

# RIDERS DIGEST 2018

MELBOURNE, AUSTRALIA EDITION

# Victorian Office

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# RIDERS DIGEST

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

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

While the information in this publication is believed to be correct, no responsibility is accepted for its accuracy. Persons desiring to utilise any information appearing in this publication should verify its applicability to their specific circumstances. Cost information in this publication is indicative and for general guidance only and is based on rates ruling at Fourth Quarter 2017 (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

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# COST MANAGEMENT AND QUANTITY SURVEYING SERVICES

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

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

# Feasibility Analysis

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

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

### Financial Institution Auditing

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

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

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

## Post-Contract Services

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

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

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

### Tendering and Documentation

Among the tendering and documentation services offered by RLB:

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

# COST MANAGEMENT AND QUANTITY SURVEYING SERVICES

# Value Management

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

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

# **ADVISORY SERVICES**

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

# Asset Advisory

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

RLB is expert in the following strategic services:

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

### RElifing of Assets

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

## **Facilities Consultancy**

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

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

# **ADVISORY SERVICES**

# **Building Surveying**

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

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

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

# Risk Mitigation and Due Diligence

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

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

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

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

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

# **Property Taxation**

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

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

# Litigation Support

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

## **Procurement Strategies**

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

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

# **ADVISORY SERVICES**

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

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

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

#### Research

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

# INTERNATIONAL CONSTRUCTION

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# INTERNATIONAL CONSTRUCTION BUILDING COST RANGES

All costs are stated in local currency as shown below.

# Refer to www.rlbintelligence.com for updates.

		COST PER M <sup>2</sup>				
LOCATION	LOCAL		OFFICE E	BUILDING		
/CITY	CURRENCY	PREI	MIUM	GRA	DE A	
		LOW	HIGH	LOW	HIGH	
AMERICAS @ Q3 2	2017					
BOSTON	USD	3,230	5,110	2,155	3,230	
CHICAGO	USD	3,015	4,845	1,885	3,015	
DENVER	USD	1,720	2,745	1,235	1,885	
HONOLULU	USD	3,070	5,705	2,635	4,305	
LAS VEGAS	USD	1,505	3,175	1,130	2,045	
LOS ANGELES	USD	2,370	3,660	1,720	2,635	
NEW YORK	USD	4,035	6,190	3,230	4,305	
PHOENIX	USD	1,720	2,960	1,185	1,885	
SEATTLE	USD	2,155	2,690	1,560	2,155	
TORONTO	CAD	2,100	2,800	1,830	2,690	
ASIA @ Q3 2017						
BEIJING	RMB	7,650	11,300	7,150	10,800	
GUANGZHOU	RMB	7,200	10,900	6,650	10,050	
HO CHI MINH CITY	VND ('000)	24,900	35,800	21,300	26,600	
HONG KONG	\$HKD	23,600	35,200	20,100	27,300	
JAKARTA	RP ('000)	10,130	13,200	6,870	11,000	
KUALA LUMPUR	RINGGIT	2,800	4,000	2,200	3,000	
MACAU	MOP	18,600	25,900	16,400	23,000	
SEOUL	KRW ('000)	2,330	3,000	1,760	2,160	
SHANGHAI	RMB	7,500	11,100	6,750	10,300	
SINGAPORE	SGD	2,900	4,050	2,050	3,250	
EUROPE @ Q3 201	17					
BELFAST	GBP	1,325	1,865	1,155	1,870	
BIRMINGHAM	GBP	1,850	2,700	1,500	2,700	
BRISTOL	GBP	1,950	2,800	1,600	2,800	
CARDIFF	GBP	1,655	2,335	1,440	2,340	
EDINBURGH	GBP	1,745	2,455	1,515	2,460	
LONDON	GBP	2,600	3,390	2,145	3,340	
MANCHESTER	GBP	2,045	2,680	1,765	2,650	
MIDDLE EAST @ G	3 2017					
ABU DHABI	AED	5,510	6,650	4,465	6,270	
DUBAI	AED	5,800	7,000	4,700	6,600	
DOHA	QAR	6,500	8,500	6,100	8,200	
OCEANIA @ Q4 20	017					
ADELAIDE	AUD	2,600	3,800	2,100	3,150	
AUCKLAND	NZD	3,600	4,750	2,800	4,500	
BRISBANE	AUD	2,600	3,900	2,200	3,500	
CANBERRA	AUD	3,400	5,400	2,750	4,200	
CHRISTCHURCH	NZD	3,600	4,500	2,750	4,250	
DARWIN	AUD	3,100	4,150	2,400	3,800	
GOLD COAST	AUD	2,450	4,000	1,900	3,000	
MELBOURNE	AUD	3,150	4,250	2,450	3,350	
PERTH	AUD	3,000	4,400	2,400	3,750	
SYDNEY	AUD	3,550	4,750	2,650	3,850	
WELLINGTON	NZD	3,100	4,500	2,700	4,450	

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

Rates are in national currency per square metre of Gross Floor Area except as follows:

**Chinese cities, Hong Kong and Macau:** Rates are per square metre of Construction Floor Area, measured to outer face of external walls.

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

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

	COST PER M <sup>2</sup>							
	RET	AIL			NTIAL			
MA	LL	STRIP SI	HOPPING	MULTIS	STOREY			
LOW	HIGH	LOW	HIGH	LOW	HIGH			
1,885	2,960	1,345	2,155	1,885	3,230			
1,990	3,015	1,455	2,370	1,720	3,660			
970	1,560	755	1,455	915	2,045			
2,260	5,330	1,885	4,680	2,100	4,790			
1,240	5,165	700	1,560	755	4,360			
1,560	3,500	1,240	1,940	1,940	3,120			
2,960	4,575	1,885	3,230	2,155	4,035			
1,290	2,155	860	1,505	970	1,990			
1,455	3,285	1,185	1,670	1,615	2,690			
2,155	2,690	1,130	1,720	1,400	2,205			
8,400	12,850	7,400	11,550	4,050	5,950			
8,200	11,650	7,100	10,650	3,800	5,450			
20,100	26,800	-	-	15,400	23,300			
23,700	30,100	20,200	26,300	22,400	37,400			
6,520	8,515	-	-	6,870	10,100			
2,100	3,500	-	-	1,900	4,500			
20,400	25,100	17,300	22,100	14,150	22,300			
1,570	2,270	1,320	2,010	1,590	2,180			
7,850	12,450	7,000	11,400	3,700	5,450			
2,150	3,300	-	-	1,950	3,100			
2,030	2,845	645	1,215	1,220	1,715			
2,750	3,890	870	1,670	1,575	2,210			
2,750	3,890	870	1,650	1,700	2,450			
2,540	3,555	805	1,515	1,525	2,140			
2,675	3,740	850	1,595	1,605	2,255			
3,470	4,875	1,115	2,085	2,475	4,090			
2,875	4,040	915	1,735	1,755	2,460			
7.005	C 17F			4.075	E 70E			
3,895	6,175	-	-	4,275	5,795			
4,100	6,500	-	-	4,500	6,500			
5,300	6,500	-	-	6,500	7,800			
1.575	7.000	1 700	1 005	2.750	7.450			
1,575 2,750	3,000	1,300	1,825	2,350	3,450			
	3,100	1,600	2,000	3,300	4,200			
2,000 2,350	3,500	1,200 1.240	1,800	2,300	4,000			
,	3,950 2,800	, ,	2,500	2,850	4,950			
2,500	,	1,400	1,800	3,000	4,000			
1,750	2,600	1,250	2,100	2,050	2,650			
2,150 2,150	3,100 3,150	1,050 1,220	1,600 1,640	1,850 2,350	3,000 4,200			
1.900	2,900	1,220	2,500	2,350	4,200			
1,900	4,150	1,520	2,500	2,600	5,400			
2,600	2,800	1,520	1,800	3,150	4,000			
2,000	∠,0∪∪	1,400	1,000	3,130	4,000			

# INTERNATIONAL CONSTRUCTION BUILDING COST RANGES

All costs are stated in local currency as shown below.

# Refer to www.rlbintelligence.com for updates.

		COST PER M <sup>2</sup>				
LOCATION	LOCAL	HOTELS				
/CITY	CURRENCY	3 STAR		5 S	ΓAR	
		LOW	HIGH	LOW	HIGH	
AMERICAS @ Q3 2	2017					
BOSTON	USD	2,690	4,035	4,035	5,920	
CHICAGO	USD	2,905	4,200	4,200	6,995	
DENVER	USD	1,615	1,990	2,155	3,335	
HONOLULU	USD	3,500	5,865	5,545	8,020	
LAS VEGAS	USD	1,615	3,230	3,765	5,380	
LOS ANGELES	USD	2,690	3,500	3,765	5,545	
NEW YORK	USD	3,230	4,305	4,305	6,460	
PHOENIX	USD	1,615	2,690	3,230	5,380	
SEATTLE	USD	2,370	2,530	2,585	3,550	
TORONTO	USD	2,100	2,800	3,230	3,820	
ASIA @ Q3 2017						
BEIJING	RMB	9,700	12,500	13,000	17,200	
GUANGZHOU	RMB	9,600	11,700	13,000	16,700	
HO CHI MINH CITY	′ VND (′000)	24,400	31,500	32,400	39,700	
HONG KONG	\$HKD	30,300	35,100	36,800	45,000	
JAKARTA	RP ('000)	11,140	12,470	13,670	17,420	
KUALA LUMPUR	RINGGIT	2,500	3,500	5,000	7,000	
MACAU	MOP	25,200	29,000	31,300	38,500	
SEOUL	KRW ('000)	2,030	2,580	3,150	4,680	
SHANGHAI	RMB	9,500	12,300	12,900	17,000	
SINGAPORE	SGD	3,200	3,600	4,150	5,450	
EUROPE @ Q3 20	17					
BELFAST	GBP	975	1,435	1,550	2,115	
BIRMINGHAM	GBP	1,280	1,970	2,100	3,000	
BRISTOL	GBP	1,350	1,800	2,300	3,100	
CARDIFF	GBP	1,220	1,795	1,935	2,640	
EDINBURGH	GBP	1,285	1,890	2,035	2,780	
LONDON	GBP	1,855	2,380	2,745	3,690	
MANCHESTER	GBP	1,385	1,845	2,190	3,000	
MIDDLE EAST @ C	3 2017					
ABU DHABI	AED	5,700	8,075	8,550	11,400	
DUBAI	AED	6,000	9,000	9,000	14,000	
DOHA	QAR	7,500	8,500	11,500	14,500	
OCEANIA @ Q4 2	017					
ADELAIDE	AUD	2,600	3,500	3,600	4,500	
AUCKLAND	NZD	4,100	4,600	5,250	6,000	
BRISBANE	AUD	2,800	4,000	4,000	5,500	
CANBERRA	AUD	3,050	5,200	4,150	6,300	
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	2,850	3,700	4,050	5,300	
PERTH	AUD	2,600	3,600	3,600	4,800	
SYDNEY	AUD	3,150	4,000	4,450	6,000	
WELLINGTON	NZD	3,800	4,300	4,500	5,500	

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

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

COST PER M <sup>2</sup>							
	CAR PA	RKING		INDUS	TRIAL		
MULTI S	STOREY	BASE	MENT	WARE	HOUSE		
LOW	HIGH	LOW	HIGH	LOW	HIGH		
805	1,345	970	1,615	1,075	1,885		
860	1,345	970	1,670	1,185	1,990		
540	755	970	1,290	970	1,615		
1,075	1,560	1,505	2,850	1,560	2,420		
540	915	645	1,615	540	1,075		
1,075	1,290	1,345	1,830	1,130	1,885		
1,025	1,885	1,345	2,155	1,240	2,155		
485	755	645	1,185	590	1,075		
970	1,185	1,400	1,720	1,025	1,345		
755	970	755	970	1,240	1,615		
2,250	3,050	3,750	6,550	4,350	5,500		
2,100	3,000	3,700	6,400	4,150	5,150		
9,100	13,600	18,700	25,500	6,210	9,400		
9,250	10,950	19,000	26,000	15,600	19,600		
3,500	4,500	4,500	6,190	4,790	6,080		
800	1,200	1,400	3,200	1,000	1,800		
-	-	10,850	13,700	-	-		
670	820	850	1,090	1,180	1,460		
2,100	3,050	4,000	6,650	4,050	5,200		
700	1,350	1,450	2,200	1,100	1,450		
0.45	400	615	1.055	070	400		
245 350	490 675	615 800	1,055 1.375	270 400	490 560		
400	800	950	1,575	400	650		
305	610	770	1,320	335	610		
325	640	810	1,320	355	640		
445	890	1,185	1,910	480	870		
345	695	940	1,510	380	695		
343	033	340	1,500	300	033		
1,710	3,420	2,710	4,275	1,425	2,565		
2,300	3,600	3,100	4,500	1,850	2,900		
2,750	4,500	2,500	4,250	-	-		
_,	.,		,,				
630	930	1.325	1.950	630	1.100		
900	1,200	2,200	2,700	750	1,000		
900	1,300	1,700	2,200	700	1,100		
770	1,300	1,040	1,800	720	1,360		
850	1,350	1,750	2,200	720	1,100		
750	1,250	1,175	1,550	800	1,425		
700	1,100	1,500	2,050	600	1,100		
690	1,120	1,180	1,540	580	1,160		
650	1,000	1,800	3,100	550	1,050		
770	1,160	1,120	1,800	730	1,160		
800	1,100	2,000	2,500	750	1,000		

# INTERNATIONAL CONSTRUCTION RLB ESCALATION FORECASTS

# **RLB TENDER PRICE INDEX ANNUAL CHANGE**

All indices are stated as annual percentage changes.

# Refer to www.rlbintelligence.com for updates.

	2015	2016	2017 (F)	2018 (F)	2019 (F)	2020 (F)
AFRICA @ Q3 2017						
CAPE TOWN	6.0	7.3	NP	NP	NP	NP
JOHANNESBURG	7.2	6.4	7.9	7.0	7.6	10.9
MAPUTO	4.0	4.0	4.0	4.0	NP	NP
AMERICAS @ Q3 2017						
BOSTON	4.0	4.0	3.5	4.0	4.0	4.0
CALGARY	NP	NP	1.5	2.0	2.0	2.0
CHICAGO	4.1	4.3	5.0	4.0	4.0	4.0
HONOLULU	8.2	0.7	1.0	2.0	2.0	2.0
LAS VEGAS	4.4	3.3	3.0	5.0	5.0	5.0
LOS ANGELES	5.2	8.4	5.0	4.0	4.0	4.0
NEW YORK	3.9	3.9	3.5	4.0	4.0	4.0
PHOENIX	3.7	3.7	3.0	3.5	3.5	3.5
SEATTLE	4.9	4.7	5.0	4.0	4.0	4.0
TORONTO	NP	NP	1.5	3.0	3.0	3.0
WASHINGTON DC	4.4	4.3	4.0	4.0	4.0	4.0
ASIA @ Q3 2017		1.0	1.0	1.0	1.0	1.0
BEIJING	-1.0	0.0	2.0	2.0	2.0	2.0
CHENGDU	0.3	-0.8	2.0	2.0	2.0	2.0
GUANGZHOU	-3.0	1.0	2.5	3.5	2.0	2.0
HONG KONG	1.2	0.4	0.0	2.0	2.0	2.0
MACAU	3.5	0.0	2.0	2.8	3.0	3.0
SEOUL	-0.5	3.9	2.5	2.1	1.9	1.8
SHANGHAI	-4.4	6.0	3.0	3.0	3.0	2.0
SHENZHEN	-0.7	1.0	2.0	3.5	4.1	4.1
SINGAPORE	1.5	-5.8	-1.5	NP	NP	NP
EUROPE @ Q3 2017	1.0	5.0	1.5	141	141	141
BIRMINGHAM	4.0	3.0	2.8	2.5	3.0	3.0
BRISTOL	4.5	5.0	5.0	5.5	5.2	NP
BUDAPEST	1.0	5.5	9.5	8.0	8.0	5.0
LONDON	5.9	3.5	2.0	1.5	2.0	3.5
SHEFFIELD	9.0	2.5	-1.0	-3.0	0.5	NP
MADRID	0.0	0.1	0.8	0.1	0.1	NP
MANCHESTER	4.0	4.0	2.5	2.0	3.0	3.5
MOSCOW	-5.0	0.0	1.0	1.5	1.5	2.0
MIDDLE EAST @ Q3 2017	-3.0	0.0	1.0	1.3	1.3	2.0
ABU DHABI	4.7	-5.0	-3.0	2.0	7.0	8.0
DOHA	5.0	5.5	6.0	7.0	NP	NP
DUBAI	4.6	3.0	3.5	3.5	3.5	3.5
RIYADH	4.8	5.0	5.0	5.0	5.0	NP
OCEANIA @ Q4 2017	4.0	3.0	3.0	5.0	5.0	INP
ADELAIDE	0.8	1.8	3.1	3.5	4.0	4.0
AUCKLAND	5.1	5.5	8.0	6.0	3.5	3.0
BRISBANE	5.1	7.2	4.1	4.0	4.1	3.1
CANBERRA	2.0	2.5	2.8	3.5	3.2	3.0
					2.0	
CHRISTCHURCH	6.0	3.0	3.0	3.0		2.0
DARWIN	1.0	1.0	1.0	1.5	2.0	2.5
GOLD COAST	4.0	6.5	3.0	2.5	3.0	3.0
MELBOURNE	2.0	2.0	3.0	3.0	3.0	3.0
PERTH	0.8	0.0	0.0	1.5	2.5	3.0
SYDNEY	4.5	7.0	4.2	4.9	3.9	3.9
TOWNSVILLE	3.0	3.0	4.0	4.0	4.0	3.1
WELLINGTON	3.0	4.5	4.5	4.0	3.0	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	ADEL	AIDE	BRISI	BANE
COST RANGE PER	\$/	M <sup>2</sup>	\$/	M <sup>2</sup>
GROSS FLOOR AREA	LOW	HIGH	LOW	HIGH
OFFICE BUILDINGS				
Prestige, CBD				
10 TO 25 STOREYS (75-80% EFFICIENCY)	2,600	3,400	2,600	3,700
25 TO 40 STOREYS (70-75% EFFICIENCY)	2,950	3,800	2,700	3,900
40 TO 55 STOREYS (68-73% EFFICIENCY)	-	-	2,900	4,200
Investment, CBD				
UP TO 10 STOREYS (81-85% EFFICIENCY)	2,100	2,600	2,200	2,600
10 TO 25 STOREYS (76-81% EFFICIENCY)	2,350	2,950	2,300	3,000
25 TO 40 STOREYS (71-76% EFFICIENCY)	2,550	3,150	2,400	3,500
Investment, other than CBD				
WALK UP (83-87% EFFICIENCY)	1,750	2,250	1,600	2,200
UP TO 10 STOREYS (82-86% EFFICIENCY)	2,000	2,500	1,800	2,400
10 TO 25 STOREYS (77-82% EFFICIENCY)	-	-	2,000	2,600
HOTELS				
Multi-Storey (ex FF&E)				
FIVE STAR	3,600	4,500	4,000	5,500
FOUR STAR	3,100	4,200	3,400	4,500
THREE STAR	2,600	3,500	2,800	4,000
CAR PARK				
OPEN DECK MULTI-STOREY	625	925	900	1,300
BASEMENT: CBD	1,325	1,950	1,700	2,200
BASEMENT: OTHER THAN CBD	925	1,750	1,100	1,800
UNDERCROFT: OTHER THAN CBD	575	875	650	850
INDUSTRIAL BUILDINGS				
6.00 M to underside of truss and 4,500 M² Gross Floor Area with:				
ZINCALUME METAL CLADDING	625	1,000	700	1,000
PRECAST CONCRETE CLADDING	725	1,100	800	1,100
Attached Airconditioned Offices				
200 M <sup>2</sup>	1,550	2,150	1,800	2,500
400 M <sup>2</sup>	1,550	2,150	1,800	2,300

### NOTES

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

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

# Refer to www.rlbintelligence.com for updates.

CANB	ERRA	DAR	WIN	MELBO	DURNE	E PERTH		SYD	NEY
\$/	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
3,400	5,000	3,100	4,000	3,150	3,600	3,000	4,000	3,550	4,100
3,650	5,400	3,250	4,150	3,700	4,000	3,300	4,400	4,150	4,750
-	-	-	-	3,800	4,250	3,500	4,700	4,600	5,200
2,750	3,900	2,400	3,450	2,450	2,900	2,400	3,300	2,650	3,100
2,850	4,050	2,550	3,800	2,800	3,200	2,500	3,500	3,150	3,500
2,900	4,200	-	-	2,850	3,350	2,600	3,750	3,300	3,850
1,460	2,450	2,200	2,800	1,600	2,300	1,800	2,600	2,100	2,500
2,100	2,900	2,300	3,350	1,820	2,650	2,000	2,800	2,300	3,000
2,200	3,400	2,550	3,450	2,200	2,950	2,200	3,000	2,650	3,400
4,150	6,300	3,600	4,450	4,050	5,300	3,600	4,800	4,450	6,000
3,600	5,900	3,350	4,050	3,650	4,700	3,100	4,000	3,750	5,200
3,050	5,200	2,850	3,550	2,850	3,700	2,600	3,600	3,150	4,000
770	1,300	750	1,260	690	1,120	650	1,000	770	1,160
1,040	1,800	1,180	1,540	1,180	1,540	1,800	3,100	1,120	1,800
1,020	1,800	1,040	1,520	1,120	1,440	1,400	2,800	1,100	1,660
770	1,180	720	1,020	750	900	700	1,100	-	-
720	900	800	1,400	580	1,020	550	800	730	910
830	1,360	840	1,420	690	1,160	630	1,050	800	1,160
1,700	2,700	1,700	2,400	1,560	2,000	1,400	1,900	1,960	2,600
1,620	2,600	1,700	2,400	1,500	1,940	1,350	1,850	2,050	2,800

# AUSTRALIAN CONSTRUCTION BUILDING COST RANGES

All costs current as at Fourth Quarter 2017.

CITY	ADEL	AIDE	BRISBANE	
COST RANGE PER	\$/	M <sup>2</sup>	\$/	M <sup>2</sup>
GROSS FLOOR AREA	LOW	HIGH	LOW	HIGH
AGED CARE				
SINGLE STOREY FACILITY	2,100	2,700	2,300	2,900
PRIVATE HOSPITALS				
Low Rise Hospital				
45-60 M <sup>2</sup> GFA/BED	3,700	5,700	4,500	5,800
55-80 M <sup>2</sup> GFA/BED WITH MAJOR OPERATING THEATRE	4,000	6,000	5,000	6,500
CINEMAS				
GROUP COMPLEX, 2,000-4,000 SEATS (WARM SHELL)	2,750	3,650	2,500	3,500
REGIONAL SHOPPING CENTRES				
DEPARTMENT STORE	1,375	2,400	1,600	2,100
SUPERMARKET/VARIETY STORE	1,300	1,750	1,600	2,000
DISCOUNT DEPARTMENT STORE	1,100	1,350	1,400	2,000
MALLS	1,575	3,000	2,000	3,500
SPECIALTY SHOPS	1,000	1,675	1,200	1,600
SMALL SHOPS AND SHOWROOMS				
SMALL SHOPS & SHOWROOMS	1,300	1,825	1,200	1,800
RESIDENTIAL				
SINGLE & DOUBLE STOREY DWELLINGS (CUSTOM BUILT)	1,575	3,450	1,800	4,000
RESIDENTIAL UNITS				
WALK-UP 85 TO 120 M <sup>2</sup> /UNIT	1,650	2,750	1,600	3,400
TOWNHOUSES 90 TO 120 M²/UNIT	1,725	2,625	1,300	2,800
MULTI-STOREY UNITS				
Up to 10 storeys with lift				
UNITS 60-70 M <sup>2</sup>	2,350	3,450	2,300	3,000
UNITS 90-120 M <sup>2</sup>	2,250	3,350	2,300	2,900
Over 10 and up to 20 storeys				
UNITS 60-70 M <sup>2</sup>	2,450	3,550	2,600	3,200
UNITS 90-120 M <sup>2</sup>	2,400	3,450	2,600	3,100
Over 20 and up to 40 storeys				
UNITS 60-70 M <sup>2</sup>	2,650	3,450	2,700	3,400
UNITS 90-120 M <sup>2</sup>	2,600	3,400	2,700	3,200
Over 40 and up to 80 storeys				
UNITS 60-70 M <sup>2</sup>	-	-	3,000	4,000
UNITS 90-120 M <sup>2</sup>	-	-	2,900	3,800

# Building Costs include Building Works and Building Services

# Refer to www.rlbintelligence.com for updates.

CANB	ERRA	DAR	WIN	MELBO	DURNE	PERTH		SYD	NEY
\$/	M <sup>2</sup>	\$/	M <sup>2</sup>	\$/	\$/M <sup>2</sup> \$/M <sup>2</sup>		\$/	'M²	
LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH
2,050	3,400	2,400	3,550	1,840	2,950	1,750	2,800	2,650	3,450
4,300	7,100	3,850	4,600	2,750	3,250	3,400	4,300	2,850	3,600
4,700	7,800	4,500	5,500	3,050	4,200	3,600	4,500	3,600	4,750
3,000	4,100	2,700	3,450	2,450	3,250	2,200	2,700	3,300	4,550
2,400	3,150	1,700	2,400	2,050	2,450	1,900	2,600	1,520	2,150
1,440	2,400	1,800	2,450	1,280	1,900	1,200	1,750	1,480	2,900
1,320 2,350	1,880 3,950	1,640 1,740	2,250	1,320 2,150	1,680 3,150	1,200	1,700 2,900	1,300	1,600 4,150
1,220	1,980	1,440	2,050	1,220	1,680	1,000	1,500	1,700	2,550
1,220	1,300	1,440	2,030	1,220	1,000	1,000	1,300	1,700	2,330
1.240	2.500	1.240	2.100	1.220	1.640	1.000	2.500	1.520	2.000
,	,	,	,		,	,	,	,	,
1,620	3,250	1,780	2,750	1,640	3,250	1,400	2,700	1,700	4,800
1,720	4,200	1,980	2,400	1,540	3,250	1,450	2,900	-	-
1,720	4,100	1,980	2,400	1,500	2,800	1,450	2,900	-	-
2,850	4,300	2,050	2,450	2,350	3,000	2,000	3,000	2,850	3,650
2,800	4,200	2,050	2,400	2,350	3,050	1,900	2,900	2,600	3,400
3,100	4,550	2,100	2,550	2,700	3,400	2,300	3,300	3,000	4,000
3,050	4,550	2,050	2,500	2,650	3,450	2,200	3,200	2,850	3,750
3,550	4,950	2.350	2.650	3,150	3,700	2,800	3,600	3,900	4,850
3,450	4,700	2,300	2,600	2.950	3,600	2,700	3,500	3,700	4,400
2, .20	.,. 20	.,	.,	1,110	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1,1.20	,,	,,	.,
-	-	-	-	3,550	4,200	3,300	4,100	4,500	5,600
-	-	-	-	3,400	4,100	3,200	4,000	4,350	5,400

# AUSTRALIAN CONSTRUCTION BUILDING SERVICES COST RANGES

All costs current as at Fourth Quarter 2017.

	ADEL	AIDE	BRIS	BANE
COST RANGE PER GROSS FLOOR AREA	\$/	M <sup>2</sup>	\$/	M <sup>2</sup>
	LOW	HIGH	LOW	HIGH
OFFICE BUILDINGS				
Prestige, CBD				
10 TO 25 STOREYS (75-80% EFFICIENCY)	748	1,122	789	1,153
25 TO 40 STOREYS (70-75% EFFICIENCY)	799	1,222	870	1,236
40 TO 55 STOREYS (68-73% EFFICIENCY)	-	-	1,016	1,409
Investment, CBD				
UP TO 10 STOREYS (81-85% EFFICIENCY)	731	998	719	945
10 TO 25 STOREYS (76-81% EFFICIENCY)	733	1,047	772	1,014
25 TO 40 STOREYS (71-76% EFFICIENCY)	753	1,096	814	1,135
INVESTMENT, OTHER THAN CBD				
WALK UP (83-87% EFFICIENCY)	398	580	523	648
UP TO 10 STOREYS (82-86% EFFICIENCY)	551	778	657	917
10 TO 25 STOREYS (77-82% EFFICIENCY)	-	-	728	1,028
HOTELS				
Multi-Storey				
FIVE STAR	1,037	1,456	963	1,211
FOUR STAR	931	1,277	937	1,187
THREE STAR	878	1,071	895	1,141
CAR PARK				
OPEN DECK MULTI-STOREY	132	268	136	271
BASEMENT: CBD	214	422	231	407
BASEMENT: OTHER THAN CBD	213	422	231	407
UNDERCROFT: OTHER THAN CBD	105	118	77	104
INDUSTRIAL BUILDINGS				
6.00 M to underside of truss and 4,500 M² Gross Floor Area with:				
ZINCALUME METAL CLADDING	213	302	197	351
PRECAST CONCRETE CLADDING	213	345	197	351
Attached Airconditioned Offices				
200 M <sup>2</sup>	481	631	473	602
400 M <sup>2</sup>	474	624	473	602

#### BUILDING SERVICES COSTS INCLUDE:

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

Refer to page 34 to 37 for detailed services costs.

CANB	ERRA	DAR	WIN	MELBO	DURNE	PERTH		SYD	NEY
\$/	M <sup>2</sup>	\$/	M <sup>2</sup>	\$/	M <sup>2</sup>	\$/	M²	\$/	M <sup>2</sup>
LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH
878	1,274	1,160	1,523	799	1,241	930	1,340	980	1,320
931	1,381	1,246	1,594	944	1,318	965	1,395	1,157	1,318
-	-	-	-	999	1,411	990	1,470	1,292	1,459
728	1,167	911	1,321	623	1,066	695	1,125	669	948
771	1,167	983	1,445	691	1,133	720	1,185	793	1,036
771	1,220	-	-	762	1,190	760	1,225	878	1,141
460	632	841	1,082	433	700	420	600	453	658
610	878	882	1,281	541	858	565	820	657	913
674	996	971	1,326	598	973	660	920	801	1,052
1,252	1,702	1,394	1,753	1,725	2,178	1,235	1,750	1,155	1,494
1,142	1,526	1,272	1,539	1,246	1,859	1,025	1,465	1,025	1,388
900	1,307	1,122	1,386	942	1,421	825	1,265	874	1,156
170	276	201	363	96	282	135	300	63	156
233	467	328	449	168	365	200	405	237	323
170	456	298	449	158	334	185	390	145	277
64	117	135	282	31	62	135	305	46	66
225	396	210	499	180	320	160	335	117	206
225	385	225	518	180	320	170	355	117	208
223	303	223	510	100	320	1/0	333	11/	200
513	685	661	926	464	644	385	630	485	865
513	620	661	926	464	855	385	595	485	878
313	020	001	320	404	033	303	333	403	070

# AUSTRALIAN CONSTRUCTION BUILDING SERVICES COST RANGES

All costs current as at Fourth Quarter 2017.

COST DANGE DED		AIDE	BRISBANE	
COST RANGE PER GROSS FLOOR AREA	\$/	M <sup>2</sup>	\$/	M <sup>2</sup>
	LOW	HIGH	LOW	HIGH
AGED CARE				
SINGLE STOREY FACILITY	430	699	497	797
PRIVATE HOSPITALS				
Low Rise Hospital				
45-60 M <sup>2</sup> GFA/BED	1,234	1,500	906	1,622
55-80 M <sup>2</sup> GFA/BED WITH MAJOR OPERATING THEATRE	1,447	1,924	1,373	2,070
CINEMAS				
GROUP COMPLEX, 2,000-4,000 SEATS. (WARM SHELL)	794	1,071	624	969
REGIONAL SHOPPING CENTRES				
DEPARTMENT STORE	447	719	507	799
SUPERMARKET/VARIETY STORE	433	674	500	741
DISCOUNT DEPARTMENT STORE	440	616	490	652
MALLS	527	799	580	873
SPECIALTY SHOPS	302	577	478	683
SMALL SHOPS AND SHOWROOMS				
SMALL SHOPS & SHOWROOMS	411	642	340	647
RESIDENTIAL				
SINGLE & DOUBLE STOREY DWELLINGS (CUSTOM BUILT)	252	554	255	559
RESIDENTIAL UNITS				
WALK-UP 85 TO 120 M <sup>2</sup> /UNIT	212	480	243	483
TOWNHOUSES 90 TO 120 M²/UNIT	215	488	243	474
MULTI-STOREY UNITS				
Up to 10 storeys with lift				
UNITS 60-70 M <sup>2</sup>	476	749	445	852
UNITS 90-120 M <sup>2</sup>	455	703	424	818
Over 10 and up to 20 storeys				
UNITS 60-70 M <sup>2</sup>	482	811	539	850
UNITS 90-120 M <sup>2</sup>	468	796	512	809
Over 20 and up to 40 storeys				
UNITS 60-70 M <sup>2</sup>	527	913	614	972
UNITS 90-120 M <sup>2</sup>	511	884	592	932
Over 40 and up to 80 storeys				
UNITS 60-70 M <sup>2</sup>	-	-	825	1,097
UNITS 90-120 M <sup>2</sup>	-	-	765	1,040

CANB	ERRA	DAR	WIN	MELBO	OURNE	PERTH		SYD	NEY
\$/	M <sup>2</sup>	\$/	\$/M <sup>2</sup> \$/N		\$/M <sup>2</sup> \$/M <sup>2</sup> \$,		\$/	M²	
LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH
416	776	883	1,322	464	1,087	670	1,100	387	723
1,087	1,435	1,433	1,680	983	1,496	1,130	1,500	994	1,307
1,323	1,895	1,580	1,981	1,181	2,039	1,275	1,710	1,334	1,881
790	951	1,013	1,278	618	906	695	910	968	1,418
742	853	642	877	525	811	630	870	484	673
465	698	662	920	417	773	540	775	484	676
465	631	602	840	366	670	555	695	457	609
576	853	577	918	484	901	-	-	517	835
410	642	519	762	335	675	360	600	499	753
044		44.7	700	047	0.45	070	570	770	F 40
244	666	417	760	217	645	270	570	338	549
236	525	336	649	206	628	235	785	189	716
230	525	330	649	206	020	233	/65	109	/10
234	658	400	574	206	567	240	470	214	670
123	658	400	574	206	546	240	470	185	634
123	030	400	3/4	200	340	240	4/0	103	034
547	889	654	851	510	867	495	860	615	886
547	832	620	809	505	836	485	830	580	862
593	889	648	846	546	892	555	860	702	960
593	980	636	829	546	861	550	825	668	881
708	1,005	712	875	639	977	655	955	751	1,097
662	1,005	696	855	618	887	630	935	739	1,032
-	-	-	-	809	1,202	870	1,110	987	1,311
-	-	-	-	752	1,151	850	1,095	962	1,301

# AUSTRALIAN CONSTRUCTION RLB TENDER PRICE INDEX

DATE         TPI         CPI         TPI         CPI         TPI         CPI           DEC-1972         11.7         11.7         11.7         12.7         12.7           DEC-1974         19.3         15.6         18.8         16.7           DEC-1975         22.6         17.7         20.6         19.1           DEC-1976         26.6         20.7         21.8         21.8           DEC-1977         28.9         22.7         23.6         23.7           DEC-1978         30.6         24.2         24.4         24.4         24.4           DEC-1979         32.6         26.7         26.9         28.1         26.7         26.9           DEC-1980         35.8         29.0         36.2         30.6         30.2         29.6           DEC-1981         40.5         32.3         41.0         34.2         34.9         32.9           DEC-1981         40.5         39.1         49.5         40.9         45.2         39.8           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	DATE	ADEL	AIDE	BRISE	BANE	CANB	ERRA
DEC-1973	DATE	TPI	CPI	TPI	CPI	TPI	CPI
DEC-1974	DEC-1972	11.7	11.7	12.7	12.7		
DEC-1975	DEC-1973	14.7	13.3	15.6	14.5		
DEC-1976         26.6         20.7         21.8         21.8           DEC-1977         28.9         22.7         23.6         23.7           DEC-1978         30.6         24.2         24.4         25.8         24.4         24.4           DEC-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-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         65.5         49.8         59.3         48.6           DEC-1989         75.4         58.6         60.5         61.4         70.9         59.5	DEC-1974	19.3	15.6	19.8	16.7		
DEC-1977         28.9         22.7         23.6         23.7           DEC-1978         30.6         24.2         24.4         25.8         24.4         24.4           DEC-1979         32.6         26.7         26.9         28.1         26.7         26.9           DEC-1980         35.8         29.0         36.2         30.6         30.2         29.6           DEC-1981         40.5         32.3         41.0         34.2         34.9         32.9           DEC-1982         45.7         35.8         46.2         37.8         40.7         36.9           DEC-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-1986         59.7         47.9         56.5         49.8         59.3         44.6           DEC-1986         59.7         47.9         56.5         54.8         59.3         44.6           DEC-1988         70.1         54.6         60.4         57.0         68.5 </td <td>DEC-1975</td> <td>22.6</td> <td>17.7</td> <td>20.6</td> <td>19.1</td> <td></td> <td></td>	DEC-1975	22.6	17.7	20.6	19.1		
DEC-1978         30.6         24.2         24.4         25.8         24.4         24.4           DEC-1979         32.6         26.7         26.9         28.1         26.7         26.9           DEC-1980         35.8         29.0         36.2         30.6         30.2         29.6           DEC-1981         40.5         32.3         41.0         34.2         34.9         32.9           DEC-1982         45.7         35.8         46.2         37.8         40.7         36.9           DEC-1983         48.5         39.1         49.5         40.9         45.2         39.8           DEC-1984         51.1         40.4         51.6         42.4         47.9         41.1           DEC-1985         55.6         43.8         54.3         45.7         55.9         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-1987         75.4         58.6         60.5         51.4         70.9         59.5           DEC-1989         75.4         58.6         60.5 </td <td>DEC-1976</td> <td>26.6</td> <td>20.7</td> <td>21.8</td> <td>21.8</td> <td></td> <td></td>	DEC-1976	26.6	20.7	21.8	21.8		
DEC-1979         32.6         26.7         26.9         28.1         26.7         26.9           DEC-1980         35.8         29.0         36.2         30.6         30.2         29.6           DEC-1981         40.5         32.3         41.0         34.2         34.9         32.9           DEC-1982         45.7         35.8         46.2         37.8         40.7         36.9           DEC-1983         48.5         39.1         49.5         40.9         45.2         39.8           DEC-1984         51.1         40.4         51.6         42.4         47.9         41.1           DEC-1986         59.7         47.9         56.5         49.8         59.3         48.6           DEC-1987         66.0         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         66.9         62.6         65.3           DEC-1991         79.7         64.3         55.2 </td <td>DEC-1977</td> <td>28.9</td> <td>22.7</td> <td>23.6</td> <td>23.7</td> <td></td> <td></td>	DEC-1977	28.9	22.7	23.6	23.7		
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-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-1991         78.7         65.4         55.2 </td <td>DEC-1978</td> <td>30.6</td> <td>24.2</td> <td>24.4</td> <td>25.8</td> <td>24.4</td> <td>24.4</td>	DEC-1978	30.6	24.2	24.4	25.8	24.4	24.4
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         78.7         66.3         55.3         66.9         62.6         65.3           DEC-1993         81.2         66.6         57.5 </td <td>DEC-1979</td> <td>32.6</td> <td>26.7</td> <td>26.9</td> <td>28.1</td> <td>26.7</td> <td>26.9</td>	DEC-1979	32.6	26.7	26.9	28.1	26.7	26.9
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         78.7         66.3         55.3         66.9         62.6         65.3           DEC-1993         81.2         66.6         57.5 </td <td>DEC-1980</td> <td>35.8</td> <td>29.0</td> <td>36.2</td> <td>30.6</td> <td>30.2</td> <td>29.6</td>	DEC-1980	35.8	29.0	36.2	30.6	30.2	29.6
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-1986         55.6         43.8         54.3         45.7         53.9         44.7           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-1991         79.7         64.3         55.2         66.9         62.6         65.3           DEC-1993         81.2         66.6         57.5         68.1         76.0         66.7           DEC-1994         85.7         71.6         65.3         73.4         82.6         71.9           DEC-1995         84.7         71.6         67.7 </td <td>DEC-1981</td> <td>40.5</td> <td>32.3</td> <td>41.0</td> <td>34.2</td> <td>34.9</td> <td>32.9</td>	DEC-1981	40.5	32.3	41.0	34.2	34.9	32.9
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-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 </td <td>DEC-1982</td> <td>45.7</td> <td>35.8</td> <td>46.2</td> <td>37.8</td> <td>40.7</td> <td>36.9</td>	DEC-1982	45.7	35.8	46.2	37.8	40.7	36.9
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-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 </td <td>DEC-1983</td> <td>48.5</td> <td>39.1</td> <td>49.5</td> <td>40.9</td> <td>45.2</td> <td>39.8</td>	DEC-1983	48.5	39.1	49.5	40.9	45.2	39.8
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         66.4         57.0         68.5         55.4           DEC-1999         75.4         58.6         60.5         61.4         70.9         59.5           DEC-1991         79.7         64.3         53.3         66.3         65.8         64.6           DEC-1992         78.7         66.3         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-1997         86.8         71.6         71.7         75.1         83.9         71.8           DEC-1997         86.8         71.6         71.7 </td <td>DEC-1984</td> <td>51.1</td> <td>40.4</td> <td>51.6</td> <td>42.4</td> <td>47.9</td> <td>41.1</td>	DEC-1984	51.1	40.4	51.6	42.4	47.9	41.1
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-1999         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         55.3         66.3         65.8         64.6           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-1997         86.8         71.6         71.7         75.1         83.9         71.8           DEC-1999         87.0         74.3         78.2         76.7         87.1         74.0           DEC-2000         88.2         78.3         78.3 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
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-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 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
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-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 </td <td>DEC-1987</td> <td>65.0</td> <td></td> <td></td> <td>53.3</td> <td></td> <td>51.8</td>	DEC-1987	65.0			53.3		51.8
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         55.3         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-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 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
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         66.4         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-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         98.2         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 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
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<							
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<							
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-2005         119.4         91.0         118							
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-2005         119.4         91.0         118.9         94.1         117.8         90.3           DEC-2006         126.2         93.9							
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-1999         87.0         73.3         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-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							
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-2004         112.4         88.6         106.8         91.4         110.4         87.6           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							
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							
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-2010         142.5         104.7 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
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-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							
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-2019         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							
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-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							
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-2010         142.5         104.7         119.8         108.0         136.5         102.2           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<							
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							
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							
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-2019         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							
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           MAR-2017							
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         116.5           JUN-2017         144.8         118.4         140.8         126.3         155.3         117.2           JUN-2017							
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-2016         143.7         117.9         139.7         126.0         154.3         116.2           JUN-2017         144.8         118.4         140.8         126.3         155.3         117.2           SEP-2017 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
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           MAR-2017         144.8         118.4         140.8         126.3         155.3         117.2           JUN-2017         145.9         118.5         142.5         126.9         156.4         117.2           SEP-2017         147.0         119.8         143.9         127.3         157.5         118.3							
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           MAR-2017         144.8         118.4         140.8         126.3         155.3         117.2           JUN-2017         145.9         118.5         142.5         126.9         156.4         117.2           SEP-2017         147.0         119.8         143.9         127.3         157.5         118.3							
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         13.6           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           MAR-2017         144.8         118.4         140.8         126.3         155.3         117.2           JUN-2017         145.9         118.5         142.5         126.9         156.4         117.2           SEP-2017         147.0         119.8         143.9         127.3         157.5         118.3							
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           MAR-2017         144.8         118.4         140.8         126.3         155.3         117.2           JUN-2017         145.9         118.5         142.5         126.9         156.4         117.2           SEP-2017         147.0         119.8         143.9         127.3         157.5         118.3							
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           MAR-2017         144.8         118.4         140.8         126.3         155.3         117.2           JUN-2017         145.9         118.5         142.5         126.9         156.4         117.2           SEP-2017         147.0         119.8         143.9         127.3         157.5         118.3							
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           MAR-2017         144.8         118.4         140.8         126.3         155.3         117.2           JUN-2017         145.9         118.5         142.5         126.9         156.4         117.2           SEP-2017         147.0         119.8         143.9         127.3         157.5         118.3							
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           MAR-2017         144.8         118.4         140.8         126.3         155.3         117.2           JUN-2017         145.9         118.5         142.5         126.9         156.4         117.2           SEP-2017         147.0         119.8         143.9         127.3         157.5         118.3							
DEC-2016         143.7         117.9         139.7         126.0         154.3         116.4           MAR-2017         144.8         118.4         140.8         126.3         155.3         117.2           JUN-2017         145.9         118.5         142.5         126.9         156.4         117.2           SEP-2017         147.0         119.8         143.9         127.3         157.5         118.3							
MAR-2017         144.8         118.4         140.8         126.3         155.3         117.2           JUN-2017         145.9         118.5         142.5         126.9         156.4         117.2           SEP-2017         147.0         119.8         143.9         127.3         157.5         118.3							
JUN-2017         145.9         118.5         142.5         126.9         156.4         117.2           SEP-2017         147.0         119.8         143.9         127.3         157.5         118.3							
SEP-2017 147.0 119.8 143.9 127.3 157.5 118.3							
DEC 2017   140.1   146.7   150.6	DEC-2017	147.0	119.0	145.3	12/.3	157.5	110.5

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

DAR\	WIN	MELBO	URNE	PER	PERTH SYDI		NEY	
TPI	CPI	TPI	CPI	TPI	CPI	TPI	CPI	
		13.8	13.8	14.8	14.8	14.5	14.5	
		15.3	15.7	17.0	16.4	16.2	16.4	
		19.4	18.2	21.6	19.2	21.4	19.1	
		22.6	20.9	26.3	22.0	24.6	21.7	
		25.4	23.9	30.5	25.7	25.7	24.5	
		27.7	26.2	34.2	28.6	27.7	26.5	
		29.4	28.2	35.7	30.6	29.3	28.7	
		32.3	31.0	36.0	33.5	32.5	31.7	
		35.5	33.9	38.4	36.3	37.3	34.7	
		39.6	37.8	43.9	40.8	43.6	38.6	
		44.4	41.7	51.3	44.8	46.9	43.2	
		47.3	45.7	53.4	48.6	49.7	46.4	
		52.0	46.8	56.0	49.5	52.6	47.5	
		58.5	50.7	65.8	53.6	60.6	51.5	
		63.4	55.9	72.6	59.1	67.2	56.5	
		69.3	59.8	76.5	63.2	74.1	60.5	
		74.9	63.9	81.7	68.0	80.6	66.1	
		81.9	69.2	89.5	73.3	86.8	71.0	
		82.6	74.4	92.1	78.8	84.1	75.5	
		76.7	75.6	91.2	78.6	75.1	76.6	
		74.8	75.5	91.2	78.6	71.4	76.9	
		77.0	77.4	91.2	80.5	72.5	77.9	
		78.3	79.0	92.1	82.2	75.4	80.0	
		79.8	82.7	93.0	86.2	79.1	84.7	
		82.0	83.7	95.0	87.8	83.8	86.1	
		84.1	83.7	97.2	87.1	89.7	86.0	
		86.8	84.4	99.3	89.1	96.1	87.6	
88.0		89.4	86.1	101.9	90.9	100.0	89.3	
89.8		93.8	91.3	102.6	95.5	99.9	94.6	
91.8		96.7	94.1	100.6	98.3	100.9	97.8	
93.7	93.7	104.6	97.0	103.8	101.1	103.9	100.5	
101.1	95.2	110.1	99.2	112.1	103.1	110.1	102.8	
113.2	97.1	114.7	101.5	124.5	106.2	117.8	105.5	
121.8	100.0	118.4	104.2	135.0	110.4	123.1	108.0	
132.7	105.0	122.2	107.2	147.2	115.2	128.7	111.5	
144.7	108.0	128.0	110.6	163.4	118.8	133.2	114.2	
159.1	112.0	129.6	114.1	159.9	123.2	139.2	118.4	
164.7	115.4	131.8	116.2	150.0	125.7	139.2	121.0	
168.0	118.1	137.4	119.8	147.6	129.0	140.6	123.9	
148.8	121.0	141.4	123.5	149.5	132.8	143.7	127.9	
151.8	124.1	141.4	126.1	146.1	135.6	145.4	131.1	
156.4	129.5	141.8	129.5	147.7	139.6	148.3	134.6	
159.1	132.0	143.9	131.4	148.9	142.3	152.8	136.9	
160.7	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	
162.7	132.0	150.8	137.1	150.0	145.0	169.1	142.6	
163.1	132.3	152.0	137.2	150.0	145.0	170.8	143.1	
163.5	133.1	153.1	137.8	150.0	145.7	172.6	144.2	
163.9		154.2		150.0		174.4		

# AUSTRALIAN CONSTRUCTION DEFINITIONS

### CBD

Central Business District.

### **BUILDING WORKS**

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

### **BUILDING SERVICES**

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

# OFFICE BUILDINGS

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

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

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

#### HOTELS

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

Note: Public space includes service areas.

#### **CAR PARKS**

Open Deck Multi-storey - minimal external walling.

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

## INDUSTRIAL BUILDINGS

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

Exclusions: Hardstandings, Roadworks and Special Equipment.

# AGED CARE

Single storey domestic construction with no operating theatre capacity, minimal specialist and service areas. 35-45 M<sup>2</sup> GFA/bed (150 beds).

### HOSPITAL

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

Low rise hospital (55–80 M<sup>2</sup> GFA/Bed) - Major operating theatre capacity including extensive specialist and service areas.

Exclusions: Loose furniture, special medical equipment.

# **CINEMAS**

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

Exclusions: Projection equipment, seating.

### SHOPPING CENTRES

### Department Store

Partially finished suspended ceilings and painted walls.

Exclusions: Floor finishes, shop fittings etc.

## Supermarket/Variety Store

Fully finished and serviced space.

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

### Malls

Fully finished and serviced space.

### Specialty Shops

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

Exclusions: Floor finishes and shop fittings.

### SMALL SHOPS AND SHOWROOMS

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

#### RESIDENTIAL

Single Storey or 1-3 Storey

Units reflect medium quality accommodation.

# Multi-Storey

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

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

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

# RIDERS DIGEST

# **ACKNOWLEDGEMENTS**

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**Property Council of Australia**Measurement of Net Lettable Area.

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

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

WSP Structures
Reinforcement Ratios.

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

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# MELBOURNE CONSTRUCTION COSTS

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# MELBOURNE CONSTRUCTION BUILDING SERVICES COSTS

All costs current as at Fourth Quarter 2017.

	SPECIAL EQUIPMENT		HYDR	AULIC
COST RANGE PER	<del></del>	M <sup>2</sup>	- ''	M <sup>2</sup>
GROSS FLOOR AREA	LOW	HIGH	LOW	HIGH
OFFICE BUILDINGS				
Prestige, CBD		=0	70	
10 TO 25 STOREYS (75-80% EFFICIENCY)	16	52	72	88
25 TO 40 STOREYS (70-75% EFFICIENCY)	16	52	72	93
40 TO 55 STOREYS (68-73% EFFICIENCY)	26	52	77	93
Investment, CBD				
UP TO 10 STOREYS (81-85% EFFICIENCY)	-	10	62	77
10 TO 25 STOREYS (76-81% EFFICIENCY)	21	46	62	82
25 TO 40 STOREYS (71-76% EFFICIENCY)	15	46	67	88
Investment, other than CBD				
1 TO 3 STOREYS (81-85% EFFICIENCY)	-	10	57	82
UP TO 10 STOREYS (82-86% EFFICIENCY)	10	15	52	82
10 TO 25 STOREYS (77-82% EFFICIENCY)	15	46	57	82
HOTELS				
Multi-Storey				
FIVE STAR	93	113	232	283
FOUR STAR	72	93	206	273
THREE STAR	62	82	185	273
CAR PARK				
OPEN DECK MULTI-STOREY	-	-	21	31
BASEMENT: CBD	-	-	31	46
BASEMENT: OTHER THAN CBD	-	-	26	36
UNDERCROFT: OTHER THAN CBD	-	-	5	5
INDUSTRIAL BUILDINGS				
6.00 M to underside of truss and 4,500 M <sup>2</sup> Gross Floor Area with:				
ZINCALUME METAL CLADDING	-	-	41	67
PRECAST CONCRETE CLADDING	-	-	41	67
Attached Air Conditioned Offices				
200 M <sup>2</sup>	-	-	57	77
400 M²	-	-	57	72

# 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.

FI	RE	ME	CH.		TICAL SPORT		DING GT	ELECT	RICAL	то	TAL
\$/	M <sup>2</sup>	\$/	M²	\$/	M <sup>2</sup>	\$/	M <sup>2</sup>	\$/M <sup>2</sup> \$/M <sup>2</sup>		M²	
LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH
67	77	309	474	113	227	57	88	165	237	799	1,241
62	77	319	494	244	268	57	88	175	247	944	1,318
62	82	330	505	258	330	57	93	191	258	999	1,411
57	72	258	489	52	155	46	77	149	185	623	1,066
57	77	268	453	82	206	41	62	160	206	691	1,133
57	82	278	433	134	258	41	57	170	227	762	1,190
52	72	206	309	-	41	15	31	103	155	433	700
52	77	216	330	62	147	21	41	129	165	541	858
52	77	237	340	72	191	21	57	144	180	598	973
77	93	371	464	155	309	77	93	721	824	1,725	2,178
72	88	309	391	82	258	41	88	464	670	1,246	1,859
67	88	288	361	41	170	41	88	258	361	942	1,421
10	46	-	26	34	102	5	31	26	46	96	282
36	57	21	57	34	102	15	36	31	67	168	365
31	52	21	52	34	102	15	36	31	57	158	334
5	10	-	-	-	-	-	11	21	36	31	62
46	67	36	72	-	-	5	21	52	93	180	320
46	67	36	72	-	-	5	21	52	93	180	320
46	77	227	278	-	-	15	46	118	165	464	644
46	77	227	299	-	185	15	46	118	175	464	855

#### 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.

## MELBOURNE CONSTRUCTION BUILDING SERVICES COSTS

		SPECIAL EQUIPMENT		AULIC
COST RANGE PER	<u> </u>	M <sup>2</sup>		M <sup>2</sup>
GROSS FLOOR AREA	LOW	HIGH	LOW	HIGH
AGED CARE				
SINGLE STOREY FACILITY	15	88	144	206
PRIVATE HOSPITALS				
Low Rise Hospital				
45-60 M <sup>2</sup> GFA/BED	36	93	144	206
55-80 M <sup>2</sup> GFA/BED WITH MAJOR OPERATING THEATRE	41	103	165	227
CINEMAS				
GROUP COMPLEX, 2,000-4,000 SEATS (WARM SHELL)	-	36	62	93
REGIONAL SHOPPING CENTRES				
DEPARTMENT STORE	21	41	46	72
SUPERMARKET/VARIETY STORE	15	31	57	82
DISCOUNT DEPARTMENT STORE	15	31	57	67
MALLS	-	36	57	82
SPECIALTY SHOPS	-	-	41	67
SMALL SHOPS AND SHOWROOMS				
SMALL SHOPS & SHOWROOMS	-	-	72	103
RESIDENTIAL				
SINGLE AND DOUBLE STOREY DWELLINGS (CUSTOM BUILT)	-	-	82	155
RESIDENTIAL UNITS				
WALK-UP 85 TO 120 M <sup>2</sup> /UNIT	-	-	88	186
TOWNHOUSES 90 TO 120 M <sup>2</sup> /UNIT	-	-	82	186
MULTI-STOREY UNITS				
Up to 10 storeys with lift				
UNITS 60-70 M <sup>2</sup>	5	37	165	216
UNITS 90-120 M <sup>2</sup>	5	37	160	206
Over 10 and up to 20 storeys				
UNITS 60-70 M <sup>2</sup>	5	37	175	216
UNITS 90-120 M <sup>2</sup>	5	37	170	206
Over 20 and up to 40 storeys				
UNITS 60-70 M <sup>2</sup>	5	37	185	227
UNITS 90-120 M <sup>2</sup>	5	37	180	216
Over 40 and up to 80 storeys				
UNITS 60-70 M <sup>2</sup>	5	37	191	237
UNITS 90-120 M <sup>2</sup>	5	37	155	216

#### 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.

FI	RE	ME	CH.		TICAL SPORT		DING GT	ELEC1	TRICAL	то	TAL
\$/	M²	\$/	M²	\$/	M²	\$/	′M²	\$/	′M²	\$/	/M²
LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH
31	82	93	361	-	-	36	124	144	227	464	1,087
57	82	464	618	45	85	52	124	185	288	983	1,496
57	82	567	876	74	206	72	155	206	391	1,181	2,039
67	72	361	489		21	26	52	103	144	618	906
07	12	301	403		21	20	32	103	144	010	300
=0					0.5						
52	67	216	267	-	85	26	46	165	232	525	811
41	62	155	227	-	144	26	41	124	185	417	773
41	62	124	206	-	103	26	46	103	155	366	670
46	77	185	309	-	103	21	46	175	247	484	901
46	67	185	309	-	103	-	26	62	103	335	675
31	67	52	278	-	82	-	-	62	114	217	645
5	10	26	155	-	124	-	31	93	155	206	628
5	26	26	185				26	88	144	206	567
5	26	26	185	_	_	_	26	93	124	206	546
	20	20	100				20	50		200	0.10
57	72	113	258	21	63	15	46	134	175	510	867
57	72	124	247	21	63	15	46	124	165	505	836
57	72	124	258	26	67	15	46	144	196	546	892
57	72	134	247	26	67	15	46	139	185	546	861
57	72	149	278	62	91	15	46	165	227	639	977
57	72	144	268	62	41	15	46	155	206	618	887
62	77	191	335	170	244	15	46	175	227	809	1,202
62	77	180	324	170	244	15	46	165	206	752	1,151

#### ELECTRICAL

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

# MELBOURNE CONSTRUCTION UNIT COSTS

ITEM	CONSTR RAN		PER
	LOW	HIGH	-
HOTELS Multi-Storey (excluding basements)			
FIVE STAR	340,000	555,000	BEDROOM
FOUR STAR	285,000	380,000	BEDROOM
THREE STAR	190,000	255,000	BEDROOM
CAR PARKS Based on 30 M² per car			
OPEN DECK MULTI-STOREY	19,750	33,250	CAR
BASEMENT - CBD	42,250	80,000	CAR
BASEMENT - OTHER THAN CBD	37,000	75,000	CAR
UNDERCROFT - OTHER THAN CBD	21,500	26,000	CAR
AGED CARE			
FACILITY	145,000	190,000	BEDROOM
PRIVATE HOSPITALS Low Rise Hospital			
45-60 M <sup>2</sup> GFA/BED	135,000	205,000	BED
55-80 M <sup>2</sup> GFA/BED	205,000	320,000	BED
CINEMAS			
GROUP COMPLEX, 2,000-4,000 SEATS (WARM SHELL)	7,300	11,000	SEAT
HOUSING			
SINGLE AND DOUBLE STOREY DWELLINGS (CUSTOM BUILT) - 325 M <sup>2</sup>	460,000	915,000	HOUSE
RESIDENTIAL UNITS (EXCL CARPARK/SI	TE WORKS)	)	
TOWNHOUSES (90-120 M²)	130,000	385,000	UNIT
1 TO 3 STOREY UNITS (85-120 M²)	135,000	345,000	UNIT
MULTI-STOREY RESIDENTIAL UNITS Up to 10 storeys with lift			
UNITS 60-70 M <sup>2</sup>	185,000	290,000	UNIT
UNITS 90-120 M <sup>2</sup>	265,000	485,000	UNIT
Over 10 and up to 20 storeys			
UNITS 60-70 M <sup>2</sup>	215,000	320,000	UNIT
UNITS 90-120 M <sup>2</sup>	290,000	555,000	UNIT
Over 20 and up to 40 storeys			
UNITS 60-70 M <sup>2</sup>	255,000	345,000	UNIT
UNITS 90-120 M <sup>2</sup>	345,000	580,000	UNIT
Over 40 and up to 80 storeys			
UNITS 60-70 M <sup>2</sup>	290,000	530,000	UNIT
UNITS 90-120 M <sup>2</sup>	395,000	790,000	UNIT

## MELBOURNE CONSTRUCTION SITEWORKS COSTS

#### **LANDSCAPING**

	LOW	HIGH	PER
LIGHT LANDSCAPING TO LARGE AREAS WITH MINIMAL PLANTING AND SITE FORMATION BUT EXCLUDING TOPSOIL AND GRASSING	34,750	50,000	HECTARE
DENSE LANDSCAPING AROUND BUILDINGS INCLUDING SHRUBS, PLANTS, TOPSOIL AND GRASSING	70	205	$M^2$
GRASSING ONLY TO LARGE AREAS INCLUDING TOPSOIL, SOWING AND TREATING	10	30	$M^2$

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

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

	LOW	HIGH	PER
LIGHT DUTY PAVING.	1,140	1,360	CARSPACE
HEAVY DUTY PAVING TO FACTORY TYPE COMPLEX, LARGE AREA WITH MINIMAL SITE FORMATION, DRAINAGE AND KERB TREATMENT	2,200	3,150	CARSPACE
LIGHT DUTY PAVING TO SHOPPING CENTRE COMPLEX, LARGE AREA WITH MINIMAL SITE FORMATION, AND INCLUDING DRAINAGE AND KERB TREATMENT	1,840	3,050	CARSPACE

#### **ROADS**

Asphalt finish including kerb, channel and drainage.

	LOW	HIGH	PER
RESIDENTIAL ESTATE 6.80 METRES WIDE EXCLUDING FOOT PATH AND NATURE STRIP	700	1,080	М
INDUSTRIAL ESTATE 10.4 METRES WIDE INCLUDING MINIMAL TO EXTENSIVE FORMATION	1,040	1,780	М

### MELBOURNE 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	35	50	M <sup>2</sup>
SINGLE/DOUBLE STOREY BRICK HOUSE WITH TILED ROOF	40	55	$M^2$
SINGLE STOREY FACTORY/ WAREHOUSE WITH REINFORCED CONCRETE GROUND SLAB, TIMBER OR STEEL FRAMED WALLS			
METAL CLAD	40	70	$M^2$
BRICK CLAD	55	80	$M^2$
TWO STOREY OFFICE BUILDING WITH REINFORCED CONCRETE FRAME MASONRY CLADDING AND METAL ROOF	100	115	$M^2$
MULTI-STOREY OFFICE BUILDING UP TO 15 FLOORS WITH MASONRY CLADDING			
REINFORCED CONCRETE	160	310	$M^2$
STRUCTURAL STEEL	170	310	$M^2$
MULTI-STOREY OFFICE BUILDING UP TO 25 STOREYS, CONSTRUCTED OF STEEL FRAME WITH MASONRY CLADDING	205	360	$M^2$

### HOTEL FURNITURE, FITTINGS & EQUIPMENT COSTS

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

	LOW	HIGH	PER
THREE STAR RATING	18,250	29,000	BEDROOM
FOUR STAR RATING	26,750	40,500	BEDROOM
FIVE STAR RATING	52,500	60,000	BEDROOM

### MELBOURNE 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	870	1,340	1,080	1,620	$M^2$
MAJOR COMPANY HEADQUARTERS	1,060	1,660	1,320	1,840	$M^2$
SOLICITORS, FINANCIERS	1,560	2,600	1,580	2,400	$M^2$
EXECUTIVE AREAS AND FRONT OF HOUSE	-	-	3,050	6,800	$M^2$
COMPUTER AREAS	2,300	4,850	-	-	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  $\times$  1,800 MM including screens generally 1,220 MM high (managerial 1,620 MM high), desks, storage cupboards, shelving.

TYPE OF WORKSTATION	LOW	HIGH	PER
CALL CENTRE	1,660	3,600	EACH
SECRETARIAL	1,860	4,850	EACH
TECHNICAL STAFF	3,600	6,000	EACH
EXECUTIVE	5.500	9.200	EACH

#### REFURBISHMENT

#### Office

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

	LOW	HIGH	PER
CBD OFFICES TYPICAL FLOOR	630	1,840	$M^2$
CBD OFFICES CORE UPGRADE (EXCLUDING LIFTS MODERNISATION)	720	1,440	$M^2$

## MELBOURNE 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 SATING, PUBLIC SATING CHANGE ROOMS	1,000	1,320	M²

#### SWIMMING POOL CENTRES

	LOW	HIGH	PER
INCLUDING FOYER, KIOSK, OFFICE, LOCKERS, ADMINISTRATION OFFICES, CHANGE ROOMS	1,480	1,800	$M^2$

#### **SWIMMING POOLS**

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

	LOW	HIGH	PER
HALF OLYMPIC (25.0 X 12.5 M)	360,000	470,000	EACH
EXTRA FOR HEATING	19,570	38,110	EACH
EXTRA OVER FILTRATION AND DOSING PLANT FOR OZONE BASED DOSING SYSTEM	177,160	283,250	EACH
EXTRA FOR WET DECK	24,720	47,380	EACH
OLYMPIC (50.0 X 21.5 M)	1,400,000	1,825,000	EACH
EXTRA FOR HEATING	36,050	61,800	EACH
EXTRA FOR FILTRATION AND DOSING PLANT	257,500	432,600	EACH
EXTRA OVER FILTRATION AND DOSING PLANT FOR OZONE BASED DOSING SYSTEM	82,400	139,050	EACH

#### SMALL BOAT AND YACHT MARINA BERTHS

Floating pontoon walkways, serviced with power and water.

	LOW	HIGH	PER
DOUBLE LOADED BERTHS	16,750	23,000	BERTH
SINGLE LOADED BERTHS	28,250	33,750	BERTH
SUPER YACHTS	220,000	275,000	BERTH

### MELBOURNE 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	48,000	57,500	COURT
RED POROUS (EN-TOUT-CAS)	27,500	36,250	COURT
SYNTHETIC ACRYLIC (FLEXIPAVE)	40,500	48,000	COURT
ASPHALT (5 MM)	30,500	39,500	COURT
REBOUND ACE	-	-	COURT
CONCRETE	38,500	42,750	COURT
FLOODLIGHTING	-	-	COURT

#### **GOLF COURSES**

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

	LOW	HIGH	PER
SANDY SOIL SITE, REQUIRING MINIMAL EXCAVATION AND SITE PREPARATION	7,350,000	10,800,000	COURSE
SITE REQUIRING ROCK EXCAVATION	12,750,000	16,475,000	COURSE
SWAMPY SITE REQUIRING DREDGING FOR LAKES, ETC. AND EXTENSIVE FILL	14,050,000	21,500,000	COURSE

#### PLAYING FIELDS

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

	LOW	HIGH	PER
EXCLUDES SPRINKLERS	35	40	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	3,650	8,300	SEAT

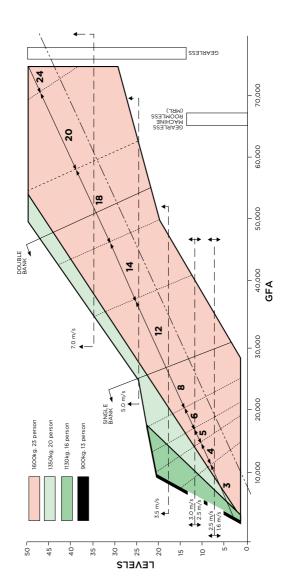
### MELBOURNE CONSTRUCTION VERTICAL TRANSPORTATION

#### 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.



# MELBOURNE CONSTRUCTION VERTICAL TRANSPORTATION

APPLICATION	LIFT TYPE	SPEED NO. OF FLOORS			COST	ADDITIONAL FLOOR	EXPRESS FLOOR
		11/3	SERVED	LOW	HIGH	RATE	RATE
	ELECTRO-HYDRAULIC PASSENGER	0.5	2	-	-	-	-
	GEARLESS TO 17 PASSENGER	1	5	120,000	190,000	8,800	6,200
	GEARLESS UP TO 17 PASSENGER	1.6	8	155,000	240,000	8,800	6,200
	GEARLESS	2.5	10	290,000	445,000	10,500	7,800
OFFICE &	GEARLESS	3.5	10	475,000	570,000	12,000	7,800
RESIDENTIAL	GEARLESS	4	10	495,000	590,000	12,000	8,300
	GEARLESS	5	10	570,000	705,000	12,000	8,300
	GEARLESS	6	10	705,000	805,000	14,500	10,500
	GEARLESS	7	10	725,000	825,000	15,000	11,000
	GEARLESS	8	10	795,000	900,000	15,500	11,500
HOSPITAL	GEARED UP TO 40 PASSENGER	2	5	425,000	475,000	15,000	9,600
HOSFITAL	GEARLESS	2.5	10	670,000	870,000	12,500	8,300
	GEARLESS MRL TO 2,000 KG	1.6	10	340,000	435,000	13,500	10,500
LARGE GOODS	ELECTRO-HYDRAULIC TO 5,000 KG	0.5	2	260,000	415,000	31,000	25,750
	GEARLESS 2,500 KG	2.5	10	745,000	870,000	13,000	9,300
ESCALATORS	RISE 2,600 TO 5,000 MM	0.5	-	125,000	165,000	-	-
MOVING WALKS	2,500 TO 5,000 MM	0.5	-	150,000	260,000	-	-
SERVICE LIFT	BENCH HEIGHT UNIT	0.2	3	34,000	38,250	4,350	1,450
SERVICE LIFT	LARGER UNIT	0.2	3	47,500	57,500	4,750	1,450
DISABLED PLATFORM	TO 1,000 MM	0.1	2	29,000	36,250	-	-
LIFT	1,000 TO 4,000 MM	0.1	2	43,500	48,500	-	-

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

### MELBOURNE DEVELOPMENT

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### MELBOURNE DEVELOPMENT STAMP DUTIES

When purchasing Victorian land, which may include buildings, there is a liability to pay stamp duty. The duty payable is based on the market value of the property or the purchase price, whichever is greater.

DUTIABLE VALUE RANGE	DUTY RATE
\$0-\$25,000	1.4 PER CENT OF THE DUTIABLE VALUE OF THE PROPERTY
\$25,001-\$130,000	\$350 PLUS 2.4 PER CENT OF THE DUTIABLE VALUE IN EXCESS OF \$25,000
\$130,001-\$960,000	\$2,870 PLUS 6 PER CENT OF THE DUTIABLE VALUE IN EXCESS OF \$130,000
MORE THAN \$960,000	5.5 PER CENT OF THE DUTIABLE VALUE

The Victorian Government offers a concession when purchasing an "off-the-plan property", either as a land and building package, or a refurbished lot.

Residential property purchased by foreign purchasers must pay Foreign Purchaser Additional Duty (FPAD) in addition to land transfer duty on the dutiable value of the property purchased. The dutiable value is the greater of the price paid, or the market value of the property/land.

For contracts, transactions, agreements and arrangements entered into on or after 1 July 2015 but before 1 July 2016, the additional duty rate is 3% (even if the settlement date is on or after 1 July 2016). For contracts, transactions, agreements and arrangements entered into on or after 1 July 2016, the additional duty rate is 7%.

For further details refer to www.sro.vic.gov.au.

### MELBOURNE DEVELOPMENT LAND TAX

Land tax is an annual tax levied on owners of taxable land in Victoria as at midnight on 31 December of the year preceding the year of assessment. For example, the 2017 assessment is based on land holdings as at midnight on 31 December 2016.

In general, a principal place of residence or land used for primary production is exempt from land tax.

From 1 January 2016, an absentee owner surcharge applies. This surcharge will increase from 0.5 per cent to 1.5 per cent from 1 January 2017.

The absentee owner surcharge is an additional amount that applies over the land tax payable over the general and trust surcharge rates.

An absentee individual is any individual who:

- 1. Is not an Australian citizen or permanent resident,
- Does not ordinarily reside in Australia, and
- 3. Was absent from Australia:
- on 31 December of the year prior to the tax year, or
- for more than six months in total in the calendar year prior to the tax year

Land tax is assessed on a calendar year basis.

TOTAL TAXABLE VALUE OF LANDHOLDINGS	LAND TAX PAYABLE
< \$250,000	NIL
\$250,000 TO \$600,000	\$275 PLUS 0.2% OF AMOUNT > \$250,000
\$600,000 TO \$1,000,000	\$975 PLUS 0.5% OF AMOUNT > \$600,000
\$1,000,000 TO \$1,800,000	\$2,975 PLUS 0.8% OF AMOUNT > \$1,000,000
\$1,800,000 TO \$3,000,000	\$9,375 PLUS 1.3% OF AMOUNT > \$1,800,000
MORE THAN \$3,000,000	\$24,975 PLUS 2.25% OF AMOUNT > \$3,000,000

Land held on trust is treated differently from land held by a person in their own right.

TOTAL TAXABLE VALUE OF TRUST OWNED LANDHOLDINGS	LAND TAX PAYABLE
< \$25,000	Nil
\$25,000 TO < \$250,000	\$82 PLUS 0.375% OF AMOUNT > \$25,000
\$250,000 TO < \$600,000	\$926 PLUS 0.575% OF AMOUNT > \$250,000
\$600,000 TO < \$1,000,000	\$2,938 PLUS 0.875% OF AMOUNT > \$600,000
\$1,000,000 TO < \$1,800,000	\$6,438 PLUS 1.175% OF AMOUNT > \$1,000,000
\$1,800,000 TO < \$3,000,000	\$15,838 PLUS 0.7614%* OF AMOUNT > \$1,800,000
\$3,000,000 AND OVER	\$24,975 PLUS 2.25% OF AMOUNT > \$3,000,000

For further details refer to www.sro.vic.gov.au.

### MELBOURNE DEVELOPMENT PLANNING - CAR PARKING

The following car parking information is derived from the Melbourne Planning Scheme, Clause 52.06 Car Parking, which details the appropriate number of car parking spaces to be provided to service particular uses of land.

The table sets out the car parking requirement that applies to the uses listed. A car parking requirement in the table is calculated by multiplying the figure in Column A or Column B (whichever applies) by the measure (for example square metres, number of patrons or number of bedrooms) in Column C.

Column A applies unless a schedule to the Parking Overlay or another provision of the planning scheme specifies that Column B applies. Full details of the Melbourne Planning Scheme can be found at: http://planningschemes.dpcd.vic.gov.au/schemes/melbourne.

TYPE OF PROPOSED USE	COLUMN A	COLUMN B	COLUMN C
	APPLIES THE STANDARD RATE TO ALL ZONES	ONLY APPLIES WHERE SPECIFIED IN A SCHEDULE TO THE PARKING OVERLAY	
	RATE	RATE	CAR PARKING MEASURE
	1	1	EACH 1 OR 2 BEDROOM UNIT, PLUS
DWELLINGS	2	2	EACH 3 OR MORE BEDROOM UNIT, PLUS
	1	0	1 VISITOR SPACE FOR EACH 5 UNITS FOR DEVELOPMENTS WITH MORE THAN 5 UNITS
HOTEL	0.4		EACH PATRON PERMITTED
HOTEL		3.5	EACH 100 M² OF LEASABLE AREA
OFFICE	3.5	3.0	EACH 100 M² OF LEASABLE AREA
RESIDENTIAL AGED CARE FACILITY	0.3	0.3	TO EACH LODGING ROOM
RESTAURANT	0.4		EACH PATRON PERMITTED
RESTAURANT		3.5	EACH 100 M² OF LEASABLE AREA
RESTRICTED RETAIL PREMISES	3	2.5	EACH 100 M² OF LEASABLE AREA
SHOP	4	3.5	EACH 100 M² OF LEASABLE AREA
SUPERMARKET	5	5	EACH 100 M² OF LEASABLE AREA

### MELBOURNE DEVELOPMENT LAND VALUES

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

LOCATION (COSTS PER M²)	\$/	M <sup>2</sup>
	LOW	HIGH
OFFICES		
CBD OFFICES	15,000	25,000
FRINGE	10,000	15,000
BOX HILL (2,000 M²)	8,000	11,000
CBD RETAIL		
CBD PRIME RETAIL (EG. 120 M²)	20,000	50,000
CBD SECONDARY AREAS	10,000	15,000
NEIGHBOURHOOD SHOPPING CENTRE	300	750
SUBURBAN STRIP SHOPPING	750	2,500
INDUSTRIAL (1HA TO 5HA)		
SOUTH EAST	170	250
NORTH WEST	150	250
CITY FRINGE	600	800

Prepared in association with Savills.

# MELBOURNE 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	ST.KILDA ROAD	SUBURBAN OFFICES	PRIME
1988	345	186	206	49
1989	271	218	217	47
1990	192	213	231	56
1991	160	172	209	66
1992	71	145	188	62
1993	54	117	157	60
1994	57	108	183	50
1995	73	130	179	47
1996	85	145	181	48
1997	103	160	183	52
1998	132	166	183	58
1999	142	168	183	65
2000	191	168	183	64
2001	265	190	205	66
2002	317	193	201	66
2003	255	195	182	66
2004	188	186	199	70
2005	238	188	196	70
2006	259	201	222	75
2007	281	207	223	75
2008	367	256	254	75
2009	349	206	228	78
2010	370	217	225	85
2011	404	219	239	83
2012	400	249	228	83
2013	324	238	229	83
2014	352	248	235	85
2015	352	240	230	85
2016	420	240	275	85
2017	440	270	285	87

Prepared in association with Savills.

# MELBOURNE DEVELOPMENT OFFICE SECTOR DATA

#### **MELBOURNE CBD VACANCY RATES - Q2 2017**

PCA GRADE	STOCK M²	VACANCY M²	VAC % JUN-17
PREMIUM	751,400	46,000	6.1
GRADE A	2,257,800	137,100	6.1
SECONDARY	1,541,400	111,500	7.2
TOTAL	4,550,600	294,600	6.5

Source: PCA/Savills Research.

### CURRENT CENTRAL MELBOURNE OFFICE DEVELOPMENT ACTIVITY

PROPERTY	PRECINCT	NLA (M²)	TYPE	STATUS	COMPLETION	MAJOR TENANT(S)
839 COLLINS STREET	CBD	38,000	PRE- COMMITTED	UC	2019	ANZ
TWO MELBOURNE QUARTER	DOCKLANDS	49,000	NEW	UC	2021+	
664 COLLINS ST	DOCKLANDS	23,200	PRE- COMMITTED	UC	2018	PITCHER PARTNERS, EXXON
271 SPRING ST	CBD	15,600	PRE- COMMITTED	UC	2019	AUSTRALIAN UNITY
ONE MELBOURNE QUARTER	DOCKLANDS	26,400	PRE- COMMITTED	UC	2018	ARUP, LENDLEASE
80 COLLINS ST	CBD	43,000	NEW	UC	2020	MACQUARIE GROUP, SAVILLS
130 LONSDALE ST	CBD	55,000	NEW	PA	2020	
TOWER 5, 727 COLLINS ST	DOCKLANDS	40,000	NEW	UC	2018	TRANSURBAN, GRANT THORNTON
MELBOURNE QUARTER TOWER	DOCKLANDS	55,000	NEW	UC	2021+	
447 COLLINS ST	CBD	49,000	PRE- COMMITTED	UC	2020	KING & WOOD MALLESONS
311 SPENCER ST	CBD	65,000	PRE- COMMITTED	PS	2020	VICTORIAN POLICE
405 BOURKE ST	CBD	61,500	NEW	UC	2020	NAB
477 COLLINS ST	CBD	51,661	NEW	UC	2020	DELOITTE

UC: Under Construction Source: Savills Research.

UC: Under Construction PA: Plans Approved/Applied

PS: Plans Submitted

# MELBOURNE DEVELOPMENT OFFICE SECTOR DATA

#### **KEY MARKET INDICATORS - Q3 2017**

MELBOURNE CBD	PCA PI	REMIUM
	LOW	HIGH
RENTAL - GROSS FACE	680	955
RENTAL - NET FACE	490	765
INCENTIVE LEVEL (%) GROSS	24	28
RENTAL - NET EFFECTIVE	365	565
OUTGOINGS - OPERATING	115	135
OUTGOINGS - STATUTORY	60	70
OUTGOINGS - TOTAL	175	205
TYPICAL LEASE TERM (YEARS)	6	10
YIELD - MARKET (% NET FACE RENTAL)	4.75	5.50
IRR (%)	6.75	7.00
CARS PERMANENT RESERVED (\$/PCM)	550	800
CARS PERMANENT (\$/PCM)	450	600
OFFICE COMPONENT CAPITAL VALUES	8,500	14,000

SUBURBAN OFFICE	PCA GI	RADE A
	LOW	HIGH
RENTAL - GROSS FACE	455	505
RENTAL - NET FACE	350	400
INCENTIVE LEVEL (%) GROSS	15	20
RENTAL - NET EFFECTIVE	290	330
OUTGOINGS - OPERATING	50	70
OUTGOINGS - STATUTORY	30	55
OUTGOINGS - TOTAL	80	125
TYPICAL LEASE TERM (YEARS)	4	8
YIELD - MARKET (% NET FACE RENTAL)	6.25	7.00
IRR (%)	7.00	8.00
CARS PERMANENT RESERVED (\$/PCM)	185	215
CARS PERMANENT (\$/PCM)	-	-
OFFICE COMPONENT CAPITAL VALUES	6,100	7,600

All rates are \$/M2 unless otherwise noted.

Source: Savills Research Q2 2017.

PCA G	PCA GRADE A		RADE B
LOW	HIGH	LOW	HIGH
655	765	545	585
490	600	405	445
25	30	22	26
355	435	310	340
100	110	85	109
55	60	37	47
155	170	122	156
5	8	3	7
5.00	5.75	6.00	7.00
6.75	7.00	7.00	7.50
500	700	450	600
450	600	420	500
7,000	12,000	6,000	8,500

PCA GRADE B				
LOW	HIGH			
375	420			
275	320			
20	25			
215	250			
50	60			
40	45			
90	105			
3	5			
6.50	7.50			
7.25	8.25			
150	200			
-	-			
4,500	5,500			

# MELBOURNE DEVELOPMENT RETAIL SECTOR DATA

#### **KEY MARKET INDICATORS - Q3 2017**

MELBOURNE ENCLOSED CENTRES	REGI	ONAL
	LOW	HIGH
DEPARTMENT STORE RENT (GROSS)	150	300
DDS RENT (GROSS)	210	300
SUPERMARKET RENT (GROSS)	250	400
SPECIALTY TENANT RENT (GROSS)	750	2,000
MINI-MAJOR RENT (GROSS)	400	1,750
YIELD - MARKET (%)	4.25	5.50
IRR (%)	6.25	7.25
OUTGOINGS - OPERATING	100	150
OUTGOINGS - STATUTORY	40	75
OUTGOINGS - TOTAL	140	225
CAPITAL VALUES	7,500	12,000

#### **RETAIL SALES ACTIVITY**

PROPERTY SALES	TYPE
ST COLLINS LANE	CITY CENTRE
CASEY CENTRAL	SUB REGIONAL
DFO SOUTHWHARF & HOMEMAKER HUB (25%)	OTHER
ARENA SHOPPING CENTRE	NEIGHBOURHOOD
CENTURY CITY WALK SHOPPING CENTRE	NEIGHBOURHOOD
WODONGA PLAZA	SUB REGIONAL
SPRINGHILL SHOPPING CENTRE	NEIGHBOURHOOD
BAXTER CENTRAL	NEIGHBOURHOOD
125-131 CHAPEL ST, PRAHRAN	SHOPS
ROCKLEA HOMEMAKER	LARGE FORMAT
SUNBURY SHOWROOMS	LARGE FORMAT
WOOLWORTHS SUPERMARKET	FREESTANDING
METRO WOOLWORTHS	SHOPS
HEALESVILLE WALK S.C.	NEIGHBOURHOOD
40-50 EYANS ST, GEELONG	LARGE FORMAT

All rates are \$/M2 unless otherwise noted.

Source: Savills Research.

SUB RE	GIONAL	NEIGHBOURHOOD L		LARGE I	ORMAT
LOW	HIGH	LOW	HIGH	LOW	HIGH
170	340				
250	400	250	400		
550	1,500	450	750		
400	1,500	300	650	175	300
5.25	6.25	5.00	6.25	6.00	7.50
7.00	7.75	6.75	8.00	7.75	8.75
75	100	50	75	25	50
25	50	25	35	10	20
100	150	75	110	35	70
3,500	7,500	3,000	7,000	2,000	3,500

PRICE (\$M)	DATE	GLA (M²)	\$/M²
247.00	NOV-16	9,000	27,444
221.00	DEC-16	24,853	8,892
141.25	FEB-17	28,653	19,719
48.10	APR-17	8,144	5,906
45.00	MAY-17	8,352	5,388
43.50	JUN-17	17,503	2,485
43.00	DEC-16	7,102	6,055
16.60	MAY-17	4,218	3,936
14.96	OCT-16	800	18,700
35.00	NOV-16	18,347	1,908
14.88	JAN-17	5,554	2,679
32.08	JUL-16	3,305	9,707
13.50	APR-17	1,639	8,237
29.90	OCT-16	4,972	6,014
11.44	JUL-17	4,483	2,552

# MELBOURNE DEVELOPMENT INDUSTRIAL SECTOR DATA

#### **KEY MARKET INDICATORS - Q3 2017**

### SOUTH EASTERN (BRAESIDE, CARRUM DOWNS, DANDENONG, KEYSBOROUGH, MOORABBIN)

	PR	IME	SECO	NDARY
	LOW	HIGH	LOW	HIGH
RENTAL NET FACE	75	90	55	65
INCENTIVES (%)	15	25	15	25
YIELD - MARKET (%)	5.75	6.75	6.75	8.00
IRR (%)	7.00	8.00	7.75	8.75
OUTGOINGS - TOTAL	14	18	12	16
CAPITAL VALUES	1,100	1,500	700	900
LAND VALUES 3,000 - 5,000 M <sup>2</sup>	275 (	LOW)	375 (	HIGH)
LAND VALUES 10,000 - 50,000 M <sup>2</sup>	180 (	LOW)	225 (	HIGH)
LAND VALUES 10 HA AND ABOVE	110 (	LOW)	140 (	HIGH)
ENGLOBO LAND VALUES	30 (L	.OW)	80 (H	HIGH)

### WEST (ALTONA, DERRIMUT, LAVERTON NORTH, SUNSHINE, TRUGANINA)

	PR	PRIME		NDARY
	LOW	HIGH	LOW	HIGH
RENTAL NET FACE	67	80	50	60
INCENTIVES (%)	15	30	20	30
YIELD - MARKET (%)	5.75	6.75	6.75	8.00
IRR (%)	7.00	7.75	7.75	8.75
OUTGOINGS - TOTAL	12	16	10	15
CAPITAL VALUES	900	1,300	550	700
LAND VALUES 3,000 - 5,000 M <sup>2</sup>	160 (	LOW)	220 (	HIGH)
LAND VALUES 10,000 - 50,000 M <sup>2</sup>	150 (	LOW)	200 (	HIGH)
LAND VALUES 10 HA AND ABOVE	80 (L	OW)	110 (	HIGH)
ENGLOBO LAND VALUES	30 (L	OW)	80 (H	HIGH)

#### CITY FRINGE (PORT MEI BOURNE)

	PR	IME	SECONDARY	
	LOW	HIGH	LOW	HIGH
RENTAL NET FACE	90	150	65	90
INCENTIVES (%)	5	15	5	10
YIELD - MARKET (%)	6.00	7.00	8.00	9.00
IRR (%)	7.50	8.25	9.00	9.50
OUTGOINGS - TOTAL	25	38	25	38
CAPITAL VALUES	1,300	2,500	900	1,200
LAND VALUES 3,000 - 5,000 M <sup>2</sup>	800 (	LOW)	1,100	(HIGH)
LAND VALUES 10,000 - 50,000 M <sup>2</sup>	600 (	LOW)	800 (	HIGH)

All rates are \$/M2 unless otherwise noted.

Source: Savills Research.

# MELBOURNE DEVELOPMENT CONSTRUCTION WORK DONE

#### ANNUAL VALUE OF CONSTRUCTION WORK DONE

YEAR ENDING	RESIDENTIAL	NON- RESIDENTIAL	ENGINEERING	TOTAL CONSTRUCTION
JUN-1990	3,614	4,450	2,360	10,424
JUN-1991	2,904	3,643	2,314	8,861
JUN-1992	2,725	2,404	1,916	7,045
JUN-1993	3,063	1,971	2,098	7,131
JUN-1994	3,450	1,902	2,329	7,681
JUN-1995	3,581	2,322	2,409	8,313
JUN-1996	3,261	2,870	2,353	8,484
JUN-1997	3,385	3,252	2,472	9,110
JUN-1998	4,480	2,960	3,137	10,577
JUN-1999	5,312	3,571	3,885	12,768
JUN-2000	7,089	3,431	3,451	13,971
JUN-2001	6,646	3,544	3,216	13,407
JUN-2002	8,161	3,929	3,389	15,480
JUN-2003	9,364	4,705	4,244	18,313
JUN-2004	10,219	5,102	4,983	20,305
JUN-2005	10,453	5,863	5,911	22,227
JUN-2006	10,085	6,215	7,406	23,706
JUN-2007	10,094	7,138	7,217	24,449
JUN-2008	10,928	9,089	7,324	27,341
JUN-2009	12,337	9,042	8,346	29,725
JUN-2010	13,941	8,531	9,539	32,011
JUN-2011	15,910	8,495	11,189	35,594
JUN-2012	16,036	8,578	11,756	36,370
JUN-2013	16,268	8,398	10,905	35,571
JUN-2014	16,281	8,914	10,386	35,580
JUN-2015	18,252	9,611	10,209	38,072
JUN-2016	21,338	9,484	11,116	41,937
JUN-2017	22,663	10,319	12,001	44,983

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

# MELBOURNE DEVELOPMENT CONSTRUCTION WORK DONE

### ANNUAL VALUE OF NON-RESIDENTIAL BUILDING WORK DONE IN VICTORIA

YEAR ENDING	COMMERCIAL	INDUSTRIAL	RETAIL	EDUCATION
JUN-2002	895	640	762	648
JUN-2003	1,111	913	852	615
JUN-2004	1,597	732	814	704
JUN-2005	1,564	1,118	956	700
JUN-2006	1,543	1,271	1,007	759
JUN-2007	1,710	1,462	1,389	816
JUN-2008	2,520	1,427	2,106	869
JUN-2009	2,503	1,142	1,892	933
JUN-2010	1,359	935	1,226	2,681
JUN-2011	1,329	1,158	1,350	2,819
JUN-2012	1,817	1,193	1,721	1,685
JUN-2013	2,163	1,047	1,688	1,165
JUN-2014	2,296	840	1,441	1,187
JUN-2015	2,169	1,483	1,356	1,208
JUN-2016	2,195	1,548	1,585	1,262
JUN-2017	1,849	1,667	1,798	1,677

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

HEALTH	AGED CARE	HOTELS	OTHER	TOTAL NON-RESIDENTIAL
257	181	125	422	3,929
314	236	188	476	4,705
344	238	121	552	5,102
330	215	144	835	5,863
356	254	194	830	6,215
421	285	246	808	7,138
466	386	443	871	9,089
758	323	589	901	9,042
758	216	341	1,013	8,531
745	159	165	771	8,495
609	202	296	1,054	8,578
778	249	218	1,090	8,398
1,035	335	163	1,615	8,914
1,530	339	186	1,339	9,611
1,153	429	221	1,092	9,484
818	427	442	1,641	10,319

# MELBOURNE DEVELOPMENT CONSTRUCTION WORK DONE

### ANNUAL VALUE OF RESIDENTIAL BUILDING WORK DONE IN VICTORIA

YEAR ENDING	NEW HOUSES	NEW APARTMENTS & SEMI DETACHED HOUSING	ALTERATIONS & ADDITIONS INCLUDING CONVERSIONS	TOTAL RESIDENTIAL
JUN-1990	2,777	206	631	3,614
JUN-1991	2,147	195	562	2,904
JUN-1992	1,993	181	550	2,725
JUN-1993	2,287	196	579	3,063
JUN-1994	2,521	278	651	3,450
JUN-1995	2,574	300	708	3,581
JUN-1996	2,111	452	698	3,261
JUN-1997	1,989	621	775	3,385
JUN-1998	2,808	760	911	4,480
JUN-1999	3,366	948	998	5,312
JUN-2000	4,468	1,352	1,269	7,089
JUN-2001	3,926	1,521	1,199	6,646
JUN-2002	4,918	1,799	1,445	8,161
JUN-2003	5,782	2,119	1,463	9,364
JUN-2004	6,051	2,429	1,739	10,219
JUN-2005	6,199	2,513	1,740	10,453
JUN-2006	6,231	2,188	1,666	10,085
JUN-2007	6,493	1,815	1,786	10,094
JUN-2008	6,802	2,094	2,031	10,928
JUN-2009	7,669	2,631	2,038	12,337
JUN-2010	8,781	3,193	1,968	13,941
JUN-2011	9,310	4,433	2,167	15,910
JUN-2012	8,670	5,042	2,324	16,036
JUN-2013	8,161	5,771	2,335	16,268
JUN-2014	7,895	5,906	2,480	16,281
JUN-2015	8,960	6,807	2,485	18,252
JUN-2016	10,341	8,403	2,594	21,338
JUN-2017	11,005	8,746	2,912	22,663

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

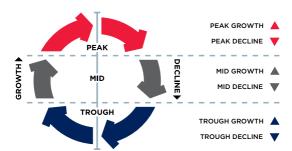
### MELBOURNE DEVELOPMENT RLB CONSTRUCTION MARKET ACTIVITY CYCLE

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

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

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

#### RLB CONSTRUCTION MARKET ACTIVITY CYCLE



### MELBOURNE DEVELOPMENT RLB CONSTRUCTION MARKET ACTIVITY CYCLE

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

MELBOURNE	Q2 2015	Q4 2015	Q2 2016	Q4 2016	Q2 2017	Q4 2017
HOUSES	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>
APARTMENTS			<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>
OFFICES					<b>A</b>	<b>A</b>
INDUSTRIAL	▼	•	•			
RETAIL	•	•	•	<b>A</b>	<b>A</b>	•
HOTEL	<b>A</b>		<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>
CIVIL		<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>

## BENCHMARKS

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### BENCHMARKS REGIONAL INDICES

The construction cost information in this publication is based upon rates for capital city construction projects and are current for the Fourth Quarter 2017. 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 2017

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

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

Base city ( $C_b$ ), divided by the Relativity of city to be compared with ( $C_r$ ) i.e. ( $C_R$ / $C_r$ )-1

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

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

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

ie. 1,000,000 x (100/90) = ~1,111,000

ADELAIDE 100		BRISBANE 100		CANBERRA 100		DARWIN 100		GOLD COAST 100	
BNE	98	ADE	102	ADE	93	ADE	90	ADE	111
CAN	107	CAN	109	BNE	92	BNE	89	BNE	109
DAR	111	DAR	113	DAR	103	CAN	97	CAN	119
GC	90	GC	92	GC	84	GC	82	DAR	123
MEL	104	MEL	106	MEL	97	MEL	94	MEL	115
PER	101	PER	103	PER	95	PER	91	PER	112
SYD	118	SYD	120	SYD	110	SYD	106	SYD	130
TVE	100	TVE	102	TVE	93	TVE	90	TVE	111

MELBOURNE 100		PERTH 100		SYDNEY 100		TOWNSVILLE 100	
ADE	96	ADE	99	ADE	85	ADE	100
BNE	94	BNE	97	BNE	83	BNE	98
CAN	103	CAN	106	CAN	91	CAN	107
GC	87	GC	89	GC	77	GC	90
DAR	106	DAR	109	DAR	94	DAR	111
PER	97	MEL	103	MEL	88	MEL	104
SYD	113	SYD	116	PER	86	PER	101
TVE	96	TVE	99	TVE	85	SYD	118

### BENCHMARKS OFFICE BUILDING EFFICIENCIES

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

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

### PLANT ROOM SPACE

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

### REINFORCEMENT RATIOS

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

	AVE KG/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
RETAINING WALLS			
1-2 STOREY	70	BEAMS	170
2-3 STOREY	120		
GROUND BEAMS	120	WALLS (CORE)	140
		STAIRS	80

### BENCHMARKS LABOUR AND MATERIALS TRADE RATIOS

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

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

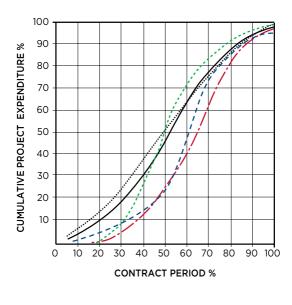
PRELIMINARIES	40 10 50
DEMOLISHER	85 15
EXCAVATOR	32 15 53
PILER	20 50 30
IN SITU CONCRETOR	25 75
FORMWORKER	70 30
REINFORCEMENT FIXER	20 80
PRECAST CONCRETOR	20 80
BRICKLAYER & BLOCKLAYER	50 50
MASON	10 90
ASPHALTOR	40 60
STRUCTURAL STEELWORK	60 40
METALWORKER	20 80
SUSPENDED CEILING FIXER	40 60
CARPENTER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

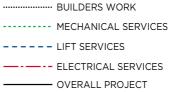
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LABOUR MATERIAL FIXED FACTOR

### BENCHMARKS PROGRESS PAYMENT CLAIMS

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





# **BENCHMARKS** COMMON INDUSTRY ACRONYMS

#### PROJECT MANAGEMENT

 $\wedge \wedge$ Architects Advice

ABIC Australian Building Industry

Contracts

ДΙ

Architects Instruction AIA Australian Institute of

Architects

BCA. Building Code of Australia

BOQ Bill of Quantities

ВÞ **Building Permit** 

BS Building Surveyor CA Contract Administration

CAN Consultants Advice Notice DΑ Development Application

DD Design Development

DWG Drawing (also an Autocad file format)

FBD Evidence Based Design

**FSD** Environmentally

Sustainable Design

ы Professional Indemnity

(Insurance) ΡМ Project Manager

Quantity Surveyor

RCP Reflected Ceiling Plan

RFI Request for Information

SD Schematic Design

ARCHITECTURAL DRAWINGS

ABS Acrylonitrile Butadiene Styrene (Edging)

AS Australian Standards

COL Column

CTS Centres (Spacing)

DP Downpipe

FNS Ensuite

ΕX Existina

FC. Fibre Cement (Sheet) EC1

Finished Ceiling Level FFI Finished Floor Level

FR Fire Rated

GEA Gross Floor Area

Highly Moisture Resistant HMR

(Particleboard)

KDHW Kiln Dried Hardwood

MDF Medium Density Fibreboard

PR Plasterboard

RI Relative Level

Stainless Steel

TYP Typical

VOC. Volatile Organic Compound

WC Water Closet (Toilet)

#### LAND SURVEYS

AHD Australian Height Datum AMG Australian Mapping Grid

DΡ Downpipe Ш Invert Level

Underground

RI Relative Level STRUCTURAL DRAWINGS

CFW Continuous Fillet Weld

CHS Cylindrical Hollow Section Construction Joint

FΑ Egual Angle

PFC Parallel Flange Channel

RB Roof Beam

RHS Rectangular Hollow Section

SB Sill Beam

SHS Square Hollow Section

TR Tie Beam

IJΑ Unequal Angle

UB Universal Beam UC Universal Column

WT Wall Tie

#### HYDRAULIC DRAWINGS

DCW Domestic Cold Water DHW Domestic Hot Water

FΗ Fire Hydrant

FHR Fire Hose Reel

FIP Fire Indicator Panel

FS Fire Service

FW Floorwaste

Hot Water System HWS

Tundish

TM\/ Thermostatic Mixing Valve

UPVC Unplasticated Polyvinyl

Chloride (Pipework)

VP Vent Pipe

#### MECHANICAL DRAWINGS A/C Air Conditioning

A/P Access Panel ACU Air Conditioning Unit

AHU Air Handling Unit

Condensina Unit

FCU Fan Coil Unit

Fire Damper

R/A Return Air

S/A Supply Air cn. Smoke Damper

### **ELECTRICAL DRAWINGS**

DB Distribution Board

Double General Power DGPO

Outlet

GPO General Power Outlet MSB

Main Switchboard Residual Current Device RCD

CB Switchboard

# BENCHMARKS METHOD OF MEASUREMENT OF BUILDING AREAS

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

The definitions are as follows: Unit of measurement: square metres (M<sup>2</sup>).

#### **GROSS FLOOR AREA (GFA)**

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

#### FULLY ENCLOSED COVERED AREA (FECA)

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

#### UNENCLOSED COVERED AREA (UCA)

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

# BENCHMARKS METHOD OF MEASUREMENT OF BUILDING AREAS

#### **BUILDING AREA (BA)**

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

#### USABLE FLOOR AREA (UFA)

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

#### Deductions

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

#### NET LETTABLE AREA (NLA)

#### Application

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

#### Definition

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

The whole floor net lettable area is calculated by:

- 3.2.1 taking measurements from the internal finished surfaces of permanent internal walls and the internal finished surfaces of dominant portions of the permanent outer building walls.
- 3.2.2 included in the lettable area calculation are:
  - 3221 window mullions
  - 3.2.2.2 window frames
  - 3.2.2.3 structural columns
  - 3.2.2.4 engaged perimeter columns or piers
  - 3.2.2.5 fire hose reels attached to walls, and,
  - 3.2.2.6 additional facilities specially constructed for or used by individual tenants that are not covered in section 3.2.3.

# BENCHMARKS METHOD OF MEASUREMENT OF BUILDING AREAS

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

## 3.3 Net Lettable Area (NLA)

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

3.4 Treatment of Balconies. Verandahs etc.

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

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

# ASSETS AND FACILITIES

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Outgoings	79
Essential Safety Measures	80
Capital Allowances (Tax Depreciation)	81



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

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

# ASSETS AND FACILITIES SUSTAINABILITY AND QUALITY

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

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

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

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

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

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

**RLB** have staff accredited in the use of Green Star, NABERS, along with access to LEED, BREEAM, GreenMark and other international standards.

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

# ASSETS AND FACILITIES MANAGEMENT STANDARDS

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

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

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



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

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

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

# ASSETS AND FACILITIES USEFUL LIFE ANALYSIS

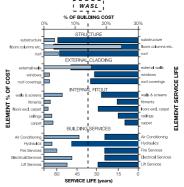
#### LIFE CYCLE ANALYSIS

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

#### WEIGHTED AVERAGE SERVICE LIFE

Weighted Average Service Life (WASL) is a

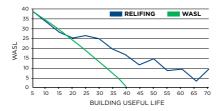
methodology used to determine the "Useful Life" of an asset. For buildings the WASL is the collective result of applying service life criteria to each element of a cost analysis; excluding capital recurrent expenditure other than routine maintenance.



#### RELIFING

RElifing takes the

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



# ASSETS AND FACILITIES OUTGOINGS

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

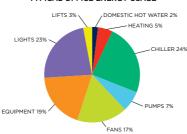
The level of recovery of outgoings is normally governed and regulated by leases and other agreements with tenants.

The cost of outgoings varies depending upon:

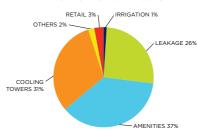
- · the level of management and services provided
- · lease agreements
- · quality, type and efficiency of the building
- · location and statutory regimes applicable

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

#### TYPICAL OFFICE ENERGY USAGE



#### TYPICAL OFFICE WATER USAGE



# ASSETS AND FACILITIES ESSENTIAL SAFETY MEASURES

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

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

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

- VIC Building Regulations 2006 Part 12
- QLD Queensland Fire and Rescue Service Amendment Act 2006
- NSW Environmental Planning and Assessment Regulations 2000
- SA SA Development Act 1993 & Minister's Specifications SA 76
- TAS Fire Services Act 1979 & General Fire Regulations 2010
- ACT ACT Emergencies Act 2004
- WA No specific legislation

#### Note:

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

# ASSETS AND FACILITIES CAPITAL ALLOWANCES (TAX DEPRECIATION)

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

#### Division 40 - Depreciating Assets

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

#### Division 43 - Capital Allowances

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

The ATO issued the latest effective life review of assets under TR2016/1 which came into effect on the 1st July 2016.

The following broad principles outline the rates of depreciation deductions relative to income producing assets under ITAA 1997 (Division 40 & 43).

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



70% DIVISION 43

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

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

# ASSETS AND FACILITIES CAPITAL ALLOWANCES (TAX DEPRECIATION)

SCHEDULE OF ASSETS	PRIME COST %	DIMINISHING VALUE %		
THE FOLLOWING LIST GIVES A SAMPLE OF	ELIGIBLE			
DEPRECIATING ASSETS.				
OFFICE BUILDING				
HOT WATER INSTALLATIONS	6.667	13.333		
MULTI TYPE FIRE DETECTION SYSTEMS	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	5	10		
VINYL FLOORING	10	20		
CARPET	12.5	25		
WINDOW BLINDS	5	10		
OFFICE FURNITURE, FREESTANDING	4-10	8-20		
ESCALATORS	5	10		
LIFTS, ELEVATORS & HOISTS	3.333	6.667		
SIGNAGE FOR BUSINESS IDENTIFICATION HOTELS. MOTELS	10	20		
CARPETS	14.286	28.572		
WINDOW BLINDS AND CURTAINS	16.667	33.333		
FURNITURE AND FITTINGS (FREE STANDING)	14.286-20	28.572-40		
HOT WATER SYSTEMS	10	20		
BEDS AND BEDDING	14.286-50	28.572-100		
SHOPPING CENTRES Generally, the list for office buildings will ap additions:	ply with the fol			
FLOATING TIMBER FLOORS	10	20		
FURNITURE, FREESTANDING INDUSTRIAL	10	20		
Generally, the list for office buildings will ap additions:	ply with the fol	llowing		
CRANES	5	10		
GANTRIES	3	6		
DOCK LEVELLERS	5	10		
INFLATABLE DOCK SEALS	10	20		
RESIDENTIAL Only for assets continuously owned prior to 10/05/17 or new assets (not used) purchased from 10/05/17. FLOOR COVERINGS:				
CARPET	10	20		
FLOATING TIMBER	6.667	13.333		
Hotwater Systems (excluding piping):	0.007	10.000		
ELECTRIC AND GAS	8.333	16.667		
SOLAR	6.667	13.333		
Miscellaneous:				
INTERCOM SYSTEM ASSETS	10	20		
WINDOW BLINDS	10	20		
ROOM AIR CONDITIONING	10	20		
Kitchen Assets:				
COOKTOPS, OVENS, RANGEHOODS	8.333	16.667		
DISHWASHERS, WASHING MACHINES, CLOTHES DRYERS	10	20		

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# **CALENDARS 2017 - 2020**

### 2017

2017			
JANUARY 2017 FEBRUARY 2017 MARCH 2017  S M T W T F S S M T W T F S S M T W T F S			
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JULY 2018	AUGUST 2018	SEPTEMBER 2018	
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# 2019

	2019	
JANUARY 2019	FEBRUARY 2019	MARCH 2019
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APRIL 2019	MAY 2019	JUNE 2019
SMTWTFS	SMTWTFS	SMTWTFS
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JULY 2019	AUGUST 2019	SEPTEMBER 2019
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OCTOBER 2019	NOVEMBER 2019	DECEMBER 2019
S M T W T F S 1 2 3 4 5	S M T W T F S	S M T W T F S 1 2 3 4 5 6 7
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	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	8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
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APRIL 2020 S M T W T F S	MAY 2020 S M T W T F S	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	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	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
26 27 28 29 30	31	20 29 30
JULY 2020	AUGUST 2020	SEPTEMBER 2020
JULY 2020  S M T W T F S	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	SEPTEMBER 2020  S M T W T F S

# CALENDARS 2018 ROSTERED DAYS OFF

	ADELAIDE	BRISBANE & DARWIN
BASIS	CFMEU EBA	CFMEU EBA
HOURS BASIS	36	36
JAN	MON 29	TUE 2
	TUE 30	WED 3
		THU 4
		FRI 5
FEB	MON 26	MON 5
	TUE 13	
MAR	WED 14	MON 5
	THU 29	
APR	TUE 3	TUE 3
	THU 26	WED 4
	FRI 27	THU 5
		FRI 6
		MON 23
		TUE 24
MAY	MON 14	MON 21
	MON 28	
JUN	TUE 12	MON 18
	WED 13	
JUL	MON 16	MON 16
	MON 30	
AUG	MON 13	MON 13
	MON 27	TUE 14
SEP	MON 10	MON 10
	MON 24	
ост	TUE 2	TUE 2
	WED 3	
	MON 12	
NOV	MON 26	MON 5
		TUE 6
	FRI 21	
DEC	MON 24	MON 3
	MON 24	MON 24
		THU 27
		FRI 28
		MON 31
TOTAL	26	26

CANBERRA	MELBOURNE	PERTH SYDNEY	
CFMEU EBA	CFMEU EBA	CFMEU EBA	CFMEU EBA
36	36	36	36
TUE 2	FRI 5	TUE 2	MON 29
MON 29	MON 8	WED 3	
TUE 30	TUE 9	THU 4	
	MON 29	FRI 5	
		MON 29	
MON 12	MON 12	MON 12	MON 26
MON 26	MON 26		
MON 5	TUE 13	TUE 6	
TUE 13			
TUE 3	TUE 3		MON 23
MON 9		TUE 3	TUE 24
MON 23			
MON 7	MON 14		MON 21
MON 14	MON 28	MON 14	
FRI 8	TUE 12		TUE 12
TUE 12	MON 25	TUE 5	
MON 9	MON 9		MON 16
MON 16	MON 23	MON 2	
MON 6	MON 6	MON 30	MON 13
MON 20	MON 20	MON 27	
FRI 21	MON 3		MON 10
TUE 25	MON 17	TUE 25	
TUE 2	MON 1		TUE 2
MON 29	MON 15	MON 29	
MON 5	MON 5	MON 5	MON 5
TUE 6	WED 7	TUE 6	
	MON 19		
MON 3	MON 24	MON 24	TUE 4
THU 27	THU 27	THU 27	MON 24
	FRI 28	FRI 28	
		MON 31	
26	26	21 FIXED & 5 VARIABLE	13 FIXED & 13 VARIABLE

# CALENDARS PUBLIC HOLIDAYS IN AUSTRALIA

ALL STATES	2018	2019	2020
NEW YEARS DAY	1 JAN	1 JAN	1 JAN
AUSTRALIA DAY	26 JAN	28 JAN	26 JAN
GOOD FRIDAY	30 MAR	19 APR	10 APR
EASTER MONDAY	2 APR	22 APR	13 APR
ANZAC DAY	25 APR	25 APR	25 APR
QUEENS BIRTHDAY (EXCL QLD & WA)	11 JUN	10 JUN	8 JUN
CHRISTMAS DAY	25 DEC	25 DEC	25 DEC
BOXING DAY	26 DEC	26 DEC	26 DEC
A.C.T			
CANBERRA DAY	12 MAR	11 MAR	9 MAR
EASTER SATURDAY	31 MAR	20 APR	11 APR
EASTER SUNDAY	1 APR	21 APR	12 APR
RECONCILIATION DAY	28 MAY	27 MAY	25 MAY
LABOUR DAY	1 OCT	7 OCT	5 OCT
NEW SOUTH WALES			
EASTER SATURDAY	31 MAR	20 APR	11 APR
EASTER SUNDAY	1 APR	21 APR	12 APR
BANK HOLIDAY	6 AUG	5 AUG	3 AUG
LABOUR DAY	1 OCT	7 OCT	5 OCT
NORTHERN TERRITORY			
EASTER SATURDAY	31 MAR	20 APR	11 APR
MAY DAY	7 MAY	6 MAY	4 MAY
PICNIC DAY	6 AUG	5 AUG	3 AUG
QUEENSLAND			
EASTER SATURDAY	31 MAR	20 APR	11 APR
LABOUR DAY	7 MAY	6 MAY	4 MAY
ROYAL QUEENSLAND SHOW	15 AUG	14 AUG	12 AUG
QUEENS BIRTHDAY	1 OCT	7 OCT	5 OCT
SOUTH AUSTRALIA			
EASTER SATURDAY	31 MAR	20 APR	11 APR
ADELAIDE CUP DAY	12 MAR	11 MAR	9 MAR
LABOUR DAY	1 OCT	7 OCT	5 OCT
TASMANIA			
ROYAL HOBART REGATTA	12 FEB	11 FEB	10 FEB
LAUNCESTON CUP	28 FEB	27 FEB	26 FEB
EIGHT HOURS DAY	12 MAR	11 MAR	9 MAR
EASTER TUESDAY	3 APR	23 APR	14 APR
LAUNCESTON SHOW	11 OCT	10 OCT	8 OCT
HOBART SHOW	25 NOV	24 NOV	22 NOV
RECREATION DAY (NORTHERN)	5 NOV	4 NOV	2 NOV
VICTORIA LABOUR DAY	12 MAR	11 MAR	9 MAR
EASTER SATURDAY		20 APR	9 MAR 11 APR
EASTER SATURDAY	31 MAR 1 APR	20 APR 21 APR	11 APR 12 APR
GRAND FINAL EVE DAY	28 SEP	21 APR 27 SEP	25 SEP
MELBOURNE CUP DAY	6 NOV	5 NOV	3 NOV
WESTERN AUSTRALIA	6 NUV	5 NUV	3 NOV
LABOUR DAY	5 MAR	4 MAR	2 MAR
FOUNDATION DAY	4 JUN	3 JUN	1 JUN
QUEENS BIRTHDAY	24 SEP	30 SEP	28 SEP
MOLENO DIKTRUAT	24 SEP	JU SEP	20 SEP