Did you know?

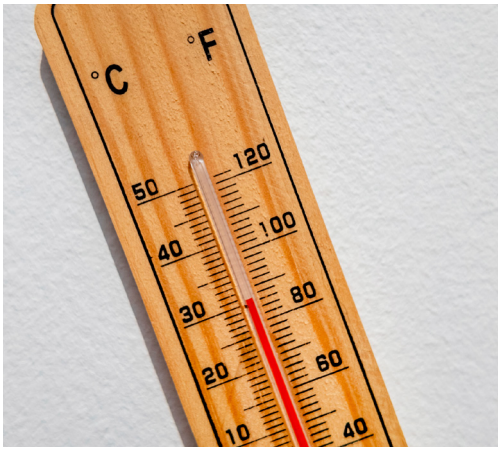
Tackling Overheating in Townhouses: Mitsubishi Electric Solutions

Overheating in townhouses is becoming a critical issue in New Zealand's housing market. With headlines like "A sauna without the fun" highlighting the problem, homeowners are demanding better solutions. Builders and developers now face the challenge of delivering energy-efficient homes that are also liveable and comfortable. Mitsubishi Electric's Air Conditioning and Lossnay Mechanical Ventilation Systems emerge as an innovative solution to this pressing issue.

The Problem: Overheating and Modern Housing

Modern, airtight housing designs are great for energy efficiency but can trap heat, leading to discomfort and health risks. Key factors contributing to this issue include:

- **Insufficient Ventilation:** Poor air exchange in airtight homes exacerbates overheating.
- **Urban Density:** Shared walls and limited cross-ventilation opportunities in townhouses amplify heat retention.
- **Climate Change:** Rising temperatures mean older designs are no longer fit for purpose.
- **Building Code Gaps:** While Clause H1 of the New Zealand Building Code addresses energy efficiency, it lacks specific overheating mitigation measures.



These issues lead to discomfort, reduced property values, and dissatisfied homeowners.

Did you know?

The Role of Council Bylaws

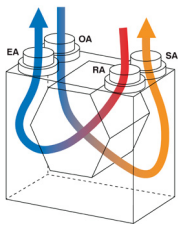
Local council bylaws often unintentionally contribute to the overheating problem. For example:

- **Window Opening Restrictions:** Building Code Clause F4 Safety from Falling requires barriers for windows with openings larger than 1000mm in width and sill heights under 760mm. While enhancing safety, these restrictions limit natural ventilation.
- **Noise Control Regulations:** Councils like Auckland enforce noise bylaws that deter homeowners from relying on open windows for cooling, especially in urban and high-traffic areas. This makes mechanical ventilation essential.
- **Security & Privacy Concerns:** High-density living often leads to closed windows to maintain security and privacy, further reducing airflow.

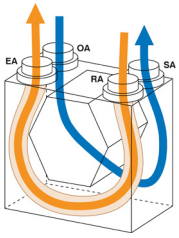
Introducing Mitsubishi Electric Lossnay Ventilation

The Mitsubishi Electric Lossnay Heat Recovery Ventilation System offers a ground-breaking solution to these challenges. It's designed to maintain optimal indoor air quality while working alongside air conditioning to manage temperature efficiently no matter the season. At the same time the system operates by introducing fresh, filtered outdoor air into the home, removing the need for window openings, and therefore any concern regarding outdoor noise, security, or privacy. Key benefits include:

- **Pre-cooling Maximises Efficiencies:** The unique Lossnay Core uses the energy from outgoing cooler indoor air to help pre-cool the warmer air coming in. This smart process saves energy and helps lower your running costs.
- **Automatic Free Cooling Mode*:** Ideal for cooling down a home that may have overheated during the day. Lossnay is able to detect when an indoor space is hotter than the temperature outside. The system will intuitively bypass the Lossnay Core to introduce cooler, fresher air into the home while extracting the stale, overheated indoor air.



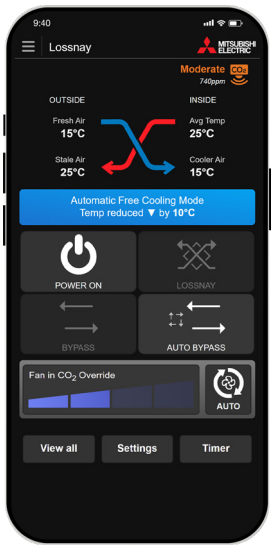
Heat Recovery Operation



Automatic Summer Bypass Operation

EA = Exhaust Air, OA = Outside Air, RA = Return Air, SA = Supply Air

Lossnay



OPTIONAL Wi-Fi CONTROL

- **Optional Advanced Wi-Fi Control:** Mitsubishi Electric Lossnay Wi-Fi Control makes the invisible, visible. With optional Lossnay Wi-Fi Control you can now monitor when your system is delivering you the above benefits.
  At the same time the App will also proactively remind you when it is time to clean your filters to maximise both cost efficient operation and health benefits.
- **Improved Air Quality:** The system manages CO_2 levels** and reduces indoor humidity, providing a healthier environment for occupants.
- **Energy Efficiency:** Lossnay supports sustainability goals by minimising energy loss.
- **Flexible Integration:** It can be seamlessly added to both new builds and retrofitted properties.

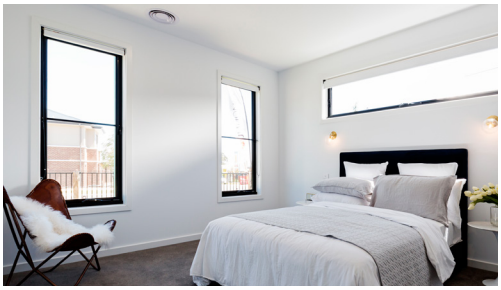
* In comparison to using a dedicated cooling device. The unit will continue to use a small amount of power to bring colder fresh air from outside.
** Available on LGH-RVS and LGH-RVX3 models only.

Did you know?

A Future-Proof Housing Solution

Investing in advanced ventilation like Lossnay isn't just about addressing current challenges. It's about preparing for the future. Climate change, urbanisation, and stricter regulatory demands will continue to shape housing design. Lossnay aligns with these trends, offering a sustainable, energy-efficient, and liveable solution.

Moreover, as awareness grows around the importance of indoor air quality, systems like Lossnay will become non-negotiable in modern homes.



Air Conditioning: Complements Energy Recovery Ventilation For Cool, Energy-Efficient Comfort

Managing indoor temperatures effectively in modern townhouses requires a combination of air conditioning and ventilation. Air conditioners provide precise temperature control, ensuring comfort year-round. However, many homeowners overlook upstairs spaces, where heat naturally rises and can make bedrooms uncomfortably warm.

Mitsubishi Electric OmniCore Multi Room Systems offer a smart solution by allowing multiple indoor units to connect to a single outdoor unit. This setup maximises outdoor space—particularly valuable in medium to high-density developments like townhouses and apartments—while maintaining a clean and uncluttered exterior aesthetic. With over 80 different indoor unit options, including high walls, floor consoles, cassettes, and ducted systems, OmniCore provides flexibility to customise comfort in every room.

While air conditioning effectively manages indoor temperatures, most systems do not introduce fresh outdoor air—a crucial factor in today's airtight homes.

An air conditioning system paired with a mechanical balanced pressure ventilation system, like Mitsubishi Electric's Lossnay Energy Recovery Fresh Air Ventilation, offers a rounded solution. Instead of relying on open windows, these systems bring in fresh air while expelling stale, overheated air, all while working with your air conditioner to recover energy to help keep your home efficiently cool.

Did you know?

Why Builders and Developers Should Act Now

- **Enhance Livability:** Improve comfort for residents, ensuring satisfaction and long-term value.
- **Meet Future Standards:** Stay ahead of potential updates to the Building Code by proactively adopting best practices.
- **Stand Out in the Market:** Differentiate developments as smart, sustainable, and resident-focused.

Builders, developers, and architects must prioritise ventilation systems like Lossnay to stay ahead of market demands. Updates to Clause G4 Ventilation could mandate mechanical ventilation in airtight homes. Proactively adopting these technologies not only ensures compliance but also enhances customer satisfaction and property value.

Mitsubishi Electric is leading the way with proven, high-quality systems designed to meet the needs of modern housing. By integrating Lossnay alongside air conditioning into your projects, you can set a benchmark for comfort, energy efficiency, and innovation.

Conclusion

The challenge of overheating in townhouses is real, but the solution is within reach. Mitsubishi Electric's Air Conditioning paired with a Lossnay Heat Recovery Ventilation System offers a comprehensive approach to creating energy-efficient, comfortable, and healthy homes. Builders and developers have an opportunity to lead the market by adopting this innovative technology, ensuring a cooler, more sustainable future for New Zealand's urban housing landscape.

Discover the Mitsubishi Electric Solutions here or enquire for a free quote today.

For more information please visit our website or call our Customer Service Team.
www.mitsubishi-electric.co.nz | 0800 784 382

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PLEASE LOOK AFTER THE ENVIRONMENT AND RECYCLE