



Rider  
Levett  
Bucknall

**RIDERS  
DIGEST  
2017**

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EDITION**

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# **RIDERS DIGEST**

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

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

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

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

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# INTRODUCTION

## RIDER LEVETT BUCKNALL

### “CONFIDENCE TODAY INSPIRES TOMORROW”

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

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

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

### “CREATING A BETTER TOMORROW”

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

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

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

# PROFESSIONAL SERVICES

Cost Management and Quantity Surveying	6
Advisory	9

# COST MANAGEMENT AND QUANTITY SURVEYING SERVICES

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

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

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

LOCATION /CITY	LOCAL CURRENCY	COST PER M <sup>2</sup>			
		OFFICE BUILDING			
		PREMIUM		GRADE A	
		LOW	HIGH	LOW	HIGH
<b>AMERICAS @ Q3 2016</b>					
BAHAMAS	USD	2,495	4,455	2,335	3,270
BOSTON	USD	2,960	4,840	1,940	2,960
CHICAGO	USD	2,475	3,875	1,505	2,155
HONOLULU	USD	3,070	5,705	2,635	4,305
LAS VEGAS	USD	1,505	3,175	1,130	2,045
LOS ANGELES	USD	2,260	3,390	1,560	2,370
NEW YORK	USD	3,765	5,920	2,960	4,035
PHOENIX	USD	1,615	2,960	1,185	1,885
SEATTLE	USD	2,045	2,530	1,400	1,990
WASHINGTON D.C.	USD	2,690	4,305	1,885	2,960
<b>ASIA @ Q3 2016</b>					
BEIJING	RMB	7,550	12,450	7,100	10,700
CHENGDU	RMB	6,900	9,940	7,750	11,240
HO CHI MINH CITY	VND ('000)	24,000	34,400	20,400	25,600
HONG KONG	\$HKD	22,900	34,100	19,500	26,500
JAKARTA	RP ('000)	9,648	13,200	6,670	10,620
KUALA LUMPUR	RINGGIT	2,500	4,500	1,300	3,000
SEOUL	KRW ('000)	2,250	2,890	1,700	2,080
SHANGHAI	RMB	7,250	11,500	6,500	9,900
SHENZHEN	RMB	7,000	11,250	6,450	9,800
SINGAPORE	SGD	2,700	4,000	2,100	3,000
<b>EUROPE @ Q3 2016</b>					
BERLIN	EUR	1,355	1,775	990	1,150
BIRMINGHAM	GBP	1,725	2,430	1,500	2,435
BRISTOL	GBP	1,960	2,580	1,580	2,370
DUBLIN	EUR	1,800	2,000	1,600	1,800
LONDON	GBP	2,396	3,120	1,975	3,077
MANCHESTER	GBP	1,907	2,501	1,646	2,470
OSLO	EUR	2,840	3,690	2,190	2,850
<b>MIDDLE EAST @ Q3 2016</b>					
ABU DHABI	AED	5,800	7,000	4,700	6,600
DUBAI	AED	5,800	7,000	4,700	6,600
DOHA	QAR	6,500	8,500	6,100	8,200
<b>OCEANIA @ Q4 2016</b>					
ADELAIDE	AUD	2,600	3,850	2,100	3,250
AUCKLAND	NZD	3,400	4,500	2,600	4,250
BRISBANE	AUD	2,600	4,000	2,000	3,000
CANBERRA	AUD	3,274	4,245	2,655	3,349
CHRISTCHURCH	NZD	3,700	4,800	3,150	4,200
DARWIN	AUD	3,100	4,150	2,400	3,800
GOLD COAST	AUD	2,450	4,000	1,900	3,000
MELBOURNE	AUD	3,060	3,825	2,370	2,960
PERTH	AUD	3,150	4,770	2,575	3,740
SYDNEY	AUD	3,400	4,820	2,510	3,620
WELLINGTON	NZD	3,058	3,494	2,402	2,730

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

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

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

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

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

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

# INTERNATIONAL CONSTRUCTION BUILDING COST RANGES

All costs are stated in local currency as shown below.

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

LOCATION /CITY	LOCAL CURRENCY	COST PER M <sup>2</sup>			
		HOTELS			
		3 STAR		5 STAR	
		LOW	HIGH	LOW	HIGH
<b>AMERICAS @ Q3 2016</b>					
BAHAMAS	USD	1,530	4,885	2,725	7,070
BOSTON	USD	2,420	3,765	3,765	5,400
CHICAGO	USD	2,045	2,585	3,120	4,845
HONOLULU	USD	3,500	5,865	5,545	8,020
LAS VEGAS	USD	1,615	2,960	3,765	5,005
LOS ANGELES	USD	2,260	3,120	3,390	5,060
NEW YORK	USD	2,960	4,035	4,035	5,920
PHOENIX	USD	1,615	2,690	2,960	4,575
SEATTLE	USD	1,720	2,260	2,315	3,390
WASHINGTON D.C.	USD	2,420	3,495	3,500	5,110
<b>ASIA @ Q3 2016</b>					
BEIJING	RMB	9,600	12,350	12,900	17,000
CHENGDU	RMB	8,730	11,000	11,600	14,900
HO CHI MINH CITY	VND ('000)	23,400	30,300	31,100	38,100
HONG KONG	\$HKD	29,400	34,000	35,700	43,600
JAKARTA	RP ('000)	10,410	11,875	13,670	17,420
KUALA LUMPUR	RINGGIT	2,500	3,500	5,000	7,000
SEOUL	KRW ('000)	1,960	2,490	3,040	4,510
SHANGHAI	RMB	9,300	12,000	12,600	16,600
SHENZHEN	RMB	9,120	11,500	12,100	15,800
SINGAPORE	SGD	3,300	3,700	4,300	5,600
<b>EUROPE @ Q3 2016</b>					
BERLIN	EUR	1,355	1,770	1,985	2,755
BIRMINGHAM	GBP	1,270	1,870	2,015	2,750
BRISTOL	GBP	1,300	1,740	2,250	3,000
DUBLIN	EUR	1,340	1,440	2,000	2,200
LONDON	GBP	1,706	2,191	2,526	3,400
MANCHESTER	GBP	1,292	1,719	2,042	2,793
OSLO	EUR	2,960	3,850	3,920	5,090
<b>MIDDLE EAST @ Q3 2016</b>					
ABU DHABI	AED	6,000	8,500	9,000	12,000
DUBAI	AED	6,000	8,500	9,000	12,500
DOHA	QAR	7,500	8,500	11,500	14,500
<b>OCEANIA @ Q4 2016</b>					
ADELAIDE	AUD	2,550	3,450	3,550	4,450
AUCKLAND	NZD	3,800	4,300	4,500	5,500
BRISBANE	AUD	2,800	4,000	4,000	5,500
CANBERRA	AUD	2,933	4,095	4,031	4,970
CHRISTCHURCH	NZD	3,000	3,300	3,700	4,200
DARWIN	AUD	2,830	3,550	3,600	4,450
GOLD COAST	AUD	2,600	4,000	3,400	5,500
MELBOURNE	AUD	3,110	3,570	3,920	5,090
PERTH	AUD	2,645	3,635	3,600	4,430
SYDNEY	AUD	2,980	3,770	4,230	5,610
WELLINGTON	NZD	2,402	2,839	3,536	4,264

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

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

# INTERNATIONAL CONSTRUCTION RLB ESCALATION FORECASTS

## RLB TENDER PRICE INDEX ANNUAL CHANGE

All indices are stated as annual percentage changes.

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

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

NP: Not published

# AUSTRALIAN CONSTRUCTION

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# AUSTRALIAN CONSTRUCTION BUILDING COST RANGES

## CONSTRUCTION RATES

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

Specific exclusions:

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

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

**NOTES**

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

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

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

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

# AUSTRALIAN CONSTRUCTION BUILDING COST RANGES

All costs current as at Fourth Quarter 2016.

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

Building Costs include Building Works and Building Services

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

CANBERRA		DARWIN		MELBOURNE		PERTH		SYDNEY	
\$/M <sup>2</sup>									
LOW	HIGH								
1,994	2,698	2,400	3,550	1,785	2,425	2,200	2,625	2,510	3,250
4,156	5,623	3,850	4,600	2,650	3,110	2,780	3,425	2,720	3,410
4,572	6,186	4,500	5,500	2,960	3,570	3,145	4,220	3,450	4,510
2,911	3,252	2,700	3,450	2,370	2,650	2,535	2,995	3,140	4,300
2,293	2,517	1,700	2,380	1,965	2,370	1,195	1,655	1,460	2,040
1,397	1,899	1,790	2,440	1,240	1,835	1,355	1,700	1,410	2,720
1,269	1,493	1,630	2,230	1,175	1,630	1,995	2,870	1,250	1,520
2,250	3,156	1,730	2,590	2,065	3,060	2,300	2,800	1,880	3,930
1,174	1,578	1,430	2,050	1,080	1,530	1,010	1,445	1,620	2,410
1,205	1,984	1,230	2,090	1,080	1,580	1,025	2,565	1,460	1,890
1,568	2,570	1,780	2,750	1,390	2,755	1,420	2,263	1,620	4,560
1,674	3,359	1,970	2,370	1,495	3,110	1,745	2,803	-	-
1,674	3,274	1,970	2,370	1,445	2,705	1,585	2,613	-	-
2,773	3,402	2,030	2,430	2,270	2,905	2,280	2,975	2,720	3,460
2,720	3,349	2,010	2,400	2,245	2,960	2,230	2,880	2,460	3,200
2,996	3,626	2,100	2,520	2,580	3,300	2,725	3,375	2,870	3,770
2,933	3,626	2,050	2,480	2,550	3,315	2,655	3,275	2,720	3,560
3,455	3,946	2,340	2,650	3,060	3,570	3,405	3,830	3,710	4,560
3,349	3,733	2,280	2,580	2,855	3,470	3,335	3,780	3,550	4,190
-	-	-	-	3,415	4,080	3,810	4,475	4,280	5,190
-	-	-	-	3,265	3,980	3,665	4,395	4,180	5,080

# AUSTRALIAN CONSTRUCTION BUILDING SERVICES COST RANGES

All costs current as at Fourth Quarter 2016.

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

**BUILDING SERVICES COSTS INCLUDE:**

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

Refer to page 34 to 37 for detailed services costs.

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

# AUSTRALIAN CONSTRUCTION BUILDING SERVICES COST RANGES

All costs current as at Fourth Quarter 2016.

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

CANBERRA		DARWIN		MELBOURNE		PERTH		SYDNEY	
\$/M <sup>2</sup>									
LOW	HIGH								
406	757	883	1,322	450	1,055	680	1,180	374	690
1,061	1,400	1,433	1,680	954	1,453	1,080	1,410	965	1,248
1,291	1,848	1,580	1,981	1,147	1,980	1,335	1,825	1,294	1,798
771	927	1,013	1,278	600	880	680	910	940	1,358
724	832	642	877	510	787	600	825	470	643
454	681	662	920	405	750	480	655	469	645
454	616	602	840	355	650	495	625	443	582
562	832	577	918	470	875	0	0	502	796
400	627	519	762	325	655	350	590	484	718
238	650	417	760	211	626	225	570	327	524
230	512	336	649	200	610	190	463	183	682
229	642	400	574	200	550	195	483	207	640
120	642	400	574	200	530	195	483	178	605
534	867	654	851	495	842	495	860	597	850
534	812	620	809	490	812	485	830	562	826
578	867	648	846	530	866	560	855	682	919
578	956	636	829	530	836	550	825	650	843
691	980	712	875	620	949	655	945	728	1,048
646	980	696	855	600	861	635	925	716	985
-	-	-	-	785	1,167	865	1,100	958	1,257
-	-	-	-	730	1,117	845	1,085	934	1,247

# AUSTRALIAN CONSTRUCTION RLB TENDER PRICE INDEX

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

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

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

# AUSTRALIAN CONSTRUCTION DEFINITIONS

## CBD

Central Business District.

## BUILDING WORKS

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

## BUILDING SERVICES

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

## OFFICE BUILDINGS

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

**Investment offices** are based on high quality buildings which are built for the middle range of the rental market. (used as generic descriptions for International Building Cost Ranges on page 20).

## HOTELS

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

Note: Public space includes service areas.

## CAR PARKS

Open Deck Multi-storey - minimal external walling.

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

## INDUSTRIAL BUILDINGS

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

Exclusions: Hardstandings, Roadworks and Special Equipment.

## AGED CARE

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

## **HOSPITAL**

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

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

Exclusions: Loose furniture, special medical equipment.

## **CINEMAS**

Multiplex Group Complex (warm shell).

2,000–4,000 seats.

Exclusions: Projection equipment, seating.

## **SHOPPING CENTRES**

### **Department Store**

Partially finished suspended ceilings and painted walls.

Exclusions: Floor finishes, shop fittings etc.

### **Supermarket/Variety Store**

Fully finished and serviced space.

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

### **Malls**

Fully finished and serviced space.

### **Specialty Shops**

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

Exclusions: Floor finishes and shop fittings.

## **SMALL SHOPS AND SHOWROOMS**

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

## **RESIDENTIAL**

### **Single Storey or 1-3 Storey**

Units reflect medium quality accommodation.

### **Multi-Storey**

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

Note: the ratio of kitchen, laundry and bathroom areas to living areas considerably affects the cost range.

Range given is significantly affected by the height and configuration of the building.

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

# RIDERS DIGEST

## 45<sup>TH</sup> EDITION

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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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# DARWIN CONSTRUCTION COSTS

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# DARWIN CONSTRUCTION BUILDING SERVICES COSTS

All costs current as at Fourth Quarter 2016.

COST RANGE PER GROSS FLOOR AREA	SPECIAL EQUIPMENT		HYDRAULIC		FIRE PROTECTION	
	\$/M <sup>2</sup>		\$/M <sup>2</sup>		\$/M <sup>2</sup>	
	LOW	HIGH	LOW	HIGH	LOW	HIGH
<b>OFFICE BUILDINGS</b>						
<b>Prestige, CBD</b>						
10 TO 25 STOREYS (75-80% EFFICIENCY)	18	52	87	100	87	95
25 TO 40 STOREYS (70-75% EFFICIENCY)	19	49	86	104	88	98
<b>Investment, CBD</b>						
UP TO 10 STOREYS (81-85% EFFICIENCY)	17	38	82	100	69	104
10 TO 25 STOREYS (76-81% EFFICIENCY)	18	62	88	103	89	106
<b>Investment, other than CBD</b>						
1 TO 3 STOREYS (81-85% EFFICIENCY)	-	-	104	150	92	135
UP TO 10 STOREYS (82-86% EFFICIENCY)	7	21	89	112	82	99
10 TO 25 STOREYS (77-82% EFFICIENCY)	6	54	82	115	87	109
<b>HOTELS</b>						
<b>Multi-Storey</b>						
FIVE STAR	51	83	261	291	86	113
FOUR STAR	41	75	225	290	84	103
THREE STAR	24	55	227	264	63	96
<b>CAR PARK</b>						
OPEN DECK MULTI-STOREY	13	31	22	26	60	73
BASEMENT: CBD	16	29	24	24	75	81
BASEMENT: OTHER THAN CBD	15	29	22	24	69	81
UNDERCROFT: OTHER THAN CBD	19	35	29	37	19	29
<b>INDUSTRIAL BUILDINGS</b>						
<b>6.00 M to underside of truss and 4,500 M<sup>2</sup> Gross Floor Area with:</b>						
ZINCALUME METAL CLADDING	-	29	39	66	44	86
PRECAST CONCRETE CLADDING	-	30	42	68	47	89
<b>Attached Air Conditioned Offices</b>						
200M <sup>2</sup>	-	28	59	87	82	136
400M <sup>2</sup>	-	28	59	87	82	136

## 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.

MECHANICAL		VERTICAL TRANSPORT		BUILDING MANAGEMENT		ELECTRICAL		TOTAL	
\$/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
427	641	204	230	89	105	247	300	1,160	1,523
475	651	275	287	62	95	240	310	1,246	1,594
333	541	181	212	52	83	179	243	911	1,321
359	567	184	277	50	84	195	247	983	1,445
430	497	-	-	-	-	216	301	841	1,082
361	502	152	210	38	71	155	266	882	1,281
370	519	197	224	50	66	178	240	971	1,326
474	637	216	246	58	105	248	278	1,394	1,753
457	498	178	208	43	86	244	279	1,272	1,539
400	447	162	162	49	86	198	275	1,122	1,386
-	55	39	82	8	26	59	70	201	363
58	101	48	101	21	38	85	76	328	449
53	101	44	101	19	38	77	76	298	449
-	78	-	-	-	22	69	81	135	282
48	145	-	-	-	24	79	149	210	499
51	150	-	-	-	25	85	155	225	518
336	425	-	-	24	44	160	207	661	926
336	425	-	-	24	44	160	207	661	926

#### 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.

# DARWIN CONSTRUCTION BUILDING SERVICES COSTS

COST RANGE PER GROSS FLOOR AREA	SPECIAL EQUIPMENT		HYDRAULIC		FIRE PROTECTION	
	\$/M <sup>2</sup>		\$/M <sup>2</sup>		\$/M <sup>2</sup>	
	LOW	HIGH	LOW	HIGH	LOW	HIGH
<b>AGED CARE</b>						
SINGLE STOREY FACILITY	17	79	137	200	94	116
<b>PRIVATE HOSPITALS</b>						
Low Rise Hospital						
45-60 M <sup>2</sup> GFA/BED	52	113	234	238	120	145
55-80 M <sup>2</sup> GFA/BED WITH MAJOR OPERATING THEATRE	49	147	250	248	117	149
<b>CINEMAS</b>						
GROUP COMPLEX, 2,000-4,000 SEATS (WARM SHELL)	-	39	86	107	86	117
<b>REGIONAL SHOPPING CENTRES</b>						
DEPARTMENT STORE	27	49	70	93	97	114
SUPERMARKET/VARIETY STORE	28	43	72	96	100	128
DISCOUNT DEPARTMENT STORE	25	44	66	84	91	114
MALLS	-	38	63	101	69	104
SPECIALITY SHOPS	-	32	40	68	69	98
<b>SMALL SHOPS AND SHOWROOMS</b>						
	-	29	38	70	53	87
<b>RESIDENTIAL</b>						
SINGLE AND DOUBLE STOREY DWELLINGS (CUSTOM BUILT)	-	-	139	218	4	9
<b>RESIDENTIAL UNITS</b>						
WALK-UP 85 TO 120 M <sup>2</sup> /UNIT	-	-	165	193	5	8
TOWNHOUSES 90 TO 120 M <sup>2</sup> /UNIT	-	-	165	193	5	8
<b>MULTI-STOREY UNITS</b>						
Up to 10 storeys with lift						
UNITS 60-70 M <sup>2</sup>	11	40	191	205	88	103
UNITS 90-120 M <sup>2</sup>	9	39	183	194	85	97
Over 10 and up to 20 storeys						
UNITS 60-70 M <sup>2</sup>	13	40	181	203	86	101
UNITS 90-120 M <sup>2</sup>	12	39	183	199	85	99
Over 20 and up to 40 storeys						
UNITS 60-70 M <sup>2</sup>	14	39	205	197	96	98
UNITS 90-120 M <sup>2</sup>	13	35	200	191	94	90

## 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.

MECHANICAL		VERTICAL TRANSPORT		BUILDING MANAGEMENT		ELECTRICAL		TOTAL	
\$/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
411	583	-	-	25	48	200	296	883	1,322
560	684	71	101	51	63	345	336	1,433	1,680
681	871	91	112	51	90	342	363	1,580	1,981
639	712	-	-	-	49	202	255	1,013	1,278
283	363	-	40	15	33	150	185	642	877
292	409	-	-	16	37	155	207	662	920
265	346	-	36	14	39	141	177	602	840
249	361	-	-	20	46	176	268	577	918
277	337	-	-	-	27	134	199	519	762
174	334	-	-	-	18	153	222	417	760
68	218	-	-	-	32	125	171	336	649
81	193	-	-	-	29	149	151	400	574
81	193	-	-	-	29	149	151	400	574
154	238	59	95	13	23	137	147	654	851
150	228	54	92	12	21	125	138	620	809
157	237	60	95	16	23	135	147	648	846
151	233	58	93	12	22	134	144	636	829
169	231	65	92	14	22	150	197	712	875
165	248	63	90	13	23	147	177	696	855

#### ELECTRICAL

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

# DARWIN CONSTRUCTION UNIT COSTS

ITEM	CONSTRUCTION RANGE		PER
	LOW	HIGH	
<b>HOTELS</b>			
Multi-Storey (excluding basements)			
FIVE STAR	355,000	440,000	BEDROOM
FOUR STAR	26,000	350,000	BEDROOM
THREE STAR	220,000	285,000	BEDROOM
<b>CAR PARKS</b>			
Based on 30 M <sup>2</sup> per car			
OPEN DECK MULTI-STOREY	25,000	32,000	CAR
BASEMENT - CBD	37,500	45,000	CAR
BASEMENT - OTHER THAN CBD	37,500	45,000	CAR
UNDERCROFT - OTHER THAN CBD	25,800	28,700	CAR
<b>AGED CARE</b>			
FACILITY	175,000	210,000	BEDROOM
<b>PRIVATE HOSPITALS</b>			
Low Rise Hospital			
45-60 M <sup>2</sup> GFA/BED	215,000	340,000	BED
55-80 M <sup>2</sup> GFA/BED	320,000	470,000	BED
<b>CINEMAS</b>			
GROUP COMPLEX, 2,000-4,000 SEATS (WARM SHELL)	6,780	9,000	SEAT
<b>HOUSING</b>			
SINGLE AND DOUBLE STOREY DWELLINGS (CUSTOM BUILT) - 325 M <sup>2</sup>	585,000	850,000	HOUSE
<b>RESIDENTIAL UNITS (EXCL CARPARK/SITE WORKS)</b>			
TOWNHOUSES (90-120 M <sup>2</sup> )	230,000	395,000	UNIT
1 TO 3 STOREY UNITS (85-120 M <sup>2</sup> )	220,000	380,000	UNIT
<b>MULTI STOREY RESIDENTIAL UNITS</b>			
Up to 10 storeys with lift			
UNITS 60-70 M <sup>2</sup>	210,000	280,000	UNIT
UNITS 90-120 M <sup>2</sup>	260,000	390,000	UNIT
Over 10 and up to 20 storeys			
UNITS 60-70 M <sup>2</sup>	230,000	310,000	UNIT
UNITS 90-120 M <sup>2</sup>	275,000	420,000	UNIT
Over 20 and up to 40 storeys			
UNITS 60-70 M <sup>2</sup>	240,000	340,000	UNIT
UNITS 90-120 M <sup>2</sup>	310,000	490,000	UNIT

# DARWIN CONSTRUCTION SITEWORKS COSTS

## LANDSCAPING

	LOW	HIGH	PER
LIGHT LANDSCAPING TO LARGE AREAS WITH MINIMAL PLANTING AND SITE FORMATION BUT EXCLUDING TOPSOIL AND GRASSING.	40,000	55,000	HECTARE
DENSE LANDSCAPING AROUND BUILDINGS INCLUDING SHRUBS, PLANTS, TOPSOIL AND GRASSING.	82	105	M <sup>2</sup>
GRASSING ONLY TO LARGE AREAS INCLUDING TOPSOIL, SOWING AND TREATING.	36	58	M <sup>2</sup>

## CAR PARKS - ON GROUND

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

	LOW	HIGH	PER
LIGHT DUTY PAVING.	4,300	5,400	CARSPACE
HEAVY DUTY PAVING TO FACTORY TYPE COMPLEX, LARGE AREA WITH MINIMAL SITE FORMATION, DRAINAGE AND KERB TREATMENT.	4,600	5,700	CARSPACE
LIGHT DUTY PAVING TO SHOPPING CENTRE COMPLEX, LARGE AREA WITH MINIMAL SITE FORMATION, AND INCLUDING DRAINAGE AND KERB TREATMENT.	4,800	5,500	CARSPACE

## ROADS

Asphalt finish including kerb, channel and drainage.

	LOW	HIGH	PER
RESIDENTIAL ESTATE 6.80 METRES WIDE INCLUDING FOOT PATH AND NATURE STRIP.	1,000	1,280	M
INDUSTRIAL ESTATE 10.4 METRES WIDE INCLUDING MINIMAL TO EXTENSIVE FORMATION.	1,530	1,960	M

## DARWIN 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	70	83	M <sup>2</sup>
SINGLE/DOUBLE STOREY BRICK HOUSE WITH TILED ROOF	90	110	M <sup>2</sup>
SINGLE STOREY FACTORY/ WAREHOUSE WITH REINFORCED CONCRETE GROUND SLAB, TIMBER OR STEEL FRAMED WALLS			
• METAL CLAD	76	92	M <sup>2</sup>
• BRICK CLAD	85	108	M <sup>2</sup>
TWO STOREY OFFICE BUILDING WITH REINFORCED CONCRETE FRAME MASONRY CLADDING AND METAL ROOF	120	140	M <sup>2</sup>
MULTI STOREY OFFICE BUILDING UP TO 15 FLOORS WITH MASONRY CLADDING			
• REINFORCED CONCRETE	155	170	M <sup>2</sup>
• STRUCTURAL STEEL	155	170	M <sup>2</sup>
MULTI-STOREY OFFICE BUILDING UP TO 25 STOREYS, CONSTRUCTED OF STEEL FRAME WITH MASONRY CLADDING	170	190	M <sup>2</sup>

## HOTEL FURNITURE, FITTINGS & EQUIPMENT COSTS

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

	LOW	HIGH	PER
THREE STAR RATING	37,000	46,000	BEDROOM
FOUR STAR RATING	41,000	52,000	BEDROOM
FIVE STAR RATING	50,000	75,000	BEDROOM

# DARWIN CONSTRUCTION OFFICE FITOUT COSTS

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

TYPE OF TENANCY	OPEN PLANNED		FULLY PARTITIONED		PER
	LOW	HIGH	LOW	HIGH	
INSURANCE OFFICES, GOVERNMENT DEPARTMENT	1,000	1,410	1,240	1,690	M <sup>2</sup>
MAJOR COMPANY HEADQUARTERS	1,310	1,680	1,670	2,200	M <sup>2</sup>
SOLICITORS, FINANCIERS	1,350	1,660	1,700	2,180	M <sup>2</sup>
EXECUTIVE AREAS AND FRONT OF HOUSE			4,700	5,800	M <sup>2</sup>
COMPUTER AREAS	2,200	3,100			M <sup>2</sup>

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

## WORKSTATIONS

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

TYPE OF WORKSTATION	LOW	HIGH	PER
CALL CENTRE	1,980	2,980	EACH
SECRETARIAL	2,950	3,550	EACH
TECHNICAL STAFF	2,980	3,540	EACH
EXECUTIVE	3,750	5,350	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	980	2,300	M <sup>2</sup>
CBD OFFICES CORE UPGRADE (EXCLUDING LIFTS MODERNISATION)	850	1,350	M <sup>2</sup>

# DARWIN CONSTRUCTION RECREATIONAL FACILITIES COSTS

## BASKETBALL CENTRE

	LOW	HIGH	PER
CONSISTING OF BRICK WALLS, STEEL PORTAL FRAME AND PURLINS WITH METAL ROOF, TIMBER FLOOR TO PLAYING AREA, PUBLIC SEATING, PUBLIC TOILETS AND CHANGE ROOMS.	1,200	1,680	M <sup>2</sup>

## SWIMMING POOL CENTRES

	LOW	HIGH	PER
INCLUDING FOYER, KIOSK, OFFICE, LOCKERS, ADMINISTRATION OFFICES, CHANGE ROOMS.	2,500	3,400	M <sup>2</sup>

## SWIMMING POOLS

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

	LOW	HIGH	PER
HALF OLYMPIC (25.0 X 12.5 M)	1,000,000	1,600,000	EACH
• EXTRA FOR HEATING	130,000	180,000	EACH
• EXTRA OVER FILTRATION AND DOSING PLANT FOR OZONE BASED DOSING SYSTEM	164,000	244,000	EACH
• EXTRA FOR WET DECK	60,000	100,000	EACH
OLYMPIC (50.0 X 21.5 M)	2,600,000	3,000,000	EACH
• EXTRA FOR HEATING	270,000	350,000	EACH
• EXTRA FOR FILTRATION AND DOSING PLANT	260,000	490,000	EACH
• EXTRA OVER FILTRATION AND DOSING PLANT FOR OZONE BASED DOSING SYSTEM	100,000	180,000	EACH

## SMALL BOAT AND YACHT MARINA BERTHS

Floating pontoon walk-ways, serviced with power and water.

	LOW	HIGH	PER
DOUBLE LOADED BERTHS	28,000	42,000	BERTH
SINGLE LOADED BERTHS	38,000	50,000	BERTH
SUPER YACHTS	310,000	370,000	BERTH

# DARWIN 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	92,000	102,000	COURT
RED POROUS (EN-TOUT-CAS)	42,000	50,000	COURT
SYNTHETIC ACRYLIC (FLEXIPAVE)	63,000	83,000	COURT
ASPHALT (5 MM)	43,000	55,000	COURT
REBOUND ACE	107,000	118,000	COURT
CONCRETE	52,000	62,000	COURT
FLOODLIGHTING	40,000	55,000	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	11,000,000	16,000,000	COURSE
SITE REQUIRING ROCK EXCAVATION	19,000,000	27,000,000	COURSE
SWAMPY SITE REQUIRING DREDGING FOR LAKES, ETC. AND EXTENSIVE FILL	23,000,000	35,000,000	COURSE

## PLAYING FIELDS

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

	LOW	HIGH	PER
EXCLUDES SPRINKLERS	-	-	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	-	-	SEAT

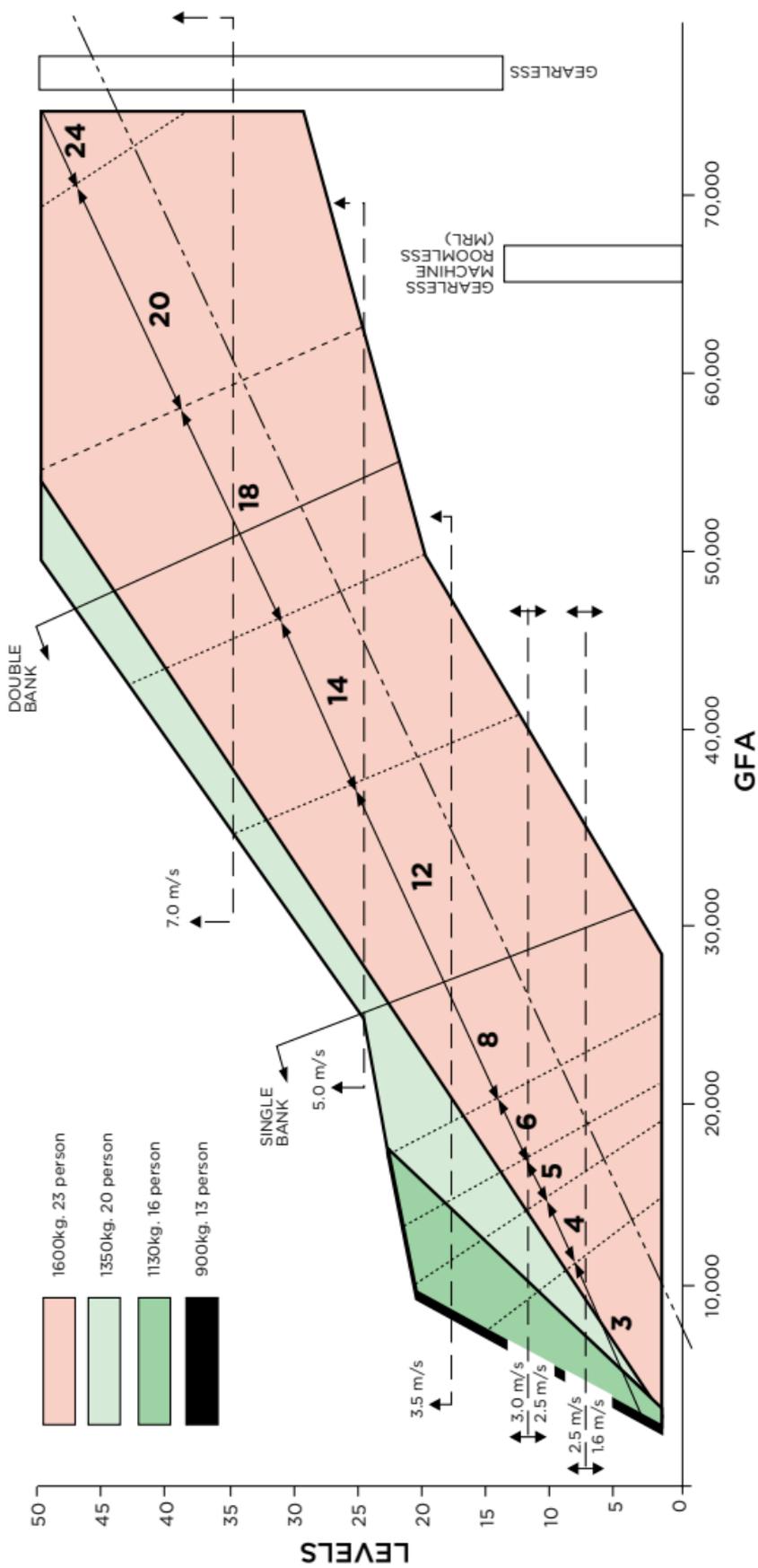
# DARWIN CONSTRUCTION VERTICAL TRANSPORTATION

## 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.



# DARWIN CONSTRUCTION VERTICAL TRANSPORTATION

APPLICATION	LIFT TYPE	SPEED M/S	NO. OF FLOORS SERVED	BASE COST \$		ADDITIONAL FLOOR	EXPRESS FLOOR
				LOW	HIGH	RATE	RATE
OFFICE & RESIDENTIAL	ELECTRO-HYDRAULIC PASSENGER	0.5	2	98,280	124,200	11,880	8,640
	GEARLESS TO 17 PASSENGER	1	5	138,240	154,440	9,720	6,480
	GEARLESS UP TO 17 PASSENGER	1.6	8	174,960	236,520	10,800	6,480
	GEARLESS	2.5	10	307,800	436,320	10,800	7,560
	GEARLESS	3.5	10	451,440	559,440	10,800	7,560
	GEARLESS	4	10	614,520	697,680	12,960	10,800
	GEARLESS	5	10	655,560	729,000	12,960	10,800
	GEARLESS	6	10	666,360	759,240	12,960	10,800
	GEARLESS	7	10	696,600	790,560	16,200	10,800
	GEARLESS	8	10	819,720	912,600	20,520	12,960
HOSPITAL	GEARED UP TO 40 PASSENGER	2	5	429,840	471,960	16,200	10,800
	GEARLESS	2.5	10	614,520	697,680	19,440	10,800
LARGE GOODS	GEARLESS MRL TO 2,000 KG	1.6	10	330,640	369,360	14,040	9,720
	ELECTRO-HYDRAULIC TO 5,000 KG	0.5	2	399,600	440,640	29,160	19,440
	GEARLESS 2,500 KG	2.5	10	696,600	779,760	19,440	10,800
ESCALATORS	RISE 2,600 TO 5,000 MM	0.5	-	159,760	190,080	-	-
MOVING WALKS	2,500 TO 5,000 MM	0.5	-	143,640	257,040	-	-
SERVICE LIFT	BENCH HEIGHT UNIT	0.2	3	32,400	35,640	5,400	1,728
	LARGER UNIT	0.2	3	48,600	61,560	5,940	2,160
DISABLED PLATFORM LIFT	TO 1,000 MM	0.1	2	31,320	34,560	-	-
	1,000 TO 4,000 MM	0.1	2	43,200	47,520	-	-

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

# DARWIN DEVELOPMENT

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## DARWIN DEVELOPMENT STAMP DUTIES

A conveyance or an agreement to convey dutiable property is liable to stamp duty. Where dutiable property is acquired without being evidenced by a dutiable document, the person acquiring the property is required to complete a statement detailing the transaction. Duty is calculated on the purchase price or unencumbered value of the dutiable property, whichever is the greater, as follows:

WHERE THE DUTIABLE VALUE DOES NOT EXCEED \$525,000,  
IN ACCORDANCE WITH THE FOLLOWING FORMULA:

$$D = (0.06571441 \times V^2) + 15V$$

WHERE D = THE DUTY PAYABLE IN \$

$$\text{AND } V = \frac{\text{THE DUTIABLE VALUE}}{1000}$$

WHERE THE DUTIABLE VALUE EXCEEDS \$525,000  
BUT LESS THAN \$3,000,000  
4.95 PER CENT OF THAT AMOUNT.

WHERE THE DUTIABLE VALUE EXCEEDS \$3,000,000  
5.45 PER CENT OF THAT AMOUNT.

Refer to [www.treasury.nt.gov.au/](http://www.treasury.nt.gov.au/) for more details.

# DARWIN DEVELOPMENT LAND TAX

Land tax is not payable on the value of any property in the Northern Territory.

# DARWIN DEVELOPMENT PLANNING - CAR PARKING

The following car parking information is derived from the Northern Territory Planning Scheme, Part 4-6, Table to Clause 6.5.1, which details the appropriate number of car parking spaces to be provided to service particular uses of land.

Full details of the Northern Territory Planning Scheme can be found at <https://nt.gov.au/property/building-and-development/northern-territory-planning-scheme>.

USE OR DEVELOPMENT	MINIMUM NUMBER OF CAR PARKING SPACES REQUIRED	MINIMUM NUMBER OF CAR PARKING SPACES REQUIRED WITHIN ZONE CB IN DARWIN
GENERAL INDUSTRY	1 FOR EVERY 100 M <sup>2</sup> OF NET FLOOR AREA OTHER THAN OFFICES PLUS 4 FOR EVERY 100 M <sup>2</sup> OF NET FLOOR AREA OF OFFICE PLUS 1 FOR EVERY 250 M <sup>2</sup> USED AS OUTDOOR STORAGE	
HOSPITAL	1 FOR EVERY 4 PATIENT BEDS PLUS 4 FOR EVERY 100 M <sup>2</sup> OF NET FLOOR AREA USED FOR ADMINISTRATIVE PURPOSES PLUS FOR A MEDICAL CLINIC, 4 FOR EVERY CONSULTING ROOM	1 FOR EVERY 4 PATIENT BEDS PLUS 4 FOR EVERY 100 M <sup>2</sup> OF NET FLOOR AREA USED FOR ADMINISTRATIVE PURPOSES PLUS FOR A MEDICAL CLINIC, 4 FOR EVERY CONSULTING ROOM
HOTEL	16 FOR EVERY 100 M <sup>2</sup> OF NET FLOOR AREA USED AS A LOUNGE BAR OR BEER GARDEN PLUS 50 FOR EVERY 100 M <sup>2</sup> OF NET FLOOR AREA USED AS A BAR PLUS 10 FOR A DRIVE-IN BOTTLE SHOP (IF ANY) FOR CARS BEING SERVED OR AWAITING SERVICE PLUS 1 FOR EVERY GUEST SUITE OR BEDROOM PLUS 3 FOR EVERY 100 M <sup>2</sup> USED FOR DINING	16 FOR EVERY 100M <sup>2</sup> OF NET FLOOR AREA PLUS 0.4 FOR EVERY GUEST SUITE OR BEDROOM
MULTIPLE DWELLINGS	2 PER DWELLING	1 PER BED-SITTER AND ONE BEDROOM DWELLING 1.5 PER TWO BEDROOM DWELLING 1.7 PER THREE BEDROOM DWELLING 2 PER DWELLING WITH FOUR OR MORE BEDROOMS
OFFICE	2.5 FOR EVERY 100 M <sup>2</sup> OF NET FLOOR AREA	3 FOR EVERY 100 M <sup>2</sup> OF NET FLOOR AREA
RESTAURANT	6 FOR EVERY 100 M <sup>2</sup> OF NET FLOOR AREA AND ANY ALFRESCO DINING AREAS PLUS 10 FOR DRIVE-THROUGH (IF ANY) FOR CARS BEING SERVED OR AWAITING SERVICE	3 FOR EVERY 100 M <sup>2</sup> OF NET FLOOR AREA AND ANY ALFRESCO DINING AREAS
SHOP	6 FOR EVERY 100 M <sup>2</sup> OF NET FLOOR AREA	3 FOR EVERY 100 M <sup>2</sup> OF NET FLOOR AREA

# DARWIN DEVELOPMENT LAND VALUES

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

LOCATION (COSTS PER M <sup>2</sup> )	\$/M <sup>2</sup>	
	LOW	HIGH
<b>OFFICES</b>		
CBD	1,700	3,000
FRINGE	600	900
SUBURBAN (EG. 2,000 M <sup>2</sup> )	350	750
<b>RETAIL (EG. 120 M<sup>2</sup>)</b>		
CBD	-	-
SECONDARY AREAS	-	-
<b>SUBURBAN RETAIL</b>		
NEIGHBOURHOOD SHOPPING CENTRE	400	700
STRIP CENTRE	400	700
<b>INDUSTRIAL (1HA TO 5HA)</b>		
PRIME	150	250
SECONDARY	80	150

Prepared in association with Colliers International.

# DARWIN DEVELOPMENT RENTAL RATES

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

	OFFICES		INDUSTRIAL
	CBD	FRINGE	PRIME
2001	225	175	70
2002	225	175	70
2003	225	200	80
2004	250	200	80
2005	275	225	90
2006	300	250	100
2007	350	275	110
2008	380	275	110
2009	400	300	125
2010	425	300	125
2011	435	300	125
2012	435	300	125
2013	435	300	125
2014	380	250	125
2015	350	225	120
2016	350	225	110

Prepared in association with Savills.

# DARWIN DEVELOPMENT SECTOR DATA

The rents and yields are indicative of modern average quality existing accommodation in each location. Factors causing variations to these rates and yields are: location – age – quality – size of building. Unless otherwise stated, net rentals are given below, ie. the tenant pays all outgoings. Allowance has been made for the effects of rental incentives, rent free periods, etc. ie. the rates are net effective rents.

	RENT \$/M <sup>2</sup>		% YIELD	
	LOW	HIGH	LOW	HIGH
<b>OFFICES</b>				
CITY PRIME	300	500	8.00	9.50
SECONDARY	175	300	9.50	11.00
<b>RETAIL</b>				
CBD	300	900	8.00	9.00
MAJOR SHOPPING CENTRE	400	1,000	8.00	9.00
NEIGHBOURHOOD CENTRES	300	500	8.00	9.50
<b>INDUSTRIAL</b>				
PRIME	75	150	7.50	8.50
SECONDARY	50	100	8.50	10.00

Prepared in association with Colliers International

# DARWIN DEVELOPMENT FORECASTED DEVELOPMENT ACTIVITY

PROJECT
<b>ACCOMMODATION</b>
ASTI MOTEL SITE REDEVELOPMENT
LHILPA/RED MALLEE NATURE BASED TOURISM LODGE
MEREENIE OIL & GAS FIELD LIFE EXTENSION ACCOMMODATION PROJECT
<b>BRIDGES RAILWAYS HARBOURS</b>
EAST ARM MULTI USER SHIP LIFT FACILITY
FINNISS RIVER BRIDGE & LITCHFIELD PARK ROAD SEALING
VICTORIA HIGHWAY LITTLE HORSE & BIG HORSE CREEK CROSSINGS
<b>EDUCATION</b>
ZUCCOLI PRIMARY SCHOOL
<b>HEALTH AND AGED CARE</b>
ROYAL DARWIN HOSPITAL EXPANSION
<b>HEAVY INDUSTRY</b>
BIGRYLI JOINT VENTURE URANIUM PROJECT - PROCESSING PLANT
CENTRAL TANAMI JOINT VENTURE GOLD OPERATIONS RECOMMENCEMENT
CHARLEY CREEK JOINT VENTURE RARE EARTHS PROJECT
JERVOIS RANGE COPPER/SILVER PROJECT
KARINGA LAKES POTASH PROJECT
MOLYHIL TUNGSTEN-MOLYBDENUM PROJECT
MOUNT PEAKE VANADIUM TITANIUM & IRON ORE PROJECT
NGALIA REGIONAL URANIUM PROJECT
NOLANS RARE EARTHS PROJECT
RANGER URANIUM OPERATIONS - RANGER 3 DEEPS EXPANSION
ROVER COPPER GOLD PROJECT
TASSIE SHOAL LNG PROJECT
WONARAH PHOSPHATE PROJECT
WONARAH PHOSPHATE PROJECT - MINING CRUSHING & SCREENING
WONARAH PHOSPHATE PROJECT - REHABILITATION
<b>INDUSTRIAL</b>
METTAM ROAD INDUSTRIAL SUBDIVISION
<b>MISCELLANEOUS</b>
MOUNT PEAKE VANADIUM TITANIUM & IRON ORE PROJECT - REFINERY
<b>OFFICES</b>
WHITTAKER STREET RESIDENTIAL & COMMERCIAL DEVELOPMENT
<b>RESIDENTIAL</b>
BLAKE STREET ELYSIUM RESIDENTIAL DEVELOPMENT
BOWERLEE ROAD DWELLINGS
CAVENAGH STREET QUEST SERVICES APARTMENTS
DALY STREET MIXED USE DEVELOPMENT
DALY STREET MOTEL
DARWIN CITY WATERFRONT RESIDENTIAL DEVELOPMENT - STAGE 2K2
FLORINA ROAD RURAL SUBDIVISION
MANTON STREET MIXED USE DEVELOPMENT
MITCHELL STREET MIXED USE DEVELOPMENT
NOONAMAH RIDGE ESTATE
THE BOULEVARD 3 TOWER MIXED USE DEVELOPMENT STAGES 1-3
THE ESPLANADE MIXED USE DEVELOPMENT
ZUCCOLI SUBDIVISION STAGE 5
<b>RETAIL / WHOLESALE TRADE</b>
GATEWAY SHOPPING CENTRE
MYER DEPARTMENT STORE CASUARINA SQUARE
<b>ROADS</b>
BARNESON BVLD LINK & DUPLICATION OF MCMINN ST & TIGER BRENNAN DR
KATHERINE HEAVY VEHICLE ALTERNATIVE ROUTE

Source: ACIF & RLB

LOCATION	VALUE \$M	STAGE
LARRAKEYAH	25	FIRM
HERMANNSBURG	50	REGISTRATIONS
ALICE SPRINGS	100	EARLY
EAST ARM	100	FIRM
LITCHFIELD PARK	25	FIRM
TIMBER CREEK	30	POSSIBLE
ZUCCOLI	30	POSSIBLE
TIWI	30	REGISTRATIONS
YUENDUMU	165	EARLY
YUENDUMU	35	EARLY
ALICE SPRINGS	120	EARLY
ALICE SPRINGS	155	EARLY
YULARA	20	EARLY
ALICE SPRINGS	70	EARLY
BARROW CREEK	970	POSSIBLE
YUENDUMU	20	EARLY
TI TREE	898	POSSIBLE
JABIRU	90	POSSIBLE
TENNANT CREEK	101	EARLY
DARWIN	2,000	POSSIBLE
TENNANT CREEK	215	EARLY
TENNANT CREEK	25	EARLY
TENNANT CREEK	20	EARLY
WISHART	20	POSSIBLE
DARWIN	650	POSSIBLE
ALICE SPRINGS	100	REGISTRATIONS
DARWIN	30	EARLY
BERRIMAH	28	POSSIBLE
DARWIN	29	POSSIBLE
DARWIN	50	POSSIBLE
DARWIN	40	POSSIBLE
DARWIN	50	POSSIBLE
COSSACK	70	EARLY
DARWIN	45	POSSIBLE
DARWIN	24	FIRM
NOONAMAH	175	EARLY
PALMERSTON	24	POSSIBLE
DARWIN	47	POSSIBLE
ZUCCOLI	35	POSSIBLE
YARRAWONGA	20	POSSIBLE
CASUARINA	58	POSSIBLE
DARWIN	100	POSSIBLE
KATHERINE	50	POSSIBLE

# DARWIN DEVELOPMENT BUILDING COMMENCEMENT VALUE

YEAR ENDING	RESIDENTIAL			
	NEW HOUSES	APARTMENTS & TERRACES	ALTERATIONS	TOTAL RESIDENTIAL
JUN-2000	282,131	140,883	71,419	487,810
JUN-2001	172,522	98,583	46,382	313,999
JUN-2002	199,215	110,550	44,901	350,542
JUN-2003	185,429	126,452	57,837	366,675
JUN-2004	196,832	163,050	71,739	428,899
JUN-2005	241,711	249,518	76,986	565,218
JUN-2006	246,357	252,797	98,497	594,573
JUN-2007	277,726	248,069	91,411	613,070
JUN-2008	238,722	142,349	77,861	455,089
JUN-2009	253,288	134,899	78,987	462,946
JUN-2010	327,956	153,338	137,207	612,494
JUN-2011	347,373	257,852	244,982	846,745
JUN-2012	351,234	241,164	155,690	744,033
JUN-2013	289,081	439,531	72,638	801,257
JUN-2014	325,054	267,835	74,381	667,271
JUN-2015	312,907	281,917	90,579	685,404
JUN-2016	336,077	192,411	91,299	619,787

Source: ABS Building Activity 8752.0.

Note: Chain volume measures calculated by the ABS do not, in some tables, sum exactly to the total value of the components. This is due to the re-referencing and indexing of historical data.

<b>NON-RESIDENTIAL</b>	<b>TOTAL</b>
269,051	747,877
382,868	695,973
275,837	628,332
257,519	625,966
302,722	733,459
430,251	997,381
482,509	1,078,137
408,479	1,022,733
489,258	942,243
430,587	891,796
503,957	1,113,001
530,141	1,369,341
1,229,061	1,972,005
975,598	1,777,120
856,286	1,523,556
505,100	1,190,502
749,110	1,368,899

# DARWIN DEVELOPMENT FORCASTED CONSTRUCTION VOLUME

SECTOR (\$M)	2016	2017	2018
NEW HOUSES	345	354	364
NEW OTHER RESIDENTIAL	199	190	203
ALTERATIONS AND ADDITIONS (LARGE)	93	96	94
ALTERATIONS AND ADDITIONS (SMALL)	207	211	208
<b>TOTAL RESIDENTIAL</b>	<b>844</b>	<b>851</b>	<b>869</b>
RETAIL/WHOLESALE TRADE	151	101	108
OFFICES	56	94	78
OTHER COMMERCIAL	4	14	8
INDUSTRIAL	185	200	189
EDUCATION	104	77	76
HEALTH AND AGED CARE	99	64	76
ENTERTAINMENT AND RECREATION	16	28	24
ACCOMMODATION	39	71	67
MISCELLANEOUS	56	110	93
<b>TOTAL NON-RESIDENTIAL</b>	<b>710</b>	<b>759</b>	<b>719</b>
ROADS	272	323	353
BRIDGES, RAILWAYS, HARBOURS	19	78	53
ELECTRICITY, PIPELINES	86	76	27
WATER AND SEWERAGE	79	64	68
TELECOMMUNICATIONS	227	196	207
RECREATION AND OTHER	122	98	96
<b>TOTAL ENGINEERING</b>	<b>805</b>	<b>835</b>	<b>804</b>
HEAVY INDUSTRY INCL. MINING	5,474	3,160	2,414
<b>TOTAL FORECAST</b>	<b>7,833</b>	<b>5,605</b>	<b>4,806</b>

Source: ACIF & RLB

# DARWIN DEVELOPMENT CONSTRUCTION WORK DONE

## ANNUAL VALUE OF CONSTRUCTION WORK DONE IN NORTHERN TERRITORY

YEAR ENDING	RESIDENTIAL	NON-RESIDENTIAL	ENGINEERING	TOTAL CONSTRUCTION
JUN-1990	88	135	161	383
JUN-1991	98	175	159	432
JUN-1992	130	127	137	395
JUN-1993	137	117	138	392
JUN-1994	168	156	213	537
JUN-1995	194	145	271	609
JUN-1996	201	239	207	647
JUN-1997	201	267	191	659
JUN-1998	264	212	201	677
JUN-1999	319	242	349	910
JUN-2000	255	138	277	671
JUN-2001	163	146	168	478
JUN-2002	177	181	1,227	1,585
JUN-2003	210	156	1,332	1,698
JUN-2004	218	183	1,620	2,021
JUN-2005	309	210	1,731	2,250
JUN-2006	374	285	1,876	2,535
JUN-2007	412	334	1,698	2,445
JUN-2008	451	413	1,280	2,143
JUN-2009	439	447	2,657	3,543
JUN-2010	574	468	1,169	2,211
JUN-2011	762	457	928	2,146
JUN-2012	721	712	1,864	3,297
JUN-2013	621	1,047	5,848	7,516
JUN-2014	820	1,103	5,894	7,817
JUN-2015	732	729	8,089	9,551
JUN-2016	644	738	6,344	7,726

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

# DARWIN DEVELOPMENT CONSTRUCTION WORK DONE

## ANNUAL VALUE OF NON-RESIDENTIAL BUILDING WORK DONE IN NORTHERN TERRITORY

YEAR ENDING	COMMERCIAL	INDUSTRIAL	RETAIL	EDUCATION
JUN-2002	25	18	19	22
JUN-2003	44	12	27	10
JUN-2004	52	34	26	12
JUN-2005	64	26	29	19
JUN-2006	90	31	34	36
JUN-2007	58	43	39	48
JUN-2008	67	58	27	80
JUN-2009	136	89	25	76
JUN-2010	76	51	34	196
JUN-2011	44	44	41	166
JUN-2012	51	62	28	97
JUN-2013	51	420	26	54
JUN-2014	128	323	54	95
JUN-2015	151	229	43	70
JUN-2016	62	63	156	108

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

HEALTH	AGED CARE	HOTEL	OTHER	TOTAL NON-RESIDENTIAL
42	5	22	28	181
23	4	12	23	156
10	1	22	26	183
16	0	20	36	210
22	2	6	65	285
18	2	31	96	334
17	10	72	82	413
31	8	27	56	447
28	5	24	54	468
23	10	32	98	457
77	-	50	346	712
38	5	40	412	1,047
56	2	52	393	1,103
32	6	92	105	729
103	0	41	75	738

# DARWIN DEVELOPMENT CONSTRUCTION WORK DONE

## ANNUAL VALUE OF RESIDENTIAL BUILDING WORK DONE IN NORTHERN TERRITORY

YEAR ENDING	NEW HOUSES	NEW APARTMENTS & SEMI DETACHED HOUSING	ALTERATIONS & ADDITIONS INCLUDING CONVERSIONS	TOTAL RESIDENTIAL
JUN-1990	49	20	19	88
JUN-1991	60	20	18	98
JUN-1992	79	35	16	130
JUN-1993	86	31	20	137
JUN-1994	114	36	19	168
JUN-1995	113	54	26	194
JUN-1996	111	58	32	201
JUN-1997	121	57	23	201
JUN-1998	146	91	26	264
JUN-1999	199	90	30	319
JUN-2000	150	73	33	255
JUN-2001	84	56	24	163
JUN-2002	104	50	23	177
JUN-2003	102	77	31	210
JUN-2004	108	77	33	218
JUN-2005	137	120	52	309
JUN-2006	160	147	67	374
JUN-2007	194	145	73	412
JUN-2008	219	170	63	451
JUN-2009	199	170	70	439
JUN-2010	296	160	117	574
JUN-2011	309	226	226	762
JUN-2012	350	215	155	721
JUN-2013	296	248	77	621
JUN-2014	300	447	74	820
JUN-2015	324	322	86	732
JUN-2016	350	200	94	644

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

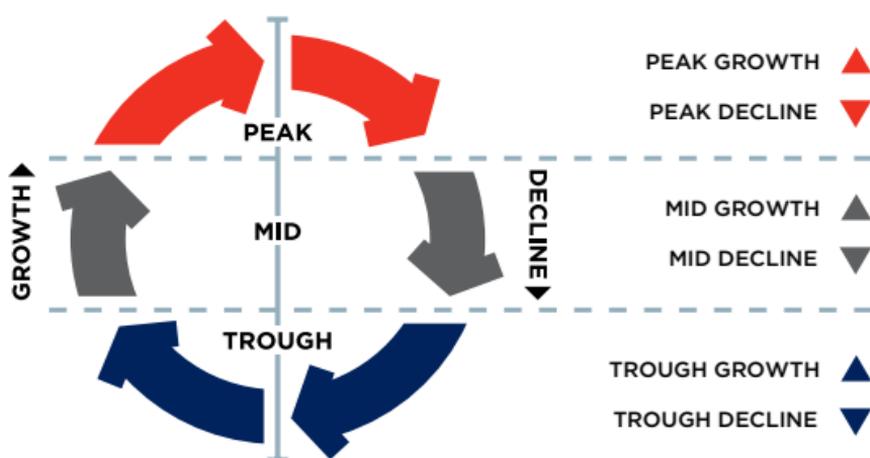
# RLB CONSTRUCTION MARKET ACTIVITY CYCLE

Activity within the construction industry traditionally has been subject to volatile cyclical fluctuations. The RLB Construction Market 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



# 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.

DARWIN	Q2 2015	Q4 2015	Q2 2016	Q4 2016
HOUSES	▲	▲	▲	▲
APARTMENTS	▼	▼	▼	▼
OFFICES	▲	▼	▼	▼
INDUSTRIAL	▲	▲	▲	▲
RETAIL	▲	▲	▲	▼
HOTEL	▲	▲	▼	▼
CIVIL	▲	▲	▲	▲

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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 2016. For towns or cities outside capital cities, costs can be expected to vary in accordance with the following table of indices:

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

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

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

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

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

# BENCHMARKS

## KEY CITY RELATIVITIES - Q4 2016

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

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

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

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

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

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

i.e.  $1,000,000 \times \frac{100}{90} = 1,111,000$ .

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

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

# BENCHMARKS

## OFFICE BUILDING EFFICIENCIES

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

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

## PLANT ROOM SPACE

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

## REINFORCEMENT RATIOS

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

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

# BENCHMARKS

## LABOUR AND MATERIALS

### TRADE RATIOS

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

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

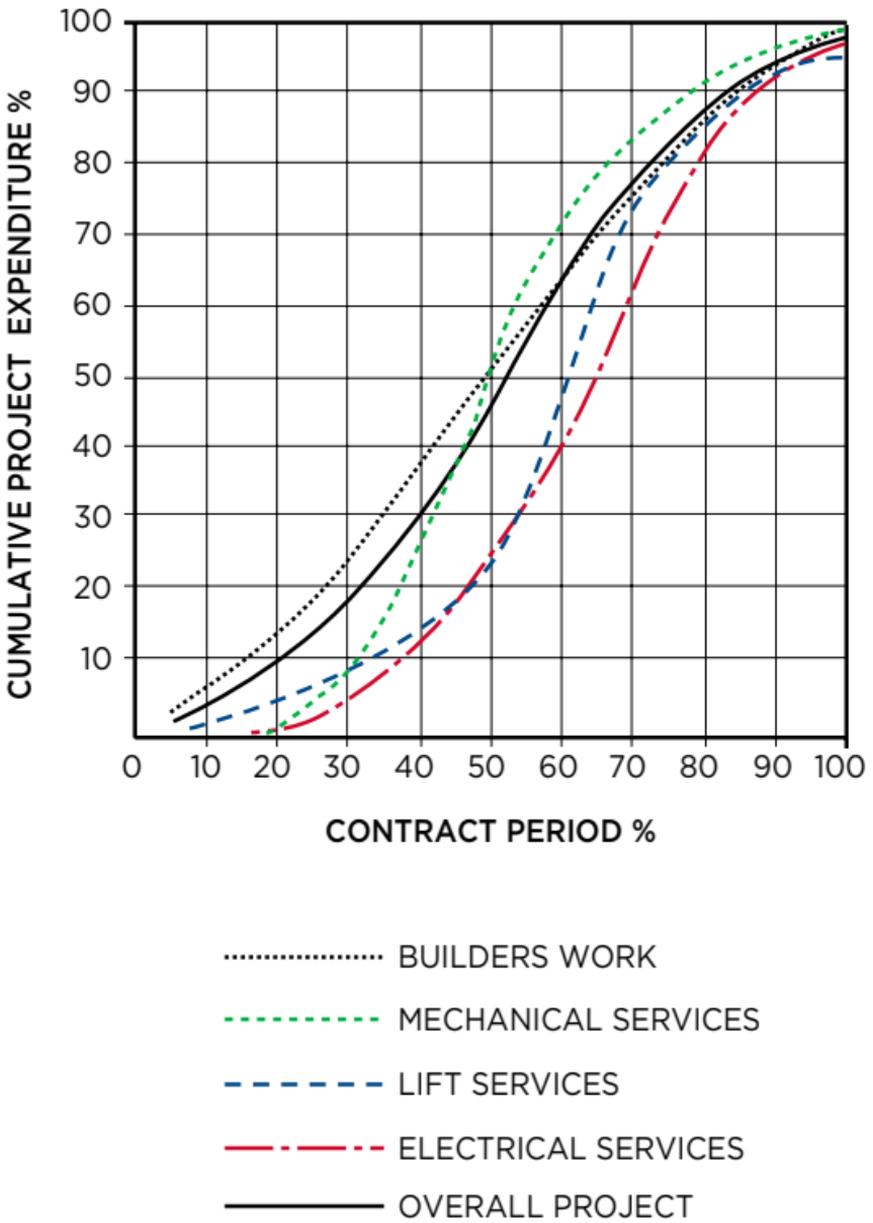
PRELIMINARIES	40	10	50
DEMOLISHER	85		15
EXCAVATOR	32	15	53
PILER	20	50	30
IN SITU CONCRETOR	25	75	
FORMWORKER	70	30	
REINFORCEMENT FIXER	20	80	
PRECAST CONCRETOR	20	80	
BRICKLAYER & BLOCKLAYER	50	50	
MASON	10	90	
ASPHALTOR	40	60	
STRUCTURAL STEELWORK	60	40	
METALWORKER	20	80	
SUSPENDED CEILING FIXER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

LABOUR
  MATERIAL
  FIXED FACTOR

# BENCHMARKS

## PROGRESS PAYMENT CLAIMS

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



# BENCHMARKS

## COMMON INDUSTRY ACRONYMS

### PROJECT MANAGEMENT

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

### ARCHITECTURAL DRAWINGS

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

### LAND SURVEYS

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

### STRUCTURAL DRAWINGS

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

### HYDRAULIC DRAWINGS

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

### MECHANICAL DRAWINGS

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

### ELECTRICAL DRAWINGS

DB	Distribution Board
DGPO	Double General Power Outlet
GPO	General Power Outlet
MSB	Main Switchboard
RCD	Residual Current Device
SB	Switchboard

## **BENCHMARKS**

# **METHOD OF MEASUREMENT OF BUILDING AREAS**

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

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

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

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

### **FULLY ENCLOSED COVERED AREA (FECA)**

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

### **UNENCLOSED COVERED AREA (UCA)**

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

# BENCHMARKS

## METHOD OF MEASUREMENT OF BUILDING AREAS

### BUILDING AREA (BA)

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

### USABLE FLOOR AREA (UFA)

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

#### Deductions

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

### NET LETTABLE AREA (NLA)

#### Application

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

#### Definition

3.1 The net lettable area of a building is the sum of its whole floor lettable areas.

3.2 Net Lettable Area - Whole Floors

The whole floor net lettable area is calculated by:

- 3.2.1 taking measurements from the internal finished surfaces of permanent internal walls and the internal finished surfaces of dominant portions of the permanent outer building walls.
- 3.2.2 included in the lettable area calculation are:
  - 3.2.2.1 window mullions
  - 3.2.2.2 window frames
  - 3.2.2.3 structural columns
  - 3.2.2.4 engaged perimeter columns or piers
  - 3.2.2.5 fire hose reels attached to walls, 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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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 M<sup>2</sup> or more to have an up-to-date Building Energy Efficiency Certificate (BEEC).

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

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

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

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

## ASSETS AND FACILITIES MANAGEMENT STANDARDS

Since late 2012 Standards Australia, supported by FMA Australia, PCA, RICS, SBEnc, 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.

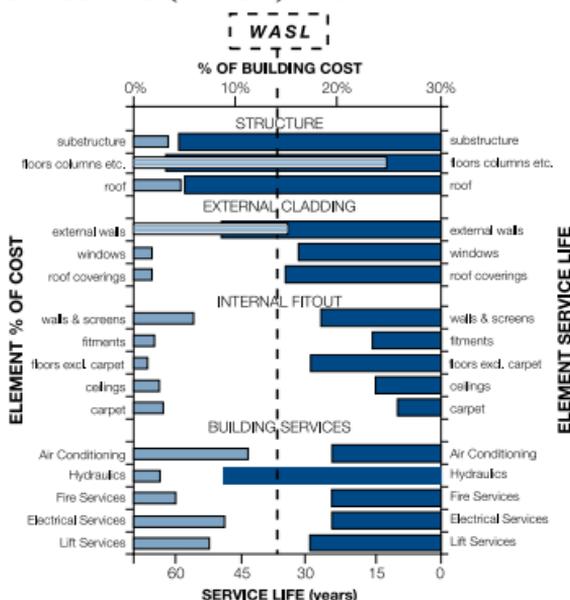
# ASSETS AND FACILITIES USEFUL LIFE ANALYSIS

## 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.

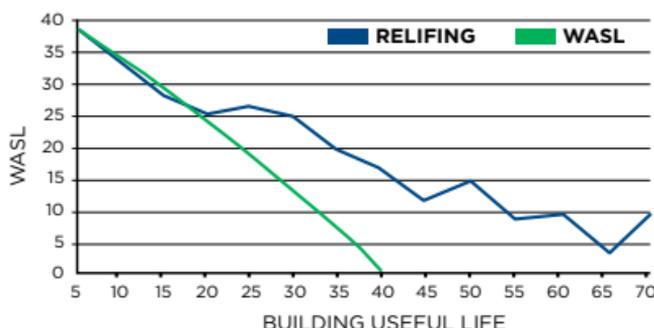
## WEIGHTED AVERAGE SERVICE LIFE

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.

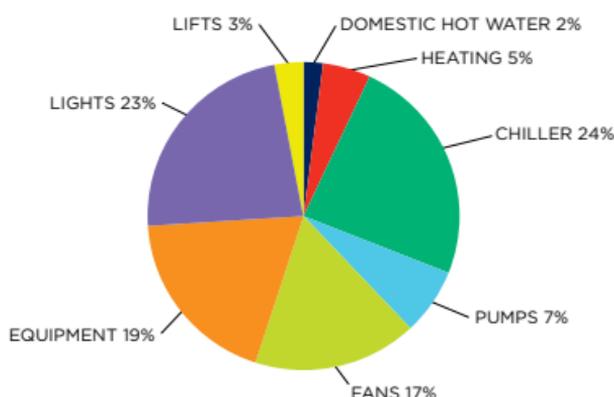
The level of recovery of outgoings is normally governed and regulated by leases and other agreements with tenants.

The cost of outgoings varies depending upon:

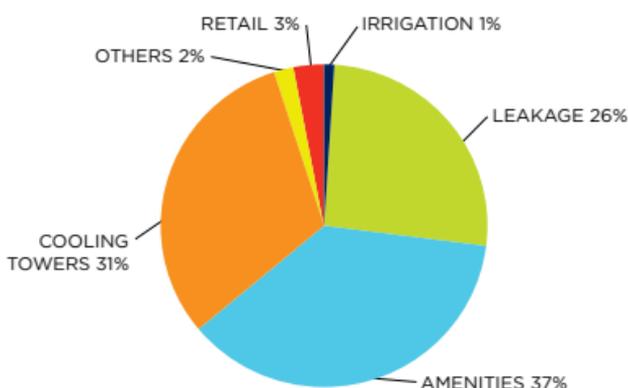
- the level of management and services provided
- lease agreements
- quality, type and efficiency of the building
- location and statutory regimes applicable

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	NSW	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

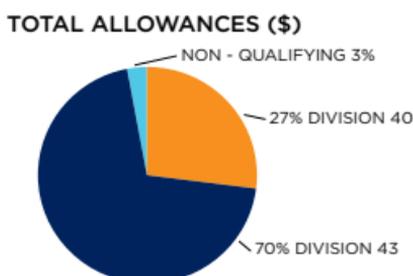
Assets with a limited effective life that are reasonably expected to decline in value. The decline in value is based on the cost and effective life of the depreciating asset, not its actual change in value. Examples of these are carpet, air conditioning plant, lights etc.

## 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.



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

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# CALENDARS

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# CALENDARS 2016 - 2019

## 2016

**JANUARY 2016**

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

**FEBRUARY 2016**

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

**MARCH 2016**

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

**APRIL 2016**

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3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

**MAY 2016**

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15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

**JUNE 2016**

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5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

**JULY 2016**

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17	18	19	20	21	22	23
24	25	26	27	28	29	30
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**AUGUST 2016**

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7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
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**SEPTEMBER 2016**

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4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
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**OCTOBER 2016**

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16	17	18	19	20	21	22
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**NOVEMBER 2016**

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20	21	22	23	24	25	26
27	28	29	30			

**DECEMBER 2016**

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4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
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## 2017

**JANUARY 2017**

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**FEBRUARY 2017**

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19	20	21	22	23	24	25
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**MARCH 2017**

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**APRIL 2017**

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**MAY 2017**

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**JUNE 2017**

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**JULY 2017**

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**AUGUST 2017**

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**SEPTEMBER 2017**

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**OCTOBER 2017**

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**NOVEMBER 2017**

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# 2018

**JANUARY 2018**

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**FEBRUARY 2018**

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**MARCH 2018**

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# 2019

**JANUARY 2019**

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**SEPTEMBER 2019**

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**OCTOBER 2019**

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**NOVEMBER 2019**

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17	18	19	20	21	22	23
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**DECEMBER 2019**

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	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

# CALENDARS 2017

## ROSTERED DAYS OFF

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

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

# CALENDARS

## PUBLIC HOLIDAYS IN AUSTRALIA

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

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