

NATSPEC is owned by the following organisations:

- Air Conditioning and Mechanical Contractors' Association of Australia
- Australian Elevator Association
- Australian Institute of Architects
- Australian Institute of Building
- Australian Institute of Building Surveyors
- Australian Institute of Quantity Surveyors
- Chief Minister, Treasury and Economic Development Directorate (ACT)
- Construction Industry Engineering Services Group
- Consult Australia
- Department of Finance (Federal)
- Department of Finance (WA)
- Department of Housing and Public Works (QLD)
- Department of Infrastructure (NT)
- Department of Planning, Transport and Infrastructure (SA)
- Department of Treasury and Finance (TAS)
- Department of Treasury and Finance (VIC)
- Engineers Australia
- Master Builders Australia
- Department of Finance, Services and Innovation (NSW)
- Standards Australia

NATSPEC is a national not-for-profit organisation that is owned by the design, build, construct, and property industry through professional associations and government property groups. NATSPEC's objective is to improve the construction quality and productivity of the built environment through leadership of information.

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## Building Quality

Quality cannot be managed if it is not defined. In construction, since there are many different parties who work on the same project, the level of quality must be clearly specified in order to achieve it. Poor documentation and low quality is compounded by re-work, variations, excess meetings, and time delays.

Construction specifications are the most reliable way to meet technical standards. An up-to-date and comprehensive specification to support your contract and drawings is required to deliver a project with reduced risk of litigation.

*"The volume of legislation has risen from 18,000 pages in the 70's to over 55,000 pages in the 90's."*

Gary Banks, Productivity Commission 2005

Maintaining up-to-date specifications is time-consuming. NATSPEC, which is owned by the design, build, construct, and property industry and government bodies, provides an economy of scale for the industry, by the industry.

Through the leadership of information and a well-resourced team that tracks and incorporates the latest changes to regulation, standards, and industry information, NATSPEC always keeps up-to-date with the current building standards to make it easier for you to define the level of quality needed for your projects.



Bryce Mortlock

*"The level of quality that can be policed in the construction stage cannot be higher than that which is spelt out in the contract. If the building contract documents permit a sow's ear then all the quality control in the world cannot demand a silk purse. True quality control starts with the documentation for a project and in the project specification in particular."*

Bryce Mortlock  
NATSPEC Founder  
AIA Gold Medalist

*"...Hence the courts and others often look to the specification in particular to determine the message conveyed by the contract documents to those who work with them."*

AIA Practice Note AN04.101 April 08

# Are you at risk?

Is your specification putting you, your client, and your project at risk?

Consider that:

- Your specification needs to be up-to-date with the latest Australian regulations and standards. NATSPEC has a team of 20 tracking around 1000 documents relating to the building sector alone. Furthermore, as a not-for-profit organisation owned by government and industry, NATSPEC receives regular feedback and reviews from government and industry organisations.
- Your specification is your quality control for construction. Issues such as temporary maskings for glazing are clearly covered in NATSPEC and have proven to protect architects and clients from litigation. Many schedules claiming to be specifications are inadequate in protecting your client; you will need to pay extra for corrective work. There is no "industry standard" and there is no obligation to construct to Australian Standards - unless it is specified in the National Construction Code (NCC) or your construction specification.
- NATSPEC is clear and unambiguous. NATSPEC has been developed over the past 40 years by the industry, for the industry. The classification system and regular industry feedback and updating minimises risk. NATSPEC is used by over 1600 companies.
- Proprietary specifications need to be suitable for Australian conditions; attention to detail is paramount, and there are no "equivalent" products. Australia has very specific climatic and ecological conditions, and pests such as insects, and these can affect your products.
- Recent adverse issues with electrical cable, combustible cladding used appropriately, products with asbestos, and glass failures, as well as more frequent extreme weather events resulting from climate change, necessitate thorough construction specifications. By documenting a required standard in your specification, you are covered and, at no additional cost to you or your client, you may reject non-compliant materials or seek appropriate rectification work.



Richard Choy  
CEO, NATSPEC



Megan Motto  
CEO, Consult Australia

*"NATSPEC fulfils a critical role in the building and construction industry in the provision and dissemination of information, which not only assists those in the supply chain to conduct their day to day activities, but also assists in the standardisation of practices across the industry to produce better building quality outcomes, as well as outcomes in value for money delivery, health and safety and innovation. Consult Australia takes great pride in our founding membership of NATSPEC, and highly recommends NATSPEC documents to our industry."*



Richard Choy  
NATSPEC CEO

## Raising awareness of product conformity

NATIONAL  
CONSTRUCTION  
PRODUCT  
REGISTER



[www.ncpr.com.au](http://www.ncpr.com.au)

Also accessible through [www.natspec.com.au](http://www.natspec.com.au)

# Quality does not cost

- In Australia, the builder need not conform to Australian Standards unless they are cited in regulation or within the construction specification.
- A crooked wall costs more to construct than a straight one. If you don't specify the quality of construction and finish, the client will pay for any rectification work, variation, time extension, and increased maintenance.
- Clearly defined quality requirements reduce construction cost blowouts that result from re-work, redesign, variations, and disputes. Poor documentation adds an estimated 10-15% to project costs.
- Good specifications increase construction productivity due to clarity of instruction. This minimises the need for repairs and replacement, and reduces the construction period due to fewer RFIs (request for information).
- A construction specification reduces the risk of lengthy and expensive litigation as it is a clear record of what is needed, and the level of quality required.

# Quality documentation

NATSPEC references and monitors updates to relevant Australian and International Standards, including those cited within the Building Code of Australia (BCA). Where standards define alternative levels of service, NATSPEC provides prompts to be completed by the specifier. It is essential that the specification defines the requirement, as blanket references to standards may not achieve the desired quality.

The NATSPEC worksection Templates include the construction processes required for each particular item of work, and also define clear industry standard acceptance criteria in the form of tolerances, performance requirements, and testing requirements. All can be modified if necessary to suit the defined quality levels agreed for each individual project and its components.

- Each month, NATSPEC publishes standards revising NATSPEC in the Technical Resources area of the website [www.natspec.com.au](http://www.natspec.com.au).
- Every three months, NATSPEC lists the most important of these standards in SPECnotes.
- Every six months, in April and October, NATSPEC issues updated specification material to its subscribers via SPECbuilder Live.



Jennifer Cunich  
CEO, Australian Institute  
of Architects

*"To be a registered Architect you are required to be proficient in documentation.*

*The NATSPEC system, owned by the Australia Institute of Architects (AIA), simplifies the process for all. It protects the interests of good architects and their clients."*



Grant Warner  
CEO, Australian Institute  
of Quantity Surveyors

*"Quality documentation is one of the most important aspects for ensuring a project finishes on time, on budget, and meets the client's expectations of quality. Without the guidance of NATSPEC and the inclusion of quality project specifications, there is an increased risk that projects will not achieve positive outcomes in terms of cost, quality, effectiveness, and timeliness of construction."*

# NATSPEC online resources



Denita Wawn  
CEO, Master Builders  
Australia

*"The quality and productivity of the building and construction industry is enhanced by the work of the National Building Specification (NATSPEC). For more than 40 years NATSPEC has provided professional and specialty packages for all sectors of the industry and all building structures. NATSPEC is highly regarded by industry stakeholders in both the private and public sectors and is strongly supported by Master Builders Australia. "*

## **NATSOURCE**

NATSource is the definitive reference document for standards and reference documents relating to the building industry. The short descriptions of the publications allow you to determine their relevance to your projects. This PDF document is searchable to provide easy research, and also advises designers where they may purchase the documents. It includes all NATSPEC cited standards and their abstracts. It is provided to subscribers as part of their package, or available for individual purchase.

## **TECHNOTES**

TECHnotes complement NATSPEC worksection Guidance text and cover a wide range of topics of interest to specification writers, in one or two pages. They are general in nature and provide guidance for consideration, that either relates to several worksections, or does not fit into a generic worksection. Numbering and classification of TECHnotes is based on the categories used for the AIA Environment Design Guide: *GEN - General issues and miscellaneous*, *DES - Design strategies*, and *PRO - Products and materials*.

NATSPEC worksections identify any relevant TECHnotes in Guidance text. A TECHnote will be reissued if it has been significantly revised, and the footer will reflect the date of reissue. The TECHnote index lists all of NATSPEC's TECHnotes and can be found on the website.

## **TECHREPORTS**

TECHreports are detailed reference documents providing a deeper understanding of particular construction related topics than is offered by the brief NATSPEC TECHnotes. TECHreports are cited within the NATSPEC worksections where appropriate, but may also be read for general interest. TECHnotes are researched and written by the NATSPEC editors, and externally reviewed. Currency is maintained by the NATSPEC editorial team and TECHreports are updated twice a year. Without funding from the government, NATSPEC independently invests in industry research to produce useful resources and gather information for the industry. This knowledge is shared with the industry, aiding development and increasing productivity.

## **BUILDING INFORMATION MODELLING**

NATSPEC believes that digital information, including 3-D Modelling and Building Information Modelling (BIM), will provide improved methods of design, construction, and communication for the industry. Furthermore, NATSPEC supports open global systems. This will result in improved efficiency and quality. NATSPEC's primary focus is on the "i" (information) in BIM and how it is linked to digital models. NATSPEC's areas of interest include how specification information can be best integrated within BIM, and the development of BIM guidelines and standards beneficial to the construction industry.

## **NATSPEC PRODUCT PARTNER BRANDED WORKSECTIONS**

Branded worksections are technical worksections developed by NATSPEC in conjunction with a manufacturer known as a NATSPEC Product Partner. Each branded worksection is based on the associated NATSPEC generic worksection, and shares the same classification number. It is a Microsoft Word document Template which follows the NATSPEC style and can be customised. See the NATSPEC website for the full list of Product Partners with branded worksections.

**These resources can be found on the  
NATSPEC website: [www.natspec.com.au](http://www.natspec.com.au)**

# Economy of scale

Within construction, complying with government regulations at the national level means complying with the NCC, together with various national standards, as well as completing taxation returns and GST reporting. At the State and Territory level, this involves state variations to the NCC, state planning legislation, business registration and licensing, insurances, work health and safety, and training obligations. At the local government level, this means council-specific development requirements and application and inspection processes for construction. Local governments have previously been charged with fostering national inconsistency due to their focus on meeting local needs. However, this inconsistency can easily be avoided through using AUS-SPEC, NATSPEC's specification system for local government, which has been specifically designed as the national specification in order to support contract and asset management with consistency nationwide.

Harmonisation has been proven to provide various benefits such as lower production costs and economies of scale, which the Commonwealth government has recognised. Through harmonisation, a more efficient working process and better productivity can be achieved.

NATSPEC supports national harmonisation, and by keeping the national construction specification up-to-date with the latest standards, aims to assist this goal.

## A COMMON CLASSIFICATION SYSTEM

Worksections need to be classified and sequenced in a logical order, with respect to the common local construction industry sequence. Locations need to be allocated for specification material provided by the various specialist designers and consultants.

The National Classification System provides locations for specification material produced by the architect and landscape architect, interior designer, civil and structural engineer, and mechanical, hydraulic, and electrical engineers.

By adopting a common classification system, working on various projects will become easier to manage. This classification system is freely available at [www.natspec.com.au](http://www.natspec.com.au).



*"The Civil Contractors Federation (CCF) supports harmonisation and mutual recognition in principle, as we support a competitive market where all parties can compete equally."*



Dermot Small  
Director, Simpson Kotzman

*"Having an up-to-date, industry-wide technical reference as the basis of our specifications creates efficiencies for us in this aspect of our project design work. The direct and economic style in which NATSPEC is written gives our specification writers a more powerful tool to define scope and intent more clearly for contractors."*





Sumit Oberoi  
National Director,  
Air Conditioning and  
Mechanical Contractors'  
Association

*"As one of the earlier members of NATSPEC, the Air Conditioning and Mechanical Contractors' Association have long recognised and supported NATSPEC's vision to improve the construction quality and productivity of the built environment, through leadership of information. Whether you are a home builder, local government, commercial contractor, or consultant, the range of products, training, and other resources available through this not-for-profit organisation is extensive and up to date. We congratulate NATSPEC the organisation, and all of its staff and industry supporters for its work and ongoing success."*

# Why NATSPEC?

NATSPEC is the only regularly updated and comprehensive national building specification system endorsed by government and professional bodies. NATSPEC, is for all building structures, with specialist packages for architects, interior designers, landscape architects, building designers, structural engineers, services engineers, and domestic owners.

**GOVERNMENT DEPARTMENTS** and clients prefer NATSPEC specifications so that they are assured of a baseline level of project quality. For over 40 years NATSPEC has been trusted to deliver quality results.

**CONTRACTORS** want to compete on an even footing, and a NATSPEC specification means that the job will not be lost to someone who will cut the quality of construction. NATSPEC is independent and does not favour one party over another.

**CONSULTANTS** know that NATSPEC is comprehensive and provides a clear outline of the quality of materials and tolerance of construction required. NATSPEC specifications reduce the risk of litigation and support the team's desire for successful projects. NATSPEC provides the economies of scale to keep consultants up-to-date.

**PROJECT MANAGERS** do not waste time clarifying project requirements as NATSPEC's specifications are written in simple and plain English, without duplication or contradiction.

**ARCHITECTS ACCREDITATION COUNCIL OF AUSTRALIA** highlights the need to know your specifications and schedules in order to register as an architect.

*"Specifications are written descriptions of a technical nature for material, equipment standard, and quality, and are used by architects to communicate the project requirements to the contractor."*

(AIA Practice Note – AN04.02.101)

Specifications are your design decisions in word form, and with your drawings create an efficient working document for your project. Engineers of all disciplines are also being encouraged to utilise up-to-date specifications in their projects. Consult Australia has highlighted that "poor project design documentation is another major consequence of a lack of expertise in the industry which leads to inefficiency, variations and a lack of competitiveness."



# NATSPEC's value

## **SPECNOTES**

SPECnotes is the quarterly newsletter on standards and regulatory changes. Included is an outline of the latest standards changes, as well as additional interesting information.

## **SPECBUILDER LIVE**

SPECbuilder is NATSPEC's online specification compilation program. It allows the design team to easily compile worksections into a draft project specification.

## **PDF VERSIONS**

Within the Resource Materials section online are PDF versions of NATSPEC's worksections. These are fully searchable, allowing you to quickly locate information, with the latest changes highlighted in yellow for your convenience.

## **ECONOMIES OF SCALE**

NATSPEC is a not-for-profit organisation owned by you, through government and industry. Our team of 20 track and incorporate the latest changes to regulation, standards, and industry information. Could you afford to have 20 of your staff dedicated to this function? We are indebted to the many organisations and individuals that freely provide their time in the development and review of worksections.

## **CURRENT INFORMATION**

NATSPEC's greatest value is in its update service. Only NATSPEC can claim the accuracy and currency of its information. The worksections are updated twice a year, in April and October to reflect changes to Australian Standards, with the April update also reflecting changes within the NCC.

Additionally, the NATSPEC website has monthly updates on standards, with additional relevant information. Worksections are reviewed by the industry, for the industry.

## **NATIONAL**

NATSPEC is a truly national Australian specification system. Its method of incorporating feedback from multiple sources nationwide across government and industry enables the single specification system to be relevant to different projects all over Australia. NATSPEC is by far the most-used Australian national specification system. According to an Australian Institute of Architects survey conducted in 2007, approximately 47% of architects already use NATSPEC, and 45% of architects use an individual in-house office specification. It is important to note that many in-house specifications are based on NATSPEC, but have not been fully maintained to reflect changes in regulations and standards.

## **CONTRACTUALLY "TIGHT"**

Tight specifications produce quality projects and minimise variations. NATSPEC places particular emphasis on producing contractually tight specifications by eliminating such risks as vague and contractually empty phrases, unnecessary duplication, and reliance on out-of-date standards and reference documents.

## **INTEGRATED**

Because it is a comprehensive specification system, NATSPEC is integrated. Unlike specifications created by combining material from disparate sources, a project that uses NATSPEC's integrated approach can eliminate the "holes" and duplication inherent in other approaches. This means the risk of contract variations is minimised, and the cost of coordination is reduced.



Mario Macri  
Operations Manager,  
Lend Lease

*"Using good design documentation, you protect your reputation, you reduce defects, you produce high quality, you reduce costs, and most importantly and overarchingly, you deliver on time. And without good documentation you can't achieve all these objectives.*

*"Poor documentation adds an estimated 10-15% to project costs in Australia (Getting it right the first time, Engineers Australia, 2005). Good documentation reduces project costs. Clearly defined quality requirements reduce construction cost blowouts that result in re-work, redesign, variations and disputes. Good quality construction increases asset value due to longer life of asset. "*



If you're not already a NATSPEC Subscriber, download the subscription form from [www.natspec.com.au](http://www.natspec.com.au)



David Sutherland  
Fender Katsalidis Architects

*"It's incredibly important to manage processes, it's incredibly important to manage information: to know what information is correct, what information is out of date, and what is the current information. NATSPEC is very important because it is a common language and what it does is, it creates a whole specification database for the elements we're proposing to build. Essentially, working through NATSPEC provides you with a full gamut of opportunities that you can potentially face, so it acts as an aide-mémoire as well as working through the documentation."*



**NATSPEC//ConstructionInformation**

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