

# CONCRETE MASONRY COURSE FOR ARCHITECTS

## *based on NZS 4229:2013*

**Christchurch, 15<sup>th</sup> December 2020**

Concrete NZ with support of Firth Industries have developed a course for architects, designers and building experts to achieve an understanding of concrete masonry design based on NZS 4229: Concrete Masonry Buildings Not Requiring Specific Engineering Design. This half-day course qualifies for 40 NZRAB CPD points and 5 ADNZ CPD points.

### COURSE SUMMARY

The four-hour course is aimed at architects, designers and building experts in general. Attendees will achieve an understanding of the requirements of residential concrete masonry building design based on NZS 4229:2013 *Concrete masonry buildings not requiring specific engineering design* and of Code compliance, clauses B1, B2 and E2.

Structural requirements for the design of foundations, walls, beams & lintels, diaphragms and bracing for wind and earthquake forces will all be covered during the course. Attendees will learn to develop structural designs for concrete masonry buildings without the need of an engineer.

The course includes a working exercise, helping to assess if what has been learnt can be applied correctly. It would help attendees to bring a copy of NZS 4229 to the course. It is also of benefit to attendees to have obtained basic knowledge of NZS 3604 – this is not a prerequisite, but will help to put the course content into perspective and assist/support the application of the knowledge gained in a practical situation, either in the workplace or in a simulated situation.

The course includes:

- Tutor presentation
- Tutor-led activities, group-work & discussion
- Assessment activities

To complete the course participants will be required to:

- Actively participate in all sessions
- Work in pairs or teams to complete some exercises
- Provide feedback/evaluation of the course

### COURSE CONTENT

The course contains the following nine Sections plus an exercise in which the attendee can apply the knowledge that has been learnt during the course.

#### Section 1 - Scope

- Geometry
- Loads
- Construction excluded

#### Section 2 - Inspection & Workmanship

- Materials
- Inspection process
- NZS 4210 summary

#### Section 3 – Site Requirements

- Suitable ground
- Unsuitable ground
- Testing

#### Section 4 - Foundation

#### Section 5 - Walls

- Masonry Units
- Reinforcement

#### Section 6 - Bracing

- Bracing lines
- Resisting wind forces
- Resisting earthquake forces

#### Section 7 - Diaphragms

#### Section 8 - Beams & Lintels

Exercise - Applying what has been learnt

## COURSE DETAILS

### Target Audience

- Architects, designers, building experts.  
(It would be beneficial if attendees were familiar with NZS 3604).
- Other building professionals.

### Venue

ARA  
130 Madras St  
Christchurch 8011  
Room tbc

### Date/Time

Tuesday, 15<sup>th</sup> December 2020  
8.30 a.m. to 12.30 p.m.

### Registration Fee

- Concrete NZ Members - \$180.00  
(\$156.52 plus GST).
- Non-Concrete NZ Members - \$198.00  
(\$172.17 plus GST).

*Fee includes morning tea.*

## REGISTRATION FORM

|                |                      |              |                      |
|----------------|----------------------|--------------|----------------------|
| Name           | <input type="text"/> | NZTAB/ADNZ # | <input type="text"/> |
| Company        | <input type="text"/> |              |                      |
| Postal Address | <input type="text"/> |              |                      |
| Phone          | <input type="text"/> |              |                      |
| Email          | <input type="text"/> |              |                      |

## PAYMENT DETAILS

**Please provide payment for your registration by cheque or credit card.**

☐ I have enclosed a cheque for:

☐ \$180.00 (Concrete NZ Members @ \$156.52 plus GST)

☐ \$198.00 (Non-Concrete NZ Members @ \$172.17 plus GST)

*Please make cheque payable to Concrete New Zealand Inc.*

☐ I prefer to pay by credit card:

☐ Mastercard

☐ Visa

Card No  Expiry  /

Cardholder  Signature

**A tax invoice/receipt will be issued on receipt of payment.**

Please complete this form and forward it to:

Concrete Masonry Course for Architects, Concrete NZ Inc., PO Box 448, Wellington 6140,  
email [admin@concretenz.org.nz](mailto:admin@concretenz.org.nz)

For all enquiries phone (04) 499 8820 or email [admin@concretenz.org.nz](mailto:admin@concretenz.org.nz).