



Introduction:

NAMS Property maintains New Zealand's Building Component Guidelines (BCG's) annually. The maintenance process mainly considers the movements in gross replacement unit rates that have occurred over the past 12 months. This data is provided from Rawlinsons Ltd who publish the annual Construction Cost Handbook in New Zealand and Australia. Rawlinsons provide a direct linkage from their unit rates of the Handbook and the BCG's as provided by NAMS Property.

The alignment between the Construction Cost Handbook and NAMS Property BCG's has been refined this year and as a result, the unit rates have a greater level of confidence. The 2006 Construction Cost Handbook is now directly aligned with the 2006 BCG's. The 2007 Cost Handbook will be published late 2007 and will be directly related with the 2007 BCG's. The 2007 BCG's will be published through NAMS Property early in 2008. As at June 2007, the latest version of the BCG's are called 'BCG's 2006 Vrs 2'.

BCG's 2006 Version 2

The latest guidelines are available from www.namsproperty.com through either the on-line database accessed with your logon and password, or you can download the MS Excel spreadsheets from the 'toolbox' in the members area. The number of components, format and content have remained unchanged. However, the gross replacement unit rates have all been individually reviewed by Rawlinsons and aligned with the latest Handbook. The following image shows the additional column and column names provided in the latest BCG's, i.e. the typical rate for Butynol roofing has increased by \$5/m².

Component Group	Component Type	Component	Unit Rates for Gross Replacement Costs (GRC)						
			Description of 'Low rates'	Description of 'High rates'	Unit	Typical Rate 06 Vrs1	Typical Rate 06 Vrs2	GRC 06 Vrs 2	
								Low	High
Roof		Butynol Roofing	1 thick black incl replace plywood	1.5 thick grey including replace plywood	m2	130	135	119	159
		Colour Steel	0.4mm Endura Corrugate	0.55mm ZRX Dimondek 400 trough	m2	80	76	64	127
		Compressed Fibre	9mm thick Hardipanel	18mm thick Hardipanel	m2	130	130	123	191
		Concrete Roof Slabs	75 thick	150 thick	m2	270	248	219	253
		Decramastic	Decrabond to 30 degree pitch	Decrabond to 46 degree pitch and over	m2	65	65	60	70
		Glass	Clear polycarbonate	Tinted polycarbonate	m2	50	47	45	55
		Metal Roofing	4mm G2Z corrugated	9mm aluminium trough 300 profile	m2	70	57	45	156
		Paint Finish	Single storey limited scaffolding	Working at height and difficult application	m2	22	30	24	36
		Skylight	610sq Adlux low profile spandrome nonvent.	2075 x 2075 Adlux pyramid spandome	m2	2,250	2,250	540	3,140
		Shingles - Timber	Cedar or treated pine	more difficult installation	m2	120	132	96	155
		Soffits - Fibrolite	6 thick villaboard	Working at height	m2	60	70	61	85
		Soffits - Timber	7 thick plywood	12 thick pine	m2	95	101	57	151
		Downpipes - Metal	65 dia zincume steel	100 dia S.S.	m	36	66	58	142
		Spouting - Metal	125 zincume steel	125 copper	m	36	41	38	86



The 2006 BCG's Vrs 2 spreadsheet now has 3 tabs:

1. The 2006 BCG's Vrs 1 – direct copy from the 2006 NAMS Property manual
2. The 2006 BCG's Vrs 2 – latest rates across the 4 NZ regions
3. Comparative analysis – this analyses the differences between Vrs 1 and Vrs 2 and shows where these differences are greater than 15% and less than 5% through colour coding. The tab provides the details of the analysis for those who are interested.

Comparative Analysis

The following image shows how the analysis was undertaken. The blue shaded cells highlight component unit rates that have reduced by greater than 5% (lower band) of the original rate. The red shaded cells highlight component unit rates that have increased by greater than 15% (upper band) of the original rate.

Group	Type	Component	Unit	Unit Rates for Gross Replacement Costs (GRC)																				
				GRC				Auckland				Wellington				Christchurch								
				2006 Ty	2007 Ty	Comparison	2006L	2007L	2006Hi	2007Hi	2006Lo	2007L	2006Hi	2007Hi	2006	2007L	2006	2007H	2006	2007L	2006	2007L	2006	2007L
External Fabric	Roof	Butynol Roofing	m2	130	135	104%	116	119	153	159	122	126	159	165	115	115	150	155	110	115				
External Fabric	Roof	Colour Steel	m2	80	76	95%	72	64	124	127	72	64	124	128	72	64	124	126	72	64				
External Fabric	Roof	Compressed Fibre	m2	130	130	100%	121	123	193	191	120	120	190	190	115	120	185	190	120	120				
External Fabric	Roof	Concrete Roof Slabs	m2	270	248	92%	234	219	281	253	240	220	290	255	225	215	265	245	220	210				
External Fabric	Roof	Decramastic	m2	65	65	100%	60	60	70	70	60	60	70	70	60	60	70	70	60	60				
External Fabric	Roof	Glass	m2	50	47	94%	44	45	65	55	45	45	65	55	45	45	65	55	40	45				
External Fabric	Roof	Metal Roofing	m2	70	57	81%	56	45	160	156	70	45	160	160	70	45	160	155	70	45				
External Fabric	Roof	Paint Finish	m2	22	30	135%	18	24	26	36	18	24	26	28	18	24	26	38	18	24				
External Fabric	Roof	Skylight	m2	2,250	2,250	100%	540	540	3,140	3,140	540	540	2,835	2,835	540	540	3,040	3,040	540	540				
External Fabric	Roof	Shingles - Timber	m2	120	132	110%	96	96	130	155	120	120	130	155	120	120	130	155	120	120				
External Fabric	Roof	Soffits - Fibrolite	m2	60	70	116%	56	61	69	85	54	56	74	90	50	56	70	90	44	54				
External Fabric	Roof	Soffits - Timber	m2	95	101	107%	53	57	144	151	54	58	146	152	50	54	136	148	48	52				
External Fabric	Roof	Downpipes - Metal	m	36	66	184%	34	58	72	142	34	58	72	142	34	58	72	142	34	58				
External Fabric	Roof	Spouting - Metal	m	36	41	113%	33	38	79	86	34	38	80	86	32	38	78	86	32	38				
External Fabric	Roof	Downpipes - PVC	m	28	41	146%	25	40	45	58	26	40	46	58	24	40	44	58	24	40				
External Fabric	Roof	Spouting - PVC	m	40	55	137%	32	47	58	75	32	46	50	64	30	44	48	62	30	44				
External Fabric	Roof	Tile Roofing - Clay	m2	115	115	100%	110	110	135	135	110	110	135	135	110	110	135	135	110	110				
External Fabric	Roof	Tile Roofing - Concrete	m2	66	66	100%	40	40	68	68	40	40	60	60	40	40	75	75	40	40				
External Fabric	Roof	Tile Roofing - Slate	m2	280	280	100%	245	245	460	460	245	245	460	460	245	245	460	460	245	245				
External Fabric	Roof	Timber Fascia	m	40	45	112%	26	30	80	84	25	30	80	90	25	30	80	80	25	30				
External Fabric	Roof	Translucent Sheeting	m2	45	45	100%	40	45	70	55	40	45	70	55	35	45	70	55	35	45				

The comparative analysis of the 'typical rates' showed:

- Unit rates increased 11% on average
- 91 unit rates were unchanged



- 8 unit rates were within the 5% lower band
- 80 unit rates were within the 15% upper band
- 78 unit rates are considered as outliers, i.e. 8 unit rates have increased by 150%

The following table highlights key differences between the versions.

Group	Type	Component	Movement	Rate	Comment
Ext Fabric	Roof	ColorSteel	Down	\$64/m2	The low rate has moved from \$72/m2 to \$64/m2 across all regions
Ext Fabric	Roof	Concrete Roof Slabs	Down	\$240/m2	General down by \$20/m2 across the regions
Ext Fabric	Roof	Glass	Down	\$55/m2	The high rate has decreased by \$10/m2
Ext Fabric	Roof	Metal Roofing	Down	\$45/m2	The low rate has moved from \$70/m2 to \$45/m2 which is more of a correction
Ext Fabric	Roof	Paint Finish	Up	\$38/m2	Significant movement from \$28/m2 to \$38/m2 in regions except for Auckland
Ext Fabric	Roof	Shingles - Timber	Up	\$155/m2	The high rate has increase from \$130/m2
Ext Fabric	Roof	Soffits - Fibrolite	Up	\$90/m2	The high rate has increase from \$74/m2
Ext Fabric	Roof	Downpipes - Metal	Up	\$142/m2	The high rate has doubled to reflect actual costs of steel downpipe installations
Ext Fabric	Roof	Spouting - Metal	Up	\$38/m2	The low rate has increased by about \$4/m2 to \$6/m2
Ext Fabric	Roof	Downpipes	Up	\$58/m2	Low and high rates have moved by about \$12/m2 to \$16/m2
Ext Fabric	Roof	Spouting	Up	\$64/m2	Low and high rates have moved by about \$12/m2 to \$16/m2
Ext Fabric	Roof	Timber Fascia	Up	\$30/m2	Low rate has increased by \$5/m2
Ext Fabric	Roof	Translucent Sheeting	Down	\$55/m2	The high rate has moved from \$70/m2 to \$55/m2 across all regions
Ext Fabric	External Walls	Brick Cladding	Up	\$140/m2	The Auckland low rate has moved from \$120/m2 to \$140/m2
Ext Fabric	External Walls	Fibrolite Sheeting	Up	\$200/m2	Significant 2 fold increase in the high rate across all regions
Ext Fabric	External Walls	Hardipank	Up	\$100/m2	Low rate moved up by \$20/m2 across all regions
Ext Fabric	External Walls	Metal Cladding	Up	\$90/m2	High rate increased by \$15/m2 across all regions
Ext Fabric	External Walls	Paint Finish	Up	\$23/m2	High rate increased from \$18/m2 across all regions except for Auckland where it was \$26/m2
Ext Fabric	External Walls	Plaster	Down	\$60/m2	High rate generally moved from \$72/m2
Ext Fabric	External Walls	Plywood	Down	\$100/m2	High rate has come down from \$150/m2 to \$140/m2



Group	Type	Component	Movement	Rate	Comment
Ext Fabric	External Walls	Precast Conc Wall Panels	Up	\$300/m2	Christchurch rates are now similar to other regions
Ext Fabric	External Walls	PVC Weatherboards	Up	\$155/m2	Low rates have increased from \$100/m2 across all regions
Ext Fabric	External Walls	Weatherboard -Timber	Down	\$210/m2	Christchurch, Wellington and Dunedin have reduced from about \$260/m2
Ext Fabric	Winds & Drs	Alum/Glass - Sliding Double Door	Up	\$3825	High rate increased from \$3175
Ext Fabric	Winds & Drs	Alum Frame Glass - Double Door	Up	\$4785	High rate increased from \$3780
Ext Fabric	Winds & Drs	Aluminium windows	Up	\$715/m2	High rate across all regions has increased from \$620/m2
Ext Fabric	Winds & Drs	Glass Door	Up	\$8000	The low rate has increased from \$2000 to \$8000 – non domestic doors
Ext Fabric	Winds & Drs	Metal clad doors	Down	\$300	Low and high rates are reduced significantly for Christchurch and Dunedin
Internal Finishes	Ceiling finishes	Gib Board Lining	Up	\$42/m2	Generally the low and high rates have increased by \$10/m2 to \$12/m2. The low rate is now \$42/m2 across all regions
Internal Finishes	Ceiling finishes	Paint finish	Up	\$12/m2	Low rate up from \$10/m2 and high for Auckland reduced from \$25/m2 to \$16/m2
Internal Finishes	Ceiling finishes	Plaster finish	Down	\$56/m2	High rates reduced from \$64/m2
Internal Finishes	Wall finishes	Paint finish	Down	\$18/m2	Auckland high rate has reduced from \$25/m2
Internal Finishes	Wall finishes	Fibrolite	Down	\$44/m2	Low rate has reduced from \$66/m2
Internal Finishes	Wall finishes	Melteca / Seratone	Up	\$156/m2	High rate has increased from \$106/m2
Internal Finishes	Interior doors	Metal doors	Up/Down	\$1135	Reduced in Christchurch & Dunedin and increased in other regions
Internal Finishes	Floor finishes	Floating timber	Up/Down	\$135/m2	Low rates have increased and high rates have reduced
Internal Finishes	Floor finishes	Paint Finish	Up	\$40/m2	High rate has increased from \$32/m2
Internal Finishes	Floor finishes	Stair nosing	Up	\$32/m2	Low rate has doubles across all regions
Internal Finishes	Fixtures & fittings	Fixed seating	Down	\$100/m	Low and high rates have significantly decreased
Internal Finishes	Fixtures & fittings	Hot water cylinder	Up	\$1450	Low rate has increased from \$1170
Internal Finishes	Fixtures & fittings	Zip Heater	Up	\$2370	Low rate for Auckland has increased from \$1100
Internal Finishes	Fixtures & fittings	Stoves	Up	\$1655	Low rate for Auckland has increased from \$1150
Services	Sanitary Plumbing	Hand basin	Down	\$950	High rate has reduced from \$1200
Services	Sanitary Plumbing	Shower Unit (acrylic 3 sided)	Up/Down	\$2400	Low rates have increased and high rates have significantly reduced



Group	Type	Component	Movement	Rate	Comment
Services	Sanitary Plumbing	Toilet bowl & cistern	Down	\$130	Low rate is now more reflective of a low quality mass produced system
Services	Electrical	Cabling / Internal wiring	Up	\$100/m2	Increase of 30%
Services	Electrical	Fluorescent Lights	Up	\$205	Both high and low rates increased from \$50 to \$150
Services	Electrical	Light Switches & Powerpoints	Up	\$1000	High rates have increased significantly to account for sophisticated systems
Services	Services	Electrical	Up	\$5335	High rate has increased from \$675
Services	Electrical	Main fusebox	Down	\$935	High rate has significantly decreased from \$24000 to be aligned with other boards
Services	Mechanical	Space heaters	Up	\$1305	High and low rates have increased
Services	Mechanical	Axial Ventillation Fans	Down	\$9600	High rate decreased from \$20,000
Services	Mechanical	Build Manag System	Up/Down	\$6750	High and low rates now aligned with industry rather than rough estimate
Services	Mechanical	Centrifugal Ventilation Fans	Up	\$8000	Significant increase from \$1000 to \$8000 and from \$30,000 to \$35000
Services	Mechanical	Chillers – centrifugal	Up	\$236,000	Low rate increased from \$9000 to \$236000
Services	Mechanical	Chillers - reciprocating	Up	\$243,000	Low and high rates increased significantly and rationalised
Services	Mechanical	Chillers -screw	Up	\$150,000	Low and high rates increased
Services	Mechanical	Header tank	Up/Down	\$4255	Low up and high down
Services	Mechanical	Valves - HVAC	Down	\$4120	Low rate had largest fall from \$600 to \$80
Services	Lifts / Hoists	Various	Rationalised		All lift and hoist components are rationalised due to first year being componentised
Services	Special services	Barrier arms	Up	\$4320	Low rate has increased from \$2000
Services	Special services	Card reader	Up	\$7000	High rate has increased from \$4725
Services	Special services	CCTV Camera / Monitor	Up	\$1595	High and low rates have increased by \$400
Services	Special services	Elect. Security Sys. - Domestic	Up	\$900	Low rate has increased from \$675
Services	Special services	Generators (Standby)	Up	\$107000	Low and high rates have increased by about 30%
Services	Special services	Paring control	Up/Down	\$23000	Low rate has increased and the high rate has decreased
Services	Special services	Surveillance and Security System	Up/Down	\$16800	Low rate has increased and the high rate has decreased
Services	Fire services	EWIS System	Up/Down	\$42000	Low rate has increased and the high rate has decreased



Group	Type	Component	Movement	Rate	Comment
Services	Fire services	Pipe work	Down	\$35/m	Low and high rates have reduced by about 30%
Services	Fire services	Valves – fire system	Up/Down	\$1890	Low rate has increased and the high rate has decreased
Ext Wks / Sundries	External Works	Asphalt paths	Up	\$30	Low and high rates increased by \$10/m2
Ext Wks / Sundries	External Works	Staircase - metal	Up	\$2267	Low rate now matches the high rate

Application of the changes

It is intended that the 2006 BCG's Vrs 2 will be used by organisations that are following the data collection techniques described in Section 3 of the NAMS Property manual. Applying the unit rates to components that have had condition grades assessed and quantities measured, will allow the calculation of long term capital renewals and planned maintenance. The rates will also provide for the property valuation process for specialised property that require a Depreciated Replacement Cost to calculate depreciation. In addition to this, the rates can be used to apportion the market or Fair Value back to components as required from the International Financial Reporting Standard (IFRS).

Organisations that use asset management systems, ERP's or NAM's demonstration asset planning system, can update the component values by applying the percentage differences for each component to the master data. This process is best described as follows:

- Apply the percentage differences to components that have been updated within the past 1 to 2 years
- Consider additional percentage factors for components that have not been updated for 3 to 5 years. The factors would be aligned with the Construction Cost Index or the Consumer Price Index or a combination of both
- Exclude components that have been updated within the past 9 months.
- Entire properties could have the percentages applied or groupings of individual components within properties
- This is part of the data maintenance process. As works are carried out during the year, individual components should be updated to reflect the changes. This will result in an ever improving database.
- It is envisaged that the next unit rate update will be undertaken when the 2007 BCG's are released in early 2008. Each organisation makes their own decision on when the updates will take place. Some organisations may chose to update the data every three years when valuations are due. Others could be more proactive and update annually alongside other data maintenance tasks. It is recommended that the BCG updates are undertaken annually.