RLB Rider RLB Levett Bucknall

RIDERS DIGEST 2017

CANBERRA, AUSTRALIA EDITION

Australian Capital Territory Office

16 Bentham Street, Yarralumla ACT 2600 Telephone: +61 2 628<u>1 5446</u>



45TH EDITION

A yearly publication from RLB's Research & Development department.

Riders Digest is a compendium of cost information and related data specifically prepared by RLB for the Australian construction industry.

While the information in this publication is believed to be correct, no responsibility is accepted for its accuracy. Persons desiring to utilise any information appearing in this publication should verify its applicability to their specific circumstances. Cost information in this publication is indicative and for general guidance only and is based on rates ruling at Fourth Quarter 2016 (unless stated differently). All figures are rounded and exclude GST.

© Rider Levett Bucknall 2016 Reproduction in whole or part forbidden

CONTENTS

PROFESSIONAL SERVICES Cost Management and Quantity Surveying Advisory	6 9
INTERNATIONAL CONSTRUCTION Building Cost Ranges RLB Escalation Forecasts	14 18
AUSTRALIAN CONSTRUCTION Building Cost Ranges Building Services Cost Ranges RLB Tender Price Index Definitions Acknowledgements	20 24 28 30 32
CONSTRUCTION COSTS Building Services Ranges Unit Costs Site Works Demolition Hotel Furniture, Fittings & Equipment Office Fitout Recreational Facilities Vertical Transportation	34 38 39 40 40 41 42 44
DEVELOPMENT Stamp Duties Land Tax Planning - Car Parking Land Values Rental Rates Office Sector Data Retail Sector Data Industrial Sector Data Construction Work Done RI B Market Activity Cycle	48 49 50 51 52 53 56 58 59 63

BENCHMARKS Regional Indices Key City Relativities Office Building Efficiencies Reinforcement Ratios Labour and Materials Trade Ratios Progress Payment Claims Common Industry Acronyms Method of Measurement	66 67 68 69 70 71 72
ASSETS AND FACILITIES Sustainability and Quality Management Standards Useful Life Analysis Outgoings Essential Safety Measures Capital Allowances (Tax Depreciation)	76 77 78 79 80 81
OFFICES Oceania Africa Middle East United Kingdom Asia Americas	84 85 85 86 86 89
CALENDARS Calendars 2016 - 2019 2017 Rostered Days Off Public Holidays	92 94 96

| 3

INTRODUCTION RIDER LEVETT BUCKNALL

"CONFIDENCE TODAY INSPIRES TOMORROW"

With a network that covers the globe and a heritage spanning over two centuries, Rider Levett Bucknall is a leading independent organisation in quantity surveying and advisory services.

Our achievements are renowned: from the early days of pioneering quantity surveying, to landmark projects such as the Sydney Opera House, HSBC Headquarters Building in Hong Kong, the 2012 London Olympic Games and CityCenter in Las Vegas.

We continue this successful legacy with our dedication to the value, quality and sustainability of the built environment. Our innovative thinking, global reach, and flawless execution push the boundaries. Taking ambitious projects from an idea to reality.

"CREATING A BETTER TOMORROW"

The Rider Levett Bucknall vision is to be the global leader in the market, through flawless execution, a fresh perspective and independent advice.

Our focus is to create value for our customers, through the skills and passion of our people, and to nurture strong long-term partnerships.

By fostering confidence in our customers, we empower them to bring their imagination to life, to shape the future of the built environment, and to create a better tomorrow.

PROFESSIONAL SERVICES

Cost Management and Quantity Surveying

Advisory

6 9

COST MANAGEMENT AND QUANTITY SURVEYING SERVICES

The skilled cost management professionals at RLB use many tools when creating a plan that optimises the relationship between the cost and quality of a project and a client's cost objectives. The services offered by the firm to achieve these objectives are:

- Preparation of preliminary elemental estimates based on preliminary design
- Preparation of detailed estimates and cost planning advice throughout design development
- Estimating of building services
- Participation and leadership in the value management process
- Comparative cost studies and advice on cost effective design solutions
- Advice on materials selection and general buildability advice
- Advice on selection of tenderers
- Attendance at design meetings and construction control meetings

Feasibility Analysis

An accurate, reliable feasibility study is an essential prerequisite to any procurement decision-making process. Feasibility studies assess the viability of a project over its expected life and indicate the probable return, either at the point of sale or over a period of time, generally using discounted cash flow techniques. They can also assist in the process of obtaining project financing, as well as highlight variables that have the greatest impact on project returns.

Whether it's a simple developer's return on capital cost feasibility or a detailed discounted cash flow feasibility based on a range of rates of return and risk sensitivity tests, RLB can provide expert analysis and materials.

Financial Institution Auditing

RLB takes a two-step approach to financial institution audits.

At the pre-commencement stage, the firm looks beyond the items identified in the financier's brief, and expands upon it with a full analysis of all risk-related issues, providing a comprehensive profile of the project. During the post-contract stage, the company provides detailed cost-to-complete assessments. This ensures there are adequate funds should the financier be required to initiate step-in rights.

To provide effective financial management of the development process for the duration of the project, RLB will prepare a pre-commencement report including auditing project costs and the adequacy of project documentation, monitor authority approvals, prepare progress payment assessments and recommendations, and prepare cost-to-complete assessments.

Post-Contract Services

RLB ensures the successful performance building contracts by applying proven cost management, monitoring and cost reporting procedures, as well as through managing a productive working relationship with the project team.

To ensure efficient progress as specified in the cost plan, the firm will:

- Review progress claims for work in progress and recommend payment values
- Monitor documentation changes
- Prepare regular financial statements forecasting final end cost
- Measure, price, and negotiate variations
- Structure agreement of final account
- Attend meetings to represent the financial interests of the client

Tendering and Documentation

Among the tendering and documentation services offered by RLB:

- Preparation of bills/schedule bills of quantities or schedule of rates
- Preparation of bid documentation for tendering contractors
- Strategic advice of method of project procurement and tendering
- · Advice on suitability of contractor tender lists
- Review of tenders received, reconciliation to budget, and recommendation of contractor
- Attendance at tender interviews

COST MANAGEMENT AND QUANTITY SURVEYING SERVICES

Value Management

RLB offers a strategic value-management process that is dedicated to assisting with the improvement of value obtained in capital expenditure. This is achieved through participatory workshops which challenge option and design assumptions and encourage creative and lateral thinking for better value solutions.

The integration of value management with cost management results in a powerful and dynamic approach to the economic management of projects, especially during the design process.

8

ADVISORY SERVICES

RLB's depth of experience in all aspects of the property cycle enables us to deliver mature and innovative solutions for property, construction, and facilities sector clients in seven principal areas:

Asset Advisory

With total operating costs amounting to several times the initial capital cost, clients are increasingly focused on longer term strategies that span their investment horizons and beyond, to ensure they are able to consider the impact on value at all points in a property's useful life. RLB works with owners and occupiers of buildings to ensure that they are able to take full account of the total impact of their buildings and can advise on many alternate methods of identifying and accounting for assets.

RLB is expert in the following strategic services:

- Total Asset Management Planning to ISO Standards
- Asset Recognition and Rationalisation
- Cost-Benefit Analysis
- Sustainability and Environmental Performance Issues
- Whole-Life Cost Modeling

RElifing of Assets

RLB is a pioneer in using building life-extension and repositioning studies to realise and optimise the use of buildings. This methodology identifies if, when, and where to spend money to capture remaining asset values and extend the life of existing buildings.

Facilities Consultancy

Facilities management is the business practice of optimising people, process, assets, and the work environment to support the delivery of the organisation's business objectives. As acknowledged thought-leaders in the facilities management field, RLB works with a diverse range of clients to enhance facilities performance through:

- Facilities Management (FM) Planning
- Building Quality Assessments (BQA)
- Facilities and Operational Performance Audits
- Maintenance Planning and Operating Expenditure Forecast
- Performance Reviews and Benchmarking
- Post-Occupancy Evaluations
- Space Audits and Utilisation Studies

9

ADVISORY SERVICES

Building Surveying

RLB works closely with major developers, corporations, fund managers, financial institutions, and property owners and tenants to understand, maintain, and enhance the value of their built assets. The firm's expertise includes:

- Condition/Dilapidation Surveys
- Compliance Advisory
- · Conservation and Heritage Surveys
- Tenancy Make-Good Reinstatements Surveys

By combining a practical knowledge of construction issues with a strong understanding of property law, RLB offers a multi-faceted building surveying service that is and responsive to the client's needs. The firm's understanding of local markets enables us to deliver a solution that is appropriate to your specific requirements.

Risk Mitigation and Due Diligence

RLB understands that clients and stakeholders are increasingly requiring more detailed information to ensure a level of confidence is achieved and maintained in terms of enhancing value and mitigating risks. The firm can conduct risk assessments to review the scope of required work, identify project risks, prioritise key issues, provide risk analysis and develop risk management action plans for your strategic asset/facilities plan or next capital works project.

RLB can provide key advisory services targeted at risk mitigation, including:

- · Review of the scope of required work
- · Identification of project risks
- Capital Expenditure Forecasting
- · Prioritisation of key issues
- Risk analysis and customized risk-management action plans

In addition, RLB's expert services extend to specific associated property risks, among them:

- · Insurance replacement cost assessments
- Technical due diligence (for owners, vendors, purchasers and tenants)
- Services procurement, outsourcing, compliance, and supply chain issues

Property Taxation

RLB recognises the financial, compliance, and management benefits that can be achieved by adopting taxation advice from professionals who understand the business of property. The firm provides its clients with advice on capital allowances and property tax assessment and depreciation, inventories and asset registers, and changes in tax legislation to enable them to optimise their entitlements and potential for existing assets and new projects. Its experienced and qualified staff can provide proactive reporting and analysis of how taxation changes may affect a client's real estate decisions, including capital gains tax, land taxes and rating assessments, and stamp duty.

RLB's experience in property taxation covers all asset types. Data has been retained and compiled over many years to enable the firm to produce dynamic models that can quickly produce accurate indicative analysis for all property situations.

Litigation Support

RLB has a team of highly seasoned professionals with considerable expertise in the litigation arena. The firm offers comprehensive front-end, claims management, and dispute resolution services, and has particular expertise in scope definition claims appraisal, documentation, and negotiation; expert witness and determination; and arbitration and mediation.

Procurement Strategies

RLB develops procurement strategies that provide a systematic means of analysing the costs and benefits during project development, before any commitment is given to a particular option, including:

- · Clear definition of project objectives
- Identification of practical ranges of options
- Quantification of the costs and benefits of each option
- · Consideration for qualitative aspects
- Identification of the preferred option and development of action plans

ADVISORY SERVICES

RLB can examine the issues and assist in the development and evaluation of a project or service delivery with vast experience and knowledge of value enhancement through:

- Needs Analysis and Brief Definition
- Feasibility Studies
- Develop, Own and Lease Options
- Contractual Arrangements
- Project Monitoring and Certifications
- Value Engineering/Management Workshops

Our services do not deal with asset creation and capital projects alone. RLB's expertise and experience extends to property transactions, services procurement, outsourcing operations and supply chain management. RLB is uniquely positioned to provide independent and specialist advisory services and supplementary support to a client who wishes for certainty in contractual outcomes.

Research

- Industry and sectoral workload
- Cost escalation
- · Cost benchmarking by sector
- Industry trend analysis

INTERNATIONAL CONSTRUCTION

Building Cost Ranges	14
RLB Escalation Forecasts	18

INTERNATIONAL CONSTRUCTION BUILDING COST RANGES

All costs are stated in local currency as shown below.

Refer to www.rlbintelligence.com for updates.

		COST PER M ²						
	LOCAL		OFFICE B	UILDING				
LOCATION /CITY	CURRENCY	PREI	MUIN	GRADE A				
		LOW	HIGH	LOW	HIGH			
AMERICAS @ Q3 20	016							
BAHAMAS	USD	2,495	4,455	2,335	3,270			
BOSTON	USD	2,960	4,840	1,940	2,960			
CHICAGO	USD	2,475	3,875	1,505	2,155			
HONOLULU	USD	3,070	5,705	2,635	4,305			
LAS VEGAS	USD	1,505	3,175	1,130	2,045			
LOS ANGELES	USD	2,260	3,390	1,560	2,370			
NEW YORK	USD	3,765	5,920	2,960	4,035			
PHOENIX	USD	1,615	2,960	1,185	1,885			
SEATTLE	USD	2,045	2,530	1,400	1,990			
WASHINGTON D.C.	USD	2,690	4,305	1,885	2,960			
ASIA @ Q3 2016								
BEIJING	RMB	7,550	12,450	7,100	10,700			
CHENGDU	RMB	6,900	9,940	7,750	11,240			
HO CHI MINH CITY	VND ('000)	24,000	34,400	20,400	25,600			
HONG KONG	\$HKD	22,900	34,100	19,500	26,500			
JAKARTA	RP ('000)	9,648	13,200	6,670	10,620			
KUALA LUMPUR	RINGGIT	2,500	4,500	1,300	3,000			
SEOUL	KRW ('000)	2.250	2.890	1.700	2.080			
SHANGHAI	RMB	7.250	11.500	6,500	9,900			
SHENZHEN	RMB	7.000	11.250	6,450	9.800			
SINGAPORE	SGD	2,700	4.000	2,100	3.000			
EUROPE @ Q3 2016				_,				
BERLIN	EUR	1,355	1,775	990	1,150			
BIRMINGHAM	GBP	1,725	2,430	1,500	2,435			
BRISTOL	GBP	1.960	2.580	1.580	2.370			
DUBLIN	EUR	1,800	2.000	1,600	1,800			
LONDON	GBP	2,396	3.120	1.975	3.077			
MANCHESTER	GBP	1,907	2.501	1,646	2,470			
OSLO	EUR	2,840	3.690	2,190	2,850			
MIDDLE EAST @ Q3		_,	-,	-,	_,			
ABU DHABI	AED	5,800	7,000	4,700	6,600			
DUBAI	AED	5,800	7,000	4,700	6,600			
DOHA	QAR	6,500	8,500	6,100	8,200			
OCEANIA @ Q4 201		0,000	0,000	0,100	0,200			
ADELAIDE	AUD	2,600	3.850	2,100	3.250			
AUCKLAND	NZD	3,400	4,500	2,600	4.250			
BRISBANE	AUD	2,600	4,000	2,000	3.000			
CANBERRA	AUD	3,274	4,245	2,655	3,349			
CHRISTCHURCH	NZD	3,700	4,800	3,150	4,200			
DARWIN	AUD	3,100	4,000	2,400	3,800			
GOLD COAST	AUD	2,450	4.000	1,900	3,000			
MELBOURNE	AUD	3.060	3.825	2,370	2,960			
PERTH	AUD	3,000	4,770	2,370	3,740			
SYDNEY	AUD	3,130	4,770	2,575	3,740			
WELLINGTON	NZD	3,400	3,494	2,510	2,730			

The following data represents estimates of current building costs in the respective market. Costs may vary as a consequence of factors such as site conditions, climatic conditions, standards of specification, market conditions etc.

Rates are in national currency per square metre of Gross Floor Area except as follows: Chinese cities, Hong Kong and Macau: Rates are per square metre of Construction Floor Area, measured to outer face of external walls.

Singapore, Ho Chi Minh City, Jakarta and Kuala Lumpur: Rates are per square metre of Construction Floor Area, measured to outer face of external walls and inclusive of covered basement and above ground parking areas.

Chinese cities, Hong Kong, Macau and Singapore: All hotel rates are inclusive of Furniture Fittings and Equipment (FF&E).

COST PER M ²								
	RET	AIL			ENTIAL			
MA	LL	STRIP SH	HOPPING	MULTIS	STOREY			
LOW	HIGH	LOW	HIGH	LOW	HIGH			
1,635	2,830	1,520	2,390	1,410	4,565			
1,615	2,690	1,075	1,615	1,885	3,230			
1,400	2,260	1,130	1,400	1,400	2,260			
2,260	5,330	1,885	4,680	2,100	4,780			
1,240	5,165	700	1,560	755	4,360			
1,400	3,175	1,130	1,830	1,720	2,800			
2,690	4,305	1,615	2,690	2,155	4,035			
1,185	1,830	805	1,400	970	1,990			
1,400	2,475	1,185	1,670	1,505	2,690			
1,345	2,690	1,075	1,615	1,885	3,230			
8,300	12,700	7,350	11,450	4,000	6,100			
5,000	7,400	5,150	7,600	3,500	5,450			
19,300	25,700	NP	NP	15,400	23,300			
23,000	29,200	19,600	25,500	21,500	37,200			
6,520	8,515	NP	NP	6,430	9,986			
2,100	3,500	NP	NP	1,900	4,500			
1,520	2,190	1,280	1,940	1,470	2,120			
7,600	12,000	6,750	11,000	3,600	5,750			
7,450	11,450	6,550	10,050	3,600	5,500			
2,200	3,400	NP	NP	2,000	3,200			
1,145	1,460	835	1,040	990	1,407			
2,645	3,700	840	1,580	1,590	2,230			
2,700	3,800	860	1,625	1,700	2,400			
1,900	2,100	1,000	1,200	1,400	1,600			
3,195	4,491	1,026	1,922	2,008	2,785			
2,678	3,762	854	1,615	1,636	2,292			
1,800	2,340	1,440	1,870	2,420	3,150			
4,100	6,500	NP	NP	4,500	6,500			
4,100	6,500	NP	NP	4,500	6,500			
5,300	6,500	NP	NP	6,500	7,800			
1,550	2,950	1,300	1,825	2,250	3,550			
2,500	2,800	1,400	1,800	3,000	4,000			
2,300	3,100	1,100	1,600	2,000	3,200			
2,250	3,156	1,205	1,984	2,720	3,946			
1,650	2,200	NP	NP	NP	NP			
1,730	2,590	1,230	2,090	2,010	2,650			
2,150	3,100	1,050	1,600	1,758	3,200			
2,065	3,060	1,080	1,580	2,245	3,570			
2,300	2,800	1,025	2,565	2,230	3,830			
1,880	3,930	1,460	1,890	2,460	4,560			
1,352	1,872	NP	NP	2,730	3,494			

INTERNATIONAL CONSTRUCTION BUILDING COST RANGES

All costs are stated in local currency as shown below.

Refer to www.rlbintelligence.com for updates.

		COST PER M ²					
	LOCAL		нот	ELS			
LOCATION /CITY	CURRENCY	3 S	TAR	5 STAR			
		LOW	HIGH	LOW	HIGH		
AMERICAS @ Q3 20	016						
BAHAMAS	USD	1,530	4,885	2,725	7,070		
BOSTON	USD	2,420	3,765	3,765	5,400		
CHICAGO	USD	2,045	2,585	3,120	4,845		
HONOLULU	USD	3,500	5,865	5,545	8,020		
LAS VEGAS	USD	1,615	2,960	3,765	5,005		
LOS ANGELES	USD	2,260	3,120	3,390	5,060		
NEW YORK	USD	2,960	4,035	4,035	5,920		
PHOENIX	USD	1.615	2.690	2,960	4.575		
SEATTLE	USD	1,720	2,260	2,315	3,390		
WASHINGTON D.C.	USD	2.420	3.495	3,500	5.110		
ASIA @ Q3 2016							
BEIJING	RMB	9,600	12,350	12,900	17,000		
CHENGDU	RMB	8.730	11.000	11.600	14,900		
HO CHI MINH CITY	VND ('000)	23,400	30,300	31,100	38,100		
HONG KONG	\$HKD	29,400	34.000	35,700	43,600		
JAKARTA	RP ('000)	10,410	11,875	13,670	17,420		
KUALA LUMPUR	RINGGIT	2,500	3,500	5,000	7,000		
SEOUL	KRW ('000)	1.960	2,490	3.040	4,510		
SHANGHAI	RMB	9.300	12.000	12.600	16.600		
SHENZHEN	RMB	9.120	11.500	12.100	15.800		
SINGAPORE	SGD	3.300	3,700	4.300	5.600		
EUROPE @ Q3 2016	5						
BERLIN	EUR	1,355	1,770	1,985	2,755		
BIRMINGHAM	GBP	1,270	1,870	2,015	2,750		
BRISTOL	GBP	1.300	1.740	2.250	3.000		
DUBLIN	EUR	1,340	1,440	2,000	2,200		
LONDON	GBP	1,706	2,191	2,526	3,400		
MANCHESTER	GBP	1,292	1,719	2,042	2,793		
OSLO	EUR	2,960	3,850	3,920	5,090		
MIDDLE EAST @ Q	3 2016						
ABU DHABI	AED	6,000	8,500	9,000	12,000		
DUBAI	AED	6,000	8,500	9,000	12,500		
DOHA	QAR	7,500	8,500	11,500	14,500		
OCEANIA @ Q4 20	16						
ADELAIDE	AUD	2,550	3,450	3,550	4,450		
AUCKLAND	NZD	3,800	4,300	4,500	5,500		
BRISBANE	AUD	2,800	4,000	4,000	5,500		
CANBERRA	AUD	2,933	4,095	4,031	4,970		
CHRISTCHURCH	NZD	3,000	3,300	3,700	4,200		
DARWIN	AUD	2,830	3,550	3,600	4,450		
GOLD COAST	AUD	2,600	4,000	3,400	5,500		
MELBOURNE	AUD	3,110	3,570	3,920	5,090		
PERTH	AUD	2,645	3,635	3,600	4,430		
SYDNEY	AUD	2,980	3,770	4,230	5,610		
WELLINGTON	NZD	2,402	2,839	3,536	4,264		

The following data represents estimates of current building costs in the respective market. Costs may vary as a consequence of factors such as site conditions, climatic conditions, standards of specification, market conditions etc.

Rates are in national currency per square metre of Gross Floor Area except as follows: Chinese cities, Hong Kong and Macau: Rates are per square metre of Construction Floor Area, measured to outer face of external walls.

Singapore, Ho Chi Minh City, Jakarta and Kuala Lumpur: Rates are per square metre of Construction Floor Area, measured to outer face of external walls and inclusive of covered basement and above ground parking areas.

Chinese cities, Hong Kong, Macau and Singapore: All hotel rates are inclusive of Furniture Fittings and Equipment (FF&E).

COST PER M ²								
	CAR PA				TRIAL			
MULTI	STOREY	BASE	MENT	WARE	HOUSE			
LOW	HIGH	LOW	HIGH	LOW	HIGH			
NP	NP	NP	NP	1,410	2,280			
755	1,075	970	1,615	1,075	1,885			
700	1,185	970	1,505	1,075	1,400			
1,075	1,560	1,505	2,850	1,560	2,420			
540	915	645	1,615	540	1,075			
1,075	1,290	1,240	1,775	1,075	1,830			
970	1,615	1,345	2,160	1,240	2,155			
430	700	645	1,075	590	1,075			
860	1,075	1,075	1,560	970	1,345			
700	1,075	860	1,345	970	1,615			
2,220	3,000	3,700	6,500	4,300	5,450			
2,050	2,800	3,650	5,950	3,500	4,300			
8,800	13,100	18,000	24,500	5,970	9,100			
8,950	10,600	18,400	25,200	15,100	19,000			
3,460	4,450	4,450	6,190	4,650	5,680			
800	1,200	1,400	3,200	1,000	1,800			
650	790	820	1,050	1,140	1,410			
2,050	2,950	3,850	6,400	3,900	5,050			
2,050	2,900	3,700	6,300	3,850	4,850			
700	1,400	1,500	2,250	1,100	1,600			
470	680	785	1,040	365	730			
320	635	800	1,375	350	635			
400	800	925	1,440	360	650			
400	500	600	1,000	400	560			
410	820	1,090	1,760	443	799			
323	646	875	1,396	354	646			
690	880	890	1,160	1,570	2,030			
1,800	3,600	2,850	4,500	1,500	2,700			
2,300	3,600	3,100	4,500	1,850	2,900			
NP	NP	2,750	4,500	NP	NP			
610	925	1,325	1,950	625	1,100			
750	1,000	2,000	2,500	700	950			
700	1,100	1,600	2,100	600	1,100			
747	1,034	1,003	1,429	693	1,077			
850	1,350	1,750	2,200	720	1,100			
750	1,250	1,170	1,530	800	1,420			
700	1,100	1,500	2,050	600	1,100			
670	1,080	1,130	1,390	565	1,120			
750	1,000	1,850	3,100	550	1,020			
730	1,100	1,050	1,680	700	1,100			
520	936	1,966	2,839	936	1,456			

INTERNATIONAL CONSTRUCTION RLB ESCALATION FORECASTS

RLB TENDER PRICE INDEX ANNUAL CHANGE

All indices are stated as annual percentage changes. *Refer to www.rlbintelligence.com for updates.*

	2014	2015	2016 (F)	2017 (F)	2018 (F)	2019 (F)
AFRICA @ Q3 2016						
CAPE TOWN	5.0	6.0	7.0	8.0	4.8	4.8
JOHANNESBURG	8.3	7.2	7.5	8.0	4.8	4.8
PRETORIA	8.3	7.2	7.5	8.0	4.8	4.8
AMERICAS @ Q3 2016						
BOSTON	5.0	3.5	4.8	4.1	4.1	4.1
CHICAGO	4.9	4.1	4.6	4.1	4.1	4.1
DENVER	2.5	3.6	3.8	4.1	4.2	4.2
HONOLULU	13.3	11.2	4.0	4.0	4.1	4.1
LAS VEGAS	3.6	4.4	5.9	4.6	4.1	4.1
LOS ANGELES	4.9	5.2	5.4	4.1	4.1	4.1
NEW YORK	5.0	3.7	4.4	4.1	4.1	4.1
PHOENIX	3.7	3.7	4.4	4.3	4.1	4.1
PORTLAND	6.0	4.6	4.6	4.1	4.1	4.1
SAN FRANCISCO	6.1	9.4	4.3	4.1	4.1	4.8
WASHINGTON DC	5.0	4.4	4.3	4.1	4.1	4.1
ASIA @ Q3 2016						
BEIJING	2.0	(1.0)	0.5	2.0	2.0	2.0
CHENGDU	1.1	0.3	(1.1)	0.0	0.4	0.4
GUANGZHOU	3.0	(3.0)	1.0	2.0	2.0	2.0
HONG KONG	8.2	4.3	3.4	3.0	3.0	3.0
MACAU	10.4	3.5	2.0	3.0	3.0	3.0
SEOUL	1.1	(0.5)	1.3	1.7	1.8	1.9
SHANGHAI	(1.0)	(4.4)	(0.0)	2.0	2.0	2.0
SHENZHEN	1.5	(0.7)	1.0	2.0	2.0	2.0
SINGAPORE	1.5	1.5	NP	NP	NP	NP
EUROPE @ Q3 2016						
BERLIN	1.8	2.2	2.0	2.0	2.0	2.0
BRISTOL	7.1	4.5	5.0	5.0	5.5	4.8
BUDAPEST	NP	2.5	3.0	3.3	2.5	NP
DUBLIN	5.0	7.0	4.0	8.0	8.0	NP
LONDON	5.0	5.9	3.5	3.5	3.5	3.7
MADRID	0.0	(0.0)	0.1	0.8	0.1	0.1
MANCHESTER	7.1	4.0	5.0	5.0	5.5	4.8
WARSAW	(0.8)	0.7	3.2	3.2	1.2	NP
MIDDLE EAST @ Q3 2016						
ABU DHABI	3.3	4.7	5.7	6.1	7.3	7.3
DOHA	4.5	5.0	5.5	6.0	7.0	NP
DUBAI	3.7	4.6	3.0	3.5	3.5	3.5
RIYADH	5.0	4.8	5.0	5.0	5.0	5.0
OCEANIA @ Q4 2016						
ADELAIDE	0.6	0.8	1.8	3.0	3.5	3.5
AUCKLAND	4.1	5.1	5.6	4.6	3.0	1.5
BRISBANE	5.1	5.9	7.9	4.0	4.0	4.0
CANBERRA	1.6	2.0	2.5	2.8	3.0	3.0
CHRISTCHURCH	6.0	6.0	3.0	4.0	4.0	3.5
DARWIN	1.8	0.8	0.2	0.8	1.5	2.0
GOLD COAST	4.1	4.0	6.0	5.0	4.0	3.0
MELBOURNE	1.5	2.0	2.0	3.0	3.0	3.0
PERTH	0.8	0.8	0.8	1.5	3.0	3.0
SYDNEY	3.0	4.5	4.8	4.2	4.0	3.5
TOWNSVILLE	2.0	3.0	3.0	4.0	4.0	4.0
WELLINGTON	3.4	3.0	4.0	4.0	4.5	5.0

NP: Not published

18 I

AUSTRALIAN CONSTRUCTION

Building Cost Ranges	20
Building Services Cost Ranges	24
RLB Tender Price Index	28
Definitions	30
Acknowledgements	32

AUSTRALIAN CONSTRUCTION BUILDING COST RANGES

CONSTRUCTION RATES

The following range of current building costs could be expected should tenders be called in the respective city. Items specifically included are those normally contained in a Building Contract.

Specific exclusions:

- Goods & Services Tax (GST)
- Land
- Legal and professional fees
- Loose furniture and fittings
- Site works and drainage
- Subdivisional partitions in office buildings
- Telstra and private telephone systems (PABX)
- Tenancy works

CITY	ADEL	AIDE	BRISBANE		
COST RANGE PER	\$/	M²	\$/M ²		
GROSS FLOOR AREA		HIGH	LOW	HIGH	
OFFICE BUILDINGS					
Prestige, CBD					
10 TO 25 STOREYS (75-80% EFFICIENCY)	2,600	3,500	2,600	3,500	
25 TO 40 STOREYS (70-75% EFFICIENCY)	3,000	3,850	2,700	3,700	
40 TO 55 STOREYS (68-73% EFFICIENCY)	-	-	2,900	4,000	
Investment, CBD					
UP TO 10 STOREYS (81-85% EFFICIENCY)	2,100	2,650	2,200	2,600	
10 TO 25 STOREYS (76-81% EFFICIENCY)	2,350	2,950	2,300	2,700	
25 TO 40 STOREYS (71-76% EFFICIENCY)	2,550	3,250	2,400	3,200	
Investment, other than CBD					
WALK UP (83-87% EFFICIENCY)	1,750	2,250	1,600	2,200	
UP TO 10 STOREYS (82-86% EFFICIENCY)	2,000	2,600	1,800	2,400	
10 TO 25 STOREYS (77-82% EFFICIENCY)	-	-	2,000	2,600	
HOTELS					
Multi-Storey					
FIVE STAR	3,550	4,450	4,000	5,500	
FOUR STAR	3,050	4,150	3,400	4,500	
THREE STAR	2,550	3,450	2,800	4,000	
CAR PARK					
OPEN DECK MULTI-STOREY	610	925	800	1,200	
BASEMENT: CBD	1,325	1,950	1,600	2,100	
BASEMENT: OTHER THAN CBD	925	1,750	1,100	1,800	
UNDERCROFT: OTHER THAN CBD	575	875	600	800	
INDUSTRIAL BUILDINGS					
6.00 M to underside of truss and 4,500 M² Gross Floor Area with:					
ZINCALUME METAL CLADDING	625	1,000	700	1,000	
PRECAST CONCRETE CLADDING	725	1,100	800	1,100	
Attached Airconditioned Offices					
200 M ²	1,550	2,150	1,600	2,000	
400 M ²	1,550	2,150	1,600	1,900	

NOTES

- i Car Parking costs have been excluded to arrive at the various building rates.
- ii Refer to Page 30 for definitions.
- The percentages shown against each building may be used to calculate the rate per Net Lettable Area.

Example: the NLA rate for a Premium Office CBD 10 to 25 Storeys would be calculated NLA rate = $/M^2 \div$ the efficiency percentage.

Refer to www.rlbintelligence.com for updates.

CANB	ERRA	DAR	WIN	MELBOURNE		PE	RTH	SYD	NEY
\$/	M ²	\$/	\$/M ² \$/M ²		M ²	\$/	Μ²	\$/	M ²
LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH
3,274	3,977	3,100	4,000	3,060	3,455	3,150	4,080	3,400	3,880
3,520	4,245	3,250	4,150	3,265	3,670	3,445	4,470	3,920	4,450
-	-	-	-	3,400	3,825	3,735	4,770	4,340	4,820
2,655	3,103	2,400	3,430	2,370	2,805	2,575	3,315	2,510	2,930
2,773	3,210	2,550	3,800	2,500	2,905	2,670	3,485	2,980	3,300
2,826	3,349	-	-	2,550	2,960	2,775	3,740	3,140	3,620
1,418	1,941	2,200	2,800	1,250	1,735	2,300	3,100	1,990	2,360
2,015	2,303	2,300	3,350	1,760	2,345	2,500	3,300	2,190	2,830
2,133	2,720	2,550	3,430	1,940	2,550	2,900	3,600	2,510	3,200
4,031	4,970	3,600	4,450	3,920	5,090	3,600	4,430	4,230	5,610
3,465	4,714	3,330	4,050	3,515	4,535	3,105	4,035	3,550	4,930
2,933	4,095	2,830	3,550	3,110	3,570	2,645	3,635	2,980	3,770
747	1,034	750	1,250	670	1,080	750	1,000	730	1,100
1,003	1,429	1,170	1,530	1,130	1,390	1,850	3,100	1,050	1,680
981	1,429	1,040	1,520	1,080	1,480	1,400	2,800	1,050	1,570
747	928	720	1,020	725	875	700	1,350	-	-
693	715	800	1,390	565	980	550	815	700	860
800	1,077	840	1,420	670	1,120	630	1,020	760	1,100
1,653	2,122	1,700	2,400	1,505	1,940	1,450	2,110	1,880	2,460
1,578	2,047	1,700	2,400	1,455	1,885	1,405	1,995	1,930	2,620

AUSTRALIAN CONSTRUCTION BUILDING COST RANGES

All costs current as at Fourth Quarter 2016.

CITY	ADEL	AIDE	BRISBANE		
COST RANGE PER	\$/	M²	\$/M ²		
GROSS FLOOR AREA	LOW	HIGH	LOW	HIGH	
AGED CARE					
SINGLE STOREY FACILITY	2,100	2,700	2,300	2,900	
PRIVATE HOSPITALS					
Low Rise Hospital					
45-60 M ² GFA/BED	3,600	5,550	4,200	5,500	
55-80 M ² GFA/BED WITH MAJOR OPERATING THEATRE	3,900	5,850	5,000	6,500	
CINEMAS					
GROUP COMPLEX, 2,000-4,000 SEATS (WARM SHELL)	2,700	3,650	2,500	3,500	
REGIONAL SHOPPING CENTRES					
DEPARTMENT STORE	1,350	2,350	1,600	2,100	
SUPERMARKET/VARIETY STORE	1,300	1,750	1,600	2,000	
DISCOUNT DEPARTMENT STORE	1,100	1,350	1,400	2,000	
MALLS	1,550	2,950	2,500	3,500	
SPECIALITY SHOPS	1,000	1,675	1,200	1,600	
SMALL SHOPS AND SHOWROOMS					
SMALL SHOPS & SHOWROOMS	1,300	1,825	1,200	1,800	
RESIDENTIAL					
SINGLE & DOUBLE STOREY DWELLINGS (CUSTOM BUILT)	1,575	3,450	1,800	4,000	
RESIDENTIAL UNITS					
WALK-UP 85 TO 120 M ² /UNIT	1,650	2,750	1,600	3,400	
TOWNHOUSES 90 TO 120 M ² /UNIT	1,700	2,600	1,600	2,800	
MULTI-STOREY UNITS					
Up to 10 storeys with lift					
UNITS 60-70 M ²	2,350	3,450	2,300	3,000	
UNITS 90-120 M ²	2,250	3,350	2,300	2,900	
Over 10 and up to 20 storeys					
UNITS 60-70 M ²	2,450	3,550	2,500	3,100	
UNITS 90-120 M ²	2,400	3,450	2,500	3,000	
Over 20 and up to 40 storeys					
UNITS 60-70 M ²	2,650	3,450	2,600	3,300	
UNITS 90-120 M ²	2,600	3,400	2,600	3,100	
Over 40 and up to 80 storeys					
UNITS 60-70 M ²	-	-	3,000	3,800	
UNITS 90-120 M ²	-	-	2,900	3,600	

Building Costs include Building Works and Building Services

Refer to www.rlbintelligence.com for updates.

CANBERRA		DARWIN		MELBOURNE		PEF	RTH	SYDNEY	
\$/M ²		\$/M ²		\$/M ²		\$/	M²	\$/M ²	
LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH
1,994	2,698	2,400	3,550	1,785	2,425	2,200	2,625	2,510	3,250
4,156	5,623	3,850	4,600	2,650	3,110	2,780	3,425	2,720	3,410
4,572	6,186	4,500	5,500	2,960	3,570	3,145	4,220	3,450	4,510
2,911	3,252	2,700	3,450	2,370	2,650	2,535	2,995	3,140	4,300
2,293	2,517	1,700	2,380	1,965	2,370	1,195	1,655	1,460	2,040
1,397	1,899	1,790	2,440	1,240	1,835	1,355	1,700	1,410	2,720
1,269	1,493	1,630	2,230	1,175	1,630	1,995	2,870	1,250	1,520
2,250	3,156 1,578	1,730 1.430	2,590 2,050	2,065	3,060 1,530	2,300	2,800 1,445	1,880 1,620	3,930 2,410
1,174	1,576	1,450	2,050	1,080	1,550	1,010	1,445	1,620	2,410
1.205	1.984	1.230	2.090	1.080	1.580	1.025	2,565	1.460	1.890
1,200	1,504	1,200	2,050	1,000	1,000	1,023	2,303	1,400	1,000
1.568	2,570	1.780	2,750	1.390	2.755	1.420	2.263	1.620	4.560
1,674	3,359	1,970	2,370	1,495	3,110	1,745	2,803	-	-
1,674	3,274	1,970	2,370	1,445	2,705	1,585	2,613	-	-
2,773	3,402	2,030	2,430	2,270	2,905	2,280	2,975	2,720	3,460
2,720	3,349	2,010	2,400	2,245	2,960	2,230	2,880	2,460	3,200
2,996	3,626	2,100	2,520	2,580	3,300	2,725	3,375	2,870	3,770
2,933	3,626	2,050	2,480	2,550	3,315	2,655	3,275	2,720	3,560
7 455	7.040	2.740	2.650	7.000	7 5 70	7 405	7.070	7 710	4.500
3,455 3,349	3,946 3,733	2,340	2,650 2,580	3,060 2,855	3,570 3,470	3,405	3,830 3,780	3,710 3,550	4,560 4,190
3,349	3,735	2,200	2,300	2,033	3,470	3,335	3,760	3,330	4,190
-	-	-	-	3.415	4.080	3.810	4,475	4.280	5.190
_	-	-	-	3,413	3,980	3,665	4,395	4,180	5,080
				5,205	5,505	3,005	1,000	*,100	5,000

AUSTRALIAN CONSTRUCTION BUILDING SERVICES COST RANGES

All costs current as at Fourth Quarter 2016.

	ADEL	AIDE	BRISBANE		
COST RANGE PER GROSS FLOOR AREA		Μ²	\$/	′M²	
CROSS I LOOK AREA	LOW	HIGH	LOW	HIGH	
OFFICE BUILDINGS					
Prestige, CBD					
10 TO 25 STOREYS (75-80% EFFICIENCY)	729	1,088	759	1,108	
25 TO 40 STOREYS (70-75% EFFICIENCY)	781	1,192	837	1,187	
40 TO 55 STOREYS (68-73% EFFICIENCY)	-	-	976	1,354	
Investment, CBD					
UP TO 10 STOREYS (81-85% EFFICIENCY)	713	972	692	908	
10 TO 25 STOREYS (76-81% EFFICIENCY)	716	1,023	742	976	
25 TO 40 STOREYS (71-76% EFFICIENCY)	736	1,071	783	1,090	
INVESTMENT, OTHER THAN CBD					
WALK UP (83-87% EFFICIENCY)	386	563	502	623	
UP TO 10 STOREYS (82-86% EFFICIENCY)	532	759	631	882	
10 TO 25 STOREYS (77-82% EFFICIENCY)	-	-	700	988	
HOTELS					
Multi-Storey					
FIVE STAR	1,011	1,421	926	1,164	
FOUR STAR	908	1,246	901	1,141	
THREE STAR	856	1,044	860	1,097	
CAR PARK					
OPEN DECK MULTI-STOREY	129	262	131	261	
BASEMENT: CBD	208	412	221	392	
BASEMENT: OTHER THAN CBD	208	412	221	392	
UNDERCROFT: OTHER THAN CBD	102	114	74	99	
INDUSTRIAL BUILDINGS					
6.00 M to underside of truss and 4,500 M ² Gross Floor Area with:					
ZINCALUME METAL CLADDING	207	293	190	337	
PRECAST CONCRETE CLADDING	207	334	190	337	
Attached Airconditioned Offices					
200 M ²	467	612	454	579	
400 M ²	460	605	454	579	

BUILDING SERVICES COSTS INCLUDE:

- Building Management
- Electrical
- Fire Protection
- Hydraulic
- Mechanical
- Special Equipment
- Vertical Transport

Refer to page 34 to 37 for detailed services costs.

CANBERRA		DAR	WIN	MELBO	DURNE	PEF	RTH	SYD	NEY
\$/	M ²	\$/M ²		\$/M ²		\$/	M ²	\$/M ²	
LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW HIGH		LOW	HIGH
856	1,243	1,160	1,523	775	1,205	930	1,280	951	1,267
909	1,347	1,246	1,594	917	1,280	965	1,340	1,124	1,362
-	-	-	-	970	1,370	985	1,395	1,255	1,400
710	1,138	911	1,321	605	1,025	695	1,085	649	910
752	1,138	983	1,445	670	1,100	720	1,125	770	994
752	1,191	-	-	740	1,155	755	1,150	852	1,094
449	616	841	1,082	420	680	420	600	440	629
595	856	882	1,281	525	833	565	820	638	875
658	971	971	1,326	580	945	660	920	777	1,008
1,221	1,660	1,394	1,753	1,675	2,115	1,175	1,630	1,123	1,432
1,114	1,489	1,272	1,539	1,210	1,805	1,040	1,440	996	1,331
878	1,275	1,122	1,386	915	1,380	825	1,235	847	1,109
166	269	201	363	93	274	135	285	60	150
228	456	328	449	163	354	200	405	230	310
166	445	298	449	153	324	185	375	140	265
62	114	135	282	30	60	135	290	44	63
219	386	210	499	175	310	165	335	113	196
219	376	225	518	175	310	175	355	113	198
501	668	661	926	450	625	435	630	470	829
501	605	661	926	450	830	435	595	470	842

AUSTRALIAN CONSTRUCTION BUILDING SERVICES COST RANGES

All costs current as at Fourth Quarter 2016.

	ADEL	AIDE	BRISBANE		
COST RANGE PER GROSS FLOOR AREA	\$/	Μ²	\$/	'M²	
CROSS I ECOR AREA	LOW	HIGH	LOW	HIGH	
AGED CARE					
SINGLE STOREY FACILITY	417	680	478	767	
PRIVATE HOSPITALS					
Low Rise Hospital					
45-60 M ² GFA/BED	1,200	1,461	870	1,560	
55-80 M ² GFA/BED WITH MAJOR OPERATING THEATRE	1,407	1,873	1,321	1,990	
CINEMAS					
GROUP COMPLEX, 2,000-4,000 SEATS. (WARM SHELL)	771	1,040	600	933	
REGIONAL SHOPPING CENTRES					
DEPARTMENT STORE	405	700	486	769	
SUPERMARKET/VARIETY STORE	420	655	480	712	
DISCOUNT DEPARTMENT STORE	427	598	470	627	
MALLS	511	776	558	840	
SPECIALITY SHOPS	293	560	460	657	
SMALL SHOPS AND SHOWROOMS					
SMALL SHOPS & SHOWROOMS	399	623	327	623	
RESIDENTIAL					
SINGLE & DOUBLE STOREY DWELLINGS (CUSTOM BUILT)	245	538	246	537	
RESIDENTIAL UNITS					
WALK-UP 85 TO 120 M ² /UNIT	206	466	234	465	
TOWNHOUSES 90 TO 120 M ² /UNIT	209	474	234	456	
MULTI-STOREY UNITS					
Up to 10 storeys with lift					
UNITS 60-70 M ²	463	729	428	819	
UNITS 90-120 M ²	442	684	408	786	
Over 10 and up to 20 storeys					
UNITS 60-70 M ²	468	789	518	818	
UNITS 90-120 M ²	455	775	493	779	
Over 20 and up to 40 storeys					
UNITS 60-70 M ²	513	889	591	935	
UNITS 90-120 M ²	498	861	570	896	
Over 40 and up to 80 storeys					
UNITS 60-70 M ²	-	-	793	1,055	
UNITS 90-120 M ²	-	-	736	1,000	

CANB	CANBERRA		WIN	MELBOURNE		PERTH		SYDNEY	
\$/	M ²	\$/M ²		\$/M ²		\$/	′M²	\$/M ²	
LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH
406	757	883	1,322	450	1,055	680	1,180	374	690
1 001	1 400	1.433	1 600	954	1 457	1.080	1 410	965	1.0.40
1,061	1,400		1,680		1,453		1,410		1,248
1,291	1,848	1,580	1,981	1,147	1,980	1,335	1,825	1,294	1,798
771	927	1,013	1,278	600	880	680	910	940	1,358
724	832	642	877	510	787	600	825	470	643
454	681	662	920	405	750	480	655	469	645
454	616	602	840	355	650	495	625	443	582
562	832	577	918	470	875	0	0	502	796
400	627	519	762	325	655	350	590	484	718
238	650	417	760	211	626	225	570	327	524
230	512	336	649	200	610	190	463	183	682
229	642	400	574	200	550	195	483	207	640
120	642	400	574	200	530	195	483	178	605
534	867	654	851	495	842	495	860	597	850
534	812	620	809	490	812	485	830	562	826
578	867	648	846	530	866	560	855	682	919
578	956	636	829	530	836	550	825	650	843
691	980	712	875	620	949	655	945	728	1,048
646	980	696	855	600	861	635	925	716	985
-	-	-	-	785	1,167	865	1,100	958	1,257
-	-	-	-	730	1,117	845	1,085	934	1,247

AUSTRALIAN CONSTRUCTION RLB TENDER PRICE INDEX

	ADEL	AIDE	BRISE	BANE	CANBERRA		
DATE	TPI	CPI	TPI	CPI	TPI	CPI	
DEC-1972	11.7	11.7	12.7	12.7			
DEC-1973	14.7	13.3	15.6	14.5			
DEC-1974	19.3	15.6	19.8	16.7			
DEC-1975	22.6	17.7	20.6	19.1			
DEC-1976	26.6	20.7	21.8	21.8			
DEC-1977	28.9	22.7	23.6	23.7			
DEC-1978	30.6	24.2	24.4	25.8	24.4	24.4	
DEC-1979	32.6	26.7	26.9	28.1	26.7	26.9	
DEC-1980	35.8	29.0	36.2	30.6	30.2	29.6	
DEC-1981	40.5	32.3	41.0	34.2	34.9	32.9	
DEC-1982	45.7	35.8	46.2	37.8	40.7	36.9	
DEC-1983	48.5	39.1	49.5	40.9	45.2	39.8	
DEC-1984	51.1	40.4	51.6	42.4	47.9	41.1	
DEC-1985	55.6	43.8	54.3	45.7	53.9	44.7	
DEC-1986	59.7	47.9	56.5	49.8	59.3	48.6	
DEC-1987	65.0	51.1	60.4	53.3	63.3	51.8	
DEC-1988	70.1	54.6	65.4	57.0	68.5	55.4	
DEC-1989	75.4	58.6	60.5	61.4	70.9	59.5	
DEC-1990	79.6	63.1	55.2	65.2	73.7	63.5	
DEC-1991	79.7	64.3	53.3	66.3	65.8	64.6	
DEC-1992	78.7	65.4	55.2	66.9	62.6	65.3	
DEC-1993	81.2	66.6	57.5	68.1	76.0	66.7	
DEC-1994	83.5	68.6	62.3	70.3	78.1	68.2	
DEC-1995	84.7	71.6	65.5	73.4	82.6	71.9	
DEC-1996	86.1	72.5	68.4	74.6	84.1	72.7	
DEC-1997	86.8	71.6	71.7	75.1	83.9	71.8	
DEC-1998	87.1	73.0	75.6	76.0	85.5	72.8	
DEC-1999	87.0	74.3	78.2	76.7	87.1	74.0	
DEC-2000	88.2	78.3	78.3	81.4	92.5	78.6	
DEC-2001	90.1	80.7	79.7	84.0	93.1	80.8	
DEC-2002	94.6	83.7	87.5	86.5	97.5	83.4	
DEC-2003	102.9	86.4	95.0	89.2	103.0	85.6	
DEC-2004	112.4	88.6	106.8	91.4	110.4	87.6	
DEC-2005	119.4	91.0	118.9	94.1	117.8	90.3	
DEC-2006	126.2	93.9	129.3	97.3	125.0	93.2	
DEC-2007	134.0	96.5	137.5	101.0	130.8	96.3	
DEC-2008	142.5	100.0	127.1	105.4	134.9	99.9	
DEC-2009	138.6	102.1	119.8	108.0	136.5	102.2	
DEC-2010	142.5	104.7	119.0	111.3	141.0	104.4	
DEC-2011	137.9	108.5	119.3	114.0	143.0	108.0	
DEC-2012	138.1	110.8	119.3	116.5	142.1	109.9	
DEC-2013	139.3	113.3	117.0	119.6	145.3	112.3	
DEC-2014	140.1	115.2	123.0	122.0	147.5	113.6	
DEC-2015	141.2	116.4	130.3	124.0	150.5	114.4	
MAR-2016	141.8	116.1	133.0	124.0	151.4	114.6	
JUN-2016	142.4	116.6	135.6	124.6	152.4	114.8	
SEP-2016	143.0	117.6	137.7	125.4	153.3	115.8	
DEC-2016	143.6		140.5		154.3		

The following indices reflect the change in tender levels for buildings, other than housing, as compared with the consumer price index. The Tender Price Index figures take into account labour and material cost changes and market conditions.

DARWIN		MELBOURNE		PEF	RTH	SYDNEY		
TPI	CPI TPI CPI		TPI	CPI	TPI CPI			
		13.8	13.8	14.8	14.8	14.5	14.5	
		15.3	15.7	17.0	16.4	16.2	16.4	
		19.4	18.2	21.6	19.2	21.4	19.1	
		22.6	20.9	26.3	22.0	24.6	21.7	
		25.4	23.9	30.5	25.7	25.7	24.5	
		27.7	26.2	34.2	28.6	27.7	26.5	
		29.4	28.2	35.7	30.6	29.3	28.7	
		32.3	31.0	36.0	33.5	32.5	31.7	
		35.5	33.9	38.4	36.3	37.3	34.7	
		39.6	37.8	43.9	40.8	43.6	38.6	
		44.4	41.7	51.3	44.8	46.9	43.2	
		47.3	45.7	53.4	48.6	49.7	46.4	
		52.0	46.8	56.0	49.5	52.6	47.5	
		58.5	50.7	65.8	53.6	60.6	51.5	
		63.4	55.9	72.6	59.1	67.2	56.5	
		69.3	59.8	76.5	63.2	74.1	60.5	
		74.9	63.9	81.7	68.0	80.6	66.1	
		81.9	69.2	89.5	73.3	86.8	71.0	
		82.6	74.4	92.1	78.8	84.1	75.5	
		76.7	75.6	91.2	78.6	75.1	76.6	
		74.8	75.5	91.2	78.6	71.4	76.9	
		77.0	77.4	91.2	80.5	72.5	77.9	
		78.3	79.0	92.1	82.2	75.4	80.0	
		79.8	82.7	93.0	86.2	79.1	84.7	
		82.0	83.7	95.0	87.8	83.8	86.1	
		84.1	83.7	97.2	87.1	89.7	86.0	
		86.8	84.4	99.3	89.1	96.1	87.6	
88.0		89.4	86.1	101.9	90.9	100.0	89.3	
89.8		93.8	91.3	102.6	95.5	99.9	94.6	
91.8		96.7	94.1	100.6	98.3	100.9	97.8	
93.7	93.7	104.6	97.0	103.8	101.1	103.9	100.5	
101.1	95.2	110.1	99.2	112.1	103.1	110.1	102.8	
113.2	97.1	114.7	101.5	124.5	106.2	117.8	105.5	
121.8	100.0	118.4	104.2	135.0	110.4	123.1	108.0	
132.7	105.0	122.2	107.2	147.2	115.2	128.7	111.5	
144.7	108.0	128.0	110.6	163.4	118.8	133.2	114.2	
159.1	112.0	129.6	114.1	159.9	123.2	139.2	118.4	
164.7	115.4	131.8	116.2	150.0	125.7	139.2	121.0	
168.0	118.1	137.4	119.8	147.6	129.0	140.6	123.9	
148.8	121.0	141.4	123.5	149.5	132.8	143.7	127.9	
151.8	124.1	141.4	126.1	146.1	135.6	145.4	131.1	
156.4	129.5	141.8	129.5	147.7	139.6	148.3	134.6	
159.1	132.0	143.9	131.4	148.9	142.3	152.8	136.9	
160.4	132.6	146.8	133.9	150.0	144.5	159.7	139.5	
160.5	131.4	147.5	133.7	150.3	143.5	161.5	139.3	
160.5	131.7	148.3	134.2	150.6	143.9	163.4	140.1	
160.6	132.2	149.0	134.8	150.9	144.5	165.4	141.5	
160.7		149.7		151.2		167.3		

AUSTRALIAN CONSTRUCTION DEFINITIONS

CBD

Central Business District.

BUILDING WORKS

Building works include substructure, structure, finishings, fittings, preliminary items, attendance and builder's work in connection with services.

BUILDING SERVICES

Building services include special equipment, hydraulics, fire protection, mechanical, vertical transport, building management and electrical services.

OFFICE BUILDINGS

Prestige offices are based on landmark office buildings located in major CBD Office Markets, which are pacesetters in establishing rents.

Investment offices are based on high quality buildings which are built for the middle range of the rental market.

(used as generic descriptions for International Building Cost Ranges on page 20).

RATING	GFA PER ROOM						
RATING	TOTAL ACCOMMODATION		PUBLIC SPACE				
FIVE STAR	85-110 M ²	45-55 M ²	40-55 M ²				
FOUR STAR	65-85 M ²	40-45 M ²	25-40 M ²				
THREE STAR	40-65 M ²	30-40 M ²	10-25 M ²				

HOTELS

Note: Public space includes service areas.

CAR PARKS

Open Deck Multi-storey - minimal external walling.

Basement - CBD locations incur higher penalties for restricted sites and perimeter conditions.

INDUSTRIAL BUILDINGS

Quality reflects a simplified type of construction suitable for light industry.

Exclusions: Hardstandings, Roadworks and Special Equipment.

AGED CARE

Single storey domestic construction with no operating theatre capacity, minimal specialist and service areas. 35-45 M² GFA/bed (150 beds).

HOSPITAL

Low rise hospital (45–60 M² GFA/Bed) - Minimal operating theatre capacity, specialist and service areas.

Low rise hospital (55-80 M² GFA/Bed) - Major operating theatre capacity including extensive specialist and service areas.

Exclusions: Loose furniture, special medical equipment.

CINEMAS

Multiplex Group Complex (warm shell). 2,000-4,000 seats.

Exclusions: Projection equipment, seating.

SHOPPING CENTRES

Department Store Partially finished suspended ceilings and painted walls.

Exclusions: Floor finishes, shop fittings etc.

Supermarket/Variety Store Fully finished and serviced space.

Exclusions: Cool rooms, shop fittings, refrigeration equipment etc.

Malls Fully finished and serviced space.

Specialty Shops Partially finished with ceilings, unpainted walls and power to perimeter point.

Exclusions: Floor finishes and shop fittings.

SMALL SHOPS AND SHOWROOMS

Exclusions: Floor finishes, plumbing (other than hot and cold water to sink fittings in each shop) and shop fittings.

RESIDENTIAL

Single Storey or 1-3 Storey Units reflect medium quality accommodation.

Multi-Storey Units reflect medium to luxury quality and air conditioned accommodation up to 80 storeys in height.

Note: the ratio of kitchen, laundry and bathroom areas to living areas considerably affects the cost range. Range given is significantly affected by the height and configuration of the building.

Exclusions: Loose furniture, special fittings, washing machines, dryers and refrigerators.

ASTH EDITION

ACKNOWLEDGEMENTS

Rider Levett Bucknall wish to express their appreciation for advice received from the following organisations in the preparation of this compendium:

Property Council of Australia Measurement of Net Lettable Area.

Savills Research Land Values, Rents and Yields, Rental Growth Rates and Construction Sector Data.

Colliers International – NT Northern Territory Land Values & Yields and Rental Rates.

WSP Structures Reinforcement Ratios.

Australian Bureau of Statistics Construction and Building Data and CPI information.

For further information or feedback contact:

John Cross Oceania Research & Development Manager

john.cross@au.rlb.com

Rider Levett Bucknall 13th Floor, 380 St Kilda Road, Melbourne Vic. 3004

Telephone: (03) 9690 6111 Facsimile: (03) 9690 6577

CANBERRA CONSTRUCTION COSTS

Building Service Costs	34
Unit Costs	38
Siteworks Costs	39
Demolition Costs	40
Hotel Furniture, Fittings & Equipment	40
Office Fitout Costs	41
Recreational Facilities Costs	42
Vertical Transportation	44

CANBERRA CONSTRUCTION BUILDING SERVICES COSTS

All costs current as at Fourth Quarter 2016.

	SPECIAL EQUIPMENT		HYDR	AULIC		RE ECTION	
COST RANGE PER		\$/M ²		\$/M ²		\$/M ²	
GROSS FLOOR AREA	LOW	HIGH	LOW	HIGH	LOW	HIGH	
OFFICE BUILDINGS							
Prestige, CBD							
10 TO 25 STOREYS (75-80% EFFICIENCY)	32	51	83	124	62	94	
25 TO 40 STOREYS (70-75% EFFICIENCY)	33	51	88	128	60	95	
Investment, CBD							
UP TO 10 STOREYS (81-85% EFFICIENCY)	-	-	83	114	12	108	
10 TO 25 STOREYS (76-81% EFFICIENCY)	16	47	73	117	56	104	
25 TO 40 STOREYS (71-76% EFFICIENCY)	15	45	76	126	60	99	
Investment, other than CBD							
1 TO 3 STOREYS (81-85% EFFICIENCY)	-	11	72	90	11	34	
UP TO 10 STOREYS (82-86% EFFICIENCY)	10	16	76	90	54	79	
10 TO 25 STOREYS (77-82% EFFICIENCY)	14	45	74	99	58	77	
HOTELS							
Multi-Storey							
FIVE STAR	37	66	239	320	74	113	
FOUR STAR	32	58	233	298	77	109	
THREE STAR	17	40	193	269	11	87	
CAR PARK							
OPEN DECK MULTI-STOREY	-	-	51	42	32	42	
BASEMENT: CBD	-	-	23	59	62	116	
BASEMENT: OTHER THAN CBD	-	-	21	57	13	104	
UNDERCROFT: OTHER THAN CBD	-	-	27	46	8	11	
INDUSTRIAL BUILDINGS							
6.00 M to underside of truss and 4,500 M² Gross Floor Area with:							
ZINCALUME METAL CLADDING	-	-	99	118	21	47	
PRECAST CONCRETE CLADDING	-	-	99	114	21	45	
Attached Airconditioned Offices							
200 M ²	-	-	75	74	12	24	
400 M ²	-	-	75	66	12	21	

SPECIAL EQUIPMENT

Special Equipment includes Building Maintenance Units, Medical Gases, Chutes,

Incinerators and Compactors where appropriate.

HYDRAULIC

Hydraulic Services include Cold Water Supply, Soil, Waste and Ventilation Plumbing and Associated Sanitary Fittings and Faucets where appropriate.

MECHA	ANICAL		ICAL SPORT		DING GEMENT	ELECTRICAL		то	TAL
\$/	M²	\$/	M ²	\$/	′M²	\$/M ²		M ² \$/M ²	
LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH
319	402	164	243	32	83	165	246	856	1,243
295	417	204	301	42	84	187	270	909	1,347
305	431	152	213	12	36	146	237	710	1,138
292	407	157	207	23	47	135	210	752	1,138
272	387	170	258	16	50	143	226	752	1,191
247	269	-	51	11	28	108	135	449	616
238	307	97	156	10	29	110	180	595	856
243	333	136	198	15	33	118	187	658	971
420	495	186	278	37	80	227	307	1,221	1,660
347	454	192	232	38	65	195	272	1,114	1,489
310	417	142	187	24	34	181	242	878	1,275
-	32	-	50	-	20	83	84	166	269
51	98	34	75	11	25	46	83	228	456
48	104	28	57	-	29	55	95	166	445
-	-	-	-	-	11	27	46	62	114
-	22	-	-	-	-	99	199	219	386
-	21	-	-	-	-	99	195	219	376
258	253	-	140	19	38	137	140	501	668
258	229	-	123	19	33	137	132	501	605

FIRE PROTECTION

Fire Services include Detectors, Warden Communication, Sprinklers, Hydrants, Hose Reels and Extinguishers.

MECHANICAL

Mechanical Services include Air Conditioning, Ventilation, Heating and Domestic Hot Water where appropriate.

CANBERRA CONSTRUCTION BUILDING SERVICES COSTS

	SPECIAL EQUIPMENT		HYDR	AULIC		RE
COST RANGE PER	\$/	′ M ²	\$/	′M²	\$/	Μ²
GROSS FLOOR AREA	LOW	HIGH	LOW	HIGH	LOW	HIGH
AGED CARE						
SINGLE STOREY FACILITY	-	12	167	257	12	64
PRIVATE HOSPITALS						
Low Rise Hospital						
45-60 M ² GFA/BED	25	53	181	232	39	84
55-80 M ² GFA/BED WITH MAJOR OPERATING THEATRE	41	143	185	211	52	92
CINEMAS						
GROUP COMPLEX, 2,000-4,000 SEATS (WARM SHELL)	9	15	77	101	57	62
REGIONAL SHOPPING CENTRES						
DEPARTMENT STORE	-	22	105	110	91	99
SUPERMARKET/VARIETY STORE	-	-	72	86	49	73
DISCOUNT DEPARTMENT STORE	-	18	58	78	47	78
MALLS	-	32	76	88	59	81
SPECIALITY SHOPS	-	-	58	75	44	71
SMALL SHOPS AND SHOWROOMS						
SMALL SHOPS & SHOWROOMS	-	-	42	98	8	35
RESIDENTIAL						
SINGLE AND DOUBLE STOREY DWELLINGS (CUSTOM BUILT)	-	8	111	127	7	21
RESIDENTIAL UNITS						
WALK-UP 85 TO 120 M ² /UNIT	-	-	121	218	6	28
TOWNHOUSES 90 TO 120 M ² /UNIT	-	-	58	232	4	30
MULTI-STOREY UNITS						
Up to 10 storeys with lift						
UNITS 60-70 M ²	-	11	161	226	10	54
UNITS 90-120 M ²	-	11	160	198	11	52
Over 10 and up to 20 storeys						
UNITS 60-70 M ²	-	10	151	219	45	66
UNITS 90-120 M ²	-	12	149	238	42	66
Over 20 and up to 40 storeys						
UNITS 60-70 M ²	5	38	213	247	62	76
UNITS 90-120 M ²	5	41	202	252	59	80

VERTICAL TRANSPORT

Transport Services include Lifts, Escalators, Travelators, Dumbwaiters, etc. where appropriate.

BUILDING MANAGEMENT

Building Management Services include Communications, Security and Building Automation Systems where appropriate.

MECHA	NICAL		ICAL SPORT		DING GEMENT	ELECTRICAL		то	TAL
\$/	M ²	\$/	M²	\$/	′M²	\$/M ²		\$/M ²	
LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH
109	244	-	-	-	12	118	169	406	757
486	568	52	90	33	46	246	326	1,061	1,400
608	851	69	97	81	92	255	362	1,291	1,848
324	374	142	154	9	35	152	186	771	927
294	329	-	-	-	14	221	270	724	832
177	279	-	-	-	11	156	231	454	681
165	213	-	-	30	48	154	180	454	616
206	316	-	-	-	26	222	290	562	832
184	273	-	-	-	15	114	192	400	627
118	363	-	-	-	13	71	141	238	650
14	196	-	-	-	13	97	147	230	512
13	196	-	-	-	17	88	183	229	642
8	191	-	-	-	19	50	170	120	642
139	214	106	153	-	18	118	191	534	867
147	211	101	138	-	17	114	184	534	812
161	217	100	151	-	17	121	186	578	867
159	250	100	170	-	20	128	200	578	956
202	302	61	80	11	21	136	217	691	980
182	299	58	68	10	23	129	217	646	980

ELECTRICAL Electrical Services include the provision of Lighting and Power to occupied areas where appropriate.

CANBERRA CONSTRUCTION UNIT COSTS

ITEM _	CONSTR RAI	PER	
	LOW	HIGH	
HOTELS Multi-Storey (excluding basements)			
FIVE STAR	440,417	517,196	BEDROOM
FOUR STAR	335,911	453,213	BEDROOM
THREE STAR	211,944	263,931	BEDROOM
CAR PARKS Based on 30 M ² per car			
OPEN DECK MULTI-STOREY	23,141	36,257	CAR
BASEMENT - CBD	36,257	54,386	CAR
BASEMENT - OTHER THAN CBD	36,257	51,186	CAR
UNDERCROFT - OTHER THAN CBD	14,397	29,326	CAR
AGED CARE			
FACILITY	155,692	197,281	BEDROOM
PRIVATE HOSPITALS Low Rise Hospital			
45-60 M ² GFA/BED	187,033	337,394	BED
55-80 M ² GFA/BED	251,457	494,844	BED
CINEMAS			
GROUP COMPLEX, 2,000-4,000 SEATS (WARM SHELL)	8,852	12,051	SEAT
HOUSING			
SINGLE AND DOUBLE STOREY DWELLINGS (CUSTOM BUILT) - 325 M ²	502,267	1,386,300	HOUSE
RESIDENTIAL UNITS (EXCL CARPARK/S	ITE WOR	KS)	
TOWNHOUSES (90-120 M ²)	172,754	422,288	UNIT
1 TO 3 STOREY UNITS (85-120 M ²)	191,949	407,359	UNIT
MULTI STOREY RESIDENTIAL UNITS Up to 10 storeys with lift			
UNITS 60-70 M ²	179,153	220,742	UNIT
UNITS 90-120 M ²	211,144	351,907	UNIT
Over 10 and up to 20 storeys			
UNITS 60-70 M ²	190,883	242,603	UNIT
UNITS 90-120 M ²	230,339	396,695	UNIT
Over 20 and up to 40 storeys			
UNITS 60-70 M ²	246,335	272,994	UNIT
UNITS 90-120 M ²	302,853	447,881	UNIT
Over 40 and up to 80 storeys			
UNITS 60-70 M ²	280,459	310.318	UNIT
UNITS 90-120 M ²	349,774	524,661	UNIT

CANBERRA CONSTRUCTION SITEWORKS COSTS

LANDSCAPING

	LOW	HIGH	PER
LIGHT LANDSCAPING TO LARGE AREAS WITH MINIMAL PLANTING AND SITE FORMATION BUT EXCLUDING TOPSOIL AND GRASSING.	117,302	287,924	HECTARE
DENSE LANDSCAPING AROUND BUILDINGS INCLUDING SHRUBS, PLANTS, TOPSOIL AND GRASSING.	75	118	M^2
GRASSING ONLY TO LARGE AREAS INCLUDING TOPSOIL, SOWING AND TREATING.	32	43	M^2

CAR PARKS - ON GROUND

Based on 30 M² overall area per car with asphalt paving including sub base and sealing.

	LOW	HIGH	PER
LIGHT DUTY PAVING.	3,701	4,830	CARSPACE
HEAVY DUTY PAVING TO FACTORY TYPE COMPLEX, LARGE AREA WITH MINIMAL SITE FORMATION, DRAINAGE AND KERB TREATMENT.	4,383	5,854	CARSPACE
LIGHT DUTY PAVING TO SHOPPING CENTRE COMPLEX, LARGE AREA WITH MINIMAL SITE FORMATION, AND INCLUDING DRAINAGE AND KERB TREATMENT.	3,701	4,830	CARSPACE

ROADS

Asphalt finish including kerb, channel and drainage.

	LOW	HIGH	PER
RESIDENTIAL ESTATE 6.80 METRES WIDE EXCLUDING FOOT PATH AND NATURE STRIP.	736	1,131	М
INDUSTRIAL ESTATE 10.4 METRES WIDE INCLUDING MINIMAL TO EXTENSIVE FORMATION	1,077	1,856	М

CANBERRA CONSTRUCTION DEMOLITION COSTS

Demolition costs include grubbing up footings, sealing services, temporary shoring, supports, removal of demolished materials, rubbish and site debris.

Exclusions: work carried out outside normal working hours, credit value of demolished materials and restricted site conditions.

BUILDING TYPE	LOW	HIGH	PER
SINGLE STOREY TIMBER FRAMED HOUSE WITH TIMBER CLADDING AND TILED ROOF	75	96	M ²
SINGLE/DOUBLE STOREY BRICK HOUSE WITH TILED ROOF	85	107	M^2
SINGLE STOREY FACTORY/ WAREHOUSE WITH REINFORCED CONCRETE GROUND SLAB, TIMBER OR STEEL FRAMED WALLS			
METAL CLAD	75	96	M ²
BRICK CLAD	96	118	M^2
TWO STOREY OFFICE BUILDING WITH REINFORCED CONCRETE FRAME MASONRY CLADDING AND METAL ROOF	138	203	M ²
MULTI STOREY OFFICE BUILDING UP TO 15 FLOORS WITH MASONRY CLADDING			
REINFORCED CONCRETE	171	235	M ²
STRUCTURAL STEEL	171	235	M^2
MULTI-STOREY OFFICE BUILDING UP TO 25 STOREYS, CONSTRUCTED OF STEEL FRAME WITH MASONRY CLADDING	224	320	M ²

HOTEL FURNITURE, FITTINGS & EQUIPMENT COSTS

The cost of hotel furniture, fittings and equipment (FF&E) varies within a wide range and is dependent on the quality of items provided. The following gives the expected cost ranges for different rating hotels. These costs include fitting out public areas.

	LOW	HIGH	PER
THREE STAR RATING	23,460	42,655	BEDROOM
FOUR STAR RATING	30,925	50,120	BEDROOM
FIVE STAR RATING	49,054	91,709	BEDROOM

CANBERRA CONSTRUCTION OFFICE FITOUT COSTS

The following costs, which include workstations, are an indication of those currently achievable for good quality office accommodation, inclusive of all loose and fixed furniture.

TYPE OF TENANCY	OPEN PLANNED		FULLY PARTITIONED		PER
	LOW	HIGH	LOW	HIGH	
INSURANCE OFFICES, GOVERNMENT DEPARTMENT	981	1,493	1,493	2,762	M^2
MAJOR COMPANY HEADQUARTERS	981	1,493	1,493	2,762	M^2
SOLICITORS, FINANCIERS	1,152	1,674	1,792	3,050	M^2
EXECUTIVE AREAS AND FRONT OF HOUSE	-	-	1,792	3,050	M^2
COMPUTER AREAS	2,399	2,986	-	-	M^2

Computer areas include access flooring and additional services costs but exclude computer equipment.

WORKSTATIONS

Fully self-contained workstation module size 1,800 x 1,800 MM including screens generally 1,220 MM high (managerial 1,620 MM high), desks, storage cupboards, shelving.

TYPE OF WORKSTATION	LOW	HIGH	PER
CALL CENTRE	1,919	2,986	EACH
SECRETARIAL	2,666	6,825	EACH
TECHNICAL STAFF	3,306	8,531	EACH
EXECUTIVE	8,531	29,859	EACH

REFURBISHMENT

Office

The following refurbishment costs include for demolition and removal of partitions and internal finishes, provide new floor, ceiling and wall finishes, but excluding fitting out and removal of asbestos and upgrading of building for GreenStar ratings. The lower end of the range indicates re-use and modification of existing specialist building services, while the upper end of the range indicates complete replacement of equipment and accessories.

	LOW	HIGH	PER
CBD OFFICES TYPICAL FLOOR	587	3,445	M^2
CBD OFFICES CORE UPGRADE (EXCLUDING LIFTS MODERNISATION)	2,186	4,479	M^2

CANBERRA CONSTRUCTION RECREATIONAL FACILITIES COSTS

BASKETBALL CENTRE

	LOW	HIGH	PER
CONSISTING OF BRICK WALLS, STEEL PORTAL FRAME AND PURLINS WITH METAL ROOF, TIMBER FLOOR TO PLAYING AREA, PUBLIC SEATING, PUBLIC TOILETS AND CHANGE ROOMS.	1,066	1,375	M ²

SWIMMING POOL CENTRES

	LOW	HIGH	PER
INCLUDING FOYER, KIOSK, OFFICE, LOCKERS, ADMINISTRATION OFFICES, CHANGE ROOMS.	1,493	2,240	M ²

SWIMMING POOLS

High quality fully tiled including drainage and filtration but excluding surrounding paving and enclosures.

	LOW	HIGH	PER
HALF OLYMPIC (25.0 X 12.5 M)	394,562	543,856	EACH
EXTRA FOR HEATING	20,800	38,500	EACH
EXTRA OVER FILTRATION AND DOSING PLANT FOR OZONE BASED DOSING SYSTEM	140,000	230,000	EACH
EXTRA FOR WET DECK	55,000	83,000	EACH
OLYMPIC (50.0 X 21.5 M)	1,263,665	1,770,198	EACH
EXTRA FOR HEATING	40,500	69,000	EACH
EXTRA FOR FILTRATION AND DOSING PLANT	285,000	487,000	EACH
EXTRA OVER FILTRATION AND DOSING PLANT FOR OZONE BASED DOSING SYSTEM	93,000	164,000	EACH

SMALL BOAT AND YACHT MARINA BERTHS

Floating pontoon walk-ways serviced with power and water.

	LOW	HIGH	PER
DOUBLE LOADED BERTHS	22,394	30,925	BERTH
SINGLE LOADED BERTHS	28,260	35,724	BERTH
SUPER YACHTS	229,273	296,455	BERTH

CANBERRA CONSTRUCTION RECREATIONAL FACILITIES COSTS

TENNIS COURTS

Six courts with minimal site formation and including sub base playing surface, chainwire fence 3.60 M high and spoon drains.

	LOW	HIGH	PER
SYNTHETIC GRASS	59,718	72,514	COURT
RED POROUS (EN-TOUT-CAS)	25,061	32,525	COURT
SYNTHETIC ACRYLIC (FLEXIPAVE)	42,655	48,521	COURT
ASPHALT (5 MM)	34,124	92,775	COURT
REBOUND ACE	-	-	COURT
CONCRETE	40,523	45,855	COURT
FLOODLIGHTING	-	-	COURT

GOLF COURSES

18 hole championship course including siteworks, finishing works, irrigation, grassing, landscaping, green keeping, plant & equipment, course furniture and groundstaff to practical completion but excluding mains water supply to course, roads, carparks and clubhouse. The following are indicative costs only.

	LOW	HIGH	PER
SANDY SOIL SITE, REQUIRING MINIMAL EXCAVATION AND SITE PREPARATION	7,869,917	13,884,325	COURSE
SITE REQUIRING ROCK EXCAVATION	13,457,771	17,181,585	COURSE
SWAMPY SITE REQUIRING DREDGING FOR LAKES, ETC. AND EXTENSIVE FILL	15,782,489	21,327,688	COURSE

PLAYING FIELDS

Soccer, rugby, australian rules, hockey or similar turfed areas with minimal site formation and including sub base, drainage and turfing.

	LOW	HIGH	PER
EXCLUDES SPRINKLERS	38	48	M ²

GRANDSTANDS

Prestige metropolitan grandstand with a high standard of finishes and facilities including bars, stores, meeting/ change rooms, dining and kitchen area.

	LOW	HIGH	PER
GRANDSTAND	5,866	11,730	SEAT

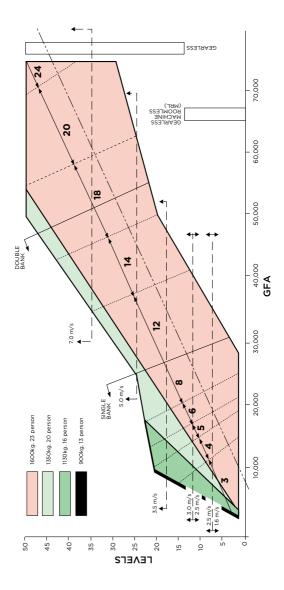
CANBERRA CONSTRUCTION VERTICAL TRANSPORTATION

LIFT SELECTION CHART

To calculate the number and type of lifts:

- Locate a point on the graph by using the GFA in M² shown on the bottom axis and number of levels on the left axis.
- The colour at the intersection point indicates the lift capacity, the horizontal lines the lift speed and the angled lines the number of lifts and the number of banks.
- By extending the horizontal line to the far right hand side, the type of lift required can be obtained.

Destination control is an optional lift control system in which passengers key-in the number of their destination floor at a button panel located in their current lift lobby area. Each floor lobby has a button panel. The lifts cars themselves do not have destination buttons and are designated to serve the floors as required. Destination control will generally boost the "Up peak" or morning performance of the lift system and will provide additional security provisions. The performance of the lift system during lunch times and at the end of the day is generally not improved with this control system. Lobby area may need to be increased.



CANBERRA CONSTRUCTION VERTICAL TRANSPORTATION

APPLICATION	LIFT TYPE	SPEED M/S	NO. OF FLOORS SERVED	BASE COST \$		RS \$ FLOOR	ADDITIONAL FLOOR	EXPRESS FLOOR
				LOW	HIGH	RATE	RATE	
	ELECTRO-HYDRAULIC PASSENGER	0.5	2	90,559	114,390	11,500	7,600	
	GEARLESS TO 17 PASSENGER	1	5	114,390	142,988	11,500	7,600	
	GEARLESS UP TO 17 PASSENGER	1.6	8	190,650	228,780	11,500	7,600	
	GEARLESS	2.5	10	343,170	405,131	11,500	7,600	
OFFICE &	GEARLESS	3.5	10	419,430	519,521	11,500	7,600	
RESIDENTIAL	GEARLESS	4	10	524,288	548,119	13,400	9,500	
	GEARLESS	5	10	610,080	676,808	13,400	9,500	
	GEARLESS	6	10	619,613	705,405	13,400	9,500	
	GEARLESS	7	10	753,068	791,198	13,400	9,500	
	GEARLESS	8	10	762,600	848,393	19,000	11,500	
HOSPITAL	GEARED UP TO 40 PASSENGER	2	5	400,365	438,495	15,250	9,500	
	GEARLESS	2.5	10	571,950	648,210	16,200	9,500	
	GEARLESS MRL TO 2,000 KG	1.6	10	309,806	343,170	12,600	8,600	
LARGE GOODS	ELECTRO-HYDRAULIC TO 5,000 KG	0.5	2	362,235	409,898	23,800	16,200	
	GEARLESS 2,500 KG	2.5	10	619,613	724,470	16,200	9,500	
ESCALATORS	RISE 2,600 TO 5,000 MM	0.5	-	142,988	219,248	-	-	
MOVING WALKS	2,500 TO 5,000 MM	0.5	-	133,455	238,313	-	-	
SERVICE LIFT	BENCH HEIGHT UNIT	0.2	3	30,504	38,130	4,300	1,430	
SERVICE LIFT	LARGER UNIT	0.2	3	47,663	57,195	4,760	1,430	
DISABLED	TO 1,000 MM	0.1	2	30,504	36,224	-	-	
LIFT	1,000 TO 4,000 MM	0.1	2	42,896	71,494	-	-	

Note: Destination Control Lift System option costs are not included in the above rates.

CANBERRA DEVELOPMENT

Stamp Duties	48
Land Tax	49
Planning – Car Parking	50
Land Values	51
Rental Rates	52
Office Sector Data	53
Forecasted Development Activity	56
Forecasted Construction Volume	58
Construction Work Done	59
RLB Market Activity Cycle	63

CANBERRA DEVELOPMENT STAMP DUTIES

Purchasers of property (houses, land, land and improvements or commercial premises) located in the ACT must pay duty on that purchase.

The rates of duty changed on 8th June 2016. Current rates published are:

VALUE OF TRANSACTION	RATE OF DUTY
UP TO \$200,000	\$20 OR \$1.48 PER \$100 OR PART THEREOF, WHICHEVER IS GREATER
\$200,001 TO \$300,000	\$2,960 PLUS \$2.50 PER \$100 OR PART THEREOF BY WHICH THE VALUE EXCEEDS \$200,000
\$300,001 TO \$500,000	\$5,460 PLUS \$4.00 PER \$100 OR PART THEREOF BY WHICH THE VALUE EXCEEDS \$300,000
\$500,001 TO \$750,000	\$13,460 PLUS \$5.00 PER \$100 OR PART THEREOF BY WHICH THE VALUE EXCEEDS \$500,000
\$750,001 TO \$1,000,000	\$25,960 PLUS \$6.50 PER \$100 OR PART THEREOF BY WHICH THE VALUE EXCEEDS \$750,000
\$1,000,001 TO \$1,454,999	\$42,210 PLUS \$7.00 PER \$100 OR PART THEREOF BY WHICH THE VALUE EXCEEDS \$1,000,000
\$1,455,000 AND OVER	A FLAT RATE OF \$5.09 PER \$100 APPLIED TO THE TOTAL TRANSACTION VALUE

For further details refer to www.revenue.act.gov.au.

CANBERRA DEVELOPMENT LAND TAX

Land tax is a general revenue measure that is used by the Government to provide a range of essential services to the ACT Community. Generally, land tax applies to all residential properties that are rented.

If you own a residential property that is rented, you are liable for land tax on that property. This also applies to boarding houses and multiple dwellings, including dual occupancies and granny flats that are rented. Rent can include cash, services or any other valuable consideration earned in respect of a property for which any form of tenancy arrangement exists.

Residential properties owned by a trust or a corporation are also liable for land tax, even if they are not rented.

Commercial properties have not been subject to land tax since 1 July 2012. Certain exemptions may apply to residential land owned by building or land development corporations.

Land tax for 2016/17 is based on a fixed charge (FC) of \$1,090 plus the calculation of the marginal rates applied to the property AUV (Average of the 2014, 2015 and 2016 unimproved land values).

TOTAL UNIMPROVED VALUE OF LAND	2016/17 TAX RATES (LAND OWNED @ 1ST JAN, APR, JUL, OCT)
AUV UP TO \$75,000	0.41%
AUV \$75,001 - \$150,000	0.48%
AUV \$150,001 - \$275,000	0.61%
AUV \$275,001 AND ABOVE	1.23%

For further details refer to www.revenue.act.gov.au.

CANBERRA DEVELOPMENT PLANNING - CAR PARKING

The following car parking information is derived from the ACT Planning & Land Authority, Parking and Vehicular Access General Code. The following table shows the parking provision rates for the provision of parking in the commercial zones.

Full details of the ACT Planning Scheme can be found at http://www.planning.act.gov.au/

USE OR DEVELOPMENT	CITY CENTRE ZONE	TOWN CENTRE ZONE		
CULTURAL FACILITY	0.5 SPACES	5/100 M ² GFA		
EDUCATION ESTABLISHMENT	1 SPACE/10 STUDENTS			
FINANCIAL ESTABLISHMENT	4 SPACES/	/100 M ² GFA		
HEALTH FACILITY	3.5 SPACES	5/100 M ² GFA		
HOSPITAL	N/A	0.8 SPACES/PEAK SHIFT EMPLOYEES PLUS 0.5 SPACES PER BED		
HOTEL	CZ1 ZONE 1 SPACE/3 EMPLOYEES PLUS 0.1 SPACES/ GUESTROOM OR UNIT PLUS 5 SPACES/100 M ² GFA OF BARS AND FUNCTION ROOMS PLUS 2 SPACES/100 M ² OF RETAIL SPACE	25 SPACES PLUS 0.3 SPACES/GUEST ROOM OR UNIT FOR ESTABLISHMENTS OF MORE THAN 36 UNITS PLUS 5 SPACES/ 100 M² GFA OF BARS AND FUNCTION ROOMS UP TO 5,000 M² PLUS 1 SPACE/10 RESTAURANT SEATS PLUS 2 SPACES/100 M² OF RETAIL SPACE		
	C21 ZONE: 1 SPACE/100 M ² GFA C22 ZONE: 2.0 SPACES/100 M ² GFA C23 ZONE: 2 SPACES/100 M ² GFA	BELCONNEN & WODEN CZ1 AND CZ2: 1 SPACE/100 M ² GFA CZ3 ZONE: 2.5 SPACES/100 M ² GFA GUNGAHLIN & TUGGERANONG: 2.5 SPACES/100 M ² GFA RESPECTIVELY		
PUBLIC AGENCY		/100 M ² GFA		
RESIDENTIAL USE	C21 & C22 ZONES: NO MINIMUM REQUIREMENT C23 ZONE: 0.8 SPACES PER SINGLE BEDROOM UNIT 1.3 SPACES PER TWO BEDROOM UNIT 1.8 SPACES PER UNIT WITH THREE OR MORE BEDROOMS			
SHOP	4 SPACES/100 M ² GFA			
WAREHOUSE	1 SPACE/100 M ² GFA PLUS 2.5 SPACES/ 100 M ² OF OFFICE AREA			

CANBERRA DEVELOPMENT LAND VALUES

The values shown are indicative of current land values in the Australian Capital Territory and may vary according to position, planning requirements etc.

LOCATION (COSTS PER M ²)	\$/M ²	
	LOW	HIGH
OFFICES		
CBD	5,265	8,000
FRINGE	3,505	5,400
SUBURBAN (EG. 2,000 M ²)	4,776	7,728

Prepared in association with Savills.



CANBERRA DEVELOPMENT RENTAL RATES

The net rents indicated below show the change in levels since 2001. Allowance has been made for the effects of rental incentives, rent free periods etc.

	OF	FICES	INDUSTRIAL
	CBD	FRINGE	PRIME
2001	225	175	70
2002	225	175	70
2003	225	200	80
2004	250	200	80
2005	275	225	90
2006	300	250	100
2007	350	275	110
2008	380	275	110
2009	400	300	125
2010	425	300	125
2011	435	300	125
2012	435	300	125
2013	435	300	125
2014	412	291	NP
2015	397	275	NP
2016	397	275	NP

NP = Not published.

CANBERRA DEVELOPMENT OFFICE SECTOR DATA

CANBERRA VACANCY RATES - DECEMBER 2015

PCA GRADE	STOCK M ²	VACANCY M ²	VAC % DEC-15	VAC % DEC-14
PCA GRADE A	1,083,498	141,033	13.0	15.7
PCA GRADE B	519,983	53,683	10.3	11.4
PCA GRADE C	690,642	133,028	19.3	17.3
PCA GRADE D	96,635	28,976	30.0	18.5
TOTAL	2,390,758	356,720	14.9	15.4

Source: PCA/Savills Research

CURRENT CANBERRA OFFICE DEVELOPMENT ACTIVITY

PROPERTY	PRECINCT	NLA (M²)	TYPE	STATUS	COMPLETION
QUEEN VICTORIA TERRACE	PARKES	5,200	REFURB	UC	2016
KELTIE ST	PHILLIP	600	REFURB	UC	2016
19-23 MOORE ST	TURNER	2,900	REFURB	UC	2016
SECTION 96	CIVIC	37,000	NEW	DA	MOOTED
68-72 NORTHBOURNE AVE	CIVIC	52,000	NEW	DA APPLIED	MOOTED
GOZZARD STREET	GUNGAHLIN	2,250	NEW	DA	MOOTED

UC: Under Construction DA: Development Approval.

Source: Savills Research Q2 2016

CANBERRA DEVELOPMENT OFFICE SECTOR DATA

KEY MARKET INDICATORS

CANBERRA - CIVIC/CITY	PCA GRADE A	
	LOW	HIGH
RENTAL - GROSS FACE (\$/M ²)	408	480
RENTAL - NET FACE (\$/M ²)	328	390
RENTAL - NET EFFECTIVE (\$/M ²)	252	299
OUTGOINGS - OPERATING (\$/M ²)	55	60
OUTGOINGS - STATUTORY (\$/M ²)	25	30
OUTGOINGS - TOTAL (\$/M ²)	80	90
TYPICAL LEASE TERM	5	15
YIELD - MARKET (% NET FACE RENTAL)	6.00	7.75
IRR (%)	7.50	9.00
CARS PERMANENT RESERVED (\$/PCM)	290	355
OFFICE COMPONENT CAPITAL VALUES (\$/M ²)	5,265	8,000

CANBERRA - NON-CIVIC (BARTON, BELCONNEN, PHILLIP, TUGGERANONG)	PCA GRADE A	
	LOW	HIGH
RENTAL - GROSS FACE (\$/M ²)	405	485
RENTAL - NET FACE (\$/M ²)	328	398
RENTAL - NET EFFECTIVE (\$/M ²)	252	306
OUTGOINGS - OPERATING (\$/M2)	55	60
OUTGOINGS - STATUTORY (\$/M ²)	23	25
OUTGOINGS - TOTAL (\$/M ²)	78	85
TYPICAL LEASE TERM (YEARS)	5	15
YIELD - MARKET (% NET FACE RENTAL)	6.25	8.50
IRR (%)	8.00	9.50
CARS PERMANENT RESERVED (\$/PCM)	150	215
OFFICE COMPONENT CAPITAL VALUES (\$/M ²)	5,063	7,760

Source: Savills Research Q2 2016

CANBERRA DEVELOPMENT OFFICE SECTOR DATA

PCA GRADE B			
LOW	HIGH		
368	405		
283	305		
210	226		
60	70		
25	30		
85	100		
3	10		
7.50	10.50		
9.00	12.00		
290	355		
3,318	4,571		

PCA GRADE B			
LOW	HIGH		
341	398		
258	303		
184	216		
60	70		
23	25		
83	95		
3	10		
8.00	11.00		
9.25	12.00		
150	215		
3,100	4,975		

CANBERRA DEVELOPMENT FORECASTED DEVELOPMENT ACTIVITY

PROJECT	
ACCOMMODATION	
ANU NEW HALL OF RESIDENCE	
COOPER LODGE 2	
ECLIPSE HOUSE THE PENINSULA KINGSTON FORESHORE DEVELOPMENT SITE	
CAPITAL HOTEL FORREST	
BRIDGES RAILWAYS HARBOURS	
CAPITAL METRO LIGHT RAIL - STAGE 1	
EDUCATION	
ANU - RESEARCH SCHOOL OF SOCIAL SCIENCES	
ANU GATEWAY	
ANU MATHEMATICAL & COMPUTER SCIENCES BUILDING AUSTRALIAN NATIONAL UNIVERSITY	
DISTANCE EDUCATION FACILITY	
NORTH GUNGAHLIN PRIMARY SCHOOL	
ENTERTAINMENT & RECREATION	
NATIONAL ARBORETUM AMPITHEATRE	
CANBERRA CASINO REDEVELOPMENT - OVERALL PROJECT	
GUNGAHLIN TOWN CENTRE CINEMA	
WESTON CREEK MOLONGLO AQUATIC PARK	
HEALTH AND AGED CARE CALVARY BRUCE PRIVATE HOSPITAL	
UNIVERSITY OF CANBERRA PUBLIC HOSPITAL	
MISCELLANEOUS	
ACT LAW COURTS	
OFFICES	
ACT GOVERNMENT OFFICE	
IMMIGRATION & CUSTOMS HUB LONDON CCT COMMERCIAL BUILDING	
SECTION 63 - LANDMARK BUILDING	
SECTION 63 - SIGNATURE BUILDING - BUILDING 2	
SECTION 63 VERNON SOUTH - BUILDING 3	
BELCONNEN SECTION 48 SITE	
FORMER DICKSON MOTOR VEHICLE REGISTRY SITE	
MORISSET ST CARPARK	
MYUNA COMPLEX - NORTHBOURNE SQUARE OTHER COMMERCIAL	
CANBERRA AIRPORT 2014 OVERALL MASTERPLAN	
CANBERRA DATA CENTRE	
THE AUSTRALIAN FORUM COMPLEX	
WODEN TOWN CENTRE - PUBLIC REALM WORKS	
RESIDENTIAL	
ACT PUBLIC HOUSING COOMBS ANTILL ST APARTMENTS	
KINGSBOROUGH	
SQ1 SOUTHQUAY	
CENTRAL PARK GUNGAHLIN - INFINITY TOWERS	
CENTRAL PARK GUNGAHLIN - INFINITY TOWERS	
WODEN GREEN - IDALIA	
ALLARA ST REDEVELOPMENT - HIGHGATE	
BORROWDALE HOUSE MIXED USE DEVELOPMENT CAMPBELL RESIDENTIAL DEVELOPMENT - ISKIA	
CAMPBELL RESIDENTIAL DEVELOPMENT - ISKIA CANBERRA BRICKWORKS REDEVELOPMENT - MASTERPLAN	
CANBERRA CIVIC SITE REDEVELOPMENT PRECINCT D	
CENTRAL PARK GUNGAHLIN	
DENMAN PROSPECT MOLONGLO VALLEY STAGE 1B	
DICKSON GROUP CENTRE - DICKSON PLACE - LOTUS	
EASTERN VALLEY WAY CAMPUS DEVELOPMENT	
EMU BANK DRIVE MIXED USE DEVELOPMENT GOODWIN VILLAGE FARRER	
GRACEWOOD - RED HILL	
MOLONGLO VALLEY STAGE 3	
NORTHBOURNE AV APARTMENTS	
NORTHBOURNE AVENUE APARTMENTS - ON FORBES	
TAYLOR 3 ESTATE DEVELOPMENT	
THE BRINDABELLA	
UPTOWN WENTWORTH AVE UNITS	
RETAIL / WHOLESALE TRADE	
KINGSTON SUPERMARKET & APARTMENTS - ATRIA	
WESTFIELD WODEN	
	-

Source: ACIF & RLB

LOCATION	VALUE \$M	STAGE
ACTON	53	COMMENCED
BRUCE	45	COMMENCED
CANBERRA	41	EARLY
KINGSTON	43	EARLY
FORREST	63	POSSIBLE
FORREST	03	POSSIBLE
CANBERRA	698	FIRM
CANBERRA	050	T II MIT
ACTON	56	FIRM
CANBERRA CITY	60	POSSIBLE
ACTON	25	POSSIBLE
CANBERRA	173	POSSIBLE
QUEANBEYAN	50	POSSIBLE
TAYLOR	25	POSSIBLE
CANBERRA	30	EARLY
CANBERRA CITY	307	POSSIBLE
GUNGAHLIN	30	POSSIBLE
WESTON CREEK	33	POSSIBLE
BRUCE	55	COMMENCED
BRUCE	340	FIRM
CANBERRA CITY	150	FIRM
CIVIC SQUARE	300	EARLY
MAJURA	185	EARLY
CANBERRA CITY	28	EARLY
CANBERRA CITY	25	EARLY
CANBERRA CITY	35	EARLY
CANBERRA CITY	41	EARLY
BELCONNEN	35	POSSIBLE
DICKSON	48	POSSIBLE
QUEANBEYAN	50	POSSIBLE
CANBERRA	172	POSSIBLE
PIALLIGO	48	EARLY
FYSHWICK	31	POSSIBLE
ACTON	327	POSSIBLE
WODEN	38	POSSIBLE
00001/000		0.01.01.050
COOMBS	26	COMMENCED
DICKSON	30	COMMENCED
KINGSTON	35	COMMENCED
GREENWAY	47	COMMENCED
GUNGAHLIN	51 44	FIRM
GUNGAHLIN	23	FIRM
PHILLIP	23	FIRM POSSIBLE
CANBERRA CITY PHILLIP	45	
	36	POSSIBLE
CAMPBELL		POSSIBLE
YARRALUMLA	70	POSSIBLE
CANBERRA CITY	189	POSSIBLE
GUNGAHLIN	1.4	POSSIBLE
WRIGHT	30	POSSIBLE
DICKSON BELCONNEN	56 32	POSSIBLE
BELCONNEN	32	POSSIBLE POSSIBLE
FARRER	62	POSSIBLE
RED HILL WESTON	52 35	POSSIBLE POSSIBLE
BRADDON	53	POSSIBLE
TURNER	41	POSSIBLE
TAYLOR	30	POSSIBLE
GREENWAY	39	POSSIBLE
GUNGAHLIN	30	POSSIBLE
KINGSTON	32	POSSIBLE
KINGSTON	52	I OSSIBLE
KINGSTON	69	FIRM
WODEN	50	POSSIBLE

CANBERRA DEVELOPMENT FORCASTED CONSTRUCTION VOLUME

SECTOR (\$M)	2016	2017	2018
NEW HOUSES	390	412	420
NEW OTHER RESIDENTIAL	754	795	755
ALTERATIONS AND ADDITIONS (LARGE)	135	148	142
ALTERATIONS AND ADDITIONS (SMALL)	218	255	238
TOTAL RESIDENTIAL	1,497	1,610	1,555
RETAIL/WHOLESALE TRADE	159	131	144
OFFICES	160	162	147
OTHER COMMERCIAL	41	35	41
INDUSTRIAL	32	32	33
EDUCATION	110	109	104
HEALTH AND AGED CARE	137	103	108
ENTERTAINMENT AND RECREATION	13	28	28
ACCOMMODATION	19	47	41
MISCELLANEOUS	88	86	98
TOTAL NON-RESIDENTIAL	759	733	744
ROADS	155	216	221
BRIDGES, RAILWAYS, HARBOURS	18	28	61
ELECTRICITY, PIPELINES	111	100	81
WATER AND SEWERAGE	99	73	103
TELECOMMUNICATIONS	199	216	206
RECREATION AND OTHER	84	56	60
TOTAL ENGINEERING	666	689	732
HEAVY INDUSTRY INCL. MINING	0	0	0
TOTAL FORECAST	2,922	3,032	3,031

Source: ACIF & RLB

CANBERRA DEVELOPMENT CONSTRUCTION WORK DONE

ANNUAL VALUE OF CONSTRUCTION WORK DONE IN AUSTRALIAN CAPITAL TERRITORY

YEAR ENDING	RESIDENTIAL	NON- RESIDENTIAL	ENGINEERING	TOTAL CONSTRUCTION
JUN-1990	275	401	159	835
JUN-1991	278	414	138	830
JUN-1992	385	333	167	886
JUN-1993	448	258	188	893
JUN-1994	441	260	167	868
JUN-1995	402	298	178	878
JUN-1996	295	316	141	752
JUN-1997	261	402	136	799
JUN-1998	218	383	151	751
JUN-1999	273	375	171	820
JUN-2000	395	265	273	933
JUN-2001	296	282	208	787
JUN-2002	396	287	200	883
JUN-2003	581	335	245	1,160
JUN-2004	628	316	245	1,189
JUN-2005	606	371	247	1,224
JUN-2006	643	879	270	1,792
JUN-2007	730	1,193	291	2,214
JUN-2008	692	1,120	370	2,182
JUN-2009	780	1,220	364	2,363
JUN-2010	1,097	1,293	404	2,794
JUN-2011	1,390	1,333	769	3,491
JUN-2012	1,502	1,285	830	3,617
JUN-2013	1,419	991	856	3,266
JUN-2014	1,303	712	889	2,904
JUN-2015	1,395	763	682	2,840
JUN-2016	1,314	792	672	2,778

Source: ABS 8752.0 & 8755.0 (Current Prices - Original Series - \$ millions).

CANBERRA DEVELOPMENT CONSTRUCTION WORK DONE

ANNUAL VALUE OF NON-RESIDENTIAL BUILDING WORK DONE IN AUSTRALIAN CAPITAL TERRITORY

YEAR ENDING	COMMERCIAL	INDUSTRIAL	RETAIL	EDUCATION
JUN-2002	147	10	43	33
JUN-2003	175	10	40	57
JUN-2004	142	14	17	84
JUN-2005	178	11	40	95
JUN-2006	440	28	154	95
JUN-2007	761	50	117	77
JUN-2008	541	32	123	163
JUN-2009	721	40	81	180
JUN-2010	761	29	50	338
JUN-2011	577	53	147	414
JUN-2012	596	39	154	242
JUN-2013	392	39	66	226
JUN-2014	259	39	77	121
JUN-2015	198	33	115	137
JUN-2016	207	34	166	115

Source: ABS 8752.0 (Original Cost - \$ millions).

HEALTH	AGED CARE	HOTEL	OTHER	TOTAL NON-RESIDENTIAL
13	0	7	33	287
12	3	2	37	335
7	1	1	50	316
6	6	9	25	371
28	18	47	69	879
13	25	26	123	1,193
18	29	12	202	1,120
17	44	4	135	1,220
28	3	19	65	1,293
33	6	32	70	1,333
133	16	42	63	1,285
119	14	61	74	991
82	20	28	86	712
33	41	73	133	763
102	41	19	106	792

CANBERRA DEVELOPMENT CONSTRUCTION WORK DONE

ANNUAL VALUE OF RESIDENTIAL BUILDING WORK DONE IN AUSTRALIAN CAPITAL TERRITORY

YEAR ENDING	NEW HOUSES	NEW APARTMENTS & SEMI DETACHED HOUSING		TOTAL RESIDENTIAL
JUN-1990	148	84	43	275
JUN-1991	133	104	41	278
JUN-1992	200	128	57	385
JUN-1993	242	146	59	448
JUN-1994	206	168	68	441
JUN-1995	183	150	69	402
JUN-1996	150	90	55	295
JUN-1997	137	64	61	261
JUN-1998	121	42	55	218
JUN-1999	157	51	64	273
JUN-2000	206	100	89	395
JUN-2001	170	72	54	296
JUN-2002	190	127	79	396
JUN-2003	278	214	89	581
JUN-2004	331	188	110	628
JUN-2005	244	263	100	606
JUN-2006	270	266	108	643
JUN-2007	317	308	105	730
JUN-2008	336	235	122	692
JUN-2009	367	309	104	780
JUN-2010	535	432	129	1,097
JUN-2011	567	663	159	1,390
JUN-2012	510	843	148	1,502
JUN-2013	586	694	139	1,419
JUN-2014	528	654	121	1,303
JUN-2015	544	723	128	1,395
JUN-2016	396	782	137	1,314

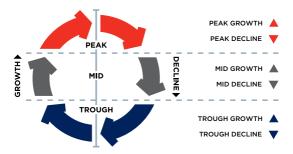
Source: ABS 8752.0 (Original Cost - \$ millions).

RLB CONSTRUCTION MARKET ACTIVITY CYCLE

Activity within the construction industry traditionally has been subject to volatile cyclical fluctuations. The RLB Construction Market Cycle represents the construction development activity cycle.

Each RLB office highlights the current construction sector activity position within the market activity cycle of those key construction sectors within their region. Each sector is categorised by three positions within the cycle; Peak, Mid and Trough. Within each position, activity is further defined by either declining or growing within that sector.

The "up" and "down" arrows highlight the current status within the three positions of the cycle by means of the three colours identified in the cycle diagram below.



RLB CONSTRUCTION MARKET ACTIVITY CYCLE



RLB CONSTRUCTION MARKET ACTIVITY CYCLE

The following tables represent the position of each sector within the RLB Market Activity Cycle. The tables reflect the movement of each sector within the cycle for the period represented.

CANBERRA	Q2 2015	Q4 2015	Q2 2016	Q4 2016
HOUSES	•			
APARTMENTS	$\mathbf{\nabla}$			
OFFICES	•	▼		
INDUSTRIAL	▼	▼	▼	•
RETAIL	▼	▼	▼	•
HOTEL	•	▼	▼	•
CIVIL		▼	▼	

BENCHMARKS

Regional Indices	66
Key City Relativities	67
Office Building Efficiencies	68
Reinforcement Ratios	68
Labour and Materials Trade Ratios	69
Progress Payment Claims	70
Common Industry Acronyms	71
Method of Measurement	72

BENCHMARKS REGIONAL INDICES

The construction cost information in this publication is based upon rates for capital city construction projects and are current for the Fourth Quarter 2016. For towns or cities outside capital cities, costs can be expected to vary in accordance with the following table of indices:

NEW SOUTH WALES		QUEENSLAND		WESTERN AUSTRALIA	
SYDNEY	100	BRISBANE	100	PERTH	100
ARMIDALE	105	CAIRNS	105	ALBANY	108
COFFS HARBOUR	100	GLADSTONE	125	BROOME	140
NEWCASTLE	99	GOLD COAST	95	BUNBURY	103
ORANGE	106	MACKAY	114	CARNARVON	140
TAMWORTH	102	SUNSHINE COAST	95	ESPERANCE	125
WAGGA WAGGA	106	TOWNSVILLE	108	GERALDTON	105
WOLLONGONG	100			KALGOORLIE	120
				KUNUNURRA	170
				PORT HEDLAND	145
				TOM PRICE	160

The above table should be used only as a comparative guide, and is only appropriate for the urban precincts nominated and for the larger commercial projects.

Care must be taken to review specific local market conditions within the anticipated time frame of a project's development period before establishing and committing viable budgets for projects.

In the event that projects are required to be constructed in remote locations or in areas without urban infrastructure, then special consideration must be given to the budget structure of these projects. Each project must be considered in detail and its specific resource requirements assessed and sourced to establish budget costs.

RLB recommend that advice on local market conditions be sought from our regional offices when initial project budgets and feasibility studies are in the process of establishment. Our regional offices are identified on page 84.

BENCHMARKS KEY CITY RELATIVITIES - Q4 2016

RLB's Key City Relativity Matrix highlights the cost relativity between key Australian cities. The Relativity Matrix compares the cost of a range of building types in a standardised form based on tender prices. Each column represents a base city indexed to 100 with other city's relativities reindexed to that base city.

In order to calculate the relativity between different cities, the difference can be calculated using the following formula:

Base city (C_b), divided by the Relativity of city to be compared with (C_r) i.e. (C_{B}C_{r})-1

For example, when comparing costs between Sydney and Perth, Sydney building costs are generally 11% more than Perth.

i.e (100/90)-1=~11.1%

If the tendered price of a similar building in Sydney was \$1,000,000, the equivalent cost in Perth would be \$900,000 or conversely a \$1,000,000 building in Perth would cost \$1,110,000 in Sydney.

					DARWIN 100		GOLD COAST 100		
BNE	98	ADE	102	ADE	93	ADE	89	ADE	111
CAN	107	CAN	110	BNE	91	BNE	87	BNE	109
DAR	112	DAR	114	DAR	104	CAN	96	CAN	119
GC	90	GC	92	GC	84	GC	80	DAR	124
MEL	104	MEL	107	MEL	97	MEL	93	MEL	116
PER	105	PER	108	PER	98	PER	94	PER	117
SYD	116	SYD	119	SYD	108	SYD	104	SYD	129
TVE	99	TVE	101	TVE	92	TVE	89	TVE	110

i.e 1	,000,000 x	$\frac{100}{90} =$	~1,111,000.
-------	------------	--------------------	-------------

MELBOURNE 100		PEF 10		SYDNEY 100		TOWNSVILLE 100	
ADE	96	ADE	95	ADE	86	ADE	101
BNE	94	BNE	93	BNE	84	BNE	99
CAN	103	CAN	102	CAN	92	CAN	108
GC	86	GC	86	GC	77	GC	91
DAR	107	DAR	106	DAR	96	DAR	113
PER	101	MEL	99	MEL	89	MEL	105
SYD	112	SYD	111	PER	90	PER	106
TVE	95	TVE	94	TVE	85	SYD	118

BENCHMARKS OFFICE BUILDING EFFICIENCIES

The efficiency of an office building is expressed as a percentage of the Net Lettable Area (NLA) to the Gross Floor Area (GFA). The table below indicates that relationship to the GFA of the whole building both with car parks and basements included and excluded, that could be expected for an average project in the nominated category. Also shown is the average net to gross efficiency of the office floors only in each of the eight building types listed below.

	EFFICIENCY					
	BASE	MENTS AND CA	R PARKS			
TYPE OF CBD OFFICE BUILDING	INCLUDED %	EXCLUDED %	OFFICE FLOORS %			
PRESTIGE						
10 TO 25 STOREYS	63-68	75-80	85-90			
25 TO 40 STOREYS	58-63	70-75	80-85			
40 TO 55 STOREYS	53-58	68-73	75-80			
INVESTMENT						
UP TO 10 STOREYS	69-74	81-85	86-91			
10 TO 25 STOREYS	64-69	76-81	81-86			
25 TO 40 STOREYS	59-64	71-76	76-81			
INVESTMENT, OTHER THAN						
UP TO 10 STOREYS	70-75	82-86	87-92			
10 TO 25 STOREYS	65-70	77-82	82-87			

PLANT ROOM SPACE

Generally plant room space represents 6–11% of the GFA of a multi-storey office building.

REINFORCEMENT RATIOS

The following ratios give an indication of the average weight of reinforcement per cubic metre of concrete for the listed elements. Differing structural systems and sizes of individual elements and grid sizes will cause considerable variation to the stated ratios. For project specific ratios a structural engineer should be consulted.

	AVE KG/M ³		AVE KG/M ³
STRIP FOOTINGS	50	STRAP BEAMS	120
COLUMN BASES	40	SLAB ON GROUND	40
PILE CAPS	50	SUSPENDED SLABS 100-150 MM ONE AND TWO WAY	90
BORED PIER	90	250 MM FLAT PLATE	120
RAFT FOUNDATION	70	250 MM WAFFLE	160
PEDESTAL & STUB COLUMNS	240	COLUMNS	240
RETAINING WALLS			
1-2 STOREY	70	BEAMS	170
2-3 STOREY	120		
GROUND BEAMS	120	WALLS (CORE)	140
		STAIRS	80

BENCHMARKS LABOUR AND MATERIALS TRADE RATIOS

The following represents the ratio of on-site labour to material for various trades and sub-trades based upon our own survey.

The figures are relevant to all works constructed by traditional methods; variations to these methods will change the ratios, i.e. on-site fabrication of items traditionally factory fabricated such as joinery fittings, metalwork items, etc.

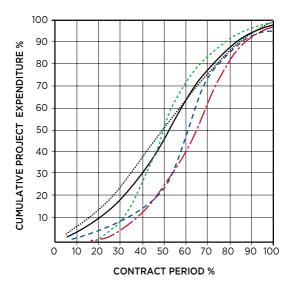
PRELIMINARIES	40 10	50
DEMOLISHER	85	15
EXCAVATOR	32 15	53
PILER	20 50	30
IN SITU CONCRETOR	25	75
FORMWORKER	70	30
REINFORCEMENT FIXER	20	80
PRECAST CONCRETOR	20	80
BRICKLAYER & BLOCKLAYER	50	50
MASON	10	90
ASPHALTOR	40	60
STRUCTURAL STEELWORK	60	40
METALWORKER	20	80
SUSPENDED CEILING FIXER	40	60
CARPENTER	45	55
JOINER	15	85
STEEL DECK ROOFER	40	60
BITUMINOUS BUILT UP ROOFER	30	70
PIPEWORK PLUMBER	60	40
FITTING PLUMBER	25	75
DRAINER	65	35
PLASTERER	80	20
PLASTERBOARD & FIB. PLASTER FIXER	40	60
CERAMIC TILER	55	45
VINYL TILER	45	55
IN SITU PAVIOR	75	25
GLAZIER	20	80
PAINTER	75	25
CARPET LAYER	10	90
ROADWORKER & EXTERNAL PAVIOR	15	85
AIR CONDITIONING SPECIALIST	35	65
LIFT INSTALLER	25	75
ELECTRICAL SPECIALIST	40	60
WATER FIRE SERVICE SPECIALIST	44	56

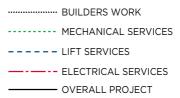


MATERIAL FIXED FACTOR

BENCHMARKS PROGRESS PAYMENT CLAIMS

Average rate of claims expenditure on construction projects from \$4,000,000 to \$34,000,000 and/ or greater than one year but less than two years construction period to practical completion are depicted in the following graph.





BENCHMARKS COMMON INDUSTRY ACRONYMS

PROJECT MANAGEMENT

PROJE	CT MANAGEMENT
AA	Architects Advice
ABIC	Australian Building Industry Contracts
Al	Architects Instruction
AIA	Australian Institute of Architects
BCA	Building Code of Australia
BOQ	Bill of Quantities
BP	Building Permit
BS	Building Surveyor
CA	Contract Administration
CAN	Consultants Advice Notice
DA	Development Application
DD	Design Development
DWG	Drawing (also an Autocad file format)
EBD	Evidence Based Design
ESD	Environmentally
	Sustainable Design
PI	Professional Indemnity
	(Insurance)
PM	Project Manager
QS	Quantity Surveyor
RCP	Reflected Ceiling Plan
RFI	Request for Information
SD	Schematic Design
ARCHIT	ECTURAL DRAWINGS
ABS	Acrylonitrile Butadiene Styrene (Edging)
AS	Australian Standards
COL	Column
CTS	Centres (Spacing)
DP	Downpipe
ENS	Ensuite
EX	Existing
FC	Fibre Cement (Sheet)
FCL	Finished Ceiling Level
FFL	Finished Floor Level
FR	Fire Rated
GFA	Gross Floor Area
HMR	Highly Moisture Resistant (Particleboard)
KDHW	Kiln Dried Hardwood
MDF	Medium Density Fibreboard
PB	Plasterboard
RL	Relative Level
SS	Stainless Steel
TYP	Typical
VOC	Volatile Organic Compound
WC	Water Closet (Toilet)
	URVEYS
AHD AMG	Australian Height Datum

STRUCTURAL DRAWINGS

STRUC	TURAL DRAWINGS
CFW	Continuous Fillet Weld
CHS	Cylindrical Hollow Section
CJ	Construction Joint
EA	Equal Angle
PFC	Parallel Flange Channel
RB	Roof Beam
RHS	Rectangular Hollow Section
SB	Sill Beam
SHS	Square Hollow Section
TB	Tie Beam
UA	Unequal Angle
UB	Universal Beam
UC	Universal Column
WT	Wall Tie
HYDRA	ULIC DRAWINGS
DCW	Domestic Cold Water
DHW	Domestic Hot Water
FH	Fire Hydrant
FHR	Fire Hose Reel
FIP	Fire Indicator Panel
FS	Fire Service
FW	Floorwaste
HWS	Hot Water System
TD	Tundish
TMV	Thermostatic Mixing Valve
UPVC	Unplasticated Polyvinyl Chloride (Pipework)
VP	Vent Pipe
MECHA	NICAL DRAWINGS
A/C	Air Conditioning
A/P	Access Panel
ACU	Air Conditioning Unit
AHU	Air Handling Unit
CU	Condensing Unit
FCU	Fan Coil Unit
FD	Fire Damper
R/A	Return Air
S/A	Supply Air
SD	Smoke Damper
ELECT	RICAL DRAWINGS
DB	Distribution Board
DGPO	Double General Power Outlet
CDO	Conoral Dower Outlat

- GPO General Power Outlet
- MSB Main Switchboard
- RCD Residual Current Device
- SB Switchboard

LAND	SURVETS
AHD	Australian Height Datum
AMG	Australian Mapping Grid
DP	Downpipe
IL	Invert Level
U/G	Underground
RL	Relative Level

BENCHMARKS METHOD OF MEASUREMENT OF BUILDING AREAS

The rules for measurement of building areas are defined by the Australian Institute of Quantity Surveyors and the Australian Institute of Architects.

The definitions are as follows: Unit of measurement: square metres (M^2) .

GROSS FLOOR AREA (GFA)

The sum of the "Fully Enclosed Covered Area" and "Unenclosed Covered Area" as defined.

FULLY ENCLOSED COVERED AREA (FECA)

The sum of all such areas at all building floor levels, including basements (except unexcavated portions), floored roof spaces and attics, garages, penthouses, enclosed porches and attached enclosed covered ways alongside buildings, equipment rooms, lift shafts, vertical ducts, staircases and any other fully enclosed spaces and usable areas of the building, computed by measuring from the normal inside face of exterior walls but ignoring any projections such as plinths, columns, piers and the like which project from the normal inside face of exterior walls. It shall not include open courts, lightwells, connecting or isolated covered ways and net open areas or upper portions of rooms, lobbies, halls, interstitial spaces and the like which extend through the storey being computed.

UNENCLOSED COVERED AREA (UCA)

The sum of all such areas at all building floor levels. including roofed balconies, open verandahs, porches and porticos, attached open covered ways alongside buildings, undercrofts and usable space under buildings. unenclosed access galleries (including ground floor) and any other trafficable covered areas of the building which are not totally enclosed by full height walls, computed by measuring the area between the enclosing walls or balustrade (ie. from the inside face of the UCA excluding the wall or balustrade thickness). When the covering element (ie. roof or upper floor) is supported by columns, is cantilevered or is suspended, or any combination of these, the measurements shall be taken to the edge of the paving or to the edge of the cover, whichever is the lesser. UCA shall not include eaves overhangs, sun shading, awnings and the like where these do not relate to the clearly defined trafficable areas, nor shall it include connecting or isolated covered ways.

BENCHMARKS METHOD OF MEASUREMENT OF BUILDING AREAS

BUILDING AREA (BA)

The total enclosed and unenclosed area of the building at all building floor levels measured between the normal outside face of any enclosing walls, balustrades and supports.

USABLE FLOOR AREA (UFA)

The sum of the floor areas measured at floor level from the general inside face of walls of all interior spaces related to the primary function of the building. This will normally be computed by calculating the "Fully Enclosed Covered Area" (FECA) and deducting all the following areas supplementary to the primary function of the building:

Deductions

(a) Common Use Areas(b) Service Areas(c) Non-Habitable Areas

NET LETTABLE AREA (NLA)

Application

Calculating tenancy areas in office buildings and office & business parks.

Definition

- 3.1 The net lettable area of a building is the sum of its whole floor lettable areas.
- 3.2 Net Lettable Area Whole Floors

The whole floor net lettable area is calculated by:

- 3.2.1 taking measurements from the internal finished surfaces of permanent internal walls and the internal finished surfaces of dominant portions of the permanent outer building walls.
- 3.2.2 included in the lettable area calculation are:
 - 3.2.2.1 window mullions
 - 3.2.2.2 window frames
 - 3.2.2.3 structural columns
 - 3.2.2.4 engaged perimeter columns or piers
 - 3.2.2.5 fire hose reels attached to walls, and,
 - 3.2.2.6 additional facilities specially constructed for or used by individual tenants that are not covered in section 3.2.3.

BENCHMARKS METHOD OF MEASUREMENT OF BUILDING AREAS

- 3.2.3 Excluded from the lettable area of each tenancy are:
 - 3.2.3.1 stairs, accessways, fire stairs, toilets, recessed doorways, cupboards, telecommunication cupboards, fire hose reel cupboards, lift shafts, escalators, smoke lobbies, plant/motor rooms, tea rooms and other service areas, where all are provided as standard facilities in the building.
 - 3.2.3.2 lift lobbies where lifts face other lifts, blank walls or areas listed in section 3.2.3.1 above.
 - 3.2.3.3 areas set aside for the provision of all services, such as electrical or telephone ducts and air conditioning risers to the floor, where such facilities are standard facilities in the building.
 - 3.2.3.4 area dedicated as public spaces or thoroughfares such as foyers, atria and accessways in lift and building service areas.
 - 3.2.3.5 areas and accessways set aside for use by service vehicles and for delivery of goods, where such areas are not for the exclusive use of occupiers of the floor or building.
 - 3.2.3.6 areas and accessways set aside for car parking, and;
 - 3.2.3.7 areas where there is less than 1.5 metre height clearance above floor level – these spaces should be measured and recorded separately.

3.3 Net Lettable Area (NLA)

Follow 3.2 but measure to the centre line of inter-tenancy walls or partitions except where the walls or partitions adjoin public areas, such as lobbies and corridors, in which case measure to the line of the dominant portion of their public area faces.

3.4 Treatment of Balconies, Verandahs etc.

Balconies, terraces, planter boxes, verandahs, awnings and covered areas should be excluded from tenancy area calculations, but may be separately identified for the purpose of negotiating rentals.

Areas should be measured to the inside face of the enclosing walls or structures. The outer edge of the awning or covered area is the defined edge.

ASSETS AND FACILITIES

Sustainability and Quality	76
Management Standards	77
Useful Life Analysis	78
Outgoings	79
Essential Safety Measures	80
Capital Allowances (Tax Depreciation)	81



Through the Rider Levett Bucknall | Life suite of services, we are able to provide meaningful, practical, commercial advice to clients in the delivery of sustainable and economically responsible projects.

The services help building owners understand the life value and expectancy of their buildings' whole life costs and provide options to extend the useful life of buildings and maintain quality.

ASSETS AND FACILITIES SUSTAINABILITY AND QUALITY

Sustainability is concerned with improving the quality of life while living within the carrying capacity of supporting ecosystems. The planning, delivering and managing of our Built Environment requires a balance between environmental, economic and social factors.

The provision of a more productive, sustainable and liveable Built Environment is best considered in collaboration with all the stakeholders, including owners, managers and tenants. This process should include not only the review of sustainability objectives and initiatives, but address functional requirements and whole of life costings along with the implementation of facilities planning and asset management strategies.

Rating systems developed to assist with performance benchmarking within Australia include:

Green Star – The Green Building Council of Australia's (GBCA) six star Environmental rating system evaluates: communities, design, as-built of buildings, interiors, building performance in terms of energy and water efficiency, indoor environmental quality and resource conservation.

NABERS – National Australian Built Environment Rating System is a national program managed by the NSW Department of Environment and heritage. NABERS measures the environmental performance of Australian offices, tenancies, shopping centers, hotels, data centers and homes. There are NABERS tools for energy efficiency, water usage, waste management and indoor environment quality. Additionally, a NABERS Energy rating forms part of the Building Energy Efficiency Certificate (BEEC) requirement under the Commercial Building Disclosure (CBD) program. The CBD Program requires most sellers and lessors of office space of 2,000 M² or more to have an up-to-date Building Energy Efficiency Certificate (BEEC).

IS - The Infrastructure Sustainability Council of Australia's (ISCA) Infrastructure Sustainability (IS) rating scheme. IS is Australia's only comprehensive rating system for evaluating sustainability across design, construction and operation of infrastructure. IS evaluates the sustainability (including environmental, social, economic and governance aspects) of infrastructure projects and assets including transport, energy, water and communications sectors.

Guality – Property Council of Australia's (PCA) "a Guide to Office Building Quality" (2006, 2012), provides separate tools for assessing office building quality in new and existing buildings. The tools provide a guide to parameters that typically influence building quality. They offer a voluntary, market-based approach to classifying building characteristics and performance. The 2nd edition of the guide took effect on 1 January 2012 and includes expanded environmental performance criteria for Energy, Water, Waste and Indoor Environment. Additionally, the Building Management criteria was expanded to include Level of Service, Energy and Water Sub-Metering and Life Cycle/Maintenance Plan requirements. RLB have staff accredited in the use of Green Star, NABERS, along with accose to LEED. RDEEAM

along with access to LEED, BREEAM, GreenMark and other international standards.

RLB also provides Building Quality Assessment (BQA) services for PCA Quality gradings.

ASSETS AND FACILITIES MANAGEMENT STANDARDS

Since late 2012 Standards Australia, supported by FMA Australia, PCA, RICS, SBEnrc, TEFMA and other industry bodies, have been involved with the ISO's international **Facilities Management (FM)** standards initiative. To date this has involved 34 countries, plus EuroFM and Global FM, looking at Terms and Definitions and Guidance on strategic sourcing and the development of agreements. Now designated ISO 41000, work has commenced on a Management Systems Standard for FM.

Separately, there was the release in 2014 of the ISO 55000 series for **Asset Management (AM)**. This comprises three parts: Overview, principles and terminology; Management systems requirements; and Guidelines for the application of *the standard*. ISO 55000 specifies the requirements for the establishment, implementation, maintenance and improvement of a management system for asset management, referred to as an "asset management system" for those wishing to:

- improve the realisation of value for their organization from their asset base
- be involved in the establishment, implementation, maintenance and improvement of an asset management system, and
- be involved in the planning, design, implementation and review of asset management activities along with service providers.



Meanwhile, FMA Australia's local efforts include "An Operational Guide to Sustainable Facilities Management" (2010) - a practical document that provides technical guidance in achieving a more sustainable FM approach in the Australian context.

Recent internationally publications have included the IFMA Foundation's "Work on the Move 2" (2016), IFMA's "FM Outlook" (2016) and "FM Outsourcing" (2016).

RLB can provide strategic advisory and technical support across the latest in AM and FM practices.

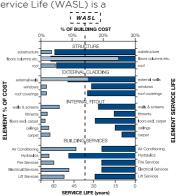
ASSETS AND FACILITIES **USEFUL LIFE ANALYSIS**

LIFE CYCLE ANALYSIS

Life Cycle Studies recognise that every 'whole' asset consists of many component parts, each with its own life expectancy, interrelationships, resulting guality and maintenance issues. However, in addition to physical obsolescence, useful life expectancy is also dependent on the influence of economic, functional, technological, social and legal obsolescence.

WEIGHTED AVERAGE SERVICE LIFE

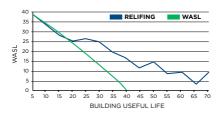
Weighted Average Service Life (WASL) is a methodology used to determine the "Useful Life" of an asset. For buildings the WASL is the collective result of applying service COST life criteria to each % OF element of a cost analysis: excluding ELEMENT capital recurrent expenditure other than routine maintenance.



RELIFING

RElifing takes the

"WASL" a stage further by considering the effect of capital upgrades, refurbishments, replacement of plant, architectural fabric and finishes. Below is a graphical representation of a RElifing profile for a typical office building, compared to the base WASL. RElifing analysis is useful for developers, owners and occupiers in financial planning, calculating depreciation and in the negotiation of long term property costs.



ASSETS AND FACILITIES OUTGOINGS

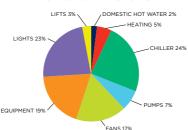
Outgoings are the costs required to operate a property that are generally recoverable by a Landlord from the tenants. The recovery of outgoings is usually calculated by a sharing of costs amongst tenants relative to their leasehold interest. They generally cover the recurrent costs for the delivery of services, maintenance, power and statutory and management costs.

The level of recovery of outgoings is normally governed and regulated by leases and other agreements with tenants.

The cost of outgoings varies depending upon:

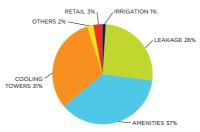
- · the level of management and services provided
- lease agreements
- · quality, type and efficiency of the building
- · location and statutory regimes applicable

The following graphs highlight typical component usage of both energy and water consumption for office buildings.



TYPICAL OFFICE ENERGY USAGE





ASSETS AND FACILITIES ESSENTIAL SAFETY MEASURES

The following table provides a brief overview of building owners' responsibilities with regard to certifying the annual maintenance of essential safety systems and measures within commercial buildings.

	۲IC	ard	NSN	SA	TAS	ACT	WA
IS MAINTENANCE OF ESSENTIAL SAFETY MEASURES REQUIRED BY LEGISLATION (OTHER THAN BCA)?	✓	✓	~	✓	~	✓	×
IS THERE A PRESCRIBED FORM OF CERTIFICATE?	✓	✓	✓	✓	✓	×	×
CERTIFICATE REQUIRED TO BE DISPLAYED	×	×	✓	×	✓	NA	NA
CERTIFICATE REQUIRED TO BE FORWARDED TO AN AUTHORITY	×	✓	✓	✓	×	NA	NA
CAN FINES BE IMPOSED IF MAINTENANCE IS NOT CARRIED OUT?	✓	✓	✓	×	✓	✓	NA

The relevant legislation governing the essential safety measures by State are:

VIC	Building Regulations 2006 Part 12
QLD	Queensland Fire and Rescue Service Amendment Act 2006
NSW	Environmental Planning and Assessment Regulations 2000
SA	SA Development Act 1993 & Minister's Specifications SA 76
TAS	Fire Services Act 1979 & General Fire

- **TAS** Fire Services Act 1979 & General Fire Regulations 2010
- ACT ACT Emergencies Act 2004
- WA No specific legislation

Note:

The above is a brief guide only. Other state or national legislation and laws may also be relevant. It is recommended that all property owners consult a building surveyor regarding responsibilities associated with maintenance of essential measures within their buildings.

ASSETS AND FACILITIES CAPITAL ALLOWANCES (TAX DEPRECIATION)

The Australian Taxation Office (ATO) allows a tax deduction for the recovery of the cost of assets used in a business or for the production of income. The Income Tax Assessment Act (ITAA) allows two types of allowances for assets:

Division 40 - Depreciating Assets

Assets with a limited effective life that are reasonably expected to decline in value. The decline in value is based on the cost and effective life of the depreciating asset, not its actual change in value. Examples of these are carpet, air conditioning plant, lights etc.

Division 43 - Capital Allowances

Capital allowances are the Building Allowance and Structural Improvement deductions that are available for buildings. Depreciating rates are either 2.5% or 4% dependent on the use of the building and construction commencement date.

The ATO issued the latest effective life review of assets under TR2016/1 which came into effect on the 1st July 2016. The following broad principles outline the rates of depreciation deductions relative to income producing assets under ITAA 1997 (Division 40 & 43).

- The effective life and hence the rate of depreciation of an item of plant can be self-assessed by the taxpayer.
- Depreciating Assets (Division 40) are subject to a balancing adjustment on disposal. Capital works Deductions (Division 43) are subject to Capital Gains Tax on disposal.
- Low value pool option for assets less than \$1,000 in value depreciated at 18.75% in the first year and 37.50% in subsequent years.
- The Diminishing Value rate is currently 200% of Prime Cost rate (excluding Low value Pool), with the effect of accelerating the tax write off in earlier years of the asset's life.



Typical percentage apportionment of depreciation allowances based on new \$300m Commercial Office Tower with 6 Star Green Star certification.

RLB employs qualified staff, who are registered with the Tax Practitioners Board under the Tax Agent Services Act 2009, for the preparation of Capital Allowance Reports.

ASSETS AND FACILITIES CAPITAL ALLOWANCES (TAX DEPRECIATION)

SCHEDULE OF ASSETS	PRIME COST %	DIMINISHING VALUE %
THE FOLLOWING LIST GIVES A SAMPLE OF	ELIGIBLE	
DEPRECIATING ASSETS.		
OFFICE BUILDING HOT WATER INSTALLATIONS	6.667	13.333
MULTI TYPE FIRE DETECTION SYSTEMS		
CENTRAL AIR CONDITIONING (VARIOUS RATES	4-16.67	8-33.33
APPLY TO EQUIPMENT COMPONENTS)	4-10	8-20
ROOM AIR CONDITIONING	10	20
PACKAGED AIR CONDITIONING	6.667	13.333
ELECTRIC HAND DRYERS	10	20
DEMOUNTABLE PARTITIONS	5	10
SECURITY SYSTEMS	14.286-50	28.572-100
LIGHTING PLANT	5	10
VINYL FLOORING	10	20
CARPET	12.5	25
WINDOW BLINDS	5	10
OFFICE FURNITURE, FREESTANDING	4-10	8-20
ESCALATORS	5	10
LIFTS, ELEVATORS & HOISTS	3.333	6.667
SIGNAGE FOR BUSINESS IDENTIFICATION HOTELS. MOTELS	10	20
CARPETS	14.286	28.572
WINDOW BLINDS AND CURTAINS	16.667	33.333
FURNITURE AND FITTINGS (FREE STANDING)	14.286-20	28.572-40
HOT WATER SYSTEMS	10	20
BEDS AND BEDDING	14.286-50	28.572-100
SHOPPING CENTRES		
Generally, the list for office buildings will app additions:	oly with the fo	llowing
FLOATING TIMBER FLOORS	10	20
FURNITURE, FREESTANDING	10	20
INDUSTRIAL		
Generally, the list for office buildings will app additions:	oly with the fo	llowing
CRANES	5	10
GANTRIES	3	6
DOCK LEVELLERS	5	10
INFLATABLE DOCK SEALS	10	20
RESIDENTIAL		
EFFECTIVE FROM 1ST JULY 2004		
FLOOR COVERINGS:		
CARPET	10	20
FLOATING TIMBER	6.667	13.333
Hotwater Systems (excluding piping):		
ELECTRIC AND GAS	8.333	16.667
SOLAR	6.667	13.333
Miscellaneous:		
INTERCOM SYSTEM ASSETS	10	20
WINDOW BLINDS	10	20
ROOM AIR CONDITIONING	10	20
Kitchen Assets:		
COOKTOPS, OVENS, RANGEHOODS	8.333	16.667
DISHWASHERS, WASHING MACHINES, CLOTHES DRYERS	10	20

OFFICES AROUND THE WORLD

Oceania	84
Africa	85
Middle East	85
United Kingdom	86
Asia	86
Americas	89

OFFICES AROUND THE WORLD

AUSTRALIA

ADELAIDE

Rider Levett Bucknall SA Pty Ltd Level 1, 8 Leigh Street, Adelaide, SA 5000 T: +61 8 8100 1200 E: adelaide@au.rlb.com Contact: Andrew Suttie

BRISBANE

Rider Levett Bucknall QLD Pty Ltd Level 13, 10 Eagle Street, Brisbane, QLD 4000 T: +61 7 3009 6933 E: brisbane@au.rlb.com Contact: Dave Stewart

CAIRNS

Rider Levett Bucknall QLD Pty Ltd Suite 7, 1st Floor, Cairns Professional Centre, 92-96 Pease Street, Cairns, QLD 4870 T: +61 7 4032 1533 E: cairns@au.rlb.com Contact: Nicholas Duncan

CANBERRA

Rider Levett Bucknall ACT Pty Ltd 16 Bentham Street, Yarralumla, ACT 2600 T: +61 2 6281 5446 E: canberra@au.rlb.com Contact: Mark Chappe

COFFS HARBOUR

Rider Levett Bucknall NSW Pty Ltd Level 1, 9 Park Avenue, Coffs Harbour, NSW 2450 T: +61 2 4940 0000 E: northernnsw@au.rlb.com Contact: Mark Hocking

DARWIN

Rider Levett Bucknall NT Pty Ltd Level 4, 62 Cavanagh Street, Darwin, NT 0800 T: +61 8 8941 2262 E: darwin@au.rlb.com Contact: Paul Lassemillante

GOLD COAST

Rider Levett Bucknall QLD Pty Ltd 45 Nerang Street, Southport, QLD 4215 T: +61 7 5595 6900 E: goldcoast@au.rlb.com Contact: Mark Burow

MELBOURNE

Rider Levett Bucknall VIC Pty Ltd Level 13, 380 St. Kilda Road, Melbourne, VIC 3004 Telephone: +61 3 9690 6111 E: melbourne@au.rlb.com Contact: Ewen McDonald

NEWCASTLE

Rider Levett Bucknall NSW Pty Ltd 63 Lindsay Street, Hamilton, NSW 2303 T: +61 2 4940 0000 E: newcastle@au.rlb.com Contact: Mark Hocking

PERTH

Rider Levett Bucknall WA Pty Ltd Level 9, 160 St Georges Tce, Perth, WA 6000 T: +61 8 9421 1230 E: perth@au.rlb.com Contact: Mark Bendotti

SUNSHINE COAST

Rider Levett Bucknall QLD Pty Ltd La Balsa Business Centre Level 5/505, 45 Brisbane Road Mooloolaba, QLD 4557 T: +61 7 5443 3622 E: suncoast@au.rlb.com Contact: Jan Buys

SYDNEY

Rider Levett Bucknall NSW Pty Ltd Level 19, 141 Walker Street, North Sydney, NSW 2060 T: +61 2 9922 2277 E: sydney@au.rlb.com Contact: Matthew Harris

TOWNSVILLE

Rider Levett Bucknall QLD Pty Ltd Level 1, 45 Eyre Street, North Ward, Townsville, QLD 4810 T: +61 7 4771 5718 E: townsville@au.rlb.com Contact: Chris Marais

NEW ZEALAND

AUCKLAND

Rider Levett Bucknall Auckland Ltd Level 16, Vero Centre, 48 Shortland Street, Auckland 1141 T: +64 9 309 1074 E: auckland@nz.rlb.com Contact: Stephen Gracey

CHRISTCHURCH

Rider Levett Bucknall Christchurch Ltd Level 1, 254 Montreal Street, Christchurch 8013 T: +64 3 354 6873 E: christchurch@nz.rlb.com Contact: Neil O'Donnell

HAMILTON

Rider Levett Bucknall Hamilton Level 3, 103 London Street, Hamilton 3204 T +64 9 309 1074 E: hamilton@nz.rlb.com Contact: Bob Buskin

PALMERSTON NORTH

Rider Levett Bucknall Palmerston North Ltd Suite 1, Level 1, 219 Broadway Avenue, Palmerston North 4440 T: +64 6 4 384 9198 E: palmerstonnorth@nz.rlb.com Contact: Tony Sutherland

QUEENSTOWN

Rider Levett Bucknall Otago Ltd Level 3, The Mountaineer Building, 32 Rees Street, Queenstown 9348 T: +64 3 409 0325 E: queenstown@nz.rlb.com Contact: Chris Haines

TAURANGA

Rider Levett Bucknall Auckland Ltd Ground Floor, 3/602 Cameron Road, Tauranga 3141 T: +64 9 309 1074 E: tauranga@nz.rlb.com Contact: Richard Anderson

WELLINGTON

Rider Levett Bucknall Wellington Ltd Level 1, 279 Willis Street, Wellington 6011 T: +64 4 384 9198 E: wellington@nz.rlb.com Contact: Tony Sutherland

AFRICA

CAPE TOWN

9th Floor, 22 Bree Street, Cape Town, South Africa T: +27 83 267 6771 E: martin.meinesz@za.rlb.com Contact: Martin Meinesz

JOHANNESBURG

Building 4, Maxwell Office Park, West Waterfall City, Magwa Cres, Midrand, 2000, South Africa T: +27 82 823 6534 E: leon.cronje@za.rlb.com Contact: Leon Cronje

PRETORIA

Ist Floor, Building A, Lynnwood Bridge Office Park, Pretoria, South Africa T: +27 83226 0303 E: nicolas.sheard@za.rlb.com Contact: Nicolas Sheard

GABARONE (BOTSWANA)

Unit 32 Kgale Mews, Gaborone, Botswana. T: +27 72 622 9852 E: fred.solowane@bw.rlb.com Contact: Fred Selolwane

SAINT PIERRE (MAURITIUS)

Ground Floor, Office 4, ENL House, Vivéa Business Park, Moka, Mauritius T: +230 5 767 8815 E: marvind.beetul@mu.rlb.com Contact: Marvind Beetul

MAPUTO (MOZAMBIQUE)

Rua Dom Estêvão Ataíde, nº 38/42, no Bairro da Sommerschield 1, Maputo, Mozambigue T: +27 79 524 1009 E: christiaan.rademan@mu.rlb.com Contact: Christiaan Rademan

MIDDLE EAST

ABU DHABI

Mezzanine Level, Al Mazrouei Building, Muroor Road, PO Box 105766 Abu Dhabi, United Arab Emirates T: +971 2 643 3691 E: tony.bratt@ae.rlb.com Contact: Tony Bratt

DOHA

Office 32, Second Floor, Al Mirqab Complex, Al Mirqab Al Jadeed Street, Al Naser Area, Doha, Gatar T: +974 4016 2777 E: sam.barakat@ae.rlb.com Contact: Sam Barakat

85

OFFICES AROUND THE WORLD

DUBAI

Oasis Centre, Level 3, Suite 9, Sheikh Zayed Road, Dubai, United Arab Emirates T: +971 4 339 7444 E: rob.edgecombe@ae.rlb.com Contact: Rob Edgecombe

MUSCAT

Building No. 287, 18th November Road, North Azaiba, Sultanate of Oman E: rocky.chan@cn.rlb.com Contact: Rocky Chan

RIYADH

F43, 1st Floor, Localizer Mall, Prince Mohammad bin, Abdlaziz Road (Tahliyah Street), Olaya, Riyadh 11593, Saudi Arabia T: +966 11 217 5551 E: john.prior@sa.rlb.com Contact: John Prior

UNITED KINGDOM

BIRCHWOOD

Suite A4, Chadwick House, Birchwood Park, Warrington WA3 6AE T: +44 0 192 585 1787 E: deryck.barton@au.rlb.com Contact: Deryck Barton

BIRMINGHAM

Cathedral Court, 15 Colmore Row, Birmingham, B3 2BH T: +44 0 121 503 1500 E: nigel.mason@uk.rlb.com Contact: Nigel Mason

BRISTOL

Embassy House, 86 Queens Avenue, Bristol, BS8 ISB T: +44 0 117 974 1122 E: jackie.pinder@uk.rlb.com Contact: Jackie Pinder

CUMBRIA

44 Springfield Road, Egremont, Cumbria, CA22 2TQ T: +44 7771 986 099 E: deryck.barton@uk.rlb.com Contact: Deryck Barton

LEEDS

Atlas House, 31 King Street, Leeds LS1 2HL T: +44 0 113 457 3225 E: matt.summerhill@uk.rlb.com Contact: Matt Summerhill

LONDON

2nd Floor, 60 New Broad Street, London, EC2M 1JJ T: +44 0 207 398 8300 E: andrew.reynolds@uk.rlb.com Contact: Andrew Reynolds

MANCHESTER

8 Exchange Quay, Salford Quays, Manchester, M5 3EJ T: +44 0 161 868 7700 E: russell.bolton@uk.rlb.com Contact: Russell Bolton

SHEFFIELD

6th Floor Orchard Lane Wing, Fountain Precinct, Balm Green, Sheffield, S1 2JA T: +44 0 114 273 3300 E: steven.reynolds@uk.rlb.com Contact: Steven Revnolds

THAMES VALLEY

1000 Eskdale Road, Winnersh Triangle, Wokingham, Berkshire, RG41 5TS T: +44 0 118 974 3600 E: michael.righton@uk.rlb.com Contact: Michael Righton

WELWYN GARDEN CITY

29 Broadwater Road, Welwyn Garden City, Hertfordshire, AL7 3BQ T: +44 20 7398 8300 E: andrew.reynolds@uk.rlb.com Contact: Andrew Reynolds

CHINA

BEIJING

Room 1803-1809, 18th Floor, East Ocean Centre, 24A Jian Guo Men Wai Avenue, Chaoyang District, Beijing 100004, China T: +86 10 6515 5818 E: sm.tuen@cn.rlb.com Contact: Simon Tuen

CHENGDU

29th Floor, Square One, No. 18 Dongyu Street, Jinjiang District, Chengdu 610016, Sichuan Province, China T: +86 28 8670 3382 E: eric.lau@cn.rlb.com Contact: Eric Lau

CHONGQING

Room 3007-3008, 30th Floor, Metropolitan Tower, No. 68 Zourong Road, Central District, Chongging 400010, China T: +86 20 8732 1801 E: danny.chow@cn.rlb.com Contact: Danny Chow

DALIAN

Room 1103, 11th Floor, Xiwang Tower, No. 136 Zhongshan Road, Zhongshan District, Dalian 116001, Liaoning Province, China T: +86 10 6515 5818 E: sm.tuen@cn.rlb.com Contact: Simon Tuen

GUANGZHOU

Room 601, 6 Taikoo Hui Tower, 385 Tian He Road, Guangzhou 510620, Guangzhou Province T: +86 20 8732 1801 E: danny.chow@cn.rlb.com Contact: Danny Chow

GUIYANG

Room E, 12th Floor, Fuzhong International Plaza, 126 Xin Hua Road, Guiyang 550002, Guizhou Province, China T: + 86 20 8732 1801 E: danny.chow@cn.rlb.com Contact: Danny Chow

HAIKOU

Room 1705, 17th Floor, Fortune Center, 38 Da Tong Road, Haikou 570102, Hainan Province, China T: +852 2823 1828 E: stephen.lai@hkrlb.com Contact: Stephen Lai

HANGZHOU

Room 2306, 23rd Floor, Deep Blue Plaza, No. 203, Zhao Hui Road, Hangzhou, 310014 Zhejiang Province, China T: + 86 21 6330 1999 E: iris.lee@cn.rlb.com Contact: Iris Lee

HONG KONG

20th Floor, Eastern Central Plaza, 3 Yiu Hing Road, Shaukeiwan T: +852 2823 1823 E: philip.lo@hk.rlb.com Contact: Philip Lo

MACAU

Alameda Dr. Carlos D'Assumpção, No. 398 Edificio CNAC 9° Andar, I-J Macau SAR T: 4553 2823 1830 E: kenneth.kwan@hk.rlb.com Contact: Kenneth Kwan

NANJING

Room 1202, South Tower NIC, 201 Zhong Yang Road, Nanjing 210009, Jiang Su Province, China T: +86 21 6330 1999 E: eric.fong@cn.rlb.com Contact: Eric Fong

NANNING

Room 801 Unit 3 Lingshijun Building No. 1, No.10 Zhongwen Road, Qingxiu District, Nanning 530000, China T: +852 2823 1830 E: kenneth.kwan@hk.rlb.com Contact: Kenneth Kwan

QINGDAO

Room 2019, 20th Floor, Parkson Commerical Plaza, 44-60 Zhongshan Road, Shinan District, Quingdao 266001, Shandong Provinces, China T: +86 10 6515 5818 E: sm.tuen@cn.rlb.com Contact: Simon Tuen

SHANGHAI

22nd Floor, Greentech Tower, 436 Hengfeng Road, Zhabei District, Shanghai 200070, China T: +86 21 6330 1999 E: wg.want@cn.rlb.com Contact: W.Q. Wang

SHENYANG

25th Floor, Tower A, President Building, No. 69 Heping North Avenue, Heping District, Shenyang 110003, Liaoning Province, China T: +852 2823 1907 E: choihing.chan@hkrlb.com Contact: C.H. Chan

SHENZHEN

Room 4510-4513, 45th Floor, Shun Hing Square Diwang Commercial Centre, 5002 Shennan Road East, Shenzhen 518001, Guangdong Province, China T: +852 2823 1830 E: kenneith kwan@hk.rlb.com Contact: Kenneth Kwan

TIANJIN

Room 502, 5th Floor, Tianjin International Building, 75 Nanjing Road, Heping District, Tianjin 300050, China T: +852 2823 1828 E: stephen.lai@hk.rlb.com Contact: Stephen.Lai

OFFICES AROUND THE WORLD

WUHAN

Room 2301, 23rd Floor, New World International Trade Centre, No. 568 Jianshe Avenue, Wuhan 430022, Hubei Province, China T: +852 2823 1828 E: stephen.lai@hk.rlb.com Contact: Stephen.Lai

WUXI

Juna Plaza, Wuxi 214000, Jiangsu Province, China T: +86 21 6330 1999 E: wq.wang@cn.rlb.com Contact: W.Q. Wang

XIAMEN

Room 2216, 22nd Floor, The Bank Centre, 189 Xiahe Road, Xiamen 361000, China T: +86 21 6330 1999 E: eric.fong@cn.rlb.com Contact: Eric Fong

XIAN

Room 2906, 29th Floor, Digital Plaza, Hi-Tech International Business Centre, 33 Keji Road, Xian 710075, Shaanxi Province, China T: +86 28 8670 3382 E: eric.lau@en.rlb.com Contact: Eric Lau

ZHUHAI

Room 3108, 31st Floor Everbright International Trade Centre, No, 47 Haibinnanlu, Jida, Zhuhai 519015, Guangdong Province, China T; +852 2823 1830 E: kenneth.kwan@cn.rlb.com Contact: Kenneth Kwan

INDONESIA

JAKARTA

Jl. Jend. Surdirman Kav 45-46, Sampoerna Strategic Square South Tower, level 18, Jakarta 12930, Indonesia T: +62 21 5795 2308 E: rlb@id.rlb.com Contact: Widitomo Puntoadi

MALAYSIA

KUALA LUMPUR

B2-6-3 Solaris Dutamas, No 1 Jalan Dutamas, 50480 Kuala Lumpur, Malaysia T: +60 3 6207 9991 E: rlb@my.rlb.com Contact: K.F. Lai

MYANMAR

YANGON

Union Business Center, Nat Mauk St, Yangon, Myanmar (Burma) T: +95 1 441 3410 E: rlb@mm.rlb.com Contact: Serene Wong

PHILIPPINES

BACOLOD CITY

4th Floor, Carmen Building, Lizares Avenue, Brgy. 39, Bacolod City, Negros Occidental, 6100 Philippines T: +63 88 850 4105 / +63 998 573 2107 E: coraballard@ph.rlb.com Contact: Corazon Ballard

CAGAYAN DE ORO

2308 Sto. Tomas Street, Phase 2, Sta. Cecilia Village, Gusa, Purificacion Street, Cagayan de Oro, Misamis Oriental, Philippines T: 463 88 850 4105 / +63 998 573 2107 E: coraballard@ph.rlb.com Contact: Corazon Ballard

CEBU

Suite 602 PDI Condominium, Arch. Bichop Reyes Avenue, Corner J. Panis Street, Banilad, Cebu City T: +63 88 850 4105 / +63 998 573 2107 E: coraballard@ph.rlb.com Contact: Corazon Ballard

DAVAO

6th Floor, Unit 15 Metro Lifestyle Complex, Corner F. Torres St, & E. Jacinto Extension, Davao City T: +63 88 850 4105 / +63 998 573 2107 E: coraballard@ph.rlb.com Contact: Corazon Ballard

ILOILO

Uy Bico Building, Yulo Street, Iloilo City, 5000 Philippines T: +63 88 850 4105 / +63 998 573 2107 E: coraballard@ph.rlb.com Contact: Corazon Ballard

METRO MANILA

54 Canley Rd, Pasig, Metro Manila, Philippines T: +63 88 850 4105 / +63 998 573 2107 E: coraballard@ph.rlb.com Contact: Corazon Ballard

PANGLAO, BOHOL

Panglao Island, Bohol, 6340 Philippines T: +63 88 850 4105 / +63 998 573 2107 E: coraballard@ph.rlb.com Contact: Corazon Ballard

STA. ROSA CITY, LAGUNA

Unit 201, Brain Train Centre, Santa Rosa, Calabarzon, Philippines T: +63 88 850 4105 / +63 998 573 2107 E: coraballard@ph.rlb.com Contact: Corazon Ballard

SINGAPORE

SINGAPORE

150 Beach Road, #09-01 Gateway West, Singapore 189720 T: +65 6339 1500 E: rlb@sg.rlb.com Contact: Silas Loh

SOUTH KOREA

JEJU

1084, Seogwang-ri, Andeok-myeon, Seogwipo-si, Jeju-do, Korea T +852 2823 1828 E stephen.lai@hk.rlb.com Stephen Lai

SEOUL

Yeoksam-Dong, Yeji Building, 3rd Floor, 513 Nonhyeon-Ro, Gangnam-Gu, Seoul 135-909, Korea T: +852 2823 1828 E: stephen.lai@hk.rlb.com Contact: Stephen Lai

VIETNAM

HO CHI MINH CITY

Centec Tower, 16th Floor, Unit 1603, 72-74 Nguyen Thi Minh Khai Street, Ward 6, District 3 Ho Chi Minh City, Vietnam T: +84 83 823 8070 E: rlb@vn.rlb.com Contact: Ong Choon Beng

CANADA

CALGARY

Campana Place, 200-609 14th Street NW, Calgary, Alberta T2N 2A1, Canada T: +1 905 827 8218 E: joe.pendlebury@ca.rlb.com Contact: Joe Pendlebury

TORONTO

1155 North Service Road West, Unit 5, Oakville, Ontario, L6M 3E3 T: +1 905 827 8218 E: joe.pendlebury@ca.rlb.com Contact: Joe Pendlebury

CARIBBEAN

BARBADOS

Altman Annex, Derricks, St James, Barbados. BB 24008 T: +1 246 432 5795 E: anthony.ebdon@bb.rlb.com Contact: Anthony Ebdon

CAYMAN ISLANDS

Genesis Bldg, 13 Genesis Cl, George Town, Cayman Islands T: +1 345 946 6063 E: martyn.bould@ky.rlb.com Contact: Martyn Bould

ST LUCIA

Desir Ave, Saint Lucia T: +1 758 452 2125 E: brad.paul@lc.rlb.com Contact: Brad Paul

USA

AUSTIN

111 Congress Avenue, Suite 400, Austin, Texas 78701 T: +1 512 704 3026 E: ruben.rodriguez@us.rlb.com Contact: Ruben Rodriguez

BOSTON

Two Financial Center, Suite 810, 60 South Street, Boston, Massachusetts 02111 T: +1 617 737 9339 E: grant.owen@us.rlb.com Contact: Grant Owen

89

OFFICES AROUND THE WORLD

CHICAGO

65 East Wacker Place, Suite 1215, Chicago, Illinois 60601 T: +1 312 819 4250 E: montie.garrison@us.rlb.com Contact: Montie Garrison

DENVER

1675 Larimer Street. Suite 470, Denver, Colorado 80202 Suite 350, Phoenix, Arizona 85018 T: +1 720 904 1480 E: peter.knowles@us.rlb.com Contact: Peter Knowles

GUAM

GCIC Building, Suite 603, 414 West Soledad Avenue, Hagatna, Guam 96910 T: +1 671 473 9054 E: emile.leroux@us.rlb.com Contact: Emile le Roux

HII O

117 Keawe Street, Suite 125, Hilo, Hawaii 96720 T: +1 808 883 3379 E: kevin.mitchell@us.rlb.com Contact: Kevin Mitchell

HONOLULU

American Savings Bank Tower, Suite 1340, 1001 Bishop Street, Honolulu, Hawaii 96813 T: +1 808 521 2641 E: tony.smith@us.rlb.com Contact: Tony Smith

LAS VEGAS

3753 Howard Hughes, Parkway, Suite 211, Las Vegas, Nevada 89169 T: +1 702 227 8818 E: simon.james@us.rlb.com Contact: Simon James

LOS ANGELES

The Bloc, 700 South Flower Street, Suite 630 Los Angeles, California 90017 T: +1 213 689 1103 E: philip.mathur@us.rlb.com Contact: Philip Mathur

ΜΔUΙ

300 Ohukai Road, Building B, Kihei, Hawaii 96753 T: +1 808 875 1945 E: brian.lawder@us.rlb.com Contact: Brian Lowder

NEW YORK

Broad Street Centre, 80 Broad Street, 5th Floor, New York 10004 T: +1 212 837 7789 E: grant.owen@us.rlb.com Contact: Grant Owen

ORLANDO

2703 Rew Circle, Ocoee, Florida 34761-2991 T: +1 407 905 0002 E: doneal@cwisdom.com Contact: David O'Neal

PHOENIX

4343 East Camelback Road. T: +1 602 443 4848 E: scott.macperhson@us.rlb.com Contact: Scott Macpherson

PORTLAND

Brewery Block 2, 1120 NW Couch Street, Suite 730, Portland, Oregon 97209 T: +1 503 226 2730 E: graham.roy@us.rlb.com Contact: Graham Roy

SAN FRANCISCO

850 Montgomery Street, Suite 100A San Francisco, CA 94133 T +1 415 362 2613 E: catherine.stoupas@us.rlb.com Contact: Catherine Stoupas

SEATTLE

2003 Western Avenue, Suite 515. Seattle. Washington 98121 T: +1 206 223 2055 E: steve.kelly@us.rlb.com Contact: Steve Kelly

TUSCON

33 South Fifth Avenue, Tucson, Arizona 85701 T: +1 520 777 7581 E: joel.brown@us.rlb.com Contact: Joel Brown

WAIKOLOA

Waikoloa Highlands Centre 68-1845 Waikeloa Road, Suite 202, Waikoloa, Hawaii 96738 T: +1 808 883 3379 E: kevin.mtichell@us.rlb.com Contact: Kevin Mitchell

WASHINGTON DC

Metro Center, 1200 G Street NW, Suite 800, Washington, DC 20005 T: +1 617 737 9339 E: grant.owen@us.rlb.com Contact: Grant Owen

CALENDARS

Calendars 2016 - 2019	92
2017 Rostered Days Off	94
Public Holidays	96

CALENDARS 2016 - 2019

2016

	JA	NU	AR	1 20	016			FE	BRU	JAR	Y 20	016	MARCH 2016							
S	М	т	W	т	F	S	S	М	т	W	т	F	S	S	М	т	W	т	F	S
1					1	2	1	1	2	3	4	5	6	1		1	2	3	4	5
3	4	5	6	7	8	9	7	8	9	10	11	12	13	6	7	8	9	10	11	12
10	11	12	13	14	15	16	14	15	16	17	18	19	20	13	14	15	16	17	18	19
17	18	19	20	21	22	23	21	22	23	24	25	26	27	20	21	22	23	24	25	26
24	25	26	27	28	29	30	28	29						27	28	29	30	31		
31																				
APRIL 2016 MAY 2016																				
_	_			2016	5		_		MA	Y 2	016			_	_	JUL	NE 2	016		_
s	м	APF T	W N	2016 T	F	s	s	м	т	w	016 T	F	s	s	м	JUL T	WE 2	016 T	F	s
1	_	T		2016 T	5 F 1	S 2	S 1	M 2	<u>МА</u> Т 3	4 Y 2	016 T 5	F 6	S 7	S	_	JUL T	NE 2 W	2016 T 2	F 3	S 4
S 3	_	<u>АР</u> Т 5		2016 T 7	F 1 8	S 2 9	S 1 8	M 2 9	т	w	016 T 5 12	F 6 13	S 7 14	S	_	JUN T 7	1 1 8	2 9	F	
1	_	Т		7 14	F	2	S 1 8 15	2	Т 3	w	T 5	F 6 13 20	7	5 12	м	JUN T 7 14	W 1	T 2	F 3	4
3	_	Т		T 7 14	F 1 8	2 9 16	15	2 9 16	T 3 10 17	4 11 18	T 5 12 19		7 14 21	5 12 19	м 6 13	T 7 14	1 8	T 2 9 16	F 3	4 11
3 10 17	M 4 11	T 5 12 19	6 13 20	T 7 14 21	F 1 8 15 22	2 9 16 23	15 22	2 9 16	T 3 10 17 24	4 11 18	T 5 12 19	20	7 14 21	5	6 13 20	T 7 14	W 1 8 15 22	T 2 9 16 23	F 3 10 17	4 11 18
3 10 17	M 4 11 18	T 5 12 19	6 13 20	T 7 14 21	F 1 8 15 22	2 9 16 23	15 22	2 9 16 23	T 3 10 17 24	4 11 18	T 5 12 19	20	7 14 21	5 12 19	6 13 20	T 7 14 21	W 1 8 15 22	T 2 9 16 23	F 3 10 17	4 11 18

				-Y 2				_		UG			16		SEPTEMBER 2016								
-[S	М	т	W	т	F	S	S	М	т	w	т	F	S	S	Μ	т	W	т	F	s		
						1	2		1	2	3	4	5	6	1				1	2	3		
	3	4	5	6	7	8	9	7	8	9	10	11	12	13	4	5	6	7	8	9	10		
	10	11	12	13	14	15	16	14	15	16	17	18	19	20	11	12	13	14	15	16	17		
	17	18	19	20	21	22	23	2	22	23	24	25	26	27	18	19	20	21	22	23	24		
	24	25	26	27	28	29	30	28	3 29	30	31			- 1	25	26	27	28	29	30			
	31							L															

	00	сто	BEF	20	016		NOVEMBER 2016									DECEMBER 2016							
S	м	т	w	т	F	s	S	м	т	w	т	F	s	Г	s	М	т	w	т	F	s		
1						1	1		1	2	3	4	5						1	2	3		
2	3	4	5	6	7	8	6	7	8	9	10	11	12		4	5	6	7	8	9	10		
9	10	11	12	13	14	15	13	14	15	16	17	18	19		11	12	13	14	15	16	17		
16	17	18	19	20	21	22	20	21	22	23	24	25	26		18	19	20	21	22	23	24		
23	24	25	26	27	28	29	27	28	29	30					25	26	27	28	29	30	31		
30	31													L									

2017

	JA	NU	AR	r 20	17			FE	BRU	JAR	Y 20	017			1	MAR	сн	201	7	
S	м	т	w	т	F	S	S	М	т	w	т	F	S	S	м	т	W	т	F	S
1	2	3	4	5	6	7	1			1	2	3	4	1			1	2	3	4
8	9					14		6		8		10	11	5		7		9	10	11
15	16	17	18	19	20	21	12	13	14	15	16	17	18	12	2 13	14	15	16	17	18
22	23	24	25	26	27	28	19	20	21	22	23	24	25	19	20	21	22	23	24	25
29	30	31					26	27	28				1	26	5 27	28	29	30	31	
1													i	1						

		APF		2017	,				MA	Y 2	017						JUL	NE 2	017		
S	м	т	w	т	F	S	S	м	т	w	т	F	S	IF	S	М	т	w	т	F	S
1						1	1	1	2	3	4	5	6						1	2	3
2	3		5		7	8	7	8	9	10	11	12	13		4		6		8	9	10
9	10	11	12	13	14	15	14	15	16	17	18	19	20		11	12	13	14	15	16	17
16	17	18	19	20	21	22	21	22	23	24	25	26	27		18	19	20	21	22	23	24
23	24	25	26	27	28	29	28	29	30	31					25	26	27	28	29	30	
30																					

		JUL	Y 2	017				A	UGI	UST	201	17			SEI	PTE	MBE	R 2	017	
S	Μ	т	w	т	F	S	S	М	т	w	т	F	S	S	Μ	т	w	т	F	S
1						1	1		1	2	3	4	5	I .					1	2
2			5			8	6				10			3		5		7	8	9
							13													
							20					25	26	17	18	19	20	21	22	23
23	24	25	26	27	28	29	27	28	29	30	31			24	25	26	27	28	29	30
30	31																			

	00	сто	BEF	R 20	017			NO	VE	ИВЕ	R 2	017			DE	CEN	1BE	R 20	017	
S	м	т	w	т	F	s	S	м	т	w	т	F	s	S	М	т	w	т	F	s
1	2	3	4	5	6	7	1			1	2	3	4						1	2
8						14		6		8		10		3		5		7	8	9
															11					
22	23	24	25	26	27	28	19	20	21	22	23	24	25	17	18	19	20	21	22	23
29	30	31				- 1	26	27	28	29	30		1	24	25	26	27	28	29	30
						- 1				-			1	31						

	J٨	NU	AR	r 20	18			FE	BRU	JAR	Y 20	018			N	1AR	СН	201	8	
S	м	т	w	т	F	S	S	м	т	W	т	F	S	S	м	т	w	т	F	s
1	1	2	3	4	5	6	1				1	2	3	1				1	2	3
7	8	9	10	11	12	13	4	5	6	7	8	9	10	4	5	6	7	8	9	10
14	15	16	17	18	19	20	11	12	13	14	15	16	17	111	12	13	14	15	16	17
21	22	23	24	25	26	27	18	19	20	21	22	23	24	18	19	20	21	22	23	24
28	29	30	31			- 1	25	26	27	28			- 1	25	26	27	28	29	30	31
						- 1	1						- 1	1						
				0.10	,					v 2	010						15 2	010		
_				2018		_	_		MA	Y 2	018			_		JUI		018		_
s	м	т	W	2018 T	F	s	s	м	MA T	Y 2 W	018 T	F	s	s	м	JUL T	NE 2 W	018 T	F	s
S 1		APF T 3	W 4	2018 T 5		S 7	s	м	<u>МА</u> 1	W 2	018 T 3	F 4	S 5	s		1UL T		018 T		S 2
S 1 8		т	W 4 11	2018 5 12		S 7 14	S 6	м 7	MA T 1 8	W 2 9	018 T 3 10	F 4 11		s 3		<u>ии</u> т 5		018 T		
1	M 2	т	W 4 11 18	2018 5 12 19	F 6	7	S 6 13	M 7 14	T 1	W 2	018 T 3 10 17	F 4 11 18	5	1		Т		018 T 7 14	F 1	2
1 8	M 2 9	т	W 4 11 18	T 5 12	F 6 13	7 14 21	6	7	T 1 8	W 2 9	T 3 10		5 12	3		Т	W 6	т 7	F 1 8	2
1 8	M 2 9 16	T 3 10 17	W 4 11 18	T 5 12 19	F 6 13 20	7 14 21	6 13	7 14 21	T 1 8 15	2 9 16 23	T 3 10 17 24	18	5 12 19	3 10	M 4 11	T 5 12	6 13 20	T 7 14	F 1 8 15 22	2 9 16
1 8 15 22	M 2 9 16 23	T 3 10 17	W 4 11 18	T 5 12 19	F 6 13 20	7 14 21	6 13 20	7 14 21	T 1 8 15 22	2 9 16 23	T 3 10 17 24	18	5 12 19	3 10 17	M 4 11 18	T 5 12 19	6 13 20	7 14 21	F 1 8 15 22	2 9 16 23

			JUL	Y 2	018				A	UGI	UST	201	18			SEF	PTE	MBE	R 2	018	
5	s	М	т	w	т	F	s	S	м	т	w	т	F	S	S	м	т	w	т	F	S
1:	1	2	3	4	5	6	7	1			1	2	3	4	1						1
18							14							11		3			6	7	8
1	5	16	17	18	19	20	21	12	13	14	15	16	17	18	9	10	11	12	13	14	15
2	2	23	24	25	26	27	28	19	20	21	22	23	24	25	16	17	18	19	20	21	22
2	9	30	31					26	27	28	29	30	31	- 1	23	24	25	26	27	28	29
							- 1							I	20						

	00	сто	BEF	R 20	018			NO	VE	ИВЕ	R 2	018			DE	CEN	1BE	R 2	018	
s	м	т	w	т	F	S	S	м	т	w	т	F	S	S	м	т	w	т	F	S
1	1	2	3	4	5	6	1				1	2	3	1						1
7	8	9	10	11	12	13	4	5	6	7	8	9	10	2	3	4	5	6	7	8
14	15	16	17	18	19	20	11	12	13	14	15	16	17	9	10	11	12	13	14	15
21	22	23	24	25	26	27	18	19	20	21	22	23	24	16	17	18	19	20	21	22
28	29	30	31				25	26	27	28	29	30	1	23	24	25	26	27	28	29
														30	31					

	J٨	NU	AR	1 20	19			FE	BRL	JAR	Y 20	019				1AR	CH	201	9	
S	м	т	w	т	F	s	S	м	т	w	т	F	s	s	М	т	w	т	F	S
1		1	2	3	4	5	1					1	2						1	2
6	7	8	9	10	11	12	3	4	5	6	7	8	9	3	4	5	6	7	8	9
) 11					
20	21	22	23	24	25	26	17	18	19	20	21	22	23	17	18	19	20	21	22	23
27	28	29	30	31			24	25	26	27	28		I	24	25	26	27	28	29	30
													1	31						

		APF	RIL 2	2019					MA	Y 2	019						JUN	NE 2	019		
S	М	т	w	т	F	S	S	м	т	w	т	F	S	Γ	s	М	т	w	т	F	s
1	1	2	3	4	5	6	1			1	2	3	4	L							1
7	8	9	10	11	12	13	5	6	7	8	9	10	11	L	2	3	4	5	6	7	8
14	15	16	17	18	19	20	12	13	14	15	16	17	18	L	9	10	11	12	13	14	15
21	22	23	24	25	26	27	19	20	21	22	23	24	25	Ŀ	16	17	18	19	20	21	22
	29									29									27		
													- 1	Ŀ	30						

		JUL	Y 2	019				A	UG	UST	201	19			1	SEP	TEI	мве	R 2	019	
S	м	т	w	т	F	S	s	м	т	w	т	F	s	5	5	М	т	w	т	F	s
	1	2	3	4	5	6	1				1	2	3	13	L	2	3	4	5	6	7
7	8	9	10	11	12	13	4	5	6	7	8	9	10	8	3	9	10	11	12	13	14
14	15	16	17	18	19	20	11	12	13	14	15	16	17	1	5	16	17	18	19	20	21
21	22	23	24	25	26	27	18	19	20	21	22	23	24	2	2	23	24	25	26	27	28
28	29	30	31				25	26	27	28	29	30	31	2	9	30					
1													1								

	00	сто	BEF	20)19			NC	VE	1BE	R 2	019				DE	CEN	1BE	R 2	019	
S	м	т	w	т	F	S	S	м	т	w	т	F	s	5	5	м	т	W	т	F	S
1		1	2	3	4	5	1					1	2	1:	L	2	3	4	5	6	7
6	7	8	9	10	11	12	3	4	5	6	7	8	9	18	3	9	10	11	12	13	14
13	14	15	16	17	18	19	10	11	12	13	14	15	16	1	5	16	17	18	19	20	21
20	21	22	23	24	25	26	17	18	19	20	21	22	23	2	2	23	24	25	26	27	28
27	28	29	30	31			24	25	26	27	28	29	30	2	9	30	31				
1																					

CALENDARS 2017 ROSTERED DAYS OFF

	ADELAIDE	BRISBANE & DARWIN
BASIS	CFMEU EBA	CFMEU EBA
HOURS BASIS	36	36
JAN	FRI 27	MON 3
	MON 30	TUE 4
		WED 5
		THU 6
		FRI 27
FEB	MON 13	MON 20
	MON 27	
MAR	TUE 14	MON 20
	WED 15	
APR	THU 13	TUE 18
	TUE 18	WED 19
	MON 24	THU 20
		FRI 21
		MON 24
MAY	MON 15	MON 29
	MON 29	
JUNE	TUE 13	MON 26
	WED 14	
JUL	MON 10	MON 17
	MON 24	
AUG	MON 14	MON 14
	MON 18	TUE 15
SEP	MON 11	MON 11
	MON 25	
ост	MON 3	TUE 3
	TUE 4	
	MON 30	
NOV	MON 13	MON 6
	MON 27	TUE 7
		THU 8
DEC	THU 21	MON 4
	FRI 22	WED 27
		THU 28
		FRI 29
TOTAL	26	26

CANBERRA	MELBOURNE	PERTH	SYDNEY
CFMEU EBA	CFMEU EBA	AWARD	CFMEU EBA
36	36	38	36
TUE 3	TUE 10	FRI 27	FRI 27
WED 25	FRI 27		
FRI 27			
MON 6	MON 6	MON 13	MON 27
MON 20	MON 20		
TUE 14	TUE 14	TUE 7	MON 27
MON 27	MON 27		
TUE 18	TUE 18	MON 24	MON 24
FRI 21	WED 19		
MON 24	MON 24		
MON 8	MON 8	MON 15	MON 22
MON 22	MON 22		
TUE 13	TUE 13	TUE 6	TUE 13
MON 26	MON 26		
MON 10	MON 10	MON 3	MON 17
MON 24	MON 24		
MON 14	MON 7	MON 28	MON 14
MON 28	MON 21		
MON 11	MON 4	MON 25	MON 11
FRI 22	MON 18		
TUE 3	MON 2	MON 30	TUE 3
MON 16	MON 16		
MON 6	MON 6	MON 27	MON 6
MON 20	WED 8		
	MON 20		
MON 11	WED 27	FRI 22	MON 4
WED 27	THU 28		TUE 5
			WED 27
26	26	13	13 FIXED & 13 VARIABLE

CALENDARS PUBLIC HOLIDAYS IN AUSTRALIA

ALL STATES	2017	2018	2019
New Years Day	1 & 2 JAN	1 JAN	1 JAN
Good Friday	14 APR	30 MAR	28 MAR
Easter Monday	17 APR	2 APR	2 APR
Anzac Day	25 APR	25 APR	25 APR
Queens Birthday (excl. QLD & WA)	12 JUN	11 JUN	11 JUN
Christmas Day	25 DEC	25 DEC	25 DEC
Boxing Day	26 DEC	26 DEC	26 DEC
A.C.T			
Canberra Day	13 MAR	12 MAR	11 MAR
Easter Saturday	15 APR	31 MAR	29 APR
Easter Sunday	16 APR	1 APR	30 APR
Family and Community Day	25 SEP	24 SEP	30 SEP
Labour Day	2 OCT	1 OCT	7 OCT
QUEENSLAND			
Easter Saturday	15 APR	31 MAR	29 APR
Labour Day	1 MAY	7 MAY	6 MAY
Royal Queensland Show	16 AUG	15 AUG	14 AUG
Queens Birthday	2 OCT	1 OCT	7 OCT
NEW SOUTH WALES			
Easter Saturday	15 APR	31 MAR	29 APR
Easter Sunday	16 APR	1 APR	30 APR
Bank Holiday	7 AUG	6 AUG	5 AUG
Labour Day	2 OCT	1 OCT	7 OCT
NORTHERN TERRITORY			
Easter Saturday	15 APR	31 MAR	29 APR
May Day	1 MAY	7 MAY	6 MAY
Picnic Day	7 AUG	6 AUG	5 AUG
QUEENSLAND			
Easter Saturday	15 APR	31 MAR	29 APR
Labour Day	1 MAY	7 MAY	6 MAY
Royal Queensland Show	16 AUG	15 AUG	14 AUG
Queens Birthday	2 OCT	1 OCT	7 OCT
SOUTH AUSTRALIA			
Easter Saturday	15 APR	31 MAR	29 APR
Adelaide Cup Day	13 MAR	12 MAR	11 MAR
Labour Day	2 OCT	1 OCT	7 OCT
TASMANIA			
Royal Hobart Regatta	13 FEB	12 FEB	11 FEB
Launceston Cup	22 FEB	28 FEB	27 FEB
Eight Hours Day	13 MAR	12 MAR	11 MAR
Easter Tuesday	18 APR	3 APR	2 MAY
Launceston Show	12 OCT	11 OCT	10 OCT
Hobart Show	26 OCT	25 OCT	24 OCT
Recreation Day (Northern)	6 NOV	5 NOV	4 NOV
VICTORIA			
Labour Day	13 MAR	5 MAR	11 MAR
Easter Saturday	15 APR	31 MAR	29 APR
Easter Sunday	16 APR	1 APR	30 APR
Grand Final Eve Day	29 SEP	28 SEP	27 SEP
Melbourne Cup Day	7 NOV	6 NOV	5 NOV



