





WINDOW & DOOR PRODUCT GUIDE

An introduction to Loewen

www.loewen.com

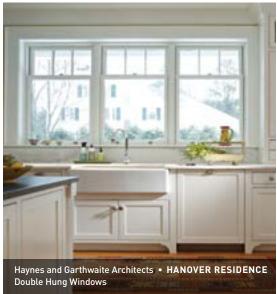




WE REALIZE THAT EVERY
PROJECT BEGINS FROM AN
INNATE DESIRE TO CREATE
SOMETHING GREAT.



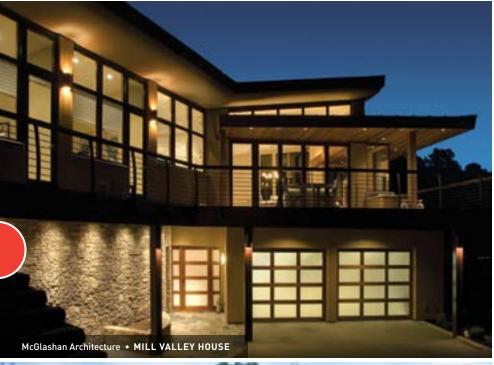




EXCELLENCE IN DESIGN AND CRAFTSMANSHIP CREATES STRONG, DURABLE AND HIGH PERFORMANCE WOOD WINDOWS AND DOORS.



PERFORMANCE





We take great pride in the fact that our windows and doors are among the highest performing products in the industry. Performance keeps homes comfortable and energy efficient, and strength protects against the worst nature can deliver. We achieve this through a commitment to produce the highest quality products that we can, using only the highest quality materials. Loewen offers several solutions ideal for a variety of different environments, from the cold harsh northern climate, to the warm, sunny south and tropical storm threatened regions.

Loewen products are engineered to comply and exceed building codes in North America. Each test is conducted by an independent agency and is based on extreme conditions and varying product sizes. Code compliance is a fundamental aspect of our product design. Many of our products meet the performance requirements for Energy Star in all United States climate zones. The National Fenestration Rating Council empirically shows that Loewen products are among the industry's best in terms of thermal performance.

Loewen windows are highly customizable. There are countless options and features to tailor to each unique opening in any style of home. Whether you are looking to retrofit an elegant, traditional-style home, or aiming for a highly contemporary look, Loewen has the ideal solution.

Loewen frames and sashes are available in pre-primed or clear wood, for a natural look. Exteriors may be clad in low-maintenance extruded aluminum, available in 70 different finishes including clad in natural or patinated copper or bronze from our Cyprium collection.

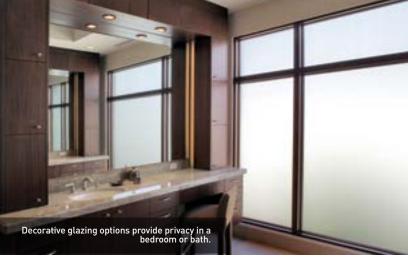














LOEWEN ENGINEERING RESULTS IN UNCOMMON STRENGTH AND DURABILITY, ENABLING DRAMATIC DESIGN, INNOVATION AND INSPIRATION.

- 1 Coastal Douglas Fir for strength and rigidity (Mahogany available).
- 2 Laminated sash for enhanced structural stability and a tight weather seal.
- 3 Dual seal on glass units for long hermetic seal life.
- 4 Natural clear wood interior, ideal for staining or painting.
- **5** Profiled sash edge for a finished look and integration with Simulated Divided Lite (SDL) bars.
- **6** Optional extruded aluminum cladding, for low maintenance, available in a wide range of colors. (Cyprium cladding available, see page 24)
- 7 Minimal use of exposed exterior caulking on glass surfaces.
- 8 No metal-to-glass contact, for improved energy efficiency.
- **9** Triple seal glazing system on metal clad units to effectively block moisture infiltration.
- **10** Hidden venting channel to allow built-up condensation to escape, increasing seal and sash life.
- 11 Authentic stile and rail construction. No miters.
- **12** Mortise and tenon sash corner joints, for structural stability.
- **13** Taller bottom rail to create a custom architectural look reminiscent of traditional joinery and to enhance structural stability and strength.
- **14** Airspace between wood and window cladding, for air circulation and added insulative value.
- 15 Secondary weatherstrip to deflect wind-driven rain from primary seal.
- 16 Continuous primary weather-strip, for maximum protection against air and water infiltration.



*The window corner section illustrated is a Douglas Fir Awning/Casement unit. Doors and other window models may have construction and performance differences.

Review with your Authorized Loewen Dealer for a full understanding of the Loewen product line.



20/20/20 LIMITED WARRANTY

Loewen metal clad products carry a 20 year warranty covering paint, glass and wood components.

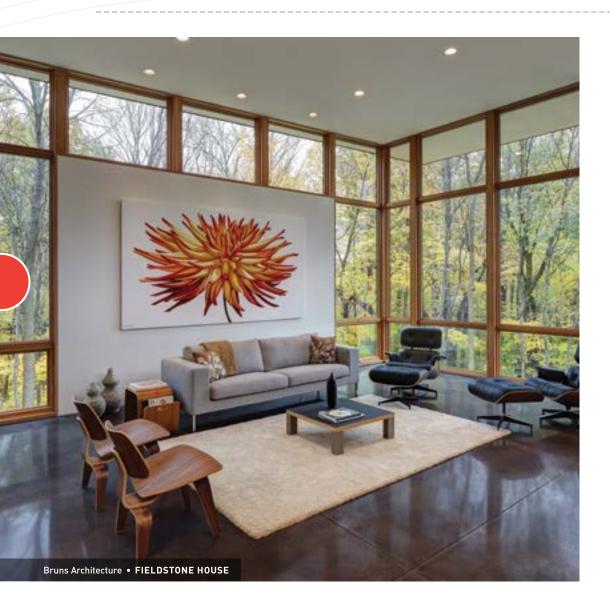
Visit loewen.com/warranty for complete details.



LOEWEN'S EXPANSIVE FINISH PALETTE

provides the perfect finishing touch for fulfilling your vision.

DOUGLAS FIR & MAHOGANY



Unlike other window manufacturers, we use only Coastal Douglas Fir (Pseudotsuga Menziesii) or Mahogany in our frames and sashes. These tightly grained woods do more than just give our windows a rich, warm texture — they're also naturally tough and resilient, yet remarkably workable, meaning they are ideal for precision milling and capable of holding the smallest, most intricate detailing.

To enhance our woods' high natural resistance to moisture absorption, decay and insect infestation, every Loewen wood component is treated with a water repellant/wood preservative sealant before assembly.

Douglas Fir is North America's most plentiful softwood species, accounting for one-fifth of the continent's total softwood reserves. It is extremely beautiful and durable, making it the ideal species for fenestration and a hallmark of the Loewen brand.





0.40

Ponderosa Pine

Versatility is one of the key elements in the Loewen product offering — there are endless possible combinations of standard Loewen products.

In addition to this massive standard selection matrix, Loewen products are available in custom shapes, sizes and configurations.



Slightly to non-resistant

Each Loewen product, whether standard or custom, may be further personalized by choosing the Loewen Cyprium Collection or through the use of Simulated Divided Lites, exterior casing options and metal clad paint in a variety of colors and finishes. An array of hardware finishes further expands the variety and customization of each window order.



19.0







420



DOUGLAS FIR DURABILITY Douglas Fir outperforms Hemlock & Pine							
	Specific Gravity (density)	Impact Strength (height of drop causing complete failure)	Compression Strength (parallel to grain)	Compression Strength (perpendicular to grain)	Hardness (load perpendicular to grain)	Resistance to Decay	
	Weight Over Volume	Inch	Psi	Psi	lbs	USFS Grade	
Douglas Fir	0.48	31.0	7,230	800	710	Moderate	
Mahogany	0.42	Untested	6,460	1,500	830	Slight	
Western Hemlock	0.45	23.0	7,200	550	540	Slightly to non-resistant	

DOUGLAS FIR F	ASTENER RETENTION	This chart s	This chart shows the force required to remove fasteners.	
	Nail	Screw	Hinge	
Douglas Fir	189 lbs	527 lbs	743 lbs	
Ponderosa Pine	98 lbs	392 lbs	486 lbs	

5,320

GLAZING





WE ARE PROUD TO INTRODUCE THE NEXT GENERATION OF HEAT-SMART® TECHNOLOGIES.

- Loewen standard 1/8" (3 mm) double strength glass offers greater strength and clarity over thinner glass, making our products more insulative, more soundproof, more resistant to impact and considerably more resistant to stresses caused by fluctuations in temperature.
- Loewen standard sealed units contain argon gas and machine applied primary and secondary sealants, reducing the chance of seal failure, improving argon gas retention and increasing strength.

Heat-Smart® Window Systems offer varying levels of thermal protection. They also protect furnishings by screening out much of the damaging ultraviolet radiation that causes fading and related damage. The charts on the next page show the comparative performance of each Loewen Window System. Heat-Smart® is a high-performance glazing system that offers great thermal value in a variety of climate zones.



HEAT-SMART® DOUBLE

Double glazed, with one or more layers of Low E coating and one 1/2" (13 mm) air space filled with argon gas and inserted thermal spacer bar.



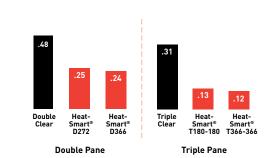
HEAT-SMART® TRIPLE

Triple glazed, with multiple layers of Low E coatings and two 1/2" (13 mm) air spaces filled with argon gas and inserted thermal spacer bars.

HEAT-SMART® COMPARED WITH CLEAR DOUBLE & TRIPLE PANE GLASS

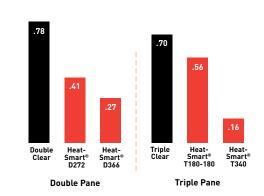
U-VALUE*

This chart illustrates the resistance of heat transfer through the glass. Lower U-Value indicates greater insulating capabilities. U-Value is measured at the center of the glass.



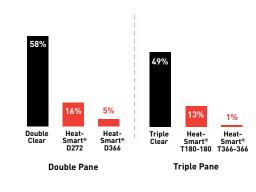
SOLAR HEAT GAIN (SHGC)*

This chart measures the ratio of solar heat gain through a glazing system compared to an unobstructed opening.



UV TRANSMITTANCE*

This chart measures the percentage of ultraviolet radiated wavelengths allowed to be transmitted through the glazing system.



Note: Information in these charts compares the center of glass performance levels of the sealed unit only when manufactured with different glazing options. They are not representative of overall window performance, which depends on many factors including grille options, such as simulated divided lites, grilles between glass, product size and configuration. This information cannot be used to calculate energy performance, to determine resistance to condensation or to develop assumptions about suitability for use or compliance with energy codes. For overall performance of specific windows or doors, refer to "NFRC U-factor and SHGC/VT" information.

OTHER GLAZING CHOICES:

TRANQUILITY SOUND GLASS | NEAT GLASS | PRESERVE PROTECTIVE FILM

^{*}Ashrae calculated values Window 5.2 | 1/2" airspace (13 mm) | Does not apply to sealed units with capillary tubes installed

COLORS & CLADDING

Loewen uses only pre-finished extruded aluminum cladding to better protect window and door exteriors and eliminate the need for painting. Our thick extruded aluminum cladding retains its shape, resists denting and lasts longer than roll-formed aluminum. In addition, Loewen's window cladding is set away from the underlying wood, creating an air space that improves thermal performance.





The broad variation in Loewen sizes, shapes and designs and the demanding environmental conditions that our product encounters require an alloy that has the ability to:

- Withstand serious impact without sustaining damage.
- Allow intricate extrusion detailing.
- Provide the malleability necessary to clad the many sizes and shapes we offer.
- Deliver the unequalled environmental durability for which aluminum is known.
- Provide a substrate that enhances colorfast paint performance.

AMMA 2605 / 70% KYNAR FINISHES

Loewen's expansive finish palette provides the perfect finishing touch for fulfilling your vision, while also providing industry leading quality and performance to uphold it. Loewen's paint formula includes 70% Kynar 500 PVDF (polyvinylidene fluoride) resin, which offers the greatest resistance to weathering, fade and chalking. This ensures a beautiful finish that will last for decades when cared for properly. With their excellent appearance and durability, these paints meet the specifications of the American Architectural Manufacturers Association (AAMA) 2605.



20/20/20 LIMITED WARRANTY

Loewen metal clad products carry a 20 year warranty covering paint, glass and wood components.

Visit loewen.com/warranty for complete details.



LOEWEN'S EXPANSIVE FINISH PALETTE

provides the perfect finishing touch



WINDOW & DOOR HARDWARE OPTIONS



Selecting a style and finish that reflects your unique taste is a critical part of creating the right look.

But choosing hardware involves more than just appearance — function and operation are essential, which is why Loewen offers a wide range of handles, locking systems and other hardware choices — from the most traditional to the most contemporary. Hardware must also offer intelligent design and flexibility. This is why Loewen provides designs such as the foldaway handle, useful when drapes or blinds fit tight against a window or when access space is limited.

For hard-to-reach windows, optional motorized operators can be activated by a simple wall switch or battery operated remote control.

Not all finishes are available in each hardware style. Consult your Authorized Loewen Dealer for the most current information.



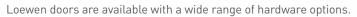






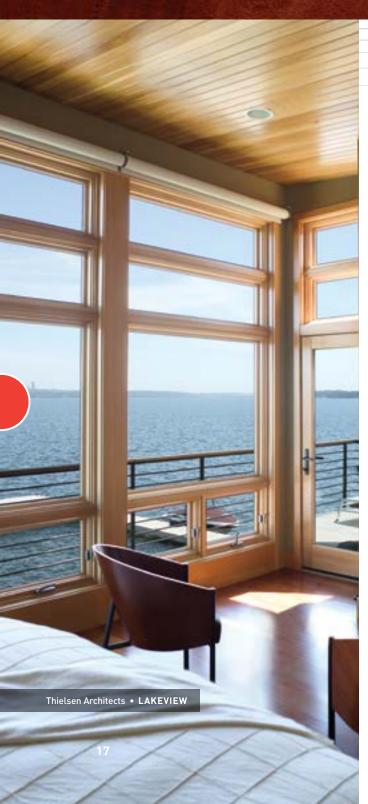






We constantly review our hardware selection and new options are regularly added. Not all finishes are available in each hardware style. Consult your Authorized Loewen Dealer for the most current information.





AWNING WINDOWS

Awning windows open out from the bottom, allowing air to circulate freely while providing a unique protective shield to keep out rain. Awning windows, on their own or combined with picture windows, can easily create a desired look and function that fits with any architectural style. Loewen offers two different types of Awning windows.



AWNING WINDOW



PUSH OUT AWNING WINDOW

Optional wood screen shown

CASEMENT WINDOWS

Casement windows swing open like a door to provide superior ventilation and easy operation. Suitable for many home styles, Casements shut tightly and provide a firm, lasting seal and one of the highest thermal performance ratings of any window style. Practical and beautiful, Casements are easy to combine with other Loewen window styles

for a distinctive look. It's no wonder the Casement is one of the most popular window styles in markets around the world.

Part of what makes our Casement windows unique is the wide variety we offer. Loewen makes four distinct styles of Casement windows.



CASEMENT WINDOW

Optional retractable screen shown



FRENCH CHATEAU
CASEMENT WINDOW

Specialty shape shown



MISSION®

CASEMENT WINDOW



PUSH OUT
CASEMENT WINDOW

DOUBLE HUNG WINDOWS

PICTURE & SPECIALTY WINDOWS

Opening from both the top and the bottom, Double Hung windows are proof that certain traditional looks never go out of style. Loewen's Double Hung is designed to complement the depth and character of the traditional North American home while delivering the progressive performance it deserves.

Loewen Picture windows are designed to give you maximum views with a minimum of wood framework. Picture windows, of course, do not open, but you can create the ideal combination of view and ventilation by pairing them with operable Loewen windows.

Picture units can be built in a variety of different shapes. Below are some standard shapes.



DOUBLE HUNG WINDOW

Available in popular Cottage Style version (Top sash smaller than bottom)



PICTURE/DIRECT SET WINDOW

SPECIALTY WINDOWS

Contact your Authorized Loewen Dealer to discuss your creative possibilities.

ACCESS WINDOWS

Born of modernist design but at ease in a variety of settings, the versatile Access window has a growing and enthusiastic following. These windows are ideal in situations where access to the outside is restricted — such as multiple story homes and commercial applications.

Our unique design allows the sash to rotate 180 degrees outside the window frame, leaving your draperies and blinds untouched and making exterior cleaning a breeze. Access windows are fully compatible with the entire Loewen product line for seamless integration.



DOUBLE ACCESS WINDOW

Two sashes in one frame

BOW AND BAY WINDOWS

Unlike other options, Bow and Bay windows actually add valuable living space to your home — how much extra space is up to you. Loewen three-sided Bay windows can be built at one of three fixed angles: 34, 45 or 90 degrees. These angles determine how much extra space you gain by controlling how far the window extends.

Bow windows feature a series of four or more adjoining windows that form an arc or bow.



BAY WINDOW

SLIDING PATIO DOORS

SWINGING TERRACE DOORS

ENTRY DOORS

Functioning like large moving windows, Loewen Sliding Patio doors can open up the walls in your home to new possibilities.

To make our doors safe, secure and easy to operate, Loewen uses laminated sash construction, thick, tempered safety glass and smooth tandem rollers. For added security, Loewen builds an anti-lift device into every patio door. An optional foot lock and manual three-point hardware are also available.

Loewen offers two styles of Terrace Doors to choose from —Traditional and French. Traditional Terrace doors hinge in the middle so that one panel is fixed and the other operates. By contrast, French Terrace doors are hinged on the outside to allow both doors to operate from the middle. Outswing versions of both styles are available as options. Other design options include Mid-Rail and raised panel doors, fixed or venting Sidelites and Transoms, and Barrier-free Sills (ADA Flat Sills).

Loewen offers a wide range of Entry Systems, both standard and custom, in a variety of finishes, shapes, configurations and styles. Entryways are available in custom variations and with an extensive selection of wood species.











BIFOLD DOORS

Bifold Doors are made up of multiple door panels that fold open, creating a large opening that makes for a stunning transition to the fresh air and spaciousness of outdoor living. When closed, Bifold Doors provide privacy and protection while allowing unobstructed views. Bifold Doors are available in configurations of up to 16 panels, which allows for openings of up to 52 feet wide. Folding to the outside so as not to disturb interior furnishings, Bifold Doors put outdoor spaces in a new perspective.

LIFTSLIDE DOORS

The Loewen LiftSlide Door allows expansive glass panels to roll smoothly and easily during operation. This door not only provides a panoramic view but also extends the living space of your home. Available in both jamb and pocketing configurations, LiftSlide Doors glide easily on almost unnoticeable, corrosion-resistant tracks. With the touch of a hand, the LiftSlide mechanism effortlessly carries individual glass panels weighing up to 850 pounds. The flush track protrudes ever so slightly above the finished floor so your interior and exterior finishes flow seamlessly. For more inclement environments, a raised threshold is available for additional protection. The Loewen Liftslide can be manufactured in straight, cornered and angled configurations.



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STORMFORCE SERIES

MAXIMUM PROTECTION FROM COASTAL ENVIRONMENTS

StormForce from Loewen takes the performance of our standard windows and doors to the extreme, offering you fenestration that is structurally enhanced to meet—and exceed—International Residential Code, Florida Building Code and other Coastal requirements, including the stringent Dade Country certification. Each test is conducted by an independent agency, based on extreme conditions and varying product sizes. Code compliance is a fundamental aspect of Loewen design and engineering.

StormForce is available on:

WINDOWS: Awning - Casement - Picture - Double Hung

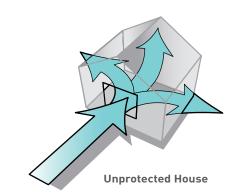
DOORS: Swinging Terrace Doors - Sliding Patio Door - LiftSlide

HIGHLIGHTS:

- Maximum coastal protection purposely designed to withstand all of nature's harshest elements—hurricanes, tropical storms, high winds, driving rain, sweltering heat and freezing cold.
- Unseen structural upgrades no unsightly brackets and/or locks commonly seen on coastal products.
- Versatile and enhanced styling Douglas fir wood interior standard with the choice of extruded aluminum cladding.
- Optimal thermal performance Heat-Smart (LowE) insulated glazing, laminated, and reflective glazing options, which provide comfort, shading and peace of mind.

THE FLORIDA BUILDING CODE is the strictest code in the United States for resistance to wind-borne debris and wind loading for fenestration products. Many Loewen certified products meet high velocity wind zone 4 standards.

ALL COMPONENTS IN A STORMFORCE™ WINDOW OR DOOR PROVIDE A NUMBER OF ADDITIONAL BENEFITS: ENHANCED SECURITY, EXCELLENT ULTRAVIOLET RAY PROTECTION AND INCREASED SOUND ATTENUATION.





Windborne wreckage can impact homes during windstorms and hurricanes, with gusting, pervasive winds to follow. To protect the integrity and interior of homes, windows and doors must resist penetration and remain in place and intact. Impact-designed laminated-glass windows and doors pass windborne debris-impact tests. Even when broken, glass fragments remain integral, adhering to the plastic interlayer, to preserve the building envelope.



All Loewen StormForce products use industry-leading laminated glass produced by bonding a combination of plastic vinyl layers and polyester film between two panes of glass into a single sheet. Laminated glass has the look of ordinary glass but offers a fortification against accidental impact, forced entry, sun damage and noise that far surpasses that of standard glass.





CYPRIUM COLLECTION

LIVING FINISHES IN COPPER AND BRONZE

Cyprium Collection features copper and bronze clad windows and doors that are unique in design and construction. The Cyprium Collection is artisanal in detail, down to the soldered exterior joints and rich, tactile depth of texture in the thick metal cladding and deep profiles.

These hand-wrought living surfaces develop distinctive patinas that adopt and define the individual aesthetic character of the homes to which they belong.

The Cyprium Collection is available in Casement, Picture/Direct Set, and Awning Windows, LiftSlide Doors, Specialty Windows and Terrace Doors.



Copper Umbra patina Casement window featuring 7/8" Simulated Divided Lites (SDL).





Copper Natura

SOLDERED JOINTS

Lead-free soldered joints add a hand-forged, authentic appearance that is both attractive and functional. Soldered joints create a cohesive, watertight body for frame and sash members resulting in uniform reaction to temperature fluctuation.



Copper Natura

RECESSED MULLION

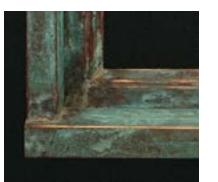
Recessed from the face of the sill and frame, this classical mullion detail adds visual harmony. Cyprium's deep sills are well suited to masonry wall construction.



Bronze Umbra

CAPPED SILL END

Hand-fitted sill caps are soldered in place for structural integrity and a finished appearance.



Bronze Verdigris

DISTINCT PICTURE/ DIRECT SET PROFILES

Picture/Direct Set (fixed, non-sashed units) offer an even deeper offset from the face of sill, head and frame members to the vertical plane of the glass.

COPPER PALETTE Colors may not be exactly as shown.



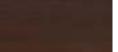
Copper Natura



Copper Umbra



Copper Verdigris



Copper Aduro









Bronze Aduro



BRONZE PALETTE Colors may not be exactly as shown.



Bronze Natura



Bronze Umbra



Bronze Verdigris



LOEWEN HERITAGE

INSPIRATIONAL PRODUCTS. **DESIGN LEADERSHIP. CUSTOM CAPABILITY. VERSATILITY.** THE DISTINCTIVENESS OF DOUGLAS FIR AND MAHOGANY.

OUR HISTORY IS SO MUCH OF WHAT WE ARE — OUR ESSENCE.

If our inspirational designs reflect our artistic soul, history describes our journey and helps to explain the foundation upon which the Loewen brand of windows and doors is built.

Our products are still crafted in the same location in which we have built our rich history—Steinbach, Manitoba, Canada. Our centrally located manufacturing facility is ideal for distribution across North America.

C.T. Loewen founds Loewen Millwork in Steinbach, Manitoba

1905

Loewen begins manufacturing pre-built windows and doors to supply post-war boom in housing construction

1940s

Loewen introduces in North America what is known to be the first true triple pane system with full half-inch airspace

1960s

Loewen introduces hurricane rated products for coastal storm environments

1990s



Windows and doors become our specialty and passion

1950s

Loewen constructs the first phase of the current Steinbach manufacturing facility

1980s

Loewen expands US market and opens its first U.S. branch office in Chicago in 1990

2000s

Bluff House • BRUNS ARCHITECTURE

The Company introduces Mahogany product options, Bifold doors, and Loewen Architectural Services

2008

Loewen introduces Cyprium Collection and becomes the first major manufacturer to offer FSC certified Douglas Fir products

2013

A private group of the Loewen family members, management and individual investors repurchase the Company

















2005

American Double Hung and other innovations 2010

Loewen begins its extensive lean manufacturing

redesign program introducing LiftSlide, Classic

Spa House • SAGE

Core values of quality, innovation and performance continue with new contemporary architectural aesthetics



TO FIND YOUR NEAREST LOEWEN DEALER GO TO WWW.LOEWEN.COM

E-mail: Canada and U.S.A: International: info@loewen.com 1.800.563.9367 1.204.326.6446

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