

COST – BENEFITS OF SEISMIC / BASE ISOLATION

*Megan Devine
General Manager*

Robinson **S**eismic **L**td



Wellington Regional Hospital



WELLINGTON REGIONAL HOSPITAL

- 7 storey building
- Total floor area = 44,700m²
- Total construction cost = \$165m
- 135 Lead Rubber Bearings, 132 slider bearings
- Cost of seismic bearings = 1% of total construction cost
- Total cost of seismic isolation system = <3%
- ~ \$110/m²



Wellington Regional Hospital

Lead Rubber Bearings



Whanganui Hospital



Whanganui Hospital



RoGliders

WHANGANUI HOSPITAL

- Single storey
- Total floor area = 4,500m²
- Total construction cost = \$18m
- 97 RoGliders
- Cost of seismic bearings = 2% of total construction cost
- Total cost of seismic isolation system = 3%
- ~ \$140/m²



COST OF SEISMIC ISOLATION

	CONSTRUCTION COST (NZ\$millions)	COST OF BEARINGS	TOTAL COST OF SEISMIC ISOLATION	COST (NZ\$/m ²)
Wellington Hospital	165	1%	3%	110
Chch Womens Hospital	50	1.3%	Not Available	Not Available
Hutt Hospital	35	1%	2.7%	84
Whanganui Hospital	18	2%	3%	140



Supreme Court, Wellington



BENEFITS

- Reduced structural element costs
- Minimised damage to contents
- Minimised internal structural damage
- Reduced repair costs
- Immediate continuation of business
- No maintenance costs
- Potential insurance & deductibles benefits
- Economic & social benefits

