

3

HolmesConsultingGroup



Project Name PGG Buildings  
253 Cambridge

Project No:

S.R. No: 1

Date: 7 September 2010

Reviewed By: Mark Whiteside

SITE REPORT

STRUCTURAL AND CIVIL ENGINEERS

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Work Reviewed:

Rapid Structural Assessment.

Walk around exterior, ground, first, fourth floors.

Christchurch

Telephone

64 3 366 3366

Facsimile

64 3 379 2169

Internet

www.holmesgroup.cor

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Observations & Comments:

An initial earthquake inspection was carried out on PGG Buildings.

The inspection showed:

- Insitu concrete construction building with concrete shear wall core to south side.
- Cracks to ground floor and first floor level shear walls.
- Fourth floor ceiling grid bracing has failed, ceiling tiles have been removed, electrical and air conditioning services are exposed.

Confirming 'green placard' building okay to occupy [structurally].

Report Prepared By:

Mark Whiteside  
PROJECT ENGINEER

Level 5

123 Victoria Street

PO Box 25355

Christchurch 8144

New Zealand

Offices in

Auckland

Hamilton

Wellington

Queenstown

San Francisco

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Copies to:

Cc:



Project Name PGCBuilding, 233  
Cambridge Terrace

Project No: 105315

S.R. No:

S I T E R E P O R T

Date: 16 September 2010

Reviewed By: Alistair Boys

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Work Reviewed:

Re-visit to inspect new/growing cracks.  
RC frame around lift core.

Queenstown

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Observations & Comments:

- All cracks observed minor in shear walls - typically <0.5mm.
- One single crack 0.6mm and minor spalling initiated at intersection approximately 100x100mmx10mm max depth.
- Spalling in spandrel beams (outside) initiated by reinforcing corrosion - not significant.
- Inspected parapet above carparks on boundary. All cracks evident are old (moss in cracks) and wall is stable and has not moved.
- Okay to park below.

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Report Prepared By:

Alistair Boys  
PROJECT ENGINEER

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Copies to:



Project Name PGC Building 233  
Cambridge St

Project No: 105380.37

S.R. No: 3

Date: 15 October 2010

Reviewed By: MRW

## SITE REPORT

## Work Reviewed:

PGC Building – Re-inspection of ground floor window frame gap and second floor partition crack.

## Observations &amp; Comments:

Ground floor – Window frames span from floor to floor. Aluminium mullions have moved internal cabinetry creating a gap (or enlarging).

No structural issues. Gap should be addressed for weather proofing.

Second Floor – Partition crack at concrete interface

No structural issues.

Building remains structurally okay to occupy on above observations.

Report Prepared By:

Mark Whiteside  
PROJECT ENGINEER

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Colin Hair ([colin.hair@pgc.co.nz](mailto:colin.hair@pgc.co.nz)), Anne-Cherie ([ac.manawatu-tera@harcourts.co.nz](mailto:ac.manawatu-tera@harcourts.co.nz)).



Project Name PGC Building 233  
Cambridge St

Project No: 105380.37

S.R. No: 4

Date: 27 January 2011

Reviewed By: MRW

## SITE REPORT

## Work Reviewed:

- Re-inspection of previously observed damage level 1 and new cracks.

## Observations &amp; Comments:

- Previous cracks have enlarged. Cracks to level 1 stationary wall now >.2mm, minor spalling also evident. General diagonal cracking to all shear walls.
- New cracks to stair connection at level 1 – spalled plaster. Hairline cracks to most landings (stairs appear tied to all floors).
- Building remains safe to occupy.
- Cracks to shear walls greater than .2mm will require epoxy injection repairs.
- Cracks to stairs should be repaired also where greater than .2mm.

## Report Prepared By:

Mark Whiteside  
PROJECT ENGINEER

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## Copies to:

ac.manawatu-tera@naiharcourts.co.nz NOTE: Perpetual Trust requested a copy of this report.

# Christchurch Eq RAPID Assessment Form - LEVEL 2

Inspector Initials: ALB Date: 16/9/10 Final Posting (e.g. UNSAFE): GREEN  
 Territorial Authority: Christchurch City Time: 9:30 am.

**Building Name:** PGC Building.  
**Short Name:** \_\_\_\_\_  
**Address:** 233 Cambridge Ter  
**GPS Co-ordinates:** S° \_\_\_\_\_ E° \_\_\_\_\_  
**Contact Name:** \_\_\_\_\_  
**Contact Phone:** \_\_\_\_\_  
**Stores at and above ground level:** 7 Below ground level: 0  
**Total gross floor area (m²):** -1500 Year built: -  
**No of residential Units:** -  
**Photo Taken:** Yes  No

**Type of Construction:**  
 Timber frame  Concrete shear wall (1ft over)  
 Steel frame  Unreinforced masonry  
 Tilt-up concrete  Reinforced masonry  
 Concrete frame  Confined masonry  
 RC frame with masonry infill  Other: \_\_\_\_\_

**Primary Occupancy:**  
 Dwelling  Commercial/ Offices  
 Other residential  Industrial  
 Public assembly  Government  
 School  Heritage Listed  
 Religious  Other

Investigate the building for the conditions listed on page 1 and 2, and check the appropriate column. A sketch may be added on page 3

Overall Hazards / Damage	Minor/None	Moderate	Severe	Comments
Collapse, partial collapse, off foundation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>reinspect cracks in shear walls</u>
Building or storey leaning	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>&lt; 0.5mm ✓ OK ✓</u>
Wall or other structural damage	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Overhead falling hazard	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>inspect adjacent parapet</u>
Ground movement, settlement, slips	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>⇒ NO FALL HAZARD.</u>
Neighbouring building hazard	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Electrical, gas, sewerage, water, hazmats	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Record any existing placard on this building:

Existing Placard Type (e.g. UNSAFE): GREEN.

Choose a new posting based on the new evaluation and team judgement. Severe conditions affecting the whole building are grounds for an UNSAFE posting. Localised Severe and overall Moderate conditions may require a RESTRICTED USE. Place INSPECTED placard at main entrance. Post all other placards at every significant entrance. Transfer the chosen posting to the top of this page.

INSPECTED  
 GREEN G1 G2

RESTRICTED USE  
 YELLOW Y1 Y2

UNSAFE  
 RED R1 R2 R3

Record any restriction on use or entry:

Further Action Recommended:

Tick the boxes below only if further actions are recommended

- Barricades are needed (state location):
- Detailed engineering evaluation recommended
  - Structural
  - Geotechnical
- Other recommendations:
- Other:

Estimated Overall Building Damage (Exclude Contents)

None	<input type="checkbox"/>		<input type="checkbox"/>
0-1 %	<input checked="" type="checkbox"/>	31-60 %	<input type="checkbox"/>
2-10 %	<input type="checkbox"/>	61-99 %	<input type="checkbox"/>
11-30 %	<input type="checkbox"/>	100 %	<input type="checkbox"/>

Inspection ID: \_\_\_\_\_ (Office Use Only)

Sign here on completion  
ASB  
 Date & Time: 9:30 16/9/10  
 ID: \_\_\_\_\_

Structural Hazards/ Damage	Minor/None	Moderate	Severe	Comments
Foundations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Roofs, floors (vertical load)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Columns, pilasters, corbels	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Diaphragms, horizontal bracing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Pre-cast connections	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Beam	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Non-structural Hazards / Damage</b>				
Parapets, ornamentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Cladding, glazing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Ceilings, light fixtures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Interior walls, partitions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Elevators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Stairs/ Exits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Utilities (eg. gas, electricity, water)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Geotechnical Hazards / Damage</b>				
Slope failure, debris	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Ground movement, fissures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Soil bulging, liquefaction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>General Comment</b>	<hr/> <hr/> <hr/> <hr/>			

**Usability Category**

Damage Intensity	Posting	Usability Category	Remarks
Light damage	Inspected (Green)	G1. Occupiable, no immediate further investigation required	
Low risk		G2. Occupiable, repairs required	
Medium damage	Restricted Use (Yellow)	Y1. Short term entry	
Medium risk		Y2. No entry to parts until repaired or demolished	
Heavy damage	Unsafe (Red)	R1. Significant damage: repairs, strengthening possible	
High risk		R2. Severe damage: demolition likely	
		R3. At risk from adjacent premises or from ground failure	

2 Inspection ID: \_\_\_\_\_ (Office Use Only)