Capral Automated Window Solutions
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Capral Automated Window Solutions provide a convenient and effective means to control your projection windows with the touch of a button.

By integrating the latest technologies from Lockwood - the leading brand in the Australian locking industry - with our market leading glazing systems, Capral Aluminium can provide an elegant yet flexible automated window solution.

Our awning windows can be fitted into a wide range of projects - from houses, schools, and shopping malls through to commercial multi-storey office towers. Wherever our windows are used, so can our Automated Window Solutions.

The system has the flexibility to be controlled in a number of ways - individually using a wall switch, a touch screen for a smaller building, or by a third-party CBUS or Building Management System. A rain sensor may also be fitted to automatically close the windows when it rains and open them back up when it stops, providing excellent peace of mind.

Key features of Capral Automated Windows Solutions:
• Available in a range of Capral window systems covering the Residential, Architectural, Commercial and Thermal Break markets.
• Specially designed components integrate the hardware into our systems rather than look like an add-on.
• Conforms with the BCA relating to Prevention of Falls from Windows.
• Allows the installation of large awning sashes using synchronised dual actuators.
• Touch Screen can control up to 31 actuators from a single point and allows grouping of actuators into zones.
• Rain sensors allow for automated closure and re-opening of windows.

Residential Solutions
For ease, functionality, secure and appeal for everyday living. Capral Aluminium has all bases covered for your home for all window and door requirements.

Commercial Solutions
Either triggered by a push of a button, or via a Building Management System (BMS), ventilation and passive cooling through the circulation of fresh air is the least expensive way to cool a building.

Architectural Solutions
For the designer project with that technological edge to set it apart, Capral Aluminium offers smooth clean line functional products that can link back into CBUS technology.

Public Building Solutions
Strong, secure and low maintenance, automation makes the operation of windows easier and safer than ever before.
Elevation Electric Window Actuator

Description
Window actuators can be installed in pairs that will cater for large or for heavier double glazed window systems. Elevation conforms to the Building code of Australia, relating to the “Prevention of Falls from Windows” when used in conjunction with approved window systems. Elevation allows for a generous window opening (300mm) but can also be restricted at 15mm increments and ultimately restrict the window opening to 125mm or less.

Window actuators can be connected to a Lockwood touch screen display and Zones, such as lounge, hall, bedroom, North and east facing can be easily set up.

Standards and Compliance

C-Tick Certified

IP30 Rated (if installed according to installation instructions)

DW2 Australian Window Standard (AS4145.3-2001)

Australian Window Standard for negative force strength pressure (AS4145.3-2001)

Reference notes

2 See relevant technical manual for fitting instructions to ensure that Elevation is suitable for your window type or size. Elevation is suitable for awning windows.

4 One Network adaptor is required to control your windows via a switch or CBUS system, refer to third party connections for more information.

Product Details

Cabling

Control Loom: 2m extend up to 300m (Twisted pair)
Power Loom: 2m

Chain Length
300 mm

Chain Limiting
Limit chain between 50-300mm @ every 10mm

Current
Standby Current 20mA
Maximum Peak Load 750mA

Dimensions
32H x 308L x 44D (not including sash bracket)

Endurance
12,000 Cycles

Environment
Operational temperature range 0° to +60°C

Humidity
90% @ 35°C

Materials
Furniture body: cast zinc.
Sash Bracket components: Cast 303SS
Chain: Stainless 304

Monitoring
Monitor Open Closed 15mm or 50%

Negative Holding force
220kg Applied force at chain

Noise Level
65dB @ Maximum window Load

Open/Close Force
9kg

Voltage
24-32VDC

Standards and Compliance

C-Tick Certified

IP30 Rated (if installed according to installation instructions)

DW2 Australian Window Standard (AS4145.3-2001)

Australian Window Standard for negative force strength pressure (AS4145.3-2001)
Elevation Electric Window Actuator

Alternatively you can also choose to control your windows with a standard wall switch or via any third party CBUS or Building management system.

Elevation is easy to install with the flexibility of adding additional windows at a later stage. Ultimate control is only a touch away with the option to instantly close all windows at once when leaving the house, or locking up for the night.

Applications
- Awning windows
- High out of reach windows
- Conveniently open single or a group of windows
- Commercial buildings
- Residential buildings

Window Actuator Features
- Actuators can be controlled individually or grouped into zones
- Actuator can withstand 220kg applied negative pressure*
- 9kg closing force ensures a tight window seal when closed
- Smooth chain movement
- 40 seconds Opening/closing time
- 300mm chain opening
- Strong, corrosion resistant stainless steel chain (grade 304)
- Field adjustable chain limiter. Limit chain between 50-300mm at every 10mm
- Quick clutch release Key for easy installation without power connected
- Connect and synchronise a pair of window actuators to one large window
- Ability to install actuator in multiple orientations including top and bottom chain exit
- Will cater for window sashes as short as 300mm high
- Can connect to touch screen display, standard wall switch or CBUS systems
- Network cabling can span up to 300m without voltage drop
- Connect and control up to 30 window actuators to a touch screen display
- Can connect multiple actuators (31 maximum) to a standard wall switch.

* Through sash fixing is required to reach this force.
Elevation Touch Screen Display

**Description**

The Lockwood Elevation™ touch screen display is an elegant Touch pad that’s been designed to control up to 31 Elevation window actuators. The touch pad can be programmed to open individual or groups of windows. You also have the option to name your windows or groups from a predefined list suitable for commercial or residential applications.

Window positions can be controlled to: open, close, move to a 50% or a venting position. The status of your window positions can be viewed at a glance throughout your building. You also have the option to instantly close all windows at once when leaving the house, or locking up for the night. The Lockwood Touch Screen display allows you to easily decide which window or group you would like to: open, half open, close or vent.

The Touch Screen Display also gives you the ability to connect up to four rain sensors and can be controlled to automatically close in the event of rain.

**Applications**

- Commercial Buildings
- Residential Buildings

**Touch Screen Display Features**

- 3.5” colour Touch Screen Display
- Control up to 31 windows
- 30 predefined window and group names
- 2 button touch, to control a window
- Live status of window position
- Instantly open or close all windows
- Pin code lockout option
- Synchronise an additional touch pad to the network
- Window obstruction status and warnings
- Control up to four rain sensors independently or grouped
- Easy installation with 4 wire control
- Emergency “close all” override from home button.

**Product Details**

<table>
<thead>
<tr>
<th>Cabling</th>
<th>Control Loom: 2m extend up to 300m (Twisted pair) Power Loom: 2m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current</td>
<td>Standby Current: 20mA Operating Current: 100mA</td>
</tr>
<tr>
<td>Dimensions</td>
<td>128H x 87W x 21D</td>
</tr>
<tr>
<td>Environment</td>
<td>Operational temperature range 0°C to +60°C</td>
</tr>
<tr>
<td>Finishes</td>
<td>White face with Silver trim</td>
</tr>
<tr>
<td>Humidity</td>
<td>90% @ 35°C</td>
</tr>
<tr>
<td>Materials</td>
<td>Keypad housing: PVC</td>
</tr>
<tr>
<td>Voltage</td>
<td>24-32 VDC</td>
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</table>

**Standards and Compliance**

- C-Tick Certified

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**Applications**

- Commercial Buildings
- Residential Buildings
Elevation Rain Sensor

Description
The Lockwood Elevation™ Rain Sensor has been specifically designed to work with the Elevation actuators and your touch screen display. Basic automatic "close all" function can be achieved or advanced functionality can be programmed.

Functions
Rain Sensors will be triggered by rain and automatically close the windows. Rain sensors can also be configured to re-open to original position when the rain has stopped. Rain sensors can be even further configured so that if rain comes from one particular direction i.e. east location only, windows in the east will close and the rest will remain open. The rain sensor also has the ability to differentiate between rain and dew with built in heating elements that dry up moisture build up.

Applications
• Automatically close windows in the event of rain
• Commercial Buildings
• Residential Buildings

Rain Sensor Features
• Connect up to four sensors per network
• Visual rainfall indicator on keypad
• Integrated heating elements to dry up dew or moisture
• Smart re-open function
• After rain has stopped “go to vent” function

Product Details

<table>
<thead>
<tr>
<th>Dimension</th>
<th>60H x 50W x 16D</th>
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<tbody>
<tr>
<td>Materials</td>
<td>Furniture body: Durable Acetal UV Stable Bracket: Stainless Steel 304</td>
</tr>
<tr>
<td>Finish</td>
<td>White</td>
</tr>
<tr>
<td>Voltage</td>
<td>24-32 VDC</td>
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<td>Current</td>
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<tr>
<td>Environment</td>
<td>Operational temperature range 0° to +60°C</td>
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<tr>
<td>Humidity</td>
<td>90% @ 35°C</td>
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<tr>
<td>Cabling</td>
<td>Loom: 2m</td>
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An Integrated Solution

Capral’s automated window control solutions offer an automated opening solution for awning windows in an elegant yet flexible package. These can be fitted across a number of our awning windows including:

- Urban wide frame residential awning window
- Urban Plus residential awning window
- Genesis architectural awning window
- 35 and 50 Series commercial awning windows in 400 and 425 Narrowline frames
- Futureline thermally broken awning window.

The automated window control solution incorporates actuators to open and close the window, a switch or keypad to operate the window, an optional rain sensor which can automatically close the window when it rains, and a transformer to supply the power. The system can be configured in a wide variety of ways to reflect the exact requirements of each house or building.

By integrating the actuator in a custom cover, the actuator is not visible giving a seamless appearance that you would expect in any architectural project. Incorporating two actuators on a single sash also increases the maximum width of sashes possible in our awning products.

As shown above, in the Urban wide frame residential awning, the window actuator is enclosed in an operator base and cover that hides the actuator.

In the majority of cases, the operator base will sit within the frame perimeter however in some products it will protrude past the jamb. In these cases end trims available.
## Components and Fitting Information

### Capral Extrusion and Component Details

<table>
<thead>
<tr>
<th>Material #</th>
<th>Description</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP14423</td>
<td>Elevation Winder - Operator Cover</td>
<td><img src="image1.png" alt="Image" /></td>
</tr>
<tr>
<td>EP14422</td>
<td>Elevation Winder - Operation Case</td>
<td><img src="image2.png" alt="Image" /></td>
</tr>
<tr>
<td>317142*</td>
<td>Elevation Winder - Operator End Cap</td>
<td><img src="image3.png" alt="Image" /></td>
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<tr>
<td></td>
<td>*Required on:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Genesis Awning</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Futureline</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 50 Series</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 35 insert sash</td>
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### Elevation Electric Awning Winder Components

<table>
<thead>
<tr>
<th>Material #</th>
<th>Description</th>
<th>Image</th>
<th>Material #</th>
<th>Description</th>
<th>Image</th>
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</thead>
<tbody>
<tr>
<td>317037</td>
<td>Actuator</td>
<td><img src="image4.png" alt="Image" /></td>
<td>317040</td>
<td>Network Adaptor</td>
<td><img src="image5.png" alt="Image" /></td>
</tr>
<tr>
<td>317038</td>
<td>Touch Keypad 3.5&quot;</td>
<td><img src="image6.png" alt="Image" /></td>
<td>317051</td>
<td>Sync loom (Cable)</td>
<td>No Image Available</td>
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<tr>
<td>317039</td>
<td>Rain Sensor</td>
<td><img src="image7.png" alt="Image" /></td>
<td>317052</td>
<td>Power Supply 1000mA</td>
<td><img src="image8.png" alt="Image" /></td>
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<td></td>
<td></td>
<td>317053</td>
<td>Power Supply 1500mA</td>
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