

# RIDERS DIGEST 2019

ADELAIDE, AUSTRALIA EDITION

### South Australian Office

Level 1, 8 Leigh Street, Adelaide, SA 5000 Telephone: +61 8 8100 1200



# RIDERS DIGEST

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 2018 (unless stated differently). All figures exclude GST.

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## 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	6
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## 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
- Estimation 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.

### **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

### **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 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

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# 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 <sup>2</sup>				
LOCATION	LOCAL	OFFICE BUILDING				
/CITY	CURRENCY	PREI	MIUM	GRA	DE A	
		LOW	HIGH	LOW	HIGH	
AMERICAS @ Q3	2018					
BOSTON	USD	3,230	5,115	2,155	3,230	
CHICAGO	USD	3,015	4,845	1,885	3,015	
DENVER	USD	1,775	2,745	1,290	1,990	
HONOLULU	USD	3,015	5,595	2,585	4,250	
LOS ANGELES	USD	2,475	3,765	1,830	2,745	
NEW YORK	USD	4,035	6,190	3,230	4,305	
PHEONIX	USD	1,830	2,960	1,290	1,885	
SEATTLE	USD	2,315	2,800	1,505	2,155	
TORONTO	CAD	2,100	2,800	1,885	2,690	
ASIA @ Q3 2018						
BEIJING	RMB	8,400	13,750	7,800	11,750	
GUANGZHOU	RMB	7,700	12,250	7,100	10,750	
HO CHI MINH CITY	/ VND ('000)	23,900	35,800	21,300	26,600	
HONG KONG	HKD	23,250	34,500	19,750	26,750	
JAKARTA	RP ('000)	10,130	13,200	6,870	11,000	
KUALA LUMPUR	RINGGIT	2,600	4,500	1,400	3,200	
MACAU	MOP	18,500	26,500	16,250	22,750	
SEOUL	KRK ('000)	2,525	3,275	1,925	2,350	
SHANGHAI	RMB	8,200	13,000	7,300	11,250	
SINGAPORE	SGD	2,950	4,150	2,050	3,300	
EUROPE @ Q3 20	18					
BELFAST	GBP	1,400	1,960	1,220	1,960	
BERLIN	EUR	1,380	1,800	1,000	1,180	
BIRMINGHAM	GBP	1,940	2,850	1,580	2,850	
BRISTOL	GBP	2,000	2,900	1,640	2,900	
EDINBURGH	GBP	1,820	2,600	1,600	2,600	
LONDON	GBP	3,000	3,900	2,700	3,700	
MANCHESTER	GBP	2,150	2,750	1,820	2,750	
OSLO	EUR	2,900	3,750	2,250	2,900	
MIDDLE EAST @ 0	33 2018					
ABU DHABI	AED	5,700	6,800	4,600	6,400	
DUBAI	AED	6,000	7,200	4,850	6,800	
DOHA	QAR	6,500	8,500	6,100	8,200	
OCEANIA @ Q4 2	018					
ADELAIDE	AUD	2,650	3,800	2,200	3,150	
AUCKLAND	NZD	3,700	4,900	3,100	4,650	
BRISBANE	AUD	3,000	4,400	2,500	3,800	
CANBERRA	AUD	3,500	5,500	2,800	4,300	
CHRISTCHURCH	NZD	3,600	4,500	2,750	4,250	
DARWIN	AUD	3,100	4,150	2,400	3,800	
GOLD COAST	AUD	2,600	4,000	1,900	3,200	
MELBOURNE	AUD	3,250	4,350	2,500	3,450	
PERTH	AUD	3,000	4,700	2,400	3,750	
SYDNEY	AUD	3,750	5,500	2,850	4,050	
WELLINGTON	NZD	3,900	5,000	3,050	4,800	

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 <sup>2</sup>								
	RET	AIL		RESIDI	ENTIAL			
MA	LL	STRIP SI	HOPPING	MULTIS	STOREY			
LOW	HIGH	LOW	HIGH	LOW	HIGH			
1,885	2,960	1,345	2,155	1,885	3,230			
1,990	3,120	1,455	2,370	1,775	4,305			
970	1,560	860	1,885	970	2,155			
2,205	5,220	1,885	4,575	2,100	4,680			
1,670	3,660	1,345	1,990	2,155	3,390			
2,960	4,575	1,885	3,230	2,155	4,035			
1,290	2,155	860	1,615	970	2,260			
1,455	3,285	1,185	1,670	1,720	2,905			
2,155	2,690	1,130	1,720	1,400	2,205			
9,200	14,000	8,100	12,750	4,400	9,000			
8,700	12,500	7,500	11,500	4,000	8,000			
20,100	26,750	-	-	15,400	23,300			
23,250	29,500	20,000	25,750	21,750	43,250			
6,520	8,515	-	-	6,870	16,000			
2,100	3,500	-	-	1,900	4,500			
20,250	24,750	17,000	21,750	13,750	25,250			
1,700	2,475	1,425	2,200	1,650	2,775			
8,600	13,750	7,600	12,500	4,000	8,200			
2,000	3,350	-	-	1,960	3,150			
2,200	3,000	680	1,280	1,280	1,800			
1,160	1,480	850	1,060	1,000	1,440			
2,900	4,100	910	1,760	1,660	2,350			
2,850	4,000	900	1,700	1,240	1,760			
2,850	3,950	890	1,680	1,680	2,400			
3,550	5,000	1,140	2,150	2,550	4,450			
3,000	4,200	960	1,800	1,760	2,550			
1,820	2,400	1,460	1,900	2,450	3,200			
4,000	6,300	-	-	4,400	6,500			
4,250	6,700	-	-	4,650	6,900			
5,300	6,500	-	-	6,500	7,800			
1,580	3,000	1,300	1,840	2,250	3,550			
2,850	3,200	1,660	2,050	3,700	4,900			
2,200	3,600	1,400	2,000	2,400	4,400			
2,400	4,050	1,260	2,550	2,950	5,200			
2,500	2,800	1,400	1,800	3,000	4,000			
1,760	2,650	1,260	2,150	2,050	2,650			
2,500	3,500	1,200	1,800	1,600	4,500			
2,200	3,200	1,240	1,680	2,500	4,400			
1,900	2,900	1,000	2,500	1,900	4,100			
2,100	4,400	1,600	2,100	2,750	5,900			
2,950	3,150	-		3,900	4,800			

# 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 <sup>2</sup>				
LOCATION	LOCAL	HOTELS				
/CITY	CURRENCY	3 S	TAR	5 S	TAR	
		LOW	HIGH	LOW	HIGH	
AMERICAS @ Q3 2	2018					
BOSTON	USD	2,690	4,035	4,035	5,920	
CHICAGO	USD	3,120	4,415	4,305	7,105	
DENVER	USD	1,720	2,585	2,960	3,875	
HONOLULU	USD	3,445	5,760	5,435	7,860	
LOS ANGELES	USD	2,960	3,820	3,930	5,705	
NEW YORK	USD	3,230	4,305	4,305	6,460	
PHEONIX	USD	1,615	2,690	3,230	5,595	
SEATTLE	USD	2,420	2,585	2,635	3,875	
TORONTO	CAD	2,100	2,800	3,230	3,820	
ASIA @ Q3 2018						
BEIJING	RMB	10,750	13,750	14,250	18,750	
GUANGZHOU	RMB	10,250	12,500	13,750	17,750	
HO CHI MINH CITY	/ VND ('000)	25,000	32,300	35,600	42,700	
HONG KONG	HKD	29,000	33,750	35,250	43,000	
JAKARTA	RP ('000)	11,500	13,500	15,000	20,000	
KUALA LUMPUR	RINGGIT	2,500	3,500	5,000	7,000	
MACAU	MOP	24,750	28,500	31,000	38,000	
SEOUL	KRK ('000)	1,875	2,600	3,425	5,100	
SHANGHAI	RMB	10,500	13,500	14,250	18,750	
SINGAPORE	SGD	3,250	3,650	4,250	5,500	
EUROPE @ Q3 20	18					
BELFAST	GBP	1,040	1,520	1,640	2,250	
BERLIN	EUR	1,380	1,800	2,050	2,800	
BIRMINGHAM	GBP	1,340	2,100	2,200	3,150	
BRISTOL	GBP	1,400	1,860	2,400	3,200	
EDINBURGH	GBP	1,360	1,980	2,150	2,950	
LONDON	GBP	1,900	2,450	2,850	3,800	
MANCHESTER	GBP	1,540	1,920	2,300	3,150	
OSLO	EUR	3,000	3,900	4,000	5,200	
MIDDLE EAST @ 0	23 2018					
ABU DHABI	AED	5,900	8,300	8,800	11,750	
DUBAI	AED	6,200	9,300	9,300	14,500	
DOHA	QAR	7,500	8,500	11,500	14,500	
OCEANIA @ Q4 2	018					
ADELAIDE	AUD	2,700	3,550	3,700	4,550	
AUCKLAND	NZD	4,200	4,750	5,700	6,700	
BRISBANE	AUD	3,000	4,200	4,200	5,700	
CANBERRA	AUD	3,100	5,300	4,250	6,400	
CHRISTCHURCH	NZD	3,800	4,300	4,500	5,500	
DARWIN	AUD	2,850	3,550	3,600	4,450	
GOLD COAST	AUD	2,600	4,000	3,400	5,500	
MELBOURNE	AUD	2,950	3,800	4,150	5,600	
PERTH	AUD	2,600	3,600	3,600	4,800	
SYDNEY	AUD	3,350	4,200	4,650	6,300	
WELLINGTON	NZD	4,100	4,600	5,100	6,100	

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.

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

COST PER M <sup>2</sup>							
	CAR PA	RKING		INDUS	TRIAL		
MULTI S	STOREY	BASE	BASEMENT		HOUSE		
LOW	HIGH	LOW	HIGH	LOW	HIGH		
805	1,345	970	1,615	1,075	1,885		
860	1,345	1,345	1,830	1,185	1,990		
590	805	970	1,290	970	1,615		
1,075	1,505	1,505	2,800	1,505	2,420		
1,130	1,345	1,400	1,885	1,240	1,940		
1,025	1,885	1,345	2,155	1,240	2,155		
485	755	645	1,185	590	1,075		
970	1,130	1,455	1,720	1,025	1,345		
755	970	1,240	1,615	1,240	1,615		
2,400	3,350	4,100	7,100	4,750	6,000		
2,250	3,200	3,900	6,800	4,400	5,500		
9,100	13,700	18,800	25,700	6,210	9,400		
9,100	11,000	19,000	26,000	15,500	19,250		
3,500	4,500	5,000	7,000	4,790	6,078		
800	1,200	1,400	3,400	1,000	1,800		
-	-	10,750	13,500	-	-		
720	890	920	1,200	1,300	1,600		
2,300	3,300	4,300	7,200	4,350	5,700		
700	1,400	1,500	2,250	1,100	1,600		
260	520	650	1,120	285	510		
480	690	800	1,060	370	740		
370	710	840	1,440	420	590		
410	820	980	1,540	410	670		
350	680	850	1,460	380	680		
460	920	1,220	1,960	500	900		
560	720	1,080	1,560	490	720		
700	890	900	1,180	1,600	2,100		
1.700	7.500	2.000	4.400	1.400	0.650		
1,760	3,500	2,800	4,400	1,460	2,650		
2,400	3,700	3,200	4,650	1,900	3,000		
-	-	2,750	4,500	-	-		
500	000	1.740	1.000	CEO	1 100		
680	980	1,340	1,960	650 780	1,100		
1,060	1,360	2,300	2,800		1,060		
1,000	1,500	1,700	2,200	750	1,200		
790 850	1,320	1,060	1,840 2,200	740 720	1,400		
750	1,360	1,760 1.180		800	1,100		
	1,260	,	1,540		1,420		
700 810	1,200 1,280	1,500 1,280	2,100 1,680	700 660	1,100 1,220		
650	1,280	1,280	3.100	550	1,220		
810	1,000	1,800	1,900	770	1,060		
1,440	1,640	2,850	3,050	1,020	1,400		
1,440	1,040	2,030	3,030	1,020	1,400		

## 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.

CALENDAR YEAR	2016	2017	2018 (F)	2019 (F)	2020 (F)	2021 (F)
AFRICA @ Q3 2018						
CAPE TOWN	7.3	6.2	5.0	5.4	5.7	6.0
JOHANNESBURG	6.4	7.9	4.1	5.1	5.5	5.7
MAPUTO	4.0	0.3	0.5	1.0	1.1	NP
AMERICAS @ Q3 2018						
BOSTON	4.0	3.2	4.7	4.4	4.1	3.0
CALGARY	NP	0.3	4.0	2.5	1.8	1.8
CHICAGO	4.3	5.3	6.8	4.3	3.8	3.5
HONOLULU	0.7	-1.7	2.6	3.3	3.5	3.0
LAS VEGAS	3.3	3.5	5.3	4.3	3.5	3.0
LOS ANGELES	8.4	7.6	4.4	3.8	3.5	3.0
NEW YORK	3.9	3.3	4.1	4.1	3.3	3.0
PHEONIX	3.7	4.3	6.5	4.3	3.3	3.0
SEATTLE	4.7	5.1	5.3	4.1	3.5	3.0
TORONTO	NP	1.1	5.2	2.0	2.3	2.3
WASHINGTON DC	4.3	3.2	4.3	4.1	3.5	3.0
ASIA @ Q3 2018						
BEIJING	0.0	7.7	3.0	4.1	3.0	3.0
CHENGDU	-0.8	2.0	6.1	3.0	3.0	3.0
GUANGZHOU	1.0	2.5	2.0	3.0	3.0	3.0
HONG KONG	0.4	0.0	-2.0	0.0	2.0	2.0
MACAU	0.0	2.0	-2.0	0.0	2.0	2.0
SEOUL	3.9	2.5	4.4	4.9	4.5	4.1
SHANGHAI	6.0	7.0	3.5	3.5	3.0	3.0
SHENZHEN	1.0	2.0	4.1	4.1	4.1	4.1
SINGAPORE	-5.8	-1.5	0.0	NP	NP	NP
EUROPE @ Q3 2018						
BIRMINGHAM	3.0	2.8	2.5	2.3	3.3	4.0
BRISTOL	5.0	2.5	3.0	3.0	3.0	3.0
BUDAPEST	5.5	9.5	8.0	8.0	5.0	NP
LONDON	3.5	2.0	1.3	1.0	1.5	2.0
SHEFFIELD	2.5	2.0	-1.5	3.8	4.3	5.6
MADRID	0.1	0.8	0.1	0.1	NP	NP
MANCHESTER	4.0	2.0	1.0	1.0	2.5	3.5
MOSCOW	0.0	1.0	1.5	1.5	2.0	NP
MIDDLE EAST @ Q3 2018						
ABU DHABI	-5.0	-3.0	3.2	2.7	3.7	4.2
DOHA	5.5	6.0	7.0	NP	NP	NP
DUBAI	3.0	3.5	3.0	2.5	3.5	4.0
RIYADH	5.0	5.0	5.0	5.0	5.0	5.0
OCEANIA @ Q4 2018						
ADELAIDE	1.8	3.1	3.5	4.0	4.0	4.5
AUCKLAND	5.5	8.0	6.0	3.5	3.0	3.0
BRISBANE	7.2	3.0	1.0	3.0	5.1	4.1
CANBERRA	2.5	2.8	3.5	3.2	3.0	3.0
CHRISTCHURCH	3.0	3.0	3.0	2.0	2.0	2.0
DARWIN	1.0	0.8	0.5	0.8	1.2	1.8
GOLD COAST	6.5	2.5	2.0	2.5	3.0	3.5
MELBOURNE	2.0	3.0	4.0	4.0	3.5	3.2
PERTH	0.0	0.0	1.0	2.5	3.0	3.0
SYDNEY	4.8	4.3	4.9	4.4	4.2	3.8
TOWNSVILLE	3.0	4.0	3.0	3.5	3.5	3.5
WELLINGTON	4.5	5.3	6.0	4.0	4.0	3.0
ND: Not published		0.0	0.0			0.0

NP: Not published

# AUSTRALIAN CONSTRUCTION

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## **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	\$/	M <sup>2</sup>	\$/M <sup>2</sup>		
GROSS FLOOR AREA	LOW	HIGH	LOW	HIGH	
OFFICE BUILDINGS					
Prestige, CBD					
10 TO 25 STOREYS (75-80% EFFICIENCY)	2,650	3,400	3,000	3,900	
25 TO 40 STOREYS (70-75% EFFICIENCY)	2,950	3,800	3,200	4,100	
40 TO 55 STOREYS (68-73% EFFICIENCY)	-	-	3,400	4,400	
Investment, CBD					
UP TO 10 STOREYS (81-85% EFFICIENCY)	2,200	2,650	2,500	3,000	
10 TO 25 STOREYS (76-81% EFFICIENCY)	2,350	2,950	2,800	3,300	
25 TO 40 STOREYS (71-76% EFFICIENCY)	2,550	3,150	2,900	3,800	
Investment, other than CBD					
WALK UP (83-87% EFFICIENCY)	1,800	2,300	2,000	2,400	
UP TO 10 STOREYS (82-86% EFFICIENCY)	2,050	2,550	2,200	2,600	
10 TO 25 STOREYS (77-82% EFFICIENCY)	-	-	2,400	2,800	
HOTELS					
Multi-Storey (ex FF&E)					
FIVE STAR	3,700	4,550	4,200	5,700	
FOUR STAR	3,150	4,250	3,600	4,700	
THREE STAR	2,700	3,550	3,000	4,200	
CAR PARK					
OPEN DECK MULTI-STOREY	680	980	1,000	1,500	
BASEMENT: CBD	1,340	1,960	1,700	2,200	
BASEMENT: OTHER THAN CBD	930	1,760	1,100	1,800	
UNDERCROFT: OTHER THAN CBD	580	880	700	900	
INDUSTRIAL BUILDINGS					
6.00 M to underside of truss and 4,500 M² Gross Floor Area with:					
ZINCALUME METAL CLADDING	650	1,000	750	1,100	
PRECAST CONCRETE CLADDING	750	1,100	850	1,200	
Attached Airconditioned Offices					
200 M <sup>2</sup>	1,560	2,150	2,000	2,600	
400 M <sup>2</sup>	1,560	2,150	2,000	2,400	

#### NOTES

- i Car Parking costs have been excluded to arrive at the various building rates.
- ii Refer to Page 30 for definitions.
- ii 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 =  $\frac{M^2}{100}$  + efficiency percentage.

#### Refer to www.rlbintelligence.com for updates.

CANB	ERRA	DAR	WIN	MELBO	DURNE	PEF	RTH	SYD	NEY
\$/	M <sup>2</sup>	\$/	\$/M²		M <sup>2</sup>	\$/	M <sup>2</sup>	\$/	M <sup>2</sup>
LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH
3,500	5,100	3,100	4,000	3,250	3,750	3,000	4,000	3,750	4,300
3,750	5,500	3,250	4,150	3,750	4,100	3,300	4,400	4,350	5,000
-	-	-	-	3,850	4,350	3,500	4,700	4,850	5,500
2,800	4,000	2,400	3,450	2,500	2,950	2,400	3,300	2,850	3,300
2,900	4,150	2,550	3,800	2,850	3,250	2,500	3,500	3,350	3,750
2,950	4,300	-	-	2,900	3,450	2,600	3,750	3,450	4,050
1,500	2,500	2,200	2,800	1,820	2,350	1,800	2,600	2,250	2,650
2,150	2,950	2,300	3,350	2,050	2,750	2,000	2,800	2,450	3,150
2,250	3,500	2,550	3,450	2,350	3,050	2,200	3,000	2,850	3,600
4,250	6,400	3,600	4,450	4,150	5,600	3,600	4,800	4,650	6,300
3,700	6,000	3,350	4,050	3,750	4,800	3,100	4,000	3,950	5,500
3,100	5,300	2,850	3,550	2,950	3,800	2,600	3,600	3,350	4,200
790	1,320	750	1,260	810	1,280	650	1,000	810	1,240
1,060	1,840	1,180	1,540	1,280	1,680	1,800	3,100	1,180	1,900
1,040	1,840	1,040	1,520	1,220	1,580	1,400	2,800	1,160	1,740
790	1,200	720	1,020	810	970	700	1,100	-	-
740	920	800	1,400	660	1,120	550	800	770	970
850	1,400	840	1,420	760	1,220	630	1,060	840	1,240
1,740	2,750	1,700	2,400	1,580	2,050	1,400	1,900	2,100	2,750
1,660	2,650	1,700	2,400	1,520	1,980	1,360	1,860	2,150	2,950

# AUSTRALIAN CONSTRUCTION BUILDING COST RANGES

All costs current as at Fourth Quarter 2018.

CITY	ADEL	AIDE	BRISBANE		
COST RANGE PER	\$/	M²	\$/M <sup>2</sup>		
GROSS FLOOR AREA	LOW	HIGH	LOW	HIGH	
AGED CARE					
SINGLE STOREY FACILITY	2,150	2,700	2,400	3,000	
PRIVATE HOSPITALS					
Low Rise Hospital					
45-60 M <sup>2</sup> GFA/BED	3,700	5,700	4,500	5,800	
55-80 M <sup>2</sup> GFA/BED WITH MAJOR OPERATING THEATRE	4,000	6,000	5,000	6,500	
CINEMAS GROUP COMPLEX, 2,000-4,000 SEATS (WARM SHELL)	2,750	3,650	3,500	4,500	
REGIONAL SHOPPING CENTRES					
DEPARTMENT STORE	1,560	2,400	1,600	2,100	
SUPERMARKET/VARIETY STORE	1,440	1,760	1,600	2,000	
DISCOUNT DEPARTMENT STORE	1,200	1,460	1,400	2,000	
MALLS	1,580	3,000	2,200	3,600	
SPECIALTY SHOPS	1,000	1,680	1,400	1,800	
SMALL SHOPS AND SHOWROOMS					
SMALL SHOPS & SHOWROOMS	1,300	1,840	1,400	2,000	
RESIDENTIAL					
SINGLE & DOUBLE STOREY DWELLINGS (CUSTOM BUILT)	1,580	3,450	1,800	4,000	
RESIDENTIAL UNITS					
WALK-UP 85 TO 120 M <sup>2</sup> /UNIT	1,660	2,750	1,800	3,400	
TOWNHOUSES 90 TO 120 M <sup>2</sup> /UNIT	1,740	2,650	1,500	3,500	
MULTI-STOREY UNITS					
Up to 10 storeys with lift					
UNITS 60-70 M <sup>2</sup>	2,350	3,450	2,400	3,500	
UNITS 90-120 M <sup>2</sup>	2,250	3,350	2,400	3,500	
Over 10 and up to 20 storeys					
UNITS 60-70 M <sup>2</sup>	2,450	3,550	2,800	3,600	
UNITS 90-120 M <sup>2</sup>	2,400	3,450	2,800	3,600	
Over 20 and up to 40 storeys					
UNITS 60-70 M <sup>2</sup>	2,650	3,450	3,000	3,800	
UNITS 90-120 M <sup>2</sup>	2,600	3,400	3,000	3,700	
Over 40 and up to 80 storeys					
UNITS 60-70 M <sup>2</sup>	-	-	3,300	4,400	
UNITS 90-120 M <sup>2</sup>	-	-	3,200	4,200	

## Building Costs include Building Works and Building Services

#### Refer to www.rlbintelligence.com for updates.

CANB	ERRA	DAR	WIN	MELBOURNE PERTH SY		PERTH		SYD	NEY
\$/	M <sup>2</sup>	\$/	\$/M <sup>2</sup>		\$/M <sup>2</sup>		M²	\$/	'M²
LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH
2,100	3,500	2,400	3,550	1,920	3,100	1,760	2,800	2,850	3,650
4,400	7,300	3,900	4,650	2,900	3,450	3,400	4,300	3,000	3,800
4,800	8,000	4,700	5,700	3,200	4,400	3,600	4,500	3,750	5,000
3,050	4,200	2,750	3,500	2,500	3,300	2,200	2,700	3,450	4,850
2,450	3,200	1,720	2,450	2,100	2,500	1,900	2,600	1,600	2,350
1,480	2,450	1,820	2,500	1,300	1,940	1,200	1,760 1,700	1,560	3,050
2,400	1,920 4,050	1,660 1,760	2,300	1,340 2,200	1,720 3,200	1,200	2,900	1,360 2,100	1,680 4,400
1,240	2,050	1,460	2,100	1,240	1,720	1,000	1,500	1,780	2,750
1,240	2,030	1,400	2,100	1,240	1,720	1,000	1,300	1,760	2,730
1.260	2.550	1.260	2.150	1.240	1.680	1.000	2.500	1.600	2.100
	,		,		,	,	,	,	,
1,700	3,400	1,800	2,800	1,720	3,300	1,400	2,700	1,780	5,100
1,800	4,400	1,980	2,400	1,820	3,300	1,460	2,900	-	-
1,800	4,300	1,980	2,400	1,820	3,050	1,460	2,900	-	-
3,000	4,500	2,050	2,450	2,500	3,150	2,000	3,000	3,000	3,900
2,950	4,400	2,050	2,400	2,500	3,200	1,900	2,900	2,750	3,600
3,250	4,800	2,100	2,550	2,800	3,600	2,300	3,300	3,150	4,200
3,200	4,800	2,050	2,500	2,800	3,650	2,200	3,200	3,000	4,000
3.750	5,200	2,350	2.650	3,250	3,900	2,800	3,600	4,100	5,200
3,650	4.950	2,300	2,600	3,250	4.000	2,700	3,500	3.850	4.650
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	.,	.,	.,	,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1,1.20	,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	.,
-	-	-	-	3,650	4,300	3,300	4,100	4,700	5,900
-	-	-	-	3,650	4,400	3,200	4,000	4,550	5,700

## AUSTRALIAN CONSTRUCTION BUILDING SERVICES COST RANGES

All costs current as at Fourth Quarter 2018.

	ADEI	AIDE	BRISBANE		
COST RANGE PER GROSS FLOOR AREA	\$/	Μ²	\$/	M <sup>2</sup>	
	LOW	HIGH	LOW	HIGH	
OFFICE BUILDINGS					
Prestige, CBD					
10 TO 25 STOREYS (75-80% EFFICIENCY)	748	1,122	820	1,199	
25 TO 40 STOREYS (70-75% EFFICIENCY)	799	1,222	904	1,286	
40 TO 55 STOREYS (68-73% EFFICIENCY)	-	-	1,057	1,457	
Investment, CBD					
UP TO 10 STOREYS (81-85% EFFICIENCY)	731	998	747	983	
10 TO 25 STOREYS (76-81% EFFICIENCY)	733	1,047	803	1,053	
25 TO 40 STOREYS (71-76% EFFICIENCY)	753	1,096	846	1,182	
INVESTMENT, OTHER THAN CBD					
WALK UP (83-87% EFFICIENCY)	398	580	545	674	
UP TO 10 STOREYS (82-86% EFFICIENCY)	551	778	684	953	
10 TO 25 STOREYS (77-82% EFFICIENCY)	-	-	757	1,070	
HOTELS					
Multi-Storey					
FIVE STAR	1,037	1,456	1,001	1,260	
FOUR STAR	931	1,277	974	1,235	
THREE STAR	878	1,071	931	1,187	
CAR PARK					
OPEN DECK MULTI-STOREY	132	268	141	281	
BASEMENT: CBD	214	422	241	423	
BASEMENT: OTHER THAN CBD	213	422	241	423	
UNDERCROFT: OTHER THAN CBD	105	118	80	109	
INDUSTRIAL BUILDINGS					
6.00 M to underside of truss and 4,500 M² Gross Floor Area with:					
ZINCALUME METAL CLADDING	213	302	205	367	
PRECAST CONCRETE CLADDING	213	345	205	367	
Attached Airconditioned Offices					
200 M <sup>2</sup>	481	631	493	626	
400 M <sup>2</sup>	474	624	493	626	

#### 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.

CANB	ERRA	DAR	WIN	MELBO	DURNE	PERTH		SYD	NEY
\$/	M <sup>2</sup>	\$/	M <sup>2</sup>	M <sup>2</sup> \$/M <sup>2</sup>		\$/	M²	\$/	M <sup>2</sup>
LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH
909	1,319	1,160	1,523	811	1,260	930	1,340	1,028	1,357
964	1,429	1,246	1,594	958	1,338	965	1,395	1,212	1,356
-	-	-	-	1,014	1,432	990	1,470	1,353	1,498
753	1,208	911	1,321	632	1,082	695	1,125	702	976
798	1,208	983	1,445	701	1,150	720	1,185	831	1,066
798	1,263	-	-	774	1,207	760	1,225	920	1,174
476	654	841	1,082	439	711	420	600	480	679
632	909	882	1,281	549	871	565	820	692	941
698	1,030	971	1,326	607	988	660	920	838	1,083
1,295	1,761	1,394	1,753	1,751	2,211	1,235	1,750	1,213	1,535
1,182	1,579	1,272	1,539	1,265	1,887	1,025	1,465	1,075	1,426
932	1,352	1,122	1,386	957	1,443	825	1,265	918	1,192
176	286	201	363	97	286	135	300	67	163
242	483	328	449	171	370	200	405	249	332
176	472	298	449	160	339	185	390	153	285
66	121	135	282	31	63	135	305	50	70
232	410	210	499	183	325	160	335	125	215
232	399	225	518	183	325	170	355	125	217
531	708	661	926	470	654	385	630	514	893
531	642	661	926	470	868	385	595	514	906

## AUSTRALIAN CONSTRUCTION BUILDING SERVICES COST RANGES

All costs current as at Fourth Quarter 2018.

COST RANGE PER		AIDE	BRISBANE		
COST RANGE PER GROSS FLOOR AREA	\$/	M <sup>2</sup>	\$/	M <sup>2</sup>	
	LOW	HIGH	LOW	HIGH	
AGED CARE					
SINGLE STOREY FACILITY	430	699	518	828	
PRIVATE HOSPITALS					
Low Rise Hospital					
45-60 M <sup>2</sup> GFA/BED	1,246	1,514	943	1,686	
55-80 M <sup>2</sup> GFA/BED WITH MAJOR OPERATING THEATRE	1,460	1,939	1,427	2,153	
GROUP COMPLEX, 2,000-4,000 SEATS.					
(WARM SHELL)	794	1,071	649	1,006	
REGIONAL SHOPPING CENTRES					
DEPARTMENT STORE	447	719	529	830	
SUPERMARKET/VARIETY STORE	433	674	521	771	
DISCOUNT DEPARTMENT STORE	440	616	511	678	
MALLS	527	799	603	907	
SPECIALTY SHOPS	302	577	497	710	
SMALL SHOPS AND SHOWROOMS					
SMALL SHOPS AND SHOWROOMS	411	642	356	672	
RESIDENTIAL SINGLE & DOUBLE STOREY DWELLINGS					
(CUSTOM BUILT) RESIDENTIAL UNITS	252	554	265	582	
WALK-UP 85 TO 120 M²/UNIT	212	480	253	502	
TOWNHOUSES 90 TO 120 M²/UNIT	215	488	253	493	
MULTI-STOREY UNITS					
Up to 10 storeys with lift					
UNITS 60-70 M <sup>2</sup>	476	749	464	886	
UNITS 90-120 M <sup>2</sup>	455	703	442	851	
Over 10 and up to 20 storevs					
UNITS 60-70 M <sup>2</sup>	482	811	562	883	
UNITS 90-120 M <sup>2</sup>	468	796	533	840	
Over 20 and up to 40 storeys					
UNITS 60-70 M <sup>2</sup>	527	913	639	1,010	
UNITS 90-120 M <sup>2</sup>	511	884	616	969	
Over 40 and up to 80 storeys					
UNITS 60-70 M <sup>2</sup>	-	_	859	1,141	
UNITS 90-120 M <sup>2</sup>	-	_	797	1,082	
222				2,002	

CANB	ERRA	DAR	WIN	MELBO	DURNE	PE	RTH	SYD	NEY
\$/	M <sup>2</sup>	\$/	M <sup>2</sup>	\$/	\$/M <sup>2</sup>		M²	\$/	M²
LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH
431	804	883	1,322	470	1,103	670	1,100	412	763
1,125	1,485	1,433	1,680	997	1,519	1,130	1,500	1,049	1,366
1,369	1,961	1,580	1,981	1,199	2,070	1,275	1,710	1,410	1,955
818	984	1,013	1,278	627	920	695	910	1,017	1,464
768	883	642	877	533	823	630	870	511	700
481	722	662	920	423	784	540	775	513	703
481	653	602	840	371	680	555	695	483	631
596	883	577	918	491	915	-	-	548	867
424	665	519	762	340	685	360	600	529	782
253	690	417	760	220	655	270	570	358	572
244	543	336	649	209	638	235	785	201	744
243	681	400	574	209	575	240	470	228	693
127	681	400	574	209	554	240	470	197	655
566	920	654	851	518	880	495	860	645	912
566	861	620	809	512	849	485	830	610	888
	000	640	0.45		005		000	776	000
614	920	648	846	554	905	555	860	736	988
614	1,015	636	829	554	874	550	825	702	908
777	1.040	712	875	648	002	6EE	OFF	701	1 171
733 686	1,040	712 696	855	627	992 900	655 630	955 935	791 778	1,131
000	1,040	090	000	027	900	030	333	776	1,004
_	_	-	_	821	1,220	870	1,110	1,035	1,345
_				763	1,220	850	1.095	1.009	1,335
				700	2,100	000	1,000	1,009	1,000

# AUSTRALIAN CONSTRUCTION RLB TENDER PRICE INDEX

DATE	ADEL	AIDE	BRISE	SBANE CANBE		ERRA
DATE	TPI	CPI	TPI	CPI	TPI	CPI
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
DEC-2016	143.7	117.9	139.7	126.0	154.3	116.4
DEC-2017	148.1	120.7	143.9	128.4	158.6	119.0
MAR-2018	149.3	121.1	143.9	128.5	160.0	120.0
JUN-2018	150.3	121.6	143.9	129.1	161.3	120.4
SEP-2018	151.6	122.0	145.3	129.6	162.7	121.2
DEC-2018	153.3		145.3		164.1	

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.

DAR	DARWIN		DURNE	PERTH		SYD	NEY
TPI	CPI	TPI	CPI	TPI	CPI	TPI	CPI
		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
160.7	132.6	146.8	133.9	150.0	144.5	159.7	139.5
162.3	132.1	149.7	135.8	150.0	145.0	167.3	142.1
163.6	133.4	154.2	138.8	150.0	146.2	174.4	145.2
163.8	133.4	155.7	140.0	150.3	146.3	176.5	145.6
164.0	133.9	157.3	140.7	150.7	146.6	178.7	146.1
164.2	134.8	158.8	140.9	151.1	147.4	180.8	147.0
164.4		160.4		151.5		183.0	

## 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 Building Cost Ranges on page 20).

#### HOTELS

RATING	GFA PER ROOM						
RATING	TOTAL ACCOMMODATION		PUBLIC SPACE				
FIVE STAR	85-120 M <sup>2</sup>	45-65 M²	40-55 M²				
FOUR STAR	60-85 M²	35-45 M²	25-40 M²				
THREE STAR	40-65 M <sup>2</sup>	30-40 M <sup>2</sup>	10-25 M <sup>2</sup>				

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 M<sup>2</sup> GFA/bed (150 beds).

#### HOSPITAL

Low rise hospital (45-60 M<sup>2</sup> GFA/Bed) - Minimal operating theatre capacity, specialist and service areas.

Low rise hospital (55–80 M<sup>2</sup> 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.

# RIDERS DIGEST

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Property Council of Australia Measurement of Net Lettable Area.

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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 or your local RLB office (page 84)

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

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

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## ADELAIDE CONSTRUCTION BUILDING SERVICES COSTS

All costs current as at Fourth Quarter 2018.

	SPECIAL EQUIPMENT		HYDR	AULIC
COST RANGE PER	\$/M <sup>2</sup>		\$/	M²
GROSS FLOOR AREA	LOW	HIGH	LOW	HIGH
OFFICE BUILDINGS				
Prestige, CBD				
10 TO 25 STOREYS (75-80% EFFICIENCY)	9	49	52	77
25 TO 40 STOREYS (70-75% EFFICIENCY)	9	51	55	92
Investment, CBD				
UP TO 10 STOREYS (81-85% EFFICIENCY)	-	-	60	73
10 TO 25 STOREYS (76-81% EFFICIENCY)	19	45	57	77
25 TO 40 STOREYS (71-76% EFFICIENCY)	16	47	60	94
Investment, other than CBD				
1 TO 3 STOREYS (81-85% EFFICIENCY)	-	-	45	79
UP TO 10 STOREYS (82-86% EFFICIENCY)	-	9	47	70
HOTELS				
Multi-Storey				
FIVE STAR	32	70	191	288
FOUR STAR	30	68	177	274
THREE STAR	35	68	204	252
CAR PARK				
OPEN DECK MULTI-STOREY	-	-	24	28
BASEMENT: CBD	-	-	37	49
BASEMENT: OTHER THAN CBD	-	-	34	41
UNDERCROFT: OTHER THAN CBD	-	-	34	41
INDUSTRIAL BUILDINGS				
6.00 M to underside of truss and 4,500 M² Gross Floor Area with:				
ZINCALUME METAL CLADDING	-	-	50	62
PRECAST CONCRETE CLADDING	-	-	61	88
Attached Air Conditioned Offices				
200 M <sup>2</sup>	-	-	57	88
400 M <sup>2</sup>	-	-	52	74

#### 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.

FII	RE	ME	СН.	VERT TRANS			DING GT.	ELECT	RICAL	то	TAL
\$/	\$/M <sup>2</sup>		\$/M <sup>2</sup>		M²	\$/	\$/M <sup>2</sup> \$/		\$/M <sup>2</sup>		M²
LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH
57	72	335	458	111	172	41	88	144	205	748	1,122
58	76	338	500	151	203	42	90	147	210	799	1,222
62	71	299	488	140	141	45	68	126	157	731	998
62	76	304	443	138	193	28	46	126	167	733	1,047
60	79	307	428	171	216	24	53	115	179	753	1,096
54	71	196	304	-	-	-	-	103	126	398	580
55	75	210	319	101	125	28	39	110	141	551	778
58	90	355	448	155	233	43	92	203	235	1,037	1,456
58	88	288	361	145	201	37	83	196	203	931	1,277
61	90	266	286	128	131	43	82	141	162	878	1,071
39	46	-	40	42	73	-	35	27	46	132	268
44	62	40	99	34	99	18	39	40	74	214	422
41	61	41	105	38	105	16	43	43	67	213	422
14	16	-	-	-	-	13	15	44	45	105	118
52	62	40	61	-	-	-	27	71	91	213	302
47	59	36	70	-	-	-	28	69	100	213	345
46	76	250	278	-	-	14	46	114	143	481	631
46	76	250	294	-	-	13	42	113	138	474	624

#### 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.

### ADELAIDE CONSTRUCTION BUILDING SERVICES COSTS

	SPECIAL EQUIPMENT		HYDR	AULIC
COST RANGE PER GROSS FLOOR AREA		M <sup>2</sup>		M <sup>2</sup>
	LOW	HIGH	LOW	HIGH
AGED CARE	14	83	112	144
SINGLE STOREY FACILITY	14	83	112	144
PRIVATE HOSPITALS				
Low Rise Hospital	7.0	100	107	200
45-60 M <sup>2</sup> GFA/BED 55-80 M <sup>2</sup> GFA/BED WITH MAJOR	36	106	183	209
OPERATING THEATRE	51	125	207	232
CINEMAS				
GROUP COMPLEX, 2,000-4,000 SEATS (WARM SHELL)	-	35	70	93
REGIONAL SHOPPING CENTRES				
DEPARTMENT STORE	-	32	71	72
SUPERMARKET/VARIETY STORE	-	26	57	80
DISCOUNT DEPARTMENT STORE	-	19	58	72
MALLS	-	34	58	77
SPECIALTY SHOPS	-	-	37	67
SMALL SHOPS AND SHOWROOMS				
SMALL SHOPS & SHOWROOMS	-	-	88	108
RESIDENTIAL				
SINGLE AND DOUBLE STOREY DWELLINGS (CUSTOM BUILT)	-	-	113	155
RESIDENTIAL UNITS				
WALK-UP 85 TO 120 M <sup>2</sup> /UNIT	-	-	90	142
TOWNHOUSES 90 TO 120 M²/UNIT	-	-	85	158
MULTI-STOREY UNITS				
Up to 10 storeys with lift				
UNITS 60-70 M <sup>2</sup>	-	31	146	180
UNITS 90-120 M <sup>2</sup>	-	31	142	170
Over 10 and up to 20 storeys				
UNITS 60-70 M <sup>2</sup>	-	31	146	199
UNITS 90-120 M <sup>2</sup>	-	31	143	196
Over 20 and up to 40 storeys				
UNITS 60-70 M <sup>2</sup>	-	31	153	221
UNITS 90-120 M <sup>2</sup>	-	31	150	214
Over 40 and up to 80 storeys				
UNITS 60-70 M <sup>2</sup>	-	-	-	-
UNITS 90-120 M <sup>2</sup>	-	-	-	-

#### VERTICAL TRANSPORT

 $\label{thm:continuous} Transport Services include \ Lifts, Escalators, Travelators, \ Dumbwaiters, \ etc.$  where appropriate.

#### BUILDING MANAGEMENT

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

FII	RE	ME	СН.		TICAL SPORT		DING ST.	ELECT	RICAL	тот	ΓAL
\$/	\$/M <sup>2</sup>		\$/M <sup>2</sup>		M <sup>2</sup>	\$/M <sup>2</sup>		\$/M <sup>2</sup>		\$/	M <sup>2</sup>
LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH
67	85	101	167	-	-	26	53	109	167	430	699
75	99	591	632	60	94	43	68	258	306	1,246	1,514
70	96	688	905	80	115	91	100	273	366	1,460	1,939
68	96	530	603	-	-	-	42	126	203	794	1,071
64	74	160	221	-	75	15	41	138	203	447	719
63	73	155	227	-	25	23	45	136	198	433	674
50	73	160	211	-	20	28	48	144	172	440	616
66	75	200	303	-	-	21	45	182	265	527	799
65	73	200	297	-	-	-	32	-	109	302	577
59	81	165	301	-	-	-	-	100	151	411	642
3	5	41	160	-	40	-	38	95	157	252	554
56	70	5	134	_	_	_	9	62	125	212	480
55	68	10	134	_	_	_	9	65	119	215	488
68	68	122	247	25	50	11	26	105	146	476	749
61	63	116	227	25	50	11	26	100	136	455	703
66	71	136	242	24	45	11	27	99	196	482	811
62	68	132	237	24	45	11	27	97	193	468	796
64	68	149	286	47	75	10	29	103	202	527	913
62	67	144	272	47	75	10	29	98	196	511	884
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

#### ELECTRICAL

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

# ADELAIDE CONSTRUCTION UNIT COSTS

ITEM	CONSTR COST F	PER	
	LOW	HIGH	
HOTELS Multi-Storey (excluding basements)			
FIVE STAR	380,000	510,000	BEDROOM
FOUR STAR	270,000	420,000	BEDROOM
THREE STAR	190,000	255,000	BEDROOM
CAR PARKS Based on 30 M² per car			
OPEN DECK MULTI-STOREY	17,500	27,250	CAR
BASEMENT - CBD	45,000	65,000	CAR
BASEMENT - OTHER THAN CBD	35,000	45,000	CAR
UNDERCROFT - OTHER THAN CBD	16,750	26,500	CAR
AGED CARE			
FACILITY	140,000	180,000	BEDROOM
PRIVATE HOSPITALS Low Rise Hospital			
45-60 M <sup>2</sup> GFA/BED	170,000	345,000	BED
55-80 M <sup>2</sup> GFA/BED	220,000	485,000	BED
CINEMAS			
GROUP COMPLEX, 2,000-4,000 SEATS (WARM SHELL)	5,300	8,400	SEAT
HOUSING			
SINGLE AND DOUBLE STOREY DWELLINGS (CUSTOM BUILT) - 325 M <sup>2</sup>	570,000	725,000	HOUSE
RESIDENTIAL UNITS (EXCL CARPARK/S	SITE WORK	(S)	
WALK-UP UNITS 85-120 M <sup>2</sup> /UNIT	170,000	285,000	UNIT
TOWNHOUSES 90-120 M²/UNIT	185,000	280,000	UNIT
MULTI-STOREY RESIDENTIAL UNITS Up to 10 storeys with lift			
UNITS 60-70 M <sup>2</sup>	145,000	245,000	UNIT
UNITS 90-120 M <sup>2</sup>	205,000	405,000	UNIT
Over 10 and up to 20 storeys			
UNITS 60-70 M <sup>2</sup>	150,000	250,000	UNIT
UNITS 90-120 M <sup>2</sup>	220,000	415,000	UNIT
Over 20 and up to 40 storeys			
UNITS 60-70 M <sup>2</sup>	165,000	245,000	UNIT
UNITS 90-120 M <sup>2</sup>	245,000	410,000	UNIT
Over 40 and up to 80 storeys			
UNITS 60-70 M <sup>2</sup>	-	-	UNIT
UNITS 90-120 M <sup>2</sup>	-	-	UNIT

### ADELAIDE CONSTRUCTION SITEWORKS COSTS

#### **LANDSCAPING**

	LOW	HIGH	PER
LIGHT LANDSCAPING TO LARGE AREAS WITH MINIMAL PLANTING AND SITE FORMATION BUT EXCLUDING TOPSOIL AND GRASSING	35,000	50,000	HECTARE
DENSE LANDSCAPING AROUND BUILDINGS INCLUDING SHRUBS, PLANTS, TOPSOIL AND GRASSING	60	120	$M^2$
GRASSING ONLY TO LARGE AREAS INCLUDING TOPSOIL, SOWING AND TREATING	20	40	$M^2$

#### **CAR PARKS - ON GROUND**

Based on  $30\ M^2$  overall area per car with asphalt paving including sub base and sealing.

	LOW	HIGH	PER
LIGHT DUTY PAVING	1,500	2,500	CARSPACE
HEAVY DUTY PAVING TO FACTORY TYPE COMPLEX, LARGE AREA WITH MINIMAL SITE FORMATION, DRAINAGE AND KERB TREATMENT	2,450	3,350	CARSPACE
LIGHT DUTY PAVING TO SHOPPING CENTRE COMPLEX, LARGE AREA WITH MINIMAL SITE FORMATION, AND INCLUDING DRAINAGE AND KERB TREATMENT	2,450	3,200	CARSPACE

#### **ROADS**

Asphalt finish including kerb, channel and drainage.

	LOW	HIGH	PER	
RESIDENTIAL ESTATE 6.80 METRES WIDE EXCLUDING FOOT PATH AND NATURE STRIP	780	1,300	М	
INDUSTRIAL ESTATE 10.4 METRES WIDE INCLUDING MINIMAL TO EXTENSIVE FORMATION	1,060	1,760	М	

### ADELAIDE 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	50	80	$M^2$
SINGLE/DOUBLE STOREY BRICK HOUSE WITH TILED ROOF	70	95	$M^2$
SINGLE STOREY FACTORY/ WAREHOUSE WITH REINFORCED CONCRETE GROUND SLAB, TIMBER OR STEEL FRAMED WALLS			
METAL CLAD	65	100	M <sup>2</sup>
BRICK CLAD	80	120	$M^2$
TWO STOREY OFFICE BUILDING WITH REINFORCED CONCRETE FRAME MASONRY CLADDING AND METAL ROOF	80	120	$M^2$
MULTI-STOREY OFFICE BUILDING UP TO 15 FLOORS WITH MASONRY CLADDING			
REINFORCED CONCRETE	200	275	$M^2$
STRUCTURAL STEEL	200	275	$M^2$
MULTI-STOREY OFFICE BUILDING UP TO 25 STOREYS, CONSTRUCTED OF STEEL FRAME WITH MASONRY CLADDING	200	280	$M^2$

### 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
FIVE STAR RATING	42,500	80,000	BEDROOM
FOUR STAR RATING	28,500	45,000	BEDROOM
THREE STAR RATING	24,750	43,000	BEDROOM

### ADELAIDE 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	1,160	1,600	1,340	1,840	$M^2$
MAJOR COMPANY HEADQUARTERS	1,280	1,960	1,760	2,150	$M^2$
SOLICITORS, FINANCIERS	1,580	2,200	1,880	2,400	$M^2$
EXECUTIVE AREAS AND FRONT OF HOUSE	-	-	4,800	5,800	$M^2$
COMPUTER AREAS	2,100	4,450	2,450	3,200	$M^2$

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	1,600	2,500	EACH
SECRETARIAL	2,200	3,150	EACH
TECHNICAL STAFF	1,960	3,150	EACH
EXECUTIVE	3,900	5,900	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 Green Star 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	750	1,900	$M^2$
CBD OFFICES CORE UPGRADE (EXCLUDING LIFTS MODERNISATION)	700	1,260	$M^2$

### ADELAIDE 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	900	1,360	M²

#### SWIMMING POOL CENTRES

	LOW	HIGH	PER
INCLUDING FOYER, KIOSK, OFFICE, LOCKERS, ADMINISTRATION OFFICES, CHANGE ROOMS	1,860	2,450	M²

#### **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)	950,000	1,425,000	EACH
EXTRA FOR HEATING	100,000	150,000	EACH
EXTRA OVER FILTRATION AND DOSING PLANT FOR OZONE BASED DOSING SYSTEM	150,000	200,000	EACH
EXTRA FOR WET DECK	55,000	85,000	EACH
OLYMPIC (50.0 X 21.5 M)	1,800,000	2,200,000	EACH
EXTRA FOR HEATING	175,000	275,000	EACH
EXTRA FOR FILTRATION AND DOSING PLANT	300,000	500,000	EACH
EXTRA OVER FILTRATION AND DOSING PLANT FOR OZONE BASED DOSING SYSTEM	200,000	300,000	EACH

#### SMALL BOAT AND YACHT MARINA BERTHS

Floating pontoon walkways, serviced with power and water.

	LOW	HIGH	PER
DOUBLE LOADED BERTHS	18,000	35,000	BERTH
SINGLE LOADED BERTHS	30,000	45,000	BERTH
SUPER YACHTS	200,000	250,000	BERTH

### ADELAIDE 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	60,000	70,000	COURT
RED POROUS (EN-TOUT-CAS)	28,500	35,000	COURT
SYNTHETIC ACRYLIC (FLEXIPAVE)	38,000	49,500	COURT
ASPHALT (5 MM)	31,500	45,000	COURT
PLEXICUSHION	85,000	95,000	COURT
CONCRETE	36,000	48,000	COURT
FLOODLIGHTING	-	-	COURT

#### **GOLF COURSES**

18 hole championship course including siteworks, finishing works, irrigation, grassing, landscaping, green keeping, plant and 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	7,000,000	10,000,000	COURSE
SITE REQUIRING ROCK EXCAVATION	10,000,000	18,000,000	COURSE
SWAMPY SITE REQUIRING DREDGING FOR LAKES, ETC. AND EXTENSIVE FILL	12,000,000	20,000,000	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	35	50	M <sup>2</sup>

#### **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	5,000	9,500	SEAT

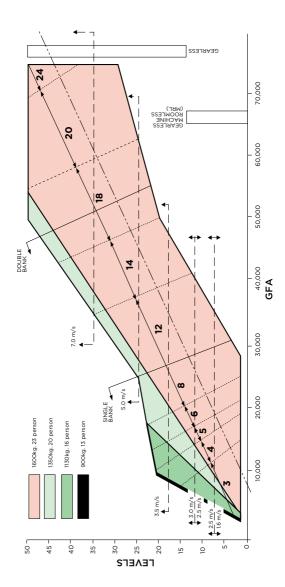
### ADELAIDE CONSTRUCTION VERTICAL TRANSPORTATION

#### LIFT SELECTION CHART

To calculate the number and type of lifts:

- Locate a point on the graph by using the GFA in M<sup>2</sup> 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.



# ADELAIDE CONSTRUCTION VERTICAL TRANSPORTATION

APPLICATION			NO. OF FLOORS		COST \$	ADDITIONAL FLOOR	EXPRESS FLOOR
		14/3	SERVED	LOW	HIGH	RATE	RATE
	ELECTRO-HYDRAULIC PASSENGER	0.5	2	90,000	113,675	10,800	NA
	GEARLESS TO 17 PASSENGER	1	5	126,500	141,500	8,900	NA
	GEARLESS UP TO 17 PASSENGER	1.6	8	160,000	216,600	9,900	NA
	GEARLESS	2.5	10	281,800	363,875	9,900	NA
OFFICE &	GEARLESS	3.5	10	413,400	512,300	9,900	NA
RESIDENTIAL	GEARLESS	4	10	593,750	638,800	11,900	NA
	GEARLESS	5	10	600,000	667,500	11,900	NA
	GEARLESS	6	10	-	-	-	NA
	GEARLESS	7	10	-	-	-	NA
	GEARLESS	8	10	-	-	-	NA
HOSPITAL	GEARED UP TO 40 PASSENGER	2	5	393,600	432,100	14,900	NA
HOSFITAL	GEARLESS	2.5	10	562,750	638,800	17,800	NA
	GEARLESS MRL TO 2,000 KG	1.6	10	304,500	338,250	12,850	NA
LARGE GOODS	ELECTRO-HYDRAULIC TO 5,000 KG	0.5	2	365,900	403,500	26,000	NA
	GEARLESS 2,500 KG	2.5	10	-	-	-	NA
ESCALATORS	RISE 2,600 TO 5,000 MM	0.5	-	144,600	173,200	-	NA
MOVING WALKS	2,500 TO 5,000 MM	0.5	-	131,200	234,200	-	NA
SERVICE LIFT	BENCH HEIGHT UNIT	0.2	3	29,500	32,500	4,850	NA
SERVICE LIFT	LARGER UNIT	0.2	3	44,250	56,100	5,400	NA
DISABLED PLATFORM	TO 1,000 MM	0.1	2	28,000	30,900	-	NA
LIFT	1,000 TO 4,000 MM	0.1	2	38,600	42,500	-	NA

NA - Not applicable.

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

### ADELAIDE DEVELOPMENT

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### ADELAIDE DEVELOPMENT STAMP DUTIES

Land holder duty is imposed and collected in South Australia in accordance with the provisions of the SDA and the Taxation Administration Act 1996 (the "TAA").

Only conveyances or transfers of an interest in residential and primary production land are liable for duty.

No liability to duty arises in relation to a conveyance in non-residential and non-primary production land executed on or after 1 July 2018.

Foreign purchasers that acquire residential property in South Australia will be required to pay a surcharge of 7% of the dutiable value of the property. This surcharge amount is in addition to the duty that is otherwise payable.

The foreign ownership surcharge applies to transactions liable to duty entered into from 1 January 2018 and is payable in addition to the landholder duty that is otherwise payable.

VALUE OF NON QUALIFYING LAND	AMOUNT OF DUTY
\$0 TO \$12,000	\$1.00 FOR EVERY \$100 OR PART OF \$100
\$12,001 TO \$30,000	\$120 PLUS \$2.00 FOR EVERY \$100 OR PART OF \$100 OVER \$12,000
\$30,001 TO \$50,000	\$480 PLUS \$3.00 FOR EVERY \$100 OR PART OF \$100 OVER \$30,000
\$50,001 TO \$100,000	\$1,080 PLUS \$3.50 FOR EVERY \$100 OR PART OF \$100 OVER \$50,000
\$100,001 TO \$200,000	\$2,830 PLUS \$4.00 FOR EVERY \$100 OR PART OF \$100 OVER \$100,000
\$200,001 TO \$250,000	\$6,830 PLUS \$4.25 FOR EVERY \$100 OR PART OF \$100 OVER \$200,000
\$250,001 TO \$300,000	\$8,955 PLUS \$4.75 FOR EVERY \$100 OR PART OF \$100 OVER \$250,000
\$300,001 TO \$500,000	\$11,330 PLUS \$5.00 FOR EVERY \$100 OR PART OF \$100 OVER \$300,000
\$500,001 OR MORE	\$21,330 PLUS \$5.50 FOR EVERY \$100 OR PART OF \$100 OVER \$500,000

For further details refer to www.revenuesa.sa.gov.au.

### ADELAIDE DEVELOPMENT LAND TAX

Land ownership, site value and land use as at midnight 30 June each year is used to determine the land tax for the forthcoming financial year. Land tax revenue assists in the provision of public services such as education, health and public safety.

Revenue SA is responsible for the collection of land tax under the Land Tax Act 1936, the Taxation Administration Act 1996 and associated Regulations.

TOTAL UNIMPROVED VALUE OF LAND	2018-19 TAX RATES (LAND OWNED @ 30/06/18)
UP TO \$369,000	NIL
\$369,001 TO \$677,000	\$0.50 FOR EVERY \$100 OR FRACTIONAL PART OF \$100 OVER \$369,000
\$677,001 TO \$985,000	\$1,540 PLUS \$1.65 FOR EVERY \$100 OR PART OF \$100 ABOVE \$677,000
\$985,001 TO \$1,231,000	\$6,622 PLUS \$2.40 FOR EVERY \$100 OR PART OF \$100 ABOVE \$985,000
OVER \$1,231,000	\$12,526 PLUS \$3.70 FOR EVERY \$100 OR PART OF \$100 ABOVE \$1,231,000

TOTAL UNIMPROVED VALUE OF LAND	2017-18 TAX RATES (LAND OWNED @ 30/06/17)
UP TO \$353,000	NIL
\$353,001 TO \$647,000	\$0.50 FOR EVERY \$100 OR PART OF \$100 OVER \$353,000
\$647,001 TO \$941,000	\$1,470 PLUS \$1.65 FOR EVERY \$100 OR PART OF \$100 ABOVE \$647,000
\$941,001 TO \$1,176,000	\$6,321 PLUS \$2.40 FOR EVERY \$100 OR PART OF \$100 ABOVE \$941,000
OVER \$1,176,000	\$11,961 PLUS \$3.70 FOR EVERY \$100 OR PART OF \$100 ABOVE \$1,176,000

For further details refer to www.revenuesa.sa.gov.au.

# ADELAIDE DEVELOPMENT PLANNING - CAR PARKING

Car parking for the City of Adelaide should be provided in accordance with The Adelaide City Development Plan, Table Adel/7, consolidated 7th June 2018. The table below summarises key requirements under the Plan. Full details are available from https://www.dpti.sa.gov.au/

	MINIMUM PARKING SPACES PERMITTED			
TYPE OF PROPOSED USE	CITY LIVING, ADELAIDE HISTORIC (CONSERVATION) AND NORTH ADELAIDE HISTORIC (CONSERVATION) ZONES	CAPITAL CITY, MAIN STREET, CITY FRAME AND II INSTITUTIONAL (ST ANDREWS) AND MIXED USE ZONES		
HOSPITAL	1.5 SPACES PER BED	1.5 SPACES PER BED		
HOTEL/LICENCED PREMISES	1 FOR EVERY 2 M² OF BUILDING FLOOR AREA AVAILABLE TO THE PUBLIC IN A BAR, PLUS 1 FOR EVERY 6 M² OF BUILDING FLOOR AREA AVAILABLE TO THE PUBLIC IN A LOUNGE, DINING ROOM OR BEER GARDEN	NOT SPECIFIED		
OFFICES/ ANCILLARY RETAIL SERVICES	3 PER 100 M² BUILDING FLOOR AREA	NOT SPECIFIED		
	1 SPACE PER DWELLING UP TO 200 M² BUILDING FLOOR AREA			
LOW SCALE RESIDENTIAL	$2$ SPACES PER DWELLING GREATER THAN 200 $\mathrm{M}^2$ BUILDING FLOOR AREA			
	MULTI-UNIT DWELLINGS SHOULD PROVIDE 1 VISITOR SPACE FOR EACH 4 DWELLINGS			
MEDIUM TO HIGH SCALE RESIDENTIAL OR SERVICED APARTMENT	1 SPACE PER DWELLING UP TO 200 M² BUILDING FLOOR AREA. AT LEAST 2 SPACES PER DWELLING GREATER THAN 200 M² BUILDING FLOOR AREA NOTE: THE ABOVE DOES NOT APPLY TO AREAS DESIGNATED IN THE PRIMARY PEDESTRIAN AREA			
NON- RESIDENTIAL DEVELOPMENT	5 SPACES PER 100 M <sup>2</sup> OF GROSS LEASABLE FLOOR AREA	3 SPACES PER 100 M <sup>2</sup> OF GROSS LEASABLE FLOOR AREA		
RESTAURANT/ CAFE	1 SPACE FOR EVERY 3 RESTAURANT/CAFE SEATS	NOT SPECIFIED		
TOURIST ACCOMMODATION	NOT SPECIFIED	1 SPACE FOR EVERY 4 BEDROOMS UP TO 100 BEDROOMS AND 1 SPACE FOR EVERY 5 BEDROOMS OVER 100 BEDROOMS		

# ADELAIDE DEVELOPMENT LAND VALUES

The values shown are indicative of current land values in South Australia and may vary according to position, planning requirements, etc.

LOCATION (COSTS PER M²)	\$/	M <sup>2</sup>
	LOW	HIGH
OFFICES		
CBD	2,000	4,500
FRINGE	1,000	2,600
RETAIL (EG. 120 M²)		
RUNDLE MALL	5,000	15,000
CBD SECONDARY AREAS	1,500	2,500
NEIGHBOURHOOD SHOPPING CENTRE	200	1,000
SUBURBAN STRIP SHOPPING	500	2,500
INDUSTRIAL (0.3 TO 0.5 HA)		
INNER WEST	250	450
NORTH WEST	125	275
SOUTH WEST	300	500

Prepared in association with Savills.

# ADELAIDE DEVELOPMENT RENTAL RATES

The net rents indicated below show the change in levels since 1988. Allowance has been made for the effects of rental incentives, rent free periods, etc.

	OF	FICES	INDUSTRIAL
	CBD	FRINGE	PRIME
1988	94	139	65
1989	94	153	69
1990	94	162	70
1991	93	132	68
1992	93	124	60
1993	93	124	52
1994	94	91	50
1995	101	105	58
1996	111	112	58
1997	111	112	58
1998	111	112	58
1999	111	112	58
2000	122	131	68
2001	139	135	74
2002	134	135	75
2003	134	135	75
2004	149	137	75
2005	188	194	75
2006	228	204	80
2007	236	195	100
2008	245	228	100
2009	267	243	100
2010	282	261	100
2011	279	273	100
2012	279	273	108
2013	279	273	108
2014	279	273	108
2015	269	260	108
2016	264	255	108
2017	260	250	105
2018	255	250	108

Prepared in association with Savills.

# ADELAIDE DEVELOPMENT OFFICE SECTOR DATA

#### CBD VACANCY RATES - Q2 2018

PCA GRADE	STOCK M²	VACANCY M²	VAC % JUN-18
PREMIUM	41,700	1,200	2.8
PCA GRADE A	553,200	82,100	14.8
SECONDARY	829,600	126,800	15.3
TOTAL	1,424,500	210,000	14.7

Source: PCA/Savills Research.

#### CURRENT CBD OFFICE DEVELOPMENT ACTIVITY

PROPERTY	PRECINCT	NLA M²	STATUS	COMPLETION	TENANT
42-56 FRANKLIN ST	CORE	21,000	PS	2021+	
203 NORTH TCE	CORE	1,360	PS	2020+	
FESTIVAL PLAZA BUILDING	CORE	40,000	PA	2021+	
73-85 PIRIE ST	CORE	30,000	PA	2020+	
200 NORTH TCE	CORE	25,635	PA	2021+	LE CORDON BLEU
PRECINCT GPO, TOWER 1	CORE	15,307	PA	2020+	
322 KING WILLIAM ST	FRAME	11,550	PA	2022	
PRECINCT GPO, TOWER 2	CORE	24,690	UC	2019	ATTORNEY- GENERAL'S DEPARTMENT
CNR PITT & FRANKLIN ST	CORE	6,500	UC	2018	

PS: Plans Submitted PA: Plans Approved UC: Under Construction Source: Savills Research

# ADELAIDE DEVELOPMENT OFFICE SECTOR DATA

#### **KEY MARKET INDICATORS - Q3 2018**

ADELAIDE CBD	PCA PF	REMIUM
	LOW	HIGH
RENTAL - GROSS FACE	520	590
RENTAL - NET FACE	405	475
INCENTIVE LEVEL (%) NET	25	35
RENTAL - NET EFFECTIVE	250	300
OUTGOINGS - OPERATING	65	75
OUTGOINGS - STATUTORY	40	50
OUTGOINGS - TOTAL	105	125
TYPICAL LEASE TERM (YEARS)	7	10
YIELD - MARKET (% NET FACE RENTAL)	6.00	7.25
IRR (%)	7.25	7.75
CARS PERMANENT RESERVED (\$/PCM)	380	450
CARS PERMANENT (\$/PCM)	370	450
OFFICE COMPONENT CAPITAL VALUES	5,250	7,750

ADELAIDE FRINGE	PCA GI	RADE A
	LOW	HIGH
RENTAL - GROSS FACE	400	425
RENTAL - NET FACE	330	355
INCENTIVE LEVEL (%) NET	20	30
RENTAL - NET EFFECTIVE	250	265
OUTGOINGS - OPERATING	40	50
OUTGOINGS - STATUTORY	20	30
OUTGOINGS - TOTAL	60	80
TYPICAL LEASE TERM (YEARS)	5	7
YIELD - MARKET (% NET FACE RENTAL)	7.25	7.75
IRR (%)	8.00	9.25
CARS PERMANENT RESERVED (\$/PCM)	90	120
CARS PERMANENT (\$/PCM)	90	120
OFFICE COMPONENT CAPITAL VALUES	4,125	4,725

All rates are \$/M² unless otherwise noted. Source: Savills Research.

PCA GI	RADE A	PCA G	RADE B
LOW	HIGH	LOW	HIGH
445	530	355	435
330	410	265	335
28	38	30	40
185	235	140	185
55	70	40	55
40	45	40	45
95	115	80	100
5	10	3	7
6.75	7.75	8.00	9.25
7.75	8.75	8.50	9.75
350	410	300	350
350	400	300	350
4,125	5,850	2,500	4,000

PCA GRADE B			
LOW	HIGH		
335	380		
270	300		
20	35		
195	220		
25	45		
25	35		
50	80		
3	5		
7.75	8.75		
9.25	10.50		
80	100		
80	100		
3,000	3,750		

# ADELAIDE DEVELOPMENT RETAIL SECTOR DATA

#### **KEY MARKET INDICATORS - Q2 2018**

ADELAIDE ENCLOSED CENTRES	REGIONAL	
	LOW	HIGH
DDS RENT (GROSS)	130	200
SPECIALTY TENANT RENT (GROSS)	1,100	1,900
SUPERMARKET RENT (GROSS)	250	450
MINI-MAJOR RENT (GROSS)	400	1,750
YIELD - MARKET (%)	5.75	7.00
IRR (%)	7.25	8.50
OUTGOINGS - OPERATING	50	100
OUTGOINGS - STATUTORY	35	55
OUTGOINGS - TOTAL	85	155
CAPITAL VALUES	7,200	10,800

#### RETAIL SALES ACTIVITY

PROPERTY SALES	TYPE	
CHURCHILL NORTH SHOPPING CENTRE (50%)	SUB REGIONAL	
BUNNINGS WINDSOR GARDENS	LARGE FORMAT	
WOOLWORTHS GAWLER	FREESTANDING	
PIRIE PLAZA	SUB REGIONAL	
RENMARK PLAZA	SUB REGIONAL	
CHURCHILL SOUTH CENTRE	LARGE FORMAT	
WHARFLANDS PLAZA PORT AUGUSTA	NEIGHBOURHOOD	
1028-1042 SOUTH RD, EDWARDSTOWN	LARGE FORMAT	
GREENACRES SHOPPING CENTRE	NEIGHBOURHOOD	
109 RUNDLE MALL, ADELAIDE	CITY CENTRE	
LOT 200 COMMERCIAL STREET WEST, MOUNT GAMBIER	LARGE FORMAT	

All rates are \$/M<sup>2</sup> unless otherwise noted. Source: Savills Research.

SUB RE	SUB REGIONAL		URHOOD	LARGE I	FORMAT
LOW	HIGH	LOW	HIGH	LOW	HIGH
140	180				
750	1,250	200	800	150	300
235	425	235	400		
400	1,750	200	650		
6.75	8.00	6.50	8.25	7.00	9.00
8.00	9.25	9.50	10.50	9.00	10.00
50	100	50	100	20	30
30	40	25	70	15	30
80	140	75	170	35	60
3,500	6,000	2,000	5,000	1,800	3,000

PRICE (\$M)	DATE	GLA (M²)	\$/M²
42.50	DEC-17	32,887	2,585
38.50	JUL-17	11,307	3,405
32.05	JUL-17	11,000	2,914
32.05	SEP-17	11,029	2,906
24.70	OCT-17	12,024	2,054
22.35	SEP-17	7,404	3,019
21.00	SEP-17	10,215	2,056
12.88	JUL-17	9,126	1,412
10.50	APR-18	2,524	4,160
9.17	JAN-18	318	28,836
5.50	MAR-18	3,233	1,701

# ADELAIDE DEVELOPMENT INDUSTRIAL SECTOR DATA

#### **KEY MARKET INDICATORS - Q3 2018**

### INNER WEST - BEVERLEY, THEBARTON, ADELAIDE AIRPORT, HINDMARSH

	PRIME		SECO	NDARY
	LOW	HIGH	LOW	HIGH
RENTAL NET FACE	85	140	50	80
INCENTIVES (%)	10	15	10	20
YIELD - MARKET (%)	6.50	7.50	8.25	9.25
IRR (%)	7.75	8.50	9.00	10.00
OUTGOINGS - TOTAL	15	25	10	15
CAPITAL VALUES	950	1,800	500	900
LAND VALUES 3,000 - 5,000 M <sup>2</sup>	250 (LOW)		450 (	HIGH)

#### NORTH WEST - REGENCY PARK, WINGFIELD, PORT ADELAIDE, GILLMAN, DRY CREEK, OUTER HARBOR

	PR	PRIME		NDARY
	LOW	HIGH	LOW	HIGH
RENTAL NET FACE	70	110	40	70
INCENTIVES (%)	10	20	10	20
YIELD - MARKET (%)	6.75	8.00	8.25	9.00
IRR (%)	8.75	9.50	9.75	10.75
OUTGOINGS - TOTAL	15	25	10	15
CAPITAL VALUES	900	1,400	400	800
LAND VALUES 3,000-5,000 M <sup>2</sup>	125 (	LOW)	250 (	HIGH)

#### NORTH - EDINBURGH, BURTON, SALISBURY, DIREK

	PRIME		SECON	NDARY
	LOW	HIGH	LOW	HIGH
RENTAL NET FACE	75	100	40	65
INCENTIVES (%)	10	20	10	20
YIELD - MARKET (%)	7.50	8.50	8.75	10.00
IRR (%)	8.75	9.50	10.25	11.75
OUTGOINGS - TOTAL	15	25	10	15
CAPITAL VALUES	800	1,200	375	825
LAND VALUES 3,000-5,000 M <sup>2</sup>	50 (L	.OW)	110 (	HIGH)

All rates are \$/M<sup>2</sup> unless otherwise noted. Source: Savills Research.

# ADELAIDE DEVELOPMENT CONSTRUCTION WORK DONE

### ANNUAL VALUE OF CONSTRUCTION WORK DONE IN SOUTH AUSTRALIA

YEAR ENDING	RESIDENTIAL	NON- RESIDENTIAL	ENGINEERING	TOTAL CONSTRUCTION
JUN-1990	841	989	743	2,572
JUN-1991	904	877	855	2,635
JUN-1992	874	484	764	2,121
JUN-1993	908	571	735	2,213
JUN-1994	1,008	462	736	2,207
JUN-1995	946	477	687	2,110
JUN-1996	665	542	726	1,934
JUN-1997	613	663	845	2,121
JUN-1998	737	685	1,167	2,589
JUN-1999	885	572	1,039	2,496
JUN-2000	1,195	629	1,425	3,250
JUN-2001	998	626	1,129	2,754
JUN-2002	1,277	791	1,417	3,485
JUN-2003	1,588	912	1,766	4,266
JUN-2004	1,920	1,092	1,765	4,777
JUN-2005	2,132	1,346	1,965	5,443
JUN-2006	2,201	1,355	1,828	5,384
JUN-2007	2,328	1,365	2,558	6,251
JUN-2008	2,552	1,482	2,601	6,636
JUN-2009	2,822	1,810	3,618	8,250
JUN-2010	2,857	2,446	4,699	10,003
JUN-2011	2,992	2,499	4,670	10,161
JUN-2012	2,648	2,298	4,923	9,869
JUN-2013	2,255	2,267	5,751	10,273
JUN-2014	2,623	2,361	5,486	10,469
JUN-2015	2,964	2,292	4,398	9,655
JUN-2016	2,924	1,997	4,698	9,619
JUN-2017	3,051	1,982	5,047	10,080
JUN-2018	3,465	2,479	6,416	12,360

Source - ABS 8752.0 & 8762.0 (Current Prices - Original Series - \$Millions)

# ADELAIDE DEVELOPMENT CONSTRUCTION WORK DONE

### ANNUAL VALUE OF NON-RESIDENTIAL BUILDING WORK DONE IN SOUTH AUSTRALIA

YEAR ENDING	COMMERCIAL	INDUSTRIAL	RETAIL	EDUCATION	HEALTH
JUN-2002	132	137	114	115	66
JUN-2003	111	115	169	127	109
JUN-2004	166	221	237	137	70
JUN-2005	313	288	283	169	81
JUN-2006	323	316	286	170	49
JUN-2007	337	369	218	142	31
JUN-2008	352	298	228	290	84
JUN-2009	328	339	323	271	99
JUN-2010	242	304	207	849	160
JUN-2011	312	330	215	841	212
JUN-2012	494	212	317	374	367
JUN-2013	335	213	290	429	460
JUN-2014	275	226	303	489	547
JUN-2015	260	290	262	287	768
JUN-2016	177	266	309	420	419
JUN-2017	175	250	250	423	384
JUN-2018	316	373	281	523	180

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

AGED CARE	HOTELS	ENTERTAINMENT & RECREATION	OTHER	TOTAL
62	54	71	39	791
101	59	54	67	912
88	56	39	78	1,092
76	20	39	77	1,346
66	19	48	77	1,355
102	50	69	47	1,365
123	29	42	36	1,482
125	81	120	124	1,810
90	56	227	312	2,446
72	46	199	272	2,499
110	15	154	256	2,298
52	47	281	158	2,267
85	70	271	94	2,361
125	36	129	134	2,292
141	35	137	93	1,997
161	66	127	146	1,982
198	118	195	295	2,479

# ADELAIDE DEVELOPMENT CONSTRUCTION WORK DONE

### ANNUAL VALUE OF RESIDENTIAL BUILDING WORK DONE IN SOUTH AUSTRALIA

YEAR ENDING	NEW HOUSES	NEW APARTMENTS & SEMI DETACHED HOUSING	ALTERATIONS & ADDITIONS INCLUDING CONVERSIONS	TOTAL RESIDENTIAL
JUN-1990	519	206	116	841
JUN-1991	600	182	122	904
JUN-1992	608	141	125	874
JUN-1993	661	120	127	908
JUN-1994	746	130	132	1,008
JUN-1995	694	123	129	946
JUN-1996	460	74	131	665
JUN-1997	439	52	122	613
JUN-1998	536	70	132	737
JUN-1999	615	123	148	885
JUN-2000	812	188	195	1,195
JUN-2001	678	158	162	998
JUN-2002	883	196	198	1,277
JUN-2003	1,102	231	255	1,588
JUN-2004	1,231	349	340	1,920
JUN-2005	1,351	423	358	2,132
JUN-2006	1,440	399	362	2,201
JUN-2007	1,481	432	415	2,328
JUN-2008	1,723	458	371	2,552
JUN-2009	1,848	542	433	2,822
JUN-2010	1,904	532	421	2,857
JUN-2011	1,999	549	444	2,992
JUN-2012	1,675	526	447	2,648
JUN-2013	1,512	350	393	2,255
JUN-2014	1,708	488	427	2,623
JUN-2015	1,949	576	439	2,964
JUN-2016	1,868	620	437	2,924
JUN-2017	1,957	657	437	3,051
JUN-2018	2,125	890	450	3,465

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

# ADELAIDE DEVELOPMENT DWELLING COMMENCEMENTS

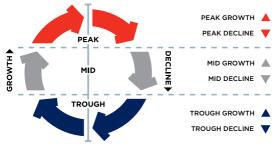
### ANNUAL NUMBER OF DWELLING COMMENCEMENTS IN SOUTH AUSTRALIA

YEAR ENDING	NEW HOUSES	NEW APARTMENTS & SEMI DETACHED HOUSING	TOTAL RESIDENTIAL
JUN-1990	7,175	3,762	10,989
JUN-1991	8,176	2,644	10,837
JUN-1992	8,344	2,327	10,700
JUN-1993	9,417	2,219	11,647
JUN-1994	9,590	1,891	11,501
JUN-1995	8,208	1,525	9,794
JUN-1996	5,071	835	5,960
JUN-1997	5,112	651	5,789
JUN-1998	5,823	741	6,653
JUN-1999	6,296	1,062	7,416
JUN-2000	7,857	1,398	9,411
JUN-2001	5,247	1,115	6,408
JUN-2002	8,385	1,684	10,130
JUN-2003	8,431	2,064	10,538
JUN-2004	8,351	1,952	10,479
JUN-2005	8,607	2,309	10,999
JUN-2006	8,183	2,284	10,701
JUN-2007	8,752	2,407	11,232
JUN-2008	9,508	2,324	11,853
JUN-2009	9,332	2,746	12,141
JUN-2010	9,681	2,599	12,314
JUN-2011	8,258	2,639	10,967
JUN-2012	6,939	2,187	9,148
JUN-2013	6,529	2,193	8,992
JUN-2014	8,307	2,799	11,153
JUN-2015	7,780	2,734	10,628
JUN-2016	7,687	3,517	11,279
JUN-2017	7,656	3,107	10,834
JUN-2018	8,219	4,645	12,922

Source: ABS 8752.0 (Number).

### ADELAIDE DEVELOPMENT RLB CONSTRUCTION MARKET ACTIVITY CYCLE

Activity within the construction industry traditionally has been subject to volatile cyclical fluctuations. The RLB Construction Market Activity Cycle (cycle) is a representation of the development activity cycle for the construction industry within the general economy.



Within the general construction industry, RLB considers seven sectors to be representative of the industry as a whole.

Each sector is assessed as to which of the three zones (peak, mid or trough) best represents the current status of that sector within the cycle, then further refined by identifying whether the current status is in a growth or a decline phase.

The 'up' and 'down' arrows within the table represent whether the sector is in a growth or decline phase with the colour of the arrow determining the zone within the cycle.

ADELAIDE	Q2 2016	Q4 2016	Q2 2017	Q4 2017	Q2 2018	Q4 2018
HOUSES		_	_	_	_	<b>A</b>
APARTMENTS			_	_		<b>A</b>
OFFICES	•	•	•	<b>A</b>	<b>A</b>	<b>A</b>
INDUSTRIAL			_	_	_	<b>A</b>
RETAIL	_					
HOTEL	<b>A</b>		<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>
CIVIL		<b>A</b>	_	<b>A</b>	<b>A</b>	<b>A</b>

### BENCHMARKS

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### 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 2018. For towns or cities outside capital cities, costs can be expected to vary in accordance with the following table of indices:

NEW SOUTH WALES		QUEENSLAN	ND	WESTERN AUSTRALIA		
SYDNEY	100	BRISBANE	100	PERTH	100	
ARMIDALE	105	CAIRNS	105	ALBANY	110	
COFFS HARBOUR	100	GLADSTONE	125	BROOME	145	
NEWCASTLE	99	GOLD COAST	95	BUNBURY	103	
ORANGE	106	MACKAY	114	CARNARVON	145	
TAMWORTH	102	SUNSHINE COAST	95	ESPERANCE	125	
WAGGA WAGGA	106	TOWNSVILLE	108	GERALDTON	105	
WOLLONGONG	100			KALGOORLIE	125	
				KUNUNURRA	165	
				PORT HEDLAND	160	
				TOM PRICE	165	

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 2018

RLB's Key City Relativity Matrix highlights the cost relativity between key Australian cities. The Relativity Matrix compares the general cost of building between cities. Each column represents a base city indexed to 100 with other city's relativities re-indexed to that base city.

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

where: 
$$Ccc = Bcc \times (\frac{Cr}{Cb})^{-1}$$

For example, when comparing costs between Sydney (base city) and Perth (compared city), Sydney building costs are generally 20.5% more than Perth i.e. (  $\frac{100}{83}$ ) and Perth is 17.4% cheaper than Sydney i.e. (  $\frac{100}{121}$ )

If the tendered price of a building in Sydney was \$1,000,000, the equivalent cost in Perth would be \$830,000 i.e. 1,000,000 x  $(\frac{100}{83})^{-1}$  and conversely a \$1,000,000 building in Perth would cost \$1,210,000 in Sydney, i.e. 1,000,000 x  $(\frac{100}{121})^{-1}$ 

ADEL 10		BRISBANE 100		CANBERRA 100		DARWIN 100		GOLD COAST 100	
BNE	95	ADE	105	ADE	93	ADE	93	ADE	113
CAN	107	CAN	113	BNE	89	BNE	88	BNE	107
DAR	107	DAR	113	DAR	100	CAN	100	CAN	121
GC	89	GC	93	GC	83	GC	83	DAR	121
MEL	105	MEL	110	MEL	98	MEL	98	MEL	118
PER	99	PER	104	PER	92	PER	92	PER	112
SYD	119	SYD	126	SYD	111	SYD	111	SYD	135
TVE	99	TVE	105	TVE	93	TVE	93	TVE	112

MELBC 10		PERTH 100		SYDNEY 100		TOWNSVILLE 100	
ADE	96	ADE	101	ADE	84	ADE	101
BNE	91	BNE	96	BNE	79	BNE	95
CAN	102	CAN	108	CAN	90	CAN	108
GC	85	GC	90	GC	74	GC	89
DAR	103	DAR	109	DAR	90	DAR	108
PER	94	MEL	106	MEL	88	MEL	105
SYD	114	SYD	121	PER	83	PER	99
TVE	95	TVE	101	TVE	83	SYD	120

### 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				
	BASEMENTS AND CAR 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/M³		AVE KG/M <sup>3</sup>
	AVE NG/M		AVE KG/M
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.

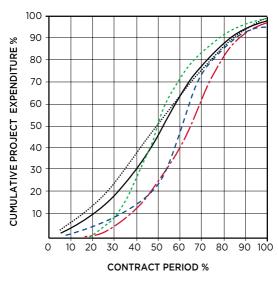
The figures are relevant to all works constructed by traditional methods; variations to these methods will change the ratios, i.e. on-site fabrication of items traditionally factory fabricated such as joinery fittings, metalwork items, etc.

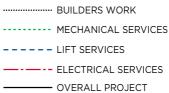
PRELIMINARIES	40 10 50
DEMOLISHER	85 15
EXCAVATOR	32 15 53
PILER	20 50 30
IN SITU CONCRETOR	25 75
FORMWORKER	70 30
REINFORCEMENT FIXER	20 80
PRECAST CONCRETOR	20 80
BRICKLAYER & BLOCKLAYER	50 50
MASON	10 90
ASPHALTOR	40 60
STRUCTURAL STEELWORK	60 40
METALWORKER	20 80
SUSPENDED CEILING FIXER	40 60
CARPENTER	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

LABOUR 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

 $\wedge$ Architects Advice

ABIC Australian Building Industry

Contracts

ΔΙ Architects Instruction AIA Australian Institute of

Architects

BCA. Building Code of Australia

BOQ Bill of Quantities

ВÞ **Building Permit** BS Building Surveyor

CA Contract Administration

CAN Consultants Advice Notice DΑ Development Application

חח Design Development DWG Drawing (also an Autocad

file format)

FBD Evidence Based Design

**FSD** Environmentally Sustainable Design

ы Professional Indemnity

(Insurance)

ΡМ Project Manager

Quantity Surveyor

RCP Reflected Ceiling Plan RFI Request for Information

SD Schematic Design

ARCHITECTURAL DRAWINGS

ABS Acrylonitrile Butadiene

Styrene (Edging)

AS Australian Standards

COL Column

CTS Centres (Spacing)

DP Downpipe

FNS Ensuite ΕX Existina

FC. Fibre Cement (Sheet)

EC1 Finished Ceiling Level FFI

Finished Floor Level FR Fire Rated

GEA Gross Floor Area

Highly Moisture Resistant HMR

(Particleboard)

KDHW Kiln Dried Hardwood

MDF Medium Density Fibreboard

PR Plasterboard

RI Relative Level

Stainless Steel

TYP Typical

VOC. Volatile Organic Compound

WC Water Closet (Toilet)

#### LAND SURVEYS

AHD Australian Height Datum AMG Australian Mapping Grid

DΡ Downpipe Ш Invert Level

Underground RI Relative Level

#### STRUCTURAL DRAWINGS

CFW Continuous Fillet Weld

CHS Cylindrical Hollow Section Construction Joint

FΑ Egual Angle

PFC Parallel Flange Channel

RB Roof Beam

RHS Rectangular Hollow Section

SB Sill Beam

SHS Square Hollow Section

TR Tie Beam

IJΑ Unequal Angle UB Universal Beam

UC Universal Column

WT Wall Tie

#### HYDRAULIC DRAWINGS

DCW Domestic Cold Water DHW Domestic Hot Water

FΗ Fire Hydrant

FHR Fire Hose Reel

FIP Fire Indicator Panel

FS Fire Service

FW Floorwaste

Hot Water System HWS

Tundish

TM\/ Thermostatic Mixing Valve

UPVC Unplasticated Polyvinyl

Chloride (Pipework)

VP Vent Pipe

#### MECHANICAL DRAWINGS

A/C Air Conditioning A/P

Access Panel ACU Air Conditioning Unit

AHU Air Handling Unit

Condensina Unit

FCU Fan Coil Unit

Fire Damper R/A Return Air

S/A Supply Air

cn.

Smoke Damper

## **ELECTRICAL DRAWINGS**

DB Distribution Board Double General Power DGPO

Outlet

GPO General Power Outlet MSB Main Switchboard

Residual Current Device RCD

CB Switchboard

# 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<sup>2</sup>).

#### **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:
  - 3221 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
  - 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
  - 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) Sub Divided Floors 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

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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 centres, 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.

Quality - 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 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.

ISO 41001:2018 specifies the requirements for a facility management (FM) system when an organization:

- a) needs to demonstrate effective and efficient delivery of FM that supports the objectives of the demand organization
- b) aims to consistently meet the needs of interested parties and applicable requirements
- c) aims to be sustainable in a globally-competitive environment

The requirements specified in ISO 41001:2018 are non-sector specific and intended to be applicable to all organizations, or parts thereof, whether public or private sector, and regardless of the type, size and nature of the organization or geographical location.

Separately, there was the release in 2014 of the ISO 55000 series for Asset Management (AM). 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
- 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 an Australian context.

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

# ASSETS AND FACILITIES USEFUL LIFE ANALYSIS

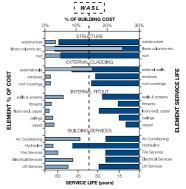
#### LIFE CYCLE ANALYSIS

Life Cycle Studies recognise that every 'whole' asset consists of many component parts, each with its own life expectancy, interrelationships, resulting quality 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

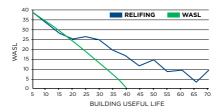
methodology used to determine the "Useful Life" of an asset. For buildings the WASL is the collective result of applying service life criteria to each element of a cost analysis; excluding capital recurrent expenditure other than routine maintenance.



#### 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.

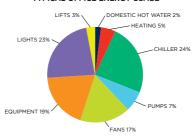
The level of recovery of outgoings is normally governed and regulated by leases and other agreements with tenants.

The cost of outgoings varies depending upon:

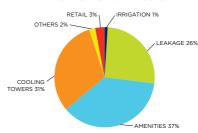
- · the level of management and services provided
- · lease agreements
- · quality, type and efficiency of the building
- · location and statutory regimes applicable

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

#### TYPICAL OFFICE ENERGY USAGE



#### TYPICAL OFFICE WATER 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.

	Ν	ag	NSW	S,	TAS	ACT	۸	Ę
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	NA
CERTIFICATE REQUIRED TO BE FORWARDED TO AN AUTHORITY	×	✓	✓	✓	×	NA	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 2018 Part 15
- QLD Fire and Emergency Services Act 1990
- NSW Environmental Planning and Assessment Regulations 2000
- SA Development Regulations 2008 & Minister's Specifications SA 76
- TAS Fire Services Act 1979 & General Fire Regulations 2010
- ACT Emergencies Act 2004
- WA Building Regulations 2012 & Building Amendment Regulations 2014
- NT Northern Territory Fire and Emergency Regulations

#### 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

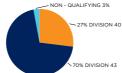
Capital allowances are the building allowance and structural improvement deductions that are available for buildings. Depreciating rates are either 2.5% or 4% dependent on the use of the building and construction commencement date.

The ATO issued the latest effective life review of assets under TR2018/4 which came into effect on the 1st July 2018. The following broad principles outline the rates of

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 including fitout 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 INSTALL ATIONS	6.667	13.333		
MULTI TYPE FIRE DETECTION SYSTEMS	4-16.67	8-33.33		
CENTRAL AIR CONDITIONING (VARIOUS RATES				
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	10	20		
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 appadditions:	oly with the fol	lowing		
FLOATING TIMBER FLOORS	10	20		
FURNITURE, FREESTANDING	10	20		
INDUSTRIAL Generally, the list for office buildings will appared additions:	ply with the fol	lowing		
CRANES	5	10		
GANTRIES	3	6		
DOCK LEVELLERS	5	10		
ROLLER SHUTTER ELECTRIC MOTORS	5	10		
RESIDENTIAL Only for assets continuously owned prior to 10/05/17 or new assets (not used) purchased from 10/05/17. FLOOR COVERINGS:				
CARPET	10	20		
FLOATING TIMBER	6.667	13.333		
Hot Water 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		

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

#### **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 Perth, WA 6000 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 Cavenagh Street, Darwin, NT 0800 T: +61 8 8941 2262

F: 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**

84 I

Rider Levett Bucknall VIC Pty Ltd Level 13, 380 St. Kilda Road, Melbourne, VIC 3004

T: +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,

T: +61 8 9421 1230 E: perth@au.rlb.com

#### Contact: Mark Bendotti SUNSHINE COAST

Rider Levett Bucknall QLD Pty Ltd Suite 11, The Boarding Offices 100-102 Brisbane Road Mooloolaba, QLD 4557 T: +61 7 5443 3622 E: suncoast@au.rlb.com

#### 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

Contact: David Stewart

#### 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 I td

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 7 839 1306

E: hamilton@nz.rlb.com

Contact: Richard Anderson

#### PALMERSTON NORTH

Rider Levett Bucknall Palmerston North Ltd Suite 1, Level 1, 219 Broadway Avenue, Palmerston North 4440

T: +64 6 357 0326

E: palmerstonnorth@nz.rlb.com Contact: Michael Craine

#### 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: Tony Tudor

#### **TAURANGA**

Rider Levett Bucknall Auckland Ltd Ground Floor, 3/602 Cameron

Road, Tauranga 3141 T: +64 7 579 5873

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 21 418 9977

E: martin.meinesz@za.rlb.com Contact: Martin Meinesz

#### DURBAN

77 Richefond Circle, Ridgeside Office Park, Suite 201, Umhlanga Ridge, Durban, 4319, South Africa

T: +27 31 072 0999 E: evan.sim@za.rlb.com

Contact: Evan Sim

#### GABORONE (BOTSWANA)

Unit 32, Kgale Mews, Gaborone, Botswana T: +27 72 622 9852

F: fred.selolwane@bw.rlb.com

Contact: Fred Selolwane

#### **JOHANNESBURG**

Mac Mac Building, Magwa Crescent Building No. 287, West, Waterfall City Midrand, Johannesburg 2090

T: +27 11 548 4000 E: leon.cronje@za.rlb.com

Contact: Leon Cronie

#### MAPUTO (MOZAMBIQUE)

Sommerschield 1, Maputo, Mozambique

T: +27 12 348 1040

E: christiaan.rademan@mu.rlb.com Contact: Christiaan Rademan

#### PRFTORIA

1st Floor, Banking Court, Menlyn Maine Central Square, Cnr Aramist and Corobay Avenue, Waterkloof Glen, Pretoria

T: +27 12 348 1040

E: nicolas.sheard@za.rlb.com Contact: Nicolas Sheard

#### SAINT PIERRE (MAURITIUS)

Vivea Business Park, Moka Mauritius

T: +230 5767 8815

E: marvind.beetul@mu.rlb.com Contact: Marvind Beetul

#### **STELLENBOSCH**

Office 11, Rouxcor House, 37 Mark Street, Stellenbosch. 7599, South Africa

T: +27 21 861 4880

E: lichelle.neethling@za.rlb.com Contact: Lichelle Neethling (du Plessis)

## MIDDLE FAST

#### ABU DHABI

Mezzanine Level, Al Mazrouei Building, Muroor Road, Abu Dhabi, United Arab Emirates

T: +971 2 643 3691

E: sam.barakat@ae.rlb.com Contact: Sam Barakat

#### DOHA

Office 32, Second Floor, Al Mirgab Complex, Al Mirgab Al Jadeed Street, Al Naser Area, Doha, Qatar T: +971 4016 2777

E: dean.mann@ae.rlb.com Contact: Dean Mann

#### DURAL

Office 2302 Marina Plaza, Dubai Marina, Dubai, United Arab **Emirates** 

T: +971 4 339 7444

F: natalie.stockman@ae.rlb.com Contact: Natalie Stockman

#### MUSCAT

18 November Road,

North Azaiba, Sultanate of Oman

T: +971 2 643 3691

E: sam.barakat@ae.rlb.com Contact: Sam Barakat

#### RIYADH

Unit F43 - First Floor, Localizer Mall, Prince Mohammad Bin Abdulaziz Road (Tahliyah Street), Riyadh 11492, Saudi Arabia T: +966 11 217 555 1

E: iohn.prior@sa.rlb.com Contact: John Prior

#### UNITED KINGDOM

#### BIRMINGHAM

Cathedral Court, 15 Colmore Row, Birmingham, B3 2BH

T: +44 121 503 1500

E: adam.ellis-morgan@uk.rlb.com Contact: Adam Ellis-Morgan

#### BRISTOL

Embassy House, 86 Queen's Avenue, Bristol, BS8 ISB T: +44 117 974 1122

E: jackie.pinder@uk.rlb.com Contact: Jackie Pinder

#### CUMBRIA

44 Springfield Road.

Egremont, Cumbria, CA22 2TQ T: +44 1925 851 787

E: dervck.barton@uk.rlb.com Contact: Deryck Barton

#### LEEDS

4D. Platform, New Station Street. Leeds LS1 4JB

T: +44 113 457 3225

E: matt.summerhill@uk.rlb.com

Contact: Matt Summerhill

#### LIVERPOOL

Suite 620, 6th Floor, The Plaza, 100 Old Hall Street, Liverpool L3 9QJ, United Kingdom

T: +44 077 6428 5920

E: jason.brownlee@uk.rlb.com Contact: Jason Brownlee

2nd Floor, 60 New Broad Street. London, EC2M 1JJ

T: +44 20 7398 8300 E: nick.eliot@uk.rlb.com

Contact: Nick Eliot

#### MANCHESTER

1 King Street,

Manchester, M2 6AW

T: +44 161 868 7700 E: russell.bolton@uk.rlb.com

Contact: Russell Bolton

#### **SHEFFIELD**

6th Floor Orchard Lane Wing, Fountain Precinct, Balm Green, Sheffield, S1 2,JA

T: +44 114 273 3300

E: matt.summerhill@uk.rlb.com Contact: Matt Summerhill

#### THAMES VALLEY

1000 Eskdale Road, Winnersh Triangle, Wokingham,

Berkshire, RG41 5TS T: +44 118 974 3600

E: michael.righton@uk.rlb.com Contact: Michael Righton

#### WARRINGTON

Ground South Wing, 401 Faraday Street, Birchwood Park, Warrington, Cheshire WA3 6GA

T: +44 1925 851787 E: dervck.barton@uk.rlb.com

Contact: Deryck Barton

#### 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

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

Contact: Simon Tuen

#### CHONGQING

Contact: Eric Lau

Room 3007-3008, 30th Floor, Metropolitan Tower. No. 68 Zourong Road, Central District, Chongging 400010, China T: +86 28 8670 3382 E: eric.lau@cn.rlb.com

#### 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 1302-1308. Central Tower. 5 Xiancun Road, Guangzhou 510623 Guangdong 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@hk.rlb.com Contact: Stephen Lai

#### HANGZHOU

Room 1603, 16th Floor, North Tower, Modern City Center, No. 161 Shao Xing Road, Xia Cheng District, Hangzhou 310004, 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: kenneth.kwan@hk.rlb.com Contact: Kenneth Kwan

#### MACAU

Alameda Dr. Carlos D'Assumpcao, No. 398 Edificio CNAC 9 Andar, I-J Macau SAR

T: +852 2823 1830

E: kenneth.kwan@hk.rlb.com Contact: Kenneth Kwan

#### NANJING

Room 1201, South Tower, Jinmao Plaza, 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 2203, Block B Resources Building No. 136 Minzu Road Nanning 530000 Guangxi, China

T: +86 20 8732 1801 E: danny.chow@cn.rlb.com

Contact: Danny Chow

#### SHANGHAI

22nd Floor, Greentech Tower, 436 Hengfeng Road, Jingan District, Shanghai 200070, China T: +86 21 6330 1999

E: wq.wang@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: +86 10 6515 5818

E: sm.tuen@cn.rlb.com Contact: Simon Tuen

#### SHENZHEN

SHEAZHEN
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: kenneth.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

#### 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@hkrlb.com

#### wuxi

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

Contact: Stephen Lai

#### XIAMEN

Room 2216, 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 1506, 15th Floor, Chang'an Metropolis Center, No.88 Nanguan Zheng Street, Beilin District, Xian 710068, Shaanxi Province, China T: +86 28 8670 3382

E: eric.lau@cn.rlb.com Contact: Eric Lau

#### **7HUHAI**

Room 1401-1402, 14th Floor, Taifook International Finance Building, No. 1199 Jiu Zhuo Road East, Jida, Zhuhai 519015, Guangdong Province, China

T: +86 20 8732 1801 E: danny.chow@cn.rlb.com Contact: Danny Chow

#### INDONESIA

#### **JAKARTA**

Jl. Jend. Surdirman Kav. 45-46 Sampoerna Strategic Square South Tower, Level 19, Jakarta 12930, Indonesia

T: +62 21 5795 2308

E: widitomo.puntoadi@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: kf.lai@my.rlb.com

Contact: Dato' Lai Kar Fook

#### MYANMAR

#### YANGON

Union Business Center, Nat Mauk St, Yangon, Myanmar (Burma)

T: +95 1 860 3448 (Ext 4004) E: serene.wong@vn.rlb.com Contact: Serene Wong

### PHILIPPINES

#### BACOLOD CITY

Suite 403 & 404, 4th Floor Carmen Building, Lizares Avenue Bacolod City, Negros Occidental 6100 Philippines

T: +63 34 432 1344

E: armando.baria@ph.rlb.com Contact: Armando Baria

#### CAGAYAN DE ORO

Rm. 702, TTK Tower, Don Apolinar Velez Street, Bgy. 14 Cagayan De Oro City, Misamis Oriental, 9000 Philippines

T: +63 88 850 4105

E: rev.clemena@ph.rlb.com Contact: Raymundo Clemena

#### **CEBU**

Suite 601 & 602, PDI Condominium, Arch. Bishop, Reyes Avenue Corner J. Panis Street, Banilad, Cebu City 1604, Philippines T: +63 38 502 8660

E: joy.marasigan@ph.rlb.com Contact: Jolly Joy Cantero

#### CLARK

Units 202 - 203, Baronesa Place Mc Arthur Hi-way City of Mabalacat Angeles Pampanga

T: +63 916 794 9156 E: marie.tendenilla@ph.rlb.com Contact: Marie E. Tendenilla

#### DAVAO

Room 307 & 308, 3rd Floor Coco Life Building, C.M. Recto Street, corner J. Palma Gil St., Davao City, 8000 Philippines

T: +63 82 297 4589

E: armando.baria@ph.rlb.com Contact: Armando Baria

#### ILOILO

Uy Bico Building, Yulo Street, Iloilo City, 5000 Philippines T: +63 33 320 0945 E: armando.baria@ph.rlb.com Contact: Armando Baria

#### METRO MANILA

Corazon Clemeña Compound. Bldg. 3 No. 54 Danny Floro Street, Bagong Ilog, Pasig City 1600, Philippines

T: +63 2 234 0141

E: coraballard@ph.rlb.com Contact: Corazon Ballard

#### PANGLAO, BOHOL

Sitio Cascajo, Looc, Panglao Bohol, 6340 Philippines

T: +63 38 502 8660 E: rlb@ph.rlb.com

Contact: Corazon Ballard

#### STA. ROSA CITY, LAGUNA

Unit 201, Brain Train Center, Lot 11. Blk 3 Sta Rosa. Business Park, Greenfield Bgy. Don Jose, Sta. Rosa Laguna 4026 Philippines

T: +63 917 572 9533

E: pedro.vambao@ph.rlb.com Contact: Pedro J. Yambao, Jr.

#### SUBIC

The Venue Building, Unit 418 Lot C-5, Commercial Area, SBF Park Phase 1, Subic Bay Freeport Zone, Zambales

T: +63 917 517 3962

E: ioselito.mendoza@ph.rlb.com Contact: Joselito Mendoza

#### **SINGAPORE**

#### SINGAPORE

911 Bukit Timah Road Level 3 Singapore 589622

T: +65 6339 1500

F: silas.loh@sq.rlb.com Contact: Silas Loh

#### SOUTH KOREA

1084, Seogwang-ri, Andeok-myeon, Seogwipo-si,

Jeju-do, Korea

T: +852 2823 1828 E: stephen.lai@hk.rlb.com

Contact: Stephen Lai

#### SEOUL

Yeoksam-Dong, Daon Building, 8th Floor, 8, Teheran-ro 27-gil, Gangnam-Gu, Seoul, 06141 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 Nauven Thi Minh Khai Street, Ward 6, District 3 Ho Chi Minh City, Vietnam

T: +84 83 823 8070

E: cb.ong@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

#### ST LUCIA

Desir Ave, Saint Lucia

T: +1 758 452 2125

E: mark.williamson@lc.rlb.com Contact: Mark Williamson

#### UNITED STATES OF **AMERICA**

#### AUSTIN

111 Congress Avenue, Suite 400. Austin, Texas 78701

T: +1 602 443 4848

E: ward.simpson@us.rlb.com Contact: Ward Simpson

#### **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

## CHICAGO

141 W. Jackson Boulevard, Suite

3810, Chicago, Illinois 60604

T: +1 312 819 4250

E: chris.harris@us.rlb.com Contact: Chris Harris

#### DENVER

1675 Larimer Street, Suite 470.

Denver, Colorado 80202

T: +1 720 904 1480

E: peter.knowles@us.rlb.com

Contact: Peter Knowles

80 Pauahi Street, Suite 104, Hilo, Hawaii 96720

T: +1 808 883 3379

E: kevin.mitchell@us.rlb.com

Contact: Kevin Mitchell

#### HONOLULU

American Savings Bank Tower, 1001 Bishop Street, Suite 2690, Honolulu, Hawaii 96813

T: +1 808 521 2641

E: maelyn.uyehara@us.rlb.com Contact: Maelyn Uyehara

#### 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

#### MAUI

300 Ohukai Road, Building B, Kihei, Hawaii 96753

T: +1 808 883 3379

E: kevin.mitchell@us.rlb.com Contact: Kevin Mitchell

#### **NEW YORK**

31 Penn Plaza, 132 West 31st Street, 15th Floor, New York, New York 10001

T: +1 646 821 4788

E: michael.moynihan@us.rlb.com Contact: Michael Moynihan

#### PHOENIX

4343 East Camelback Road, Suite 350, Phoenix, Arizona 85018

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

735 Montgomery Street, Suite 350, San Francisco, CA 94111

T: +1 415 362 2613

E: catherine.stoupas@us.rlb.com Contact: Catherine Stoupas

#### SAN JOSE

800 West El Camino, Real Suite 180, Mountain View CA 94040

T: +1 520 777 7581

E: joel.brown@us.rlb.com

Contact: Joel Brown

#### **SEATTLE**

2003 Western Avenue, Suite 515, Seattle, Washington 98121

T: +1 206 223 2055

E: emile.leroux@us.rlb.com Contact: Emile le Roux

#### TUSCON

33 West Congress Street, Suite 215, Tucson, Arizona 85701

T: +1 520 777 7581

E: josh.marks@us.rlb.com Contact: Josh Marks

#### WAIKOLOA

Waikoloa Highlands Centre 68-1845 Waikoloa Road, Suite 202, Waikoloa, Hawaii 96738

T: +1 808 883 3379

E: kevin.mitchell@us.rlb.com Contact: Kevin Mitchell

#### WASHINGTON, D.C

199 E. Montgomery Avenue, Suite 100, Rockville, Maryland 20850

T: +240 599 8176

E: neil.sinclair@us.rlb.com Contact: Neil Sinclair

# CALENDARS

Calendars 2018 - 2021	92
2019 Rostered Days Off	94
Public Holidays	96

# **CALENDARS 2018 - 2021**

## 2018

2018			
JANUARY 2018	FEBRUARY 2018	MARCH 2018	
S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	S M T W T F S 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	S M T W T F S 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	
APRIL 2018	MAY 2018	JUNE 2018	
S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
JULY 2018	AUGUST 2018	SEPTEMBER 2018	
S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	S M T W T F S 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
OCTOBER 2018	NOVEMBER 2018	DECEMBER 2018	
S M T W T F S 1 2 3 4 5 6	S M T W T F S 1 2 3	SMTWTFS	
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	
JANUARY 2019	2019 FEBRUARY 2019		
		MARCH 2019	
S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	S M T W T F S	S M T W T F S   1 2 2 3 4 5 6 7 8 9   10 11 12 13 14 15 16   17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	
S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	S M T W T F S 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	
S M T W T F S 1 2 3 4 5 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 APRIL 2019 S M T W T F S 1 2 3 4 5 6 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	S M T W T F S 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 MAY 2019 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	S M T W T F S 3 4 5 6 7 8 9 10 11 12 13 14 12 53 24 25 26 27 28 29 30 31 JUNE 2019 S M T W T F S 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 SEPTEMBER 2019	
S M T W T F S 1 2 3 4 5 5 6 7 8 9 10 11 12 13 14 15 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 APRIL 2019  S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28  MAY 2019  S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 S M T W T F S 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	
S M T W T F S 1 2 3 4 5 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28  MAY 2019  S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31  AUGUST 2019  S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 18 19 20 21 22 23 24 25 26 27 28 29 30 31	S M T W T F S 1 2 3 4 5 6 7 8 9 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 30 30 30 30 30 30 30 30 30 30 30 30	

# 2020

JANUARY 2020 S M T W T F S	FEBRUARY 2020 S M T W T F S	MARCH 2020 S M T W T F S
1 2 3 4	1	1 2 3 4 5 6 7
5 6 7 8 9 10 11	2 3 4 5 6 7 8 9 10 11 12 13 14 15	8 9 10 11 12 13 14
12 13 14 15 16 17 18 19 20 21 22 23 24 25	16 17 18 19 20 21 22	22 23 24 25 26 27 28
26 27 28 29 30 31	23 24 25 26 27 28 29	29 30 31
APRIL 2020	MAY 2020	JUNE 2020
SMTWTFS	SMTWTFS	SMTWTFS
1 2 3 4 5 6 7 8 9 10 11	3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9 10 11 12 13
12 13 14 15 16 17 18	10 11 12 13 14 15 16	14 15 16 17 18 19 20
19 20 21 22 23 24 25 26 27 28 29 30	17 18 19 20 21 22 23 24 25 26 27 28 29 30	21 22 23 24 25 26 27 28 29 30
	31	
JULY 2020	AUGUST 2020	SEPTEMBER 2020
1 2 3 4	S M I W I F S	1 2 3 4 5
5 6 7 8 9 10 11 12 13 14 15 16 17 18	2 3 4 5 6 7 8 9 10 11 12 13 14 15	6 7 8 9 10 11 12 13 14 15 16 17 18 19
19 20 21 22 23 24 25	16 17 18 19 20 21 22	20 21 22 23 24 25 26
26 27 28 29 30 31	23 24 25 26 27 28 29 30 31	27 28 29 30
OCTOBER 2020	NOVEMBER 2020	DECEMBER 2020
SMTWTFS	SMTWTFS	SMTWTFS
1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10 11 12 13 14	1 2 3 4 5
11 12 13 14 15 16 17	15 16 17 18 19 20 21	13 14 15 16 17 18 19
18 19 20 21 22 23 24 25 26 27 28 29 30 31	22 23 24 25 26 27 28 29 30	20 21 22 23 24 25 26 27 28 29 30 31
JANUARY 2021	2021 FEBRUARY 2021	MARCH 2021
1 2	1 2 3 4 5 6	1 2 3 4 5 6
3 4 5 6 7 8 9 10 11 12 13 14 15 16	7 8 9 10 11 12 13 14 15 16 17 18 19 20	7 8 9 10 11 12 13 14 15 16 17 18 19 20
17 18 19 20 21 22 23	21 22 23 24 25 26 27	21 22 23 24 25 26 27
24 25 26 27 28 29 30 31	28	28 29 30 31
		20 29 30 31
APRIL 2021	MAY 2021	JUNE 2021
SMTWTFS	SMTWTFS	JUNE 2021 S M T W T F S
S M T W T F S 1 2 3 4 5 6 7 8 9 10	S M T W T F S 1 2 3 4 5 6 7 8	JUNE 2021  S M T W T F S  1 2 3 4 5 6 7 8 9 10 11 12
S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	JUNE 2021  S M T W T F S
S M T W T F S 1 2 3 4 5 6 7 8 9 10	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	JUNE 2021  S M T W T F S  1 2 3 4 5 6 7 8 9 10 11 12
S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	S M T W T F S 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	JUNE 2021  S M T W T F S 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
S M T W T F S 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 JULY 2021 S M T W T F S	S M T W T F S 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 AUGUST 2021 S M T W T F S	JUNE 2021  S M T W T F S  1 2 3 4 5  6 7 8 9 10 11 12  13 14 15 16 17 18 19  20 21 22 23 24 25 26  27 28 29 30  SEPTEMBER 2021  S M T W T F S
S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 JULY 2021 S M T W T F S 1 2 3	S M T W T F S 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 AUGUST 2021 S M T W T F S 1 2 3 4 5 6 7	SEPTEMBER 2021   S M T W T F S
S M T W T F S	S M T W T F S 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 AUGUST 2021 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	SEPTEMBER 2021   S M T W T F S
S M T W T F S 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 S M T W T F S 4 5 6 7 8 9 10	S M T W T F S 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 AUGUST 2021 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 32 42 52 62 72 8	S M T W T F S
S M T W T F S   1 2 3	S M T W T F S 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 AUGUST 2021 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	SEPTEMBER 2021   S M T W T F S
S M T W T F S   1 2 3	S M T W T F S 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 AUGUST 2021 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 32 42 52 62 72 8	S M T W T F S
S M T W T F S   1 2 3	S M T W T F S  1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31  AUGUST 2021  S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31  NOVEMBER 2021  S M T W T F S 1 2 3 3 4 5 6 7	S   M   T   W   T   F   S   1   2   3   4   5   6   7   8   9   10   11   12   13   14   15   16   17   18   19   20   21   22   23   24   25   26   27   28   29   30
S M T W T F S	S M T W T F S 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31  AUGUST 2021  S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31  NOVEMBER 2021  S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13	SEPTEMBER 2021   S M T W T F S
S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	S M T W T F S  2 3 4 5 6 7 8  9 10 11 12 13 14 15  16 17 18 19 20 21 22  23 24 25 26 27 28 29  AUGUST 2021  S M T W T F S  1 2 3 4 5 6 7  8 9 10 11 12 13 14  15 16 17 18 19 20 21  22 32 24 25 26 27 28  NOVEMBER 2021  S M T W T F S  1 2 3 4 5 6  7 8 9 10 11 12 13  14 15 16 17 18 19 20  1 2 3 4 5 6  7 8 9 10 11 12 13  14 15 16 17 18 19 20  12 22 32 42 25 26 27  8 1 2 3 4 5 6  7 8 9 10 11 12 13  14 15 16 17 18 19 20  12 22 32 42 25 26 27	S   M T   W T F   S   1 2 3 4 4 5 6 7 8 9 10 11 12 12 13 14 15 16 17 18 19 19 19 12 13 14 15 16 17 18 19 19 19 12 13 14 15 16 17 18 19 19 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 6 7 28 29 30   S   C   C   C   C   C   C   C   C   C
S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 24	S M T W T F S 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31  AUGUST 2021 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31  NOVEMBER 2021 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 13 19 19 20 11 22 23 24 25 26 27 28 29 30 31	SEPTEMBER 2021   S M T W T F S

# CALENDARS 2019 ROSTERED DAYS OFF

	ADELAIDE	BRISBANE & DARWIN
BASIS	CFMEU EBA	CFMEU EBA
HOURS BASIS	36	36
JAN	TUE 29	WED 2
	WED 30	THU 3
		FRI 4
		TUE 29
FEB	MON 11	MON 25
	MON 25	
MAR	TUE 12	MON 25
	WED 13	
APR	THU 18	MON 23
	TUE 23	TUE 24
	WED 24	FRI 26
	FRI 26	
MAY	MON 13	MON 20
	MON 27	
JUN	TUE 11	MON 17
	WED 12	
JUL	MON 15	MON 15
	MON 29	
AUG	MON 12	MON 12
	MON 26	TUE 13
SEP	MON 9	MON 9
	MON 23	
ост	TUE 8	TUE 8
	WED 9	
NOV	MON 11	MON 4
	MON 25	TUE 5
		WED 6
DEC	MON 23	MON 2
	TUE 24	FRI 20
		MON 23
		TUE 24
		FRI 27
		MON 30
		TUE 31
TOTAL	26	26

CANBERRA	MELBOURNE	PERTH SYDNE	
CFMEU EBA	CFMEU EBA	CFMEU EBA	CFMEU EBA
36	36	36	36
WED 2	TUE 8	WED 2	TUE 29
FRI 25	TUE 29	THU 3	
TUE 29		FRI 4	
		TUE 29	
MON 4	MON 11	MON 11	MON 25
MON 25	MON 25		
FRI 8	TUE 12	TUE 5	MON 25
TUE 12			
TUE 23	MON 1	TUE 23	FRI 26
WED 24	TUE 23	WED 24	
FRI 26	WED 24		
	FRI 26		
FRI 24	MON 13	MON 13	MON 27
TUE 28	MON 27		
TUE 11	TUE 11	TUE 4	TUE 11
MON 17	MON 24		
MON 1	MON 8	MON 1	MON 8
MON 22	MON 22	MON 29	
MON 5	MON 5	MON 26	MON 5
MON 26	MON 19		
MON 9	MON 9		MON 2
MON 30	MON 30		
FRI 4	MON 14	TUE 1	TUE 8
TUE 8		MON 28	
MON 4	MON 4	MON 4	MON 4
MON 25	WED 6	TUE 5	
	MON 18		
MON 2	MON 23	MON 23 TUE 3	
MON 23	TUE 24	TUE 24	MON 23
	FRI 27	FRI 27	
		MON 30	
		TUE 31	
26	26	22 FIXED & 4 VARIABLE	13 FIXED & 13 VARIABLE

# CALENDARS PUBLIC HOLIDAYS IN AUSTRALIA

ALL STATES	2019	2020	2021
NEW YEARS DAY	1 JAN	1 JAN	1 JAN
AUSTRALIA DAY	28 JAN	27 JAN	26 JAN
GOOD FRIDAY	19 APR	10 APR	2 APR
EASTER MONDAY	22 APR	13 APR	5 APR
ANZAC DAY	25 APR	25 APR	25 APR
QUEENS BIRTHDAY (EXCL QLD & WA)	10 JUN	8 JUN	14 JUN
CHRISTMAS DAY	25 DEC	25 DEC	27 DEC
BOXING DAY	26 DEC	28 DEC	28 DEC
AUSTRALIAN CAPITAL TERRITORY			
CANBERRA DAY	11 MAR	9 MAR	8 MAR
EASTER SATURDAY	20 APR	11 APR	3 APR
EASTER SUNDAY	21 APR	12 APR	4 APR
RECONCILIATION DAY	27 MAY	1 JUN	31 MAY
LABOUR DAY	7 OCT	5 OCT	4 OCT
NEW SOUTH WALES			
EASTER SATURDAY	20 APR	11 APR	3 APR
EASTER SUNDAY	21 APR	12 APR	4 APR
BANK HOLIDAY	5 AUG	3 AUG	2 AUG
LABOUR DAY	7 OCT	5 OCT	4 OCT
NORTHERN TERRITORY			
EASTER SATURDAY	20 APR	11 APR	3 APR
MAY DAY	6 MAY	4 MAY	3 MAY
PICNIC DAY	5 AUG	3 AUG	2 AUG
QUEENSLAND			
EASTER SATURDAY	20 APR	11 APR	3 APR
LABOUR DAY	6 MAY	4 MAY	3 MAY
ROYAL QUEENSLAND SHOW	14 AUG	12 AUG	11 AUG
QUEENS BIRTHDAY	7 OCT	5 OCT	4 OCT
SOUTH AUSTRALIA			
EASTER SATURDAY	20 APR	11 APR	3 APR
ADELAIDE CUP DAY	11 MAR	9 MAR	8 MAR
LABOUR DAY	7 OCT	5 OCT	4 OCT
TASMANIA	11.550	10.555	0.550
ROYAL HOBART REGATTA	11 FEB	10 FEB	8 FEB
LAUNCESTON CUP	27 FEB	26 FEB	24 FEB
EIGHT HOURS DAY	11 MAR	9 MAR	8 MAR
EASTER TUESDAY	23 APR	14 APR	6 APR
LAUNCESTON SHOW	10 OCT	8 OCT	7 OCT
HOBART SHOW	24 OCT	22 OCT	21 OCT
RECREATION DAY (NORTHERN)  VICTORIA	4 NOV	2 NOV	1 NOV
LABOUR DAY	11 MAR	9 MAR	8 MAR
EASTER SATURDAY	20 APR	9 MAR 11 APR	3 APR
EASTER SATURDAY	20 APR 21 APR	12 APR	4 APR
GRAND FINAL EVE DAY	21 APR 27 SEP	25 SEP	TBA
MELBOURNE CUP DAY	5 NOV	3 NOV	2 NOV
WESTERN AUSTRALIA	2 IVU V	JIVUV	21101
LABOUR DAY	4 MAR	2 MAR	1 MAR
FOUNDATION DAY	3 JUN	1 JUN	7 JUN
QUEENS BIRTHDAY	30 SEP	28 SEP	27 SEP
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