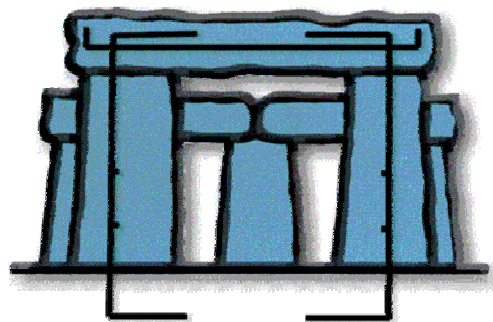


# Registration of Structural Masons



REGISTRATION OF MASONS

New Zealand Masonry Trades Registration Board (inc)

PO Box 448, Wellington 6140

Telephone: 04 499 8820 • Fax: 04 499 7760

Email: [admin@cca.org.nz](mailto:admin@cca.org.nz) • Website: [www.mtrb.org.nz](http://www.mtrb.org.nz)

# Introduction

Masonry is one of the oldest forms of construction used by mankind. The skills of the mason have been called upon over the centuries to achieve sound and true workmanship.

The popularity of concrete masonry has increased rapidly with the introduction of lighter hollow units. This has led to developments in design and construction techniques, which have simplified the use of this form of construction in many different situations.

These developments happened very quickly in New Zealand and masons have found an increasing demand for their services in a variety of construction work involving concrete masonry.

The organisation of the masonry trade has been undertaken by the Brick & Blocklaying Federation New Zealand (BBFNZ) and, in the more specialised structural construction, by the New Zealand Masonry Trades Registration Board (NZMTRB) being responsible for both Brick and Block Registrations. The concrete masonry manufacturers also recognise the significant contribution the skills of the mason bring to the total industry.

## The New Zealand Masonry Trades Registration Board

### Why Registration?

The registration scheme, administered by an independent committee, was established in 1975 to set standards of achievement in structural masonry for the masonry trade. The primary reason for the establishment of such a scheme was the need to ensure that masons were fully competent in meeting the structural aspects of their work, particularly as it relates to earthquake design requirements.

The traditional apprenticeship mainly focused on the craft of bricklaying, with only limited time available to consider the structural matters of laying blockwork, fixing reinforcement and grouting of concrete masonry walls – all of which are crucial to structural performance of masonry in earthquakes.

The committee's objectives were set in 1975 as:

- To process and, where appropriate, approve applications for registration.
- To promote, encourage and improve standards of masonry construction.
- To promote education and training of masons.

These objectives remain the same for today's Board, formed in 1987 from the original committee structure. Although the NZQA National Certificate now contains units dealing with blocklaying.

### The Board and Registration Scheme

The following groups can have representation on the Registration Board:

Association of Consulting Engineers of New Zealand (ACENZ)  
Institution of Professional Engineers of New Zealand (IPENZ)  
Local Government New Zealand (LGNZ)  
Clay Brick and Pavers Manufacturers' Association (CBPMA)  
New Zealand Concrete Masonry Association (NZCMA)  
Cement & Concrete Association of New Zealand (CCANZ)  
Building Officials Institute of New Zealand (BOINZ)  
Brick & Blocklaying Federation New Zealand (BBFNZ)

The Board's activities are directed towards implementing the primary objectives and establishing a pool of tradespeople with a recognised qualification. This qualification, 'Registered Structural Mason', shows that the mason meets the required standards of workmanship for masonry, reinforcement fixing and grouting of masonry walls, set by NZS 4210, as well as understanding the requirements of the appropriate sections of the New Zealand Building Code.

The Board is also committed to a periodic updating of knowledge to the Registered Structural Mason qualification as new standards or practices are developed.

However, the Board cannot expand the pool of qualified masons alone. There is a need for specifiers, architects, engineers and territorial authorities in particular, to support the concept of the scheme. The requirement for using a Registered Structural Mason is becoming more clearly related to providing an assurance of quality structural work.

## The Path to Registration

What does the mason do to achieve registration?

1. Registration papers can be obtained from the Board Secretary and must be completed by the applicant and professional engineer.
2. Three projects must be completed, two of which must be observed during construction by a chartered professional engineer (CPENG) and the third by a NZMTRB Registration Auditor (Blocklaying). The observers are required to verify that the applicant has been fully responsible for:
  - (a) Interpretation of plans and specifications.
  - (b) Setting out, selection and laying of masonry units.
  - (c) Preparation and placing of reinforcing steel.
  - (d) Placing and compaction of concrete/grout into masonry cores and cavities.
3. Sit the Form B Examination set by the Board in order to test the understanding of structural masonry and its relevance in earthquake resistant construction. This examination generally will be supervised by one of the chartered professional engineers or the NZMTRB Registration Auditor in (2) above or through other course approved by the Board.

The Board may waive this examination requirement where the applicant has completed either a National Certificate in Masonry within the preceding four years or the Structural Mason Correspondence Course from WELTEC, Private Bag 39803, Wellington Mail Centre, Lower Hutt 5045, Freephone 0800-935-832.

4. The mason must also be able to show they have a minimum of two year's experience after having completed a formal trade certificate/apprenticeship programme in blocklaying **OR** a minimum length of nine year's total experience in blocklaying.

**Note:** The application, project observations and Form B Examination must be completed within a two year time span.

The requirements for projects and the Form B Examination relate principally to New Zealand Standard NZS 4210: Masonry Construction, but also to sections of NZS 4229: Concrete Masonry Buildings Not Requiring Specific Engineering Design, NZS 3604: Timber Framed Buildings and also the New Zealand Building Code and Regulations. All these documents contain some references of structural importance, which the mason needs to be aware of.

Typical project examples are retaining walls, basement walls and walls for commercial and residential buildings. The important issue is that professional engineers must be available to inspect the project

during construction. If the project is residential walls to NZS 4229, this will probably require special arrangements for an engineer's inspection.

- The registration applications and the three project forms are sent to the Board Secretary, together with the application fee (\$100.00).
- The Board will consider applications and may ask for supplementary information where necessary before deciding whether to approve the application.

## Who is Registered?

Once the Board has approved an application, the mason's name will be entered in the records and will be included in the listings, which are regularly circulated throughout the industry – particularly to territorial authorities and engineers. A registration card will be issued confirming registration. This card is updated annually following payment of fees.

The mason may then use the title 'Registered Structural Mason', and is encouraged to do so.

Any specifier, approving authority, building owner, and so on, who wishes to know whether a mason is registered, may ask to see the current registration card, or may refer to the most recently published list. New names are continually being added to the records, so that at any time a particular mason may be registered, but not yet appear on the list. A phone call/fax to the Secretary or reference to the website, [www.mtrb.org.nz](http://www.mtrb.org.nz), will quickly confirm the true situation.

## The Benefits

In the changing scene of regulation in respect of the New Zealand Building Code and the supporting New Zealand Standards, there is now a clearer understanding of responsibilities for skill levels and their impact on the construction of the building. While current New Zealand Standards' documentation cannot specifically require masonry work to be carried out by Registered Structural Masons, it does express the opinion that such work preferably should be carried out by an accredited tradesperson. This scheme provides the appropriate accreditation.

The Building Act will shortly require trade licensing for "restricted work" in both blocklaying and bricklaying. The NZMTRB scheme will assist in demonstrating competence for licensing. The Board also requires a professional engineer audit of the Registered Structural Mason's work every five years.

Essentially, Standards New Zealand are giving a clear warning that if something goes wrong later in the construction, the engagement of a non-registered mason could be seen as a possible contributing cause. Such situations increase the risk of liability to those who should have been aware of the distinction relating to registration. The new Building Act now reinforces the need for the masonry trade to have registration of competence.

## Further Information

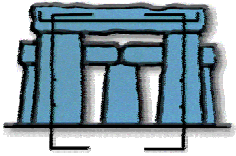
Contacts for further information:

The Secretary  
New Zealand Masonry Trades Registration Board  
PO Box 448  
Wellington 6140  
Telephone: (04) 499-8820  
Fax: (04) 499-7760  
Email: [admin@cca.org.nz](mailto:admin@cca.org.nz)  
Website: [www.mtrb.org.nz](http://www.mtrb.org.nz)

# Master Blocklayer Application Checklist

Before sending your Application to the Board, please use this checklist to ensure you have completed all the requirements for application. This will assist in the smooth and efficient processing of your application. Please ensure:

- You have the necessary criteria to apply for registration, i.e. you have had a minimum of two year's experience after having completed a formal trade certificate/apprenticeship programme in blocklaying **OR** a minimum length of nine year's total experience in blocklaying.
- Your application falls within the two year timeframe for registration applications.
- You have fully completed the Application Form.
- You have fully completed the training and work experience section of Application Form.
- You have fully completed the job description section on Application Form.
- You have signed the Application Form.
- You have attached photocopies of your qualifications.
- You have attached the \$100.00 Application Fee.
- You have written your name at the top of all three "Blocklaying Audit Certificate A" forms.
- That you have attached three "Blocklaying Audit Certificate A" job assessment forms and that:
  - the first form has been completed by a NZMTRB Registration Auditor (Blocklaying). Please refer to the job assessment form headed Job 1.
  - the other two forms have been completed by a Professional Engineer (CPENG). Please refer to the job assessment forms headed Job 2 and Job 3.
- That the Engineers have included their Professional Engineer Number on the "Blocklaying Audit Certificate A" job assessment form.
- That the NZMTRB Registration Auditor (Blocklaying) has included their NZMTRB Registration Number on the "Blocklaying Audit Certificate A" job assessment form.
- That the Engineers/NZMTRB Registration Auditor (Blocklaying) have provided written comment on the competency of your work on the "Blocklaying Audit Certificate A" forms.
- That you have undertaken on one of your three job assessments, the filling, rodding/vibration of grout fill into the blocks and supervised this process on the other job assessments. (Please note that under the code, blocklayers are required to undertake or supervise all pours).
- That the lift (high/low) procedure used for each job is indicated on the "Blocklaying Audit Certificate A" forms (in order to show the Board a knowledge of lift procedures).



# New Zealand Masonry Trades Registration Board

No: \_\_\_\_\_  
(office use only)

## Application for Registration as a Structural Mason

Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

### NAME OF APPLICANT

Name: \_\_\_\_\_

Employer: \_\_\_\_\_

Status within Company: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone: \_\_\_\_\_ Email: \_\_\_\_\_

Fax: \_\_\_\_\_ Website: \_\_\_\_\_

### TRADE CERTIFICATE/APPRENTICESHIP

**Note:** Evidence of completion of training to be attached.

STRUCTURAL MASONRY WORK EXPERIENCE		DATES	
		From	To
Training			
Employer			
Employer			
Employer			

### NOMINATED STRUCTURAL ELEMENT (see General Rules)

**Note:** Under Option A, three structural elements are required together with the Engineer's Form B Examination. Under Option B, two structural elements are required together with a certificate from an approved structural masonry course. (Contact the Secretary for further details).

JOB DESCRIPTION OR TITLE	DATE COMPLETED	AUDITOR
1.		
2.		
3.		

**Note:** The Form B multi-choice examination will be issued once this application form is received, unless a WELTEC certificate showing completion of the Structural Mason Correspondence Course is enclosed.

**Note:** A completed "Blocklaying Audit Certificate A" job assessment form for each of the above jobs, must accompany the application.

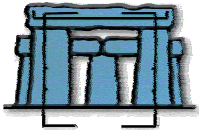
I confirm that I have read and understood the General Rules Governing Registration, and agree to conform to those rules. I hereby apply for Registration and enclose \$100.00 being the application fee.

Applicant's Signature: \_\_\_\_\_

# General Rules Governing Registration

1. Application for Registration will be received from individual masons experienced in the erection and completion of masonry walls and systems subject to building permits. Registrants must have either a minimum of two year's experience after having completed a formal trade certificate/apprenticeship programme in blocklaying **OR** a minimum length of nine year's total experience in blocklaying.
2. In order to be considered for registration the applicant must provide evidence of their training, experience and understanding of concrete block construction. The minimum requirements are:
  - Option A:** Reports on three structural elements involving load bearing structural masonry, designed and observed during construction. Two observations must be made by a Professional Engineer (CPENG) and the third by a NZMTRB Registration Auditor (Blocklaying). The observers must endorse the application accordingly. These three structural elements must be completed within the period of two years immediately prior to applying for registration. In addition, the applicant must either:
    - be examined by either by a Professional Engineer or NZMTRB Registration Auditor (usually one of those referred to above) on topics relating to masonry construction. The test questions are set out on the Engineer's Form B Examination, which must be signed by the Engineer/Registration Auditor to confirm that the applicant has shown a satisfactory understanding of the matters covered; or
    - complete a Structural Masons correspondence course from WELTEC, Private Bag 39803, Wellington Mail Centre, Lower Hutt 5045.
  - Option B:** Two Structural Reports and certificate for an approved structural masonry course. (Contact the Secretary for further details).
3. An application fee, which shall be set from time to time by the Registration Board, must be paid with the application. This fee is not refundable.
4. The applicant will be advised of the Board's decision as soon as possible. Where the application is approved the annual fee becomes immediately payable for the first year, or part thereof.
5. Registration is renewable annually, and is conditional upon:
  - (a) the mason continuing to be actively engaged in masonry construction;
  - (b) the Registration Board not having had cause to terminate registration as a disciplinary measure;
  - (c) the annual fee for renewal of registration being paid within the appointed time;
  - (d) five years after initial registration and every five years thereafter, the mason is required to submit a new project report and Engineer's Form B examination endorsed by a Professional Engineer (CPENG).
6. If the renewal fee is not paid within the appointed time the mason will become unregistered until such time as payment is made. If payment has not been made after twelve months, registration will be cancelled. Should the mason wish to regain registration, it will be necessary to make a fresh application for consideration by the Board. This application must be accompanied by Engineers' certificates and the current application fee. ***It is in the mason's interest to ensure that the Secretary is advised immediately of any change of address.***
7. Masons are to ensure that all structural work is carried out by a registered structural mason or by a competent tradesman and apprentices under the supervision of a registered structural mason. The registered mason shall apply the best standards of workmanship and, as required, shall supervise the work of others. Registered structural masons shall avail themselves of opportunities to update their knowledge and technical skills, and shall likewise encourage others to seek registration.
8. The Registration Board reserves the right to withhold registration, either for a stated period or permanently, where it is considered that such action is in the best interests of public safety, and the interest and integrity of the Registration Scheme.

In the event of the Board withholding registration due to a complaint, the Board will investigate the complaint and the mason will have the opportunity to place any relevant information before the Board prior to any action being taken by the Board.



# New Zealand Masonry Trades Registration Board

Job 1

## Blocklaying Audit Certificate A

Name of Applicant: \_\_\_\_\_

**NZMTRB Registration Auditor (Blocklaying) Registration No.** \_\_\_\_\_ / \_\_\_\_\_

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_

**Project:**

General description, location and completion date:

\_\_\_\_\_

APPROXIMATE  
DIMENSIONS OF  
STRUCTURAL WALLS

Height: \_\_\_\_\_ m

Length: \_\_\_\_\_ m

### CONSTRUCTION FEATURES CHECK SHEET

DETAILS	YES	NO	DIMENSIONS	DETAILS	DIMENSIONS			
Soil Retaining			Height _____ m	Wall Thickness	_____ mm			
Water Storage			Depth _____ m					
Lintels			Span _____ m					
Control Joints				Reinforcing	Vert D. _____ @ _____ mm.crs.			
Raking Gables					Hor D. _____ @ _____ mm.crs.			
Pilasters								
Rodding Method Used								
Vibrator Used				Grouting*	Partial Fill		Solid Fill	
Expansive Admixture					High Lift		Low Lift	

\* Applicants are required, on at least one of their three job assessments, to undertake the filling, rodding/vibration of grout fill into the blocks and to supervise this process on the other job assessments. It must also be noted that under the code, blocklayers are required to undertake or supervise all pours.

\* Applicants must indicate the lift procedure used (in order to show the Board a knowledge of lift procedures).

The NZMTRB Registration Auditor (Blocklaying) must provide written comment on the competence of the applicant and should clearly indicate the size, type and method of construction of the structural element to enable the Board to assess the suitability of the applicant to become a Registered Structural Mason.

Competency comment: \_\_\_\_\_

\_\_\_\_\_

(Continue overleaf if required)

I confirm, as a NZMTRB Registration Auditor in Blocklaying and experienced in reinforced masonry construction, that the above described structural element was subject to a specific design or design to NZS 4229 and was constructed by the applicant under my observation. In this he/she was totally responsible for:

- The interpretation of plans and specifications.
- The setting out, selection and laying of masonry units.
- The preparation and placing of reinforcing steel.
- The placing and compaction of concrete into masonry cores and cavities.

\_\_\_\_\_  
NZMTRB Registration Auditor's Signature

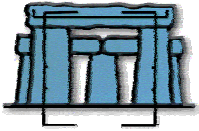
\_\_\_\_\_  
Date

**NOTE FOR THE APPLICANT MASON:** The NZMTRB Registration Auditor will normally require notification prior to the start of construction that the structural element is to be presented for Registration Board assessment.

**Note: The Auditor must be an NZMTRB Registration Auditor and approved to audit structural masonry.**

New Zealand Masonry Trades Registration Board (inc), PO Box 448, Wellington 6140  
Tel: (04) 499-8820 • Fax: (04) 499-7760 • Email: admin@cca.org.nz • Website: www.mtrb.org.nz

1/08/08



# New Zealand Masonry Trades Registration Board

Job 2

## Blocklaying Audit Certificate A

Name of Applicant: \_\_\_\_\_

### Professional Engineer No.:

Name: \_\_\_\_\_ Address: \_\_\_\_\_  
Phone: \_\_\_\_\_

### Project:

General description, location and completion date:

### APPROXIMATE DIMENSIONS OF STRUCTURAL WALLS

Height: \_\_\_\_\_ m  
Length: \_\_\_\_\_ m

### CONSTRUCTION FEATURES CHECK SHEET

DETAILS	YES	NO	DIMENSIONS	DETAILS	DIMENSIONS	
Soil Retaining			Height _____ m	Wall Thickness	_____ mm	
Water Storage			Depth _____ m			
Lintels			Span _____ m	Reinforcing	Vert D. _____ @ _____ mm.crs.	
Control Joints					Hor D. _____ @ _____ mm.crs.	
Raking Gables					Grouting*	Partial Fill
Pilasters						High Lift
Rodding Method Used					Solid Fill	
Vibrator Used					Low Lift	
Expansive Admixture						

\* Applicants are required, on at least one of their three job assessments, to undertake the filling, rodding/vibration of grout fill into the blocks and to supervise this process on the other job assessments. It must also be noted that under the code, blocklayers are required to undertake or supervise all pours.

\* Applicants must indicate the lift procedure used (in order to show the Board a knowledge of lift procedures).

The engineer must provide written comment on the competence of the applicant and should clearly indicate the size, type and method of construction of the structural element to enable the Board to assess the suitability of the applicant to become a Registered Structural Mason.

Competency comment: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(Continue overleaf if required)

I confirm, as a Professional Engineer and experienced in reinforced masonry construction, that the above described structural element was subject to a specific design or design to NZS 4229 and was constructed by the applicant under my observation. In this he/she was totally responsible for:

- The interpretation of plans and specifications.
- The setting out, selection and laying of masonry units.
- The preparation and placing of reinforcing steel.
- The placing and compaction of concrete into masonry cores and cavities.

\_\_\_\_\_  
Engineer's Signature

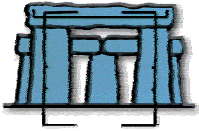
\_\_\_\_\_  
Date

**NOTE FOR THE APPLICANT MASON:** The Engineer will normally require notification prior to the start of construction that the structural element is to be presented for Registration Board assessment.

**Note: The Engineer can either be a Chartered Professional Engineer or a Corporate Member of IPENZ.**

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1/08/08



# New Zealand Masonry Trades Registration Board

Job 3

## Blocklaying Audit Certificate A

Name of Applicant: \_\_\_\_\_

### Professional Engineer No.:

Name: \_\_\_\_\_ Address: \_\_\_\_\_  
Phone: \_\_\_\_\_

### Project:

General description, location and completion date:

### APPROXIMATE DIMENSIONS OF STRUCTURAL WALLS

Height: \_\_\_\_\_ m  
Length: \_\_\_\_\_ m

### CONSTRUCTION FEATURES CHECK SHEET

DETAILS	YES	NO	DIMENSIONS	DETAILS	DIMENSIONS			
Soil Retaining			Height _____ m	Wall Thickness	_____ mm			
Water Storage			Depth _____ m					
Lintels			Span _____ m	Reinforcing	Vert D. _____ @ _____ mm.crs. Hor D. _____ @ _____ mm.crs.			
Control Joints								
Raking Gables								
Pilasters								
Rodding Method Used				Grouting*	Partial Fill		Solid Fill	
Vibrator Used					High Lift		Low Lift	
Expansive Admixture								

\* Applicants are required, on at least one of their three job assessments, to undertake the filling, rodding/vibration of grout fill into the blocks and to supervise this process on the other job assessments. It must also be noted that under the code, blocklayers are required to undertake or supervise all pours.

\* Applicants must indicate the lift procedure used (in order to show the Board a knowledge of lift procedures).

The engineer must provide written comment on the competence of the applicant and should clearly indicate the size, type and method of construction of the structural element to enable the Board to assess the suitability of the applicant to become a Registered Structural Mason.

Competency comment: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(Continue overleaf if required)

I confirm, as a Professional Engineer and experienced in reinforced masonry construction, that the above described structural element was subject to a specific design or design to NZS 4229 and was constructed by the applicant under my observation. In this he/she was totally responsible for:

- The interpretation of plans and specifications.
- The setting out, selection and laying of masonry units.
- The preparation and placing of reinforcing steel.
- The placing and compaction of concrete into masonry cores and cavities.

\_\_\_\_\_  
Engineer's Signature

\_\_\_\_\_  
Date

**NOTE FOR THE APPLICANT MASON:** The Engineer will normally require notification prior to the start of construction that the structural element is to be presented for Registration Board assessment.

**Note: The Engineer can either be a Chartered Professional Engineer or a Corporate Member of IPENZ.**

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