

PRODUCER STATEMENT – PS2 – DESIGN REVIEW

(Guidance on use of Producer Statements (formerly page 2) is available at www.ipenz.nz)

ISSUED BY: Fire HQ Ltd
(Design Review Firm)

TO: Rotorua Lakes Council
(Owner/Developer)

TO BE SUPPLIED TO: Rotorua Lakes Council
(Building Consent Authority)

IN RESPECT OF: Rotorua Museum
(Description of Building Work)

AT: 9 Queens Drive
(Address)

Town/City: Auckland LOT DP SO
(Address)

We Fire HQ Ltd have been engaged by Rotorua Lakes Council
(Design Review Firm)

to review the design documents for this project in respect of the requirements of Clause(s) C1-C6 (part)
of the Building Code.

The Review is for ☐ All or ☒ Part only of the design work prepared by FireConnect Ltd
(Design Firm)

as described in drawings titled Fire Engineering Report, Revision B, 05/02/2020

and numbered 2018123 together with the specification, and other documents
set out in the schedule attached to this statement according to which the building is proposed to be constructed.

The Review is in respect of Fire Engineering Design or per attached schedule.
(aspects of design)

The Review confirms that these aspects of the design are in accordance with:

☒ Compliance Documents issued by the Ministry of Business, Innovation & Employment C/AS2 or
(verification method/acceptable solution)

☐ Alternative solution as per the attached schedule

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

- (i) Site verification of the following design assumptions
- (ii) All proprietary products meeting their performance specification requirements;

I believe on reasonable grounds that a) the building, if constructed in accordance with the drawings, specifications, and other documents provided or listed in the attached schedule, will comply with the relevant provisions of the Building Code and that b), the persons who have undertaken the review have the necessary competency to do so.

I, Marcus Le Quesne am: ☒ CPEng 1026244 # ☐ Reg Arch #
(Name of Design Review Professional)

I am a Member of: ☒ IPENZ ☐ NZIA and hold the following qualifications: MEFE, BSc(Hons)

The Design Review Firm issuing this statement holds a current policy of Professional Indemnity Insurance no less than \$200,000*.

The Design Review Firm is a member of ACENZ: ☐

SIGNED BY Marcus Le Quesne (Signature) [Signature]
(Name of Design Review Professional)

ON BEHALF OF Fire HQ Ltd Date 07/02/2020
(Design Review Firm)

Note: This statement shall only be relied upon by the Building Consent Authority named above. Liability under this statement accrues to the Design Review 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.*

This form is to accompany **Form 2 of the Building (Forms) Regulations 2004** for the application of a Building Consent.
THIS FORM AND ITS CONDITIONS ARE COPYRIGHT TO ACENZ, IPENZ AND NZIA



Rotorua Lakes Council
1061 Haupapa Street
Rotorua

Fire HQ
P.O. Box 33240
Petone 5012
admin@firehq.co.nz

07/02/2020

PS2 Letter
Rotorua Museum Peer Review

Revision A
6445.101

To Whom It May Concern,

We have been engaged to provide a peer review of the fire engineering design of the Rotorua Museum Development design using the Acceptable Solutions design by FireConnect.

The peer review covers clauses C1-C6 (part) of the New Zealand Building Code (NZBC).

To clarify the NZBC clauses to which 'part only' applies:

NZBC clause	Comment
C2.2, C2.3	Services design is undertaken by others.
C5.7c	Hazardous substance requirements, if any, are addressed by others.
C6.2	Defining the fire severity in consideration of clause 6.2 parts b, c, and d is reviewed under this PS2. Identification of the structural systems and its need for structural stability to achieve the performance requirements is not reviewed.
C6.3	Defining the period of fire resistance is reviewed under this PS2. Identification of the structural systems and its need for structural stability to achieve the performance requirements is not reviewed.
C6.4	Consideration of this performance requirement is provided and reviewed by others.

The following documentation was referenced in the review:

Document	Issued by	Revision / Date
Fire Engineering Report ref 2018123	FireConnect Ltd	Revision B, 5 February 2020

Note that our review covers technical review of the above report only. It does not include review of design coordination, compliance schedule, level of construction monitoring, or other regulatory review items or documents. These items are to be reviewed and confirmed as acceptable by the BCA.

Based on our review of the above documentation, we believe on reasonable grounds that the proposed fire engineering design complies with Acceptable Solutions C/AS2 as nearly as is reasonably practicable. Note that confirmation of ANARP justifications and proposed scope of works is at the discretion of Council. Please refer to the attached Producer Statement PS2.

If you have any queries in relation to the above, please don't hesitate to contact us.

Yours sincerely,

A handwritten signature in blue ink, appearing to read "M. Le Quesne".

Marcus Le Quesne
CMEngNZ, MEFE, BSc (Hons)

Director
Fire HQ

Fire Engineering Report – Peer Review Log Issue A				
Project:	Rotorua Museum	Fire Engineering Designer(s):	Brian Lucas	FireConnect
FHQ Project No.	6445.101		Simon Weaver	
Date:	07/02/20	Document Control:		
Reviewer:	Marcus Le Quesne	FHQ Queries	Fire Designer Responses	
Reviewed Documents:		PR Log FER Issue A – 22/01/20	Response to queries – 03 February 2020	
Fire Engineering Report Rotorua Museum Development Government Gardens, Oruawhata Drive, Rotorua FIRECONNECT LTD Rev B 5 February 2020		PR Log FER Close Out – 07/02/20		

Project Description

The Tudor style Rotorua Museum was originally constructed in approximately 1906 for use as a bathhouse. The building comprises of a basement with unreinforced concrete columns, foundation walls, and ground floor, timber framed ground floor walls and a trussed/rafter roof system with a heavy clay tile roof.

Numerous modifications and alterations have taken place since the original construction at varying times, with the most recent works including a new South wing and extensions to the North wing in 2009-2010.

The building is registered with the New Zealand Historic Places Trust with a Category I type (A place of special or outstanding historical or cultural significance or value. The registration covers the structure, its fixtures and finishes. It also includes recent modifications.

The building is to undergo major seismic strengthening work and some internal alterations including creating larger open display areas, a new access to the basement viewing area of the baths and an intermediate floor in the café area.

Peer Review

This review provides a series of comments and questions on the Fire Engineering Report. Comments which are “Open” require a response as these are considered to affect the outcome of the design. Comments which are “Note Only” do not require a response, however we recommend that the note is considered and actioned as appropriate.

Item	Reference	Query	Response	Status
1	2	Will heat detectors be substituted in the basement where smoke detectors are omitted and/or is sprinkler coverage in place there?	Heat Detectors will not be installed as the basement is fully sprinkler protected	Closed
2	Table 1	Wall surface finishes in crowd spaces should be GN2. Please revise.	Noted - will be changed	Closed
3	4.1.10	Please describe the construction of the non-compliant surface finishes so that the risk can be better understood.	Surface finishes likely to be non-compliant include: - Solid timber Heritage T & G ceilings in the central atrium  - Heritage Timber wall panels	Closed

Item	Reference	Query	Response	Status
			 The solid timber joinery and exposed heritage timber around door openings and balustrades.	
		Noted, please include in the fire report.		
4	4.1.12	Please confirm the existing external cladding construction, and whether there are any works to cladding.	The building is timber frame with pumice concrete to most exterior walls. The works on the exterior cladding is limited to essential maintenance any is minor.	Closed
5	Drawings	There are a number of stairs which are fire separated, and these are referred to as safe path stairs in the fire report with the accompanying concessions such as measuring travel distances to the stair only. However, they are not truly safe path stairs as they discharge to an open path at the Ground Floor. Notwithstanding that the proposed improvements under this project are significant, please confirm that our interpretation of this is correct, and provide discussion on the stair discharge and occupant safety. Please include discussion on occupant awareness and notification of a fire which could block their route out from a stair and their alternative egress options noting also any relevant security controls.	The mention of "safe path" in the report referred only to the new fire separated escape route from the viewing platform area in the ceiling of the North wing. Agreed – it is not truly a safe path as it does not terminate at a final exit. It does, however terminate into a separate firecell within the sprinkler protected building which is a vast improvement on the existing situation and offers a relatively safe means of	Closed

Item	Reference	Query	Response	Status
			escape from and area which, while of huge heritage value has currently no significant level of protection to the occupants escaping the viewing platform are. It was not practical to terminate an escape route directly to the outside of the building therefore the next best option was to terminate the escape route into a separate firecell.	
We note that our review has been undertaken with respect to the minimum performance requirements of the NZBC relating to protection from fire, and we have not considered items outside of this scope, including but not limited to consideration of loss control objectives, system design performance and business continuity. Further, our review is based on the design information provided only. Coordination of the fire engineering design requirements into construction documentation remains the responsibility of the design team.				