



CURRICULUM VITAE

Concrete New Zealand/ Cement & Concrete Association of New Zealand

since 5 | 03 | 2009

Architect, Project Manager

1. Three-bedroom, 120m² residential home - study for the affordable market.

Construction type: Concrete floor and walls, light weight timber and metal roof.

Costs estimated: \$ 240,000

Fields involved with:

- architectural design,
- sustainability principles.

2. Three-bedroom, 100m² terraced homes - study for the affordable market.

Construction type: Concrete floor and walls, light weight timber and metal roof.

Costs estimated: \$ 220,000

Fields involved with:

- architectural design,
- sustainability principles.

3. Designing Comfortable Homes, 2nd edition - a guide to passive solar house design.

The first edition of this book was published in 2001 and quickly became recognised as an invaluable plain English guide for anyone interested in designing comfortable energy efficient homes. As well as providing general guidance on solar design considerations that are important to enhance energy efficiency and comfort, the book also provided data on expected performance of homes based on three different combinations of glass, mass and insulation. These were defined as 'code minimum', 'better' and 'best'.

With Code minimum at the level defined as 'better' in the 2001 edition since 2009 and the development of improved products and systems making very high energy efficiency more achievable, it was time to create this second edition.

Fields involved with:

- project management and technical assistance,
- sustainability principles.

4. Cost and performance study for a 12 storey office building totalling 17,000m².

Construction types: Concrete, steel and hybrid structure.

Fields involved with:

- structures.



5. **Urban Development Study** - Master plan study to extend Wellington's CBD by urbanizing Wellington's port land.

Fields involved with:

- design in an urban context.

6. **CCANZ CP 01** - Code of Practice for Weathertight Concrete and Concrete Masonry Construction. Later cited by MBIE (former DBH) as **NZBC, Clause E2/AS3**.

Fields involved with:

- Main author and chair of industry work group,
- building construction and materials.
- detail design.

7. **Medium Density Housing development with retail** - Design of 5 blocks consisting of 95 apartments totalling 7800 m² and 1900 m² retail area, 3300 m² below ground parking and storage space and 7000 m² extensive landscaping for the urban design competition 'Breathe' at Latimer Square, Christchurch. (1st of seven noted entries)

Construction type: concrete floor and walls, light weight roof.

Costs estimated: \$ 47 million

Fields involved with:

- project initiation and pre-design,
- concept, preliminary and developed design stages,
- architectural design,
- design in an urban context,
- building environment and services,
- sustainability principles,
- structures,
- seismic design.

8. **CCANZ Apartment Design Guide (ADG)** - Design considerations to sensible design of apartments and apartment buildings for New Zealand.

The ADG sets out some key considerations for designing New Zealand apartment buildings, their amenities and shared spaces. Included are tips on recommended minimum sizes, daylight and interior climate requirements, effective soundproofing and fire protection.

This guide also looks at how to design a sustainable and durable building that enhances rather than detracts from the urban landscape.

Author.



9. **CCANZ CP 01, 2nd edition** - to ensure that this Code of Practice remains relevant sections as weathertight concrete and coatings have been updated some detail drawings have been refined and a new section on masonry veneer has been incorporated.

This edition has been cited by MBIE as **NZBC, Clause E2/AS3** on 14th February.

Fields involved with:

- building construction and materials.

10. **Involvement in teaching at:**

- Victoria University Wellington, School of Architecture,
- UNITEC, Construction Management / Architecture + Architectural Technology,
- University of Auckland, School of Architecture,
- Building Officials Institute New Zealand.

Presentation topics:

- a. Concrete Construction - Basics,
- b. Architectural Concrete Finishes,
- c. Concrete Masonry Construction,
- d. Seismic design with concrete
- e. My own work as architect over the past 20 years,
- f. NZS 4229 for building officials.

11. **Seminars for NZIA architects**

Establishing and conducting seminars for NZIA architects in collaboration with experienced personnel from the building science and construction industry.

a. “Apartment Design Seminars” (2014),

Split into two sections,

Section 1: ‘Apartment design in theory’ (Ralf Kessel)

Section 2: ‘Work report’ of an experienced NZIA architect,
(Allan Wright, David Hill, Tony Koia)

b. “Designing Comfortable Homes” (2012),

Split into three sections,

Section 1: ‘Designing Comfortable Homes’ (Ralf Kessel)

Section 2: ‘Optimising the benefits of thermal mass’ (Dr Larry Bellamy, now MBIE)

Section 3: ‘Thermal simulation with IESVE’ (Roger Cladingboel, building services engineer)

c. Participated in NZIA/ GIB organised “NZIA Technical Series 2012”,

The NZIA established three sections,

Section 1: ‘Architectural Concrete Finishes’ (Ralf Kessel),

Section 2: ‘Fire design for architects’, (Duncan Joiner, MBIE)

Section 3: ‘Acoustic issues with recent office design trends’, (Chris Day, Marshall & Day)



Ashlin Coleman Architects, Dublin, Ireland

04/2005 - 10/2008 Project and Site Architect

1. Cork International Airport Hotel - 154 bedroom hotel, with function centre, bar + restaurant.

Construction type: Concrete floor, walls and roof.

Costs: € 30 million, GFA 7000 m²

Fields involved with:

- architectural design,
- detailed design and documentation,
- building construction and materials,
- structures,
- building environment and services,
- architectural administration and observation of the contract works.

2. Four office buildings, Units 22, 23, 24, 25 – each are two storey units at Cork Airport Business Park Stage II.

Construction type: Steel and concrete hybrid structure.

Costs: € 14 million, GFA each 2200 m²

Fields involved with:

- detailed design and documentation,
- building construction and materials,
- structures,
- building environment and services,
- detailed design and documentation,,
- architectural administration and observation of the contract works.

3. Office building, Unit 26 – Two storey unit at Cork Airport Business Park Stage II.

Construction type: Steel and concrete hybrid structure.

Costs: € 5 million, GFA 4000 m²

Fields involved with:

- detailed design and documentation,
- architectural administration and observation of the contract works.



4. Two office buildings, Unit 27 and Unit 30 - 2 storey units at Cork Airport Business Park Stage II.

Construction type: Steel and concrete hybrid structure.

Costs: € 10 million, GFA each 4300 m²

Fields involved with:

- building construction and materials,
- structures,
- building environment and services,
- detailed design and documentation,
- architectural administration and observation of the contract works.

5. Cork Airport Business Park, Phase III - Masterplan concept design for a 12 hectare triangular section at Cork Airport South.

Fields involved with:

- pre-design and concept design stages,
- design in an urban context.

6. 227 bedroom Hotel with function centre - at Elmgreen Golf Course, Dublin.

Costs estimated: € 30 million, GFA 16550 m²

Fields involved with:

- pre-design and concept design stages,
- detailed design and documentation.

7. Golf club house with maintenance unit - at 'The Links Portmarnock', Dublin.

Costs estimated: € 6 million, GFA 3300 m²

Fields involved with:

- detailed design and documentation.

8. 125 bedroom Hotel on West Cork - Baltimore Road, Skibbereen, Co. Cork.

Costs estimated: € 13 million, GFA 10700 m²

Fields involved with:

- pre-design and concept design stages,
- detailed design and documentation.



9. **Builder's Merchant Distribution Centre** - for "Heiton Buckley", Greenogue, Dublin. Two storey administration, retail and canteen building.

Costs estimated: € 4 million, GFA 2100 m²

Fields involved with:

- pre-design and concept design stages,
- detailed design and documentation.

10. **Primary school, St Joseph's** - Navan, Ireland. 17 Classrooms and auditorium. Partly new design partly refurbishment.

Costs estimated: € 5 million, GFA 1650 m²

Fields involved with:

- pre-design and concept design stages,
- detailed design and documentation.
- structures,
- building environment and services,

James Smyth Architects, Dublin, Ireland

05/2004 - 03/2005 Project and Site Architect

1. **Apartment block development with retail** - L-shaped block consisting 66 apartments totalling 8000 m² and 1600 m² retail area, 4000 m² below ground parking and storage space and 2000 m² extensive landscaping.

Costs: € 18 million, GFA 15600 m²

Fields involved with:

- detailed design and documentation.
- structures,
- building environment and services,
- architectural administration and observation of the contract works.

2. **Apartment block development with retail** - U-shaped block consisting 152 apartments totalling 11000 m² and 2000 m² retail area, 7000 m² below ground parking and storage space and 3000 m² extensive landscaping.

Costs: € 50 million, GFA 23000 m²

Fields involved with:

- pre-design and concept design stages.



Ralf Kessel Architecture + Webdesign, Berlin, Germany

02/2003 - 04/2004

Architect

1. Residential House containing 3 Apartments - Neuenhagen, Berlin.

145m² ground floor apartment with terrace and garden, 125m² first floor apartment with atrium roof garden, 50m² sous terrain apartment, below ground garage and storage.

Costs estimated: € 1 million, GFA 415 m²

Fields involved with:

- project initiation and pre-design,
- concept, preliminary and developed design stages
- building environment and services,
- sustainability principles.

2. Extension to an existing residential house - Pankow, Berlin.

Extension consisting of an open plan living kitchen space, laundry area and a bath room.

Costs estimated: € 60,000, GFA 75m²

Fields involved with:

- project initiation and pre-design,
- concept, preliminary and developed design stages
- building environment and services,
- sustainability principles.

3. Palucca School of Dance - Pankow, Dresden, Germany.

Consisting of two double storey dance studios of each 250m², four single story studios of each 150m², inclusive lockers, a 450m² auditorium administration area, 350m² canteen/ meeting area, Library, student apartments, 10 classrooms, plus Outside stage area.

Fields involved with:

- project initiation and pre-design,
- concept, preliminary and developed design stages,
- sustainability principles.



Cimdata Digital Media Academy, Berlin, Germany

01/2002 - 01/2003

Student

1. Studies of web design and architectural presentation

Subjects studied relevant to architecture were:

Auto CAD, Archi CAD, 3D Studio Max, Architectural Presentation, Adobe Photoshop

Bundes Bau Gesellschaft Berlin, Germany

01/2001 - 09/2001

Project Manager

1. MarieElisabeth-Lüders- and Paul-Löbe-Haus - legislative buildings, Berlin,

The Complex of legislative buildings serve government members with offices, theatres, a library and further administrative purposes.

Construction type: mainly insulated insitu concrete.

Costs: € 496 million, GFA 146.000 m²

Fields involved with:

- project management - building and quality control.

HENN Architects + Engineers, Berlin, Germany

02/1997 - 10/2000 Project Architect

1. Railway Station, Great Garden, Dresden, Germany - station for a miniature railway system.

Construction type: timber and timber glulam on concrete foundations.

Costs: DM 1 million, GFA: 150 m²

Fields involved with:

- concept, preliminary and developed design stages
- detailed design and documentation,
- procurement,
- structures,
- light timber framed construction.



2. IHP, Institute of Semiconductor Physics - Frankfurt/ Oder, Germany

Construction type: Concrete, steel and concrete steel hybrid.

Costs: DM 128 million, GFA: 13500 m²

Fields involved with:

- detailed design and documentation,
- building environment and services,
- structures,
- seismic design.

3. Refurbishment of an existing apartment, office, retail building - 39 Oranienburgerstr, Berlin.

Estimated costs: DM 6.2 million, GFA: 1950 m²

Fields involved with:

- project initiation and pre-design
- concept, preliminary and developed design stages

4. Floating exhibition platform - for 'Scania' at Autostadt Wolfsburg, Germany

Construction type: Steel pontoons, Steel beams, timber deck.

Costs: DM 330.000, GFA: 200 m²

Fields involved with:

- detailed design and documentation.

5. Plasma-Institute for 'Aventis' - Frankfurt Main, Germany.

Estimated costs: DM 30 million, GFA: 9000 m²

Fields involved with:

- project initiation and pre-design
- detailed design and documentation.

6. Light weight concrete manufacture - for 'Hebel', Stulln, Bavaria, Germany

Construction type: Steel pontoons, Steel beams, timber deck.

Costs: DM 25 million, GFA: 3500 m²

Fields involved with:

- project initiation and pre-design



Eller Maier Walter Architects + PLAN Bauconsult, Berlin, Germany

12/1994 - 12/1996

Project and site architect

1. Refurbishment of 5 apartment buildings - Wildau, Berlin, Germany

Construction type: timber and timber glulam on concrete foundations.

Costs: DM 3.5 million, GFA: 5600 m²

Fields involved with:

- concept, preliminary and developed design stages
- detailed design and documentation,
- procurement,
- architectural administration and observation of the contract works,
- site management.

2. Seven storey Retail/ Apartment/ Office- building - 7 Tauentzien St. Berlin, Germany

Construction type: Reinforced concrete.

Costs: DM 6 million, GFA: 8800 m²

Fields involved with:

- concept, preliminary and developed design stages
- detailed design and documentation,
- procurement.

3. Laboratory-building, Berlin Water Works - Sophienwerderweg, Germany

Construction type: reinforced concrete and steel.

Estimated costs: DM 3.5 million, GFA: 2200 m²

Fields involved with:

- concept, preliminary and developed design stages
- detailed design and documentation,



Brands Kolbe Wernik Architects, Berlin, Germany

11/1993 - 10/1994

Project Architect

1. Six storey Retail/ Apartment/ Office- building, Leipzig, Germany - Merseburger St.

Construction type: Reinforced concrete.

Estimated costs: DM 3 million, GFA: 4450 m²

Fields involved with:

- concept, preliminary and developed design stages,
- detailed design and documentation.

2. Extension of "WZB", Social Science Center - Reichspietschufer, Berlin.

Construction type: Reinforced concrete.

Estimated costs: DM 1.5 million, GFA: 1000 m²

Fields involved with:

- detailed design and documentation.

Professor Lattermann Architets, Berlin, Germany

04/1993 - 11/1993

Project Architect

1. Six storey Retail/ Apartment/ Office- building, Berlin - 138 Reichsstrasse

Construction type: Reinforced concrete with steel roof truss

Costs: DM 2.3 million, GFA: 1680 m²

Fields involved with:

- Project initiation and pre-design
- Concept, preliminary and developed design stages
- Detailed design and documentation



Quick Bäckmann Quick Architects, Berlin, Germany

11/1992 - 04/1993

Architectural Graduate

1. Urban design contest 'Garden City Berlin Falkenberg' - 1st prize scheme

Construction type: Reinforced concrete with steel roof truss

Costs: DM 2.3 million, GFA: 1680 m²

Fields involved with:

- Concept, preliminary and developed design stages

2. Secondary School 'Paulus-Praetorius Gymnasium' - Bernau, Berlin.

Construction type: Masonry, reinforced concrete with steel roof.

Costs: DM 5 million, GFA: 7000 m²

Fields involved with:

- detail design

Professional Associations

NZRAB - New Zealand Registered Architects Board, Reg # 4318

ARB UK - Architects Registration Board United Kingdom, Reg # 0867961

AKB - Chamber of Architects, Berlin, Germany, Reg # 07659 (1993 - 2018)

Studies

1986 - 1992 **Diploma of Architecture,**
"University of Applied Sciences Münster", Germany

2013 **Professional Practice for Architects in New Zealand**
Victoria University, Wellington

Further Training

CAD: AutoCad, MicroStation, Visualisation of Architecture: SketchUp, ArchiCad, 3D Studio Max

Languages German - mother tongue, English - fluent, Spanish - communication skills

Nationality German