

Design standards for Department of Education Facilities

Summary of changes

Reasons for updating documents

The *Design Standards for Department of Education Facilities* documents have been updated to reflect feedback from various sources both internal and external to the Department of Education. The content of the revised *Design Standards for Department of Education Facilities* document, replaces content in the previous published documents. The introduction of new and amended requirements embedded within the new version of the documents is part of a continuous improvement process for the *Design Standards*.

Summary of changes

The revised *Design Standards* documents includes changes that may affect the responsibilities of service providers carrying out work on departmental facilities.

The table on the next page provides a summary of changes to the *Design Standards* documents.

Version	Date	Summary of change
4.0	02/01/2024	Version 4 documents supersede the following documents: <i>Part A: Education facilities design principles and generic functional brief Version 1.8</i> <i>Part B: Master planning, architectural and landscaping design principles Version 9.0</i> <i>Part C: Technical specifications and standards Version 9.0</i>
4.0	01/01/2024	Part A: Educational facilities design principles and generic functional brief Document rebranding only and hyperlink updates
4.0	02/01/2024	Part B: Master planning, architectural and landscaping design principles Document rebranding only and hyperlink updates
4.0	02/01/2024	Part C: Technical specifications and standards Section 1: Introduction 1.0 Introduction – Minor updating to terminology and feedback email address included. 1.2 Design life expectancies – deleted ICT references (refer to DNIPS) 1.4.1 Sustainability principles – deleted references to thermal mass and night pumping. 1.4.2 Alternative ESD initiative – requirement for DoE approval added.
4.0	02/01/2024	Part C: Technical specifications and standards Section 2: Building fabric 2.1 Roof – Clarified wording related to roof pitch, clarified use of roof safety systems. 2.1.1 Guttering and Downpipes – Guttering overflow requirements amended. Reference to QLD Dev Code added for rainwater harvesting. 2.1.2 Material Selection – Clarification of use of sandwich panels. 2.1.22 Gutters and Downpipes – Re-instated requirement to protect downpipes and discharge into grates. Design requirements added. 2.3.1 Floor insulation – clause deleted. 2.4 Windows – Night purging info deleted. 2.4.2 Security – key locks to window deleted. 2.4.4 Insect screens – Amendment to only include insect screens where briefed. 2.4.5.1 Glazing – Deleted reference to double glazing and single glazing not permitted. 2.5.1 External doors – Deleted latching requirement and mat well requirement. 2.5.2 Automatically operated doors – deleted airlock requirement. 2.5.3 Internal doors – Deleted contrasting colour requirement. NCC applies. 2.5.5 Roller Shutter doors – deleted width requirement. 2.5.7 Toilet Partitions – new clause added. 2.6 Door and window hardware – lever handles push/pull and safety decals reference deleted - NCC requirement. 2.7.1 Electronic access control systems – clause deleted as referenced in section 15. 2.8 Ceilings – Min height re-instated. Acoustic ceiling tile type reference added. 2.9 Stairs and ramps – Step dimensions re-instated. Handrail terminations and TGSI preference added for Blind/Visual persons. 2.9.1 Balustrades and bleachers – Clause renamed to Fall Prevention Barriers. Added barrier references to align with NCC. Top rail sitting deterrent added. Deleted bleachers references. 2.10 Sanitaryware – Hot water approval added. 2.10.1 Toilets – Stainless steel option added. 2.10.2 Urinals – Stainless steel option added. 2.10.3 Hand wash basins – Stainless steel option added. 2.10.5 Drinking troughs and fountains – wall mount option added. Bottle refill station added. 2.10.11 Cleaners sink – option for floor mounting added. 2.10.13 Floor waster gullies – Charging requirement added. Bucket trap requirement added to kitchens. 2.10.14 Tap fittings and fixtures – anti vandal requirement to external taps added. 2.11 Joinery – compact laminate min size added. 2.12 Bird proofing – extent clarified.

		<p>2.14 Timber – clause deleted.</p> <p>2.14 Way Finding and Signage – new clause added.</p>
4.0	02/01/2024	<p>Part C: Technical specifications and standards</p> <p>Section 3: Building finishes</p> <p>3.4 External timber finishes and decking – deletion of recycled timber.</p> <p>3.5 Walls and linings – requirement for 9 mm FC reinstated.</p> <p>3.6.1 Splashbacks – materials types amended.</p> <p>3.7.1 Carpets – carpet specification reinstated.</p> <p>3.7.2 Sheet Vinyl flooring – specification reinstated.</p> <p>3.7.4 Concrete floor sealers/epoxy floors – requirements for epoxy flooring added.</p> <p>3.7.8 Floor mats – clause deleted.</p>
4.0	02/01/2024	<p>Part C: Technical specifications and standards</p> <p>Section 4: Utilities and associated infrastructure</p> <p>4.6 Electricity – Maximum demand sizing amended.</p> <p>4.7 Telecommunications – conduit requirement clarified.</p>
4.0	02/01/2024	<p>Part C: Technical specifications and standards</p> <p>Section 5: Acoustic engineering</p> <p>Section 5 is subject to a further detailed review.</p> <p>References to Australian standard and AAC document added.</p> <p>5.1.1. Building services – reference to surface vibration removed, lift location restriction removed.</p> <p>5.2.1 Corridors – clause deleted</p> <p>5.3.1 Open plan teaching and learning spaces – clause deleted.</p>
4.0	02/01/2024	<p>Part C: Technical specifications and standards</p> <p>Section 6: Civil engineering</p> <p>6.1.1 Designing for storm events – overland flow paths requirement added.</p> <p>6.3 Concrete – clause deleted.</p>
4.0	02/01/2024	<p>Part C: Technical specifications and standards</p> <p>Section 7: Electrical services</p> <p>7.2 Design and infrastructure capacities – spare space in table 9 amended.</p> <p>7.4 Distribution switchboards – surge protection amended, RCD protection amended, labelling requirement added.</p> <p>7.6 Underground pits and conduits – pits in trafficable areas to be heavy duty</p> <p>7.8 Power outlets – mounting height amended to match DNIPS, snap off covers removed.</p> <p>7.9.1 Power Emergency stop – E-Stop specification included.</p> <p>7.9.2 Permanently connected equipment – flush/surface mounting requirement removed.</p> <p>7.9.3 Earthing systems – requirement for equipotential bonding added</p> <p>7.10 Lighting systems – Colour temperature 3000K deleted, daylight control devices deleted, occupancy sensors deleted.</p> <p>7.10.1 Design – Table 10 deleted – refer to AS1680 for lighting levels.</p> <p>7.10.2 Natural daylight – clause deleted.</p> <p>7.10.4 Lighting controls – Automatic lighting controls removed.</p> <p>7.10.5 Emergency lighting – self-contained type added, central monitoring removed.</p> <p>7.11 Ceiling fans – clause relocated from section 13. Minimum size added.</p>
4.0	02/01/2024	<p>Part C: Technical specifications and standards</p> <p>Section 8: Fire systems</p> <p>Section 8 is subject to a further detailed review.</p> <p>8.4 Fire hydrants – Requirement to only install as per NCC if fire station within 50 km.</p> <p>8.5 Fire hose reels – NCC exemption added, key locking clarified, security (reed switching) amended, labelling requirement amended.</p> <p>8.9 Fire detection systems – clause amended to refer to Security design requirements.</p> <p>8.10 Sound alert and intercom systems for emergency purposes – amended to align with NCC.</p>

4.0	02/01/2024	<p>Part C: Technical specifications and standards</p> <p>Section 9: Gas supply</p> <p>9.1 General – requirement to not install control panel within switchboards added. Connection to fire alarm system added.</p>
4.0	02/01/2024	<p>Part C: Technical specifications and standards</p> <p>Section 10: Hydraulic services</p> <p>10.1.5 - Taps, outlets and fixtures – waterflow velocity amended, Table 15 Plumbing fixtures re-instated from previous design standards as these fixtures are referenced in DoE room data sheets.</p> <p>10.2 Heated water – requirement for flushing procedure added.</p> <p>10.3 Sanitary plumbing and drainage – Dual pump requirement removed.</p> <p>10.3.1 Wastewater treatment systems – capacity requirements amended.</p> <p>10.3.2 Sanitary plumbing and drainage systems – requirement for exposed drainage pipework reinstated.</p> <p>10.3.3 Pipework and fittings – deleted air admittance vents.</p> <p>10.4 Trade waste plumbing and drainage – authority requirement added.</p> <p>10.4.1 Trade waste apparatus – flushing points and separator location added.</p>
4.0	02/01/2024	<p>Part C: Technical specifications and standards</p> <p>Section 11: Information and communication technology</p> <p>11.1 Terminology – Clause removed – refer to DNIPS.</p> <p>11.2 Structured cabling systems – Clause removed – refer to DNIPS.</p> <p>11.3 Pits and conduit systems – Clause removed – refer to DNIPS.</p> <p>11.4 Network centre – Clause removed – refer to DNIPS.</p> <p>11.5 Edge building cabinets – Clause removed – refer to DNIPS.</p> <p>11.6 Patch panels and leads – Clause removed – refer to DNIPS.</p> <p>11.7 Data outlets – Clause removed – refer to DNIPS.</p> <p>11.8 Wireless access points – Clause removed – refer to DNIPS.</p> <p>11.9 Telephone systems – Clause removed – refer to DNIPS.</p> <p>11.13 Hearing augmentation – integration with PA system removed.</p>
4.0	02/01/2024	<p>Part C: Technical specifications and standards</p> <p>Section 12: Landscape architecture</p> <p>12.1.1 Turfed areas – Mowing strip and edging requirement added.</p> <p>12.1.7 Plant selection – Restricted invasive plant list added.</p> <p>12.3.3 Fencing – Hard court fencing requirement amended. Mowing strip requirement added.</p> <p>12.4.4.4. Sandpits – hose cock requirement removed.</p>
4.0	02/01/2024	<p>Part C: Technical specifications and standards</p> <p>Section 13: Mechanical services</p> <p>Section 13 is subject to a further detailed review.</p> <p>Intro – reference to Plant selection framework removed.</p> <p>13.4 Heating – Gas heating removed.</p> <p>13.4.1 Passive heating of spaces – clause removed.</p> <p>13.5.1.1 Evaporative cooling – clause removed.</p> <p>13.6 Ceiling fans – clause moved to electrical services section.</p>
4.0	02/01/2024	<p>Part C: Technical specifications and standards</p> <p>Section 15: Security technology</p> <p>Note: The entirety of Section 15 has been amended and rewritten by DoE School Security. All clauses have been amended.</p>
4.0	02/01/2024	<p>Part C: Technical specifications and standards</p> <p>Section 16: Structural engineering</p> <p>16.8 Covered walkways – min. width requirement reinstated, max. height reinstated, min. height reinstated, prevention of swinging requirement reinstated, skateboard deterrent added.</p>

4.0	02/01/2024	<p>Part C: Technical specifications and standards</p> <p>Section 17: Vertical transportation</p> <p>Lift communication to PSG added. Pixel gateway cabling added, lift car minimum dimensions added, overland flow requirement added, vandal resistant requirement added, power loss requirement added, registration requirement added.</p>
4.1	11/03/2024	<p>Part C: Technical specifications and standards</p> <p>Section 3: Building finishes</p> <p>3.2 Structural Steel finishes – All exposed and external steel work to be hot dipped galvanized.</p> <p>3.7.1 Carpets – Carpet tile table amended.</p>
4.1	11/03/2024	<p>Part C: Technical specifications and standards</p> <p>Section 16: Structural engineering</p> <p>16.8 Covered Walkways – minimum width and height amendments.</p>