  |  |  | 683 |  |  |
| CSA-S806-02 Annex O, Test method of alkali resistance of FRP rods |  |  |  |  |  | 683 |  |  |
| FHWA-NHI-14-007 : 2015 - Geotechnical Engineering Circular No. 7 - Soil Nail Walls |  |  |  |  |  | 683 |  |  |
| ISO 10140-2 : 2021 - Acoustics Laboratory measurement of sound insulation of building elements Part 2: Measurement of airborne sound insulation |  |  |  |  |  |  | 765 |  |
| AS ISO 11654 : 2002 - Acoustics - Rating of sound absorption - Materials and systems |  |  |  |  |  |  | 765 |  |
| AS/NZS ISO/IEC 17020:2013 – Conformity assessment – Requirements for the operation of various types of bodies performing inspection | 160 |  |  |  |  | 630 |  |  |
| AS ISO/IEC 17025: 2018 - General requirements for the competence of testing and calibration laboratories  ISO 9223:2012 – Corrosion of metals and alloys – Corrosivity of atmospheres – Classification, determination and estimation | 160  161  162  163  170 |  |  |  |  | 630  682 | 765 |  |
| ISO 6789 (series) - Assembly tools for screws and nuts -  Hand torque tools  Part 1 - Requirements and methods for design conformance testing and quality conformance testing: minimum requirements for declaration of conformance  Part 2 - Requirements for calibration and determination of measurement uncertainty |  |  |  |  |  | 660 |  |  |
| ISO 3549:1995 - Zinc dust pigments for paints – Specifications and Test Methods  ISO 8501(series) - Preparation of steel substrates before application of paints and related products — Visual assessment of surface cleanliness.  Part 1 : 2007 - Rust grades and preparation grades of uncoated steel substrates and of steel substrates after overall removal of previous coatings.  Part 3 : 2006 - Preparation grades of welds, edges and other areas with surface imperfections.  ISO 11127-6 : 2022 - Preparation of steel substrates before application of paints and related products – Test methods for non-metallic blast cleaning abrasives - Determination of water-soluble contaminations by conductivity measurements. |  |  |  |  |  | 631  630  631 |  |  |
| ISO 10319:2015 - Geosynthetics - Wide-width tensile test  ISO 10321:2008 - Geosynthetics - Tensile test for joints/seams by wide-width strip method  ISO 13431:1999 : Geotextiles and geotextile-related products - Determination of tensile creep and creep rupture behaviour |  |  |  |  |  | 683 |  |  |
| AS/NZS ISO 717-1 : 2020 - Acoustics Rating of sound insulation in buildings and of building elements Part 1: Airborne sound insulation |  |  |  |  |  |  | 765 |  |
| SAE International  AMS S 8802 (2022) - Sealing Compound, Fuel Resistant, Integral Fuel Tanks and Fuel Cell Cavities |  |  |  |  | 520 |  |  |  |
| Manufacturers Standardisation Society of the Valve and Fittings Industry  ANSI/MSS SP-55-2011: Quality Standard for Steel Castings for Valves, Flanges and Fittings and other Piping Components, Visual Method for Evaluation of Surface Irregularities - |  |  |  |  |  | 675 |  |  |
| NACE WJ-2:2012/ SSPC-SP WJ 2:2012 – Waterjet Cleaning of Metals – Very Thorough Cleaning |  |  |  |  |  | 691 |  |  |

**Table 175.101 Other Standards and Test Methods** … **continued**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Document** | **Standard Section** | | | | | | | |
| RMS-NSW T865 : November 2012 - Non-volatile content of concrete admixtures and curing compounds |  |  |  |  | 520 |  |  |  |
| RMS-NSW T1005 : November 2012 - Recording the infrared spectrum of materials |  |  |  |  | 520 |  |  |  |
| RMS-NSW T1192 : November 2012 - Adhesion of sealant |  |  |  |  | 503  520 |  |  |  |
| RMS-NSW T1193 : November 2012 - Accelerated ageing of cured sealant |  |  |  |  | 503 |  |  |  |
| WTIA TN05(1994) - Flame cutting of steels  (WTIA now Weld Australia) |  |  |  |  |  | 630  670 |  |  |
| IIW MCS ISO IIW : 2013 - Manufacturer Certification Scheme for the Management of Quality in Welding  Interpretation and Implementation of ISO 3834 requirements  *Prepared and issued by the IAB-International Authorisation Board under the authority of the IIW-International Institute of Welding* |  |  |  |  |  | 630 |  |  |

175.11 DTP TECHNICAL BULLETINS

Table 175.111 lists the DTP Technical Bulletins either referenced in the Standard Sections or if not referenced, documents that may be used to obtain additional information.

**Table 175.111 – DTP Technical Bulletins**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **DTP Technical Bulletin** | **Standard Section** | | | | | | | |
| TB 40 : December 1995 - Pavement Investigation – Guide to Inspection and Testing | 160 |  |  |  |  |  |  |  |
| TB 42 : June 2000 - Curing of Concrete |  |  |  |  |  | 610 | 703 |  |
| TB 46 : November 2003 - Guide to Surveillance of Structural Steelwork | 160 |  |  |  |  | 611  630  670  671 | 708 |  |
| TB 47 : November 2003 - Guide to Surveillance of Precast Concrete | 160 |  |  |  |  | 620 | 704 |  |
| TB 48 : November 2003 - Guide to Surveillance of Protective Coatings of Structural Steelwork | 160 |  |  |  |  |  |  |  |

175.12 AUSTROADS GUIDES AND SPECIFICATION FRAMEWORK DOCUMENTS

Table 175.121 lists all Austroads Guides and Specification Framework Documents applicable to the Standard Section contained in this Specification and other relevant Austroads Guides for further information.

**Table 175.121 Austroads Guides and Specification Framework Documents**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Austroads Document** | **Standard Section** | | | | | | | |
| AGPT 4K Guide to Pavement Technology: Part 4K: Selection and Design of Sprayed Seals |  |  |  | 408 |  |  |  |  |
| AGPT/T190-14 - Specification Framework for Polymer Modified Binders |  |  |  | 417 |  |  |  |  |
| AGRS 06‑09 - Guide to Road Safety – Part 6: Road Safety Audit | 160 |  |  |  |  |  |  |  |

**175.13 OTHER REFERENCE DOCUMENTS**

Table 175.131 lists all other documents applicable to the Standard Specification Section contained in this Specification or required for further information.

**Table 175.131 Other Reference Documents**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Document** | **Standard Section** | | | | | | | |
| Australian Asphalt Pavement Association HSE Guide No. 8 Environmental management when spraying bituminous materials |  |  |  | 408 |  |  |  |  |
| AASHTO MASH 2:2016 - Manual for Assessing Safety Hardware |  |  |  |  |  |  | 711 |  |
| AASHTO LRFDLTS 1:2015 - Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals |  |  |  |  |  |  | 760 |  |
| ABS Catalogue No. 6427.0 - Producer Price Indexes, Table 17, Output of the Construction industries, subdivision and class index numbers - 3101 Road and Bridge Construction Victoria | 199 |  |  |  |  |  |  |  |
| Standards Australia  AS/ACIF S009 Installation requirements for customer cabling (Wiring Rules), and any other relevant requirements of the Australian Communications and Media Authority (ACMA) for connections to telecommunication carriers’ network. |  |  |  |  |  |  | 733  751 |  |
| Australian and New Zealand Environment and Conservation Council and New Zealand and the Australian and New Zealand Environment and Conservation Council (2000) - Australian and New Zealand Guidelines for Fresh and Marine Water Quality | 177 |  |  |  |  |  |  |  |
| Country Fire Authority (CFA) - Roadside Fire Management Guidelines (2001) |  |  |  |  |  |  | 752 |  |
| Department of Sustainability and Environment (June 2006) - Native Vegetation Revegetation planting standards – Guidelines for establishing native vegetation for net gain accounting. | 177 |  |  |  |  |  |  |  |
| Department of Environment and Primary Industries (September 2013) - Permitted clearing of native vegetation - Biodiversity assessment guidelines | 177 |  |  |  |  |  |  |  |
| Energy Safe Victoria (ESV) publications and safety alerts |  |  |  |  |  |  | 751 |  |
| Energy Safe Victoria (ESV)  The Blue Book 2022 - The Code of Practice on Electrical Safety for Work on or Near High Voltage Electrical Apparatus |  |  |  |  |  |  | 751 |  |
| Engineers Australia (2006) - Australian Runoff Quality  A guide to Water Sensitive Urban Design | 176  177 |  |  |  |  |  |  |  |
| EPA Victoria Publication No. 275 - Construction Techniques for Sediment Pollution Control (May 1991) | 176  177 |  |  |  |  |  |  |  |
| EPA Victoria Publication No. 347.1 - Bunding (October 2015) | 176  177 |  |  |  |  |  |  |  |
| EPA Victoria Publication No. IWRG701 - Industrial Waste Resource Guidelines -Sampling and analysis of waters, wastewaters, soils and wastes (June 2009) | 176  177 |  |  |  |  |  |  |  |
| EPA Publication 448 – Classifications of Wastes (May 2007). Replaced by IWRG621 - Soil hazard categorisation and management (2009) | 176  177 |  |  |  |  |  | 720 |  |
| EPA Victoria Publication No. 464.2 - Guidelines for Environmental Management - Use of Reclaimed Water (November 2003) | 176  177 |  |  |  |  |  |  |  |
| EPA Victoria Publication No. 480 - Environmental Guidelines for Major Construction Sites (February 1996) | 176  177 |  |  |  |  |  |  |  |

**Table 175.131 Other Reference Documents** … **continued**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Document** | **Standard Section** | | | | | | | |
| EPA Victoria Publication No. 669 - Groundwater Sampling Guidelines (April 2000) | 176  177 |  |  |  |  |  |  |  |
| EPA Victoria Publication No. 880 - Guideline for Environmental Management: Spraying Bituminous Materials (November 2002) | 161 |  |  |  |  |  |  |  |
| EPA Victoria Publication No. 960 - Doing it Right on Subdivisions - Temporary environmental protection measures for subdivision construction sites (September 2004) | 176  177 |  |  |  |  |  |  |  |
| Florabank Guidelines and Codes of Practice  <http://www.florabank.org.au/> |  |  |  |  |  |  | 720 |  |
| International Erosion Control Association (IECA Australasia) - Best Practice Erosion and Sediment Control (BPESC) document (2008) | 176 |  |  |  |  |  |  |  |
| Melbourne Water (2005) - Water Sensitive Urban Design Engineering Procedures: Stormwater | 176  177 |  |  |  |  |  |  |  |
| VicRoads Biodiversity Guidelines | 176  177 |  |  |  |  |  |  |  |
| VicRoads Contaminated Land (Planning, Construction and Maintenance) Guidelines (September 2013) | 176  177 |  |  |  |  |  |  |  |
| VicRoads Cultural Heritage Guidelines (2007) | 176  177 |  |  |  |  |  |  |  |
| VicRoads Integrated Water Management Guidelines June 2013 | 176  177 |  |  |  |  |  |  | 812 |
| VicRoads ITS Group: Standard Drawings and Specifications |  |  |  |  |  |  | 751 |  |
| VicRoads Road Design Guidelines  Standard Drawings for Roadworks  Final Drawing Presentation Guidelines (2013)  VicRoads Supplement to Austroads Guide to Road Design (series) |  |  |  |  |  |  | 708  711  720 |  |
| VicRoads Road Design Note 06‑02D (September 2016) – The use of wire rope safety barriers (WRSB) |  |  |  |  |  |  | 711 |  |
| VicRoads Road Design Note 06‑04K (October 2017) – Accepted safety barrier products |  |  |  |  |  |  | 708  711 |  |
| VicRoads Road Design Note 06‑09A (January 2018) – Accepted frangible post systems |  |  |  |  |  |  |  |  |
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| VicRoads Road Design Note 06‑11A (August 2015) – Accepted retro-reflective sheeting materials |  |  |  |  |  |  |  | 860 |
| VicRoads Road Management Plan (April 2014) |  |  |  |  |  |  | 752 |  |
| VicRoads Roads Structures Inspection Manual (RSIM) (June 2022) |  |  |  |  |  |  | 750 |  |
| VicRoads Roadside Handbook  See Road Management Act and codes on DTP website |  |  |  |  |  |  | 752 |  |
| VicRoads Safety Requirements for Traffic Devices Works on Traffic Signals and on Road Electrical and Communication Devices |  |  |  |  |  |  | 751 |  |
| VicRoads Supplement to AS 1742.3:2009 – Manual of uniform traffic control devices (October 2015) | 166 |  |  |  |  |  | 750 |  |

**Table 175.131 Other Reference Documents** … **continued**

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| **Document** | **Standard Section** | | | | | | | |
| VicRoads Sustainability and Climate Change Policy (2015‑2020) | 176  177 |  |  |  |  |  |  |  |
| VicRoads Technical Guidelines - Noise Guidelines - Construction and Maintenance Works 2007 | 176  177 |  |  |  |  |  |  |  |
| VicRoads Temporary Sedimentation Basin Design Tool V1.05 | 176  177 |  |  |  |  |  |  |  |
| VicRoads Traffic Engineering Manual Volume 2 (April 2014) | 160 |  |  |  |  |  | 708  709  711  714  721 |  |
| Victorian Stormwater Committee  Urban Stormwater: Best Practice Environmental Management Guidelines (October 1999), published by CSIRO Publishing | 177 |  |  |  |  |  |  |  |
| Water Services Association of Australia  WSA 05-2013 Version 3.1 – Conduit Inspection Reporting Code of Australia |  |  |  |  |  |  | 701 |  |