



Elevating comfort and preserving food quality at your iconic fresh fruit, vegetable, and specialty market.

Schinella's Prospect, SA

Project Address

62 Prospect Rd, Prospect SA 5082

Contractor & Installer

Simmonds Heating & Cooling

Equipment

4 x Climate Wizard Indirect Evaporative Air
Conditioning Units

Model: Climate Wizard **CW-H15**

CUSTOMER PROFILE

Schinella's supply quality fresh fruit and veg to our local community for over 70 years. We offer local and imported specialty foods; cheeses, continental goods, cured meats, nuts, condiments, sweets, artisan baked bread and fresh flowers, fish and homemade meals.

INDUSTRY

- Food market
- Food Processing
- Bakery

APPLICATION

- Stand-alone cooling
- Supplementary cooling
- Dedicated Ventilation
- Integration

Schinella's Your Local Market in Prospect, SA, is a well-known family-owned destination for fresh produce, specialty groceries, and an authentic market experience. Maintaining optimal conditions for both shoppers and perishable products is critical to the store's reputation and operational success.

To align with their values of quality, sustainability, and customer comfort, Schinella's turned to Seeley International's Climate Wizard technology to provide an energy-efficient, all-electric solution for standalone cooling, ensuring fresh air, controlled temperatures, and reduced energy consumption throughout the year.

Project Requirements

The primary goals of the project were to:

- » Deliver 100% fresh, filtered outside air to maintain indoor air quality for both shoppers and staff.
- » Provide energy-efficient cooling performance without relying on conventional refrigerated systems.
- » Control internal temperatures for both customer comfort and to support the longevity and quality of fresh produce.
- » Ensure moisture-free cooling, avoiding humidity build-up in the store.
- » Minimise power consumption and reduce operational costs, without compromising performance.

Proposed Solution

To meet the unique environmental and performance needs of the market, four Climate Wizard CW-H15 indirect evaporative coolers were installed, operating in standalone mode.

Key Performance Details:

- » Total Airflow: 4,400 L/s
- » Supply Temperature: 17.2°C (Ambient: 38.1°C DB / 19.1°C WB)
- » Standalone Cooling Capacity: 54.3 kW
- » Coefficient of Performance (COP): 7.5
- » Total Units: 4 x CW-H15
- » Moisture-free cooling year-round delivery of cool air with no added humidity

System Benefits:

- » 71% reduction in power demand compared to an equivalent refrigerated system.
- » Estimated energy savings of 34,000 kWh annually, contributing significantly to Schinella's sustainability efforts.
- » Improved shelf life for fruits and vegetables due to stable, low-humidity air, reducing spoilage and enhancing product quality.
- » Fresh air advantage improves the shopping experience, eliminating stale or recycled air.
- » Helps maintain odour-free, well-ventilated conditions across the market floor.

The Outcome

The Climate Wizard installation at Schinella's Prospect market has delivered tangible results:

» Enhanced Indoor Air Quality

Shoppers and staff enjoy a noticeably fresher, more comfortable indoor environment, with 100% outside air circulation, supporting health and wellbeing.

» Optimised Food Storage Conditions

Fresh produce, bakery goods, and other perishables benefit from temperature-stable, dry air conditions, helping extend shelf life and reduce waste.

» Significant Energy and Cost Savings

By shifting away from traditional refrigerated cooling, Schinella's has achieved a 71% power saving and projected annual energy savings of 34,000 kWh, significantly reducing their carbon footprint and operational costs.

» Reliability in Performance Year-Round

Even during South Australia's peak summer temperatures, the system delivers consistent 17.2°C supply air without adding moisture, keeping the market cool without compromising on efficiency.

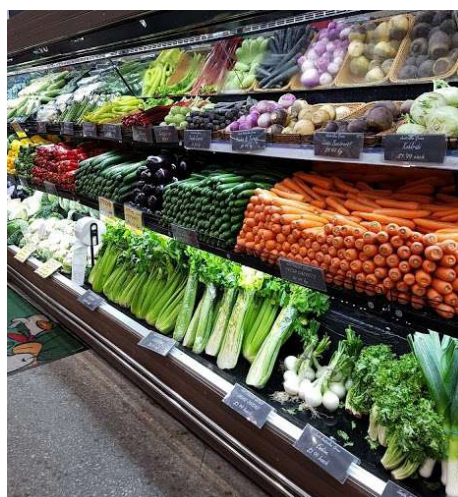


ASHRAE 0.4% Monthly Conditions (O'Connor Design Conditions) - Ambient - 38.1 °C DB / 19.1 °C WB / Indoor - 24 °C DB / 50% RH

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Dry Bulb | 41.7°C | 39.7°C | 37.5°C | 32.4°C | 25.6°C | 20.9°C | 19.8°C | 23.7°C | 28.0°C | 33.4°C | 37.3°C | 40.0°C |
| Wet Bulb | 19.9°C | 20.6°C | 18.6°C | 16.9°C | 14.3°C | 13.4°C | 11.6°C | 12.8°C | 14.5°C | 16.0°C | 18.1°C | 19.1°C |
| Dew Point | 5.6°C | 9.5°C | 5.7°C | 5.8°C | 5.4°C | 7.7°C | 4.3°C | 3.2°C | 3.3°C | 1.6°C | 4.3°C | 4.7°C |

4 x CW-H15 (4,400 L/s @ 80Pa Max. ESP) - Projected Performance for Stand-alone Cooling

| | | | | | | | | | | | | |
|-------------------------------|---------|---------|---------|--------|--------|---------|--------|---------|---------|--------|---------|---------|
| CW-H15 Supply Air Temp | 17.6°C | 18.6°C | 16.8°C | 15.6°C | 13.8°C | 13.6°C | 12.0°C | 12.5°C | 13.6°C | 14.5°C | 16.3°C | 17.0°C |
| Stand Alone Cap | 53.2 kW | 47.6 kW | 57.6 kW | 64 kW | 74 kW | 74.8 kW | 84 kW | 80.8 kW | 74.8 kW | 70 kW | 60.4 kW | 56.4 kW |
| Stand Alone COP | 7.4 | 6.6 | 8.0 | 8.9 | 10.3 | 10.4 | 11.6 | 11.2 | 10.4 | 9.7 | 8.4 | 7.8 |



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