



NEW ZEALAND QUALIFICATIONS AUTHORITY
MANA TOHU MĀTAURANGA O AOTEAROA

Final date for issue of award is 31 December 2004

NEW ZEALAND CERTIFICATE IN ARCHITECTURAL DRAUGHTING

WORK EXPERIENCE GUIDELINES

Introduction

Suitable work experience leading to the award of the New Zealand Certificate in Architectural Draughting (NZCAD) is work that:

- 1 is directly related to the certificate of study, ie Architectural Draughting
- 2 requires the range of skills for:
 - the preparation of design and contract (production) drawings for new buildings or for the alteration and renovation of existing buildings, together with associated contract documents such as specifications
 - assisting with the administration of building contracts.

Work experience should be carried out under the direct supervision of persons architecturally skilled, such as:

- those qualified to university degree level
- accredited members of the New Zealand Institute of Architects
- accredited members of the Federation of Architectural Designers of New Zealand
- accredited members of the Draughting Association of New Zealand.

Suitable Work Experience

The following notes give an indication of the kind of architectural draughting work experience (in order of increasing complexity and responsibility) that a candidate could be expected to have. Experience should be gained from the activities listed under **both** the headings Draughting and Administration below. The process of approving Work Experience Record Books will be assisted by cross-referencing activities entered in the book to these activities.

1 Draughting

- 1.1 Office duties, tracing drawings, drawing reproduction, filing plans, filing and updating catalogues of building technical papers and construction techniques, lodging plans with territorial authorities.

- 1.2 Assisting in measuring up jobs for alterations, additions or fire damage, drawing up of these conditions in two and three dimensional drawings/sketches.
- 1.3 Assisting with site surveys for siting of buildings, taking of levels and small traverse lines and preparing contour plans for sketch design purposes.
- 1.4 Assisting with soil sampling for testing of site conditions for foundations and preparing reports of results.
- 1.5 Preparing sketches and working drawings of architectural alterations and alterations, including allied services.
- 1.6 Making site visits and preparing reports on minor construction work for which the candidate has produced approved working drawings.
- 1.7 Preparing sketch designs of houses for prospective clients to suit sites previously inspected, drawing up working drawings of house plans for building consent, plans of services and joinery.
- 1.8 Preparing specification notes for **minor** work. Site visits for work, draughting and writing specifications for the job to be carried out, observing inspection of contractors' work.
- 1.9 On-site measuring up and preparing 'as-built' plans (especially of services).
- 1.10 Liaising with consultants and territorial authorities, sourcing information from Codes of Ordinances and NZ Standards, and applying this information during the design and documentation process.
- 1.11 Work relating to assisting with client interviews for residential and light commercial work, making initial site visits, preparing sketches for approval followed by presenting drawings for client approval, and preparing working drawings.
- 1.12 Drafting job specifications. Observing contract and contract administration for residential and light commercial constructions.
- 1.13 Preparing site development plans, showing landscaping, earthworks and outline of amenity design.
- 1.14 Assisting professional staff on major projects in relation to site surveys, adjoining site investigations, foundation testing, land titles, searching of deposited plans, encumbrances and easements.
- 1.15 Assisting with planning of major projects, producing concept plans, working and presentation drawings and/or models of proposals.

2 Administrative

- 2.1 Assisting with specification writing.

2.1 Assisting with contract documents, tenders and construction schedules.

- 2.3 Assisting site observations, making up variation orders for approval, and securing client agreement.
- 2.4 Assessing progress payments.
- 2.5 Liaising with allied professionals on the building projects.
- 2.6 Drafting business correspondence, maintaining progress and cost schedules.
- 2.7 Coordinating work of structural, electrical, and mechanical consultants, surveyors, landscape designers, geotechnical engineers, quantity surveyors etc.

3 Other Draughting Work Experience

Because the building industry demands a very wide range of skills and activities, **draughting** work in associated fields could contribute to practical work experience for an NZCAD. Such work would credit a maximum of **three months** work experience per associated field, with a maximum of **three** fields. The minimum work undertaken in an associated field should be of one year's duration.

Associated fields include:

- 3.1 Building services draughting under the direction of a registered engineer for commercial, industrial, and high-rise development (not residential services).
- 3.2 Structural draughting under the direction of a registered engineer for steelwork and/or reinforced concrete.
- 3.3 Civil engineering draughting under the direction of a registered engineer for earthworks, reinforced concrete, or steelwork.
- 3.4 Land survey draughting under the direction of a registered surveyor for levelling, traversing, recording and plotting.
- 3.5 Specialist draughting work directly related to the design and construction of new buildings, or the alteration and renovation of existing buildings. Work such as:
 - lift and escalator engineering
 - air-conditioning systems
 - heating and ventilating systems
 - laminated timber engineering
 - steel fabrication
 - pre-cut timber framing
 - window fabrication systems
 - modular kitchen systems
 - shop fitting
 - specialist storage systems.

- 6 On site employment as a carpenter in residential, commercial, industrial, or high-rise development.
- 7 On site employment in steel assembly and concrete placing.
- 8 Employment in a registered quantity surveying practice in measuring, taking-off, and compilation of quantity schedules.

Computer Assisted Draughting (CAD)

The prescriptions for Architectural Drawing (which govern the formal assessment of 3000 Architectural Drawing, 4004 Architectural Drawing and 5012 Architectural Drawing) have been built around and emphasise the development of manual drawing skills. Learning of **principles** of architectural drawing is seen as being of paramount importance in training, and these principles are viewed as best developed through manual drawing experience.

It is acknowledged that a number of workplaces now use CAD, and that experience in CAD is appropriate to a person working towards an NZCAD. In some cases, it may be difficult (or even impossible) for a person to gain work experience which is not CAD based. **Hence, work experience which is partly or wholly CAD based will be accepted as suitable for work experience for NZCAD.**

Work Experience Book

The work experience book is to be completed to show:

- 1 the length of time (with dates) spent on the various skills/tasks
- 2 an indication of the skills that have been gained
- 3 confirmation of 1 and 2 from the employer.