Online Producer Statements and Quality Documentation

Martin Pratchett – Engineering Practice Manager – Engineering New Zealand

Helen Davidson – Chief Executive, ACE New Zealand

Adam Thornton – DistFEngNZ - Dunning Thornton


Introduction

PS1 - Design

PRODUCER STATEMENT – PS1
DESIGN

Building Code Clause(s): _____ Job number: _____

ISSUED BY:
(Engineering Design Firm) _____

TO:
(Client) _____

TO BE SUPPLIED TO:
(Building Consent Authority) _____

IN RESPECT OF:
(Description of building work) _____

AT:
(Address, Town / City) _____

LOT: _____ **DP:** _____ **SO:** _____ **N/A:** ☐

We have been engaged by the client referred to above to provide (Extent of Engagement):

in respect of the requirements of the Clause(s) of the Building Code specified above for part only, as specified in Schedule 1, of the proposed building work.

The design carried out by us has been prepared in accordance with:

☐ compliance Documents issued by the Ministry of Business, Innovation & Employment (Verification method /acceptable solution) and/or;

☐ alternative solution as per the attached Schedule 1.

The proposed building work covered by this producer statement is described in the drawings specified in Schedule 1, together with the specification, and other documents set out in Schedule 1.

On behalf of the Design Firm, and subject to:

- site verification of the following design assumptions:
- all proprietary products meeting their performance specification requirements;

I believe on reasonable grounds that:

- the building, if constructed in accordance with the drawings, specifications, and other documents provided or listed in Schedule 1, will comply with the relevant provisions of the Building Code specified above and that;
- the persons who have undertaken the design have the necessary competence to do so.

I recommend the CM3 ▼ level of construction monitoring.

I, (Name of Design Professional) , am:

- CPEng number
- and hold the following qualifications:

The Design Firm holds a current policy of Professional Indemnity Insurance no less than $200,000
☐ the Design Firm is a member of ACE New Zealand.

SIGNED BY (Name of Engineering Design Professional):

(Signature): Date:

ON BEHALF OF (Engineering Design Firm):

Note: This statement has been prepared solely for the Building Consent Authority named above and shall not be relied upon by any other person or entity. Any liability in relation to this statement accrues to the Design Firm only. As a condition of reliance on this statement, the Building Consent Authority accepts that the total maximum amount of liability of any kind arising from this statement and all other statements provided to the Building Consent Authority in relation to this building work, whether in tort or otherwise, is limited to the sum of $200,000.

This form is to accompany **Form 2 of the Building (Forms) Regulations 2004** for the application of a Building Consent.

Liability Statement

Note: This statement shall only be relied upon by the Building Consent Authority named above. Liability under this statement accrues to the Design Firm only. The total maximum amount of damages payable arising from this statement and all other statements provided to the Building Consent Authority in relation to this building work, whether in contract, tort or otherwise (including negligence), is limited to the sum of $200,000".

Note: This statement has been prepared solely for the Building Consent Authority named above and shall not be relied upon by any other person or entity. Any liability in relation to this statement accrues to the Design Firm only. As a condition of reliance on this statement, the Building Consent Authority accepts that the total maximum amount of liability of any kind arising from this statement and all other statements provided to the Building Consent Authority in relation to this building work, whether in tort or otherwise, is limited to the sum of $200,000.

Schedule 1 included

SCHEDULE 1

Please include an itemised list of all referenced documents, drawings, or other supporting materials in relation to this producer statement below:

PS2 – Design Review

PRODUCER STATEMENT – PS2
DESIGN REVIEW

Building Code Clause(s): _____ Job number: _____

ISSUED BY:
(Design Review Firm) _____

TO:
(Client) _____

TO BE SUPPLIED TO:
(Building Consent Authority) _____

IN RESPECT OF:
(Description of building work) _____

AT:
(Address, Town / City) _____

LOT: _____ **DP:** _____ **SO:** _____ **N/A:** ☐

We have been engaged by:
To review the design documents for this project, as specified in Schedule 1, in respect of the requirements of the Clause(s) named above of the Building Code.

The Review is of aspects of the design work prepared by:
for which a PS1 has been issued as described in drawings titled and numbered as specified in Schedule 1, together with the specifications and other documents set out in Schedule 1, according to which the building is proposed to be constructed.

On behalf of the firm undertaking this review, on the basis of the review undertaken, and subject to

- Site verification of the following design assumptions:

- All proprietary products meeting their performance specification requirements
- The scope of our review as outlined in Schedule 1;

I believe on reasonable grounds that

- the building, if constructed in accordance with the drawings, specifications, and other documents provided or listed in Schedule 1, will comply with the relevant provisions of the Building Code specified above and that
- the persons who have undertaken the review have the necessary competence to do so.

Note that aspects of the design that we have reviewed were designed in accordance with:

☐ compliance documents issued by the Ministry of Business, Innovation & Employment and/or

☐ alternative solution as per Schedule 1

I, (Name of Design Review Professional) , am:

- CPEng number
- and hold the following qualifications:

The Design Review Firm holds a current policy of Professional Indemnity Insurance no less than $200,000

☐ the Design Review Firm is a member of ACE New Zealand.

SIGNED BY (Name of Design Review Professional):

(Signature): Date:

ON BEHALF OF (Design Review Firm):

Note: This statement has been prepared solely for the Building Consent Authority named above and shall not be relied upon by any other person or entity. Any liability in relation to this statement accrues to the Design Review Firm only. As a condition of reliance on this statement, the Building Consent Authority accepts that the total maximum amount of liability of any kind arising from this statement and all other statements provided to the Building Consent Authority in relation to this building work, whether in tort or otherwise, is limited to the sum of $200,000.

This form is to accompany **Form 2 of the Building (Forms) Regulations 2004** for the application of a Building Consent.

PS4 – Construction Review

PRODUCER STATEMENT – PS4
CONSTRUCTION REVIEW

Building Code Clause(s): _____ Job number: _____

ISSUED BY:
(Construction Monitoring Firm) _____

TO:
(Client) _____

TO BE SUPPLIED TO:
(Building Consent Authority) _____

IN RESPECT OF:
(Description of building work) _____

AT:
(Address, Town / City) _____

LOT: _____ **DP:** _____ **SO:** _____ **N/A:** ☐

We have been engaged by the Client referred to above to provide CM3 ▼ level of construction monitoring relating to the Clause(s) named above of the Building Code for the building work which is covered by PS1(s)

- issued by (Engineering Design Firm) and
- which is described in the documents relating to the Building Consent No. and
- those relating to Building Consent Amendment(s) No.

issued during the course of the works.

We have sighted these Building Consents and the conditions attached to them.
(If any of the fields above are too small, please write "refer Schedule 1")

Authorised instructions/variation(s) detailed/listed in Schedule 1 have been issued during the course of the works.

On the basis of these review(s) and information supplied by the contractor during the course of the works and on behalf of the engineering firm undertaking this Construction Monitoring, I believe on reasonable grounds that the building works covered by the above mentioned PS1(s) have been completed in accordance with the relevant requirements of the Building Consent and Building Consent Amendments identified above or in Schedule 1, with respect to

Clause(s) of the Building Code. I also believe on reasonable grounds that the persons who have undertaken this construction review have the necessary competence to do so.

I, (Name of Construction Monitoring Professional) , am:

- CPEng number
- and hold the following qualifications:

The Construction Monitoring Firm holds a current policy of Professional Indemnity Insurance no less than $200,000

☐ the Construction Monitoring Firm is a member of ACE New Zealand.

SIGNED BY (Name of Construction Monitoring Professional):

(Signature): Date:

ON BEHALF OF (Construction Monitoring Firm):

Note: This statement has been prepared solely for the Building Consent Authority named above and shall not be relied upon by any other person or entity. Any liability in relation to this statement accrues to the Construction Monitoring Firm only. As a condition of reliance on this statement, the Building Consent Authority accepts that the total maximum amount of liability of any kind arising from this statement and all other statements provided to the Building Consent Authority in relation to this building work, whether in tort or otherwise, is limited to the sum of $200,000.

This form is to accompany **Forms 6 or 8 of the Building (Forms) Regulations 2004** for the issue of a Code of Compliance Certificate.

Updated Guidance

GUIDANCE ON USE OF PRODUCER STATEMENTS

Information on the use of Producer Statements and Construction Monitoring Guidelines can be found on either the ACE New Zealand or Engineering New Zealand websites.

Producer statements were first introduced with the Building Act 1991. The producer statements were developed by a combined task committee consisting of members of the New Zealand Institute of Architects (NZIA), Institution of Professional Engineers New Zealand (now Engineering New Zealand), Association of Consulting and Engineering New Zealand (ACE NZ) in consultation with the Building Officials Institute of New Zealand (BOINZ). The original suite of producer statements has been revised at the date of this form to ensure standard use within the industry.

The producer statement system is intended to provide Building Consent Authorities (BCAs) with part of the reasonable grounds necessary for the issue of a Building Consent or a Code Compliance Certificate, without necessarily having to duplicate review of design or construction monitoring undertaken by others.

PS1 DESIGN Intended for use by a suitably qualified independent engineering design professional in circumstances where the BCA accepts a producer statement for establishing reasonable grounds to issue a Building Consent;

PS2 DESIGN REVIEW Intended for use by a suitably qualified independent engineering design review professional where the BCA accepts an independent design professional's review as the basis for establishing reasonable grounds to issue a Building Consent;

PS3 CONSTRUCTION Forms commonly used as a certificate of completion of building work are Schedule 6 of NZS 3910:2013 or Schedules E1/E2 of NZIA's SCC 2011[2]

PS4 CONSTRUCTION REVIEW Intended for use by a suitably qualified independent engineering construction monitoring professional who either undertakes or supervises construction monitoring of the building works where the BCA requests a producer statement prior to issuing a Code Compliance Certificate.

This must be accompanied by a statement of completion of building work (Schedule 6).

The following guidelines are provided by ACE New Zealand and Engineering New Zealand to interpret the Producer Statement.

Competence of Engineering Professional
This statement is made by an engineering firm that has undertaken a contract of services for the services named, and is signed by a person authorised by that firm to verify the processes within the firm and competence of its personnel.

The person signing the Producer Statement on behalf of the engineering firm will have a professional qualification and proven current competence through registration on a national competence-based register such as a Chartered Professional Engineer (CPEng).

Membership of a professional body, such as Engineering New Zealand provides additional assurance of the designer's standing within the profession. If the engineering firm is a member of ACE New Zealand, this provides additional assurance about the standing of the firm.

Persons or firms meeting these criteria satisfy the term "suitably qualified independent engineering professional".

Professional Indemnity Insurance
As part of membership requirements, ACE New Zealand requires all member firms to hold Professional Indemnity Insurance to a minimum level.

The PI Insurance minimum stated on the front of this form reflects standard practice for the relationship between the BCA and the engineering firm.

Professional Services during Construction Phase
There are several levels of service that an engineering firm may provide during the construction phase of a project (CM1-CM5 for engineers[3]). The BCA is encouraged to require that the service to be provided by the engineering firm is appropriate for the project concerned.

Requirement to provide Producer Statement PS4
BCAs should ensure that the applicant is aware of any requirement for producer statements for the construction phase of building work at the time the building consent is issued. No design professional should be expected to provide a producer statement unless such a requirement forms part of the Design Firm's engagement.

Refer Also:

1 Conditions of Contract for Building & Civil Engineering Construction NZS 3910: 2013
2 NZIA Standard Conditions of Contract SCC 2011
3 Guideline on the Briefing & Engagement for Consulting Engineering Services (ACE New Zealand/Engineering New Zealand 2004)
4 PN01 Guidelines on Producer Statements

www.acenz.org.nz
www.engineeringnz.org

PS1A – DESIGN PRODUCER STATEMENT

[NOT TO BE USED IN CONJUNCTION WITH A BUILDING CONSENT APPLICATION]

ISSUED BY:.....
(Engineering Design Firm)

TO:.....
(Client)

TO BE SUPPLIED TO:.....
(Regulatory Authority)

IN RESPECT OF:.....the 'Works'
(Description of Works to be constructed/carried out)

AT:.....
(Address)
..... **LOT**..... **DP** ..... **SO** .....

We have been engaged by the client referred to above to provide (Extent of Engagement):

.....

.....

and ☐ as otherwise specified in Schedule 1 attached to this statement.

The design carried out by us has been prepared in accordance with the following compliance documents, regulatory requirements and/or standards and guidelines ('Compliance Documents'):

☐ New Zealand Standard(s): .....
☐ Code(s) of Practice: .....
☐ Local Authority By-Law(s): .....
☐ Design Guidelines(s): .....
☐ Building Code Clause No(s): .....
☐ Resource Consent No: .....
☐ Other, as described in Schedule 1 attached to this statement.

The proposed work covered by this producer statement is described in the drawings listed in Schedule 1, together with the specifications, and other documents set out in Schedule 1, attached to this statement.

On behalf of the Engineering Design Firm, and subject to:

☐ Site verification of the following design assumptions .....
☐ All proprietary products meeting their performance specification requirements.
☐ Other, as described in Schedule 1, attached to this statement.

I believe on reasonable grounds that:

a) the elements of the Works that have been designed by the Engineering Design Firm, if constructed in accordance with the drawings, specifications, and other documents provided or listed in Schedule 1, will comply with the relevant provisions of the Compliance Documents listed above and that:

b), the persons who have undertaken the design have the necessary competency to do so. I also recommend the following level of construction monitoring:

☐CM1 ☐CM2 ☐CM3 ☐CM4 ☐CM5, or ☐construction monitoring as per agreement with the client.

I, ... am: ☐CPEng #.....
(Name of Design Professional)

I am a Member of : ☐ Engineering New Zealand and hold the following qualifications:.....
The Engineering Design Firm issuing this statement holds a current policy of Professional Indemnity Insurance for no less than $200,000.
The Engineering Design Firm is a member of ACE NEW ZEALAND: ☐

SIGNED BY ..... (Signature).....
(Name of Design Professional)

ON BEHALF OF .....Date.....
(Engineering Design Firm)

NOTE: This statement has been prepared solely for the Regulatory Authority named above and shall not be relied upon by any other person or entity. Any liability in relation to this statement accrues to the Engineering Design Firm only. As a condition of reliance on this statement, the Regulatory Authority accepts that the total maximum amount of liability of any kind arising from this statement and all other statements provided to the Regulatory Authority in relation to the Works, whether in tort or otherwise, is limited to the sum of $200,000.

Quality Documentation – Why?

- To reduce RFIs
- To support engineers
- Easy for engineers to integrate
- Easy for BCAs to find information
- To set a common standard throughout New Zealand

https://www.cognitoforms.com/ACENZAndEngineeringNZ/ACENewZealandAndEngineeringNewZealandProducerStatements

DESIGN FEATURES REPORT

This template covers the standard engineering design features of a residential build. You may need to supplement this template with additional information depending on the scope of the project. While the template has been prepared with assistance from industry professionals, and reviewed by Engineering New Zealand staff, it is not intended to replace your professional engineering skill and judgment. Engineering New Zealand does not accept any liability in relation to the use of, or reliance on, this template.

These calculations pertain to New build at 123 Nowhere St, Imaginary Suburb, Wellington 6010 and cover the following design aspects:

- Beams - SED beams and posts as per beam layout plan
- Bracing - Bracing as per bracing plan. A mixture of NZS3604:2013 and loadings derived from AS/NZS1170

Standards referenced

- AS/NZS 1170 Structural design actions, NZS 3603:1993 Timber Structures Standard, NZS 3604:2011 Timber-framed buildings, NZS 3404 Parts 1 & 2:1997 Steel Structures Standard, SNZ TS 3404:2018 Durability requirements for steel structures and components

Wind loads

Wind zone = High - 44m/s

Snow loads

N/A

Permanent actions (dead loads) and live loads

Dead loads

	Description	Unit load
Roof	Lightweight cladding	0.35kPa
Floor	Timber floor	0.4kPa
External Walls	Lightweight cladding	0.35kPa*2.4m = 0.84kN/m
Internal Walls	10mm plasterboard lining	0.25kPa*2.4m=0.6kN/m

Live loads (Refer table 3.1 & 3.2 Part 1 AS/NZS 1170)

	Distributed load	Point load
Roof	0.25kPa	1.4kN*
Floor	1.5kPa	1.8kN
Deck	2.0kPa	1.8kN
Domestic Garage (timber floor)	2.5kPa	9kN

*Denotes reductions allowable in specific cases

Barrier loads

Designed using requirements of clauses 3.6 and 3.8 of AS/NZS 1170 as modified by B1/VM1 (clauses 2.2.7 and 2.2.8) with imposed actions as specified in Table 3.3 of AS/NZS 1170.

Ductility and deflection

To NZS3604:2013.

Soil class and seismic coefficient

Soil parameters

Ultimate Bearing Strenth = q_u	300
Strength Reduction Factor	0.50
Design Bearing Strength = q_{dbs}	150.00

Soil Type	Ø (degrees)	Density (kN/m3)
Sand	30	20

Liquefaction risk: Low

Expansive soils suspected: No

Foundations

Foundations to NZS3604:2013, by Arch.

Corrosion

Steel fixings for exposure zones to NZS 3604:2011 Table 4.1

	Location	Description		Treatment
Zone B and C	Treated timber pile connections **more than 600mm** from the ground and all subfloor connections	Subfloors vented 7000mm^2 or less	Sheltered	Hot dip galvanised steel
		Subfloors vented more than 7000mm^2	Exposed	Type 304 Stainless Steel
	Treated timber connections within 600mm of the ground	Sheltered and Exposed		Type 304 Stainless Steel
	All other structural fixings, except brackets	Sheltered		Hot dip galvanised steel
		Exposed		Type 304 Stainless Steel

Steel to NZS TS 3404:2018 Tables 2, 4, 5, 6, 7, 8

Macroclimate corrosion category	External			Internal	
	Exposed	Sheltered	Wet	Dry	Damp
C3	TSZ100	TSZ300S	TSZ300S	ALK1	TSZ100

CERTIFICATE OF DESIGN WORK MEMORANDUM FROM LICENSED BUILDING PRACTITIONER

Section 30C and Section 45, Building Act 2004

The Building			
Street address	123 Nowhere St		
Suburb	Imaginary Suburb	**Town/City**	Wellington
Postcode	6010		

The Owner			
Name(s)	A. Developer		
Email	martin.pratchett@engineeringnz.org	**Phone**	0275555555
Address	123 Nowhere St, Imaginary Suburb, Wellington 6010		

Basis for providing this memorandum

I am providing this memorandum in my role as the specialist designer who carried out or supervised specific Primary structure elements of restricted building work (RBW) design work as described in this memorandum. Other designers will provide memoranda covering the remaining RBW design work. Refer also to the attached PS1.

Identification of restricted building work (RBW) design work

I,A.N Engineer carried out or supervised the following RBW design work:

Primary structure: B1

Design work that is RBW		Description (as required) and reference to plans and specifications	Carried out or supervised
Foundations	✗	Not applicable	Not applicable
Retaining walls	✗	Not applicable	Not applicable
Beams	✓	SED beams and posts as per beam layout plan	Carried out
Portal	✗	Not applicable	Not applicable
Bracing	✓	Bracing as per bracing plan. A mixture of NZS3604:2013 and loadings derived from AS/NZS1170	Carried out
Other (primary)	✗	Not applicable	Not applicable

Note: SED = Elements subject to Specific Engineering Design outside of the scope of NZS3604:2011, unless otherwise noted.

Waivers and modifications

Are waivers or modifications of the Building Code required? No
If yes, please provide details of the waivers or modifications:

Issued by

Name	A.N Engineer	**Design entity/company**	A.N. Engineering Firm
Chartered status	Chartered Professional Engineer	**Chartered no.**	123456
Email	martin.pratchett@engineeringnz.org	**Website**	www.anengineer.com
Phone (daytime)	027555555	**Phone (after hours)**	027555555
Mobile	027555555		
Postal address	40 Taranaki Street		
Physical address	40 Taranaki St		

Declaration

I, A.N Engineer, LBP state that I have applied the skills and care reasonably required of a competent design professional in carrying out or supervising the RBW described in this memorandum and that based on this, I certify that the RBW described in this memorandum complies with the Building Code.

Signature_____ Date _____

New build at 123 Nowhere St, Imaginary Suburb, Wellington 6010

Structural maintenance schedule

This schedule of ongoing inspection and maintenance of structural elements shall be included with the Operations and Maintenance manuals and provided to the Owner/Body Corporate and building managers.

Inspection/maintenance timeframe and item	
(a) Half-yearly	Wash down all exposed steelwork that is not in a fully interior environment including: • Veranda steelwork • Deck and balcony steelwork
(b) 5 yearly	• Inspect and repair sealant that encloses structural mild-steel components and/or timber with mild-steel fixings
(c) 10 yearly	• Check exposed timber fixings for corrosion, repair as required. • Inspect/replace sealant that encloses structural mild-steel components and/or timber with mild-steel fixings. This will typically include sealants around the perimeter of precast panels. Note that 10 years is the expected useful life for many sealants • Check all exposed steelwork that is not in a fully interior environment for signs of corrosion. Repair protective coatings as required.
(d) 25 yearly	• Inspect samples of structural steel that is hidden from view but not enclosed within a vapour barrier, and repair protective coatings as necessary. A typical example is a veranda with built-in steelwork. (Such steelwork should typically have duplex protective coatings). Inspection may typically require removal of claddings and/or the drilling of holes for borescope access. Repair as required. • Inspect all exposed, external timber. Repair as required. • Inspect all exposed, external reinforced concrete for signs of spalling or cracking. Repair as required.
(e) Following fit-out or alterations	Not applicable.
(f) Following seismic shaking > SLS1 event	• Inspections and repair as per sections above

CONSTRUCTION MONITORING SCHEDULE RESIDENTIAL

Schedule of monitoring for

Address: 123 Nowhere St, Imaginary Suburb, Wellington 6010

We confirm that A.N. Engineering Firm have been engaged to undertake construction monitoring of the specific engineering design items to an Engineering New Zealand/ACENZ CM3 level and propose that at least the following site monitoring is undertaken:

No.	Item of monitoring	Timeframe	To be monitored by
1.	Internal beams and connections	While all connections are clearly visible, pre-line and prior to building in to such an extent that remediation work could not be carried out.	Engineer
2.	Internal posts and connections	While all connections are clearly visible, pre-line and prior to building in to such an extent that remediation work could not be carried out.	Engineer
3.	Bracing walls	Pre & post-lining	Building Consent Officer

Notes:

a) The above items of monitoring are the minimum required to enable A.N. Engineering Firm to issue a PS4 – Producer Statement Construction Review for the specific engineering design items.

b) The above items of monitoring do not cover work constructed in accordance with NZS 3604:2011, for which monitoring is to be undertaken by the Building Consent Authority.

c) The Contractor/Builder is to provide A.N. Engineering Firm at least 24 hours' notice of the requirement for monitoring. The above timeframes are indicative, the Engineer and Contractor are to agree the timing of monitoring prior to work commencing on site.

d) A copy of this monitoring schedule is to be held on site during the works, and the Contractor/Builder is to provide reasonable and safe access to enable works to be monitored according to the schedule.

e) The above schedule does not necessarily represent the actual number of monitorings to be undertaken. The number of monitorings will depend on the construction method, sequence of the works and whether or not unforeseen conditions or difficulties are encountered on site.

What's next

- Further adapt for Geotechnical and Fire Engineers
- Continuous improvement
- Construction monitoring guidelines

Questions?