

RLB

Rider  
Levett  
Bucknall

**RIDERS  
DIGEST  
2019**

**SYDNEY,  
AUSTRALIA  
EDITION**

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# **RIDERS DIGEST**

## **47<sup>TH</sup> EDITION**

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

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

While the information in this publication is believed to be correct, no responsibility is accepted for its accuracy. Persons desiring to utilise any information appearing in this publication should verify its applicability to their specific circumstances. Cost information in this publication is indicative and for general guidance only and is based on rates ruling at Fourth Quarter 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
Advisory	9

# COST MANAGEMENT AND QUANTITY SURVEYING SERVICES

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

- Preparation of preliminary elemental estimates based on preliminary design
- Preparation of detailed estimates and cost planning advice throughout design development
- 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

## REliefing 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](http://www.rlbintelligence.com) for updates.

LOCATION /CITY	LOCAL CURRENCY	COST PER M <sup>2</sup>			
		OFFICE BUILDING			
		PREMIUM		GRADE A	
		LOW	HIGH	LOW	HIGH
<b>AMERICAS @ Q3 2018</b>					
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
<b>ASIA @ Q3 2018</b>					
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
<b>EUROPE @ Q3 2018</b>					
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
<b>MIDDLE EAST @ Q3 2018</b>					
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
<b>OCEANIA @ Q4 2018</b>					
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>					
RETAIL				RESIDENTIAL MULTI STOREY	
MALL		STRIP SHOPPING		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.rbintelligence.com](http://www.rbintelligence.com) for updates.**

LOCATION /CITY	LOCAL CURRENCY	COST PER M <sup>2</sup>			
		HOTELS			
		3 STAR		5 STAR	
		LOW	HIGH	LOW	HIGH
<b>AMERICAS @ Q3 2018</b>					
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
<b>ASIA @ Q3 2018</b>					
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
<b>EUROPE @ Q3 2018</b>					
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
<b>MIDDLE EAST @ Q3 2018</b>					
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
<b>OCEANIA @ Q4 2018</b>					
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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**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>					
CAR PARKING				INDUSTRIAL WAREHOUSE	
MULTI STOREY		BASEMENT		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
1,760	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	-	-
680	980	1,340	1,960	650	1,100
1,060	1,360	2,300	2,800	780	1,060
1,000	1,500	1,700	2,200	750	1,200
790	1,320	1,060	1,840	740	1,400
850	1,360	1,760	2,200	720	1,100
750	1,260	1,180	1,540	800	1,420
700	1,200	1,500	2,100	700	1,100
810	1,280	1,280	1,680	660	1,220
650	1,000	1,800	3,100	550	1,060
810	1,240	1,180	1,900	770	1,240
1,440	1,640	2,850	3,050	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](http://www.rlbintelligence.com) for updates.

CALENDAR YEAR	2016	2017	2018 (F)	2019 (F)	2020 (F)	2021 (F)
<b>AFRICA @ Q3 2018</b>						
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
<b>AMERICAS @ Q3 2018</b>						
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
<b>ASIA @ Q3 2018</b>						
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
<b>EUROPE @ Q3 2018</b>						
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
<b>MIDDLE EAST @ Q3 2018</b>						
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
<b>OCEANIA @ Q4 2018</b>						
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

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	ADELAIDE		BRISBANE	
	\$/M <sup>2</sup>		\$/M <sup>2</sup>	
	LOW	HIGH	LOW	HIGH
<b>COST RANGE PER GROSS FLOOR AREA</b>				
<b>OFFICE BUILDINGS</b>				
<b>Prestige, CBD</b>				
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
<b>Investment, CBD</b>				
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
<b>Investment, other than CBD</b>				
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
<b>HOTELS</b>				
<b>Multi-Storey (ex FF&amp;E)</b>				
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
<b>CAR PARK</b>				
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
<b>INDUSTRIAL BUILDINGS</b>				
<b>6.00 M to underside of truss and 4,500 M<sup>2</sup> Gross Floor Area with:</b>				
ZINCALUME METAL CLADDING	650	1,000	750	1,100
PRECAST CONCRETE CLADDING	750	1,100	850	1,200
<b>Attached Airconditioned Offices</b>				
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.
- iii The percentages shown against each building may be used to calculate the rate per Net Lettable Area.

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

**Refer to [www.rlbintelligence.com](http://www.rlbintelligence.com) for updates.**

CANBERRA		DARWIN		MELBOURNE		PERTH		SYDNEY	
\$/M <sup>2</sup>									
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	ADELAIDE		BRISBANE	
COST RANGE PER GROSS FLOOR AREA	\$/M <sup>2</sup>		\$/M <sup>2</sup>	
	LOW	HIGH	LOW	HIGH
<b>AGED CARE</b>				
SINGLE STOREY FACILITY	2,150	2,700	2,400	3,000
<b>PRIVATE HOSPITALS</b>				
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
<b>CINEMAS</b>				
GROUP COMPLEX, 2,000-4,000 SEATS (WARM SHELL)	2,750	3,650	3,500	4,500
<b>REGIONAL SHOPPING CENTRES</b>				
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
<b>SMALL SHOPS AND SHOWROOMS</b>				
SMALL SHOPS & SHOWROOMS	1,300	1,840	1,400	2,000
<b>RESIDENTIAL</b>				
SINGLE & DOUBLE STOREY DWELLINGS (CUSTOM BUILT)	1,580	3,450	1,800	4,000
<b>RESIDENTIAL UNITS</b>				
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
<b>MULTI-STOREY UNITS</b>				
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](http://www.rlbintelligence.com) for updates.**

CANBERRA		DARWIN		MELBOURNE		PERTH		SYDNEY	
\$/M <sup>2</sup>									
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	1,560	3,050
1,340	1,920	1,660	2,300	1,340	1,720	1,200	1,700	1,360	1,680
2,400	4,050	1,760	2,650	2,200	3,200	1,900	2,900	2,100	4,400
1,240	2,050	1,460	2,100	1,240	1,720	1,000	1,500	1,780	2,750
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
-	-	-	-	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.

COST RANGE PER GROSS FLOOR AREA	ADELAIDE		BRISBANE	
	\$/M <sup>2</sup>		\$/M <sup>2</sup>	
	LOW	HIGH	LOW	HIGH
<b>OFFICE BUILDINGS</b>				
<b>Prestige, CBD</b>				
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
<b>Investment, CBD</b>				
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
<b>INVESTMENT, OTHER THAN CBD</b>				
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
<b>HOTELS</b>				
<b>Multi-Storey</b>				
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
<b>CAR PARK</b>				
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
<b>INDUSTRIAL BUILDINGS</b>				
<b>6.00 M to underside of truss and 4,500 M<sup>2</sup> Gross Floor Area with:</b>				
ZINCALUME METAL CLADDING	213	302	205	367
PRECAST CONCRETE CLADDING	213	345	205	367
<b>Attached Airconditioned Offices</b>				
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.

CANBERRA		DARWIN		MELBOURNE		PERTH		SYDNEY	
\$/M <sup>2</sup>									
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 GROSS FLOOR AREA	ADELAIDE		BRISBANE	
	\$/M <sup>2</sup>		\$/M <sup>2</sup>	
	LOW	HIGH	LOW	HIGH
<b>AGED CARE</b>				
SINGLE STOREY FACILITY	430	699	518	828
<b>PRIVATE HOSPITALS</b>				
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
<b>CINEMAS</b>				
GROUP COMPLEX, 2,000-4,000 SEATS. (WARM SHELL)	794	1,071	649	1,006
<b>REGIONAL SHOPPING CENTRES</b>				
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
<b>SMALL SHOPS AND SHOWROOMS</b>				
SMALL SHOPS AND SHOWROOMS	411	642	356	672
<b>RESIDENTIAL</b>				
SINGLE & DOUBLE STOREY DWELLINGS (CUSTOM BUILT)	252	554	265	582
<b>RESIDENTIAL UNITS</b>				
WALK-UP 85 TO 120 M <sup>2</sup> /UNIT	212	480	253	502
TOWNHOUSES 90 TO 120 M <sup>2</sup> /UNIT	215	488	253	493
<b>MULTI-STOREY UNITS</b>				
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 storeys				
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

CANBERRA		DARWIN		MELBOURNE		PERTH		SYDNEY	
\$/M <sup>2</sup>									
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
614	920	648	846	554	905	555	860	736	988
614	1,015	636	829	554	874	550	825	702	908
733	1,040	712	875	648	992	655	955	791	1,131
686	1,040	696	855	627	900	630	935	778	1,064
-	-	-	-	821	1,220	870	1,110	1,035	1,345
-	-	-	-	763	1,168	850	1,095	1,009	1,335

# AUSTRALIAN CONSTRUCTION RLB TENDER PRICE INDEX

DATE	ADELAIDE		BRISBANE		CANBERRA	
	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.

DARWIN		MELBOURNE		PERTH		SYDNEY	
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		
	TOTAL	ACCOMMODATION	PUBLIC SPACE
FIVE STAR	85-120 M <sup>2</sup>	45-65 M <sup>2</sup>	40-55 M <sup>2</sup>
FOUR STAR	60-85 M <sup>2</sup>	35-45 M <sup>2</sup>	25-40 M <sup>2</sup>
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

## 47<sup>TH</sup> EDITION

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**Colliers International - NT**

Northern Territory Land Values & Yields and Rental Rates.

**WSP Structures**

Reinforcement Ratios.

**Australian Bureau of Statistics**

Construction and Building Data and CPI information.

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# SYDNEY CONSTRUCTION COSTS

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# SYDNEY CONSTRUCTION BUILDING SERVICES COSTS

All costs current as at Fourth Quarter 2018.

COST RANGE PER GROSS FLOOR AREA	SPECIAL EQUIPMENT		HYDRAULIC	
	\$/M <sup>2</sup>		\$/M <sup>2</sup>	
	LOW	HIGH	LOW	HIGH
<b>OFFICE BUILDINGS</b>				
<b>Prestige, CBD</b>				
10 TO 25 STOREYS (75-80% EFFICIENCY)	40	55	98	133
25 TO 40 STOREYS (70-75% EFFICIENCY)	45	55	116	136
40 TO 55 STOREYS (68-73% EFFICIENCY)	49	55	130	145
<b>Investment, CBD</b>				
UP TO 10 STOREYS (81-85% EFFICIENCY)	-	-	80	97
10 TO 25 STOREYS (76-81% EFFICIENCY)	19	44	80	109
25 TO 40 STOREYS (71-76% EFFICIENCY)	19	44	91	122
<b>Investment, other than CBD</b>				
1 TO 3 STOREYS (81-85% EFFICIENCY)	-	13	75	98
UP TO 10 STOREYS (82-86% EFFICIENCY)	14	19	88	98
10 TO 25 STOREYS (77-82% EFFICIENCY)	19	49	90	108
<b>HOTELS</b>				
<b>Multi-Storey</b>				
FIVE STAR	38	61	235	289
FOUR STAR	30	55	225	281
THREE STAR	19	37	200	246
<b>CAR PARK</b>				
OPEN DECK MULTI-STOREY	-	-	20	25
BASEMENT: CBD	-	-	25	43
BASEMENT: OTHER THAN CBD	-	-	20	37
UNDERCROFT: OTHER THAN CBD	-	-	20	26
<b>INDUSTRIAL BUILDINGS</b>				
<b>6.00 M to underside of truss and 4,500 M<sup>2</sup> Gross Floor Area with:</b>				
ZINCALUME METAL CLADDING	-	-	55	62
PRECAST CONCRETE CLADDING	-	-	55	62
<b>Attached Air Conditioned Offices</b>				
200 M <sup>2</sup>	-	-	75	98
400 M <sup>2</sup>	-	-	75	98

## 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.

FIRE		MECH.		VERTICAL TRANSPORT		BUILDING MGT.		ELECTRICAL		TOTAL	
\$/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
73	101	374	439	197	265	38	91	208	273	1,028	1,357
81	101	384	452	271	221	55	91	260	300	1,212	1,356
86	101	433	462	295	335	75	91	285	309	1,353	1,498
15	91	293	368	149	181	15	33	150	206	702	976
63	95	314	380	174	192	26	45	155	201	831	1,066
73	95	325	380	208	254	21	51	183	228	920	1,174
15	38	257	293	-	54	13	33	120	150	480	679
63	86	269	335	112	169	13	33	133	201	692	941
73	86	304	370	175	219	21	38	156	213	838	1,083
73	102	410	455	185	256	37	75	235	297	1,213	1,535
73	102	329	430	185	221	37	64	196	273	1,075	1,426
14	80	315	385	147	175	27	33	196	236	918	1,192
14	26	-	20	-	30	-	13	33	49	67	163
67	83	55	72	38	53	13	21	51	60	249	332
14	65	42	66	26	36	-	21	51	60	153	285
8	10	-	-	-	-	-	8	22	26	50	70
14	26	-	14	-	-	-	7	56	106	125	215
14	26	-	14	-	-	-	7	56	108	125	217
14	33	258	336	-	185	21	51	146	190	514	893
14	33	258	340	-	183	21	51	146	201	514	906

#### 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.

# SYDNEY CONSTRUCTION BUILDING SERVICES COSTS

COST RANGE PER GROSS FLOOR AREA	SPECIAL EQUIPMENT		HYDRAULIC	
	\$/M <sup>2</sup>		\$/M <sup>2</sup>	
	LOW	HIGH	LOW	HIGH
<b>AGED CARE</b>				
SINGLE STOREY FACILITY	-	13	164	255
<b>PRIVATE HOSPITALS</b>				
Low Rise Hospital				
45-60 M <sup>2</sup> GFA/BED	25	49	176	226
55-80 M <sup>2</sup> GFA/BED WITH MAJOR OPERATING THEATRE	45	149	200	230
<b>CINEMAS</b>				
GROUP COMPLEX, 2,000-4,000 SEATS (WARM SHELL)	13	26	101	160
<b>REGIONAL SHOPPING CENTRES</b>				
DEPARTMENT STORE	-	20	76	89
SUPERMARKET/VARIETY STORE	-	-	78	89
DISCOUNT DEPARTMENT STORE	-	20	62	80
MALLS	-	33	72	92
SPECIALTY SHOPS	-	-	75	94
<b>SMALL SHOPS AND SHOWROOMS</b>				
SMALL SHOPS & SHOWROOMS	-	-	62	87
<b>RESIDENTIAL</b>				
SINGLE AND DOUBLE STOREY DWELLINGS (CUSTOM BUILT)	-	14	93	183
<b>RESIDENTIAL UNITS</b>				
WALK-UP 85 TO 120 M <sup>2</sup> /UNIT	-	-	112	230
TOWNHOUSES 90 TO 120 M <sup>2</sup> /UNIT	-	-	88	230
<b>MULTI-STOREY UNITS</b>				
Up to 10 storeys with lift				
UNITS 60-70 M <sup>2</sup>	-	14	187	231
UNITS 90-120 M <sup>2</sup>	-	14	177	212
Over 10 and up to 20 storeys				
UNITS 60-70 M <sup>2</sup>	-	14	186	243
UNITS 90-120 M <sup>2</sup>	-	14	175	220
Over 20 and up to 40 storeys				
UNITS 60-70 M <sup>2</sup>	9	43	235	278
UNITS 90-120 M <sup>2</sup>	9	44	235	266
Over 40 and up to 80 storeys				
UNITS 60-70 M <sup>2</sup>	9	44	250	282
UNITS 90-120 M <sup>2</sup>	9	44	237	271

## VERTICAL TRANSPORT

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

## BUILDING MANAGEMENT

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

FIRE		MECH.		VERTICAL TRANSPORT		BUILDING MGT.		ELECTRICAL		TOTAL	
\$/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
14	62	107	242	-	-	8	19	119	172	412	763
38	79	478	545	49	85	33	46	250	336	1,049	1,366
56	97	660	865	73	100	86	98	290	416	1,410	1,955
74	97	420	580	185	242	14	57	210	302	1,017	1,464
69	75	205	274	-	-	-	13	161	229	511	700
55	73	198	286	-	-	-	13	182	242	513	703
48	78	172	217	-	-	32	51	169	185	483	631
55	82	197	325	-	-	-	28	224	307	548	867
57	86	242	338	-	-	-	21	155	243	529	782
14	31	172	315	-	-	-	13	110	126	358	572
8	31	14	280	-	-	-	21	86	215	201	744
8	25	14	212	-	-	8	26	86	200	228	693
8	31	14	194	-	-	8	26	79	174	197	655
14	54	165	223	123	156	12	31	144	203	645	912
14	54	163	228	111	146	12	31	133	203	610	888
55	73	201	245	123	167	12	31	159	215	736	988
49	61	190	235	117	156	12	31	159	191	702	908
69	86	228	343	68	90	23	37	159	254	791	1,131
69	86	215	321	68	74	23	37	159	236	778	1,064
74	93	313	400	170	232	23	39	196	255	1,035	1,345
74	93	300	390	170	232	23	39	196	266	1,009	1,335

#### ELECTRICAL

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

# SYDNEY CONSTRUCTION UNIT COSTS

ITEM	CONSTRUCTION COST RANGE		PER
	LOW	HIGH	
<b>HOTELS</b>			
Multi-Storey (excluding basements)			
FIVE STAR	515,000	630,000	BEDROOM
FOUR STAR	390,000	545,000	BEDROOM
THREE STAR	245,000	315,000	BEDROOM
<b>CAR PARKS</b>			
Based on 30 M <sup>2</sup> per car			
OPEN DECK MULTI-STOREY	26,750	43,500	CAR
BASEMENT - CBD	42,000	66,000	CAR
BASEMENT - OTHER THAN CBD	41,500	62,000	CAR
UNDERCROFT - OTHER THAN CBD	20,500	35,750	CAR
<b>AGED CARE</b>			
FACILITY	182,500	237,500	BEDROOM
<b>PRIVATE HOSPITALS</b>			
Low Rise Hospital			
45-60 M <sup>2</sup> GFA/BED	177,500	232,500	BED
55-80 M <sup>2</sup> GFA/BED	297,500	400,000	BED
<b>CINEMAS</b>			
GROUP COMPLEX, 2,000-4,000 SEATS (WARM SHELL)	10,250	14,750	SEAT
<b>HOUSING</b>			
SINGLE AND DOUBLE STOREY DWELLINGS (CUSTOM BUILT) - 325 M <sup>2</sup>	572,500	1,650,000	HOUSE
<b>RESIDENTIAL UNITS (EXCL CARPARK/SITE WORKS)</b>			
WALK-UP UNITS 85-120 M <sup>2</sup> /UNIT	225,000	482,500	UNIT
TOWNHOUSES 90-120 M <sup>2</sup> /UNIT	200,000	505,000	UNIT
<b>MULTI STOREY RESIDENTIAL UNITS</b>			
Up to 10 storeys with lift			
UNITS 60-70 M <sup>2</sup>	210,000	262,500	UNIT
UNITS 90-120 M <sup>2</sup>	245,000	420,000	UNIT
Over 10 and up to 20 storeys			
UNITS 60-70 M <sup>2</sup>	225,000	295,000	UNIT
UNITS 90-120 M <sup>2</sup>	267,500	477,500	UNIT
Over 20 and up to 40 storeys			
UNITS 60-70 M <sup>2</sup>	287,500	357,500	UNIT
UNITS 90-120 M <sup>2</sup>	335,000	525,000	UNIT
Over 40 and up to 80 storeys			
UNITS 60-70 M <sup>2</sup>	330,000	405,000	UNIT
UNITS 90-120 M <sup>2</sup>	407,500	672,500	UNIT

# SYDNEY CONSTRUCTION SITEWORKS COSTS

## LANDSCAPING

	LOW	HIGH	PER
LIGHT LANDSCAPING TO LARGE AREAS WITH MINIMAL PLANTING AND SITE FORMATION BUT EXCLUDING TOPSOIL AND GRASSING	65,000	90,000	HECTARE
DENSE LANDSCAPING AROUND BUILDINGS INCLUDING SHRUBS, PLANTS, TOPSOIL AND GRASSING	150	190	M <sup>2</sup>
GRASSING ONLY TO LARGE AREAS INCLUDING TOPSOIL, SOWING AND TREATING	45	60	M <sup>2</sup>

## CAR PARKS - ON GROUND

Based on 30 M<sup>2</sup> overall area per car with asphalt paving including sub base and sealing.

	LOW	HIGH	PER
LIGHT DUTY PAVING	1,860	4,150	CARSPACE
HEAVY DUTY PAVING TO FACTORY TYPE COMPLEX, LARGE AREA WITH MINIMAL SITE FORMATION, DRAINAGE AND KERB TREATMENT	4,250	5,200	CARSPACE
LIGHT DUTY PAVING TO SHOPPING CENTRE COMPLEX, LARGE AREA WITH MINIMAL SITE FORMATION, AND INCLUDING DRAINAGE AND KERB TREATMENT	4,850	6,700	CARSPACE

## ROADS

Asphalt finish including kerb, channel and drainage.

	LOW	HIGH	PER
RESIDENTIAL ESTATE 6.80 METRES WIDE EXCLUDING FOOTPATH AND NATURE STRIP	1,340	2,150	M
INDUSTRIAL ESTATE 10.4 METRES WIDE INCLUDING MINIMAL TO EXTENSIVE FORMATION	2,000	3,150	M

## SYDNEY 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	120	170	M <sup>2</sup>
SINGLE/DOUBLE STOREY BRICK HOUSE WITH TILED ROOF	125	190	M <sup>2</sup>
SINGLE STOREY FACTORY/ WAREHOUSE WITH REINFORCED CONCRETE GROUND SLAB, TIMBER OR STEEL FRAMED WALLS			
• METAL CLAD	125	150	M <sup>2</sup>
• BRICK CLAD	150	165	M <sup>2</sup>
TWO STOREY OFFICE BUILDING WITH REINFORCED CONCRETE FRAME MASONRY CLADDING AND METAL ROOF	160	190	M <sup>2</sup>
MULTI STOREY OFFICE BUILDING UP TO 15 FLOORS WITH MASONRY CLADDING			
• REINFORCED CONCRETE	225	330	M <sup>2</sup>
• STRUCTURAL STEEL	275	350	M <sup>2</sup>
MULTI-STOREY OFFICE BUILDING UP TO 25 STOREYS, CONSTRUCTED OF STEEL FRAME WITH MASONRY CLADDING	275	390	M <sup>2</sup>

## 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	58,000	110,000	BEDROOM
FOUR STAR RATING	35,250	62,000	BEDROOM
THREE STAR RATING	27,500	51,000	BEDROOM

# SYDNEY 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	960	1,440	1,260	1,800	M <sup>2</sup>
MAJOR COMPANY HEADQUARTERS	1,260	1,860	1,340	2,350	M <sup>2</sup>
SOLICITORS, FINANCIERS	1,480	2,500	2,000	3,800	M <sup>2</sup>
EXECUTIVE AREAS AND FRONT OF HOUSE	-	-	6,300	12,250	M <sup>2</sup>
COMPUTER AREAS	2,800	3,600	2,500	5,600	M <sup>2</sup>

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	2,100	3,600	EACH
SECRETARIAL	3,000	8,100	EACH
TECHNICAL STAFF	3,800	10,500	EACH
EXECUTIVE	9,700	35,500	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	1,040	2,800	M <sup>2</sup>
CBD OFFICES CORE UPGRADE (EXCLUDING LIFTS MODERNISATION)	750	1,880	M <sup>2</sup>

# SYDNEY CONSTRUCTION RECREATIONAL FACILITIES COSTS

## BASKETBALL CENTRE

	LOW	HIGH	PER
CONSISTING OF BRICK WALLS, STEEL PORTAL FRAME AND PURLINS WITH METAL ROOF, TIMBER FLOOR TO PLAYING AREA, PUBLIC SEATING, PUBLIC TOILETS AND CHANGE ROOMS	1,280	1,680	M <sup>2</sup>

## SWIMMING POOL CENTRES

	LOW	HIGH	PER
INCLUDING FOYER, KIOSK, OFFICE, LOCKERS, ADMINISTRATION OFFICES, CHANGE ROOMS	2,200	3,200	M <sup>2</sup>

## 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)	460,000	655,000	EACH
• EXTRA FOR HEATING	25,000	49,000	EACH
• EXTRA OVER FILTRATION AND DOSING PLANT FOR OZONE BASED DOSING SYSTEM	165,000	275,000	EACH
• EXTRA FOR WET DECK	63,000	98,000	EACH
OLYMPIC (50.0 X 21.5 M)	1,800,000	2,575,000	EACH
• EXTRA FOR HEATING	48,000	82,000	EACH
• EXTRA FOR FILTRATION AND DOSING PLANT	315,000	540,000	EACH
• EXTRA OVER FILTRATION AND DOSING PLANT FOR OZONE BASED DOSING SYSTEM	102,900	186,000	EACH

## SMALL BOAT AND YACHT MARINA BERTHS

Floating pontoon walkways serviced with power and water.

	LOW	HIGH	PER
DOUBLE LOADED BERTHS	26,500	38,250	BERTH
SINGLE LOADED BERTHS	33,250	42,750	BERTH
SUPER YACHTS	267,500	357,500	BERTH

# SYDNEY 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	71,000	87,000	COURT
RED POROUS (EN-TOUT-CAS)	28,750	39,000	COURT
SYNTHETIC ACRYLIC (FLEXIPAVE)	48,750	58,000	COURT
ASPHALT (5 MM)	40,000	112,500	COURT
PLEXICUSHION	115,000	132,500	COURT
CONCRETE	46,500	55,000	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	9,000,000	16,400,000	COURSE
SITE REQUIRING ROCK EXCAVATION	15,450,000	20,600,000	COURSE
SWAMPY SITE REQUIRING DREDGING FOR LAKES, ETC. AND EXTENSIVE FILL	18,150,000	42,150,000	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	55	65	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	6,900	14,750	SEAT

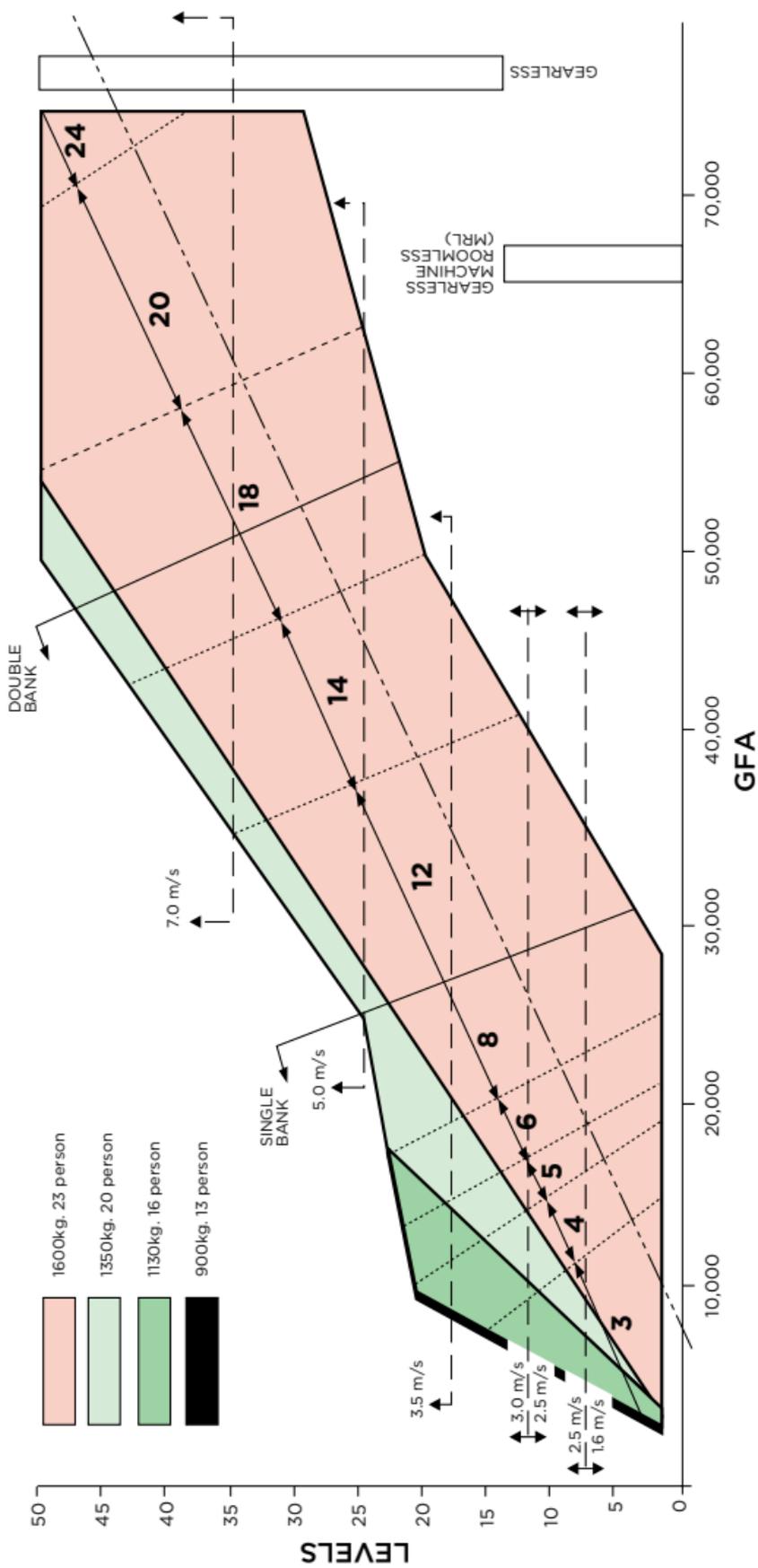
# SYDNEY CONSTRUCTION VERTICAL TRANSPORTATION

## 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.



# SYDNEY CONSTRUCTION VERTICAL TRANSPORTATION

APPLICATION	LIFT TYPE	SPEED M/S	NO. OF FLOORS SERVED	BASE COST \$		ADDITIONAL FLOOR	EXPRESS FLOOR
				LOW	HIGH	RATE	RATE
OFFICE & RESIDENTIAL	ELECTRO-HYDRAULIC PASSENGER	0.5	2	107,000	125,000	13,400	8,400
	GEARLESS TO 17 PASSENGER	1	5	137,000	157,000	11,400	7,300
	GEARLESS UP TO 17 PASSENGER	1.6	8	176,000	202,000	11,400	7,300
	GEARLESS	2.5	10	470,000	535,000	14,300	9,000
	GEARLESS	3.5	10	520,000	555,000	14,300	9,000
	GEARLESS	4	10	550,000	580,000	14,300	9,000
	GEARLESS	5	10	570,000	615,000	14,300	9,000
	GEARLESS	6	10	610,000	640,000	14,300	9,000
	GEARLESS	7	10	660,000	705,000	14,300	9,000
	GEARLESS	8	10	740,000	804,000	14,800	9,600
HOSPITAL	GEARED UP TO 40 PASSENGER	2	5	435,000	515,000	16,400	10,700
	GEARLESS	2.5	10	540,000	575,000	15,400	10,700
LARGE GOODS	GEARLESS MRL TO 2,000KG	1.6	10	365,000	400,000	15,400	10,700
	ELECTRO-HYDRAULIC TO 5,000KG	0.5	2	295,000	350,000	15,900	10,700
	GEARLESS 2,500KG	2.5	10	570,000	620,000	15,300	8,900
ESCALATORS	RISE 2,600 TO 5,000MM	0.5	-	180,000	275,000	-	-
MOVING WALKS	2,500 TO 5,000MM	0.5	-	355,000	430,000	-	-
SERVICE LIFT	BENCH HEIGHT UNIT	0.2	3	34,000	39,000	4,900	1,500
	LARGER UNIT	0.2	3	50,000	58,000	5,500	1,700
DISABLED PLATFORM LIFT	TO 1,000MM	0.1	2	34,000	39,000	-	-
	1,000 TO 4,000MM	0.1	2	40,000	53,000	-	-

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

# SYDNEY DEVELOPMENT

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# SYDNEY DEVELOPMENT STAMP DUTIES

Duty in NSW is liable for a sale or transfer of land (including improvements). Duty is calculated on the contract value of the transaction.

As of 1 July 2017, an additional 8 percent surcharge to the duty levied on land transfers by foreign persons was legislated.

From 20 June 2017, permanent residents, including New Zealand citizens holding a special category visa, will be exempt from the surcharge on purchaser duty and land tax on their principal place of residence, if they occupy the home for a continuous period of 200 days within 12 months of purchase.

An exemption for first home buyers applies to contracts executed on or after 1 July 2017 for properties up to \$650,000. For properties valued between \$650,000 and \$800,000, duty concessions will apply.

VALUE OF TRANSACTION	RATE OF DUTY
\$0 TO \$14,000	\$1.25 FOR EVERY \$100 OR PART OF THE VALUE
\$14,001 TO \$30,000	\$175 PLUS \$1.50 FOR EVERY \$100, THAT THE VALUE > \$14,000
\$30,001 TO \$80,000	\$415 PLUS \$1.75 FOR EVERY \$100, THAT THE VALUE > \$30,000
\$80,001 TO \$300,000	\$1,290 PLUS \$3.50 FOR EVERY \$100, THAT THE VALUE > \$80,000
\$300,001 TO \$1,000,000	\$8,990 PLUS \$4.50 FOR EVERY \$100, THAT THE VALUE > \$300,000
OVER \$1,000,000	\$40,490 PLUS \$5.50 FOR EVERY \$100, THAT THE VALUE > \$1,000,000
<b>PREMIUM PROPERTY DUTY</b> OVER \$3,000,000	\$150,490 PLUS \$7.00 FOR EVERY \$100, THAT THE VALUE > \$3,000,000

A **Foreign Person** means:

- an individual not ordinarily resident in Australia; or
- a corporation in which an individual not ordinarily resident in Australia, a foreign corporation or a foreign government holds a substantial interest; or
- a corporation in which 2 or more persons, each of whom is an individual not ordinarily resident in Australia, a foreign corporation or a foreign government, hold an aggregate substantial interest; or
- the trustee of a trust in which an individual not ordinarily resident in Australia, a foreign corporation or a foreign government holds a substantial interest; or the trustee of a trust in which 2 or more persons, each of whom is an individual not ordinarily resident in Australia, a foreign corporation or a foreign government, hold an aggregate substantial interest

This definition does not include an Australian Citizen, irrespective of where they reside.

For full and further details refer to [www.osr.nsw.gov.au](http://www.osr.nsw.gov.au).

# SYDNEY DEVELOPMENT LAND TAX

Land tax is a tax levied on the owners of land in NSW as at midnight on 31 December of each year, i.e. assessment for the 2018 year is based on the assessed value of property on 31 December 2017. Land tax applies to land regardless of whether or not income is earned from the land.

For land tax in NSW, an owner could be any of the following:

- sole owner
- joint owners
- a company (includes a company in an approved shared equity scheme)
- trustee of a trust
- beneficiary of a trust which is not a special trust
- society or organisation whose land is not exempt from land tax
- unit holders with interests in a unit trust which is entitled to the land tax threshold
- trustees of superannuation funds

The land tax threshold does not apply to special trusts. Examples of special trusts include most family trusts, discretionary trusts, most unit trusts, and some trusts created by a will.

If the combined value of all land holdings does not exceed the threshold, no land tax is payable.

Generally an owner's principal place of residence is exempt for land tax.

Foreign persons who own residential land in NSW, must pay an additional surcharge of two per cent from the 2018 land tax year onwards.

Land Tax thresholds and rates for 2019 have not yet been released. 2018 thresholds and rates were:

TOTAL UNIMPROVED VALUE OF LAND	2018 TAX RATES
BELOW \$629,000	NIL
\$629,000-\$3,846,000	\$100 PLUS 1.6% OF LAND VALUE
ABOVE \$3,846,000	\$51,572 FOR THE FIRST \$3,846,000 THEN 2% OVER LAND VALUE IN EXCESS OF \$3,846,000

For further details refer to [www.osr.nsw.gov.au](http://www.osr.nsw.gov.au).

# SYDNEY DEVELOPMENT PLANNING - CAR PARKING

The following car parking information is derived from the Sydney Local Environment Plan 2012, Part 7 - Local provisions - general, Division 1, which details the maximum car parking spaces to be provided to service particular uses of land. Land categories A, B & C are identified in the Land Use and Transport Integration map and Land Categories D, E & F are identified in the Public Transport Accessibility level map, both forming part of the Plan.

TYPE OF PROPOSED USE	MAXIMUM PARKING SPACES PERMITTED																																							
DWELLING - HOUSES	<p>LAND CATEGORY A - 1 SPACE FOR EACH DWELLING</p> <p>LAND CATEGORY B - 2 SPACES FOR EACH DWELLING HAVING MORE THAN 2 BEDROOMS AND 1 SPACE FOR EACH OTHER DWELLING</p> <p>LAND CATEGORY C - 2 SPACES FOR EACH DWELLING</p>																																							
RESIDENTIAL BUILDINGS (INCLUDING HOUSING FOR AGED PERSONS)	<table border="1"> <thead> <tr> <th rowspan="2">NO. OF CAR SPACES (CUMULATIVE) DWELLINGS</th> <th colspan="3">LAND CATEGORY</th> </tr> <tr> <th>A</th> <th>B</th> <th>C</th> </tr> </thead> <tbody> <tr> <td>STUDIO</td> <td>0.1</td> <td>0.2</td> <td>0.4</td> </tr> <tr> <td>1 BEDROOM</td> <td>0.3</td> <td>0.4</td> <td>0.5</td> </tr> <tr> <td>2 BEDROOMS</td> <td>0.7</td> <td>0.8</td> <td>1.0</td> </tr> <tr> <td>3+ BEDROOMS</td> <td>1.0</td> <td>1.1</td> <td>1.2</td> </tr> <tr> <td colspan="4"><b>VISITORS</b></td> </tr> <tr> <td>FIRST 30 DWELLINGS</td> <td>N/A</td> <td>0.167</td> <td>0.2</td> </tr> <tr> <td>FROM 30 - 70 DWELLINGS</td> <td>N/A</td> <td>0.1</td> <td>0.125</td> </tr> <tr> <td>FROM +70 DWELLINGS</td> <td>N/A</td> <td>0.05</td> <td>0.067</td> </tr> </tbody> </table>	NO. OF CAR SPACES (CUMULATIVE) DWELLINGS	LAND CATEGORY			A	B	C	STUDIO	0.1	0.2	0.4	1 BEDROOM	0.3	0.4	0.5	2 BEDROOMS	0.7	0.8	1.0	3+ BEDROOMS	1.0	1.1	1.2	<b>VISITORS</b>				FIRST 30 DWELLINGS	N/A	0.167	0.2	FROM 30 - 70 DWELLINGS	N/A	0.1	0.125	FROM +70 DWELLINGS	N/A	0.05	0.067
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PLACES OF PUBLIC WORSHIP AND ENTERTAINMENT FACILITIES	<p>(A) 1 SPACE FOR EVERY 10 SEATS, OR</p> <p>(B) 1 SPACE FOR EVERY 30 M<sup>2</sup> OF THE GROSS FLOOR AREA OF THE BUILDING USED FOR THOSE PURPOSES</p>																																							
SERVICED APARTMENTS, HOTEL OR MOTEL	<p>1 SPACE FOR EVERY 4 BEDROOMS UP TO 100 BEDROOMS, AND</p> <p>1 SPACE FOR EVERY 5 BEDROOMS MORE THAN 100 BEDROOMS</p>																																							
OTHER USES	REFER TO SPECIFIC PROVISIONS WITHIN ENVIRONMENTAL PLAN																																							

# SYDNEY DEVELOPMENT LAND VALUES

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

LOCATION (COSTS PER M <sup>2</sup> )	\$/M <sup>2</sup>	
	LOW	HIGH
<b>OFFICES</b>		
CBD HIGH RISE PREMIUM	23,250	41,000
NORTH SYDNEY MID RISE A GRADE	12,500	17,775
PARAMATTA MID RISE A GRADE	7,500	9,600
<b>RETAIL</b>		
PITT STREET MALL	40,000	85,000
SECONDARY CBD	10,000	50,000
NEIGHBOURHOOD SHOPPING CENTRE	2,500	7,000
SUBURBAN STRIP SHOPPING		
<b>INDUSTRIAL (1HA TO 5HA)</b>		
WEST (3,000-5,000 M <sup>2</sup> )	600	650
NORTH SHORE (3,000-5,000 M <sup>2</sup> )	900	1,250
SOUTHERN (5,000-10,000 M <sup>2</sup> )	1,000	1,300

Prepared in association with Savills.

# SYDNEY 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.

	OFFICES			INDUSTRIAL
	CBD	NORTH SYDNEY	SUBURBAN OFFICES	WEST PRIME
1988	366	280	185	100
1989	394	300	230	103
1990	353	300	252	110
1991	282	290	261	105
1992	214	260	270	98
1993	175	220	263	98
1994	182	210	252	100
1995	235	220	247	105
1996	293	225	242	110
1997	326	240	243	120
1998	355	275	247	120
1999	366	300	252	118
2000	428	350	254	113
2001	439	390	260	112
2002	440	193	212	117
2003	428	195	174	113
2004	418	186	174	113
2005	366	164	202	115
2006	383	194	194	118
2007	399	257	192	118
2008	578	338	233	115
2009	457	321	219	105
2010	449	296	221	105
2011	468	372	221	108
2012	474	406	235	110
2013	462	419	289	110
2014	466	424	293	110
2015	462	428	295	110
2016	547	551	309	110
2017	710	550	330	110
2018	750	600	345	115

Prepared in association with Savills.

# SYDNEY DEVELOPMENT OFFICE SECTOR DATA

## SYDNEY CBD VACANCY RATES - Q2 2018

PCA GRADE	STOCK M <sup>2</sup>	VACANCY M <sup>2</sup>	VAC % JUN-18
PREMIUM	1,162,100	59,300	5.1
GRADE A	1,843,400	84,200	4.6
SECONDARY	2,030,700	88,700	4.4
<b>TOTAL</b>	<b>5,036,200</b>	<b>232,200</b>	<b>4.6</b>

## NORTH SYDNEY VACANCY RATES - Q2 2018

PCA GRADE	STOCK M <sup>2</sup>	VACANCY M <sup>2</sup>	VAC % JUN-18
PRIME	1,167,200	52,900	4.5
SECONDARY	1,098,100	93,800	8.5
<b>TOTAL</b>	<b>2,265,300</b>	<b>146,700</b>	<b>6.5</b>

## PARRAMATTA VACANCY RATES - Q2 2018

PCA GRADE	STOCK M <sup>2</sup>	VACANCY M <sup>2</sup>	VAC % JUN-18
PRIME	324,600	3,200	1.0
SECONDARY	395,000	19,600	5.0
<b>TOTAL</b>	<b>719,600</b>	<b>22,900</b>	<b>3.2</b>

Source: PCA/Savills Research.

# SYDNEY DEVELOPMENT OFFICE SECTOR DATA

## KEY MARKET INDICATORS - Q3 2018

SYDNEY CBD	PCA PREMIUM	
	LOW	HIGH
RENTAL - GROSS FACE	1,265	1,665
RENTAL - NET FACE	1,050	1,450
INCENTIVE LEVEL (%) GROSS	18	21
RENTAL - NET EFFECTIVE	800	1,125
OUTGOINGS - OPERATING	140	155
OUTGOINGS - STATUTORY	55	75
OUTGOINGS - TOTAL	195	230
TYPICAL LEASE TERM	8	10
YIELD - MARKET (% NET FACE RENTAL)	4.38	4.75
IRR (%)	6.38	6.63
CARS PERMANENT RESERVED (\$/PCM)	990	1,080
CARS PERMANENT (\$/PCM)	NA	NA
OFFICE CAPITAL VALUES	22,500	30,000

NORTH SHORE	NORTH SYDNEY GRADE A	
	LOW	HIGH
RENTAL - GROSS FACE	915	1,040
RENTAL - NET FACE	775	900
INCENTIVE LEVEL (%) NET	20	25
RENTAL - NET EFFECTIVE	600	700
OUTGOINGS - OPERATING	90	110
OUTGOINGS - STATUTORY	35	40
OUTGOINGS - TOTAL	125	150
TYPICAL LEASE TERM	7	10
YIELD - MARKET (% NET FACE RENTAL)	5.00	5.50
IRR (%)	6.63	7.00
CARS PERMANENT RESERVED (\$/PCM)	550	650
CARS PERMANENT (\$/PCM)	500	550
OFFICE CAPITAL VALUES	13,000	17,500

All rates are \$/M<sup>2</sup> unless otherwise noted.

Source: Savills Research.

PCA GRADE A		PCA GRADE B	
LOW	HIGH	LOW	HIGH
1,160	1,330	1,000	1,150
980	1,150	850	1,000
15	20	15	20
775	915	675	800
110	130	80	110
50	65	45	60
160	195	125	170
5	10	5	7
4.50	5.00	4.50	5.25
6.50	6.75	6.25	6.75
900	1,070	720	790
NA	NA	NA	NA
18,500	22,000	13,500	20,000

NORTH SYDNEY GRADE B		MACQUARIE PARK GRADE A	
LOW	HIGH	LOW	HIGH
805	905	435	535
675	775	320	420
20	30	25	30
505	580	230	305
80	100	65	85
35	40	35	45
115	140	100	130
3	7	5	8
5.50	6.00	5.50	6.00
7.00	7.50	6.75	7.25
475	550	225	275
400	500	NA	NA
11,000	12,500	6,500	7,500

# SYDNEY DEVELOPMENT RETAIL SECTOR DATA

## KEY MARKET INDICATORS - Q2 2018

SYDNEY ENCLOSED CENTRES	REGIONAL	
	LOW	HIGH
DEPARTMENT STORE RENT (GROSS)	100	250
DDS RENT (\$/M <sup>2</sup> ) GROSS	150	275
SUPERMARKET RENT (GROSS)	250	550
SPECIALTY TENANT (NET) RENTAL	1,160	2,815
MINI-MAJOR RENT (GROSS)	400	1,750
YIELD - MARKET (%)	4.00	6.75
IRR (%)	6.25	7.75
OUTGOINGS - OPERATING	135	210
OUTGOINGS - STATUTORY	25	45
OUTGOINGS - TOTAL	160	255
CAPITAL VALUES	8,500	17,000

## RETAIL SALES ACTIVITY

PROPERTY SALES	TYPE
CHATSWOOD CHASE (49%)	REGIONAL
QVB, THE GALERIES, THE STRAND ARCADE	CITY CENTRE
EAST VILLAGE (50%)	SUB REGIONAL
HOME HQ ARTARMON	LARGE FORMAT
PARK SYDNEY	OTHER
PITTWATER PLACE	NEIGHBOURHOOD
SOUL PATTINSON	SHOPS
TOORMINA GARDEN SHOPPING CENTRE	SUB REGIONAL
STOCKLAND WALLSEND	SUB REGIONAL
BATHURST CITY CENTRE	NEIGHBOURHOOD
CHESTER SQUARE SHOPPING CENTRE	NEIGHBOURHOOD
BUNNINGS CARINGBAH	LARGE FORMAT
BUNNINGS BONNYRIGG	LARGE FORMAT
COLES CROWS NEST	NEIGHBOURHOOD
WOODCROFT VILLAGE	NEIGHBOURHOOD

All rates are \$/M<sup>2</sup> unless otherwise noted.

Source: Savills Research.

SUB REGIONAL		NEIGHBOURHOOD		LARGE FORMAT	
LOW	HIGH	LOW	HIGH	LOW	HIGH
150	275				
250	550	250	550		
765	1,585	620	1,395	175	565
300	1,000	200	650		
5.25	7.25	5.00	7.75	5.50	8.00
6.75	8.00	6.50	8.00	7.50	8.75
115	150	100	150	10	25
25	35	20	45	15	35
140	185	120	195	25	60
3,500	7,500	3,000	10,000	1,500	5,800

PRICE (\$M)	DATE	GLA (M <sup>2</sup> )	\$/M <sup>2</sup>
562.30	NOV-17	63,715	18,011
556.00	NOV-17	34,314	32,407
155.30	AUG-17	33,000	9,412
140.10	DEC-17	22,199	6,311
100.00	MAR-18	10,000	10,000
98.00	OCT-17	12,094	8,103
95.50	MAR-18	1,290	74,031
83.30	JAN-18	20,898	3,986
81.00	MAY-18	12,009	6,745
71.15	OCT-17	12,559	5,665
68.50	NOV-17	8,270	8,283
59.60	JUL-17	13,604	3,746
45.50	JUL-17	12,185	2,994
45.00	MAY-18	4,493	10,016
43.85	SEP-17	4,669	9,408

# SYDNEY DEVELOPMENT INDUSTRIAL SECTOR DATA

## KEY MARKET INDICATORS – Q3 2018

### SOUTH SYDNEY (ALEXANDRIA, BOTANY, BANKSMEADOW, ROSEBERY)

	PRIME		SECONDARY	
	LOW	HIGH	LOW	HIGH
RENTAL NET FACE	145	220	125	150
INCENTIVES	5	8	8	10
YIELD – MARKET (%)	4.75	5.75	6.00	6.50
IRR (%)	6.50	7.00	7.00	7.25
OUTGOINGS – TOTAL	45	60	45	55
CAPITAL VALUES	3,000	4,500	2,000	2,500
LAND VALUES 3,000–5,000 M <sup>2</sup>	1,250 (LOW)		1,750 (HIGH)	
LAND VALUES 10,000–50,000 M <sup>2</sup>	900 (LOW)		1,000 (HIGH)	

### NORTH SHORE (ARTARMON, LANE COVE, ST LEONARDS)

	PRIME		SECONDARY	
	LOW	HIGH	LOW	HIGH
RENTAL NET FACE	135	190	120	130
INCENTIVES (%)	10	15	15	20
YIELD – MARKET (%)	5.75	6.75	7.00	7.75
IRR (%)	7.25	7.75	7.50	8.00
OUTGOINGS – TOTAL	40	50	40	50
CAPITAL VALUES	2,250	3,000	1,750	2,250
LAND VALUES 3,000–5,000 M <sup>2</sup>	900 (LOW)		1,250 (HIGH)	
LAND VALUES 10,000–50,000 M <sup>2</sup>	750 (LOW)		900 (HIGH)	

### WESTERN SYDNEY (ARDELL PARK, EASTERN CREEK, ERSKINE PARK, GREYSTANES, HUNTINGWOOD, SMITHFIELD, WETHERILL PARK, YENNORA)

	PRIME		SECONDARY	
	LOW	HIGH	LOW	HIGH
RENTAL NET FACE	110	135	90	100
INCENTIVES (%)	8	20	8	15
YIELD – MARKET (%)	5.25	6.00	6.25	7.00
IRR (%)	6.75	7.25	7.25	7.75
OUTGOINGS – TOTAL	20	25	20	25
CAPITAL VALUES	1,750	2,250	1,200	1,700
LAND VALUES 3,000–5,000 M <sup>2</sup>	650 (LOW)		700 (HIGH)	
LAND VALUES 10,000–50,000 M <sup>2</sup>	550 (LOW)		650 (HIGH)	
LAND VALUES 10 HA AND ABOVE	525 (LOW)		575 (HIGH)	

All rates are \$/M<sup>2</sup> unless otherwise noted.

Source: Savills Research.

# SYDNEY DEVELOPMENT CONSTRUCTION WORK DONE

## ANNUAL VALUE OF CONSTRUCTION WORK DONE IN NEW SOUTH WALES

YEAR ENDING	RESIDENTIAL	NON-RESIDENTIAL	ENGINEERING	TOTAL CONSTRUCTION
JUN-1990	4,973	5,788	3,592	<b>14,353</b>
JUN-1991	4,715	5,854	4,126	<b>14,695</b>
JUN-1992	4,631	4,167	4,015	<b>12,814</b>
JUN-1993	5,245	3,450	4,016	<b>12,711</b>
JUN-1994	5,614	3,203	4,180	<b>12,997</b>
JUN-1995	6,348	3,343	4,687	<b>14,378</b>
JUN-1996	5,917	3,941	5,212	<b>15,070</b>
JUN-1997	5,802	4,366	5,010	<b>15,178</b>
JUN-1998	6,913	5,199	5,236	<b>17,348</b>
JUN-1999	8,032	5,963	5,597	<b>19,593</b>
JUN-2000	9,222	6,267	6,231	<b>21,720</b>
JUN-2001	7,021	4,189	6,156	<b>17,366</b>
JUN-2002	8,528	4,342	5,598	<b>18,468</b>
JUN-2003	10,667	5,132	6,484	<b>22,283</b>
JUN-2004	11,773	5,981	7,888	<b>25,642</b>
JUN-2005	11,657	6,448	9,340	<b>27,446</b>
JUN-2006	10,351	7,432	10,524	<b>28,307</b>
JUN-2007	9,798	7,913	10,825	<b>28,536</b>
JUN-2008	9,770	8,913	12,342	<b>31,024</b>
JUN-2009	9,795	8,676	16,316	<b>34,786</b>
JUN-2010	10,319	10,231	16,182	<b>36,732</b>
JUN-2011	11,480	9,840	18,470	<b>39,789</b>
JUN-2012	10,874	7,734	21,477	<b>40,085</b>
JUN-2013	13,074	8,348	23,222	<b>44,644</b>
JUN-2014	14,757	9,776	19,095	<b>43,628</b>
JUN-2015	17,718	10,821	16,384	<b>44,923</b>
JUN-2016	21,906	11,816	16,936	<b>50,659</b>
JUN-2017	25,620	11,593	19,060	<b>56,273</b>
JUN-2018	27,851	13,057	24,511	<b>65,418</b>

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

# SYDNEY DEVELOPMENT CONSTRUCTION WORK DONE

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

YEAR ENDING	COMMERCIAL	INDUSTRIAL	RETAIL	EDUCATION	HEALTH
JUN-2002	1,160	674	756	550	380
JUN-2003	1,229	761	1,052	626	376
JUN-2004	1,403	981	1,335	576	273
JUN-2005	1,542	1,126	1,372	637	255
JUN-2006	1,980	1,287	1,517	811	231
JUN-2007	2,247	1,245	1,341	794	525
JUN-2008	2,485	1,316	1,607	805	505
JUN-2009	2,343	1,331	1,836	868	624
JUN-2010	1,789	761	1,760	3,547	787
JUN-2011	1,804	912	1,872	2,843	717
JUN-2012	1,615	1,173	1,549	1,204	539
JUN-2013	1,901	1,154	1,485	1,250	734
JUN-2014	2,165	1,170	1,910	1,491	1,072
JUN-2015	2,683	1,224	1,891	1,242	1,111
JUN-2016	3,061	1,099	2,280	1,069	913
JUN-2017	2,389	1,767	1,637	1,092	1,140
JUN-2018	3,159	1,621	1,643	1,819	1,007

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

AGED CARE	HOTELS	ENTERTAINMENT & RECREATION	OTHER	TOTAL
149	134	356	183	<b>4,342</b>
151	263	390	284	<b>5,132</b>
324	411	413	265	<b>5,981</b>
343	472	440	262	<b>6,448</b>
318	547	401	340	<b>7,432</b>
374	369	448	570	<b>7,913</b>
500	310	681	703	<b>8,913</b>
429	272	594	379	<b>8,676</b>
383	210	577	417	<b>10,231</b>
286	245	646	513	<b>9,840</b>
248	366	522	518	<b>7,734</b>
305	306	650	564	<b>8,348</b>
335	379	684	571	<b>9,776</b>
535	772	746	618	<b>10,821</b>
735	768	1,261	630	<b>11,816</b>
857	977	820	913	<b>11,593</b>
706	1,086	914	1,101	<b>13,057</b>

# SYDNEY DEVELOPMENT CONSTRUCTION WORK DONE

## ANNUAL VALUE OF RESIDENTIAL BUILDING WORK DONE IN NEW SOUTH WALES

YEAR ENDING	NEW HOUSES	NEW APARTMENTS & SEMI DETACHED HOUSING	ALTERATIONS & ADDITIONS INCLUDING CONVERSIONS	TOTAL RESIDENTIAL
JUN-1990	2,818	1,181	974	<b>4,973</b>
JUN-1991	2,544	1,134	1,037	<b>4,715</b>
JUN-1992	2,661	1,028	942	<b>4,631</b>
JUN-1993	2,850	1,404	991	<b>5,245</b>
JUN-1994	3,092	1,466	1,055	<b>5,614</b>
JUN-1995	3,151	1,989	1,207	<b>6,348</b>
JUN-1996	2,839	1,920	1,158	<b>5,917</b>
JUN-1997	2,800	1,914	1,087	<b>5,802</b>
JUN-1998	3,243	2,334	1,337	<b>6,913</b>
JUN-1999	3,589	2,996	1,448	<b>8,032</b>
JUN-2000	4,400	3,215	1,607	<b>9,222</b>
JUN-2001	3,315	2,469	1,233	<b>7,021</b>
JUN-2002	4,000	3,012	1,516	<b>8,528</b>
JUN-2003	4,679	4,128	1,861	<b>10,667</b>
JUN-2004	4,901	4,704	2,167	<b>11,773</b>
JUN-2005	4,797	4,621	2,239	<b>11,657</b>
JUN-2006	4,389	3,802	2,160	<b>10,351</b>
JUN-2007	4,309	3,417	2,072	<b>9,798</b>
JUN-2008	4,283	3,330	2,156	<b>9,770</b>
JUN-2009	4,391	3,271	2,133	<b>9,795</b>
JUN-2010	4,915	3,225	2,179	<b>10,319</b>
JUN-2011	5,167	3,920	2,393	<b>11,480</b>
JUN-2012	4,981	3,672	2,221	<b>10,874</b>
JUN-2013	5,773	5,116	2,185	<b>13,074</b>
JUN-2014	6,277	6,190	2,289	<b>14,757</b>
JUN-2015	7,576	7,464	2,678	<b>17,718</b>
JUN-2016	8,466	10,624	2,816	<b>21,906</b>
JUN-2017	9,705	12,716	3,198	<b>25,620</b>
JUN-2018	10,257	14,508	3,086	<b>27,851</b>

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

# SYDNEY DEVELOPMENT DWELLING COMMENCEMENTS

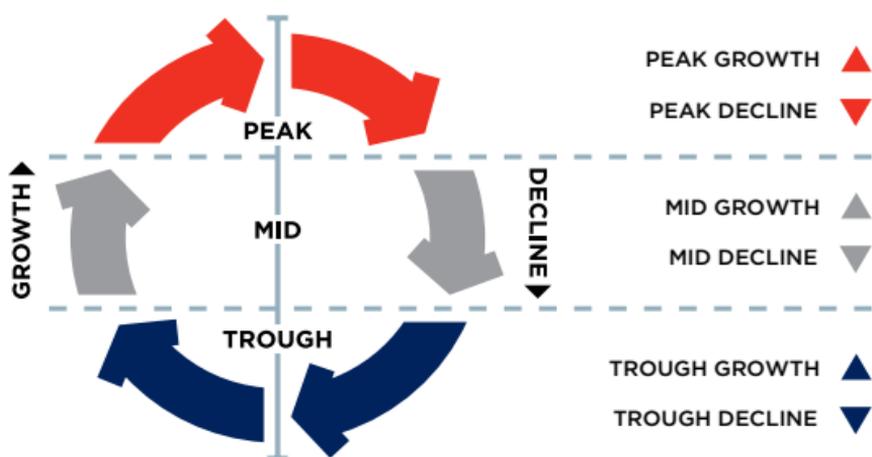
## ANNUAL NUMBER OF DWELLING COMMENCEMENTS IN NEW SOUTH WALES

YEAR ENDING	NEW HOUSES	NEW APARTMENTS & SEMI DETACHED HOUSING	TOTAL RESIDENTIAL
JUN-1990	26,233	13,482	40,586
JUN-1991	23,185	12,307	36,207
JUN-1992	26,387	14,351	41,570
JUN-1993	27,398	17,064	45,614
JUN-1994	29,162	18,019	49,322
JUN-1995	28,222	23,271	53,593
JUN-1996	23,058	17,226	41,286
JUN-1997	23,385	18,681	43,733
JUN-1998	26,764	19,852	48,437
JUN-1999	27,548	20,821	49,728
JUN-2000	30,754	19,430	50,907
JUN-2001	17,621	14,742	33,218
JUN-2002	25,512	20,631	47,337
JUN-2003	24,696	22,986	49,112
JUN-2004	22,933	21,662	45,689
JUN-2005	19,982	18,834	39,611
JUN-2006	16,160	16,306	32,921
JUN-2007	16,055	13,755	30,318
JUN-2008	15,927	15,264	31,789
JUN-2009	13,491	10,229	24,070
JUN-2010	17,646	15,189	33,222
JUN-2011	16,040	15,851	32,309
JUN-2012	15,594	14,878	30,827
JUN-2013	18,951	22,816	42,377
JUN-2014	22,155	24,458	47,595
JUN-2015	25,309	31,450	57,746
JUN-2016	27,466	40,819	69,693
JUN-2017	29,458	43,900	74,417
JUN-2018	30,390	39,573	70,843

Source: ABS 8752.0 (Number).

# SYDNEY 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.

SYDNEY	Q2 2016	Q4 2016	Q2 2017	Q4 2017	Q2 2018	Q4 2018
HOUSES	▲	▲	▲	▲	▼	▲
APARTMENTS	▲	▲	▲	▲	▼	▼
OFFICES	▲	▲	▲	▲	▲	▲
INDUSTRIAL	▼	▼	▼	▼	▲	▲
RETAIL	▼	▼	▼	▼	▲	▲
HOTEL	▲	▲	▲	▲	▲	▲
CIVIL	▲	▲	▼	▲	▲	▲

# 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		QUEENSLAND		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:

$$\text{where: } C_{cc} = B_{cc} \times \left(\frac{C_r}{C_b}\right)^{-1}$$

$C_{cc}$  = Compared city cost  
 $B_{cc}$  = Base city cost

$C_r$  = Relativity of compared city  
 $C_b$  = Relativity of base city

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.  $\left(\frac{100}{83}\right)$  and Perth is 17.4% cheaper than Sydney i.e.  $\left(\frac{100}{121}\right)$

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

ADELAIDE 100		BRISBANE 100		CANNBERRA 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

MELBOURNE 100		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.

TYPE OF CBD OFFICE BUILDING	EFFICIENCY		
	BASEMENTS AND CAR PARKS		
	INCLUDED %	EXCLUDED %	OFFICE FLOORS %
<b>PRESTIGE</b>			
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
<b>INVESTMENT</b>			
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
<b>INVESTMENT, OTHER THAN</b>			
UP TO 10 STOREYS	70-75	82-86	87-92
10 TO 25 STOREYS	65-70	77-82	82-87

## PLANT ROOM SPACE

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

## REINFORCEMENT RATIOS

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

	AVE KG/M <sup>3</sup>		AVE KG/M <sup>3</sup>
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
<b>RETAINING WALLS</b>			
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.

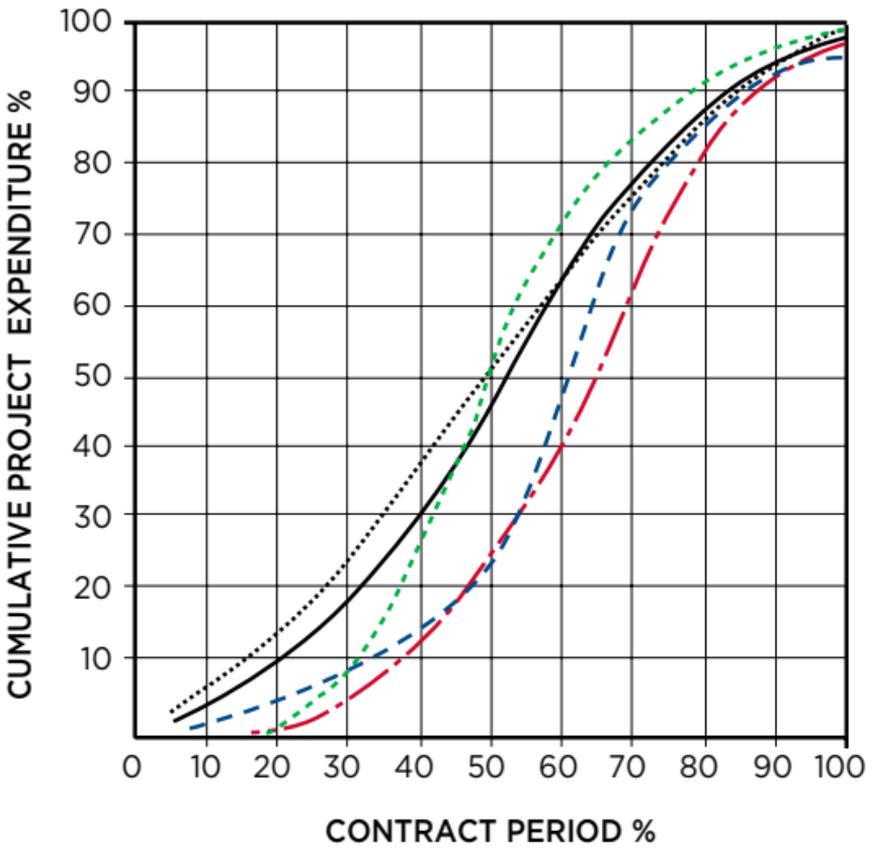
PRELIMINARIES	40	10	50
DEMOLISHER	85		15
EXCAVATOR	32	15	53
PILER	20	50	30
IN SITU CONCRETOR	25		75
FORMWORKER	70		30
REINFORCEMENT FIXER	20		80
PRECAST CONCRETOR	20		80
BRICKLAYER & BLOCKLAYER	50		50
MASON	10		90
ASPHALTOR	40		60
STRUCTURAL STEELWORK	60		40
METALWORKER	20		80
SUSPENDED CEILING FIXER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



- ..... BUILDERS WORK
- MECHANICAL SERVICES
- LIFT SERVICES
- .-.-.- ELECTRICAL SERVICES
- OVERALL PROJECT

# BENCHMARKS

## COMMON INDUSTRY ACRONYMS

### PROJECT MANAGEMENT

AA	Architects Advice
ABIC	Australian Building Industry Contracts
AI	Architects Instruction
AIA	Australian Institute of Architects
BCA	Building Code of Australia
BOQ	Bill of Quantities
BP	Building Permit
BS	Building Surveyor
CA	Contract Administration
CAN	Consultants Advice Notice
DA	Development Application
DD	Design Development
DWG	Drawing (also an Autocad file format)
EBD	Evidence Based Design
ESD	Environmentally Sustainable Design
PI	Professional Indemnity (Insurance)
PM	Project Manager
QS	Quantity Surveyor
RCP	Reflected Ceiling Plan
RFI	Request for Information
SD	Schematic Design

### ARCHITECTURAL DRAWINGS

ABS	Acrylonitrile Butadiene Styrene (Edging)
AS	Australian Standards
COL	Column
CTS	Centres (Spacing)
DP	Downpipe
ENS	Ensuite
EX	Existing
FC	Fibre Cement (Sheet)
FCL	Finished Ceiling Level
FFL	Finished Floor Level
FR	Fire Rated
GFA	Gross Floor Area
HMR	Highly Moisture Resistant (Particleboard)
KDHW	Kiln Dried Hardwood
MDF	Medium Density Fibreboard
PB	Plasterboard
RL	Relative Level
SS	Stainless Steel
TYP	Typical
VOC	Volatile Organic Compound
WC	Water Closet (Toilet)

### LAND SURVEYS

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

### STRUCTURAL DRAWINGS

CFW	Continuous Fillet Weld
CHS	Cylindrical Hollow Section
CJ	Construction Joint
EA	Equal Angle
PFC	Parallel Flange Channel
RB	Roof Beam
RHS	Rectangular Hollow Section
SB	Sill Beam
SHS	Square Hollow Section
TB	Tie Beam
UA	Unequal Angle
UB	Universal Beam
UC	Universal Column
WT	Wall Tie

### HYDRAULIC DRAWINGS

DCW	Domestic Cold Water
DHW	Domestic Hot Water
FH	Fire Hydrant
FHR	Fire Hose Reel
FIP	Fire Indicator Panel
FS	Fire Service
FW	Floorwaste
HWS	Hot Water System
TD	Tundish
TMV	Thermostatic Mixing Valve
UPVC	Unplasticated Polyvinyl Chloride (Pipework)
VP	Vent Pipe

### MECHANICAL DRAWINGS

A/C	Air Conditioning
A/P	Access Panel
ACU	Air Conditioning Unit
AHU	Air Handling Unit
CU	Condensing Unit
FCU	Fan Coil Unit
FD	Fire Damper
R/A	Return Air
S/A	Supply Air
SD	Smoke Damper

### ELECTRICAL DRAWINGS

DB	Distribution Board
DGPO	Double General Power Outlet
GPO	General Power Outlet
MSB	Main Switchboard
RCD	Residual Current Device
SB	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:
  - 3.2.2.1 window mullions
  - 3.2.2.2 window frames
  - 3.2.2.3 structural columns
  - 3.2.2.4 engaged perimeter columns or piers
  - 3.2.2.5 fire hose reels attached to walls
  - 3.2.2.6 additional facilities specially constructed for or used by individual tenants that are not covered in section 3.2.3
- 3.2.3

## BENCHMARKS

### METHOD OF MEASUREMENT OF BUILDING AREAS

3.2.3 excluded from the lettable area of each tenancy are:

- 3.2.3.1 stairs, accessways, fire stairs, toilets, recessed doorways, cupboards, telecommunication cupboards, fire hose reel cupboards, lift shafts, escalators, smoke lobbies, plant/motor rooms, tea rooms and other service areas, where all are provided as standard facilities in the building
- 3.2.3.2 lift lobbies where lifts face other lifts, blank walls or areas listed in section 3.2.3.1 above
- 3.2.3.3 areas set aside for the provision of all services, such as electrical or telephone ducts and air conditioning risers to the floor, where such facilities are standard facilities in the building
- 3.2.3.4 area dedicated as public spaces or thoroughfares such as foyers, atria and accessways in lift and building service areas
- 3.2.3.5 areas and accessways set aside for use by service vehicles and for delivery of goods, where such areas are not for the exclusive use of occupiers of the floor or building
- 3.2.3.6 areas and accessways set aside for car parking
- 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 M<sup>2</sup> 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, SBEncr, 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.

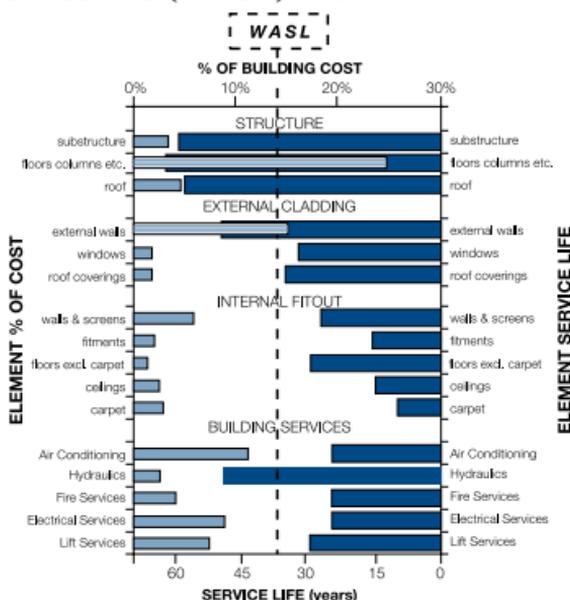
# ASSETS AND FACILITIES USEFUL LIFE ANALYSIS

## 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.

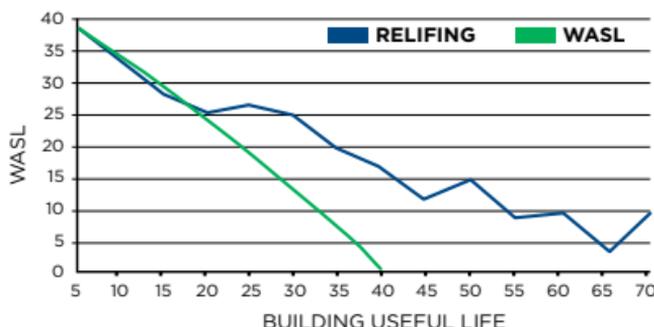
## WEIGHTED AVERAGE SERVICE LIFE

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 outgoing 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.

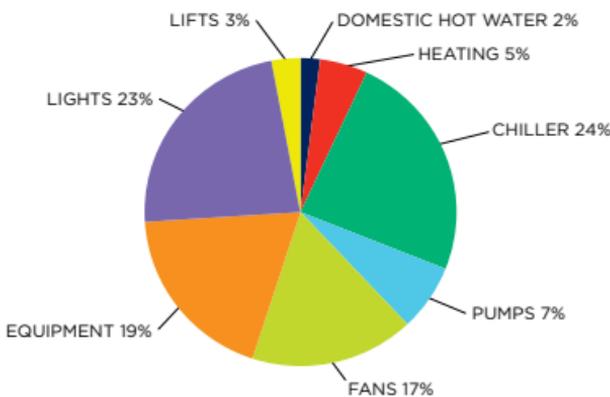
The level of recovery of outgoing is normally governed and regulated by leases and other agreements with tenants.

The cost of outgoing varies depending upon:

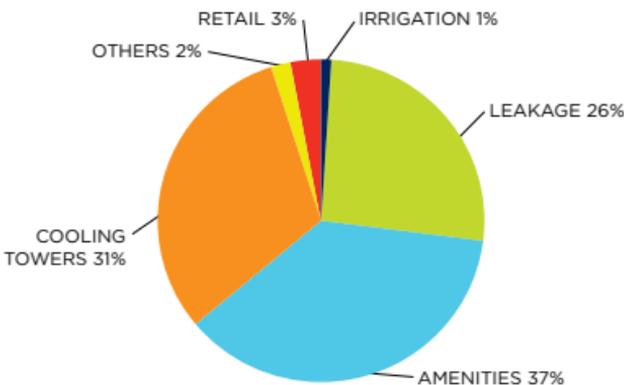
- the level of management and services provided
- lease agreements
- quality, type and efficiency of the building
- location and statutory regimes applicable

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.

	VIC	QLD	NSW	SA	TAS	ACT	WA	NT
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

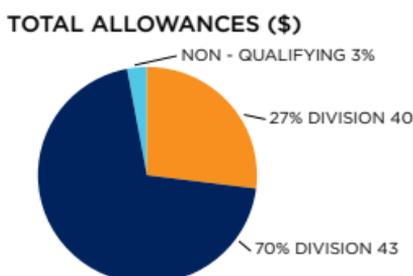
Assets with a limited effective life that are reasonably expected to decline in value. The decline in value is based on the cost and effective life of the depreciating asset, not its actual change in value. Examples of these are carpet, air conditioning plant, lights etc.

## 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 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 %
<b>THE FOLLOWING LIST GIVES A SAMPLE OF ELIGIBLE DEPRECIATING ASSETS.</b>		
<b>OFFICE BUILDING</b>		
HOT WATER INSTALLATIONS	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	10	20
<b>HOTELS, MOTELS</b>		
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
<b>SHOPPING CENTRES</b>		
Generally, the list for office buildings will apply with the following additions:		
FLOATING TIMBER FLOORS	10	20
FURNITURE, FREESTANDING	10	20
<b>INDUSTRIAL</b>		
Generally, the list for office buildings will apply with the following additions:		
CRANES	5	10
GANTRIES	3	6
DOCK LEVELLERS	5	10
ROLLER SHUTTER ELECTRIC MOTORS	5	10
<b>RESIDENTIAL</b>		
Only for assets continuously owned prior to 10/05/17 or new assets (not used) purchased from 10/05/17.		
<b>FLOOR COVERINGS:</b>		
CARPET	10	20
FLOATING TIMBER	6.667	13.333
<b>Hot Water Systems (excluding piping):</b>		
ELECTRIC AND GAS	8.333	16.667
SOLAR	6.667	13.333
<b>Miscellaneous:</b>		
INTERCOM SYSTEM ASSETS	10	20
WINDOW BLINDS	10	20
ROOM AIR CONDITIONING	10	20
<b>Kitchen Assets:</b>		
COOKTOPS, OVENS, RANGEHOODS	8.333	16.667
DISHWASHERS, WASHING MACHINES, CLOTHES DRYERS	10	20

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# OFFICES AROUND THE WORLD

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# CALENDARS 2018 - 2021

## 2018

JANUARY 2018							FEBRUARY 2018							MARCH 2018						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
	1	2	3	4	5	6					1	2	3					1	2	3
7	8	9	10	11	12	13	4	5	6	7	8	9	10	4	5	6	7	8	9	10
14	15	16	17	18	19	20	11	12	13	14	15	16	17	11	12	13	14	15	16	17
21	22	23	24	25	26	27	18	19	20	21	22	23	24	18	19	20	21	22	23	24
28	29	30	31				25	26	27	28				25	26	27	28	29	30	31

APRIL 2018							MAY 2018							JUNE 2018						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6	7				1	2	3	4						1	2
8	9	10	11	12	13	14	6	7	8	9	10	11	12	3	4	5	6	7	8	9
15	16	17	18	19	20	21	13	14	15	16	17	18	19	10	11	12	13	14	15	16
22	23	24	25	26	27	28	20	21	22	23	24	25	26	17	18	19	20	21	22	23
29	30						27	28	29	30	31			24	25	26	27	28	29	30

JULY 2018							AUGUST 2018							SEPTEMBER 2018						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6	7				1	2	3	4							1
8	9	10	11	12	13	14	5	6	7	8	9	10	11	2	3	4	5	6	7	8
15	16	17	18	19	20	21	12	13	14	15	16	17	18	9	10	11	12	13	14	15
22	23	24	25	26	27	28	19	20	21	22	23	24	25	16	17	18	19	20	21	22
29	30	31					26	27	28	29	30	31		23	24	25	26	27	28	29
														30						

OCTOBER 2018							NOVEMBER 2018							DECEMBER 2018						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6	7					1	2	3							1
8	9	10	11	12	13	14	4	5	6	7	8	9	10	2	3	4	5	6	7	8
15	16	17	18	19	20	21	11	12	13	14	15	16	17	9	10	11	12	13	14	15
22	23	24	25	26	27	28	18	19	20	21	22	23	24	16	17	18	19	20	21	22
28	29	30	31				25	26	27	28	29	30		23	24	25	26	27	28	29
														30	31					

## 2019

JANUARY 2019							FEBRUARY 2019							MARCH 2019						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
	1	2	3	4	5	6					1	2	3						1	2
7	8	9	10	11	12	13	3	4	5	6	7	8	9	3	4	5	6	7	8	9
14	15	16	17	18	19	20	10	11	12	13	14	15	16	10	11	12	13	14	15	16
21	22	23	24	25	26	27	17	18	19	20	21	22	23	17	18	19	20	21	22	23
28	29	30	31				24	25	26	27	28			24	25	26	27	28	29	30

APRIL 2019							MAY 2019							JUNE 2019						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6	7				1	2	3	4							1
8	9	10	11	12	13	14	5	6	7	8	9	10	11	2	3	4	5	6	7	8
15	16	17	18	19	20	21	12	13	14	15	16	17	18	9	10	11	12	13	14	15
22	23	24	25	26	27	28	19	20	21	22	23	24	25	16	17	18	19	20	21	22
29	30						26	27	28	29	30	31		23	24	25	26	27	28	29
														30						

JULY 2019							AUGUST 2019							SEPTEMBER 2019						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6	7				1	2	3	1	2	3	4	5	6	7	
8	9	10	11	12	13	14	4	5	6	7	8	9	10	8	9	10	11	12	13	14
15	16	17	18	19	20	21	11	12	13	14	15	16	17	15	16	17	18	19	20	21
22	23	24	25	26	27	28	18	19	20	21	22	23	24	22	23	24	25	26	27	28
29	30	31					25	26	27	28	29	30	31	29	30					

OCTOBER 2019							NOVEMBER 2019							DECEMBER 2019						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
	1	2	3	4	5	6					1	2	3	1	2	3	4	5	6	7
7	8	9	10	11	12	13	3	4	5	6	7	8	9	8	9	10	11	12	13	14
14	15	16	17	18	19	20	10	11	12	13	14	15	16	15	16	17	18	19	20	21
21	22	23	24	25	26	27	17	18	19	20	21	22	23	22	23	24	25	26	27	28
28	29	30	31				24	25	26	27	28	29	30	29	30	31				

# 2020

**JANUARY 2020**

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	

**FEBRUARY 2020**

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

**MARCH 2020**

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				

**APRIL 2020**

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		

**MAY 2020**

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					

**JUNE 2020**

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 2020**

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 2020**

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					

**SEPTEMBER 2020**

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		

**OCTOBER 2020**

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 2020**

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					

**DECEMBER 2020**

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	

# 2021

**JANUARY 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						

**FEBRUARY 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	

**MARCH 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	

**APRIL 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

**MAY 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					

**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		

**JULY 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						

**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					

**SEPTEMBER 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

**OCTOBER 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	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

**DECEMBER 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						

# 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	
OCT	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	SYDNEY
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	
<b>26</b>	<b>26</b>	<b>22 FIXED &amp; 4 VARIABLE</b>	<b>13 FIXED &amp; 13 VARIABLE</b>

# 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
<b>AUSTRALIAN CAPITAL TERRITORY</b>			
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
<b>NEW SOUTH WALES</b>			
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
<b>NORTHERN TERRITORY</b>			
EASTER SATURDAY	20 APR	11 APR	3 APR
MAY DAY	6 MAY	4 MAY	3 MAY
PICNIC DAY	5 AUG	3 AUG	2 AUG
<b>QUEENSLAND</b>			
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
<b>SOUTH AUSTRALIA</b>			
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
<b>TASMANIA</b>			
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)	4 NOV	2 NOV	1 NOV
<b>VICTORIA</b>			
LABOUR DAY	11 MAR	9 MAR	8 MAR
EASTER SATURDAY	20 APR	11 APR	3 APR
EASTER SUNDAY	21 APR	12 APR	4 APR
GRAND FINAL EVE DAY	27 SEP	25 SEP	TBA
MELBOURNE CUP DAY	5 NOV	3 NOV	2 NOV
<b>WESTERN AUSTRALIA</b>			
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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