

## The National Standard of Competency for Architects

The National Standard of Competency for Architects establishes the Standard for architectural education and assessment of professional competency prior to registration as an Architect in Australia

The Standard identifies the primary activities that are fundamental to the practice of architecture and in relation to which an architect is expected to demonstrate competence in the delivery of professional services.

Competency standards are occupational functions (expressed as Performance Criteria) that a candidate should be able to perform effectively in an ordinary work environment. The National Standard of Competency for Architects (NSCA) sets out functions important to the profession of architecture, rather than simply measuring knowledge in isolation from skills, or time spent in formal education.

The Standard applies to the accreditation of Australian university programs, Overseas Qualifications Assessment, the National Program of Assessment, the Architectural Practice Examination and the Assessment of Overseas Architects. It consists of 4 Units of Competency covering Design, Documentation, Project Delivery and Practice Management, which contain 70 individual Performance Criteria and 5 Knowledge Domains which underpin all performance criteria.

The Architects Accreditation Council of Australia (AACA) has maintained the NSCA since 1990, in collaboration with the architectural sector and Australian state and territory Architects registration boards. For an interactive tool, head to: [competencystandardforarchitects.aaca.org.au](http://competencystandardforarchitects.aaca.org.au)

## Knowledge Domains

Knowledge Domains are the core areas of knowledge that underpin architectural practice, and are relevant in demonstrating competency across all performance criteria. One or more of each of the Knowledge Domains has specific application to each performance criterion in each AACA program, and so is labelled as a 'critical' (as opposed to 'necessary') in the Standard.

Architects provide services that require knowledge, judgement and the execution of skill in response to contexts and questions that are disciplinary, regulatory, social and ethical, and environmental in scope. The Knowledge Domains identified in the Standard provide the broad framework within which the everyday practice as well as the overarching professional context of architecture can be taught, understood and evaluated.

### Regulatory Domain

Knowledge of the regulations, standards and codes, relevant to all aspects of architectural practice, project design and delivery.

### Social & Ethical Domain

Knowledge of the social, ethical and cultural values relevant to architectural practice and the impacts on project users and broader communities.

### Sustainable Environment Domain

Understanding of the responsibility of architects to minimise the impact on natural resources and design for longevity.

### Disciplinary Domain

Knowledge of histories and theories relevant to architecture, practice, building and technologies.

### Communication Domain

Knowledge of appropriate verbal, written and visual means to communicate relevant aspects of architecture.

## Units of Competency

The activities involved in the practice of architecture are broadly categorised by the National Standard of Competency for Architects into the following four units.

### Design

An activity involving iterative explorations and appraisals of a range of ideas and concepts, leading towards the development of coherent proposals for a project.

The design process extends from the evaluation of project viability to the conceptual and schematic resolution of a project in response to client, user and public requirements. The design process for a project is informed by appropriate social and environmental considerations of the architect. Although separately listed for convenience, the sequence of design phases indicated through the Elements of Competency and Performance Criteria is not necessarily linear but often comprises overlap, repetition and reiteration.

### Documentation

The process of resolving, detailing and communicating an architectural project through all project stages. The modes of documentation include modelling, drawings, specifications and schedules that can be used in the construction, contract management and handover of the project.

Documentation material must be consistent with design objectives and budgetary constraints, and must conform to relevant codes and industry standards. Where supplied by consultants, documentation compliance must be verified.

### Project Delivery

The proficient, timely and cost-effective completion of an architectural project through all design and construction phases. Project Delivery must take into account the range of contractual obligations carried by architects, clients, consultants and contractors.

Project Delivery involves the evaluation and implementation of procurement systems as well as appropriate contractual administration systems. The establishment and operation of project teams as well as formalising of project agreements (such as with client, team/s and contractor) is critical to competent project delivery.

### Practice Management

The holistic understanding and organisation of the business and profession of architecture in relation to delivering projects. It involves the knowledge and execution of the processes involved in providing architectural services; the knowledge and implementation of appropriate systems to establish

and maintain an architectural practice; and the knowledge and enactment of the broad range of ethical and legal obligations required of a Professional Practitioner.

## The 70 performance criteria

The National Standard of Competency for Architects provides a framework from which the Standard of Competency for an Architect can be assessed. Each of 70 occupational functions is set out in a Performance Criterion (e.g. "Establishment, analysis and evaluation of client project requirements and objectives") and these are grouped into nine key Elements describing major practice areas, and then into four broad Units of Competency. Cross cutting all the Performance Criteria, Elements and Units of Competency are five core Knowledge Domains constituting the broad base of understanding that underpins the complex profession of architecture.

The Standard describes the skill and knowledge to be demonstrated in the various assessment programs conducted by the AACA. The level of competency reflects community and professional expectations for an Architect.

Assessment is generally to the level of a Complex Project which would typically be one of medium scale or larger, that requires the skill and knowledge to deliver the integration and resolution of complicated aspects including (but not limited to): siting, planning, structure, services, materials, composition and configuration. Not all architectural projects follow this format, or even result in a built outcome, but it is this level of competency required by an Architect that is tested in the AACA programs

### 1. Design: Project Briefing

1.1. Preparation & endorsement of an agreement between client and Architect. This agreement will clearly communicate terms, services to be provided, and fees appropriate for the scale and type of project.

1.2. Establishment, analysis and evaluation of client project requirements and objectives.

1.3. Assessment of project budget and timeframe against project requirements and objectives.

1.4. Identification of factors that may impact on client project requirements and objectives.

1.5. Knowledge of different procurement processes available and evaluation of the impact these have on the project.

1.6. Selection and presentation to clients and relevant stakeholders of procurement method for the project.

1.7. Preparation of project brief for approval by client and relevant stakeholders.

## 2. Design: Pre Design

2.1. Identification, analysis and integration of information relevant to siting of project.

2.2. Application of principles controlling planning, development and design for the project site.

2.3. Evaluation of factors influencing and impacting on project cost.

2.4. Analysis of project brief in relation to client's objective budget and timeframe.

2.5. Attainment of approval from client of project budget and timeframe.

2.6. Preparation and analysis of project development options in response to project brief.

## 3. Design: Conceptual Design

3.1. Design response integrates the objectives of brief, user intent and built purpose.

3.2. Application of creative imagination, aesthetic judgement and critical evaluation in formulating design options.

3.3. Design response incorporates assessment of the physical location and relevant wider regional, contextual and environmental issues.

3.4. Design response incorporates assessment of relevant legislation, codes and industry standards.

3.5. Exploration and application of ordering, sequencing and modelling of three-dimensional form and spatial content.

3.6. Assessment of the economic impact on the project of design strategies and options.

3.7. Assessment and integration of construction systems and materials consistent with project brief.

3.8. Application of manual and digital graphic techniques and modelling to describe three-dimensional form and spatial relationships.

## 4. Design: Schematic Design

4.1. Evaluation of design options in relation to project requirements.

4.2. Evaluation of design options against values of physical, environmental and cultural contexts.

4.3. Application of creative imagination aesthetic judgement to produce coherent design

4.4. Inclusion of expertise of relevant specialists and consultants in developing the project design.

4.5. Investigation and integration of appropriate structural, construction, service and transport systems in the project design.

4.6. Investigation and integration of appropriate material selection for the project design.

4.7. Coordination and integration of appropriate environmental systems, including for thermal comfort, lighting and acoustics.

4.8. Analysis of schematic design in regard to cost planning and timeframe to comply with client and project requirements.

4.9. Obtain approval for the design from client and and/or relevant stakeholders.

## 5. Documentation: Detailed Design

5.1. Application of creative imagination and aesthetic judgement in producing a resolved project design in regard to site planning, physical composition and spatial planning as appropriate to the project brief.

5.2. Resolution of project design addressing all building occupancy and functional aspects including spatial requirements and relationships and circulation aspects.

5.3. Evaluation and integration of regulatory requirements.

5.4. Integration of structural and construction systems in resolved project design.

5.5. Integration of materials and components based upon an understanding of their physical properties.

5.6. Integration of relevant technical services, environmental and transportation systems.

5.7. Resolution of project design to address budget and time constraints.

5.8. Presentation of detailed design to facilitate relevant client and stakeholder approvals.

## 6. Documentation: Documentation

6.1. Identification and adoption of a strategy, program and process of documentation integrated through all project stages to enable project delivery.

6.2. Continuing coordination and integration of information and project material from relevant consultants, specialists and suppliers.

6.3. Incorporation of the project requirements and objectives in accordance with Project Brief and approved Detailed Design.

6.4. Timely completion and communication of accurate and comprehensible documents that will include, as required, drawings, models,

specifications, schedules and other relevant modes of information.

6.5. Nomination of quality and performance standards with regard to selected materials, finishes, fittings components and systems.

6.6. Identification and description within the project documentation of the type and scope of separate project trades and sub-contractors as required.

6.7. Establishment of quality assurance systems to ensure consistency and completeness of project documentation in accordance with the requirement of the project brief, project timeframe and project budget.

6.8. Project documentation is in accordance with, and appropriate to, the project contract and project procurement procedure.

## 7. Project Delivery: Procurement

7.1. Identification of available procurement methods and assessment of relevance and application to the project.

7.2. Selection of procurement method incorporates assessment of the impact on all phases of project including design, documentation and project delivery.

7.3. Selection of procurement method incorporates assessment of the impact on contractual arrangements between all project stakeholders.

7.4. Selection of procurement method incorporates assessment of the impact on selection, contracting and scope of work of consultants and specialist service providers.

7.5. Preparation of report and recommendations to enable client to make approval of procurement method and all associated contracts.

7.6. Knowledge and application of all administration and principles for the selected procurement method and associated contracts.

## 8. Project Delivery: Construction Stage

8.1. Selection process for appropriately qualified contractors is in accordance with procurement method and project contract.

8.2. Recommendation regarding contractor selection and specifics of project contract are made to the client for their approval.

8.3. Identification and application of the process and administration systems needed to fulfil all obligations under project contract.

8.4. Construction progress and quality is systematically reviewed and monitored as required under the contract provisions.

8.5. Identification and application of all relevant processes required for certification of monetary claims, project variations, extensions of time, project instructions or other administrative responsibilities under the contract provisions.

8.6. Monitoring project requirements and objectives as described in project documents are met.

8.7. Identification and application of appropriate and consistent systems for record keeping and maintenance of document revisions.

8.8. Ensure that warranties, schedules, as built documentation, certificates, approvals and other project information are completed and handed to the client and relevant authorities as required under the contract.

8.9. Undertake post occupancy evaluation if required under the scope of the project agreement.

## 9. Practice Management

9.1. Knowledge and implementation of appropriate practice model to ensure efficient, effective and ethical professional service.

9.2. Knowledge and application of practice resources required to ensure efficient and effective professional service.

9.3. Identification and application of practice systems and quality management systems to facilitate efficient and timely delivery of architectural services in accordance with project objectives.

9.4. Establishment of project team and practice structures required to deliver the professional services in a timely manner.

9.5. Knowledge of the legal and ethical obligations relating to copyright and intellectual property requirements.

9.6. Knowledge and application of professional ethics and ethical practices in respect to practice management and provision of professional service.

9.7. Knowledge of legal and regulatory requirements and obligations in regard to architectural practice, practice management and registration as an architect.

9.8. Clear and consistent communication with client and relevant stakeholders throughout project.

9.9. Provision of independent and objective advice through all phases of professional practice.

## Understanding the Standard

### *Standard of Competency*

The ability to perform activities within the profession of architecture to the standard expected for registration.

### *Unit*

The four Units of Competency: Design, Documentation, Project Delivery and Practice Management. Each Unit comprises Elements which are sufficiently related to each other to be considered as a block of connected activities. Elements

Discrete activities that collectively describe the Standard of Competency for an architect.

### *Performance Criteria*

Evaluative statements which specify the performance required to demonstrate a Standard of Competency through the Elements.

### *Knowledge Domains*

The range of knowledge and skills considered in assessing whether Performance Criteria have been met. All Knowledge Domains are relevant to achieving the Standard of Competency and should be seen as the background required to engage in Architectural practice.

### *Professional Architectural Practitioner*

One who can demonstrate the standard of skill, care and diligence widely accepted in Australia for competent professional architectural practice.

### *Complex Project*

Typically a project of medium scale or larger, that requires the skill and knowledge to deliver the resolution and integration of complicated aspects including but not limited to: siting, planning, structure, services, materials, composition and configuration.

The National Standard of Competency for Architects establishes the Standard for architectural education and assessment of professional competency prior to registration as an Architect in Australia.

To find out more, contact the Architects Accreditation Council of Australia at

[www.aaca.org.au](http://www.aaca.org.au)

### *References*

National Competency Standard for Architects  
<http://competencystandardforarchitects.aaca.org.au/about>

*N.B. The Board of Architects of Queensland acknowledges the work completed by the NSW ARB in the preparation of this document.*