



STORMGUARD BY NORDAN

THE MOST UNIQUE WINDOW - SUPPLIED WITH A 30-YEAR WARRANTY

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30-YEAR WARRANTY

The StormGuard has the best track record in Europe which is why NorDan are launching a 30-year warranty for the operation of the window and its handles.

NorDan have manufactured the StormGuard window since 1962 with more than 8 million units sold. Of the many millions of StormGuard windows across Europe, only a handful have suffered with maintenance issues.

The StormGuard has a unique hinge system which uses a simple shoot bolt system instead of the usual complicated hinge gearing you find with tilt and turn windows. The simplicity of the shoot bolt system offers an incredibly robust, low-maintenance, high-performance product with a 60+ year lifecycle.

The StormGuard warranty is offered in addition to the standard 30-year warranty which covers all NorDan products against fungal attack, decay and rot.

User benefits

- › Maintenance
- › Robustness
- › Secure 7 point locking system

Performace benefits

- › 30-year warranty
- › Passivhaus air tightness
- › Embodied carbon
- › U-values
- › Acoustics

Application benefits

- › Safety & security
- › Large number of combination and variation of product
- › Certified from a large number of institutes





NorDan is pleased to introduce a new 30-year warranty exclusive to the StormGuard window product. The warranty offers peace of mind and instils confidence in the product's quality and durability.

This exceptional warranty demonstrates our commitment to delivering the highest-standard operational components and hardware in the market.

What's Covered Under the 30-Year StormGuard Warranty?

Our StormGuard warranty covers all operational components including:

- Internal gearing/mechanisms
- Locks
- Product handles
- Window frames against fungal attack, decay and rot
- Gaskets

If any of these components are found to be defective within the warranty period, we will replace them on a supply-only basis, completely free of charge.

What's Not Covered?

While our StormGuard warranty provides extensive coverage, there are a few exclusions to note:

- Glass (covered by the standard glass manufacturer warranty)

Important Information

For StormGuard products only, the 30-year StormGuard warranty supersedes the 10-year warranty offered by NorDan on other products.

How to Make a Claim

Please get in touch with our customer service team to make a warranty claim or for any inquiries regarding your StormGuard product. We are committed to resolving any issues promptly and efficiently.

Contact Us

NorDan UK Ltd
Customer Service
01506 499132
customer.service@nordan.co.uk

Thank you for choosing NorDan UK's StormGuard products. We are confident that our 30-year StormGuard warranty will provide you lasting assurance and satisfaction.

NORWEGIAN STORMGUARD

**NorDan's flagship window,
continuously improved since 1962.
Inward opening operation with
class leading performance and
longevity.**

Advanced and easy to use, the StormGuard tilts for everyday ventilation and turns to allow access to the outside glass for cleaning safely from the inside. The advanced mechanism is the result of many years of product development. The window has three handles and seven reinforced steel locking points. All ironmongery is located safely behind the weather seal gasket for greater weather performance.

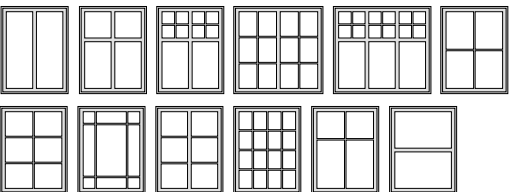
PERFORMANCE SPECIFICATION

Watertightness: E2100 (2100 Pa)	Security PAS 24:2022
Air Permeability: Class 4 (600 Pa)	Operating Forces: Air Tightness <0.1 @ 50Pa
Windload: Class C5 (2000 Pa)	U-value 1.2: Double glazed unit
Exposure Category: 2000 Pa	U-value 0.8: Triple glazed unit

Test performance for (Width x Height): 1230 x 1480 mm


EXAMPLES OF GLAZING BARS, TRANSOMS AND MULLIONS


Read more on page 39.







Measure	 Aluclad
Frame Width	113mm
Min Width	488 mm
Max Width	2 188 mm
Min Height	488 mm
Max Height	2 588 mm
Width + Height	Max: 3 500 mm
Sash Weight	Max: 130 kg

Measure	 Aluclad
Frame Width	100 mm
Min Width	372 mm
Max Width	2 188 mm
Min Height	388 mm
Max Height	2 588 mm
Width + Height	Max: 3 500 mm
Sash Weight	Max: 100 kg



30 year warranty 60 year lifecycle

KEY FEATURES

CATEGORY 5 HURRICANE FORCE WEATHER RESISTANCE

- tested to 3000Pa which is the equivalent of a Category 5 hurricane.

UNIQUE 3 HANDLED OPERATION

- the 3 handled tilt & turn has 7 independent locking points to maintain a consistent compression on the weather gasket therefore ensuring superior weather performance and security is achieved

SAFE

- opens inwards which helps prevent people falling out when cleaning from inside.

MINIMAL MAINTENANCE

- due to the simplistic mechanism i.e. each handle operating a latch, shootbolt and bullet, the 3 handled tilt & turn requires very little maintenance.

IRONMONGERY LONGEVITY

- the weather seal gasket is positioned in front of the ironmongery to protect it against the weather elements.

FLUSH SASH WITH NO HINGES

- the 3 handled tilt & turn has a flush sash with no hinges which is not only aesthetically pleasing but also reduces the need for maintenance.

VERSATILE

- the bottom handle can be removed or changed to enable tilt only function for requirements such as child safety restriction/ student accommodation/high rise developments.

SIMPLE MECHANISM

- sashes remove easily for re-glazing from inside without need for scaffold platforms on multi storey blocks.

TAKES UP TO 130kg SASH WEIGHT

- allows flexibility in the design of the windows i.e. ability to manufacture large sashes without compromising performance.

RELIABLE

- has been in production for over 60 years and with over 8 million units sold. The Stormguard has the best track record of any window in the window industry.

LONG SERVICE LIFE EXPECTANCY

- 60+ year life expectancy

COST EFFECTIVE

- the three handled tilt & turn costs significantly less to maintain especially if aluminium cladding is applicable as this covers 50% of the window which will eliminate the requirement for external cyclical painting.



UNIQUE SEVEN POINT LOCKING

The StormGuard window's operating mechanism

1 & 6: HEAD RESTRICTOR ARM

The window opens to 67 degrees on this restrictor arm and will restrict the window in the tilt position to approx 100mm for ventilation purposes. The head restrictor arm (1) is located into the strike plate (6) in the sash.

2: BALL PIVOT

A cup plate in the sash sits on top of the ball allowing the sash to pivot in the turn side (side hung) mode. This can take a sash weight of up to 90kg.

3: ADJUSTMENT DOME

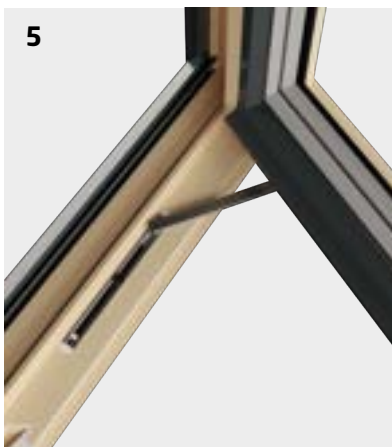
For tolerance purposes, simply use a flat head screwdriver to ensure that the sash is guided into position within the frame.

4 & 7: SHOOT BOLT & LOCKING CLUTCH

The individual shoot bolts locate into the frame ensuring consistent compression of the gasket, therefore provides superior weather and security performance.

5: CLEANING ARM

The cleaning arm holds the sash in a steady position while cleaning the window. **Note!** never leave the window in cleaning position unattended.





THE NTECH WINDOW CONSTRUCTION

1. Vacuum impregnated timber

There are many ways to protect timber windows. However, the most important longevity factor is the thorough and robust impregnation of the timber used to make the window. NorDan's vacuum impregnation process complies with the requirements of BS 8417, 'Preservation of wood Code 60-year time', for a 60-year desired service life for external joinery components.

2. Engineered timber with three lamellas

Engineered timber offers windows exceptional strength, stability, and resistance to warping. Its uniformity streamlines manufacturing and installation processes while promoting sustainability.

3. Waterbased surface treatment

Waterbased surface treatments represent the cutting edge of wood finishing technology. These treatments offer numerous advantages over traditional solvent-based alternatives. They provide excellent protection against wear, UV radiation, and moisture while minimising environmental impact. Furthermore, waterbased treatments emit fewer harmful volatile organic compounds (VOCs), making them safer for both application and indoor air quality.

4. State-of-the-art Powder Coating

In February 2016, NorDan took ownership of a state-of-the-art powder coating line with FOX (Flash OX-iding) pre-treatment, the fifth plant of its type in the world and the only one in Europe. The result - GSB Sea Proof Plus Class 5 certification suitable for marine environments. By supplying all aluminium profiles with this level of pre-treatment quality, NorDan has created a new standard for the window manufacturing industry.

5. U-Values

- **Triple-glazed** standard 0,8 Wm²/K
- **Double-glazed** standard 1,2 Wm²/K
- **Triple-glazed** optional 0,7 Wm²/K with thermal break option to passive standards

U-values represent the window's thermal transmittance, indicating how effectively it prevents heat loss. A lower U-value signifies better insulation, reducing energy consumption and enhancing indoor comfort. Insulated windows have superior thermal performance and contribute to energy savings, environmental sustainability, and year-round comfort.

6. Air permeability

Windows with high air permeability ensure minimal air leakage, creating a tight seal that prevents drafts and maintains consistent indoor temperatures. This tight seal enhances energy efficiency by reducing heat loss and minimises energy costs. Additionally, these windows help maintain a comfortable and draft-free indoor environment by preventing air infiltration.

STORMGUARD PASSIVE PERFORMANCE

StormGuard Passive offers modern windows and doors that not only save energy but also enhance your home sustainably. With our passive products, enjoy a warmer, brighter, and quieter home environment. Discover how a simple upgrade can make a significant difference in your living comfort and impact on the climate.

StormGuard Passive is ideal for those looking to build energy-efficiency and make a smart investment for the future. These products are made of wood with a polyurethane-broken thermal bridge, creating an exceptionally warm structure with very low U-values. They can also be manufactured with exterior aluminum cladding for added protection and minimal maintenance. The design reduces energy consumption throughout the product's lifecycle, helping to meet global environmental goals with significantly reduced carbon emissions.

Passive Windows for the Future

Our standard window with a u-value of 1.2 W/m²K is already one of the market's best-insulated options. With our passive series, you can further reduce energy consumption and future-proof your building with a u-value of 0.8 W/m²K. Environmental and energy experts agree that energy-efficient thinking is crucial for creating a sustainable future. By integrating StormGuard Passive into new construction or renovation projects, you promote a more sustainable environment and reduce energy costs.

Benefits of Passive Windows

Economic Savings

Offers potential savings on energy costs with rising energy prices.

Interior Flexibility

Reduces the need for traditional heat sources like radiators, freeing up space for more creative interior design solutions.

Build Quality

Exceeds industry standards for airtightness and insulation, enhancing overall build quality and durability.

Comfort

Maintains a stable and comfortable indoor temperature year-round.

Reduced Drafts

Allows for furniture placement close to large windows without experiencing cold drafts.

Increased

Property Value

Investing in energy-efficient windows and doors enhances property value and market appeal.





U-value 0.8
Class 4 Air Permeability
Air tightness of <0.1 at 50Pa
PHPP data available

EMBODIED CARBON

Building construction is responsible for nearly 40% of annual global carbon emissions and 28% of those emissions are embodied in the materials used in the construction of buildings.

28%

Embodied
carbon

40%

Carbon
emissions

EPD ANALYSIS EMBODIED CARBON COMPARISON

Embodied carbon means all the CO₂ emitted in producing materials. The embodied carbon of a building can include all the emissions from the construction materials, the building process, as well as from deconstructing and disposing of it

at the end of its lifetime.

NorDan have focused on reducing their environmental impact since the early 1960s and have the lowest embodied carbon figures in the window industry.



Figures include triple glazing for stage A1-A3

- > NorDan use 25% postconsumer recycled scrap aluminium.
- > More than 90% of the NorDan frame is timber with less than 5% aluminium.
- > NorDan factories use up to 90% renewable energy.
- > NorDan UK offices use 100% renewable energy.
- > Product specific EPD available
- > Project specific EPD available (including project specific glazing)



SCAPE STUDENT LIVING LONDON

A sound reduction of - 50 dB Rw, was key to the spec of the NorDan StormGuard aluminium clad timber windows for an innovative new concept in student accommodation in Central London.



"Scape Student Living" provides affordable "aspirational" student living spaces designed to appeal to the younger audience, and Mile End Scape East in London includes 588 studios, 30,000 sq ft of educational and common space including a gym and two restaurants. Beside a busy, noisy, arterial route, sound reduction wasn't the only challenge for NorDan in supplying the windows for this project. Delivering products into a tight site, in central London at rush hour, required expert logistics. Stopping traffic and hoisting the products off the back of a truck up into the new building were all part of the service.

Timber windows play an important part in considering the asset value and the management of the life cycle of a building with this use.

Nick Campfield, Project Director at HG Construction says: "A timber product was in the planning requirements but we had no doubt about whose product we wanted for this development as soon as we saw the sample product from NorDan. The simple uncomplicated design, the easy to operate mechanism, from a tried and trusted manufacturer, left us in no doubt. We've been really, really happy with the NorDan product with no faults at all reported."

A report was commissioned by NorDan from the Sound Research Labs (SRL) for this project.



DRYMEN, SCOTLAND'S FIRST PASSIVHAUS SOCIAL HOMES

When social housing provider Hanover began planning Scotland's first Passivhaus social homes, they needed access to the highest performing building products and materials. Although PVC-U windows had been initially specified, the long-term durability and whole life carbon-saving benefits of NorDan alu-clad timber windows ended up making these the natural choice across the project.



Winner of the Small Affordable Housing Development of the Year award at the Scottish Home Awards 2023, Scotland's largest Passivhaus social housing development is in Drymen, Stirlingshire. Passivhaus, developed in Germany in the 1990s, is a low-energy building standard that can reduce energy consumption by up to 75%.

The Drymen project includes 15 affordable homes for 44 Hanover residents, significantly advancing efforts against fuel poverty and climate change by reducing operational carbon emissions. Hanover worked with NorDan, specifying aluminium-clad NTech StormGuard windows to meet Passivhaus criteria. ECD Architects designed the development for optimal solar gain, energy efficiency, and airtightness, consistent with Passivhaus standards.

Triple-glazed NorDan windows meet the U-value

requirement of $0.8\text{W/m}^2\text{K}$, supporting the depth and weight of triple-glazed units. Scottish contractor Cruden Building selected NorDan solutions due to their reliability. Keith Barclay, Pre-Construction Manager at Cruden, emphasized the importance of quality materials for this pioneering project.

NorDan's alu-clad timber StormGuard windows deliver low U-values, high air tightness, and durability with minimal maintenance. Cruden's relationship with NorDan ensures the windows' performance at Drymen, providing aesthetic and functional benefits.

Using Passivhaus methods, each home in Drymen will need up to 90% less energy for heating, reducing fuel poverty and carbon emissions. NorDan's windows, made from sustainably harvested timber, offer low whole-life carbon impact and will benefit future Passivhaus projects across Scotland and the UK.

CASTLE COURT, SHEFFIELD

They say every good story has a beginning a middle and an end, but the intriguing story of Castle Court, a 1960's residential tower block in Sheffield, is still far from being concluded.



Castle Court was built in the mid 1960's as Hyde Park, one of a three tower development built as part of the remaking of post-war Sheffield.

But like many of the high-rise housing developments celebrated at that time, by the early 1980s Hyde Park had become run-down, with a reputation for poor quality housing and social deprivation. But in the late 1980s two of the towers were earmarked for regeneration in order to provide athlete accommodation for the World Student Games, to be hosted by Sheffield in 1990.

Beyond the games, the redeveloped blocks would also deliver much needed, quality social housing managed by the then North Counties Housing Association (now The Guinness Partnership).

As a result, Castle Court became the North of England's first ever high-rise over-cladding project, and the first large scale project in the North to incorporate NorDan's StormGuard, double-glazed Tilt and Turn windows – around 400 in total.

Over thirty years on, and the building has developed a cult design status due to a combination of the ground breaking design, and also because Castle Court has become a living example of the benefit of high-quality specification.

A unique combination

So to the beginning, and the coming together of a visionary architect Peter Bell, and soon to be over-cladding specialist, Peter Hillyard.

Peter Bell of Peter Bell Architects explains: "By the late 1980's I'd become the UK's only over-cladding expert, and prior to Castle Court I'd refurbished the iconic Parson's Tower in Westminster, and Millbank House in Southampton.

"Sheffield City Council ran a design competition to regenerate the then Hyde Park towers, which was won by the city's own team of architects. The winning design was over-cladding based, so the Council asked me to handle the project.

NorDan partnered with Allscott (now D&B Fabrication) led by Pete Hillyard, and Castle Court proved to be a transformative project for Pete: "The level of design and specification quality on that project set a standard that I endeavoured to maintain from that day forwards.

"Unbeknown to me at the time, the unique circumstances surrounding that project meant that thirty years on, it's still a shining example of how to regenerate high-rise residential buildings."

Peter Bell explains: "The impetus provided by World Student Games made this a special project, and because of the unique knowledge I'd accumulated, I was given a freehand to specify what I understood to be sensible and safe at that time."



NorDan

Peter Bell continues: "I'd seen NorDan's high performance windows in action whilst in Norway, and had been impressed by the company's capacity to deliver timber windows and doors at scale – plus NorDan's aluminium clad timber fitted well with the building's aluminium facade."

Pete Hillyard expands: "What I gained from Castle Court is that longevity is the best way to achieve value, so if you build to last, and surpass current standards, you can meet future standards.

"It may cost more to specify good quality products with great aesthetics, but the payback will be tenfold over the long-term.

"Castle Court is standing, empirical evidence of the wisdom of the investment made in 1990, because thirty years on not a single NorDan StormGuard window has needed to be replaced, and all the tilt-and-turn mechanisms still work.

"But most importantly, the homes are cosy, air and water tight, with windows that achieve 1.6w/m²C, which still meet today's refurbishment standards. I don't know of another brand of window that would still be there after more than a generation with no issues with closing, and no need for maintenance. It's remarkable."

A blueprint for quality

Pete Hillyard continues: "Sadly, history has taught us that there is a right way and a wrong way of doing this sort of high-rise regeneration, and the right over-cladding facades have proved to be high end, long lasting, stay clean, highly insulated, and non-combustible.

"The right windows are also long lasting, air and water tight, and highly thermally and acoustically insulated, and if you get all of these things right, you end up with a building that delivers truly sustainable regeneration."

Peter Bell agrees: "The design and build formula at Castle Court was excellent, and it really should have become the blueprint for regenerating all the leaky, draughty 1960s tower blocks across the country."

Pete Hillyard concludes: "Local authorities and social landlords have a lot of boxes to tick these days, not least providing people with high-quality, low-carbon and energy efficient homes that are easy to maintain.

"In my experience, windows such as PVCu and aluminium would have needed to be replaced after fifteen years, having leaked air and water, and been difficult to operate for much of that period, while NorDan's windows will still be performing in all respects in 2030!

"I urge any specifier or architect considering a high-rise retrofit or new build project to review Castle Court or visit Sheffield, and discover the true value of good engineering."



DUDHOPE COURT

In 1994, Dudhope Court in Dundee found a solution meant to last when it chose NorDan's StormGuard windows during a major refurbishment. Fast forward to today, and the outcome is clear: zero maintenance issues and robust performance.



In 1962 when high-rise buildings were being built throughout Scotland's larger cities, Dudhope Court was built on Lochee Road in Dundee as part of phase 2's public housing development in this area.

Later in 1994, a refurbishment was carried out where NorDan StormGuard windows were the primary operating window system for the project. NorDan supplied approximately 680 windows to Dundee City Council, and since the refurbishment, no maintenance or operational issues have ever been reported. Dundee City Council has been quoted as saying they have had no difficulties with their NorDan windows. This product works well on high rise blocks which have a lot of weather exposure to deal with, extensive wind and rain and on a sea estuary.

However, this doesn't come as a surprise, as NorDan have supplied over 5 million StormGuard tilt and turn windows with minimal product fault callbacks.

Incorporating innovation and user-friendliness, the StormGuard window, developed in 1960, offers a

unique combination of features. It tilts to provide daily ventilation while seamlessly turning to allow for easy and safe cleaning from the interior. This advanced mechanism is the culmination of years of dedicated product development.

Equipped with three handles and a seven-point locking system, the StormGuard window ensures security and peace of mind. Notably, all hardware is discreetly concealed behind a weather-sealed gasket, enhancing its weather-resistant capabilities.

Our windows are meticulously designed and rigorously tested to not only meet but surpass the exacting standards set by British authorities for weather performance. This exceptional quality is no accident; these windows were developed for the Norwegian market, where harsh winters, frequent heavy winds and rain, and even hot summers are part of the norm.

In fact, the StormGuard window boasts an impressive wind loading capacity of 197.5mph, firmly establishing it as a category 5 hurricane-resistant solution.



FALKIRK TOWER BLOCKS: A TESTAMENT TO LONGEVITY & DURABILITY

In the heart of Falkirk, thirteen tower blocks stand as enduring symbols of quality and longevity. Originally built between 1966 and 1972, these towers house 373 two-apartment homes and 745 three-apartment homes. Over the decades, these apartments have been continually modernised and upgraded, reflecting the evolving needs of their residents and advancements in building technologies.

A significant wave of renovations swept through these buildings between 1991 and 2014, bringing new bathrooms, kitchens, and exterior cladding to every unit. However, the installation of NorDan StormGuard windows between 1997 and 1999 proved to be a cornerstone of this transformation.

Interestingly, the only properties exempt from this extensive upgrade are the tower blocks fitted with NorDan StormGuard windows in the late 1990s. The enduring performance of these windows has rendered replacement unnecessary, a clear testament to their exceptional resilience and the foresight of the original investment.

After nearly three decades, the NorDan StormGuard windows in these tower blocks are still in perfect condition, requiring only minimal maintenance and with almost no callbacks. This remarkable performance is a testament to their superior design and durability, especially considering the challenging Scottish climate they endure, with its frequent rain, strong winds, and varying temperatures. NorDan's commitment to quality is further highlighted by its current collaboration with Falkirk Council on a groundbreaking retrofit project. This ambitious initiative aims to upgrade over 5,500 social homes, making it the largest of its kind in Scotland's housing history. NorDan is supplying windows to Sidey and DCL Joinery, which are responsible for the installation.

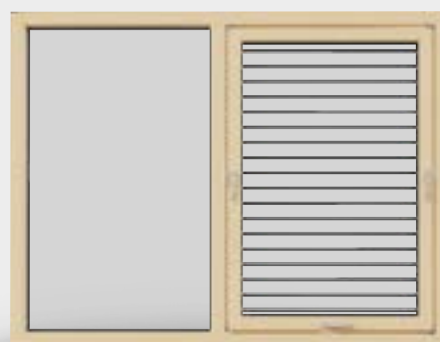
The continued excellence of NorDan StormGuard windows in Falkirk's tower blocks is a powerful endorsement of NorDan's products. Their ability to provide enduring quality and low-maintenance solutions offers a compelling case for choosing NorDan in future projects. The Falkirk tower blocks are not just buildings; they are enduring examples of how NorDan's windows can stand the test of time, providing comfort and reliability for nearly 30 years and counting.

EXAMPLES OF STORMGUARD DYNAMICS

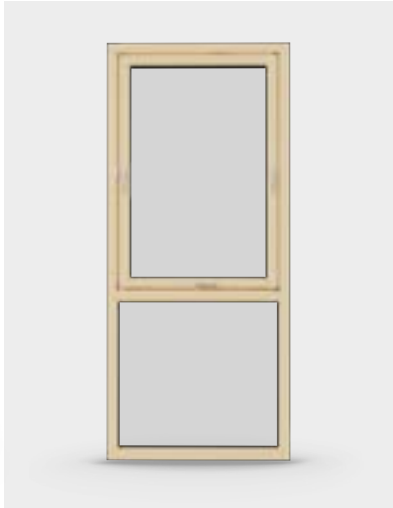




LOUVRES



COMMON CONFIGURATIONS





STORMGUARD OPTIONS



NORDAN PROFILES

Classic and Modern

Classic



Modern



With the choice of two different profiles, NorDan makes it easier to align the aesthetic expression of the windows with the rest of the building.

Small details that can really make a difference in the big picture. NorDan has for many years provided the profile that has been called the "NorDan Classic", but now customers will be able to choose a more modern profile.

SURFACE COLOURS

NORDAN STANDARD

**NorDan offers a wide spectra of standard colours.
We also offer a wide range of other colours from a
standardised palette.**

The following colour samples are for illustrative purposes only and may differ from the original colour. Please get in touch if you would like a standard colour sample from us.

					
WHITE (STANDARD) NCS S 0502-Y	WHITE NCS S 0500-N	OYSTER WHITE RAL 1013	SILK GREY RAL 7044	WINDOW GREY RAL 7040	
					
BASALT GREY RAL 7012	DUSTY GREY RAL 7037	SLATE GREY RAL 7015	ANTHRACITE GREY RAL 7016	TRAFFIC GREY B RAL 7043	
					
UMBRA GREY RAL 7022	BLACK NCS S8500-N	BLACK GREY RAL 7021	JET BLACK RAL 9005	GREY BROWN RAL 8019	
					
NUT BROWN RAL 8011	RED RAL 3011	BRILLIANT BLUE RAL 5007	MOSS GREEN RAL 6005	WHITE ALUMINIUM* RAL 9006	GREY ALUMINIUM* RAL 9007

Whilst every effort is made to verify and ensure the accuracy of the colours shown, the information displayed should be used as a guide only. No purchase should be made without consulting with your local NorDan office.

* Only for aluminium products

Special colours



NorDan can supply most RAL and NCS colours directly to the treated timber or powder coated aluminium surfaces. To view more non-standard colours, please visit: www.ralcolor.com.

NORDAN GREENTECH®

NorDan GreenTech® our most sustainable windows and doors. Industry-leading quality, longevity, environmental footprint and documentation.

Making good products even better

GreenTech® is the product mark for NorDan's most sustainable windows and doors. NorDan GreenTech® windows and doors use wooden sash and frame parts. The timber is sourced from sustainable forestry, and the NorDan factories are FSC certified.

NorDan GreenTech® offers high energy performance, up to 30-year warranty against rot and up to 60 years of expected service life.

NorDan GreenTech® products have the highest levels of documentation, including industry leading EPDs, digital customer focused solutions, and we are aligned with the EU taxonomy.

ORAÉ glass

ORAÉ glass has been developed by Saint-Gobain Glassolutions and is the world's first glass with a reduced carbon footprint.

ORAÉ is made from 64% recycled production waste content and is also manufactured in factories using renewable energy. This means its carbon footprint is 42% lower than Saint-Gobain Glassolutions' standard glass.

As 50% of the total embodied carbon in a NorDan window comes from the glazing, incorporating ORAÉ glass allows us to significantly reduce the carbon footprint of both the glass and the entire window, making it a more environmentally friendly product.

A partnership between NorDan's NTech windows and Saint-Gobain's ORAÉ® glass to create more sustainable, low-carbon windows.



GREENTECH

OPTIONS AND ACCESSORIES

NorDan provide a wide variety of solid fittings with different functions for windows and doors. Contact our expert advisors for more information and advice on compatibility, function, colour and possible customisation for your particular project.

Window handles



Handle

Silver, White, Black.



Lockable handle

Handle with key and push button.
Tokyo: Silver, White, Black.



Twist lock

Twist lock (locked from the start, released by a finger operation)
Silver, White, Black.



Blanking plate

Fixed blanking plate.
Silver, White, Black



Blanking plate

Blanking plate with cover for loose handle.
Silver, White, Black



Loose handle

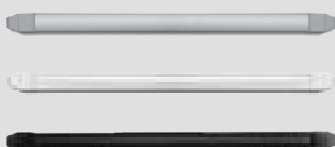
Loose handle for blanking plate with cover.



FIX 805

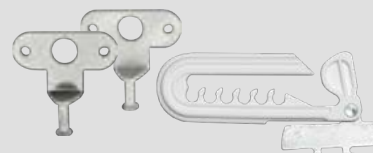
Safety lock and handle

If mounted at the bottom of the StormGuard window, only the ventilation position can be operated. If mounted on the opening side, the window cannot be opened without this special handle.



Internal trickle vent

Silver, White or Black.



Ventilation Catch

NP792 & E100

White or Black.

GLAZING OPTIONS

Sound reduction, safety, security, energy saving and decorative.
NorDan glazing can be supplied depending on the performance criteria you require.

Safety glass

NorDan takes security seriously. Personal safety and security against intrusion must be carefully considered when deciding on the level of safety glass required. It's important to consider not just the glass but all the installation and fixing of the frame.

Safety glass comes in many types with protection against multiple hazards (risk of falls, injury from collision, burglary, vandalism, projectiles and pressure loads). Some requirements use thicker glass, others with glass with special properties. The two most commonly used and known safety glass types are toughened and laminated.

Toughened glass

Toughened glass is about 4-6 times stronger than ordinary glass of the same thickness. Toughened glass is produced by heating the finished cut glass and cooled quickly so that the outer glass surface cools faster than the centre of the glass. This gives the outer surface a tension that makes the glass more difficult to break. When toughened glass is broken, the glass particles are small and relatively harmless, but the glass does not stay together.

Laminated glass

Laminated glass is composed of two or more layers of glass baked together with intermediate layers of plastic. Laminated glass can be constructed of several glass layers, and several plastic layers of different types depending on your requirement. When laminated glass breaks, the plastic layer holds the glass particles together. The result is that a barrier still remains so that burglars would not be able to get through the glass. NorDan recommends the use of laminated glass in all doors, and areas on the side of the doors, and in areas where collisions can occur.

Other glass types

Obscure and decorative glass types are also available depending on your requirements. For further information, contact your nearest NorDan representative.





TRANSOMS AND MULLIONS

Customise your windows with transoms and mullions



In addition to the various decorative glazing bars and overlays, all NorDan products are available with solid mullions and transoms in timber and aluminium cladding. Incorporated

transoms and mullions divide the glass into individual glazed areas with the advantage that different glass can be installed.

GLAZING BARS

Decorative glazing bars

External glazing bars

External glazing bars are mounted on the outside of the glass to provide an appearance of dividing large glazed areas. It is fitted with a smart snap system that easily allows you to remove the bars for cleaning. Available in 28 and 56mm versions

Integral (thermo)

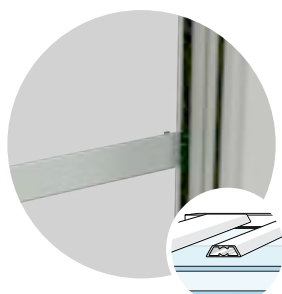
Integral (thermo) glazing bars have 26mm widths and are completely encapsulated in the glass cavity so that both the inner and outer glass surfaces can be easily cleaned. Available in white finish only.

Duplex

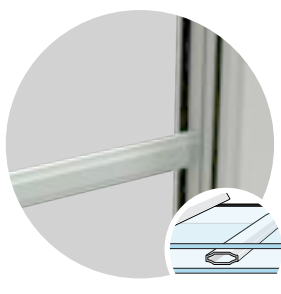
Duplex glazing bars combine 28mm wide aluminium exterior and 28mm wide wooden interior, secured to the glass with an additional spacer in between, giving the appearance of divided panes.

Surface mounted

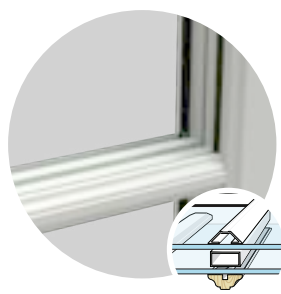
Available in 28mm, surface mounted glazing bars are securely bonded to the outer glass to give the desired panelling design while the inner glazing bar is safely secured within the sealed unit. Glazing bars are available powder coated in RAL classic range.



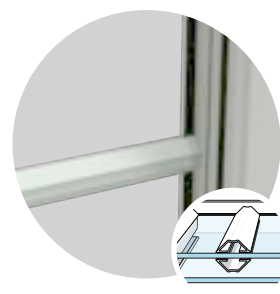
External



Integral



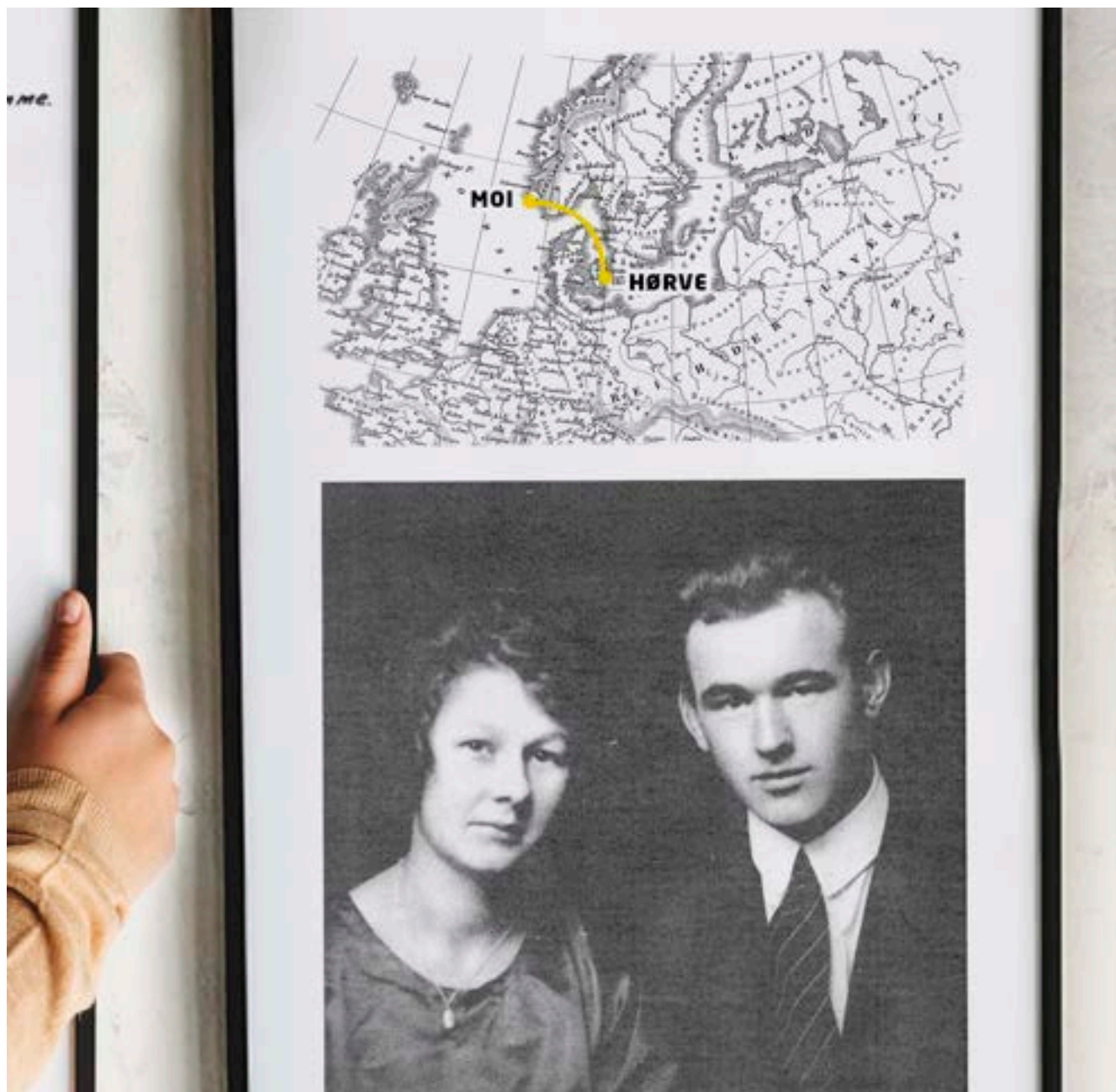
Duplex



Surface mounted

THE NORDAN HISTORY





NorDan is one of Europe's leading manufacturers of high performance windows, doors and smart accessories. Founded in Norway almost 100 years ago, we are a family-owned business operating across Europe, with sustainability and environmental thinking an integral part of the NorDan identity.

With timber at the core, our product range offers solutions that combine leading energy performance with longevity, to minimise environmental impact throughout their lifespan. The company's environmental approach is also implemented throughout the value chain, from raw materials and production right through to transportation of finished products.

Today, the NorDan Group consists of 12 factories, approx 30 project management offices and more than 2200 employees.

CERTIFIED PRODUCTS



EN 14351-1:2006+A1:2010

CE-Mark for windows and doors

The CE marking of NorDan windows and doors has been introduced in EU countries. All manufacturers must label their products with the CE mark to show that documentation of the windows and doors are manufactured and tested in accordance with European standards.



PEFC03-1-16
Promoting sustainable forest management
For more info: www.pefc.org

PEFC

NorDan AS holds the internationally renowned PEFC certificate (the Programme for the Endorsement of Forest Certification). This means that NorDan is documented along the entire chain from tree stump to the consumer and that raw materials are sourced from well managed forests.

www.pefcnorge.org



Secured by Design

Products with this symbol are tested and approved according to strict safety and quality standards from the Association of Chief Police Officers in the UK (ACPO). Products with this label are resistant to burglary and help reduce crime. Featured NorDan products that hold SBD certification can be found on the secured by design website.

www.securedbydesign.com



BBA

British Board of Agreement - The British Board of Agreement (BBA) is the UK's major authority offering approval of construction products, systems and installers. NorDan has a number of products tested to the most rigorous of standards.





Whilst every effort is made to verify and ensure the accuracy of the information in this brochure, NorDan UK Ltd do not take responsibility for any printing errors. The information should be used only as a guide and no purchasing decision should be made without consulting with your local NorDan office.



ABOUT NORDAN

At NorDan we are happy to be the forerunners in the transition to a sustainable construction industry. We try to lead by example - we've done it for nearly 100 years. Founded in 1926, and still family owned, NorDan is one of Europe's leading manufacturers of high-performance timber windows and doors. NorDan windows and doors offer solutions that combine leading energy performance with longevity, to minimise environmental impact throughout their lifespan.



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