



NATIONAL BUILDING SPECIFICATIONS

Why have a Specification?

The primary function of the drawings and specification is to give effect to design decisions. Many design decisions cannot be expressed in graphic form and therefore rely on words for their expression. Other decisions would be too tedious or impractical to be conveyed in graphic form. The drawings and specification complement each other. The specification extends beyond the selection of materials by providing the criteria for acceptable quality of construction.

The Importance of a Specification

The quality of a building project is dependent on the documentation provided. The contract documentation includes the conditions of contract, the drawings, the schedules and the specification. Whilst the specification is a multi-purpose document, its primary function is to define precisely and succinctly the levels of quality required and the processes necessary to achieve them.

The Roles of a Specification

The specification has many roles including:

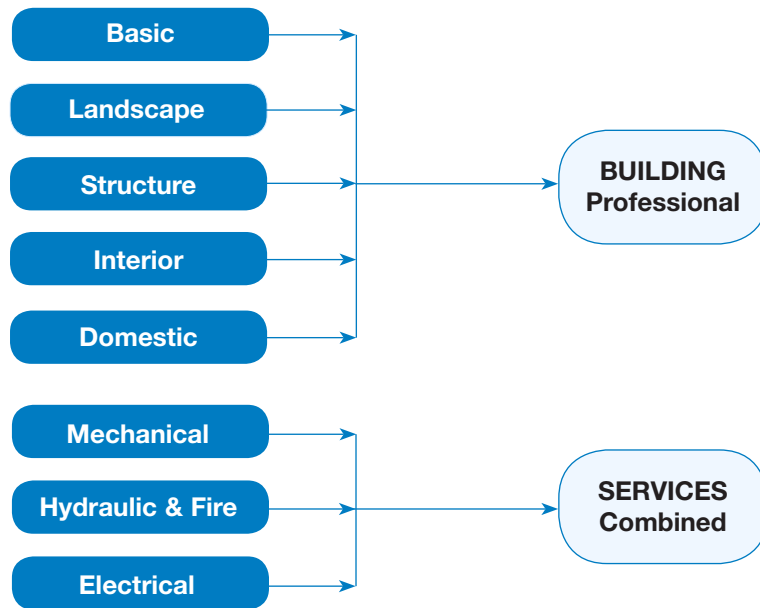
- A written record of design decisions taken.
- A document demonstrating compliance with statutory requirements.
- An estimating document.
- A tendering document.
- A legal (contractual) document.
- An on-site working document.
- A dispute settlement document.
- A project management tool.

// National, comprehensive and regularly updated
// NCC/BCA compliant
// Quick and easy with SPECbuilder
// National classification system



"NATSPEC is an evolution of specification. On this particular project... we haven't been called back for any defects, which means that the specification was well written and incorporated all the correct elements"

- Lendlease



PACKAGE	APPLICATION
BUILDING Professional	The NATSPEC content is informed by the National Construction Code. NATsource lists all Standards and publications throughout the Normal style text in NATSPEC. For architects and building designers engaged on all building project types. BUILDING Professional is NATSPEC's definitive building specification containing over 160 generic NATSPEC worksections. It covers site, architectural, interiors and landscaping, and provides design and install worksections for mechanical, hydraulic, electrical and fire services. Demolition, tendering and contract preliminaries are also covered. In addition, BUILDING Professional includes the reduced content BUILDING Basic worksections, the BUILDING Domestic specification and access to the DOMESTIC online specification and custom schedules for use with the NATSPEC Class 2 Reference Specification. The reduced content BUILDING Basic worksections may be selected for the less complicated parts of specific projects.
BUILDING Basic	For architects and building designers, this is a cut-down version of the BUILDING Professional package. It is aimed at simple building projects requiring less technical content on products, execution and scheduling. It contains over 90 generic NATSPEC worksections. Of these, approximately 30 have reduced content, compared to the equivalent worksection included in BUILDING Professional. In addition, BUILDING Basic includes custom schedules for use with the NATSPEC Class 2 Reference Specification.
BUILDING Landscape	For engineers and landscape architects engaged on site preparation works and all works external to the building and within the site boundary, together with design and installation work for mechanical, hydraulic and electrical services. Demolition, tendering and contract preliminaries are also covered. It is not applicable to works outside the site boundary, such as vehicular crossings and works within local or state government road reserves.
BUILDING Structure	For engineers engaged on structural work intended for occupation. It covers materials for components that are necessary for the adequate strength and appropriate serviceability behaviour of buildings. It is not intended that the worksections should apply to civil engineering structures, such as bridges, dams and roads.
BUILDING Interior	For architects, building designers and interior designers engaged on comprehensive interior projects. It covers interior building and finishing work, together with design and installation work for mechanical, hydraulic, electrical and fire services. Demolition (interior), tendering and contract preliminaries are also covered.
BUILDING Domestic	For architects and building designers constructing, extending or renovating uncomplicated single dwellings. It covers site and architectural work, and design and installation work for mechanical, hydraulic and electrical services. A subscription to BUILDING Domestic includes access to the DOMESTIC online specification.
SERVICES Combined	For engineers and services consultants designing and documenting building services installations for small to large building projects. It contains all material in each of the SERVICES Mechanical, Hydraulic & Fire and Electrical specification packages. It includes the most commonly used building services and components, demolition, tendering and contract preliminaries.
SERVICES Mechanical	For engineers and mechanical services consultants designing and documenting mechanical services for small to large building projects. It includes the most commonly used mechanical services and components, demolition, tendering and contract preliminaries.
SERVICES Hydraulic & Fire	For engineers, hydraulic services and fire services consultants designing and documenting hydraulic and fire services installations for small to large building projects. It includes the most commonly used hydraulic and fire services and components, demolition, tendering and contract preliminaries.
SERVICES Electrical	For engineers and electrical services consultants designing and documenting electrical services for small to large building projects. It includes the most commonly used electrical services and components, demolition, tendering and contract preliminaries.

Current Information

NATSPEC's greatest value is its update service. Only NATSPEC can claim the accuracy and currency of its information. Not only are the worksections updated every April, to reflect the changes with the National Construction Code, the October update includes the latest status including Standards updates. Worksections are reviewed by the industry for the industry.

PDF Versions

Within the Subscription Downloads 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.

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.

Branded Worksections

Whilst NATSPEC does not endorse any specific manufacturer's products we do encourage you to consider our Product Partner's offerings. As a not-for-profit organisation Product Partners assist NATSPEC keep the price of the national building specification affordable. These Branded Worksections have most of the complete/delete clauses completed for you and allow your selections to be quickly incorporated into the specification.

National

NATSPEC is a truly national Australian specification system. Its approach of incorporating feedback from many sources means that one specification system is relevant to projects spread across Australia.

Integrated

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

Economies of Scale

NATSPEC is a not-for-profit organisation owned by you through government and industry. Our team of twenty track and incorporate the latest changes to regulation, standards and industry information. Could you afford to have twenty 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.

SPECbuilder

SPECbuilder is NATSPEC's online specification compilation program. It permits worksections to be easily compiled into a draft project specification by the design team.

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.

TECHnotes

TECHnotes are one or two page summaries providing professional knowledge on current issues in the building industry and related provisions by NATSPEC. They are divided into three groups – Design, General and Products. TECHnotes help you to keep up-to-date with industry changes. They are available to download from Resources and are generally updated in April and October.

TECHreports and NATSPEC Papers

TECHreports and NATSPEC Papers are in depth reference documents and are available to download from Resources. Topics include Specifying ESD and Specification Writing.

NATSource

NATSource is the leading reference document for Standards and reference documents relating to the building industry. The short description of the publications allows you to determine its relevance to your project. This pdf document is searchable to provide easy research. This document also advises designers where they may purchase the documents.

Workgroup/
Header

03 STRUCTURE

Worksection/
Heading 1

0331 BRICK AND BLOCK CONS

Guidance/
Hidden text

Worksection application

This worksection *Template* is applicable to in buildings and associated structures using aerated concrete (AAC) used in buildings and accessories, lintels, damp proofing and flashings.

Guidance text

All text within these boxes is provided as guidance for specification. This *Guidance* text may be hidden using the *Hide* and *Delete* functions of your word processing software.

Optional
text

Optional text

Text in this font (blue with a grey background) is provided for incorporation into *Open* text where it is required.

Cross references

Worksections that cross reference this worksection are:

- 0181 Adhesives, sealants and fasteners

Material not included in NATSPEC

Some projects may include items not covered by this worksection.

Specifying ESD

Refer to the NATSPEC TECHreport TR 01

Subsection/
Heading 2

1 GENERAL

Clause/
Heading 3

1.1 CROSS REFERENCES

General

Requirement: Conform to the following:

- 0171 General requirements.

The 0171 General requirements worksection is:

- [complete/delete]

List/Normal indent

Prompt

List the worksections cross referenced by this worksection. The *Common requirements* subgroup of worksections may be used by the contractor to other worksections where applicable. NATSPEC uses generic worksection titles, change the cross reference here.

See **Related material located elsewhere**

Subclause/
Heading 4

1.2 INTERPRETATION

Definitions

General: For the purposes of this worksection and the following apply:

- Facework: Masonry intended to be finished.

Edit the **Definitions** subclause to suit the project.

Table
heading

Masonry cement mortar mix proportions

Table
Text

Mortar class to AS 3700	Clay
M3	1:0:4
M4	1:0:3

Footer

© NATSPEC

Enhancing Construction Quality with NATSPEC

NATSPEC Overview

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. NATSPEC ensures alignment with the latest Australian standards, regulations, and government legislation, thereby streamlining the process of specifying project quality.

Role of Specifications in Ensuring Quality

Specifications play an integral role in the contractual documentation of construction projects. They work in tandem with drawings, schedules, and contractual conditions to define the precise standards and the corresponding processes needed to achieve the required result. These specifications extend beyond material selection, encapsulating criteria for acceptable construction quality. Recognising that construction quality can't surpass what's defined in the contract, a comprehensive and current specification acts as a pivotal tool in minimising the risk of legal disputes and facilitating successful project outcomes.

Why NATSPEC for Quality Assurance

NATSPEC plays a pivotal role in Australia's construction industry. By regularly updating its information based on industry and government feedback, it aligns with the latest standards, simplifying the project specification. While adherence to Australian Standards is not mandatory unless specified in the construction specification or regulated by the National Construction Code (NCC), NATSPEC's role is paramount. It reduces variations and costs by facilitating a clear understanding of project quality and promoting effective communication among stakeholders. This ensures that practitioners and government bodies can rely on it for the latest standards and practices.

Quality Defined and Ensured

Quality in construction necessitates clear definition and diligent management. NATSPEC serves as a key element in this process by providing a comprehensive national building specification that defines and maintains high standards. Eliminating vagueness and ambiguity in construction specifications, NATSPEC empowers the construction industry to achieve quality projects while enhancing cost control.

Advantages for NATSPEC Subscribers

NATSPEC extends a host of advantages to its subscribers, ensuring their access to valuable resources. The quarterly newsletter, SPECnotes, delivers the latest information on standards and regulatory changes, facilitating informed decision-making. SPECbuilder, an online compilation program, streamlines the specification compilation process for design teams. The economies of scale approach underscores NATSPEC's commitment as a not-for-profit organisation, benefitting the industry through regular updates and adherence to evolving regulations.

In Conclusion

NATSPEC's resolute dedication to accurate, relevant, and up-to-date specifications significantly contributes to the enhancement of construction quality across Australia. By offering a robust and clear framework for defining quality expectations, NATSPEC empowers our subscribers to undertake projects with confidence, ensuring the successful realisation of sustainable and resilient construction. Many of these projects can be viewed in our Product Partners case study magazine which can be downloaded for free at: www.natspec.com.au.



**Australian
Institute of
Architects**

The Australian Institute of Architects is proud to be a founder and owner of NATSPEC and continues to endorse the NATSPEC National Building Specification. NATSPEC, a not-for-profit organisation, maintains the national and comprehensive master specification on behalf of the Australian industry, with input from many of the Institute's members, and reflects the latest national regulations and standards. NATSPEC's regularly updated information reduces the risk of expensive litigation for designers and improves the communication with builders.

Testimonials

BVN

The one constant was the written specification – the majority of consultant firms used the NATSPEC specification system. With such varied packages of documentation, the consistency of the consultant team's specification systems greatly assisted familiarity with the documents by the managing contractor and their subcontractors.

DesignInc

In a fast-evolving space, it can be challenging for Architects to maintain currency of standards and codes for their own profession not to mention the construction sector too. There is greater efficiency in relying on NATSPEC to monitor and track changes in these areas to assist architects in providing a comprehensive and fullproof specification to support their documentation sets.

Gran

Using the NATSPEC system gave assurance that Gran Associates had up to date standards and latest industry information at our fingertips. The hidden text, prompts and technical advice delivered in real time are comprehensive and very helpful. We've found NATSPEC to be well understood by, and accepted, within the industry. Its systematic approach to specification writing ensures thorough and rigorous documentation.

KENT  LYON
ARCHITECTS

While we never can be complacent in the building industry, it greatly reduces time trying to backtrack knowing what is specified with NATSPEC worksections has kept pace with all current requirements.

Phillips/Pilkington
Architects 

Our practice has always utilised NATSPEC since we commenced nearly 30 years ago and with the site in another state, we wanted to work with a local Victorian consultant team. It was essential to accurately communicate all the detailed design and tender information in order to enable an ambitious and constructable design to emerge. NATSPEC provided a specification platform that facilitated a successful collaboration across borders.

spowers

Our office has been using NATSPEC for many years now. In fact, it is even easier than ever with the inbuilt formatting of the document templates, resulting in a well organised, user friendly and professional document.

TERROIR

Using NATSPEC also allows us to develop the architectural specification in parallel with drawings and schedules achieving an efficient documentation workflow. The rigor of documentation coordination which NATSPEC helps enforce is a key tool in ensuring quality assurance and mitigates discrepancies in our documents which allows us to de-risk our clients from budget pressures caused by variations.

NATSPEC Packages

BUILDING

Annual

Quarterly

<input type="checkbox"/> Professional	\$1990 + \$199 GST	\$498 + \$49.80 GST
<input type="checkbox"/> Basic	\$740 + \$74 GST	\$185 + \$18.50 GST
<input type="checkbox"/> Landscape	\$740 + \$74 GST	\$185 + \$18.50 GST
<input type="checkbox"/> Structure	\$740 + \$74 GST	\$185 + \$18.50 GST
<input type="checkbox"/> Interior	\$740 + \$74 GST	\$185 + \$18.50 GST

SERVICES

Annual

Quarterly

<input type="checkbox"/> Combined	\$1990 + \$199 GST	\$498 + \$49.80 GST
<input type="checkbox"/> Mechanical	\$740 + \$74 GST	\$185 + \$18.50 GST
<input type="checkbox"/> Hydraulic & Fire	\$740 + \$74 GST	\$185 + \$18.50 GST
<input type="checkbox"/> Electrical	\$740 + \$74 GST	\$185 + \$18.50 GST
<input type="checkbox"/> DOMESTIC	\$340 + \$34 GST	\$85 + \$8.50 GST

Annual/Qtrly \$ _____

GST \$ _____

Total \$ _____

☐ Cheque enclosed

☐ Credit card

Ongoing payment system

☐ Quarterly by direct debit only
(Please complete authority below)

☐ Annually on receipt of an invoice
(Please include payment)

Credit card payment (refer to direct debit arrangements on page 2)

Please debit according to the above schedule \$ _____

☐ Mastercard

☐ Visa

Card number _____ Expiry ____ / ____

Cardholders name _____ Signature _____

Bank account debit (refer to direct debit arrangements on page 2)

I/We request Construction Information Systems Limited [ID 184871] to arrange for funds to be debited from my/our nominated account at the financial institution shown below according to the schedule above

Name and branch of financial institution _____

BSB No. _____ Account No _____ Commencing Immediately

Agreement

I/we have read and agree to be bound by the subscription conditions on page 2. It is understood that NATSPEC may need further information before opening a subscription account. If NATSPEC accepts this application it is understood that:

- > Subscriptions run for a minimum of two years.
- > Ownership of the material remains with NATSPEC.
- > A subscription is required for each office using NATSPEC.
- > Refer to server conditions over.

Authorised signature(s) for this agreement: _____

Name(s) of person(s) signing: _____

Date: _____

Contact details

Organisation _____ ABN _____

Contact name _____ Telephone _____

Job title _____ Fax _____

Email _____ Web _____

Street address _____ Address Level _____

Suburb _____ State _____ Postcode _____ Mobile _____

PO Box _____ Suburb _____ State _____ Postcode _____

Business details

Total professional/technical personnel

☐ 1-4 ☐ 5-9 ☐ 10-19 ☐ 20 +

Wordprocessing software

Word for Windows Ver _____

Word for Macintosh Ver _____

Building profession

☐ Architects/Building designers

☐ Civil engineers

☐ Contractors

☐ Electrical engineers

☐ Facilities managers

☐ Hydraulic consultants

☐ Interior designers

☐ Landscape architects

☐ Mechanical engineers

☐ Multi-disciplinary engineers

☐ Project managers

☐ Quantity surveyors

☐ Structural engineers

☐ Others _____

Send to NATSPEC

PO Box 1527

QVB NSW 1230

Australia

phone 1300 797 142

fax 1300 797 143

email mail@natspec.com.au

SUBSCRIPTION CONDITIONS

Term of Subscription

NATSPEC subscriptions are for a minimum period of two years. After the first year of subscription a renewal invoice will be issued for the part-calendar-year to bring the subscription to the common renewal date of 1 January.

Termination

After the initial period, a subscription to a NATSPEC package will continue until either party cancels it in writing. Payment will be required to the end of the calendar year. Once the subscription is terminated all copies of our material must be destroyed and no new specifications may be developed using all or part NATSPEC material.

Licence

Subscribing to a NATSPEC specification package and/or purchasing a single worksection will license you to reproduce the material in specifications during the subscription period. At all times, ownership of all information and material supplied by NATSPEC remains with NATSPEC.

This licence only extends to specifications produced in your office for projects on which you are engaged to produce the specification and either the drawings or the bill of quantities. You may not use it to provide a commercial specification preparation service, or for any other purpose, unless NATSPEC has given approval in writing.

If you have more than one office you must have a subscription for each office that is using NATSPEC material. Note: For multi-office organisations that have a single office preparing specifications, it is required that each office subscribe to NATSPEC. This allows us, as a not-for-profit organisation, to more equitably share the costs across the whole industry.

NATSPEC material may not be placed on an organisation's national server unless all Australian offices listed on the organisation's website are subscribers to NATSPEC.

Subscription Rates

Subscriptions increase annually each January by the national CPI rounded down to the nearest ten dollars.

Changes to Fees and Conditions

We will give you at least 14 days notice in writing when changes to the initial terms of the arrangement are made. This notice will state any changes to the initial terms. If you wish to discuss any changes to the initial terms please contact NATSPEC.

NATSPEC
Level 4
263 Clarence Street
SYDNEY NSW 2000
Australia

PHONE	1300 797 142
FAX	1300 797 143
EMAIL	mail@natspec.com.au
WEB	www.natspec.com.au

DIRECT DEBIT ARRANGEMENTS

Our commitment to you

This document outlines the Direct Debit Request (DDR) arrangements made between Construction Information Systems Limited (NATSPEC) (DDR ID #184871) and you.

Initial terms of the arrangement

Under the terms of the Direct Debit authorised by you, we undertake to periodically debit your nominated account for the agreed amount for NATSPEC subscriptions.

Drawing arrangements

The first drawing under this Direct Debit arrangement will occur immediately. If any drawing falls due on a non-business day, it will be debited to your account on the next business day following the scheduled drawing date.

Changes to the arrangement

If you want to make changes to the drawing arrangements, please contact NATSPEC. However, please note that you have agreed to make payments for your NATSPEC subscription for a minimum period from the date of the first quarterly payment.

Enquiries

Direct all enquiries to NATSPEC, rather than to your financial institution, and these should be made at least 14 working days before the next scheduled drawing date. All communication addressed to us should include your Subscriber ID #.

All personal customer information held by us will be kept confidential except information provided to our financial institution to initiate the drawing to your nominated account.

Disputes

If you believe that a drawing has been initiated incorrectly, we encourage you to contact us directly.

Your commitment to us

It is your responsibility to ensure that:

- your nominated account can accept direct debits (your financial institution can confirm this); and
- on the drawing date there are enough **cleared** funds in the nominated account; and
- you advise us if the nominated account is transferred or closed.

If your drawing is returned or dishonoured by your financial institution we will phone/email you and then re-draw after 3 working days. Any transaction fees payable by us in respect of the above will be added to your account.



'... 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...'

'... for many years an army of experts has been producing minimum quality standard specifications for reference in a variety of industries, including the building industry, and in regulations relevant to those industries.'

'Nothing could be more necessary, more logical, more timely or more useful in today's building industry or more responsive to the call for quality control than a specification system tied to relevant Australian standards. That is what NATSPEC sets out to be.'

Bryce Mortlock - Father of NATSPEC, RAIA Gold Medallist, Sir John Sulman Medal

NATSPEC shareholders are:

- 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
- Construction Industry Engineering Services Group
- Consult Australia
- Dept of Housing and Public Works (QLD)
- Dept of Infrastructure and Transport (SA)
- Dept of Finance (Federal)
- Dept of Finance (WA)
- Dept of Logistics and Infrastructure (NT)
- Dept of Treasury and Finance (TAS)
- Dept of Treasury and Finance (VIC)
- Engineers Australia
- Infrastructure Canberra
- Master Builders Australia
- Public Works Advisory (NSW)
- Standards Australia

NATSPEC

the National Building Specification

Government departments and clients prefer NATSPEC

In the majority of Australian States and Territories, NATSPEC specifications are required for building projects. Government departments and clients prefer NATSPEC specifications so that they are assured of a baseline level of project quality. Whilst drawings and schedules only provide the form and materials, it is a properly constructed specification that outlines the quality desired. For over 50 years NATSPEC has been trusted to deliver quality results.

Consultants prefer NATSPEC

The number of regulations that change each year continues to increase. Pressures on consultants' fees and the time required to design do not allow for individual organisations to monitor all the regulatory changes. NATSPEC provides the economies of scale to keep consultants up-to-date. Consultants know that NATSPEC is comprehensive and provides a clear outline of the quality of materials and tolerance of construction required. NATSPEC specifications save litigation and support the team's desire for successful projects.

Contractors prefer NATSPEC

It is a competitive world and as the industry continues to consolidate, greater emphasis is being placed on the cost of a project. 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.

Project managers prefer NATSPEC

When all parties are clear on the expected outcome, the project progresses quickly and without undue confrontation. NATSPEC's template specifications are written in simple plain English without duplication or contradiction so that Project Managers do not waste time clarifying project requirements.

NATSPEC is a national not-for-profit organisation, owned by Government and industry, whose objective is to improve the construction quality and productivity of the sustainable built environment through leadership of information. It is impartial and is not involved in advocacy or policy development.

www.natspec.com.au

Tel: 1300 797 142

Email: mail@natspec.com.au