



CELEBRATING  
**160** YEARS  
1860 - 2020

INNOVATION - QUALITY - SERVICE

**DOWELL** ALUMINIUM  
WINDOWS AND DOORS

# PRODUCT GUIDE-021

QUEENSLAND

CELEBRATING  
**160** YEARS  
1860 - 2020

**DOWELL**



31

# The **commitment** and **dedication**

Dowell made in 1860 to **product innovation** and **customer service**, holds **true today**.

**Note:** This publication showcases the Dowell product range, for more specific details on window and door sizes, configuration, installation diagrams and general technical details, please refer to the Dowell website ([www.dowell.com.au](http://www.dowell.com.au)) or consult your nearest Dowell sales representative.

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## CONTENTS

Story of Dowell	4
Our product series	11
<b>Window range</b> - UrbanLine™ and DesignerLine®	12
<b>Door range</b> - UrbanLine™ and DesignerLine®	40
Fall prevention	64
Glass selection	66
Safety Glass in buildings	70
Noise control	72
Bush fire rating	76
Frame couplers	80

# DOWWELL

MAIN ENTRANCE & SHOWROOM





# Story of Dowell

## - history of an Australian company

In the cut and thrust of the building industry, as well as in the Australian business world more generally, it's unusual for a company name and ethos to remain unchanged, but such is the story of Dowell.

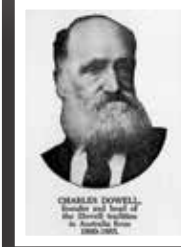
Tracking through a history which now quite remarkably crosses into three centuries, Dowell's reputation for quality workmanship and design innovation goes back to its earliest days. Back, in fact, to a gold rush...

**1820** Born in England in 1820, Charles Dowell later (as a young man) follows his father into the blacksmith trade. Primarily making wrought iron fences, gates and garden seats from various premises in east London.

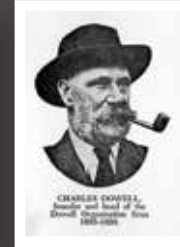
**1857** Charles Dowell (aged 37), arrives in Melbourne - a boom town, with a whole clan in tow: his wife and six children, as well as a brother and two brothers-in-law (Appold and Bailey), along with their families. Melbourne was bursting. In one year alone the number of buildings doubled. Everything was needed at once: housing and commercial premises; public buildings and infrastructure.

**1860** C. Dowell & Sons is founded by Charles Dowell, an architectural wrought iron foundry with his brother Henry - and possibly Bailey - but it was Charles who headed the business that is to become the main trunk of the tree that is Dowell today.

**1900** Fitzroy City Press - reports: 'Mr. C. Dowell owns the blacksmith's shop at No. 75 Johnston Street, and machinery suited for ornamental iron and copper work, such as verandahs, gates, etc., in fact, all high class work. He has been doing business for over a quarter of a century. Mr. C. Dowell, senior, is over 80 years of age, and is yet active, and may frequently be seen working at his trade - his eldest son at present manages the business, employing some half a dozen hands, at times a great many more. A large quantity of balconettes and grilles being recently constructed for several hospitals, are well known



CHARLES DOWELL,  
founder and head of  
the Dowell family  
in Australia from  
1860-1901.



CHARLES DOWELL,  
founder and head of the  
Dowell Corporation from  
1901-1905.



Charles Dowell's First Factory  
Lt. Lonsdale St., Melbourne.



Mid-center: Charles Dowell Senior and Junior



and in such high repute that constant orders are always coming in. Several iron gates and flower stands are ready on sale.'

**1905** Charles Dowell dies, leaving Charles II to carry on at the foundry in partnership with a fellow named Langdon. Some of Charles II's best work was produced during these pre-war years and Charles II proudly claimed he never had a job returned or condemned.

**1913** Leslie Roy Dowell starts working in the business. Seventeen years old and doing routine jobs around the place, Roy joins his eldest brother, Charles III, the last in the family to be trained as a blacksmith.

**1915** Charles III and Langdon, the partner, leave for war. Leaving Roy to work with his father and gradually take on more responsibilities.

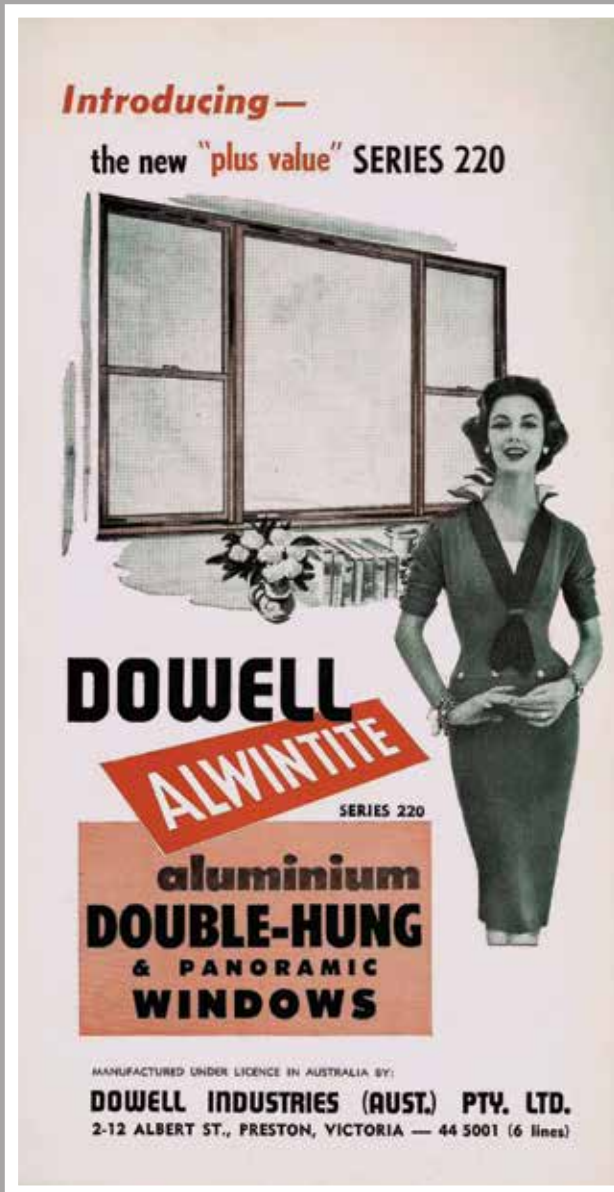
**1918** At war's end Charles III and Langdon both returned and the partnership was spilt, necessitating the sale of factory and plant. Roy and Charles III were given land by their father to build a new factory in the same area, at 2 Scotchmer Street, Fitzroy.

**1922** C. Dowell and Sons [registered as a proprietary limited company in 1922] supplied the steel windows to buildings such as Willis & Co. in Little Collins Street, Craig Williamsons in Elizabeth Street and the Postal Store in Spencer Street. The factory was set up for efficiently making these new steel window frames and there was little blacksmithing.

**1928** Roy travelled to the USA and England to research fire door products for use in multi-storey buildings. While in the USA, Roy secured licensing deals for a range of products including metal fire doors, elevator doors and metal door frames, as well as several other metal products specifically for hospitals.

**1935** The Dowell factory was expanded, perhaps in part to facilitate the filling of a contract to supply windows for the spare parts and administrative buildings at the new headquarters of General Motors-Holden at Fishermans Bend.





Dowell full page newspaper print advertisement in the 1960s

**1940** Roy travelled to the USA, returning with a revolutionary design for pressed metal double hung windows.

**1945** After the war, Dowell rode on a wave of expansion. New products, new factories and new sales networks were progressively rolled out to meet the needs of the times.

**1948** At the invitation of then the Premier Robert Cosgrove and the Tasmanian government, Dowell's first new factory was built in Moonah, Tasmania in 1948. The Dowell Industries (Tas) Pty Ltd factory employed sixty workers and produced steel window frames and stainless steel sinks.

**1949** Roy Dowell travels back to the USA to negotiate rights to the aluminium designs of the General Bronze Corporation. Headquartered in New York, General Bronze was one of the largest window manufacturers in the world. On his return Roy formed Dowell Aluminium Windows Pty Ltd. He then bought five acres of land in Albert Street, Preston for a new Melbourne factory.

Throughout this era, Dowell was involved in many major building projects across the country. Some of the most noteworthy include H.C. Sleigh House (the first office block to be erected in post-war Melbourne in 1953); the Queen Mary Nurses' Home at Royal Prince Alfred Hospital in Sydney (1956); Essington Lewis House in Melbourne (head office for BHP, 1959); and the Royal Children's Hospital in Melbourne (1962). Perhaps the most prestigious project of all was the AMP Building at Circular Quay, Sydney, completed in 1962. Dowell provided the curtain walling for this 120 metre high tower with its curved facade, which is still significant today as Sydney's first skyscraper.

**1959** In response to changes during the 1950s Dowell went through two major restructures. First, the original C. Dowell & Sons merged into three new registrations: Dowell Holdings Pty Ltd; Dowell Industries (Aust) Pty Ltd; and Dowell Steel Windows Pty Ltd. Responding to financial advice in 1959, the company was floated, becoming Dowell Australia Ltd. Roy Dowell was designated managing director and was chairman of the small board which included his son, John Dowell, as executive director. The family company, Dowell Holdings, was the main shareholder and retained ownership of property.

**1960** Dowell offered a comprehensive range of architectural products which included: aluminium windows and doors; curtain walling for multi-storey buildings; pressed metal fire doors and frames; lift doors and frames; industrial steel windows; and Sanymetal partitioning for hospitals.

**1966** Roy Dowell agreed to a negotiated, joint take-over by Alcoa and Overseas Corporation, a deal ultimately worth around \$1.75 million.

John Dowell resigns six months later, ending over a hundred years of family leadership.

**1968** New factory in Queanbeyan for the fabrication of aluminium door and window frames, and flyscreens is built.

**1970 -1980** Dowell continued to thrive. The business was simplified in that pressed metal products were no longer produced. Profits hit all-time highs and design innovation continued in both the commercial and residential sides of the business.

**1988** Dowell celebrate their 128<sup>th</sup> birthday, with the news they had won an Australian Design Award for its XD-3 sliding aluminium window. Several years of research and field testing had gone into the product.

Alcoa divest itself of the window business and Dowell Australia Ltd passes into the hands of Boral, which had an existing interest in the sector.

**2012** Dowell is awarded the Housing Industries Association GreenSmart product of the year award for its ground breaking ThermaLine range. Dowell Double glazed and thermally broken, ThermaLine aluminium window and door frames offered unprecedented thermal performance and energy efficiency.

**2013** Dowell is acquired by Chabero Pty Ltd, a Queensland based, family-owned investment company and Dowell Windows Pty Ltd operates as a standalone company.

**2015 - 2019** Dowell expands it's manufacturing facilities in Shepparton, Edinburgh Parks and Bassendean.





Dowell double page print advertisement in Grand Design Magazine

**Today** Dowell continues to prosper. With eight manufacturing locations and offices around Australia, it employs over 600 people.

The first Charles Dowell, standing as a newcomer all those years ago in the gold rush streets of Melbourne, could never have imagined that products bearing his name would, for generations, be part of the daily lives of so many Australians, in their offices, factories and homes. His eagerness for the new, was to be the story of Dowell. New designs, new products, new materials, new manufacturing processes, even new ways of doing business – whatever the circumstances of the times, innovation has always been embraced at Dowell. Throughout our history a certain kind of business and engineering intelligence has prevailed, one which holds that quality should underpin everything, at every level. From the nineteenth century to the twenty-first, these are the values which have kept Dowell vibrant and alive. As history plainly shows, the oldest window manufacturer in Australia has always been modern.





# Dowell FOR ALL YOUR WINDOWS AND DOORS

At Dowell, we've made selecting the right new windows and doors for your home, very simple.

We offer a wide choice of architecturally inspired windows and doors in three distinctive product ranges, the **Dowell UrbanLine** series, **Dowell DesignerLine™** series and the energy efficient **Dowell ThermaLine™** series.

## Dowell URBANLINE™ SERIES

The architecturally inspired design, high quality C1 & C2 - cyclone rated construction, high water resistance, low air infiltration and cost effectiveness of the Dowell UrbanLine range has made it one of Australia's most popular window and door choice. Available in a large selection of colour and glazing options.

The Dowell UrbanLine series is locally manufactured to ensure quality assurance, compliance with Australian standards and to meet tight delivery schedules.

## Dowell DESIGNERLINE® SERIES

The elegant architectural look of a deluxe frame is what makes the Dowell DesignerLine™ and DesignerLine-E™ range of windows and doors stand out from the rest. The deluxe semi-commercial frame adds substance and volume, while creating a picture frame for that spectacular view.

## Dowell THERMALINE® SERIES

Independently rated as the most energy efficient windows and doors in its class and winner of the 2012 HIA Greensmart product of the year award. Dowell ThermaLine™ is our signature 'Future Proof' energy efficient product series.

Dowell ThermaLine™ offers outstanding performance in all climatic conditions and assist in achieving energy rating of 7 stars or better.

## Dowell Aluminium WINDOW RANGE

	FIXED WINDOW	SLIDING WINDOW	AWNING WINDOW	CASEMENT WINDOW	D/HUNG WINDOW	LOUVRE WINDOW
<b>URBANLINE</b>	Yes	Yes	Yes	Yes	Yes	-
<b>DESIGNERLINE® / DESIGNERLINE®-E</b>	Yes	Yes	Yes	-	Yes	Yes
<b>THERMALINE®</b>	Yes	Yes	Yes	-	-	-

## Dowell Aluminium DOOR RANGE

	SLIDING DOOR	ALFRESCO SLIDING DOOR	ALFRESCO CRN SLIDING DOOR	HINGE DOOR	BI FOLD DOOR
<b>URBANLINE™</b>	Yes	Yes	Yes	-	-
<b>DESIGNERLINE® / DESIGNERLINE®-E</b>	-	-	-	Yes	Yes
<b>THERMALINE®</b>	Yes	Yes	Yes	-	-

**Please Note:** Product availability, sizes and colours may vary from state to state. Please refer to your local sales office for confirmation.





Dowell **UrbanLine™** and  
**DesignerLine®** Aluminium

# WINDOW RANGE

Product availability, size and configuration varies  
from state to state, please consult your local Dowell  
representative for more information.

Dowell  
**SLIDING**  
WINDOW





## Dowell SLIDING WINDOWS

Dowell Aluminium Sliding Windows are a popular choice among builders and home owners and have been for many years, they provide excellent ventilation and an elegant appearance, offering the perfect combination of style, function and value for money.



# Dowell SLIDING WINDOWS





## FEATURES

- Durable low-maintenance, easy-clean aluminium profiles.
- Adjustable stainless steel ball bearing roller system for smooth sash operation.
- Sill drainage system designed for optimum performance.
- Slimline profiles for wide uninterrupted views.
- Full perimeter reveal flashing fin for superior reveal lining protection.
- Anti-lift sash for added security.
- Full perimeter sash weather seals for optimum performance.
- Moulded end gaskets at all frame joints.
- Height adjustable mullion latch.
- Full length under-sill flap for neat finish and allowance for building settlement.
- Easy coupling to the Dowell range of windows and doors.
- Low E high performance thermal glass option available.

## HARDWARE

- Options available, please consult your local sales representative for more information.

## SLIDING WINDOW ENERGY PERFORMANCE

				
PRODUCT	Standard Single Glazed	Standard Single Glazed	ThermaLine™ Double Glazed	ThermaLine™ Double Glazed
WINDOW TYPE	Sliding	Sliding	Sliding	Sliding
GLASS OPTION	3mm Clr.	6mm SP10 Clr.	4mm Clr. /12mm Arg. gas /4mm Clr.	LB Clr.SO. 5mm /10mm Arg. gas /5mm Clr.
FRAME TYPE	Standard Aluminium	Standard Aluminium	ThermaLine™ Aluminium (with thermal-break)	ThermaLine™ Aluminium (with thermal-break)
AIR INFILTRATION	1.30	1.30	0.74	0.74
HEATING (STARS)	☆☆☆ 17%	★★★★ 37%	★★★★★ 57%	★★★★★ 59%
COOLING (STARS)	☆ 10%	★★ 33%	☆☆ 39%	☆☆☆ 55%
*SHGC	0.75	0.61	0.64	0.49
U <sub>w</sub> -VALUE	<b>6.5</b>	<b>4.5</b>	<b>2.9</b>	<b>2.1</b>

ACOUSTICS STC RATING FOR GLAZED WINDOWS	4 mm Float Glass - 6.38mm Clear Laminated Glass
	<b>Acoustic Range from RW 25 - RW 32</b>

PERFORMANCE (Standard Range)	Non Cyclonic	Cyclonic
	<b>N1 - N5 GEN</b>	<b>C1 - C2 GEN</b>

## FLY, SECURITY AND BARRIER SCREEN OPTIONS

SLIDING WINDOW	610 - 3010 (Wide)
600 - 1457 (High)	F / S / B
SLIDING/FIXED WINDOW WITH TRANSOM	610 - 3010 (Wide)
1800 - 2057 (High)	F / S / B

F = Fly Screen, S = Security Screen, B = Barrier Screen

## BUSH FIRE RATED

ATTACK LEVEL	BAL LOW	-	BAL - 40
WINDOW FRAME	Aluminium		Aluminium
WINDOW GLAZING	No special requirements.		6mm toughened glass.
HARDWARE	As Above		metal.

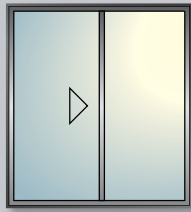
Note: BAL - 40 must include Full External Screening to comply.

## HARDWARE OPTIONS

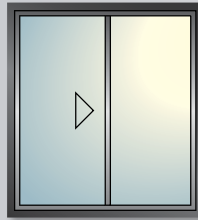
JAMB LOCKS	MULLION LOCK	FALL PREVENTION DEVICE (UPPER LEVELS)
Standard	Available	As Required

Note: Hardware options may vary from state to state, please consult your local sales representative or more information.

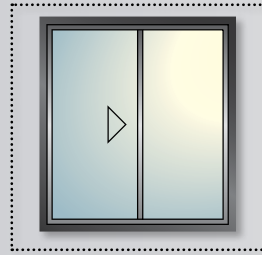




**UrbanLine™** (STD. Frame)  
Sliding window



**DesignerLine®** (Deluxe Frame)  
Sliding window



**ThermaLine®** (Thermal Barrier  
Frame) Sliding window

**Please note:** Refer to the Dowell  
ThermaLine® brochure for stud  
opening and frame sizes.

**DesignerLine® note:** Other sizes and  
configurations in DesignerLine® are available  
on request, please refer to your local sales  
office for more information.

Standard sizes and colours are available on short lead times.  
Some sizes and special colours are subject to longer lead times.  
Please refer to your local sales office for confirmation.

DesignerLine-E is available in all UrbanLine™ size configuration.

KEY: • = Not for N4 CNR & N5 GEN  
+ = Not for N3 CNR, N4 & N5  
# = Not for N2 CNR, N3, N4 & N5.

Note: For higher wind rating, wind load graphs must be consulted.

				605				605				725				725			
<b>SLIDING WINDOW</b> (N1-N5 GEN, C1-C2 GEN)																			
<b>Stud Opening</b>				660	960	1260	1560	1860	2160	2460	2160	2460	2760	3060					
	<b>Brick</b>			2.5	3.5	5	6	7.5	8.5	10	8.5	10	11	12.5					
		<b>Window</b>		600	900	1200	1500	1800	2100	2400	2100	2400	2700	3000					
660	7	600		USW0606	USW0609	USW0612	USW0615	USW0618	USW0621	USW0624	USW0621-3P	USW0624-3P	USW0627-3P	USW0630-3P					
				<b>DSW0606</b>	<b>DSW0609</b>	<b>DSW0612</b>	<b>DSW0615</b>	<b>DSW0618</b>	<b>DSW0621</b>	<b>DSW0624</b>	<b>DSW0621-3P</b>	<b>DSW0624-3P</b>	<b>DSW0627-3P</b>	<b>DSW0630-3P</b>					
960	10	900		USW0906	USW0909	USW0912	USW0915	USW0918	USW0921	USW0924	USW0921-3P	USW0924-3P	USW0927-3P	USW0930-3P					
				<b>DSW0906</b>	<b>DSW0909</b>	<b>DSW0912</b>	<b>DSW0915</b>	<b>DSW0918</b>	<b>DSW0921</b>	<b>DSW0924</b>	<b>DSW0921-3P</b>	<b>DSW0924-3P</b>	<b>DSW0927-3P</b>	<b>DSW0930-3P</b>					
1060	12	1000		USW1006	USW1009	USW1012	USW1015	USW1018	USW1021	USW1024	USW1021-3P	USW1024-3P	USW1027-3P	USW1030-3P					
				<b>DSW1006</b>	<b>DSW1009</b>	<b>DSW1012</b>	<b>DSW1015</b>	<b>DSW1018</b>	<b>DSW1021</b>	<b>DSW1024</b>	<b>DSW1021-3P</b>	<b>DSW1024-3P</b>	<b>DSW1027-3P</b>	<b>DSW1030-3P</b>					
1260	14	1200		USW1206	USW1209	USW1212	USW1215	USW1218	USW1221	USW1224	USW1221-3P	USW1224-3P	USW1227-3P	USW1230-3P					
				<b>DSW1206</b>	<b>DSW1209</b>	<b>DSW1212</b>	<b>DSW1215</b>	<b>DSW1218</b>	<b>DSW1221</b>	<b>DSW1224</b>	<b>DSW1221-3P</b>	<b>DSW1224-3P</b>	<b>DSW1227-3P</b>	<b>DSW1230-3P</b>					
1460	16	1400		USW1406	USW1409	USW1412	USW1415	USW1418	USW1421	USW1424	USW1421-3P	USW1424-3P	USW1427-3P	USW1430-3P					
				<b>DSW1406</b>	<b>DSW1409</b>	<b>DSW1412</b>	<b>DSW1415</b>	<b>DSW1418</b>	<b>DSW1421</b>	<b>DSW1424</b>	<b>DSW1421-3P</b>	<b>DSW1424-3P</b>	<b>DSW1427-3P</b>	<b>DSW1430-3P</b>					
1560	17	1500		USW1506	USW1509	USW1512	USW1515	USW1518	USW1521	USW1524	USW1521-3P	USW1524-3P	USW1527-3P	USW1530-3P					
				<b>DSW1506</b>	<b>DSW1509</b>	<b>DSW1512</b>	<b>DSW1515</b>	<b>DSW1518</b>	<b>DSW1521</b>	<b>DSW1524</b>	<b>DSW1521-3P</b>	<b>DSW1524-3P</b>	<b>DSW1527-3P</b>	<b>DSW1530-3P</b>					
<b>SLIDING / FIXED WINDOW</b> (N1-N5 GEN, C1-C2 GEN)																			
1860	21	1800		USW1806-T	USW1809-T	USW1812-T	USW1815-T	USW1818-T	USW1821-T	USW1824-T*	USW1821-3PT	USW1824-3PT*	USW1827-3PT+	USW1830-3PT+					
				<b>DSW1806-T</b>	<b>DSW1809-T</b>	<b>DSW1812-T</b>	<b>DSW1815-T</b>	<b>DSW1818-T</b>	<b>DSW1821-T</b>	<b>DSW1824-T</b>	<b>DSW1821-3PT</b>	<b>DSW1824-3PT</b>	<b>DSW1827-3PT</b>	<b>DSW1830-3PT</b>	a=1200 / b=600				
2160	24	2100		USW2106-T	USW2109-T	USW2112-T	USW2115-T	USW2118-T	USW2121-T	USW2124-T*	USW2121-3PT	USW2124-3PT*	USW2127-3PT+	USW2130-3PT+					
				<b>DSW2106-T</b>	<b>DSW2109-T</b>	<b>DSW2112-T</b>	<b>DSW2115-T</b>	<b>DSW2118-T</b>	<b>DSW2121-T</b>	<b>DSW2124-T</b>	<b>DSW2121-3PT</b>	<b>DSW2124-3PT</b>	<b>DSW2127-3PT</b>	<b>DSW2130-3PT</b>	a=1372 / b=685				

OPTION



Reverse  
Sash



Flyscreens



Bottom Sash



Colonial  
C1 & C2

Dowell  
**AWNING**  
WINDOW





## Dowell **AWNING WINDOWS**

The attractive appearance of the Dowell Awning Window is only the beginning of its quality, functionality and value. Every aspect of a Dowell Awning Window is manufactured to our exacting performance and style standards, from its smooth operation to elegantly-styled sashes.








## Dowell AWNING WINDOWS

### FEATURES

- Durable low-maintenance, easy-clean aluminium profiles.
- Integrated tubular mullions and transoms with concealed fixings for superior strength.
- Full width winder support for improved aesthetics.
- Solid extruded aluminium sash corner stakes.
- Patented continuous anti-rattle hook hinge system.
- Full perimeter sash seals for positive sealing.
- Moulded end gaskets at frame joints.
- Full length under-sill flap for neat finish and allowance for building settlement.
- Easy coupling to the Dowell range of windows and doors.
- Products available in Double Glazed configurations in some states.\*
- Fully integrated flyscreen support (as option).
- Low E high performance thermal glass option available.

### HARDWARE

- Options available, please consult your local sales representative for more information.

AWNING WINDOW ENERGY PERFORMANCE					
<b>PRODUCT</b>	Standard Single Glazed	Standard Single Glazed	Standard Double Glazed Window	ThermaLine™ Double Glazed	ThermaLine™ Double Glazed
<b>WINDOW TYPE</b>	Awning	Awning	Awning	Awning	Awning
<b>GLASS OPTION</b>	3mm Clr.	6mm SP10 Clr.	3mm Clr. /12mm Arg. gas /3mm Clr.	4mm Clr. /12mm Arg. gas /4mm Clr.	LB Clr.SO. 5mm /10mm Arg. gas /5mm Clr.
<b>FRAME TYPE</b>	Standard Aluminium	Standard Aluminium	Standard Aluminium	ThermaLine™ Aluminium (with thermal-break)	ThermaLine™ Aluminium (with thermal-break)
<b>AIR INFILTRATION</b>	0.07	0.07	0.09	0.04	0.04
<b>HEATING (STARS)</b>	☆☆☆☆ 33%	★★★★★ 51%	★★★★★ 63%	★★★★★ 76%	★★★★★ 78%
<b>COOLING (STARS)</b>	★ 20%	☆☆☆ 39%	☆☆☆ 39%	★★★ 48%	☆☆☆ 60%
<b>*SHGC</b>	0.65	0.53	0.58	0.55	0.43
<b>U<sub>w</sub>-VALUE</b>	<b>6.5</b>	<b>4.8</b>	<b>3.9</b>	<b>2.6</b>	<b>1.9</b>

ACOUSTICS STC RATING FOR GLAZED WINDOWS	3 mm Float Glass - 10.5mm VLAM Hush Acoustic Glass
	<b>Acoustic Range from RW 30 - RW 36</b>

PERFORMANCE (Standard Range)	Non Cyclonic	Cyclonic
	<b>N1 - N5 GEN</b>	<b>C1 - C2 GEN</b>

### FLY, SECURITY AND BARRIER SCREEN OPTIONS

AWNING WINDOW	610 - 2650 (Wide)
600 - 1457 (High)	F / S / B
AWNING/FIXED WINDOW WITH TRANSOM	610 - 2650 (Wide)
1800 - 2057 (High)	F / S / B

F = Fly Screen, S = Security Screen, B = Barrier Screen

### BUSH FIRE RATED

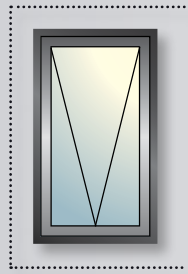
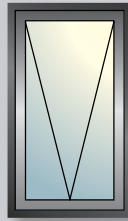
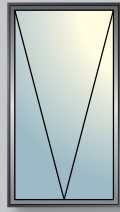
ATTACK LEVEL	BAL LOW	-	BAL - 40
<b>WINDOW FRAME</b>	Aluminium		Aluminium
<b>WINDOW GLAZING</b>	No special requirements.		6mm toughened glass.
<b>HARDWARE</b>	As Above		metal.

Note: BAL - 40 must include Full External Screening to comply.

### HARDWARE OPTIONS

KEYED CHAINWINDER	RESTRICTED CHAINWINDER	FALL PREVENTION DEVICE (UPPER LEVELS)
Standard	Available	As Required

Note: Hardware options may vary from state to state, please consult your local sales representative or more information.



**UrbanLine™** (STD. Frame)  
Awning window

**DesignerLine®** (Deluxe Frame)  
Awning window

**ThermaLine®** (Thermal Barrier  
Frame) Awning window

**Please note:** Refer to the Dowell  
ThermaLine® brochure for stud  
opening and frame sizes.

**DesignerLine® note:** Other sizes and  
configurations in DesignerLine® are available  
on request, please refer to your local sales  
office for more information.

Standard sizes and colours are available on short lead times.  
Some sizes and special colours are subject to longer lead times.  
Please refer to your local sales office for confirmation.

DesignerLine-E is available in all UrbanLine™ size configuration.

KEY: • = Not for N4 CNR & N5  
+ = Not for N3 CNR, N4 & N5  
∞ = Not available in Double Glazed.

**Safety Glass** recommended in low-lite 2400 high.  
Note: For higher wind rating, wind load graphs must be consulted.

			803				883				
AWNING WINDOW (N1 - N5 GEN, C1-C2 GEN)											
Stud Opening			660	960	1260	1560	1860	2160	2460	2760	
	Bricks	Window	2.5	3.5	5	6	7.5	8.5	10	11	
			600	900	1200	1500	1800	2100	2400	2700	
660	7	600	UAW0606	UAW0609	UAW0612	UAW0615-2P	UAW0618-2P	UAW0621-2P	UAW0624-3P	UAW0627-3P	
			<b>DAW0606</b>	<b>DAW0609</b>	<b>DAW0612</b>	<b>DAW0615-2P</b>	<b>DAW0618-2P</b>	<b>DAW0621-2P</b>	<b>DAW0624-3P</b>	<b>DAW0627-3P</b>	
960	10	900	UAW0906	UAW0909	UAW0912	UAW0915-2P	UAW0918-2P	UAW0921-2P	UAW0924-3P	UAW0927-3P	
			<b>DAW0906</b>	<b>DAW0909</b>	<b>DAW0912</b>	<b>DAW0915-2P</b>	<b>DAW0918-2P</b>	<b>DAW0921-2P</b>	<b>DAW0924-3P</b>	<b>DAW0927-3P</b>	
1060	12	1000	UAW1006	UAW1009	UAW1012	UAW1015-2P	UAW1018-2P	UAW1021-2P	UAW1024-3P	UAW1027-3P	
			<b>DAW1006</b>	<b>DAW1009</b>	<b>DAW1012</b>	<b>DAW1015-2P</b>	<b>DAW1018-2P</b>	<b>DAW1021-2P</b>	<b>DAW1024-3P</b>	<b>DAW1027-3P</b>	
1260	14	1200	UAW1206	UAW1209	UAW1212 <sup>*</sup>	UAW1215-2P	UAW1218-2P	UAW1221-2P	UAW1224-3P	UAW1227-3P	
			<b>DAW1206</b>	<b>DAW1209</b>	<b>DAW1212<sup>*</sup></b>	<b>DAW1215-2P</b>	<b>DAW1218-2P</b>	<b>DAW1221-2P</b>	<b>DAW1224-3P</b>	<b>DAW1227-3P</b>	
1460	16	1400	UAW1406	UAW1409	UAW1412 <sup>*</sup>	UAW1415-2P	UAW1418-2P <sup>*</sup>	UAW1421-2P <sup>*</sup>	UAW1424-3P	UAW1427-3P	
			<b>DAW1406</b>	<b>DAW1409</b>	<b>DAW1412<sup>*</sup></b>	<b>DAW1415-2P</b>	<b>DAW1418-2P<sup>*</sup></b>	<b>DAW1421-2P<sup>*</sup></b>	<b>DAW1424-3P</b>	<b>DAW1427-3P</b>	
1560	17	1500	UAW1506	UAW1509	UAW1512 <sup>*</sup>	UAW1515-2P	UAW1518-2P <sup>*</sup>	UAW1521-2P <sup>*</sup>	UAW1524-3P	UAW1527-3P	
			<b>DAW1506</b>	<b>DAW1509</b>	<b>DAW1512<sup>*</sup></b>	<b>DAW1515-2P</b>	<b>DAW1518-2P<sup>*</sup></b>	<b>DAW1521-2P<sup>*</sup></b>	<b>DAW1524-3P<sup>*</sup></b>	<b>DAW1527-3P</b>	
1860	21	1800	UAW1806 <sup>*</sup>	UAW1809 <sup>*</sup>	UAW1812 <sup>+∞</sup>	UAW1815-2P <sup>*</sup>	UAW1818-2P <sup>+∞</sup>	UAW1821-2P <sup>+∞</sup>	UAW1824-3P <sup>*</sup>	UAW1827-3P <sup>+∞</sup>	
			<b>DAW1806<sup>*</sup></b>	<b>DAW1809<sup>*</sup></b>	<b>DAW1812<sup>+∞</sup></b>	<b>DAW1815-2P<sup>*</sup></b>	<b>DAW1818-2P<sup>+∞</sup></b>	<b>DAW1821-2P<sup>+∞</sup></b>	<b>DAW1824-3P<sup>*</sup></b>	<b>DAW1827-3P<sup>+∞</sup></b>	
2160	25	2100	UAW2106 <sup>+∞</sup>	UAW2109 <sup>+∞</sup>	UAW2112 <sup>+∞</sup>	UAW2115-2P <sup>+∞</sup>	UAW2118-2P <sup>+∞</sup>	UAW2121-2P <sup>+∞</sup>	UAW2124-3P <sup>+∞</sup>	UAW2127-3P <sup>+∞</sup>	
			<b>DAW2106<sup>+∞</sup></b>	<b>DAW2109<sup>+∞</sup></b>	<b>DAW2112<sup>+∞</sup></b>	<b>DAW2115-2P<sup>+∞</sup></b>	<b>DAW2118-2P<sup>+∞</sup></b>	<b>DAW2121-2P<sup>+∞</sup></b>	<b>DAW2124-3P<sup>+∞</sup></b>	<b>DAW2127-3P<sup>+∞</sup></b>	
AWNING / FIXED WINDOW (N1 - N5 GEN, C1 - C2 GEN)											
1860	21	1800	UAW1806-T	UAW1809-T	UAW1812-T <sup>*</sup>	UAW1815-2PT	UAW1818-2PT	UAW1821-2PT <sup>*</sup>	UAW1824-3PT	UAW1827-3PT	a=1200 / b=600
			<b>DAW1806-T</b>	<b>DAW1809-T</b>	<b>DAW1812-T<sup>*</sup></b>	<b>DAW1815-2PT</b>	<b>DAW1818-2PT</b>	<b>DAW1821-2PT<sup>*</sup></b>	<b>DAW1824-3PT</b>	<b>DAW1827-3PT</b>	
2160	25	2100	UAW2106-T	UAW2109-T	UAW2112-T <sup>*</sup>	UAW2115-2PT	UAW2118-2PT <sup>*</sup>	UAW2121-2PT <sup>*</sup>	UAW2124-3PT <sup>*</sup>	UAW2127-3PT <sup>*</sup>	a=1372 / b=685
			<b>DAW2106-T</b>	<b>DAW2109-T</b>	<b>DAW2112-T<sup>*</sup></b>	<b>DAW2115-2PT</b>	<b>DAW2118-2PT<sup>*</sup></b>	<b>DAW2121-2PT<sup>*</sup></b>	<b>DAW2124-3PT<sup>*</sup></b>	<b>DAW2127-3PT<sup>*</sup></b>	
2460	28	2400	UAW2406-T	UAW2409-T	UAW2412-T <sup>*</sup>	UAW2415-2PT <sup>*</sup>	UAW2418-2PT <sup>+</sup>	UAW2421-2PT <sup>+</sup>	UAW2424-3PT <sup>*</sup>	UAW2427-3PT <sup>+</sup>	a=1500 / b=900
			<b>DAW2406-T</b>	<b>DAW2409-T</b>	<b>DAW2412-T<sup>*</sup></b>	<b>DAW2415-2PT<sup>*</sup></b>	<b>DAW2418-2PT<sup>+</sup></b>	<b>DAW2421-2PT<sup>+</sup></b>	<b>DAW2424-3PT<sup>*</sup></b>	<b>DAW2427-3PT<sup>+</sup></b>	

**OPTION**



Fixed / Awning



All Awning



Multi-transom  
Awning



Colonial Grid  
Awning



Flyscreens

Dowell  
**DOUBLE  
HUNG**  
WINDOW





## Dowell **DOUBLE HUNG**

The Double Hung Window has played an integral role in Australian architecture for generations, combining classic appearance with simple, reliable functionality.

The Dowell Double Hung Window captures the spirit of the old, while introducing the convenience of the new. Durable, low maintenance aluminium construction combined with advances in window technology.



# Dowell DOUBLE HUNG WINDOWS

## FEATURES

- Durable low-maintenance, easy-clean aluminium profiles.
- High quality sash suspension systems for smooth operation.
- Frame corner gaskets for superior sealing.
- Full length under-sill flap for neat finish and allowance for building settlement.
- Easy coupling to the Dowell range of windows and doors.
- Fully integrated flyscreen support (screens offered as an option).
- Low E high performance thermal glass option available.

## HARDWARE

- Options available, please consult your local sales representative for more information.

## DOUBLE HUNG WINDOW ENERGY PERFORMANCE

PRODUCT	Standard Single Glazed	Standard Single Glazed	Standard Single Glazed
WINDOW TYPE	Double Hung	Double Hung	Double Hung
GLASS OPTION	3mm Clear	6mm SP10 Clear	6mm SP50 Grey
FRAME TYPE	Standard Aluminium	Standard Aluminium	Standard Aluminium
AIR INFILTRATION	3.40	3.40	3.40
HEATING (STARS)	☆☆☆ 18%	★★★★ 36%	☆☆☆ 20%
COOLING (STARS)	☆ 12%	★★ 34%	☆☆☆☆ 55%
*SHGC	0.74	0.60	0.32
U <sub>w</sub> -VALUE	6.2	4.4	4.4

*Please Note: Only available in single glazing, not available in double glazing.*

ACOUSTICS STC RATING FOR GLAZED WINDOWS	6 mm Float Glass - 6.5mm VLAM Hush Acoustic Glass
	Acoustic Range from RW 25 - RW 32

PERFORMANCE	Non Cyclonic	Cyclonic
	N1 - N4 GEN	C1 - C2 GEN

## FLY, SECURITY AND BARRIER SCREEN OPTIONS

DOUBLE HUNG WINDOW	610 - 2650 (Wide)
857 - 1457	F / S / B
DOUBLE HUNG / FIXED WINDOW WITH TRANSOM	610 - 2650 (Wide)
1800 - 2057	F / S / B

*F = Fly Screen, S = Security Screen, B = Barrier Screen*

## BUSH FIRE RATED

ATTACK LEVEL	BAL LOW	-	BAL - 40
WINDOW FRAME	Aluminium		Aluminium
WINDOW GLAZING	No special requirements.		6mm toughened glass.
HARDWARE	As Above		metal.

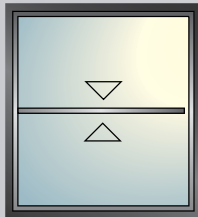
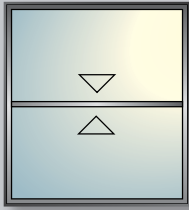
*Note: BAL - 40 must include Full External Screening to comply.*

## HARDWARE OPTIONS

INTERLOCK RAIL LOCK	FALL PREVENTION DEVICE (UPPER LEVELS)
Standard	As Required

*Note: Hardware options may vary from state to state, please consult your local sales representative or more information.*





**UrbanLine™** (STD. Frame)  
Double Hung window

**DesignerLine™** (Deluxe Frame)  
Double Hung window

**DesignerLine® note:** Other sizes and configurations in DesignerLine® are available on request, please refer to your local sales office for more information.

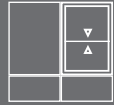
Standard sizes and colours are available on short lead times. Some sizes and special colours are subject to longer lead times. Please refer to your local sales office for confirmation.

DesignerLine®-E is available in all UrbanLine™ size configuration.

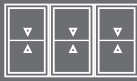
Note: For higher wind rating, wind load graphs must be consulted.

DOUBLE HUNG WINDOW (N1-N4 GEN, C1-C2 GEN)										
Stud Opening			660	960	1260	1560	1860	2160	2460	2760
	Bricks		2.5	3.5	4.5	6	7.5	8.5	10	11
		Window	600	900	1200	1500	1800	2100	2400	2700
960	10	900	UHW0906	UHW0909	UHW0911	UHW0915-2P	UHW0918-2P	UHW0921-2P	UHW0924-3P	UHW0927-3P
			<b>DHW0906</b>	<b>DHW0909</b>	<b>DHW0911</b>	<b>DHW0915-2P</b>	<b>DHW0918-2P</b>	<b>DHW0921-2P</b>	<b>DHW0924-3P</b>	<b>DHW0927-3P</b>
1060	12	1000	UHW1006	UHW1009	UHW1011	UHW1015-2P	UHW1018-2P	UHW1021-2P	UHW1024-3P	UHW1027-3P
			<b>DHW1006</b>	<b>DHW1009</b>	<b>DHW1011</b>	<b>DHW1015-2P</b>	<b>DHW1018-2P</b>	<b>DHW1021-2P</b>	<b>DHW1024-3P</b>	<b>DHW1027-3P</b>
1260	14	1200	UHW1206	UHW1209	UHW1211	UHW1215-2P	UHW1218-2P	UHW1221-2P	UHW1224-3P	UHW1227-3P
			<b>DHW1206</b>	<b>DHW1209</b>	<b>DHW1211</b>	<b>DHW1215-2P</b>	<b>DHW1218-2P</b>	<b>DHW1221-2P</b>	<b>DHW1224-3P</b>	<b>DHW1227-3P</b>
1460	16	1400	UHW1406	UHW1409	UHW1411	UHW1415-2P	UHW1418-2P	UHW1421-2P	UHW1424-3P	UHW1427-3P
			<b>DHW1406</b>	<b>DHW1409</b>	<b>DHW1411</b>	<b>DHW1415-2P</b>	<b>DHW1418-2P</b>	<b>DHW1421-2P</b>	<b>DHW1424-3P</b>	<b>DHW1427-3P</b>
1560	17	1500	UHW1506	UHW1509	UHW1511	UHW1515-2P	UHW1518-2P	UHW1521-2P	UHW1524-3P	UHW1527-3P
			<b>DHW1506</b>	<b>DHW1509</b>	<b>DHW1511</b>	<b>DHW1515-2P</b>	<b>DHW1518-2P</b>	<b>DHW1521-2P</b>	<b>DHW1524-3P</b>	<b>DHW1527-3P</b>
1860	21	1800	UHW1806	UHW1809	UHW1811	UHW1815-2P	UHW1818-2P	UHW1821-2P	UHW1824-3P	UHW1827-3P
			<b>DHW1806</b>	<b>DHW1809</b>	<b>DHW1811</b>	<b>DHW1815-2P</b>	<b>DHW1818-2P</b>	<b>DHW1821-2P</b>	<b>DHW1824-3P</b>	<b>DHW1827-3P</b>
D/HUNG / FIXED WINDOW (N1-N4 GEN, C1-C2 GEN)										
2160	25	2100	UHW2106-T	UHW2109-T		UHW2115-2PT	UHW2118-2PT		UHW2124-3PT	UHW2127-3PT
			<b>DHW2106-T</b>	<b>DHW2109-T</b>		<b>DHW2115-2PT</b>	<b>DHW2118-2PT</b>		<b>DHW2124-3PT</b>	<b>DHW2127-3PT</b>


**OPTION**




Fixed / Double Hung with Transom Option



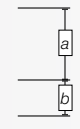
All Double Hung



Colonial Grid Double Hung



Flyscreens



a1372 / b685

Dowell  
**CASEMENT**  
WINDOW





## Dowell **CASEMENT WINDOWS**

Manufactured to exacting standards of appearance and performance, the Dowell Casement Window is a classic design that beautifully complements both traditional and modern décor. All new Dowell Casement Windows are designed to maximise the opening window area and increase airflow through your home.



# Dowell CASEMENT WINDOWS

## FEATURES

- Durable low maintenance, easy-clean aluminium profiles.
- Integrated tubular mullions and transoms with concealed fixing for superior strength.
- Solid extruded aluminium sash corner stakes.
- Low-E high performance thermal glass option available.
- Sealed casement stays for improved durability and smooth operation.
- Full perimeter sash seals for positive sealing.
- Fully open sash position allows external glass cleaning from inside.
- Patented moulded end gaskets at all frame joints.
- Full length under-sill flap for neat finish and allowance for building settlement (optional).

## HARDWARE

- Premium quality Casement Operator fitted as standard.

## CASEMENT WINDOW ENERGY PERFORMANCE

PRODUCT	Standard Single Glazed	Standard Single Glazed	Standard Single Glazed
WINDOW TYPE	Casement	Casement	Casement
GLASS OPTION	3mm Clear	6mm SP10 Clear	6mm SP50 Grey
FRAME TYPE	Standard Aluminium	Standard Aluminium	Standard Aluminium
AIR INFILTRATION	0.07	0.07	0.07
HEATING (STARS)	☆☆☆☆ 33%	★★★★★ 51%	★★★★★ 37%
COOLING (STARS)	★ 20%	☆☆☆ 39%	☆☆☆☆ 55%
*SHGC	0.65	0.53	0.30
U <sub>w</sub> -VALUE	<b>6.5</b>	<b>4.8</b>	<b>4.8</b>

*Please Note: Only available in single glazing, not available in double glazing.*

ACOUSTICS STC RATING FOR GLAZED WINDOWS	3 mm Float Glass - 6.5mm VLAM Hush Acoustic Glass
	<b>Acoustic Range from RW 30- RW 34</b>

PERFORMANCE	Non Cyclonic	Cyclonic
	<b>N1 - N5 GEN</b>	<b>C1 - C2 GEN</b>

## FLY, SECURITY AND BARRIER SCREEN OPTIONS

CASEMENT WINDOW	610 - 2650 (Wide)
600 - 1457 (High)	F / S / B
CASEMENT / FIXED WINDOW WITH TRANSOM	610 - 2650 (Wide)
1800 - 2057 (High)	F / S / B

*F = Fly Screen, S = Security Screen, B = Barrier Screen*

## BUSH FIRE RATED

ATTACK LEVEL	BAL LOW	-	BAL - 29
WINDOW FRAME	Aluminium		Aluminium
WINDOW GLAZING	No special requirements.		6mm toughened glass.
HARDWARE	As Above		metal.

## HARDWARE OPTIONS

PREMIUM CASEMENT OPERATOR	FALL PREVENTION DEVICE (UPPER LEVELS)
Standard	As Required

*Note: Hardware options may vary from state to state, please consult your local sales representative or more information.*



**UrbanLine™** (STD. Frame)  
Casement window

Standard sizes and colours are available on short lead times. Some sizes and special colours are subject to longer lead times. Please refer to your local sales office for confirmation.

KEY: • = Not for N4 CNR & N5  
+ = Not for N3 CNR, N4 & N5

Note: For higher wind rating, wind load graphs must be consulted.

			605		683		605		725		OPTION	
CASEMENT WINDOW (N1-N5 GEN, C1-C2 GEN)												
Stud Opening			660	960	1260	1560	1860	2160	2460	2760		
	Bricks		2.5	3.5	5	6	7.5	8.5	10	11		
	Window		600	900	1200	1500	1800	2100	2400	2700		
960	10	900	UCW0906	UCW0909-2P	UCW0912-2P	UCW0915-2P	UCW0918-3P	UCW0921-3P	UCW0924-3P	UCW0927-3P		
1060	12	1000	UCW1006	UCW1009-2P	UCW1012-2P	UCW1015-2P	UCW1018-3P	UCW1021-3P	UCW1024-3P	UCW1027-3P		
1260	14	1200	UCW1206	UCW1209-2P	UCW1212-2P	UCW1215-2P	UCW1218-3P	UCW1221-3P	UCW1224-3P	UCW1227-3P		
1460	16	1400	UCW1406	UCW1409-2P	UCW1412-2P	UCW1415-2P	UCW1418-3P	UCW1421-3P	UCW1424-3P	UCW1427-3P		
1560	17	1500	UCW1506	UCW1509-2P	UCW1512-2P•	UCW1515-2P•	UCW1518-3P•	UCW1521-3P•	UCW1524-3P•	UCW1527-3P•		
1860	21	1800	UCW1806+	UCW1809-2P+	UCW1812-2P+	UCW1815-2P+	UCW1818-3P+	UCW1821-3P+	UCW1824-3P+	-		
CASEMENT / FIXED WINDOW (N1-N5 GEN, C1-C2 GEN)												
1860	21	1800	UCW1806-T	UCW1809-2PT	UCW1812-2PT	UCW1815-2PT	UCW1818-3PT	UCW1821-3PT	UCW1824-3PT+	UCW1827-3PT+	a=1200 / b=600	
2160	24	2100	UCW2106-T	UCW2109-2PT	UCW2112-2PT	UCW2115-2PT	UCW2118-3PT	UCW2121-3PT	UCW2124-3PT+	UCW2127-3PT+	a=1372 / b=685	

Dowell  
**FIXED**  
WINDOW





## Dowell **FIXED WINDOWS**

A great option for maximising your view and ambient light, while keeping a comfortable internal environment through the correct choice in glass selection. Dowell has significantly increased its ability to meet customers' needs with its DesignerLine™ fixed window range. Increased choices in options such as fixed panel sizes, single or double glazing thicknesses, water penetration performance and larger span choices have been greatly increased over Dowell's UrbanLine range.



## Dowell FIXED WINDOWS

### FEATURES

- Durable low maintenance, easy-clean aluminium profiles.
- Excellent sealing performance of water, air and noise over standard sliding, awning and double hung windows.
- Full length under-sill flap for neat finish and allowance for building settlement.
- Easy coupling to the Dowell range of windows and doors.
- Low-E high performance thermal glass option available.
- Significant improvement of thermal performance, with our DesignerLine™ range.
- Can be coupled to our sliding doors as hi-lite or side-lite

### FIXED WINDOW ENERGY PERFORMANCE

					
PRODUCT	Standard Single Glazed	Standard Single Glazed	Standard Double Glazed	ThermaLine™ Double Glazed	ThermaLine™ Double Glazed
WINDOW TYPE	Fixed	Fixed	Fixed	Fixed	Fixed
GLASS OPTION	4mm Clr.	6mm SP10 Clr.	4mm Clr. /10mm Arg. gas /4mm Clr.	LB Clr.SO. 4mm /12mm Arg.gas /4mm Clr.	LB Gy.SO. 4mm /12mm Arg. gas /4mm Clr.
FRAME TYPE	Standard Aluminium	Standard Aluminium	Standard Aluminium	ThermaLine™ Aluminium (with thermal-break)	ThermaLine™ Aluminium (with thermal-break)
AIR INFILTRATION	0.05	0.05	0.05	0.04	0.04
HEATING (STARS)	☆☆☆ 17%	★★★★ 37%	☆☆☆☆ 46%	★★★★★ 64%	☆☆☆☆☆ 56%
COOLING (STARS)	☆ 11%	★★ 32%	★★ 33%	★★★★ 56%	★★★★ 66%
*SHGC	0.75	0.63	0.66	0.51	0.35
U <sub>w</sub> -VALUE	<b>6.2</b>	<b>4.3</b>	<b>3.6</b>	<b>1.7</b>	<b>1.7</b>

ACOUSTICS STC RATING FOR GLAZED DOORS	4 mm Float Glass - 10.5 mm VLAM Hush Acoustic Glass
	<b>Acoustic Range from RW 25 - RW 36 Estimate Only (no test verification)</b>

	Non Cyclonic	Cyclonic
PERFORMANCE (Standard Range)	<b>N1 - N4 GEN</b>	<b>C1-C2 GEN</b>

### BUSH FIRE RATED

ATTACK LEVEL	BAL LOW	-	BAL - 40
DOOR FRAME	Aluminium		Aluminium
DOOR GLAZING	No special requirements.		6mm toughened glass.
HARDWARE	As Above		metal.

Note: BAL - 40 must include Full External Screening to comply.





**UrbanLine™** (STD. Frame)  
Fixed window

**DesignerLine® / E**  
(Deluxe Frame) Fixed window

**DesignerLine® note:** Other sizes and configurations in DesignerLine® are available on request, please refer to your local sales office for more information.

Standard sizes and colours are available on short lead times. Some sizes and special colours are subject to longer lead times. Please refer to your local sales office for confirmation.

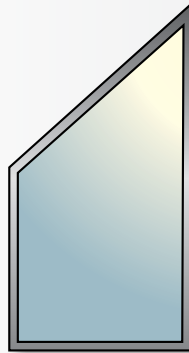
DesignerLine-E is available in all UrbanLine™ size configuration.

Key: • = Not for C2 GEN.

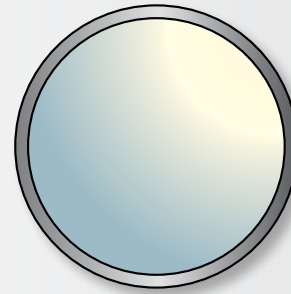
FIXED WINDOW (N1-N4 GEN, C1-C2 GEN)														
Stud Opening			660	960	1260	1560	1860	2160	2460	1560	1860	2160	2460	2760
	Bricks		2.5	3.5	5	6	7.5	8.5	10	6	7.5	8.5	10	11
		Window	600	900	1200	1500	1800	2100	2400	1500	1800	2100	2400	2700
660	7	600	UFW0606	UFW0609	UFW0612	UFW0615	UFW0618	UFW0621	UFW0624	UFW0615-2P	UFW0618-2P	UFW0621-2P	UFW0624-3P	UFW0627-3P
			<b>DFW0606</b>	<b>DFW0609</b>	<b>DFW0612</b>	<b>DFW0615</b>	<b>DFW0618</b>	<b>DFW0621</b>	<b>DFW0624</b>	<b>DFW0615-2P</b>	<b>DFW0618-2P</b>	<b>DFW0621-2P</b>	<b>DFW0624-3P</b>	<b>DFW0627-3P</b>
960	10	900	UFW0906	UFW0909	UFW0912	UFW0915	UFW0918	UFW0921	UFW0924	UFW0915-2P	UFW0918-2P	UFW0921-2P	UFW0924-3P	UFW0927-3P
			<b>DFW0906</b>	<b>DFW0909</b>	<b>DFW0912</b>	<b>DFW0915</b>	<b>DFW0918</b>	<b>DFW0921</b>	<b>DFW0924</b>	<b>DFW0915-2P</b>	<b>DFW0918-2P</b>	<b>DFW0921-2P</b>	<b>DFW0924-3P</b>	<b>DFW0927-3P</b>
1060	12	1000	UFW1006	UFW1009	UFW1012	UFW1015	UFW1018	UFW1021	<b>DFW1024</b>	UFW1015-2P	UFW1018-2P	UFW1021-2P	UFW1024-3P	UFW1027-3P
			<b>DFW1006</b>	<b>DFW1009</b>	<b>DFW1012</b>	<b>DFW1015</b>	<b>DFW1018</b>	<b>DFW1021</b>		<b>DFW1015-2P</b>	<b>DFW1018-2P</b>	<b>DFW1021-2P</b>	<b>DFW1024-3P</b>	<b>DFW1027-3P</b>
1260	14	1200	UFW1206	UFW1209	UFW1212	UFW1215	UFW1218	<b>DFW1221</b>	<b>DFW1224</b>	UFW1215-2P	UFW1218-2P	UFW1221-2P	UFW1224-3P	UFW1227-3P
			<b>DFW1206</b>	<b>DFW1209</b>	<b>DFW1212</b>	<b>DFW1215</b>	<b>DFW1218</b>			<b>DFW1215-2P</b>	<b>DFW1218-2P</b>	<b>DFW1221-2P</b>	<b>DFW1224-3P</b>	<b>DFW1227-3P</b>
1460	16	1400	UFW1406	UFW1409	UFW1412	UFW1415	<b>DFW1418</b>	<b>DFW1421</b>	<b>DFW1424</b>	UFW1415-2P	UFW1418-2P	UFW1421-2P	UFW1424-3P	UFW1427-3P
			<b>DFW1406</b>	<b>DFW1409</b>	<b>DFW1412</b>	<b>DFW1415</b>				<b>DFW1415-2P</b>	<b>DFW1418-2P</b>	<b>DFW1421-2P</b>	<b>DFW1424-3P</b>	<b>DFW1427-3P</b>
1560	17	1500	UFW1506	UFW1509	UFW1512	UFW1515	<b>DFW1518</b>	<b>DFW1521</b>	<b>DFW1524</b>	UFW1515-2P	UFW1518-2P	UFW1521-2P	UFW1524-3P	UFW1527-3P
			<b>DFW1506</b>	<b>DFW1509</b>	<b>DFW1512</b>	<b>DFW1515</b>				<b>DFW1515-2P</b>	<b>DFW1518-2P</b>	<b>DFW1521-2P</b>	<b>DFW1524-3P</b>	<b>DFW1527-3P</b>
1860	21	1800	UFW1806	UFW1809	UFW1812	<b>DFW1815</b>	<b>DFW1818</b>	<b>DFW1821</b>	<b>DFW1824</b>	UFW1815-2P	UFW1818-2P	UFW1821-2P	<b>DFW1824-3P</b>	<b>DFW1827-3P</b>
			<b>DFW1806</b>	<b>DFW1809</b>	<b>DFW1812</b>					<b>DFW1815-2P</b>	<b>DFW1818-2P</b>	<b>DFW1821-2P</b>		
2160	25	2100	UFW2106	UFW2109	<b>DFW2112</b>	<b>DFW2115</b>	<b>DFW2118</b>	<b>DFW2121</b>	<b>DFW2124</b>	UFW2115-2P	UFW2118-2P	<b>DFW2121-2P</b>	<b>DFW2124-3P</b>	<b>DFW2127-3P</b>
			<b>DFW2106</b>	<b>DFW2109</b>						<b>DFW2115-2P</b>	<b>DFW2118-2P</b>			
2460	28	2400	<b>DFW2406</b>	<b>DFW2409</b>	<b>DFW2412</b>	<b>DFW2415</b>	<b>DFW2418</b>	<b>DFW2421</b>	<b>DFW2424</b>	<b>DFW2415-2P</b>	<b>DFW2418-2P</b>	<b>DFW2421-2P</b>	<b>DFW2424-3P</b>	<b>DFW2427-3P</b>
FIXED / FIXED WINDOW (N1-N4 GEN, C1-C2 GEN)														
1860	21	1800	UFW1806-T	UFW1809-T	UFW1812-T	UFW1815-T	UFW1818-T	<b>DFW1821-T</b>	<b>DFW1824-T</b>	UFW1815-2PT	UFW1818-2PT	UFW1821-2PT	<b>DFW1824-3PT</b>	a=1200 / b=600
			<b>DFW1806-T</b>	<b>DFW1809-T</b>	<b>DFW1812-T</b>	<b>DSW1815-T</b>	<b>DSW1818-T</b>			<b>DFW1815-2PT</b>	<b>DFW1818-2PT</b>	<b>DFW1821-2PT</b>		
2160	25	2100	UFW2106-T	UFW2109-T	UFW2112-T	UFW2115-T	UFW2118-T	<b>DFW2121-T</b>	<b>DFW2124-T</b>	UFW2115-2PT	UFW2118-2PT	UFW2121-2PT	<b>DFW2124-3PT</b>	a=1372 / b=685
			<b>DFW2106-T</b>	<b>DFW2109-T</b>	<b>DFW2112-T</b>	<b>DSW2115-T</b>	<b>DSW2118-T</b>			<b>DFW2115-2PT</b>	<b>DFW2118-2PT</b>	<b>DFW2121-2PT</b>		
2460	28	2400	<b>DFW2406-T</b>	<b>DFW2409-T</b>	<b>DFW2412-T</b>	<b>DSW2415-T</b>	<b>DSW2418-T</b>	<b>DFW2421-T</b>	<b>DFW2424-T</b>	<b>DFW2415-2PT</b>	<b>DFW2418-2PT</b>	<b>DFW2421-2PT</b>	<b>DFW2424-3PT</b>	

Dowell  
**CUSTOM**  
WINDOW

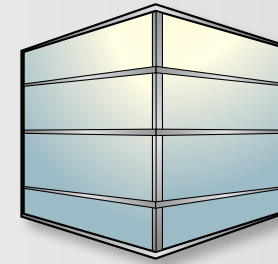




Rake window



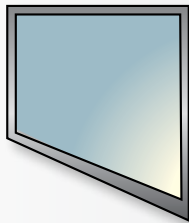
Circle window



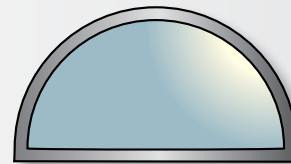
Corner window  
or Bay window



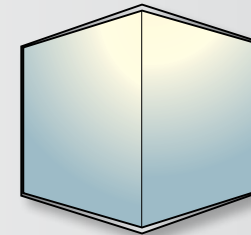
Colonial bar  
grid window



Falling Rake window



Arch window



Silicon butt joint  
Corner window

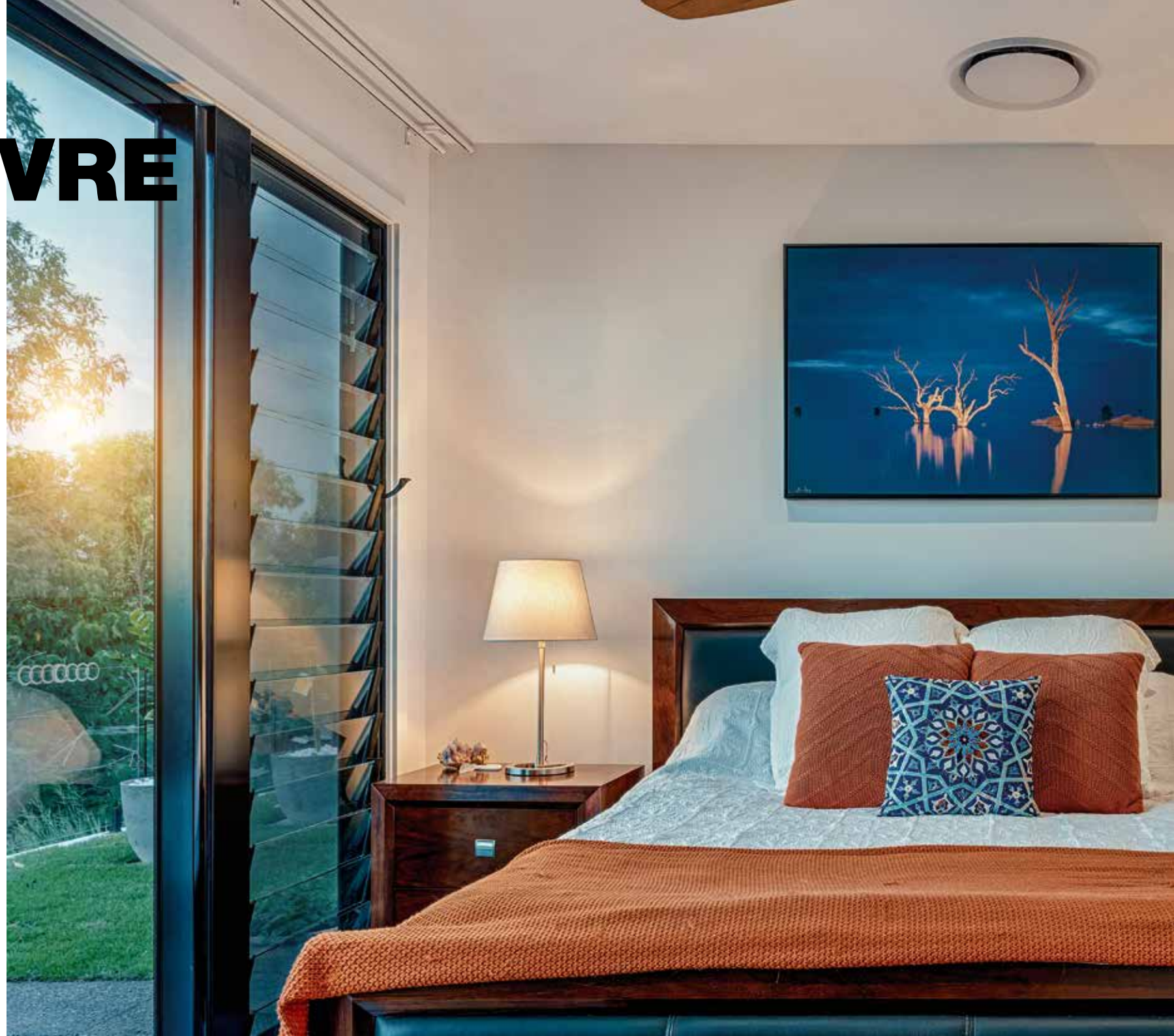
## Dowell CUSTOM WINDOWS

We manufacture custom windows to meet the needs of today's modern architectural design. Custom windows are versatile and offer many options of introduction to light within a room. Bay and Corner windows add a distinctive element to a traditional home, creating timeless elegance.

### FEATURES

- Versatile and aesthetically pleasing design.
- Durable low maintenance, easy-clean aluminium profiles.
- Custom size and colours are available.
- Low E glazing option for increased energy efficiency.\*
- Suitable for residential and multi storey applications.
- Bay and Corner windows are available in 135° and 90° configurations.
- Increase light into a room.
- A range of product couplers to suit most wind loading configurations.

Dowell  
**LOUVRE**  
WINDOW





## Dowell LOUVRE WINDOWS

The Dowell DesignerLine™ Louvre system introduces a new dimension in multi-framing application, allowing designers and fabricators to install adjustable glass louvres that will perform alongside conventional window and door systems. With a reveal fin frame system the Dowell Louvre can be installed into the building opening in a conventional manner to match other Dowell window installation details.

Custom styles and designs can be manufactured on request, please contact your nearest sales office for options available.



# Dowell LOUVRE WINDOWS



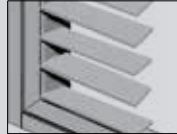
## FEATURES

- Available in 102 mm or 152 mm blade sizes (Standard blade size is 152 mm).
- Can be coupled to most Dowell products easily.
- Suitable for residential and multi storey applications.
- Reveal frame for installation into domestic buildings.
- Insect and security screens are an integral part of the design.
- Combination of glass, aluminium and or timber blades are available in 131mm (Breezway) surround frame only, can be mixed to achieve the required appearance or finish suitable for the application.
- Custom styles and designs can be manufactured.
- Low E high performance thermal glass option available.

## SECURITY OPTIONS

- Keyed locking is available as an option.
- Security bars are available in a 131 mm (Breezway) surround frame as an option.

## LOUVRE WINDOW ENERGY PERFORMANCE

			
<b>PRODUCT</b>	Single Glazed	Single Glazed	Single Glazed
<b>WINDOW TYPE</b>	Louvre	Louvre	Louvre
<b>GLASS OPTION</b>	6mm Clr.	6mm Grey.	6mm SP10 Clr.
<b>FRAME TYPE</b>	Standard Aluminium	Standard Aluminium	Standard Aluminium
<b>AIR INFILTRATION</b>	1.78	1.78	1.78
<b>HEATING (STARS)</b>	☆☆☆ 15%	☆☆ 7%	☆☆☆ 18%
<b>COOLING (STARS)</b>	☆ 22%	☆☆ 36%	☆☆☆☆ 54%
<b>*SHGC</b>	0.63	0.44	0.53
<b>U<sub>w</sub>-VALUE</b>	<b>6.1</b>	<b>6.1</b>	<b>4.5</b>

## BUSH FIRE RATED

ATTACK LEVEL	BAL LOW	BAL - 29
<b>WINDOW FRAME</b>	Aluminium	Aluminium
<b>WINDOW GLAZING</b>	No special requirements.	6mm toughened glass.
<b>HARDWARE</b>	As Above	metal.

Note: BAL-29 must have full external screening to comply..

## FLY, SECURITY AND BARRIER SCREEN OPTIONS

<b>LOUVRE WINDOW</b>	610 - 2650 (Wide)
600 - 3031 (High)	F / S / B

F = Fly Screen, S = Security Screen, B = Barrier Screen

*Options: For a complete list of options that are available, please see your local sales office and talk to one of our sales representatives.*

<b>PERFORMANCE</b>	Non Cyclonic	Cyclonic
	<b>N1 - N5 GEN</b>	<b>C1 - C2 CNR</b>

## HARDWARE OPTIONS

KEYED LOCK	FALL PREVENTION DEVICE (UPPER LEVELS)
Standard	As Required

Note: Hardware options may vary from state to state, please consult your local sales representative or more information.



**DesignerLine™** (Deluxe Frame)  
Louvre window



**DesignerLine™** (Deluxe Frame)  
Louvre / Fixed window

Some sizes and special colours are subject to longer lead times. Please refer to your local sales office for confirmation.

- Fall prevention option is available.
- 102mm frame option is available.
- Aluminium blade option is available.

**DesignerLine® note:** Other sizes and configurations in DesignerLine® are available on request, please refer to your local sales office for more information.

LOUVRE WINDOW (N1-N5 GEN, C1-C2 CNR)										
Stud Opening (DLL 152mm)			660	960	1260	1560	1860	2160	2460	2760
No. of Blades	Stud Opening	Window	600	900	1200	1500	1800	2100	2400	2700
2	420	360	DLW0406	DLW0409	DLW0412-2P	DLW0415-2P	DLW0418-2P	DLW0421-3P	DLW0424-3P	DLW0427-3P
3	560	500	DLW0506	DLW0509	DLW0512-2P	DLW0515-2P	DLW0518-2P	DLW0521-3P	DLW0524-3P	DLW0527-3P
4	700	640	DLW0606	DLW0609	DLW0612-2P	DLW0615-2P	DLW0618-2P	DLW0621-3P	DLW0624-3P	DLW0627-3P
5	840	780	DLW0806	DLW0809	DLW0812-2P	DLW0815-2P	DLW0818-2P	DLW0821-3P	DLW0824-3P	DLW0827-3P
6	980	920	DLW0906	DLW0909	DLW0912-2P	DLW0915-2P	DLW0918-2P	DLW0921-3P	DLW0924-3P	DLW0927-3P
7	1120	1060	DLW1006	DLW1109	DLW1112-2P	DLW1115-2P	DLW1118-2P	DLW1121-3P	DLW1124-3P	DLW1127-3P
8	1260	1200	DLW1206	DLW1209	DLW1212-2P	DLW1215-2P	DLW1218-2P	DLW1221-3P	DLW1224-3P	DLW1227-3P
9	1400	1340	DLW1306	DLW1309	DLW1312-2P	DLW1315-2P	DLW1318-2P	DLW1321-3P	DLW1324-3P	DLW1327-3P
10	1540	1480	DLW1506	DLW1509	DLW1512-2P	DLW1515-2P	DLW1518-2P	DLW1521-3P	DLW1524-3P	DLW1527-3P
11	1680	1620	DLW1606	DLW1609	DLW1612-2P	DLW1615-2P	DLW1618-2P	DLW1621-3P	DLW1624-3P	DLW1627-3P
12	1820	1760	DLW1806	DLW1809	DLW1812-2P	DLW1815-2P	DLW1818-2P	DLW1821-3P	DLW1824-3P	DLW1827-3P
13	1960	1900	DLW1906	DLW1909	DLW1912-2P	DLW1915-2P	DLW1918-2P	DLW1921-3P	DLW1924-3P	DLW1927-3P
14	2100	2040	DLW2006	DLW2009	DLW2012-2P	DLW2015-2P	DLW2018-2P	DLW2021-3P	DLW2024-3P	DLW2027-3P
15	2240	2180	DLW2206	DLW2209	DLW2212-2P	DLW2215-2P	DLW2218-2P	DLW2221-3P	DLW2224-3P	DLW2227-3P
16	2380	2320	DLW2306	DLW2309	DLW2312-2P	DLW2315-2P	DLW2318-2P	DLW2321-3P	DLW2324-3P	DLW2327-3P
17	2520	2460	DLW2406	DLW2409	DLW2412-2P	DLW2415-2P	DLW2418-2P	DLW2421-3P	DLW2424-3P	DLW2427-3P

OPTION



All Louvres



Fixed / Louvre



Screens

Flyscreens, Barrier and Security screens can be fitted to the outside of the frame.



Low Profile Handle

The unique shape and styling provides a slim line and functional fit.

Dowell **UrbanLine™** and  
**DesignerLine®** Aluminium

# DOOR RANGE

Product availability, size and configuration varies  
from state to state, please consult your local Dowell  
representative for more information.







*Pictured: Dowell UrbanLine™ four panel Sliding door*

Dowell  
**SLIDING**  
DOOR



*Pictured: Dowell UrbanLine™ four panel Sliding door*



*Pictured: Dowell UrbanLine™ Alfresco four panel Sliding door*

## Dowell SLIDING DOOR

Dowell sliding doors are very popular, and one of the most commonly installed doors in most residential homes. Dowell sliding doors use high quality, non corrosive ball bearing system for continuous smooth horizontal gliding motion, available in many different sizes and configurations. They are ideal for providing substantial light, protection from the elements as well as adding optional fly screen, safety grille and security door - opening up to the outdoors.



Pictured: Dowell UrbanLine™ four panel Sliding door

# Dowell SLIDING DOOR



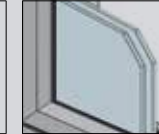
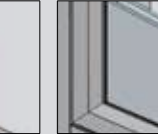
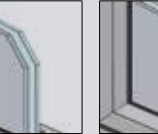
## FEATURES

- Versatile and aesthetically pleasing design.
- Suitable for residential and multi-storey applications.
- Insect and security screens are an integral part of the design.
- Durable low maintenance and easy-to clean.
- Reveal fixing fins on jambs and head for weather protection.
- Sill valve draining system for superior performance.
- Optional sump sill for demanding exposure conditions.
- Fully adjustable, non corrosive ball bearing roller system for smooth operation.
- Available in 2 or 3 panel sliding and 4 panel bi-parting sliding combinations.
- Reversal of sliding configuration on all 2 and 3 panel sliding combinations possible after installation.
- High quality corner gaskets at frame joints for superior sealing.
- Optional double glazed configurations is available in some states.\*
- Low E high performance thermal glass option available.
- Optional fly doors, safety grilles and security doors available.

## HARDWARE

- Options available, please consult your local sales representative for more information.

## SLIDING DOOR ENERGY PERFORMANCE

					
PRODUCT	Sliding Single Glazed	Sliding Single Glazed	Standard Double Glazed	ThermaLine™ Double Glazed	ThermaLine™ Double Glazed
DOOR TYPE	Sliding	Sliding	Sliding	Sliding	Sliding
GLASS OPTION	* 5mm Clr.	* 6mm SP10 Clr.	* LB Clr.SO. 4mm /10mm Arg. gas /4mm Clr.	* LB Clr.SO. 4mm /12mm Arg.gas /4mm Clr.	* LB Gy.SO. 5mm /12mm Arg. gas /5mm Clr.
FRAME TYPE	Standard Aluminium	Standard Aluminium	Standard Aluminium	ThermaLine™ Aluminium (with thermal-break)	ThermaLine™ Aluminium (with thermal-break)
AIR INFILTRATION	1.47	1.47	1.47	0.25	0.25
HEATING (STARS)	☆☆☆ 19%	★★★★ 38%	★★★★★ 48%	★★★★★★ 60%	★★★★★ 49%
COOLING (STARS)	★ 15%	★★ 36%	☆☆☆☆ 51%	☆☆☆☆ 55%	☆☆☆☆ 68%
*SHGC	0.71	0.59	0.49	0.49	0.30
U <sub>w</sub> -VALUE	<b>6.2</b>	<b>4.3</b>	<b>3.0</b>	<b>2.0</b>	<b>2.0</b>

\* TGN = Toughened glass used, please consult your Dowell representative for more information.

ACOUSTICS STC RATING FOR GLAZED WINDOWS	4 mm Toughened Glass - 10.5mm VLAM Hush Acoustic Glass
	<b>Acoustic Range from RW 24 - RW 32</b>

PERFORMANCE (Standard Range)	Non Cyclonic	Cyclonic
	<b>N1 - N5 GEN</b>	<b>C1 - C2 CNR</b>

## FLY, SECURITY AND BARRIER SCREEN OPTIONS

SLIDING DOOR	1450 - 4810 (Wide)
2100 - 2400 (High)	F / S / B

F = Fly Screen, S = Security Screen, B = Barrier Screen

## BUSH FIRE RATED

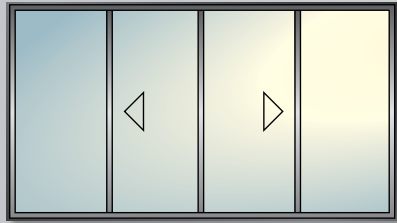
ATTACK LEVEL	<b>BAL LOW</b>	<b>BAL - 40</b>
WINDOW FRAME	Aluminium	Aluminium
WINDOW GLAZING	No special requirements.	6mm toughened glass.
HARDWARE	As Above	metal.

Note: BAL - 40 must include Full External Screening to comply.

## HARDWARE OPTIONS

KEYED LATCH	Standard
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Note: Hardware options may vary from state to state, please consult your local sales representative or more information.



**UrbanLine™** Two, three or four panel sliding door

Standard sizes and colours are available on short lead times.  
Some sizes and special colours are subject to longer lead times.  
Please refer to your local sales office for confirmation.

Also available in 2700 mm high configurations.

- KEY:
- = Not for C2 CNR.
  - + = Not for N5 GEN, C2 GEN.
  - # = Not for N4, N5, C1 & C2.

Note: For higher wind rating, wind load graphs must be consulted.

**SLIDING DOORS**  
(N1-N5 GEN)  
(C1-C2 CNR)

Stud Opening	Door	Diagram 1 (2 panels)				Diagram 2 (3 panels)			Diagram 3 (4 panels)			
		1560	1860	2160	2460	2769	3219	3669	3048	3648	4248	4848
		1500	1800	2100	2400	2709	3159	3609	2988	3588	4188	4788
2140	2100	USD2115-2P	USD2118-2P	USD2121-2P	USD2124-2P	USD2127-3P <sup>+</sup>	USD2128-3P <sup>+</sup>	USD2136-3P <sup>+</sup>	USD2129-4P	USD2136-4P	USD2141-4P	USD2148-4P
2460	2400	USD2415-2P	USD2418-2P	USD2421-2P	USD2424-2P <sup>•</sup>	USD2427-3P <sup>#</sup>	USD2428-3P <sup>#</sup>	USD2436-3P <sup>#</sup>	USD2429-4P	USD2436-4P	USD2441-4P <sup>•</sup>	USD2448-4P <sup>•</sup>

**OPTION**

Reverse Hand

Barrier Grille Screen

Colonial C1

Screen Door

Dowell  
**ALFRESCO  
SLIDING**  
DOOR





*Pictured: Dowell UrbanLine Alfresco Sliding door*



*Pictured: Dowell UrbanLine Alfresco Sliding door*

## Dowell ALFRESCO SLIDING DOOR

One of our fastest growing trends in residential markets is outdoor living. With homeowners adding outdoor kitchens, fireplaces, state of the art BBQ's, contemporary furniture and even large screen TV's to the rear outdoor area of their homes - this is the new "hang out".

Separated by Dowell Alfresco doors, the living room flows invitingly through to the outdoor. Dowell Alfresco, Sliding and Bi-Fold doors not only create the perfect alfresco environment, but also provide the award winning security, quality and protection that you have come to expect from one of Australia's leading window and door suppliers - Dowell.



*Pictured: Dowell UrbanLine™ Alfresco Sliding door*

# Dowell ALFRESCO SLIDING DOOR




## FEATURES

- Versatile and aesthetically pleasing design.
- Durable low maintenance, easy-clean aluminium profiles.
- Custom size and colour available.
- Suitable for residential and multi-storey applications.
- Optional insect and security screens are an integral part of the design.
- Highly functional alfresco stacking doors are resilient and durable in most types of weather.
- They require minimal maintenance.
- Dowell's modern technology is evident in the design of the alfresco stacking door.
- Product available in double glazed configurations in some states.\*
- Low E high performance thermal glass option available.

## HARDWARE

- Options available, please consult your local sales representative for more information.

## ALFRESCO SLIDING DOOR ENERGY PERFORMANCE

					
PRODUCT	Standard Single Glazed	Standard Single Glazed	Standard Double Glazed	Standard Double Glazed	Standard Double Glazed
DOOR TYPE	Alfresco Sliding	Alfresco Sliding	Alfresco Sliding	Alfresco Sliding	Alfresco Sliding
GLASS OPTION	* 5mm Clr.	* 6mm SP10 Clr	* 4mm Clr. /8 mm Arg. gas /4mm ET.	* LB Clr.SO. 4mm /10mm Arg. gas /4mm Clr.	* LB Gy.SO. 5mm /8mm Arg. gas /5mm Clr.
FRAME TYPE	Standard Aluminium	Standard Aluminium	Standard Aluminium	Standard Aluminium	Standard Aluminium
AIR INFILTRATION	1.47	1.47	1.47	1.47	1.47
HEATING (STARS)	☆☆☆ 19%	★★★★ 38%	★★★★★ 45%	★★★★★ 48%	★★★★ 37%
COOLING (STARS)	★ 15%	★★ 36%	☆☆ 42%	☆☆☆☆ 51%	☆☆☆☆ 62%
*SHGC	0.71	0.59	0.56	0.49	0.31
U <sub>w</sub> -VALUE	<b>6.2</b>	<b>4.3</b>	<b>3.6</b>	<b>3.0</b>	<b>3.1</b>

\* TGN = Toughened glass used, please consult your Dowell representative for more information.

ACOUSTICS STC RATING FOR GLAZED DOORS	6.38 mm Laminated Glass - 10.5mm VLAM High Acoustic Glass
	<b>Acoustic Range from RW 30 - RW 32</b>

PERFORMANCE	Non Cyclonic	Cyclonic
	<b>N1 - N5 GEN</b>	<b>C1 - C2 CNR</b>

## FLY, SECURITY AND BARRIER SCREEN OPTIONS

ALFRESCO SLIDING DOOR	2148 - 5364 (Wide)
2100 (High)	F / RF / S / B

F = Fly Screen, RF = Retractable Fly Screen, S = Security Screen, B = Barrier Screen

## BUSH FIRE RATED

ATTACK LEVEL	<b>BAL LOW</b>	-	<b>BAL - 40</b>
DOOR FRAME	Aluminium		Aluminium
DOOR GLAZING	No special requirements.		6mm toughened glass.
HARDWARE	As Above		metal.

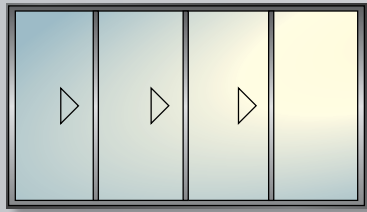
Note: BAL - 40 must include Full External Screening to comply.

## HARDWARE OPTIONS

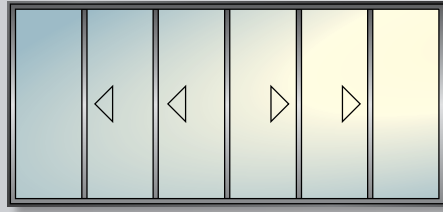
KEY LOCKS	STAINLESS STEEL LOCKS	COLOUR MATCH LOCKS / HANDLES
Standard	Option	Option

Note: Hardware options may vary from state to state, please consult your local sales representative or more information.





**UrbanLine™** Three or four panel directional Alfresco sliding door



**UrbanLine™** Three or six panel Alfresco sliding door

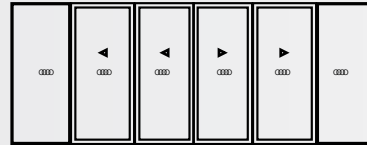
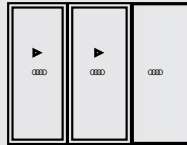
Standard sizes and colours are available on short lead times.  
Some sizes and special colours are subject to longer lead times.  
Please refer to your local sales office for confirmation.

Also available in 2700 mm high configurations.

Note: For higher wind rating, wind load graphs must be consulted.

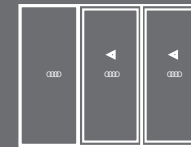
KEY: • = Not for C2 CNR.

**ALFRESCO  
SLIDING DOORS  
(N1-N5 GEN)  
(C1-C2 CNR)**



Stud Opening		2280	2730	3180	3630	4488	5388
	Door	2220	2670	3120	3570	4428	5328
2140	2100	UAD2121-3P	UAD2127-3P	UAD2130-3P	UAD2136-3P	UAD2143-6P	UAD2154-6P
2460	2400	UAD2421-3P	UAD2427-3P	UAD2430-3P	UAD2436-3P	UAD2443-6P	UAD2454-6P•

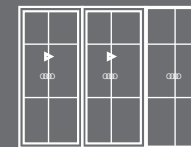
**OPTION**



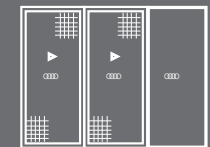
Reverse Hand



Barrier Grille Screen and Security



Colonial C1



Screen Door

Dowell

# ALFRESCO CORNER STACKING DOOR



*Pictured: Dowell UrbanLine™ Alfresco corner sliding door/ Image courtesy of Masterton Homes*



*Pictured: Dowell UrbanLine™ Alfresco corner sliding door / Image courtesy of Hotondo Homes*

## Dowell ALFRESCO CORNER STACKING DOOR

Dowell's alfresco corner stacking doors have a modern alfresco appearance that seamlessly integrates the indoor/outdoor area for a truly sophisticated alfresco-living lifestyle. This eye-catching addition to Dowell's extensive door range is available in flexible formats and sizes, creating a visually large opening for easy access to balconies, patios or to open up a courtyard, pool area or garden.



Pictured: Dowell UrbanLine™ Alfresco corner sliding door

# Dowell ALFRESCO CORNER STACKING DOOR

## FEATURES

- Versatile and aesthetically pleasing design.
- Durable low maintenance, easy-clean aluminium profiles.
- Custom size and colour available.
- Suitable for residential and multi-storey applications.
- Insect and security screens are an integral part of the design.
- Highly functional and designed to operate smoothly day after day.
- Resilient and durable in all types of weather.
- Minimal maintenance required.
- Superior product with the use of Dowell innovative design and technology
- Product available in double glazed configurations in some states.\*
- Low E high performance thermal glass option available.

## HARDWARE

- Options available, please consult your local sales representative for more information.

## ALFRESCO CORNER STACKING DOOR ENERGY PERFORMANCE

PRODUCT	Standard Single Glazed	Standard Single Glazed	Standard Double Glazed	Standard Double Glazed	Standard Double Glazed
DOOR TYPE	Alfresco Corner Stacking	Alfresco Corner Stacking	Alfresco Corner Stacking	Alfresco Corner Stacking	Alfresco Corner Stacking
GLASS OPTION	*5mm Clr.	*6mm SP10 Clr.	*4mm Clr. /8mm Arg. gas. /4mm ET.	*LB Clr.SO. 4mm /10mm Arg. gas. /4mm Clr.	*LB Gy.SO. 5mm /8mm Arg. gas. /5mm Clr.
FRAME TYPE	Standard Aluminium	Standard Aluminium	Standard Aluminium	Standard Aluminium	Standard Aluminium
AIR INFILTRATION	1.47	1.47	1.47	1.47	1.47
HEATING (STARS)	☆☆☆ 19%	★★★★ 38%	★★★★★ 45%	★★★★★ 48%	★★★★ 37%
COOLING (STARS)	★ 15%	★★ 36%	☆☆☆ 42%	☆☆☆☆ 51%	☆☆☆☆☆ 62%
*SHGC	0.71	0.59	0.56	0.49	0.31
U <sub>w</sub> -VALUE	<b>6.2</b>	<b>4.3</b>	<b>3.6</b>	<b>3.0</b>	<b>3.1</b>

\* TGN - Toughened glass used, please consult your Dowell representative for more information.

ACOUSTICS STC RATING FOR GLAZED DOORS	6.38 mm Clear Laminated Glass - 10.5mm VLAM Hush Acoustic Glass
	<b>Acoustic Range from RW 30 - RW 32</b>

PERFORMANCE	Non Cyclonic	Cyclonic
	<b>N1 - N5 GEN</b>	<b>C1 - C2 GEN</b>

## FLY, SECURITY AND BARRIER SCREEN OPTIONS

ALFRESCO CORNER STACKING DOOR	Various Width Combinations
2100 (High)	F / S / B & RF

F = Fly Screen, S = Security Screen, B = Barrier Screen

RF = Retractable Fly Screen

## HARDWARE OPTIONS

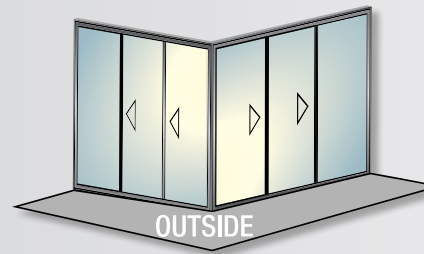
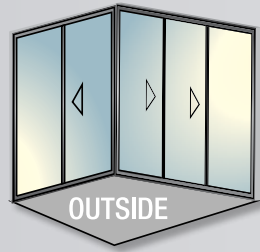
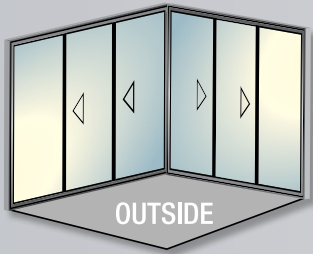
KEY LOCKS	STAINLESS STEEL LOCKS	COLOUR MATCH LOCKS / HANDLES
Standard	Option	Option

Note: Hardware options may vary from state to state, please consult your local sales representative or more information.

## BUSH FIRE RATED

ATTACK LEVEL	BAL LOW	-	BAL - 40
DOOR FRAME	Aluminium		Aluminium
DOOR GLAZING	No special requirements.		6mm toughened glass.
HARDWARE	As Above		metal.

Note: BAL - 40 must include Full External Screening to comply.



**UrbanLine™** Alfresco corner stacking door  
(Internal)

**UrbanLine™** Alfresco corner stacking door  
with 2P x 3P Left or Right configuration available

**UrbanLine™** Alfresco corner stacking door  
(External)

Standard sizes and colours are available on short lead times. Some sizes and special colours are subject to longer lead times. Please refer to your local sales office for confirmation.

Also available in other sizes.

KEY: • = Not for N5 GEN, C2 GEN.  
+ = Not for N4, N5 GEN, C2 GEN.

Note: For higher wind rating, wind load graphs must be consulted.

**INTERNAL  
CORNER STACKER  
DOORS  
(N1-N5 GEN)  
(C1-C2 GEN)**



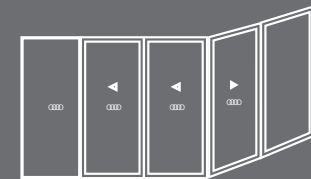
<b>Brick Opening</b>	(W2) 2250 / (W1) 2204	(W2) 2700 / (W1) 2654	(W2) 3150 / (W1) 3104	(W2) 3600 / (W1) 3554	
Stud (90mm) Opening	(W2) 2261 / (W1) 2216	(W2) 2801 / (W1) 2756	(W2) 3161 / (W1) 3116	(W2) 3701 / (W1) 3656	
	(W2) 2241 / (W1) 2196	(W2) 2781 / (W1) 2736	(W2) 3141 / (W1) 3096	(W2) 3681 / (W1) 3636	
Door	(W2) 2175 / (W1) 2130	(W2) 2715 / (W1) 2670	(W2) 3075 / (W1) 3030	(W2) 3615 / (W1) 3570	
2140	2100	UAD2121-CS-INT	UAD2127-CS-INT	UAD2130-CS-INT•	UAD2136-CS-INT•
2460	2400	UAD2421-CS-INT•	UAD2427-CS-INT•	UAD2430-CS-INT•	UAD2436-CS-INT+

**EXTERNAL  
CORNER STACKER  
DOORS  
(N1-N5 GEN,  
C1-C2 GEN)**

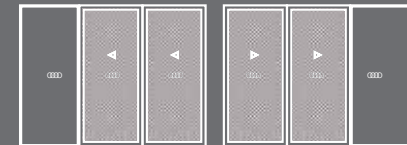


<b>Brick Opening</b>	(W1) 2319 / (W2) 2365	(W1) 2769 / (W2) 2815	(W1) 3219 / (W2) 3265	(W1) 3669 / (W2) 3715	
Stud (90mm) Opening	(W1) 2081 / (W2) 2120	(W1) 2621 / (W2) 2660	(W1) 2981 / (W2) 3020	(W1) 3521 / (W2) 3560	
	(W1) 2101 / (W2) 2140	(W1) 2641 / (W2) 2680	(W1) 3001 / (W2) 3040	(W1) 3541 / (W2) 3580	
Door	(W1) 2196 / (W2) 2235	(W1) 2736 / (W2) 2775	(W1) 3096 / (W2) 3135	(W1) 3636 / (W2) 3675	
2140	2100	UAD2121-CS-EXT	UAD2127-CS-EXT	UAD2130-CS-EXT•	UAD2136-CS-EXT•
2460	2400	UAD2421-CS-EXT•	UAD2427-CS-EXT•	UAD2430-CS-EXT•	UAD2436-CS-EXT+

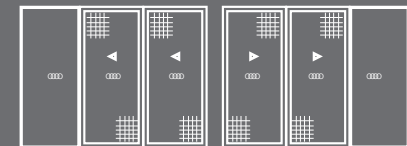
**OPTION**



Available in 3/2 panel configuration



Barrier Grille Screen  
and Security Screen



Retractable / Screen Door

Dowell  
**HINGED**  
DOOR





*Pictured: Dowell DesignerLine® Hinge door*



*Pictured: Dowell DesignerLine® Hinge door*

## Dowell HINGED DOOR

Dowell Hinged doors are available in a wide range of standard configurations and have the added versatility of coupling options, with arch head hi-lite, fixed hi-lite, fixed, awning, double hung or louvre window coupled side-lites, are all available.



*Pictured: Dowell DesignerLine® Hinge door*

# Dowell HINGED DOOR


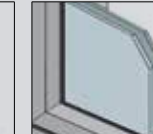
## FEATURES

- Versatile and aesthetically pleasing design.
- Durable low maintenance, easy-clean aluminium profiles.
- Custom size and colour available.
- Suitable for residential and multi-storey applications.
- Insect and security screens are an integral part of the design.
- Glass jacking screws to prevent door sag.
- Heavy duty hinges.
- Concealed door bolts for improved security and aesthetics.
- Product available in double glazed configurations.
- Easy coupling to the Dowell range of windows.
- Barrier grilles, security and screen doors are available.
- Low E high performance thermal glass option available.

## HARDWARE

- Options available, please consult your local sales representative for more information.

## HINGED DOOR ENERGY PERFORMANCE

					
PRODUCT	Standard Single Glazed	Standard Single Glazed	Standard Double Glazed	Standard Double Glazed	Standard Double Glazed
DOOR TYPE	Hinged	Hinged	Hinged	Hinged	Hinged
GLASS OPTION	* 4mm Clr.	* 6mm SP10 Clr.	* 4mm Clr. /12mm Arg. gas /4mm Clr.	* LB Clr.SO. 4mm /12mm Arg.gas /4mm Clr.	* LB Gy.SO. 4mm /12mm Arg. gas /4mm Clr.
FRAME TYPE	Standard Aluminium	Standard Aluminium	Standard Aluminium	Standard Aluminium	Standard Aluminium
AIR INFILTRATION	2.8	2.8	2.8	2.8	2.8
HEATING (STARS)	★★ 13%	★★★ 28%	★★★★ 35%	★★★★ 40%	☆☆★★ 32%
COOLING (STARS)	☆☆ 24%	☆☆☆ 40%	☆☆☆ 40%	☆☆☆☆ 52%	☆☆☆☆ 61%
*SHGC	0.62	0.52	0.55	0.44	0.32
U <sub>w</sub> -VALUE	<b>6.4</b>	<b>4.9</b>	<b>4.3</b>	<b>3.5</b>	<b>3.5</b>

\* TGN = Toughened glass used, please consult your Dowell representative for more information.

PERFORMANCE	Non Cyclonic	Cyclonic
	<b>N1 - N5 GEN</b>	<b>C2 GEN</b>

## FLY, SECURITY AND BARRIER SCREEN OPTIONS

HINGED DOOR	850 - 3010 (Wide)
2100 (High)	F / S / B

F = Fly Screen, S = Security Screen, B = Barrier Screen

## BUSH FIRE RATED

ATTACK LEVEL	BAL LOW	-	BAL - 40
DOOR FRAME	Aluminium		Aluminium
DOOR GLAZING	No special requirements.		6mm toughened glass.
HARDWARE	As Above		metal.

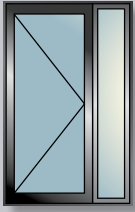
Note: BAL - 40 must include Full External Screening to comply.

## HARDWARE OPTIONS

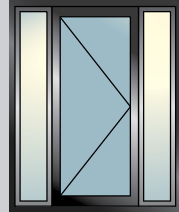
KEY LOCKS	STAINLESS STEEL LOCKS	COLOUR MATCH LOCKS / HANDLES
Standard	Option	Option

Note: Hardware options may vary from state to state, please consult your local sales representative or more information.

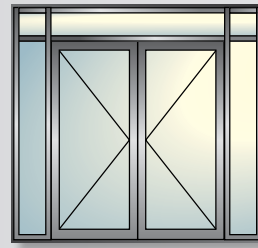




**DesignerLine®** Hinged door with side-lite



**DesignerLine®** Double Hinged door with side-lites



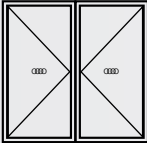
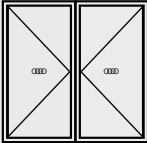
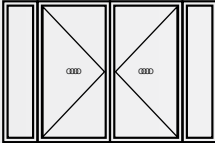
**DesignerLine®** Double Hinged door with hi-lite and side-lites

Standard sizes and colours are available on short lead times.  
Some sizes and special colours are subject to longer lead times.


**Please note:** Door panel and side-lite vary depending on overall width. Please refer to your local sales office for confirmation.

Also available in 2700 mm configurations, please check with your local Dowell sales office for confirmation. For higher wind rating, wind load graphs must be consulted.

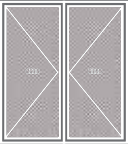
\* Note: 820 mm wide door panels as standard.

HINGED DOORS (N1-N5 GEN, C2 GEN)		870*						1698*		
										
Stud Opening		960	1560	1860	1560	1860	2160	2460	2760	3060
		3.5	6	7.5	6	7.5	8.5	10	11	12.5
	Door	900	1500	1800	1500	1800	2100	2400	2700	3000
2160	2100	DHD2109	DHD2115-2PLF	DHD2118-2PLF	DHD2115-2P	DHD2118-2P	DHD2121-4PLRF	DHD2124-4PLRF	DHD2127-4PLRF	DHD2130-4PLRF
2460	2400	DHD2409	DHD2415-2PLF	DHD2418-2PLF	DHD2415-2P	DHD2418-2P	DHD2421-4PLRF	DHD2424-4PLRF	DHD2427-4PLRF	DHD2430-4PLRF


### OPTION




Reverse Handle (- R)




Barrier Grille Screen and Security Screen



Colonial Bars



Hi-Lites

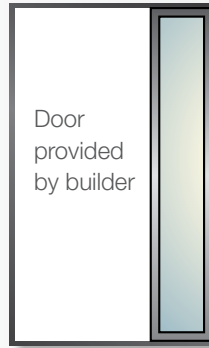


Multiple Mid-rails

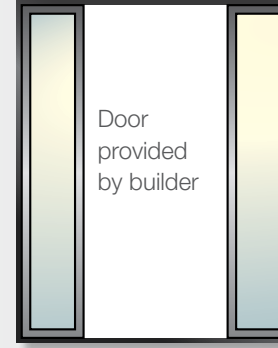
Dowell  
**ENTRY**  
FRAME



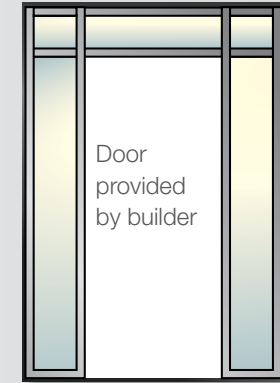
*Pictured: Dowell DesignerLine® Entry Frame with SecuraLine Security Screen Door*



**DesignerLine®** Entry frame with side-lite



**DesignerLine®** Entry frame with double side-lites



**DesignerLine®** Entry frame with hi-lite and double side-lites

## Dowell ENTRY FRAME

The Dowell Entry frame is available in a wide range of standard configurations and have the added versatility of coupling options with top hi-lite and side-lites.

### FEATURES

- Versatile and aesthetically pleasing design.
- Durable low maintenance, easy-clean aluminium profiles.
- Custom size and colour available.
- Low E glazing optional for increased energy efficiency.
- Suitable for residential and multi-story applications.
- Insect and security screens are an integral part of the design.
- Durable low maintenance, easy clean aluminium profiles.
- Heavy duty hinges.
- Product available in double glazed configurations.
- Easy coupling to the Dowell range of windows.
- Screen doors and barrier grilles are available.

Dowell  
**BI-FOLD**  
DOOR



*Pictured: Dowell DesignerLine® Bi-fold door*



*Pictured: Dowell DesignerLine® Bi-fold door*

## **Dowell** **BI-FOLD DOOR**

The Dowell Bi-Fold door system provides an ideal opportunity to maximise living floor space and combine the benefits of indoor/outdoor entertaining.



Pictured: Dowell DesignerLine® Bi-fold door / image courtesy Hotondo homes

## Dowell BI-FOLD DOOR






### FEATURES

- Versatile and aesthetically pleasing design.
- Durable low maintenance, easy-clean aluminium profiles.
- Custom size and colours are available.
- Suitable for residential and multi-storey applications.
- Robust perimeter frame.
- Hardware provides durability with ease of operation.
- High performance seals for exposed locations.
- A wide variety of panel configurations to suit most floor plan layouts.
- Options available subject to weather exposure limitations.
- Product available in double glazed configurations in some states.
- Optional powder coated and stainless steel finishes available.
- Single active leaf option is available in certain configurations.
- Low E high performance thermal glass option available.

### HARDWARE

- Options available, please consult your local sales representative for more information.

### BI-FOLD DOOR ENERGY PERFORMANCE

					
PRODUCT	Standard Single Glazed	Standard Single Glazed	Standard Double Glazed	Standard Double Glazed	Standard Double Glazed
DOOR TYPE	Bi-Fold	Bi-Fold	Bi-Fold	Bi-Fold	Bi-Fold
GLASS OPTION	* 4mm Clr.	* 6mm SP10 Clr.	* 4mm Clr. /12mm Arg. gas/4mm Clr.	* LB Clr.SO 4mm /12mm Arg.gas /4mm Clr.	* LB Gy.SO 4mm /12mm Arg.gas /4mm Clr.
FRAME TYPE	Standard Aluminium	Standard Aluminium	Standard Aluminium	Standard Aluminium	Standard Aluminium
AIR INFILTRATION	1.66	1.66	1.66	1.66	1.66
HEATING (STARS)	★★ 11%	★★★ 26%	☆☆★★ 35%	★★★★ 39%	☆☆★★ 32%
COOLING (STARS)	☆☆ 24%	☆☆★ 40%	☆☆★ 41%	☆☆★★ 53%	☆☆★★ 61%
*SHGC	0.64	0.53	0.57	0.45	0.32
U <sub>w</sub> -VALUE	<b>6.2</b>	<b>4.7</b>	<b>4.1</b>	<b>3.3</b>	<b>3.3</b>

\* TGN = Toughen glass used, please consult your Dowell representative for more information.

PERFORMANCE	Non Cyclonic	Cyclonic
	N1 - N4 GEN	C2 GEN

### FLY, SECURITY AND BARRIER SCREEN OPTIONS

BI-FOLD DOOR	1810 - 4570 (Wide)
2100 (High)	RF

RF = Retractable Fly Screen

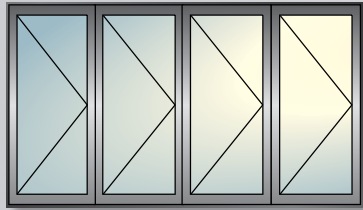
### BUSH FIRE RATED

ATTACK LEVEL	BAL LOW	-	BAL - 29
DOOR FRAME	Aluminium		Aluminium
DOOR GLAZING	No special requirements.		6mm toughened glass.
HARDWARE	As Above		metal.

### HARDWARE OPTIONS

KEY LOCKS	STAINLESS STEEL LOCKS	COLOUR MATCH LOCKS / HANDLES
Standard	Option	Option

Note: Hardware options may vary from state to state, please consult your local sales representative or more information.







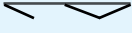



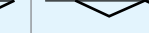

DesignerLine® Bi-fold door

Standard sizes and colours are available on short lead times.  
Some sizes and special colours are subject to longer lead times.

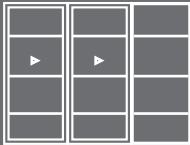
**Please note:** Available in 6, 7 and 8 panel configurations and also available in 2700 configurations, please check with your local Dowell sales office for confirmation.

Due to water performance requirements, Dowell Bi-fold doors are ONLY available in OPEN OUT configuration.

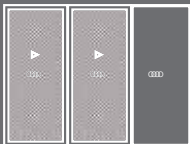
KEY: • = Not for C2 GEN.

BI-FOLD DOORS (N1-N4 GEN) (C1-C2 GEN)											Also available in 6, 7 and 8 Panel Configurations		
		Stud Opening	1860	2460	3060	3660	3660	4630					
	Door	1800	2400	3000	3600	3600	4570						
2140 2460	2100 2400	 DBD2118-3L DBD2418-3L*	 DBD2124-4L DBD2424-4L*	 DBD2130-4L DBD2430-4L*	 DBD2136-4L* DBD2436-4L*	 DBD2136-5L DBD2436-5L*	 DBD2145-5L* DBD2445-5L*	6P	7P	8P			
		 DBD2118-2L1R DBD2418-2L1R*	 DBD2124-3L1R DBD2424-3L1R*	 DBD2130-3L1R DBD2430-3L1R*	 DBD2136-3L1R* DBD2436-3L1R*	 DBD2136-4L1R DBD2436-4L1R*	 DBD2145-4L1R* DBD2445-4L1R*						
		 DBD2118-1L2R DBD2418-1L2R*	 DBD2124-2L2R DBD2424-2L2R*	 DBD2130-2L2R DBD2430-2L2R*	 DBD2136-2L2R* DBD2436-2L2R*	 DBD2136-3L2R DBD2436-3L2R*	 DBD2145-3L2R* DBD2445-3L2R*						
		 DBD2118-3R DBD2418-3R*	 DBD2124-1L3R DBD2424-1L3R*	 DBD2130-1L3R DBD2430-1L3R*	 DBD2136-1L3R* DBD2436-1L3R*	 DBD2136-2L3R DBD2436-2L3R*	 DBD2145-2L3R* DBD2445-2L3R*						
		-	 DBD2124-4R DBD2424-4R*	 DBD2130-4R DBD2430-4R*	 DBD2136-4R* DBD2436-4R*	 DBD2136-1L4R DBD2436-1L4R*	 DBD2145-1L4R* DBD2445-1L4R*						


**OPTION**



Multiple Transom option available



Screens



Frame Only

# FALL PREVENTION







Fall Prevention testing on Dowell Awning and Sliding windows



## Dowell FALL PREVENTION

### Fall prevention through open-able window Requirements

- Clauses 3.9.2.5 and D2.24 of the Building Code of Australia detail the situations in which open-able windows require fall prevention measures and the requirement that windows in these instances must meet.

The following **Dowell Window products** and configurations **have passed testing** to the Australian Standard AS5203:2016

- Protection of Openable Window / Fall Prevention Test Sequence and Compliance Method. These products **will not permit** a 125mm sphere to pass through it **and resist** a horizontal outward **force of 250N**.

Dowell Sliding Window, Dowell Awning Window, Dowell Double Hung Window and Dowell Louvre Window.

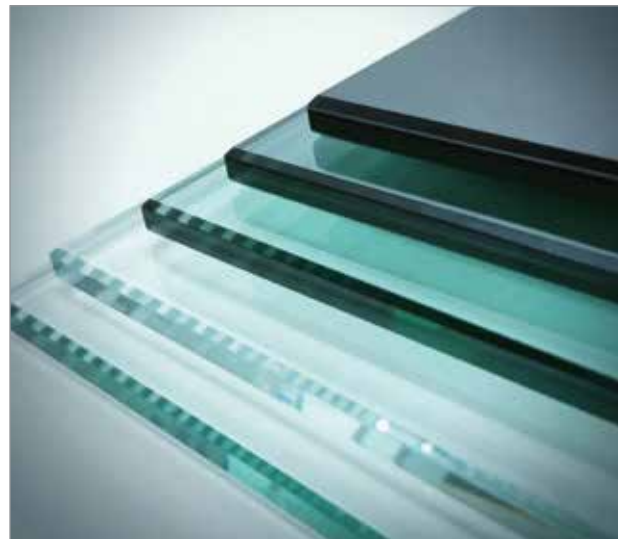
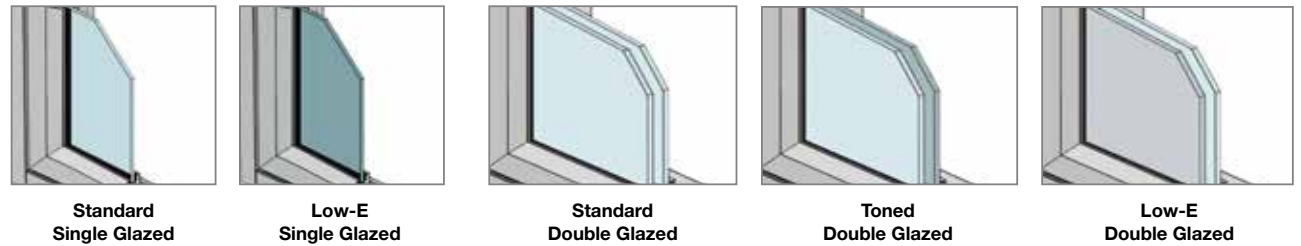


# GLASS SELECTION

# Dowell GLASS SELECTION FOR ENERGY EFFICIENCY

Why is it critical to consider the energy performance factors for the windows being installed into your home? Importantly the inclusion of energy efficient windows in the design of your home may increase your comfort level in both summer and winter.

In an average home it has been estimated 79-86% of the heat gain and 46-61% of the heat loss can be attributed to poor performing windows (source: SWA Project 2012\*). Little wonder that energy efficiency requirements now form part of the design requirements included in the 'Building Code of Australia'.



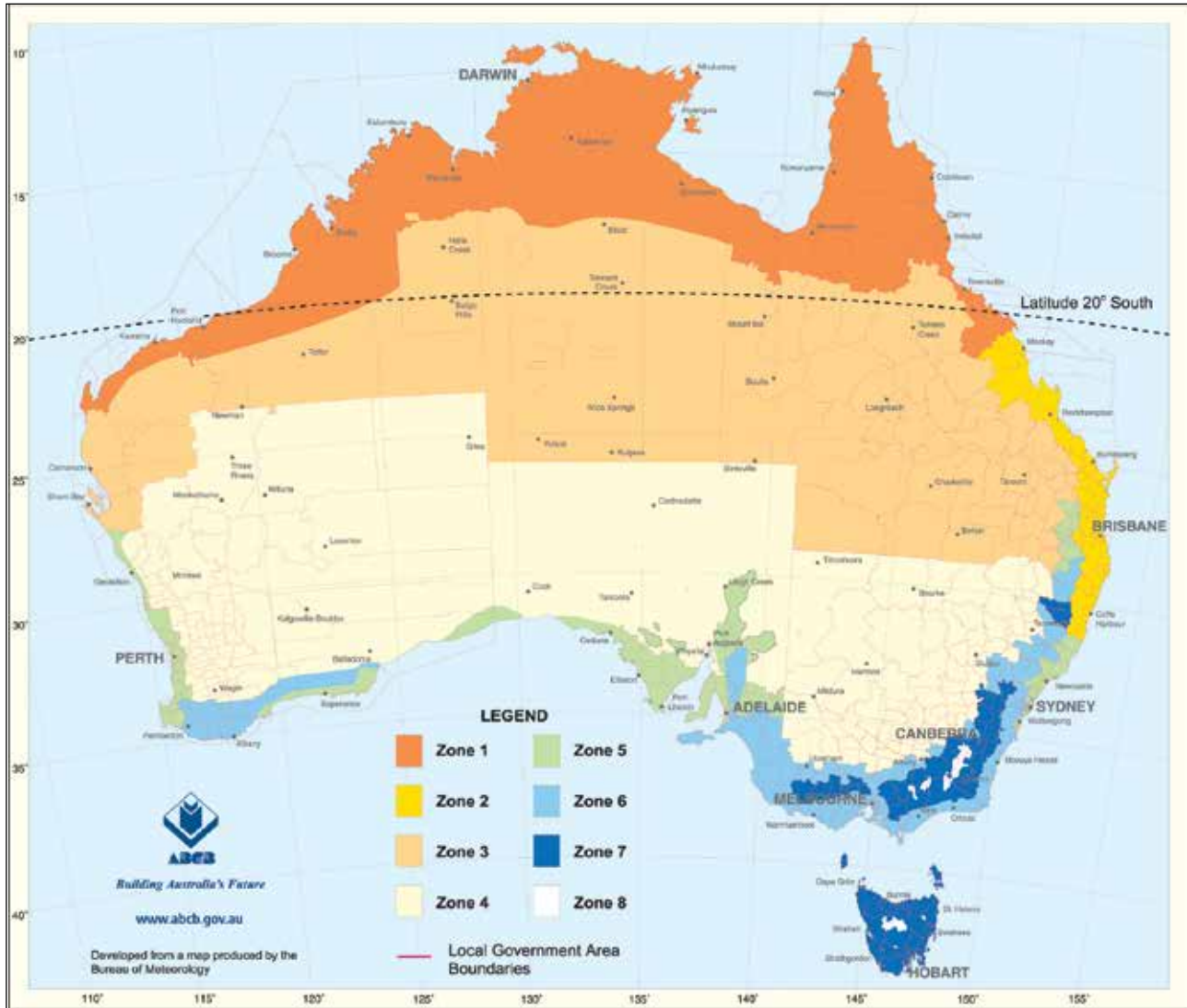
*Tinted and opaque glass provide privacy, reduce sun glare and lower heat gain.*

For the purpose of determining the varying housing energy requirements the Building Code of Australia has divided Australia into 8 climate zones.

**Low E or Low Emittance**, is a razor-thin, colorless, non-toxic coating applied to window glass to improve energy efficiency. These windows are entirely safe and are becoming the standard for energy efficiency in the modern home.

**Toned glass**, often referred to as tinted glass, is made by including colouring additives to normal clear glass during the manufacturing process. Most commonly found in shades of bronze, grey, blue or green, toned glass significantly reduces glare and heat gain from the sun.

\* The SWA project has run over 4000 simulations in all 8 BCA climate zones in 3 house types with a wide range of windows to show the impact of high performance windows on the energy efficiency or star rating of the home.



Climate Zones in Australia

The following provides a brief description of each National Construction Code (NCC) climate zone:

	Zone	Description
	1	High humidity summer, warm winter
	2	Warm humid summer, mild winter
	3	Hot dry summer, warm winter
	4	Hot dry summer, cool winter
	5	Warm temperate
	6	Mild temperate
	7	Cool temperate
	8	Alpine

**Hot climate zones 1, 2 & 3**

Areas included in these climate zones are Northern Australia, Brisbane, Darwin

Zone	U <sub>w</sub> -value	SHGC	Glazing
1 2 3	*Low 4.5 to 6.5	*Low 0.3 to 0.60	Tinted, tint IGU, high performance tint, tinted low-e (low gain), tint IGU low-e (low gain)

\* Dowell suggested thermal performance ranges.

**Mixed climate zones 4 & 5**

Areas included in these climate zones are Sydney, Perth and Adelaide

Zone	U <sub>w</sub> -value	SHGC	Glazing
4 5	*Low 3.5 to 6.5	*Mid Range 0.5 to 0.75	Tint, tint + clear low-e, tint + clear IGU, tint + clear IGU low-e

\* Dowell suggested thermal performance ranges.

**Cold climate zones 6, 7 & 8**

Areas included in these climate zones cover most of Victoria, Australian Capital Territory, Tasmania, and some Southern parts of New South Wales and Western Australia

Zone	U <sub>w</sub> -value	SHGC	Glazing
6 7 8	*Low 2 to 4.8	*High 0.6 to 0.75	Clear low-e, clear IGU, clear IGU low-e

\* Dowell suggested thermal performance ranges.

- Zone: 1 to 3** Predominantly climates requiring cooling Energy efficiency Deemed-to-Satisfy (DtS) provisions vary from location to location and for simplicity, locations with approximately similar climates have been combined into eight climate zones.
- Zone: 4 and 5** Climates requiring equal focus on both cooling and heating requirements
- Zone: 6 to 8** Predominantly climates requiring heating

In Melbourne around 75% of household energy usage is for heating, while in Brisbane, around 90% of energy is used for cooling homes. The emphasis on selecting the right product to reduce heat loss in a colder climate and reduce heat gain in a hotter climate should be an important decision to achieve greater comfort and energy efficiency. Choosing the right product and glazing option will help.

Fundamentally window energy performance is based on the following criteria:

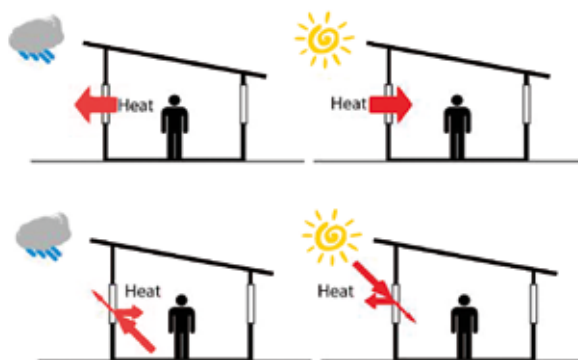
**U-value** is a measure of heat transfer/loss in a building element. Lower U-values indicate higher levels of insulation. Dowell energy efficient (ThermaLine™) window and door product range consistently produce very low U<sub>w</sub>-values.

**Solar Heat Gain Co-Efficient (SHGC)** is a measure of how much solar radiation passes through a window. For comfort during the summer months, the smaller the SHGC the better.

Depending on the climate zone solar heat gain can be an advantage or disadvantage. As a rule cooling climates require low SHGC windows while heating climates may require high SHGC windows particularly on the North facing windows which provide free heating by the winter sun.

Dowell is able to produce a range of products designed to meet the increasing impact of today's environment. A solution is available to satisfy nearly all requirements. Dowell options to improve the overall thermal performance of the window include a full range of single and double glazed energy efficient window and door products configured to suit the particular climate zone and glass orientation.

The energy efficiency of any particular building is the end result of all the factors contributing to the performance. ie roof



Normal glazing is usually one of the main reasons of heat gain in summer and heat loss in winter. Double glazing and Low-E glass will aid in thermal comfort and significantly reduce energy costs.

type, wall construction method, floor construction method, glazing type area – orientation, efficient sealing of the building, installation of insulation in the walls and roof cavity and the R' value of the insulation, are some of the factors.

Dowell is a member of the Australian Window Association and WERS (Window Energy Rating Scheme). Dowell window and



Dowell has a selection of privacy glass available in different opaque finish and tints, please ask your Dowell representative for more details.

door performance data can be found on the WERS web page at [www.wers.net](http://www.wers.net)

Dowell also offers its **ThermaLine®** thermally broken products which significantly improve the overall thermal performance of the window.

Table 5: **Glazing Options for various Climate Zones and Glazing Orientation (guide only)**

	North Elevation - Shaded	North Elevation - Unshaded	West Elevation	South Elevation	East Elevation
<b>Cooling Zones 1, 2 and 3</b>					
Good	Clear Float	Toned	Toned	Toned	Toned
Better	Neutral or Toned Low-E	Neutral or Toned Low-E	Neutral or Toned Low-E	Toned	Toned
Best	Clear IGU	Toned IGU	Toned IGU	Low-E	Low-E
<b>Cooling/Heating Zones 4 and 5</b>					
Good	Clear float	Toned	Toned	Clear	Toned
Better	Clear Low-E	Clear Low-E	Toned Low-E	Clear Low-E	Toned Low-E
Best	Clear IGU	Clear Low-E IGU	Toned Low-E IGU	Clear Low-E IGU	Clear Low-E IGU
<b>Heating Zones 6, 7 and 8</b>					
Good	Clear Low-E	Clear Low-E	Clear Low-E	Clear Low-E	Clear Low-E
Better	Clear IGU	Clear IGU	Clear IGU	Clear IGU	Clear IGU
Best	Clear Low-E IGU	Clear Low-E IGU	Clear Low-E IGU	Clear Low-E IGU	Clear Low-E IGU

**Note:** This table is a guide only and is not meant to be the Dowell recommended glazing options. Window options and glazing specifications are determined by the building specifier when determining the energy rating for the building. Second generation house energy rating programmes now coming on line, in particular 'AccuRate' will work on a much refined zoning process based on postcode.

# SAFETY GLASS IN BUILDINGS



## Dowell SAFETY GLASS IN BUILDINGS

Australian Standard determining the minimum requirements for glass to be used in buildings throughout Australia is AS 1288.

### 1) Glass Thickness Limitations

- Glass thickness requirements pre determined through the applicable wind rating category of the product.
- Glass thickness limitations – 3mm glass is limited to 0.85 square metres in size.
- The shape of the glass is now considered when determining the thickness required for a particular application instead of only the square metres as in the previous standard.

### 2) Human Impact Requirements (refer section 5 of AS 1288)

The requirements in the human impact part of the standard are designed to minimise injury to the occupants of the building caused by the glazing.

These requirements vary depending on where the glazing is located in the building and thus must be predetermined as a result of plan review by the sales person or estimator.

Please take special care in plan review to reference this part of the code when making decisions on glass selection.

The points for consideration regarding the human impact requirements in the standard are as follows:

- **Doors**

All doors including hinged, sliding, folding and stacking are to be glazed in Grade 'A' safety glazing (Toughened Glass or Laminated Glass).

- **Door Side Panels**

Side panels with their vertical sightline less than 300mm away from the door and positioned 1200mm or less above the floor level are to be glazed in Grade 'A' safety glazing except that 5mm ordinary glass can be used up to a maximum of 0.3 square metres.

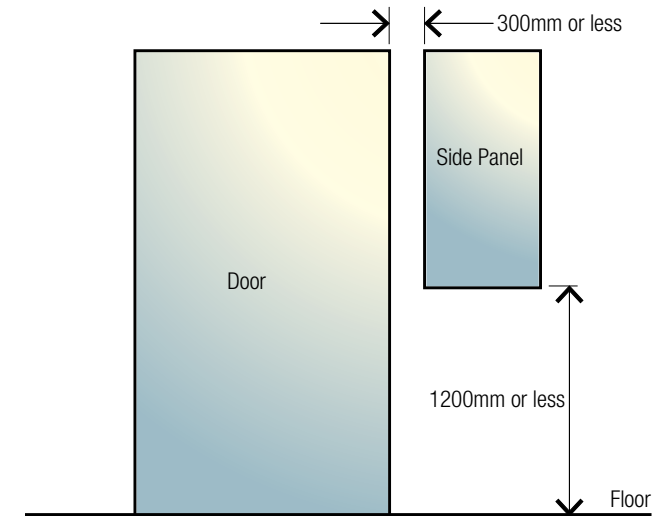


Fig 2: Door Side Panels

### GLAZING CAPABLE OF BEING MISTAKEN FOR A DOORWAY OR OPENING

If a glazed opening in the building has a glass sight line that is 500mm or greater in width, 1000mm or greater in height, or 500mm or less above the floor level it is considered capable of being mistaken as a doorway and is to be glazed in Grade 'A'

safety glazing. Further, the glass must be made visible with the application of a motif.

Exceptions to the above are:

- The glazing is opaque or has a decorative finish to make it visible.
- The glass is protected with a crash/chair rail, handrail or transom.
- There is 1000mm or greater difference in floor level either side of the glass.

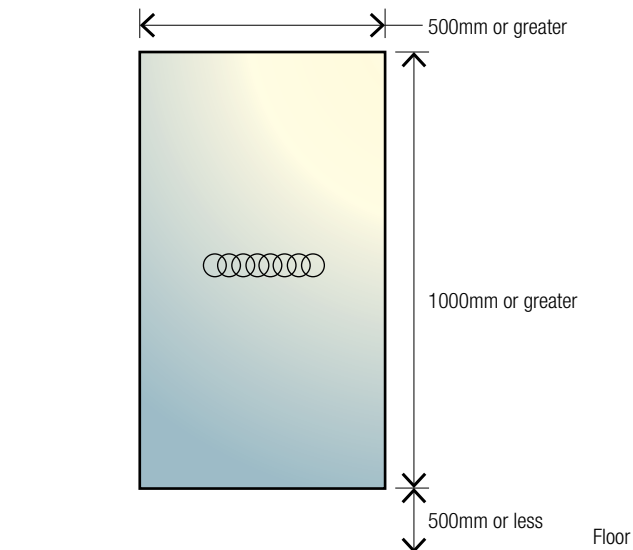


Fig 3: Glazing capable of being mistaken for a doorway

### LOW LEVEL GLAZING

Where the lowest sightline in the glazing is less than 500mm from the floor, the window is to be glazed in Grade 'A' safety glazing except a minimum of 5mm thick ordinary glass may be used up to a maximum area of 1.2 square metres.

### BATHROOMS

All glazing in a bathroom up to 2000mm above the floor is to be Grade 'A' safety glazing.

### SCHOOLS AND CHILD CARE CENTRES

All glazing in schools and child care centres up to 1000mm above the floor is to be Grade 'A' safety glazing.

### AGED CARE BUILDINGS AND NURSING HOMES

All glazing in aged care buildings and Nursing Homes up to 1500mm above the floor is to be Grade 'A' safety glazing.

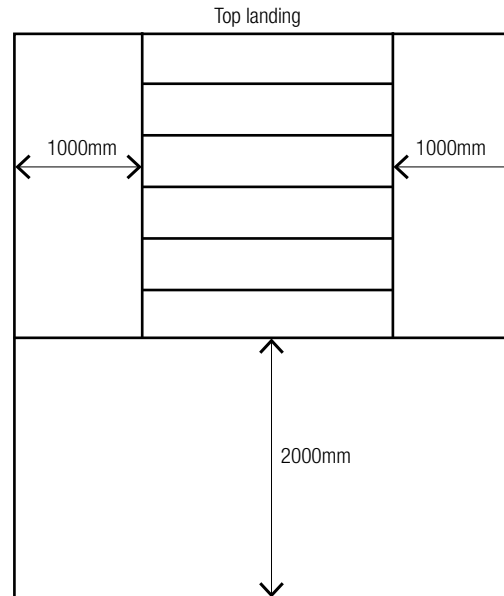


Fig 4: Stairway Glazing

### STAIRWAY GLAZING

All glazing surrounding a stairway for a distance of 2000mm away from the bottom of the stairs and a distance of 1000mm either side of the stairs must be Grade 'A' safety glazing.

### DOUBLE GLAZING

The human impact requirements for double glazing applies only to the sides of the window accessible by human traffic.

'A' safety glazing is to be used.

*Note: Parts of schools referred to in this section include glazing situated within 5000mm of areas where activities such as those in relation to playgrounds, courts or marked out playing fields occur, unless otherwise protected by a permanent barrier. Ref: www.agga.org.au*

### AREAS SUBJECT TO HIGH RISK

#### OF BREAKAGE

In all those parts of a building where the planned activity can generate a high risk of breakage from human impact, such as gymnasiums, swimming pools and spa pools and enclosures, parts of schools, halls, public viewing galleries, stadiums and the like, Grade 'A' safety glazing is to be used.

Table 6: Maximum Areas of Safety Glass for Human Impact Considerations

	Type of glazing	Normal thickness (mm)	Maximum area (m <sup>2</sup> )			
Grade 'A' safety glass*	Toughened and toughened laminated glass	3	1.0			
		4	2.2			
		5	3.0			
		6	4.0			
		8	6.0			
		10	8.0			
		12	10.0‡			
		>12	Extrapolate			
		Grade 'A' safety glass*	Laminated glass†	5	2.2	
				6	3.0	
8	5.0					
10	7.0					
12	9.0‡					
>12	Extrapolate					
Grade 'A' safety glass*	Safety organic-coated mirror (vinyl backed)	4	3.0			
		5	3.5			
		6	4.0			
	Grade 'A' safety glass*	Safety organic-coated glass	3	2.0		
			4	2.0		
			5	2.2		
			6	3.0		
			8	5.0		
			10	7.0		
			12	9.0		
			Grade 'B' safety glass*	Wired glass	≥6	2.5

\* Safety glazing material Grade A or Grade B to AS/NZS 2208.

† Based on total glass thickness only (interlayer thickness not included and should be added).

‡ This area may not be readily available.

# **NOISE CONTROL**





# Dowell NOISE CONTROL

Unwanted noise whether it comes from traffic, aircraft, trains or just noisy neighbours is an annoyance that affects our daily lives. In extreme situations unwanted noise becomes a critical issue for consideration in maintaining good health and well-being. Windows and glass play an important role in the effort to reduce unwanted noise in our home or work environment. Dowell has an extensive range of products available, designed and acoustically tested through approved testing laboratories, aimed at controlling unwanted noise passing through the windows and doors of a building.

Table 3: **Typical Sounds and Noise Levels**

Common Sound Levels	dB	Recommended Interior Sound Levels	dB
Threshold of hearing	0	Bedrooms	30-40
Conversational speech	65	Class rooms	35-40
Average traffic (kerbside)	70	Living rooms	40-45
Busy traffic	75	Private office	40-45
Traffic intersection	80	Open office	45-50
Live band (20 metres)	105		

Accurately determining the noise level reduction requirements for a particular situation requires the involvement of an acoustic engineer. The acoustic engineer will assess the levels and types of noise affecting the building and specify the acoustic performance requirements for all elements of the building. In the case of windows the acoustic performance requirements are normally specified as STC (sound transmission class) or (weighted sound reduction index)  $R_w$  values. The STC and  $R_w$  values for windows are usually within a 1dB variation.

The objective of noise control in a building is to ensure the barrier between the inside and the outside - the roof, the walls, including glazing, etc. are able to reduce the noise penetrating the inside a building, to an acceptable level. As a general rule the heavier and denser the barrier the better the noise reduction.

A reduction of 10dB in noise levels is a halving of noise levels, further, the CSIRO has determined that the human ear requires a change of 3dB in noise levels to detect a difference (source: CSIRO Report Feb 2000). Windows and glazing being of light construction are not the best sound barrier, however, by utilising various glazing options and combinations, significant sound reduction can be achieved. Thicker heavier glass performs better than thin glass. Laminated glass performs slightly better than the same thickness monolithic glass. Double glazing with small air gap performs only slightly better than single glazing. The best result is achieved with double glazing with large air gap (100 to 200mm). A doubling in glass thickness 3 to 6mm gives a 3dB sound reduction (barely noticeable).

The following table gives an **indicative noise reduction rating** for windows glazed in a number of glazing options.

Table 4: **Noise Reduction Rating for Glazed Windows**

Window Glazing Option	STC rating
3mm float glass	25
4mm float glass	26
6mm float glass	28
6.38mm laminated glass	31
10.38mm laminated glass	33
Double glazed sash 4-8-4	35

**Note:** Refer to Dowell acoustic test reports for more details.

# BUSHFIRE RATING





## Dowell **BUSHFIRE RATING**

Bushfire is a common natural occurrence in Australia. However, the increase in urban population and the general demand for housing has seen a rise in residential development in bushfire prone areas and thereby placing lives and property at risk.

As a response to the devastating losses of life and property in past bushfires, legislative changes were made to ensure bushfire matters are now considered in all building developments.

In brief, all developments on land that is designated as bushfire prone have a legal obligation to consider the bushfire risk and meet the requirements of 'Planning for BushFire Protection 2006 and AS3959 – 2018'.

In response to the latest Australian Standard for bushfire risk requirements - Dowell has developed a range of products to meet the requirements of the 'Bushfire Attack Levels' (BAL's) as nominated in AS3959 - 2018 ranging from BAL - LOW through to BAL - 40.



## Construction in Bushfire Prone Areas (AS 3959 - 2018)

Detailed below are the various Dowell Window and Door inclusions to meet that specific BAL Level requirement.

Please note these inclusions are Dowell recommendations only and where any doubt arises in respect of compliance with the Bushfire Code AS 3959-2018, you should consult your local building assessor or council for clarification.

Table 7: **Dowell Requirements for Aluminium Windows and Doors**

Bushfire Attack Level	BAL - LOW	BAL - 12.5	BAL - 19	BAL - 29	BAL - 40	BAL - FZ	
Option A	<b>External Screen</b>						
	External Screen	No special requirements at this level.	All windows and doors completely protected externally by screens with a mesh with a maximum aperture of 2mm, made of corrosion resistant steel, bronze or aluminium.	All windows and doors completely protected externally by screens with a mesh with a maximum aperture of 2mm, made of corrosion resistant steel, bronze or aluminium.	Screening externally to Windows is not a single option solution at this BAL however it is for Doors.	Screening externally is not a single option solution at this BAL.	Screening externally is not a single option solution at this BAL.
	OR	OR	OR	OR	OR	OR	
Option B	<b>Aluminium Windows</b>						
	Framing	No special requirements at this level.	Aluminium	Aluminium	Aluminium	Aluminium	Windows not available at this BAL testing required. Use roller shutters.
	Glazing	As above	Windows with sills less than 400mm from the ground, deck/verandah, roof or awning structure below shall be glazed in 4mm minimum safety glass.	All windows glazed in 5mm minimum toughened glass.	All windows glazed in 5mm minimum toughened glass.	All windows glazed in 6mm minimum toughened glass.	As above
	Hardware	As above	Standard	Standard	Externally fitted hardware that supports the sash in opening and closing shall be metal.	Externally fitted hardware that supports the sash in opening and closing shall be metal.	As above
	Seals	As above	Standard	Standard	Standard	Seals (including external glazing rubbers) to stiles, head and sills or thresholds shall be manufactured from materials having a flammability index no greater than 5.	As above
Screening	As above	Sashes shall be screened internally or externally with mesh with a maximum aperture of 2mm, made of corrosion resistant steel, bronze or aluminium.	Sashes shall be screened internally or externally with mesh with a maximum aperture of 2mm, made of corrosion resistant steel, bronze or aluminium.	Sashes shall be screened internally or externally with mesh with a maximum aperture of 2mm, made of corrosion resistant steel, bronze or aluminium. Screen assemblies must be attached using metal fixings.  AND Where glazing is less than 400mm from ground, deck/verandah, roof or awning structure then these glass panels will require screening with a mesh with a maximum aperture of 2mm, made of corrosion resistant steel, bronze or aluminium. Screen to be external.	Both operable (sashes) and fixed panels of the window shall be screened with a mesh with a maximum aperture of 2mm, made of corrosion resistant steel or bronze.  (Not Aluminium)  Screens to be external and must be attached using metal fixings.	As above	

# Construction in Bushfire Prone Areas

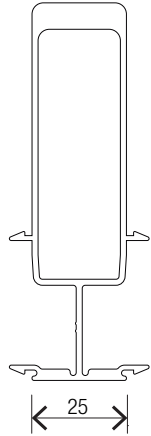
(AS 3959 - 2018) - continued

Bushfire Attack Level	BAL - LOW	BAL - 12.5	BAL - 19	BAL - 29	BAL - 40	BAL - FZ
<b>Aluminium Doors</b>						
Framing	No special requirements at this level	Aluminium	Aluminium	Aluminium	Aluminium	Doors not available at this BAL testing required. Use roller shutters.
Glazing	As above	4mm safety glass as a minimum	5mm toughened glass as a minimum	6mm toughened glass as a minimum.	6mm toughened glass as a minimum	As above
Hardware	As above	Standard	Standard	Externally fitted hardware that supports the panel in its functions of opening and closing shall be metal.	Externally fitted hardware that supports the panel in its functions of opening and closing shall be metal.	As above
Seals	As above	Standard	Standard	Standard	Seals with a flammability index of less than 5 as for Windows.	As above
Screening	As above	There is no bushfire requirement to screen to open-able doors. However, if screened, the screens shall be a mesh made of corrosion resistant steel, bronze or aluminium.	There is no bushfire requirement to screen to open-able doors. However, if screened, the screens shall be a mesh made of corrosion resistant steel, bronze or aluminium.	There is no bushfire requirement to screen to openable doors. However, if screened, the screens shall be a mesh made of corrosion resistant steel, bronze or aluminium.  Screen assemblies must be attached using metal fixings.	For Hinged and Sliding Doors both the fixed and open-able portions of doors are to be screened by a mesh with a maximum aperture of 2mm made of corrosion resistant steel or bronze.  Screen to be external and must be attached using metal fixings.	As above

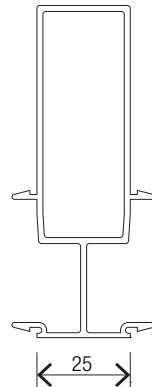
Option B (continued)

# FRAME COUPLERS

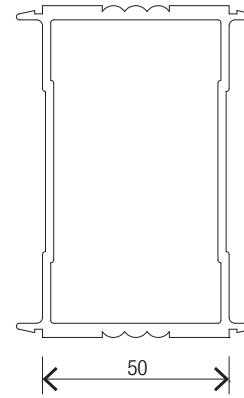
## (COMMONLY USED)



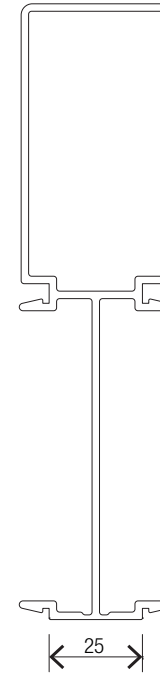
**P11808R**  
 • Heavy Duty Coupler



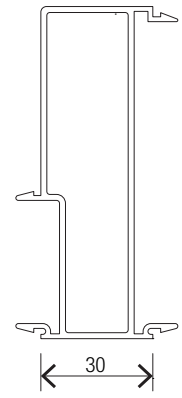
**D7708**  
 • Sliding Window  
 • Awning Window  
 • Casement Window



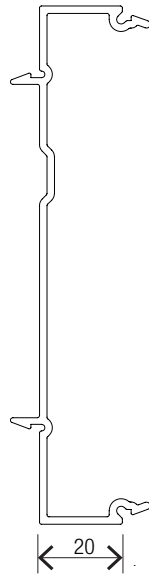
**D9681**  
 • Dowell Fixed Light  
 • Sliding Door



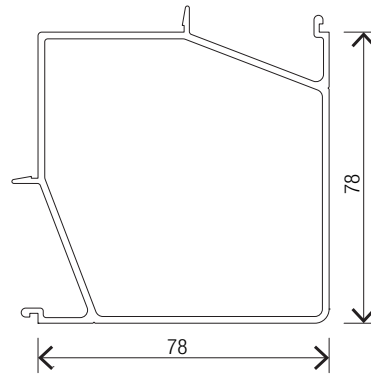
**D8266**  
 • Dowell Fixed Light  
 • Sliding Door



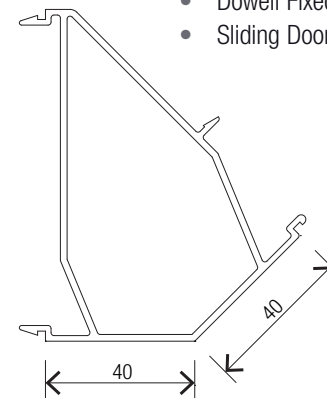
**D9867**  
 • Dowell Fixed Light / Sliding Door to Sliding, Awning & Casement Windows



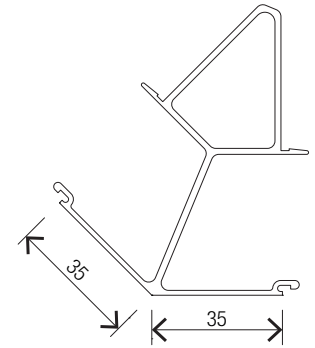
**D8599**  
 • 125-89 Coupler  
 • Hinged Door to Fixed Lite  
 • Hinged Door to Sliding Door



**D9722**  
 • Sliding Window  
 • Awning Window  
 • Casement Window



**D9763**  
 • Dowell Fixed Light / Sliding Door to Sliding, Awning & Casement Windows



**D9972**  
 • Sliding Window  
 • Awning Window  
 • Casement Window

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## Brick Courses Chart

Heights		Widths	
No. of courses	Height of brickwork	No. of bricks	Opening Width
1	86	1	250
2	172	1 1/2	370
3	257	2	490
4	343	2 1/2	610
5	429	3	730
6	514	3 1/2	850
7	600	4	970
8	686	4 1/2	1090
9	772	5	1210
10	857	5 1/2	1330
11	943	6	1450
12	1029	6 1/2	1570
13	1114	7	1690
14	1200	7 1/2	1810
15	1286	8	1930
16	1372	8 1/2	2050
17	1457	9	2170
18	1543	9 1/2	2290

## Brick Courses Chart - Cnt.

Heights		Widths	
No. of courses	Height of brickwork	No. of bricks	Opening Width
19	1629	10	2410
20	1714	10 1/2	2530
21	1800	11	2650
22	1886	11 1/2	2770
23	1972	12	2890
24	2057	12 1/2	3010
25	2143	13	3130
26	2229	13 1/2	3250
27	2314	14	3370
28	2400	14 1/2	3490
29	2486	15	3610
30	2572	15 1/2	3730
31	2657	16	3850
32	2743	16 1/2	3970
33	2829	17	4090
34	2914	17 1/2	4210
35	3000	18	4330

(1) Metric standard brick (230 x 110 x 76)

# BRICK COURSE CHART

The maximum allowable height for internal 90mm masonry is 2700mm. Refer to Section 3.3.1.3 and Section 3.3.1.4 of the Building Code of Australia. For heights above 2700mm, refer your project to a structural engineer.



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