More than 40 years ago Loewen Windows and Doors introduced our sealed triple-pane to the marketplace. This longevity and concentration on performance glazing means our products accommodate a triple glazing within standard options. It is not an afterthought, it is part of our core identity.

**True Triple Sealed Units**
with LowE surface coatings for maximum performance

Triple glazed, with multiple layers of LowE coatings and two 1/2” air spaces filled with argon gas and stainless steel thermal spacer bars. Unlike other window systems we offer sealed units with the optimum 1/2” cavities between panes to maximize energy efficiency.

- Loewen standard 1/8” (3mm) 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
- Argon gas in all air-spaces
- Sash venting channel built into the sash under every sealed unit to allow for a weeping system in the event moisture or condensation ever were to be present.
- Stainless steel spacer bar is less conductive than aluminum and structurally superior to silicone foam type spacers
- Sash cladding does not touch the glass which reduces the opportunity for thermal conduction
- Available across all window and door products categories
- Airspace between wood and window cladding
- Spacer bars available in all air spaces with SDL muntins

loewen.com
Understanding Performance Glazing

Are you getting True Triple?

In severe Northern cold climates it is important not to be swayed by performance values that require the use of roomside LowE coatings due to their reduced ability to resist condensation.

<table>
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<td>Glass Make Up</td>
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<td>.19 U Factor .38 SHGC</td>
<td>180/Cls/180</td>
<td>.23 U Factor .39 SHGC</td>
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<td>366/Cls/180</td>
<td>.23 U Factor .18 SHGC</td>
<td>LowE3/Cls/LowE1</td>
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| **Clad Double Hung** | 1 1/8” Overall IG 3/8” Airspace 1 15/16” Sash | Glass Make Up | 7/8” Overall IG 1/4” Airspace 1 3/4” Sash | Glass Make Up | 7/8” Overall IG 1/4” Airspace 1 3/4” Sash | Glass Make Up |
| .22 U Factor .40 SHGC | 180/Cls/180 | .25 U Factor .41 SHGC | LowE1/Cls/LowE1 | .27 U Factor .40 SHGC | 180/Cls/180 |
| .21 U Factor .27 SHGC | 272/Cls/180 | .25 U Factor .27 SHGC | LowE2/Cls/LowE1 | .27 U Factor .24 SHGC | 270/Cls/180 |
| .21 U Factor .18 SHGC | 366/Cls/180 | .25 U Factor .18 SHGC | LowE3/Cls/LowE1 | .27 U Factor .18 SHGC | 366/Cls/180 |

| **Clad Picture Direct Set** | 1 3/8” Overall IG 1/2” Airspace | Glass Make Up | 1” Overall IG 3/8” Airspace | Glass Make Up | 1 3/8” Overall IG 1/2” Airspace | Glass Make Up |
| .16 U Factor .48 SHGC | 180/Cls/180 | .20 U Factor .48 SHGC | LowE1/Cls/LowE1 | .17 U Factor .49 SHGC | 180/Cls/180 |
| .16 U Factor .32 SHGC | 272/Cls/180 | .19 U Factor .32 SHGC | LowE2/Cls/LowE1 | .17 U Factor .29 SHGC | 270/Cls/180 |
| .16 U Factor .21 SHGC | 366/Cls/180 | .19 U Factor .21 SHGC | LowE3/Cls/LowE1 | .17 U Factor .21 SHGC | 366/Cls/180 |

| **Clad MultiSlide Narrow Stile** | 1 3/8” Overall IG 1/2” Airspace 2 1/4” Panel | Glass Make Up | 1” Overall IG 2 1/4” panel | Glass Make Up | 1 3/8” Overall IG 1/2” Airspace 2 1/4” Panel | Glass Make Up |
| .24 U Factor .44 SHGC | 180/Cls/180 | Triple Values Not Available | LowE1/Cls/LowE1 | .25 U Factor .37 SHGC | 180/Cls/180 |
| .24 U Factor .29 SHGC | 272/Cls/180 | Triple Values Not Available | LowE2/Cls/LowE1 | .25 U Factor .22 SHGC | 270/Cls/180 |

| **Clad Timber Curtain Wall** | 1 3/8” Overall IG 1/2” Airspace | Glass Make Up | - | Glass Make Up | - | Glass Make Up |
| .17 U Factor .50 SHGC | 180/Cls/180 | Not Available | - | Not Available | - |
| .17 U Factor .34 SHGC | 272/Cls/180 | Not Available | - | Not Available | - |
| .16 U Value .23 SHGC | 366/Cls/180 | Not Available | - | Not Available | - |

Data from NFRC references

Note: Competitor “A”
- LowE1 is Cardinal 180, LowE2 is Cardinal 272, LowE3 is Cardinal 366
- mentions “ERS” glazing which is LowE3/Cls/i89 but no performance info available
- mentions triple glazing as an option on MS but NFRC values not available

Note: Competitor “B”
- Cardinal 270 is their closest comparison to Cardinal 272 but less visible light transmittance
- Does not offer i89 as a room side LowE option

Note: i89 or ERS LowE is not recommended in colder climates due to increased chances of condensation on the glass surface