

INDEX

GETTING STARTED

Getting started webinar

NATSPEC conducts a monthly “Getting started with NATSPEC” webinar.

This 30 to 40 minute webinar will help users to get started with NATSPEC. We will cover logging into and using SPECbuilder Live, creating and downloading a specification draft and working with Microsoft Word.

NATSPEC QUICKstart

A short step-by-step guide to creating a project specification using the National Building Specification and SPECbuilder.

QUICKstart for NATSPEC Domestic

A short step-by-step guide to creating a domestic project specification using BUILDING Domestic and SPECbuilder.

SPECbuilder Guide

A more comprehensive guide to using SPECbuilder, NATSPEC’s online specification compilation software.

Specification Writing (Oct 23)

A paper on the importance of specifications, specification methods and the structure of technical information, using the AUS-SPEC and NATSPEC systems, specifying ESD and suggested standards for use by offices of different disciplines.

Specification Word Processing and Production

Tips and tricks on how to use SPECbuilder and some Microsoft Word features that help with the production of specifications.

GENERAL

GEN 001 Getting help (Oct 23)

Summarises the ways in which NATSPEC provides help to specification writers.

GEN 002 NATSPEC’s use of standards (Oct 2015)

Discusses the use of Australian and other standards in specification writing.

GEN 003 Multiple contracts and ‘work by others’ (Oct 2008)

Suggests ways in which NATSPEC can be used for projects procured using multiple contracts, also called packaged contracts or multiple prime contracts.

GEN 004 Shop drawings and samples (Apr 2015)

Addresses the need for shop drawings and samples, their management and the documentation of requirements in a construction contract.

GEN 005 Specifications (Oct 2012)

Discusses the roles, forms and importance of specifications.

GEN 006 Product specifying and substitution (Oct 2015)

Reviews generic and proprietary specification and NATSPEC’s procedure for substitution of specified products.

GEN 007 Making sure your specifications are up-to-date (Apr 2016)

Offers updating strategies relating to NATSPEC information.

GEN 008 Branded versus generic worksections (Oct 2008)

Defines both types of worksection and outlines their advantages.

INTRODUCTION

This is an index, with abstracts, of NATSPEC TECHnotes, TECHreports and TECHguides which are currently available.

TECHnotes are brief documents giving information on topics of interest to the design and construction industry.

TECHreports are in-depth reference documents on topics of interest to the design and construction industry.

TECHguides are in-depth reference documents on topics primarily for AUS-SPEC users.

CLASSIFICATION

Based on the classification system used for the Australian Institute of Architects (AIA) Environmental Design Guide, TECHnotes are grouped into three categories:

- General (GEN).
- Design (DES).
- Products (PRO).

AVAILABILITY

TECHnotes TECHreports and TECHguides are available as follows:

- All TECHnotes, TECHreports and TECHguides are available at time of issue and can be downloaded from NATSPEC – Technical Resources:
- www.natspec.com.au/resources and provided on Subscriber CDs in the Acrobat documents section.
- Selected TECHnotes are distributed with SPECnotes.
- Selected TECHnotes are provided to the Australian Institute of Architects with a page of related questions and answers for their Continuing Education (CE) program.

INDEX

GEN 009 Hold points and witness points (Apr 2019)

Defines hold points and witness points and explains their contractual implications in the context of both NATSPEC and AUS-SPEC worksections.

GEN 010 Mechanical commissioning strategies (Oct 2021)

Discusses alternative mechanical balancing and commissioning strategies which have a significant impact on the performance of mechanical services.

GEN 011 Specifying NCC requirements (Oct 2022)

Discusses specifying NCC compliance based on Deemed-to-Satisfy Provisions or by using a Performance Solution.

GEN 012 Door hardware scheduling (Apr 2011)

Outlines the two alternative approaches to specifying door hardware provided for in **SELECTIONS** in NATSPEC's *0455 Door hardware* worksection.

GEN 013 Specifying quality (Apr 2012)

Communicating the requirements for quality is the main technical function of the specification. This TECHnote outlines how NATSPEC is used to achieve quality in construction projects.

GEN 014 Submissions and testing (Oct 2018)

Addresses the specification of the various contractor's submissions and tests that may be required during the construction process.

GEN 015 Using the NATSPEC classification system to organise information (Apr 2016)

Discusses how the NATSPEC National classification system can be a useful means of organising construction information other than specification content.

GEN 016 Preliminaries and contract schedules (Oct 2018)

Aims to clarify items which are sometimes overlapping in the General conditions of contract and the specification's Preliminaries.

GEN 017 Using AUS-SPEC for asset management (Oct 2022)

Provides guidance on using the AUS-SPEC specification system for asset management.

GEN 018 Using AUS-SPEC for asset maintenance (Oct 2022)

Aims to describe the philosophy and components of the AUS-SPEC maintenance system for urban and open spaces, buildings and facilities, roadways, bridges and public utilities.

GEN 019 Using AUS-SPEC for contract documentation (Oct 2022)

Provides an overview on using AUS-SPEC for standard and period supply and service contract documentation for the life cycle management of assets.

GEN 020 Commissioning (Oct 2021)

Provides information on the process of whole-building commissioning and the role of a Commissioning Authority on a project, discussing how NATSPEC can be used for whole-building commissioning.

GEN 021 Scope of works clauses (Apr 2017)

Discusses the benefits and risks of Scope of Works clauses and suggests approaches to writing an effective clause.

GEN 022 Using AUS-SPEC for asset delivery (Oct 2022)

Describes the benefits of using AUS-SPEC in providing a documentation system for the delivery of assets, to meet essential services required by the community.

ALPHABETICAL LISTING

Accessible housing – DES 037

Air, moisture and condensation – DES 004

Airborne sound insulation – DES 032

Atmospheric corrosivity categories for ferrous products – DES 010

Branded versus generic worksections – GEN 008

Building commissioning – GEN 020

Bushfire protection – DES 018

CCA (copper chrome arsenate) treated timber – PRO 001

Ceramic tile and adhesive selection – PRO 004

Chiller schedules – DES 048

Corrosion protection of building services – DES 045

Design and specification guidance text – GEN 029

Digital archiving: Introduction – GEN 030

Digital archiving: Glossary
A glossary of digital archiving-related terms – GEN 031

Digital archiving: File naming and folder structure – GEN 032

Door hardware scheduling – GEN 012

Duct leakage and leakage testing – DES 033

Environmental rating schemes for buildings – DES 014

Fire behaviour of building materials and assemblies – DES 020

Fire hazard properties of insulation materials – DES 003

Formaldehyde - indoor air quality – PRO 005

Getting help – GEN 001

Glass types used in buildings – PRO 006

Grass seeding and turfing – DES 028

Guide to adapting asset delivery documentation to building and facility maintenance – TG 404

Guide to adapting asset delivery documentation to parks and open spaces maintenance – TG 402

Guide to adapting asset delivery documentation to

INDEX

GEN 023 Using AUS-SPEC for management of unsealed roads (Oct 2022)

Provides guidance on using the AUS-SPEC specification system for the design, construction and maintenance of unsealed roads.

GEN 024 Using NATSPEC Selections schedules (Oct 2021)

Summarises NATSPEC's use of schedules.

GEN 025 Sprayed preservation surfacing treatments (Oct 2022)

Assists road owners in determining the most appropriate sprayed preservation surfacing.

GEN 026 Otta seal – A different approach for road sealing (Oct 2022)

Aims to assist road owners to understand the feasibility of using Otta seal for low traffic volume unsealed gravel roads.

GEN 027 Maintenance of unsealed roads (Oct 2022)

Aims to assist local road authorities to maintain low volume unsealed gravel roads.

GEN 028 Specifying recycled materials for road works using AUS-SPEC (Oct 2022)

To assist local road authorities implement the use of recycled materials by including it in their policies, construction specifications and approval processes.

GEN 029 Design and specification guidance text in NATSPEC (Oct 2021)

Discusses how NATSPEC worksection Templates include guidance in the form of 'hidden' Guidance text to help specifiers select the most appropriate worksections and edit Template content to create a project specification.

GEN 030 Digital archiving: Introduction (Apr 2021)

Discusses requirements for successful long-term storage of, and access to, digital archival records.

GEN 031 Digital archiving: Glossary (Apr 2021)

A glossary of digital archiving-related terms.

GEN 032 Digital archiving: File naming and project folder structure (Apr 2021)

Discusses the benefits of well-considered digital file management and outlines the principles of file and project folder naming and folder structure.

GEN 033 Understanding two-part specifications (Apr 2022)

Provides guidance on using two-part specifications and reference specifications.

DESIGN**DES 001 Slip resistance performance (Apr 2018)**

Raises awareness of the design and documentation requirements for optimising slip resistance of pedestrian surface materials.

DES 002 Moisture content in timber floors (Apr 2022)

Addresses the ways in which the natural movement of timber floors can be accommodated.

road reserve maintenance – TG 406

Guide to parks and open space maintenance system and documentation – TG 401

Guide to the building and facility maintenance management system and documentation – TG 403

Guidelines for compiling documentation for contracts – TG 101

Guidelines for Principals - sample documents – TG 104

Guidelines for Principals - period supply and service contracts – TG 103

Guidelines for Principals - standard contracts – TG 102

Guide to road reserve maintenance system and documentation – TG 405

Hold points and witness points – GEN 009

Impact sound insulation – DES 027

Improvement and stabilisation of unsealed roads – DES 035

Information classification systems and the Australian construction industry – TR 02

Limit state design – DES 009

Living walls and roofs – DES 026

Maintenance of unsealed roads – GEN 027

Making sure your specifications are up-to-date – GEN 007

Management of Council gravel pits in country areas – A case study – TR 08

Mechanical commissioning strategies – GEN 010

Mechanical design and install HVAC checklist – DES 025

Mechanical services pipe and vessel insulation – DES 023

Microbial control – DES 022

Mineral wool – PRO 002

Moisture content in timber floors – DES 002

Multiple contracts and 'work by others' – GEN 003

Native grass lawns – DES 029

INDEX

DES 003 Fire hazard properties of insulation and pliable membranes (Oct 2023)

Addresses the fire hazard properties of insulation materials as dealt with in both the BCA and in NATSPEC.

DES 004 Air, moisture and condensation (Oct 2022)

Outlines the factors that affect the selection and detailing of vapour barriers in buildings.

DES 005 Preventing condensation on ducts and air handling plant (Oct 2022)

Addresses the use of insulation to prevent condensation on ducts and air handling plant.

DES 006 Specifying concrete (Oct 2018)

Outlines the factors affecting the performance of concrete and how to specify it.

DES 007 Static control floors (Apr 2017)

Discusses electrostatic charges and the basic types of static control floors.

DES 008 Preparation of concrete substrates (Apr 2015)

Discusses preparation of concrete substrates for secondary finishes.

DES 009 Limit state design (Apr 2011)

Introduces this method for designing and evaluating structures, and for unifying structural codes and standards.

DES 010 Atmospheric corrosivity categories (Oct 2022)

Recommends a method for specifying atmospheric corrosion protection systems or products by referring to standards and the Corrosion Mapping System.

DES 011 Rainwater harvesting (Apr 2022)

Suggests ways in which a NATSPEC based specification can be used to specify a rainwater harvesting system.

DES 012 Using NATSPEC to specify BMS and automatic controls (Apr 2017)

Suggests ways to use NATSPEC worksections to specify Building Management Systems (BMS), building IT and automatic controls.

DES 013 NCC Energy efficiency protocol and software for housing (Oct 2022)

Discusses rating software and tools to demonstrate compliance with the NCC.

DES 014 Environmental rating schemes for buildings (Oct 2022)

Outlines the national voluntary energy efficiency schemes.

DES 015 NCC - BCA Volume One: Energy efficiency provisions (Oct 2022)

Outlines NCC energy efficiency provisions for Class 2-9 buildings.

DES 016 NCC - BCA Volume Two: Energy efficiency provisions (Oct 2022)

Outlines BCA energy efficiency provisions for Class 1 and Class 10a buildings.

DES 017 Selection of sealants (Oct 2015)

Summarises sealant types and their use for different applications.

NATSPEC for refurbishment, retrofitting and adaptive re-use – TR 04

NATSPEC's use of standards – GEN 002

Need for subsurface drainage on local roads – DES 036

NCC - BCA Volume One: Energy efficiency provisions – DES 015

NCC - BCA Volume Two: Energy efficiency provisions – DES 016

NCC Energy efficiency protocol and software for housing – DES 013

Otta seal – A different approach for road sealing – GEN 026

Pavement stabilisation for unsealed roads – DES 034

Pipe support spacing – DES 019

Preliminaries and contract schedules – GEN 016

Preparation of concrete substrates – DES 008

Preventing condensation on ducts and air handling plant – DES 005

Process and procedures for development and subdivision of land not in NSW – TG 201

Process and procedures for development and subdivision of land in NSW – TG 201 NSW

Procurement: Past and present – TR 06

Product specifying and substitution – GEN 006

Providing access for maintenance – TR 07

Rainwater harvesting – DES 011

Refrigerants – PRO 007

Scope of works clauses – GEN 021

Selection and design of Building IT systems – TR 05

Selection of sealants – DES 017

Seismic design actions on non-structural components – DES 030

Shop drawings and samples – GEN 004

Site electricity supply – DES 021

Slip resistance performance – DES 001

Specifications – GEN 005

Specifying air filters – DES 047

INDEX

DES 018 Bushfire protection (Oct 2022)

Summarises the factors influencing bushfires and the planning, construction and maintenance requirements for bushfire protection.

DES 019 Pipe support spacing (Apr 2023)

Tabulates the pipe support spacings nominated by several Australian standards. It covers pipes of various materials and diameters, and carrying a range of liquids and gases.

DES 020 Fire behaviour of building materials and assemblies (Oct 2022)

Provides guidance on the BCA's classification of the fire behaviour of building materials and assemblies and where to specify in NATSPEC.

DES 021 Site electricity supply (Apr 2013)

Highlights design and construction issues for consideration and suggests suitable NATSPEC worksections for the documentation of electricity supplies.

DES 022 Microbial control (Oct 2022)

Discusses the requirement for microbial control in building services and how this is dealt with in NATSPEC.

DES 023 Mechanical services pipe and vessel insulation (Apr 2023)

Addresses the selection of appropriate levels of insulation for piping, vessels and heat exchangers with curved surfaces.

DES 024 Water sensitive urban design (WSUD) (Apr 2019)

Outlines the objectives and application of water sensitive urban design principles and suggests where they can be implemented in AUS-SPEC.

DES 025 Mechanical design and install HVAC checklist (Apr 2011)

Provides a checklist intended to assist the architect or building designer in the assessment of proposals for the design and installation of HVAC systems.

DES 026 Living walls and roofs (Apr 2022)

Highlights design and construction issues and suggests suitable NATSPEC worksections for the documentation of living walls and roofs.

DES 027 Impact sound insulation (Apr 2023)

Addresses the use of impact sound insulation in floor systems.

DES 028 Grass seeding and turfing (Oct 2012)

Provides guidance on the selection of grass seed mixes and turf species for general landscaping.

DES 029 Native grass lawns (Apr 2013)

Discusses several of the native grass species suitable for lawn applications.

DES 030 Seismic design actions on non-structural components (Apr 2014)

Discusses the requirements of AS 1170.4 for seismic restraint to the non-structural components of a building.

DES 031 Specifying R-Values (Oct 2022)

Describes the various meanings of R-Value and the ways in which designers and specifiers can document compliance with statutory requirements.

Specifying concrete –
DES 006

Specifying design and construct for mechanical services – TR 03

Specifying ESD – TR 01

Specifying NCC requirements – GEN 011

Specifying quality –
GEN 013

Specifying recycled materials for roadworks using AUS-SPEC –
GEN 028

Specifying R-Values –
DES 031

Sprayed preservation surfacing treatments –
GEN 025

Static control floors –
DES 007

Submissions and testing –
GEN 014

Understanding two-part specifications – GEN 033

Universal design:
Acoustics – DES 046

Universal design:
Introduction – DES 038

Universal design: Lighting -
DES 042

Universal design: Slip resistance –
DES 039

Universal design: Trip avoidance –
DES 040

Universal design:
Wayfinding - DES 043

Using AUS-SPEC for asset delivery –
GEN 022

Using AUS-SPEC for asset maintenance –
GEN 018

Using AUS-SPEC for asset management –
GEN 017

Using AUS-SPEC for contract documentation –
GEN 019

Using AUS-SPEC for management of unsealed roads –
GEN 023

Using design and install services worksections –
DES 041

Using NATSPEC Selections schedules –
GEN 024

Using NATSPEC to specify BMS, and automatic controls –
DES 012

Using the NATSPEC classification system to organise information –
GEN 015

Warranties for steel protective paint coatings –
PRO 003

INDEX**DES 032 Airborne sound insulation (Oct 2022)**

Addresses the use of insulation to reduce the transmission of airborne sound between habitable rooms.

Water sensitive urban design (WSUD) –
DES 024

DES 033 Duct leakage and leakage testing (Oct 2014)

Discusses testing of duct systems to AS 4254.2 to reduce energy consumption and improve the quality of the service delivered.

DES 034 Pavement stabilisation for unsealed roads (Oct 2022)

Discusses factors affecting stabilisation of unsealed roads and provides basic procedure for binder selections.

DES 035 Improvement and stabilisation of unsealed roads (Oct 2022)

Describes how existing unsealed roads can be economically and effectively preserved.

DES 036 Need for subsurface drainage on local roads (Oct 2022)

Assists road owners in identifying the need for subsurface drainage on local roads.

DES 037 Accessible housing (Oct 2022)

Discusses accessible housing. This refers to housing that includes features which enable use by people either with a disability or transitioning through their life stages.

DES 038 Universal design: Introduction (Apr 2022)

Introduces universal design which is the design of buildings, products or environments to make them accessible and usable to all people of different ages and abilities over time, without the need for adaptation or specialised design.

DES 039 Universal design: Slip resistance (Oct 2022)

Discusses slip resistance as part of a universal design approach. It looks at available standards, universal design guidelines, the design process, and other considerations to reduce slip hazards in the environment.

DES 040 Universal design: Trip avoidance (Oct 2022)

Discusses trip avoidance as part of a universal design approach. It looks at available standards, universal design guidelines, the design process, and other considerations to reduce trip hazards in the environment.

DES 041 Using design and install services worksections (Oct 2022)

Describes the use of design and install worksections for mechanical, electrical, hydraulic and fire services, and their limitations. These worksections are intended for use by architects and other designers without input from specialist services consultants, with the services design completed by the contractor using NCC Deemed-to-Satisfy requirements.

DES 042 Universal design: Lighting (Oct 2022)

Discusses lighting as part of a universal design approach. It looks at available standards, universal design guidelines, the design process, and other considerations for lighting design.

DES 043 Universal design: Wayfinding (Oct 2022)

Discusses wayfinding as part of a universal design approach. It looks at available standards, universal design guidelines, the design process, and other considerations for wayfinding design.

INDEX**DES 044 Weatherproofing of external walls (Oct 2022)**

Discusses design considerations and specification of weatherproofing of external walling to meet Performance Requirements of the National Construction Code.

DES 045 Corrosion protection of building services (Oct 2021)

Discusses causes of corrosion of building services components and approaches to determining appropriate corrosion protection.

DES 046 Universal design: Acoustics (Oct 2022)

Discusses acoustics as part of a universal design approach. It looks at available standards, universal design guidelines, the design process, and other considerations for acoustic design.

DES 047 Specifying air filters (Apr 2022)

Discusses options for specifying particulate air filters for air conditioning and ventilation.

DES 048 Chiller schedules (Oct 2022)

Provides guidance on completing chiller schedules, including adapting and replacing information to accommodate chiller options.

PRODUCTS**PRO 001 CCA (copper chrome arsenate) treated timber (Apr 2022)**

Discusses the issues and alternatives to this form of timber treatment.

PRO 002 Mineral wool (Oct 2023)

Discusses the manufacture, properties and safety issues related to the use of mineral wool.

PRO 003 Warranties for steel protective paint coatings (Oct 2015)

Discusses the requirements for and availability of warranties for steel protective coatings.

PRO 004 Ceramic tile and adhesive selection (Oct 2014)

Provides guidance to specifiers on the selection of ceramic tiling and adhesives used for fixing the tiles.

PRO 005 Formaldehyde - indoor air quality (Oct 2023)

Discusses the effects and control of formaldehyde emissions within a building and how NATSPEC can be used to meet the mandatory requirements for formaldehyde emissions.

PRO 006 Glass types used in buildings (Oct 2022)

Provides guidance on the types of glass used in buildings, their properties and the manufacturing processes involved.

PRO 007 Refrigerants (Oct 2023)

Discusses the background and implications of Australia's phase-out of chlorofluorocarbon (CFC) and hydrochlorofluorocarbon (HCFC) refrigerants and the phase-down of hydrofluorocarbon (HFC) refrigerants, in conformance with international protocols and market forces.

TECHREPORTS**TR 01 Specifying ESD (Oct 2023)**

Outlines how a NATSPEC-based specification can be used to give effect to ESD principles and opportunities in the building context.

TR 02 Information classification systems and the Australian construction industry (Oct 2023)

Provides an overview of the use of classification systems for organising construction information for various purposes.

INDEX**TR 03 Specifying design and construct for mechanical services (Oct 2022)**

Outlines how NATSPEC may be used to prepare Design and Construct mechanical specifications.

TR 04 NATSPEC for refurbishment, retrofitting and adaptive re-use (Oct 2023)

Outlines how a NATSPEC based specification may be used for refurbishment and adaptive re-use projects.

TR 05 Selection and design of Building IT systems (Oct 2022)

Provides guidance on how the component parts can be configured and how a satisfactory overall IT installation can be achieved using NATSPEC worksections.

TR 06 Procurement: Past and present (Apr 2023)

Outlines the major procurement systems used in the construction industry today, and how procurement has evolved from past methods.

TR 07 Providing access for maintenance (Oct 2023)

Outlines the basic principles of providing access for maintenance, current requirements in Australian legislation and standards, and good practice.

TR 08 Management of Council gravel pits in country areas – A case study (Oct 2023)

Outlines how Councils who operate licensed gravel pits can better comply with their duty of care and be compliant with State Government legal frameworks.

TECHGUIDES**TG 101 Guidelines for compiling documentation for contracts (Oct 2023)**

This TECHguide describes the procedures for developing and compiling documentation using the AUS-SPEC system for contracts.

TG 102 Guidelines for Principals - standard contracts (Oct 2023)

This TECHguide describes the procedures for the production and management of comprehensive documentation for standard contracts. It addresses the contracting process, compilation of contract documents and tender process.

TG 103 Guidelines for Principals - period supply and service contracts (Oct 2023)

This TECHguide describes the documentation procedures for period supply and service contracts for the supply of materials and services required for local government. Read this TECHguide in conjunction with TG 101 *Guidelines for compiling documentation for contracts* and TG 102 *Guidelines for Principals – Standard contracts*.

TG 104 Guidelines for Principals – sample documents (Oct 2023)

This TECHguide includes three sample documents to demonstrate tendering and contract documentation for different types of projects using the AUS-SPEC Local Government specification system. The sample documents included are for supply, delivery and placement of sprayed bituminous surfacing, construction of roads, and external surveillance services.

TG 201 Process and procedures for development and subdivision of land not in NSW (Oct 2023)

This TECHguide is applicable to the design requirements and planning approval process for development and subdivision of land within a non-NSW Council area.

INDEX**TG 201 NSW Process and procedures for development and subdivision of land in NSW (Oct 2023)**

This TECHguide is applicable to the design requirements and planning approval process for development and subdivision of land within a NSW Council area.

TG 401 Guide to parks and open space maintenance system and documentation (Oct 2023)

This TECHguide sets out the procedure for the compilation of documentation for the maintenance of parks and open spaces, including recreation areas. It addresses the philosophy behind the creation and development of the AUS-SPEC maintenance system based on quality, competitive principles and programmed maintenance. It reflects the execution of competitive maintenance contracts, either by a Principal's own business units or private contractors.

TG 402 Guide to adapting asset delivery documentation to parks and recreation areas maintenance (Oct 2019)

This TECHguide sets out a checklist of contractual issues to consider and address within the Council's adopted General conditions of contract. Read in conjunction with TG 401 *Guide to parks and open space maintenance system and documentation*.

TG 403 Guide to the building and facility maintenance management system and documentation (Oct 2023)

This TECHguide sets out the procedure for the compilation of documentation for the maintenance of buildings and facilities. It addresses the philosophy behind the creation and development of the AUS-SPEC maintenance system based on quality, competitive principles and programmed maintenance. It reflects the execution of competitive maintenance contracts, either by a Principal's own business units or private contractors.

TG 404 Guide to adapting asset delivery documentation to building and facility maintenance (Oct 2019)

This TECHguide sets out a checklist of contractual issues to consider and address within the Council's adopted General conditions of contract. Read in conjunction with TG 403 *Guide to the building and facility maintenance system and documentation*.

TG 405 Guide to road reserve maintenance system and documentation (Oct 2023)

This TECHguide sets out the procedure for the compilation of documentation for the maintenance of road reserves. It addresses the philosophy behind the creation and development of the AUS-SPEC maintenance system based on quality, competitive pricing and programmed maintenance. It reflects the execution by competitive maintenance contracts, either by a Principal's own business units or private contractors.

TG 406 Guide to adapting asset delivery documentation to road reserve maintenance (Oct 2019)

This TECHguide provides a supplementary set of issues as a checklist to enable each Council to consider their individual issues, in light of the provisions within the Council's adopted General Conditions of contract. Read in conjunction with TG 405 *Guide to road reserve maintenance system and documentation*.

INDEX**BIM DOCUMENTS****NATSPEC National BIM Guide (Oct 2022)**

The Guide's core document is an information only (non-normative) reference document that provides an overview of BIM primarily directed at stakeholders in strategic and executive management roles or those new to the subject. It includes an introduction to AS ISO 19650 concepts and principles and high-level guidance about implementation considerations.

NATSPEC National BIM Guide Appendix A – Glossary

Definitions of terms and abbreviations used in the Guide.

NATSPEC National BIM Guide Appendix B – AS ISO 19650**Resources Descriptions**

Brief descriptions of documents and resources that support the information management processes described in AS ISO 19650.

NATSPEC National BIM Guide Appendix C- BIM Use & Enabler descriptions

Descriptions of BIM uses and enablers including their potential value, scope considerations and useful references that can be used as a resource when selecting appropriate BIM uses on a project.

NATSPEC National BIM Guide Appendix D – Defining Information Requirements

Guidance and resources for using the NATSPEC AIR, PIR and EIR Templates to document information requirements.

NATSPEC Project BIM Brief Template (Oct 2022)

A Project BIM Brief documents the specific requirements of a project. It can be developed using the *NATSPEC Project BIM Brief Template*. In addition to identifying the project and members of the project team, it provides places to specify what BIM is to be used for on the project. The Template serves a similar function to the PIR and EIR Templates for simpler projects.

Asset Information Requirements (AIR) Template

An editable document for specifying the asset information required by the client/appointing party for decision making during the operational phase of a built asset. AS ISO 19650 aligned.

Project Information Requirements (PIR) Template

An editable document for specifying the information required by the client/appointing party for decision making during the delivery phase of a built asset. AS ISO 19650 aligned.

Exchange Information Requirements (EIR) Template

An editable document for specifying appointment-based information requirements derived from the AIR and PIR. AS ISO 19650 aligned.

BIM Management Plan Templates (Mar 2016)

The Templates are editable Word files that can be used to create a BIM Management Plan (BMP).

NATSPEC BIM Paper 001: BIM and LOD (Nov 2013)

This BIM Paper provides an introduction to the concept of Level of Development (LOD) and its value in the management of the Building Information Modelling (BIM) process.

It includes recommendations about implementing LOD on projects and guidance on developing and interpreting LOD Tables.

INDEX**NATSPEC BIM Paper 002: Getting Started with BIM (Jun 2014)**

This BIM Paper is for those who have been seriously considering implementing BIM within their organisation and are now asking 'What do we do next'? It covers the preparation and planning required by architectural or engineering personnel who want to make implementation happen. It provides generic guidance on the topic and discusses some of the decisions to be made and issues which need to be considered.

NATSPEC BIM Scheduling Guidelines (Dec 2010)

These Guidelines summarise the findings of the 2010 NATSPEC BIM Scheduling project.

Part A sets out working principles for allocating properties to objects in digital models for scheduling purposes. The aim of these principles is to facilitate a consistent approach to scheduling and thereby improve information exchange in the construction industry.

Part B outlines general concepts associated with schedules that form the basis of the working principles set out in Part A.

OBOS - Open BIM Object Standard (Oct 2018)

NATSPEC worked with Masterspec (New Zealand) to develop a BIM object standard. The result is the Open BIM object standard (OBOS) intended for use by all construction professionals – from designers and specifiers to manufacturers and BIM content developers – to assist in the creation of standardised generic, manufacturer and project-specific BIM objects.

With the aim of harmonising BIM practices internationally, an extensive review of existing global guides, standards and protocols relating to the creation of BIM content was completed as part of the research and preparation work.

The OBOS complements and aligns with the NATSPEC BIM Properties Generator - both are mutually supportive tools. The former sets out the rules for applying properties to objects, specifies their format and provides requirements for the graphical modelling and functionality of a BIM object. The latter is an online compendium of properties conforming to the standard.