

A large window with a view of a house and trees. The window is framed in dark wood and has multiple panes. The view outside shows a white house with a gabled roof, surrounded by lush green trees and bushes. The window is set in a room with brown curtains and a dark armchair is visible in the foreground.

Thermawood[®]
RETROFIT & NEW TIMBER DOUBLE GLAZING SYSTEMS

RETROFIT DOUBLE GLAZING FOR WOODEN WINDOWS

YOUR COMPLETE GUIDE

thermawood.co.nz

DISCOVER THE SUPERIORITY OF THERMAWOOD

ULTIMATE GUIDE TO RETROFIT DOUBLE GLAZING

In situations where double glazing and secondary glazing fall short, retrofit double glazing emerges as the winning solution. No longer do you need to contemplate replacing your cherished timber windows with aluminium or PVC alternatives. There's no need to settle for secondary glazing, seen as the sole cost-effective option. In fact, retrofit double glazing offers both effectiveness and affordability.

At Thermawood, our approach incorporates a unique, patented dry glazing system that propels window and door enhancement to the moisture buildup, ensuring the longevity of your existing timber windows surpasses that of any other timber window solution on the market.

Aesthetic considerations also favour retrofitting. By preserving your existing timber windows, you maintain the original architectural charm and character of your property.

The benefits are manifold: superior insulation, improved acoustics, enhanced security, reduced glare, and minimised moisture. This isn't just advantageous for your living space, but it's also environmentally responsible.

Now, you may be asking, "Is this even possible?"

When you entrust your retrofitting project to a skilled team of Thermawood double-glazing installers.

Are you curious why many property owners across New Zealand & Australia are turning to retrofit double glazing for their timber windows?

All your queries are answered in our comprehensive guide on retrofitting double glazing into wooden windows.

The more you grasp the process and its advantages, the better prepared you'll be to make the optimal choice for your windows.

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01

THE DIFFERENCE BETWEEN

**DOUBLE GLAZING, RETROFIT
DOUBLE GLAZING AND
SECONDARY GLAZING**

ENHANCING WINDOW FUNCTIONALITY

A Comparison of Double Glazing, Retrofit Double Glazing, and Secondary Glazing

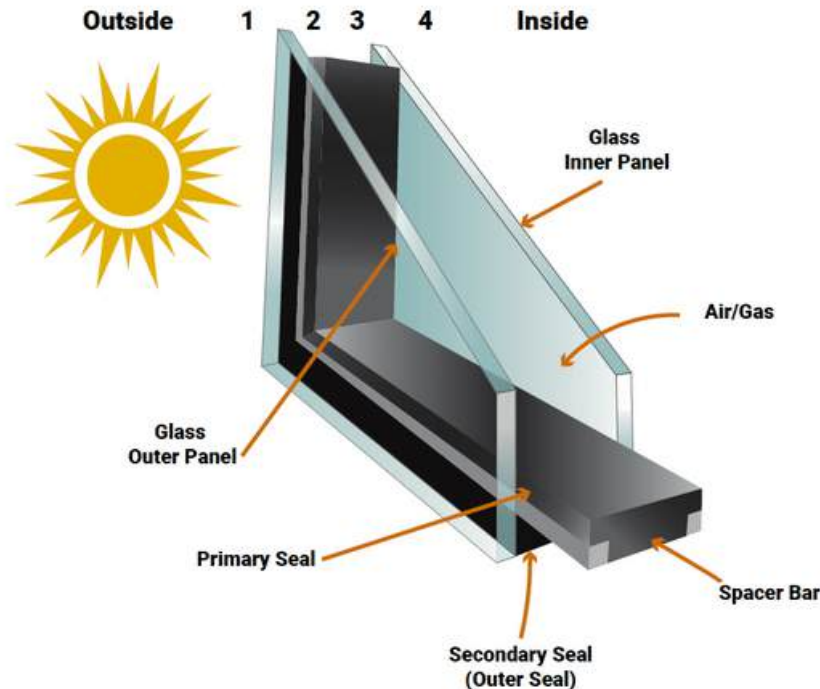


When it comes to improving your windows, there are several options at your disposal, each with its unique advantages. The common goal is to enhance energy efficiency, reduce noise intrusion, and deliver additional benefits such as minimising glare and fortifying your home against environmental damage, break-ins, or accidents.

However, the results in terms of quality, sustainability, and the range of features addressed may vary among these three window and door solutions.

Furthermore, each solution offers a different level of flexibility. Take, for instance, Thermawood's retrofit double glazing, where you have the option to select specialised glass or standard glass alternatives to suit your specific needs.

WHAT IS DOUBLE GLAZING?



Double glazing is an innovative solution that elevates your windows to new levels of performance.

Here's how it works: two glass panels are utilised, creating an insulated glass unit, or IGU. These panels are separated by a small space, typically 6mm to 18mm, which can be filled with an insulating gas like argon.

The magic lies in this dual-panel design and the hollow space, significantly boosting the window's insulating power. This translates to reduced heat loss during winter and a substantial reduction in unwanted solar heat gain during those sweltering summer months.

Consider this: an average home experiences 21% to 31% of heat loss through a standard single-pane glass window. Double glazing with increased thermal resistance means you'll need less energy to maintain your home's comfort, leading to lower energy bills.

But that's not all. The additional insulation also works wonders for acoustics, helping insulate against outdoor noise. For urban dwellers, the noise reduction factor alone makes double glazing an attractive choice.

Safety and security get a boost too. Two glass panels are a formidable barrier against intruders, and you can even opt for security glass to further fortify your defences.

For enhanced energy efficiency, you can pair double glazing with Low E glass, which not only reduces glare but also shields your indoor furnishings from UV damage.

In a world grappling with rising energy costs and growing sustainability concerns, double glazing is a powerful and practical choice. By updating your windows, you save money and contribute to a more sustainable future.

Yet, like all solutions, double glazing has its limitations. The primary hurdle is cost. It's the more expensive route to enhancing energy efficiency through your windows. The price varies based on the number of windows you're replacing and the type of glass you choose.

But here's the surprise: despite the cost, double glazing stands as a resounding yes! It outperforms other alternatives and justifies the investment, thanks to its unmatched performance and benefits.

While double glazing undoubtedly offers numerous advantages over secondary glazing, retrofit double glazing stands as the ideal solution, delivering the same sought-after benefits of a new double-glazed window system. You'll enjoy enhanced insulation, noise reduction, safety, and glare control—all without the significant drawbacks of new double-glazed timber windows: the cost and the potential for moisture buildup.

What often escapes the notice of property owners who opt for new double glazed windows is the design-related issue that hinders quick water evaporation. An insulated glass unit (IGU) must incorporate proper drainage within the system. Without it, water vapour gradually clouds the space between the two glass panels, creating an environment ripe for mould growth. Extended exposure to water or saturated vapour within the glazing channel is the primary culprit behind seal failures in IGUs, resulting in potentially costly repairs.

Another common concern with new double glazed windows is the necessity of removing the entire frame of your existing window. This process can inadvertently harm the cladding, internal lining, and other structural components of your home. That's why it's crucial to have a highly skilled team handle your double glazed window installation to ensure that your window solution doesn't inadvertently cause more harm than good.

Choose retrofit double glazing for a window enhancement solution that's on par with new double glazing, all while sidestepping the pitfalls of moisture issues and structural damage.



WHAT IS RETROFIT DOUBLE GLAZING?

Elevate Your Space with Retrofit Double Glazing

Retrofitting is the savvy choice when you seek to enhance your existing windows. With retrofit double glazing, your single glazed glass is upgraded to double glazed Insulated Glass Units (IGUs), all while retaining your current window frame.

This smart approach ensures you benefit from all the perks of double glazing, thanks to the introduction of high-quality IGUs. Whether you're a city dweller or rely on indoor climate control, this transformation significantly improves the comfort and quality of your living and working spaces.

The advantages extend beyond comfort. Retrofitting also fortifies security and safeguards your furnishings against UV damage, all at a fraction of the cost of new double glazing. It's a less invasive process that doesn't entail a complex, lengthy window replacement.





For homeowners and property investors, durability and long-lasting functionality are paramount. Plus, your windows retain their original character, making retrofit double glazing an ideal choice for heritage buildings.

Unlike some retrofit services, Thermawood's system offers an additional benefit: minimised moisture accumulation in your IGUs. Our patented dry double glazing system incorporates superior drainage, ensuring your windows and doors endure even the harshest environments. Tailored for existing timber windows, it allows water and vapour to escape, reducing the risk of double glazing failure.

The only limitation is that retrofitting is compatible only with current wooden windows. Beware of companies marketing their services as retrofit double glazing when they are offering secondary glazing.

This crucial distinction can't be overstated – secondary glazing falls far short of the superior benefits of retrofit double glazing. Know the difference and make an informed choice for your window conversions.

WHAT IS SECONDARY GLAZING?

Understanding the Limitations of Secondary Glazing



Secondary glazing, while offering some benefits, falls short of the insulation advantages provided by double glazing due to the absence of two critical components:

1. **No Argon Gas:** Secondary glazing doesn't allow the use of argon gas to enhance insulation.
2. **No High-Performance Glass:** High-performance glass options like Low E glass are incompatible with secondary glazing.

In secondary glazing, an acrylic sheet is affixed to the interior of your existing window, typically using magnets. While this approach does enhance energy efficiency and acoustic performance, it doesn't compare to the transformative effects of double glazing or retrofit double glazing.

Moreover, secondary glazing cannot incorporate specialised glass panels, such as laminated Safety Glass, which compromises the enhanced safety features of double glazing.

An additional concern is the challenge posed by sash windows. Secondary glazing can make it difficult to re-weight double-hung sashes, as the acrylic adds weight. To address this issue, a full panel is often installed over the entire window. This means you must remove the panel every time you wish to open the window, making ventilation a cumbersome process – far from the convenience you anticipated when investing in window improvements.

Lastly, an important limitation shared with traditional double glazing is the potential for moisture accumulation. The nature of secondary glazing can lead to condensation forming in the gap between the existing glass and the secondary glazing. This poses a significant problem for wooden frames, as condensation can drip down and damage the wood over time. It's crucial to be aware of these limitations when considering secondary glazing for your windows.



02

HOW DOES RETROFIT

DOUBLE GLAZING WORK

ELEVATE YOUR EXISTING TIMBER WINDOWS WITH THERMAWOOD RETROFIT DOUBLE GLAZING



Experience the remarkable benefits of double glazing without needing a costly window replacement. The Thermawood retrofit double glazing system is a versatile solution designed to fit seamlessly into your existing timber joinery, enabling the transformation of all your existing wooden windows and doors.

The process is both efficient and effective. It involves replacing your current single glass panel while slightly adjusting the existing frame. To secure the insulated glass unit (IGU) and maintain a draught- and acoustic-proof seal, a unique adapter, crafted from 100% recycled materials, is installed.

The final step involves fitting the window beading, specially designed to facilitate optimal moisture release. This patented dry retrofit design sets Thermawood apart, ensuring condensation-related issues are kept at bay.

Timber windows boast inherent advantages. Wood, at the cellular level, naturally serves as a thermal insulator, thanks to the air pockets within the timber. These micro air pockets also help dampen acoustic vibrations, enhancing your indoor environment.

Unlike conventional double-glazed windows that may develop moisture issues in a few years, our dry system provides lasting assurance against such concerns. Moreover, secondary glazing can be problematic with timber windows as it may lead to water accumulation at the base of the window, directly affecting the wooden frame.

Retrofit double glazing offers a significant advantage in preserving existing timber joinery while mitigating moisture and mould risks, as timber windows inherently outperform aluminium alternatives in terms of insulation.

By replacing your current glass panel, converting the existing frame, and installing sealing and double glazing, you'll create a more comfortable home, improve indoor air quality, and simultaneously enhance your property's value—all without the extended installation times and higher costs associated with new double glazing.



03

HOW EFFECTIVE

IS RETROFIT DOUBLE GLAZING?



Our Thermawood retrofit double glazing system is your key to a home that's warmer, quieter, and better for your furnishings. By upgrading your windows, you can experience a remarkable improvement in insulation and noise reduction. Plus, say goodbye to concerns about your soft furnishings fading away.

We're dedicated to ensuring that your retrofit experience is seamless and comprehensive. A truly thermally efficient window should leave no room for draughts. That's why we incorporate draught and acoustic seals on all our windows, surpassing the standard set by other companies.

Our mission is to create a tranquil, comfortable indoor environment for you. With Thermawood, you can expect curtains that stay perfectly still and enjoy the serenity of a quiet home. Unlike other companies that merely apply seals onto the window structure, we take it a step further by machining the sealing directly into the window. This means you won't have to worry about seals falling off when you open your windows.



When it comes to noise reduction, our retrofit double glazing system delivers excellent results, ensuring you have a peaceful living space.

For added safety, you have the flexibility to choose different types of safety glass. Safety glass is crafted from laminated glass, renowned for its exceptional resilience against breakage. Even in high winds or when subjected to blunt force, intentional or accidental, it's highly resistant to cracking. While laminated glass may eventually form cracks with repeated, excessive force, it remains challenging to shatter into pieces. Pair this with the formidable barrier of two glass panels in double glazing; breaking in becomes a highly challenging endeavour. Your safety and peace of mind are our top priorities.

04

WHAT IS THE BEST RETROFIT

SOLUTION AVAILABLE TO ME?

Discover the Ultimate Retrofit Double Glazing Solution.

When it comes to DIY draught-proofing, the significant concern is its longevity. Attaching materials to the edges of your doors and windows, unless professionally machined, often results in these additions falling off. In many cases, foam seals, for instance, tend to dislodge after just one window opening. This can be exceptionally frustrating, as you invest time and effort, along with the cost of materials, only to discover that the functionality you sought is compromised.

To work around this, people frequently put up draught seals in the winter and remove them in the summer to allow for ventilation. Not only is this practice cumbersome, but it also lacks practicality. This is particularly true because draught-proofing your windows and doors represents just one facet of the overall issue.

However, there's an alternative method where:

- Seals remain inconspicuous
- Windows and doors remain undamaged
- You avoid the problem of windows sticking shut

The best part is that, when implemented as part of a comprehensive window system, you can address not only draughts but also enhance thermal insulation and soundproofing. It's an all-inclusive solution, reducing costs across the board because everything is done correctly from the outset.

Furthermore, you get to check off a multitude of tasks on your home's performance improvement list, contributing to your overall peace of mind. Refer to the next page for a detailed explanation of how this innovative approach works.

05

**DRAUGHT PROOFING
IS ONLY ONE SMALL
PART OF THE PUZZLE**

**THERE'S MORE TO INSULATING AND
SOUNDPROOFING YOUR HOME**

Draught-proofing is a crucial step in addressing one aspect of home insulation by tackling the intrusion of cold air through small cracks and gaps. However, even with comprehensive draught-proofing services applied to every window and door in your home, you'll still encounter insulation challenges. That's because cold air isn't the sole contributor to the issue; a more significant problem lies in heat loss through your window glass. This issue persists year-round, as it also pertains to unwanted heat gain during the summer months.

Glass, being a natural conductor of energy, absorbs thermal energy and subsequently emits heat to maintain an energy balance. This process is continuous. When you heat your home, a portion of that warmth is absorbed by the glass, which then emits heat energy outside. Remarkably, this can account for up to 40% of your overall thermal heat loss. During the summer, thermal UV rays interact with your glass. The glass absorbs this energy and radiates it indoors. This explains why you encounter overheating issues even if you employ window dressings to block sunlight. It's worth noting that window dressings primarily block light, not heat.



Furthermore, when addressing insulation, it's crucial to consider not only the unwanted movement of thermal energy but also the transmission of sound waves. Vibrations from heavy vehicles, trams, aircraft, and everyday traffic, coupled with the noise from lawnmowers and neighbouring disturbances, collectively contribute to noise pollution. This issue goes beyond mere annoyance, as it can disrupt your peace, impact your health by interfering with sleep, elevating blood pressure, and over time, leading to hearing impairment.



Draught seals offer a partial solution to your overall insulation challenge, but addressing this aspect alone leaves approximately 80% of the problem unresolved.

That's why at Thermawood, we have taken a different approach to draught sealing windows and doors. We don't just come out and draught proof a house. You can find people to do this, and they can do an excellent job, but because they have to...

- remove the windows and doors,
- take them apart,
- and put on the seals,

It can end up being really expensive for the results you get.

Our approach integrates draught sealing within our patented Dry Retrofit Double Glazing System, which effectively insulates the entire window or door.

Here's how it works:

We double glaze your windows by replacing the single pane of glass with an insulated glass unit, customised for each area of your home to meet your specific insulation and soundproofing needs. We're passionate about efficiency, so we focus on what you truly require, saving you money and providing a tranquil, cosy, and drier home.

But the most exceptional aspect concerning your draught problem is that, during our retrofitting process, we machine draught seals directly into the window or door. No two windows or doors are identical, with variations in movement, shifted frames, sashes, curves, or gaps. Our approach involves assessing each window or door during the double glazing retrofit, with the sashes removed or the door disassembled as needed. We then machine the seals to ensure a perfect fit.



For casement windows, we employ special tooling to align the frames and sashes, levelling everything to eliminate gaps and problem areas. The seals are securely bonded and affixed into the window, becoming an integral part of the frame. Once the windows are repainted, the draught seal becomes virtually invisible, seamlessly blending with the existing windows. Your windows will open and close without sticking, and the seals will remain firmly in place. This isn't a short-term fix; it's a solution designed to last for generations. That's the level of quality we invest in our work.

For double-hung windows, we employ a similar process, machining in draught seals designed to work seamlessly with the sliding mechanism of double-hung windows, ensuring smooth operation with the sashes.

As for doors, we utilise high-quality rubber draught seals, identical to those used for windows, contributing to enhanced acoustic performance. These rubber seals are precisely machined into the wood, creating an imperceptible presence. We match the contour of the door to the seal's, forming a comprehensive seal extending across the entire door. What sets our draught seals apart is our utilisation of specially designed tooling, engineered in-house, enabling us to machine the seals into the timber. After all, what's the point of making a considerable effort if gaps persist, or if the work ends up damaging your windows or doors? Why settle for a partial solution, leaving issues with thermal insulation and noise pollution unaddressed?

What sets us apart is our integration of draught sealing within our innovative Dry Retrofit Double Glazing System, which provides comprehensive insulation for your entire window or door.

06

PRESERVING HERITAGE

**UNRAVELLING THE CHALLENGES
FACED BY HERITAGE PROPERTY
OWNERS**

In the heart of Melbourne, Sydney, and various historical pockets across New Zealand & Australia, a tapestry of heritage overlays weaves through the older districts. For those fortunate enough to own heritage properties, a unique set of challenges arises, particularly concerning the preservation of heritage windows. These windows, often integral to the character of the building, present limitations on alterations due to their heritage status.



At Thermawood we understand the delicate balance between preservation and modernization. Unlike the stark appearance of aluminium or PVC windows, our solutions are crafted with heritage in mind. Our expertise lies in seamlessly retrofitting heritage windows without compromising their aesthetic integrity. Once we've completed our work, it's almost as if we were never there.

Our attention to detail is evident in every aspect of the retrofitting process. The beads, meticulously aligned at the same angle as the old putty, seamlessly integrate into the heritage window. When we rebate the frame for the double-glazed unit, the angle of the beads harmoniously mirrors the original putty. This isn't an add-on or secondary glazing – it's a fully incorporated, properly-sealed double-glazed insulated glass unit nestled within the heritage window.



For heritage property owners contemplating renovations, our solutions offer a gateway to modern comforts while respecting the historical significance of their dwellings. Whether opting for a partial renovation or a more extensive project, Thermawood ensures that the heritage front remains untouched, mirroring the approach seen on projects like The Block.

Our commitment to innovation extends beyond preservation. We bring old heritage windows into the 21st century, providing enhanced insulation, noise reduction, and draught-proofing.

In the intricate dance between past and present, Thermawood emerges as the partner of choice for heritage property owners, bridging the gap between tradition and contemporary living. Welcome to a future where heritage meets innovation, and every window tells a story of seamless evolution.

07

DISCOVERING THE HIDDEN HERITAGE

UNVEILING THE SURPRISES OF
PROPERTY OWNERSHIP.



in the realm of property ownership, there's a fascinating twist that occasionally unfolds – the unaware ownership of a heritage-listed property. Surprising as it may seem, some individuals may find themselves in possession of historically significant structures without realising their unique status.

This lack of awareness becomes particularly crucial when property owners are considering modifications or renovations. Uninformed actions in a heritage-listed property can lead to unintended consequences. However, the challenge lies not only in the potential pitfalls but also in the solutions available to seamlessly blend modern comforts with historical preservation.

Thermawood is the pioneer in a specialised field that often remains undiscovered. As the sole company offering our unique heritage window retrofitting services, we find ourselves in the position of selling a well-kept secret. Many property owners, unbeknownst to them, may be sitting on the potential to elevate their living spaces without compromising the heritage value.

It's not uncommon for us to encounter individuals at Home Shows who express disbelief, exclaiming, "**We've been told that what you do can't be done.**" Our mission goes beyond retrofitting heritage windows; it involves spreading awareness that there are innovative solutions available for heritage property owners.

We pride ourselves on being the torchbearers of a transformational approach that not only respects the historical significance of heritage-listed properties but enhances their functionality for contemporary living. As we continue to unveil the possibilities, we invite property owners to step into a realm where heritage meets innovation, and every window holds the potential for a seamless blend of the past and the present. Welcome to a world where the hidden heritage becomes a canvas for modernization, with Thermawood leading the way.



08

NAVIGATING HERITAGE WINDOW CHALLENGES

A GLIMPSE INTO PAST SOLUTIONS

Before the advent of Thermawood's groundbreaking retrofit double glazing, heritage property owners explored various avenues to address the challenges posed by ageing windows.

Some opted for draught seals, a practical solution that helps combat draughts, enhancing insulation and comfort within the space. While effective in mitigating draughts, draught seals may fall short of providing comprehensive insulation benefits.

Another approach was the adoption of secondary glazing. However, the aesthetic appeal and operation of secondary glazing often left much to be desired.

Many heritage property owners found themselves grappling with the compromise between functionality and visual harmony.

Additionally, some homeowners resorted to the installation of double windows, introducing a secondary window within the original frame. While this method achieved notable acoustic insulation benefits, the visual impact on the heritage window's appearance was undeniable.



Thermawood is a transformative solution that eclipses these traditional approaches. Our retrofit double glazing not only addresses draughts but goes beyond, providing comprehensive insulation benefits. Unlike secondary glazing, our system seamlessly integrates into the heritage window, maintaining its authentic appearance. The result is a harmonious blend of heritage aesthetics and modern functionality.

As we pave the way for a new era in heritage window solutions, Thermawood stands at the forefront, offering property owners a chance to preserve the charm of the past while enjoying the comforts of the present. Welcome to a future where heritage windows are not just a piece of history but a canvas for innovation and enduring beauty.



09

NAVIGATING HERITAGE GUIDELINES

**INSIGHTS FROM COUNCILS AND
HERITAGE AUTHORITIES**



In the past, councils and heritage authorities often recommended traditional solutions such as secondary glazing or film for heritage property owners grappling with window-related challenges. However, the landscape has evolved, and a groundbreaking alternative has emerged – Thermawood's retrofit double glazing.

As pioneers in our field, we recognized the need to collaborate with councils and heritage bodies to introduce our transformative solution. The reality is that councils and heritage authorities don't typically endorse specific companies or products. Instead, they offer property owners a range of options and ideas to explore.

Our engagement with councils and heritage bodies has been instrumental in building awareness of our existence and the unique benefits we bring to heritage window preservation. We are proud to share that Thermawood holds heritage approval, a testament to our commitment to working within the guidelines set forth by councils and heritage authorities.

For properties under a Heritage Overlay, the general advice often revolves around preserving existing windows rather than replacing them. The process for such work is usually straightforward, with an emphasis on maintaining the heritage aesthetic. However, for listed properties, each job necessitates its own approval, evaluated on its individual merits. Thermawood has successfully obtained approval for every listed property project, showcasing our ability to align with the stringent criteria set by heritage authorities.

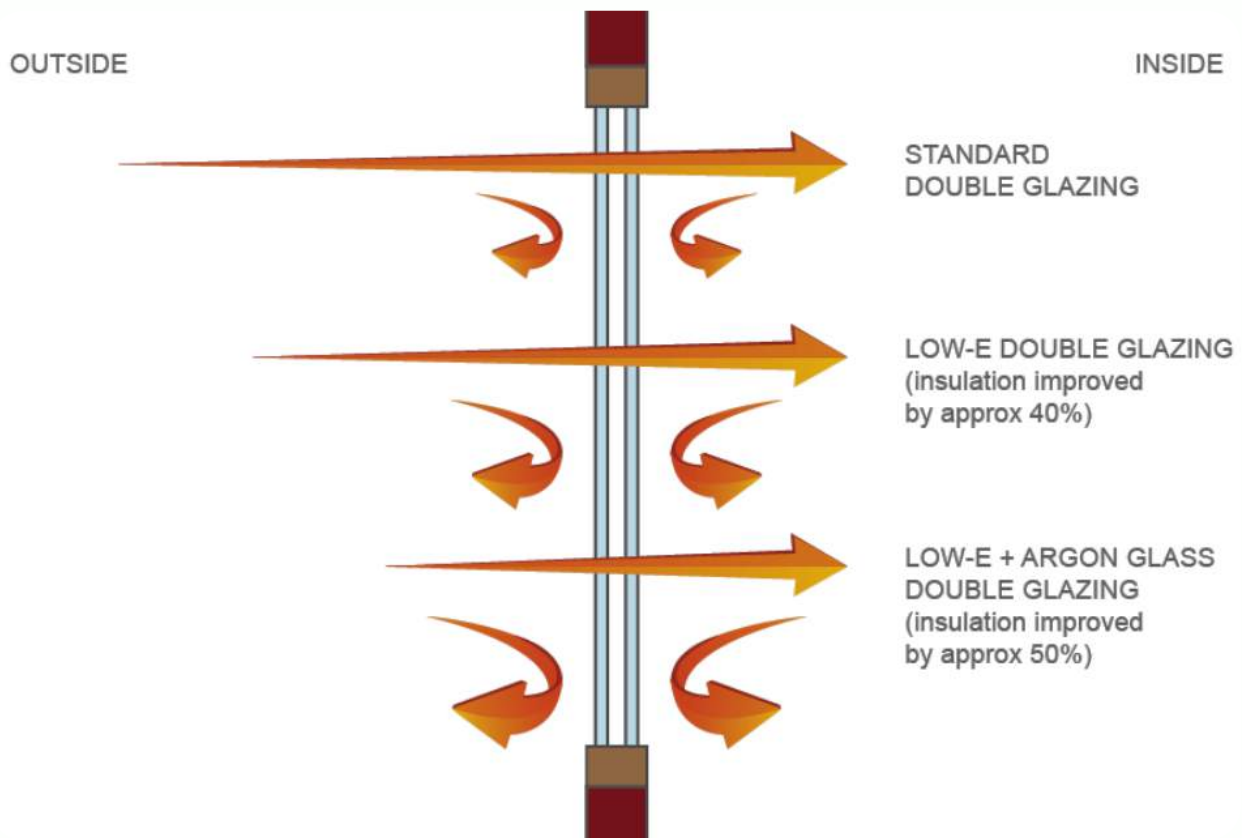
In essence, our collaboration with councils and heritage bodies extends beyond mere approval – it's about fostering a shared understanding that preservation and innovation can coexist. Thermawood stands as a beacon of possibility, offering heritage property owners a solution that not only meets stringent guidelines but elevates the performance of heritage windows for generations to come. Welcome to a future where heritage preservation meets cutting-edge technology with Thermawood leading the way.



10

ELEVATING HERITAGE WINDOWS

**TAILORED SOLUTIONS FOR
VARIED CHALLENGES**



Heritage windows bring timeless charm, but they also present unique challenges, with noise and insulation topping the list. At Thermawood, we specialise in crafting tailored solutions that go beyond the ordinary, addressing each window's specific needs.

Noise intrusion is a prevalent concern, especially in heritage properties. To combat this, we leverage acoustic glass, significantly reducing external sounds and creating a quieter, more comfortable living space. Insulation issues are often exacerbated in heritage properties, especially when the layout is not optimised. We counter this by incorporating Low-E glass with argon gas and acoustic glass within the same unit, ensuring optimal insulation and noise reduction.



At Thermawood, we approach every window with a keen understanding of its individual requirements. Whether it's noise, insulation, security, or a blend of factors, our goal is to tailor the double glazing solution per room. We invest time in assessing each window and room with the customer, understanding specific challenges such as overheating, draughts, window operability, and the potential addition of fly screens.

Our commitment to quality extends beyond customization. Before embarking on any retrofit, we conduct a comprehensive assessment of the existing windows, looking for signs of rot, water penetration, and the condition of hardware. If replica heritage hardware is needed, we explore the available options.

Transparent communication is at the core of our ethos. Our quotes are detailed and robust, itemising any extras such as hardware, ropes, or additional items. We provide a duplicate assessment to the customer, ensuring a shared understanding of the tailored solutions proposed for each window and room.

At Thermawood, we don't retrofit windows that aren't up to the task. We prioritise a thorough evaluation to ensure the longevity and effectiveness of our solutions. Welcome to a world where heritage windows not only retain their timeless charm but also embrace modern functionality with Thermawood's tailored approach.

11

PRESERVING HERITAGE ESSENCE

**REDISCOVERING ORIGINALITY
WITH THERMAWOOD**

Preserving heritage glass is a delicate art, especially when dealing with leadlights.

One of the distinctive features of heritage windows lies in their original hardware, and at Thermawood, we understand the significance of maintaining that authenticity. If original hardware is missing, we have you covered.

Our extensive list of heritage hardware includes options in brass, satin chrome, and various finishes, ensuring a comprehensive selection for homeowners seeking to replicate the original charm of their windows. Particularly with double-hung windows, where a slimmer lock is required due to our deeper rebate cut, we seamlessly replace locks while preserving the window's authentic aesthetic.



At Thermawood, our approach involves cutting around the old glass during removal, ensuring it remains intact. If you have heritage glass, rest assured – we can preserve it. For leadlights, our process involves gently removing them, allowing a leadlighter to refurbish them to their former glory. Once restored, we place them securely within the double glazing, extending their life considerably.

This commitment to preservation extends beyond aesthetics; it's about encapsulating the essence of heritage within every window. There is virtually nothing we can't achieve within the window space, and our solutions align with the meticulous standards upheld by heritage enthusiasts.

At Thermawood, we don't just retrofit windows; we craft timeless transformations that honour the past while embracing the future. Welcome to a world where heritage windows not only endure but thrive with Thermawood's meticulous attention to detail and preservation expertise.



12

PRESERVING THE STRENGTH OF HERITAGE:

**A TESTAMENT TO TIMELESS
MATERIALS**



In the realm of heritage windows, there's a profound truth – the original materials used were of unparalleled quality and durability. At Thermawood, we recognize the enduring strength of these materials and leverage them to ensure windows stand the test of time.

Consider a heritage window, standing resilient after 100 to 140 years. The timber used in its construction is often old-growth timber, renowned for its robust nature and longevity. Unfortunately, such timber is a rarity today, as we've exhausted the world's supply. Yet, within these heritage windows lies a treasure trove of materials that surpass the resilience of contemporary alternatives.

Preserving these original materials isn't just about retaining the aesthetics of the past; it's a practical choice rooted in the inherent strength of the materials. When Thermawood completes its transformative work, the result is a heritage window poised to endure for another century. It's not merely a restoration; it's a preservation of heritage, ensuring that the legacy of these windows lives on, robust and timeless.

Welcome to a future where the strength of the past meets the innovations of the present, creating heritage windows that don't just survive but thrive for generations to come. With Thermawood, the story of heritage is one of enduring strength and timeless elegance.

13

PRESERVING THE INTEGRITY OF HERITAGE:

**THE ADVANTAGES OF REUSING
ORIGINAL TIMBER**

When it comes to heritage windows, there's an intrinsic value in retaining the original timber frame that surpasses the benefits of replacing it with new timber. As a joiner with a deep appreciation for craftsmanship, I can attest to the numerous advantages of preserving the authenticity of these time-worn frames.



First and foremost, the original timber fits the frame – a seemingly simple yet crucial factor. Fitting a new frame or sash into an existing opening poses numerous challenges. Settlement, subtle movements, and variations in squareness are inherent in any structure, making the task complex. The original timber, marked with dings and bangs acquired over decades, effortlessly conforms to the unique contours of the frame. This character, though imperfect by conventional standards, tells a story of a window that has stood the test of time.

At Thermawood, we don't just retrofit windows; we honour their heritage. We believe every window tells a story of enduring craftsmanship and character.

As a joiner, I understand the intricacies of this process. The original timber may bear nicks and marks, but it is precisely these imperfections that contribute to its charm. Whether it's a section that slid past a lock for a century or colonial bars with a distinctive appearance, these details become part of the window's narrative. When the pieces come back together, they form a harmonious whole that fits seamlessly into its historical context.

Attempting to introduce something new into an old opening is not just arduous; it disrupts the visual harmony of heritage windows. The contrast between heritage timber and its modern counterpart is evident, even with expert craftsmanship and meticulous painting. There's a distinct beauty in the authenticity of the original, imperfect timber that cannot be replicated.

14

**IS POOR DESIGN AN
ISSUE WITH ANY
STYLE OF HERITAGE
WINDOW**

FROM ONE PERIOD TO THE NEXT?

ELEVATING HERITAGE FUNCTIONALITY

Dispelling the Myth of Poor Design

In the realm of heritage windows, functionality is often attributed to poor design, but the reality is quite different. Heritage windows typically fall into two categories: double-hung or casement windows. The primary issue affecting their performance is not inherent design flaws but rather a lack of maintenance.



For casement windows, a common misconception arises when people observe gaps at the bottom, leading to draughts. While some may attribute this to a twisted sash, it's often the house settling, causing the frame to twist. Replacing the sash with a new one may not resolve the issue. At Thermawood, our innovative draught-seal approach, seamlessly machined into the window (no adhesives), allows us to identify and address these gaps effectively, eliminating draughts.

Similarly, double-hung windows, if properly maintained, function exceptionally well. However, when we encounter them, the top window is frequently painted shut after years of neglect. Our meticulous process involves stripping away decades of paint, restoring the windows to their intended operability.



By addressing the consequences of lack of maintenance, we ensure that heritage windows operate as they should. When restored to their original condition, double-hung windows exhibit smooth operation—they come down and close seamlessly, a testament to their well-crafted design.

At Thermawood, we don't just retrofit windows; we revive their functionality and bring them back to life. Welcome to a future where heritage windows retain their timeless charm and operate as efficiently as they did in their prime. With Thermawood, the narrative shifts from poor design to a celebration of craftsmanship and functionality.

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PRESERVING HERITAGE WISDOM

**A GUIDING LIGHT FOR WINDOW
RENOVATION**

With heritage windows, a valuable piece of advice stands tall: "Don't replace - Retrofit " Before embarking on any window-related endeavours, take the time to educate yourself and understand the true potential of these timeless elements.

Double-hung windows, often a source of trepidation for homeowners, are deceptively simple. To appreciate their functionality, one must first understand their intricacies. At Thermawood, we don't just restore windows; we demystify their workings. Drawing from years of experience, including time spent in England refurbishing heritage homes, we've come to intimately know these windows—how they operate, their nuances, and what it takes to bring out their true potential.

It's a common misconception that demolishing and replacing is the only solution. Instead, consider the wealth of knowledge available before tearing into your windows. Our franchisees, armed with the insights gained over the years, consistently astound customers with the transformation of their double-hung windows. The key lies in understanding, appreciating, and preserving the inherent beauty and functionality of these heritage treasures.

So, before you wield the sledgehammer, arm yourself with knowledge. Learn about the unique characteristics of your heritage windows, and you might discover a world of possibilities that renovation, not demolition, can unlock. At Thermawood, we are not just preserving windows; we are preserving heritage wisdom, one renovation at a time. Welcome to a future where education guides preservation, and heritage windows stand as testaments to enduring craftsmanship.

READY TO EXPERIENCE THE THERMAWOOD DIFFERENCE?

Contact us today for more information on transforming your windows for a better tomorrow.

bit.ly/GetThermawood-NZ

