

A Seismic Building Rating System – The New Zealand Experience.

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**17th U.S. – Japan – New Zealand Workshop on the Improvement of
Structural Engineering and Resilience**

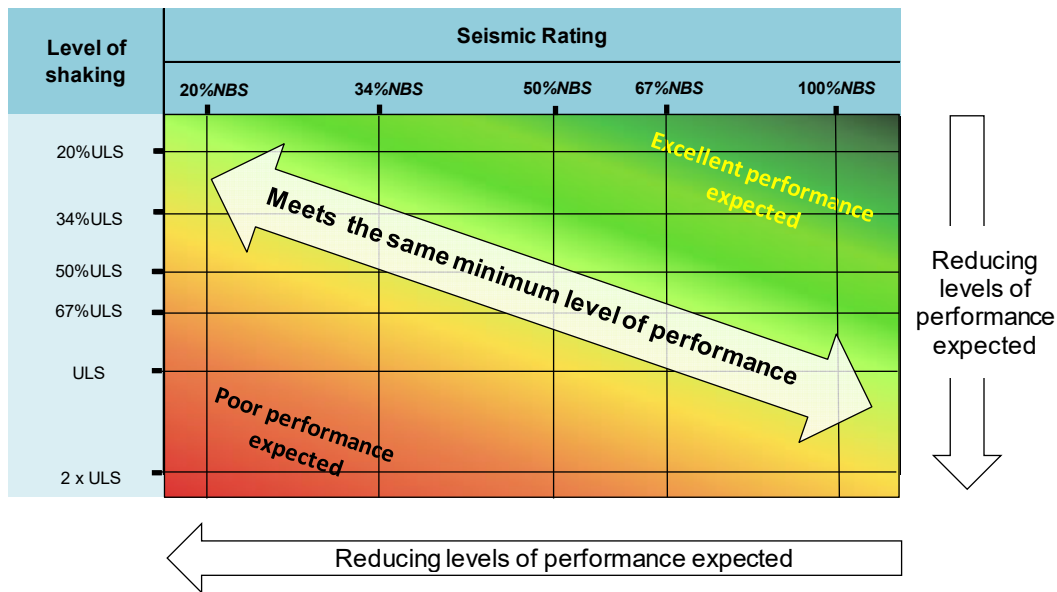


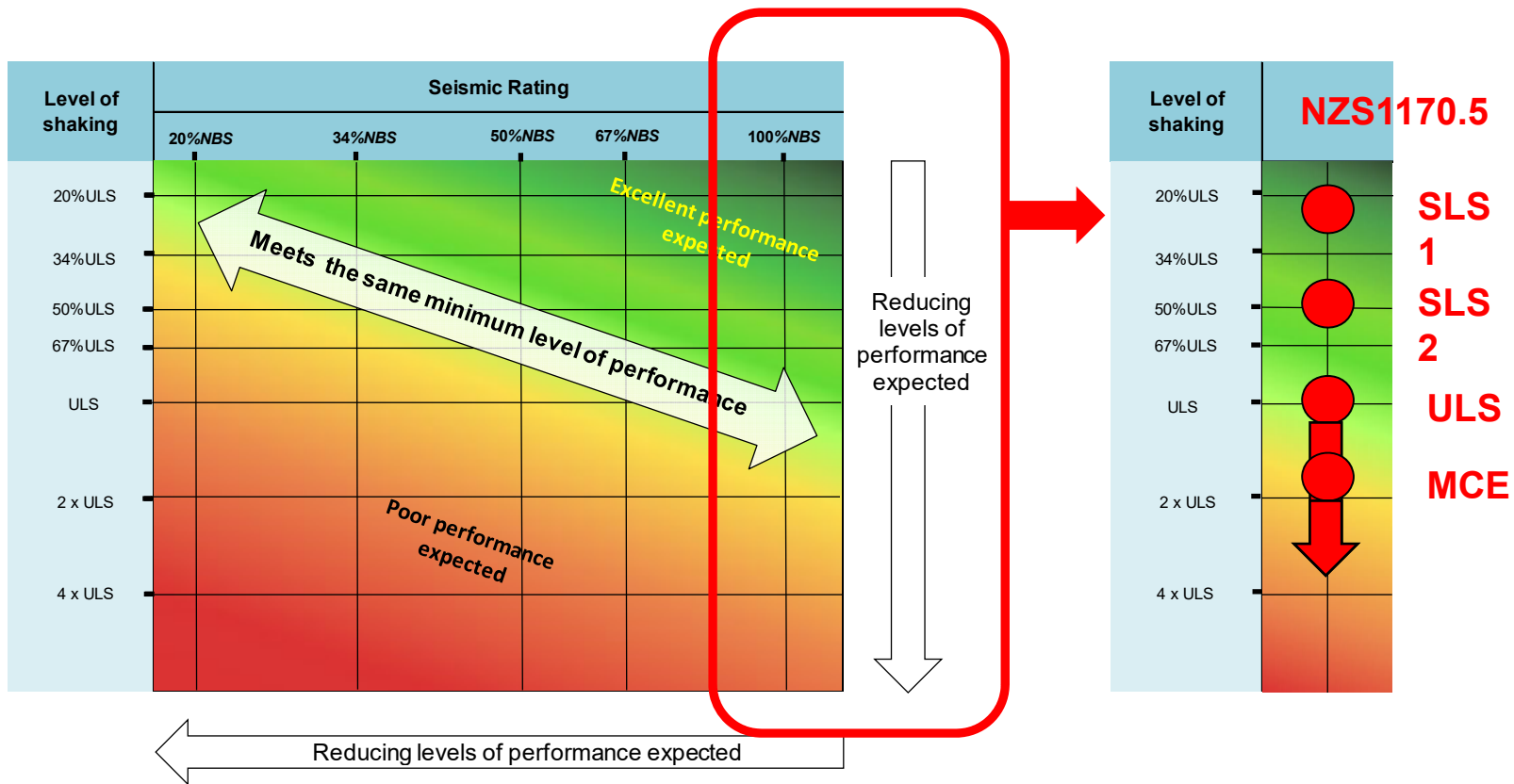
QuakeCoRE
NZ Centre for Earthquake Resilience



% NBS (New Building Standard)

%NBS	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Seismic Grade	E		D		C			B	A		A+
Relative Risk	> 25 times		10-25 times		5-10 times			2-5 times	1-2 times		< 1 times
Designation as per Building Act 2004	Earthquake Prone Building (%NBS <=33)				Earthquake Risk Building (%NBS <67)			Low Potential Earthquake Risk (%NBS >=67)			






Objectives of the %NBS rating system



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Big Profile in Petone with 90% NBS

Listing #: 1784332278

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For sale by tender
Listed: Fri 28 Sep, 9:58 am

Kieran Lennon
Commercial Consultants Limited trading as
Colliers International, Licensed Agent
(REAA 2008)

Contact details

Email the agent

Advertisement

C LUND & SON

Ground Floor - 460M²
1st Floor - 685M²
2nd Floor - 685M²

180% of building code
Base Isolated
post tensioned
Due to be completed February 2014

For enquiries please contact either
Ashton Owen
021 666 809
or
Richard Owen
021 378 374




Location: 180 Hutt Road, Petone, Petone, Lower Hutt, Wellington



For Lease

Seismic upgrades to 100% of NBS
• Free office tours available
• Fully Refurbished
Low Price Matt Hince
021 666 747 021 333 005

Westpac

JONES LANG LASALLE

FOR LEASE
Options from 277 - 500 sqm
100% NBS Rating
Danny Blair 021 826 496

Lumley

Lumley

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Minimum legislative standard



Marketable standard

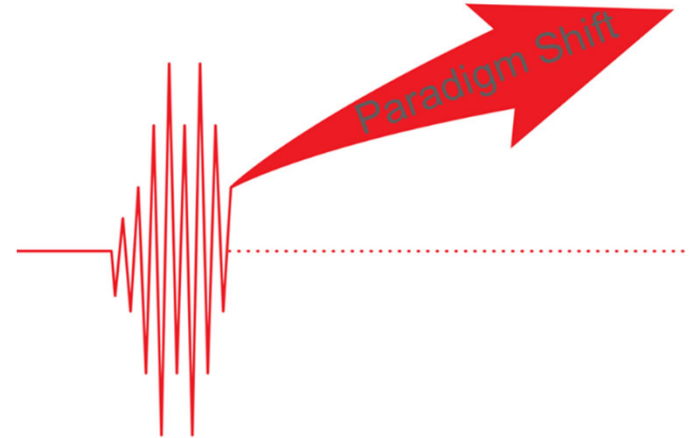


Health and safety standard ??

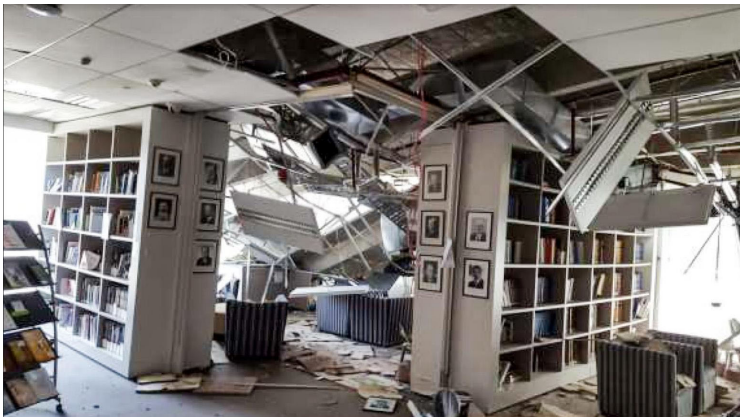


Observations

- Clarity of a single number rating.
- Seismic risk is a difficult concept for even sophisticated clients to understand.
- Some people don't get that %NBS is normalised for seismic hazard across NZ.
- Incorporating future code changes?
- Life safety focus of NZ codes
- “Is a building safe?”
- Reliability of a %NBS rating?
- Seeming precision of modern analysis techniques.
- Impact of the rating system on many small NZ communities is only now starting to become apparent.
- And ...



Building Performance in Kaikoura Earthquake



Conclusions

