

# Triple Pane vs Double Pane Windows

## Comparison Guide for Canadian Homeowners

### Side-by-Side Performance Comparison

Feature	Double Pane	Triple Pane
Layers of glass	2	3
Gas spaces	1	2
U-factor (lower = better)	0.29 to 0.35	0.15 to 0.22
R-value	R-3 to R-4	R-5 to R-7
Weight per window	15 to 20 lbs	25 to 35 lbs
Cost premium vs baseline	Baseline	+15 to +30%
Sound reduction	Good	Excellent
Best climate zone	Toronto, mild regions	Winnipeg, Calgary, north

### Canadian Climate Zone Guidance

#### Winnipeg / Manitoba

**Recommendation: Triple pane recommended**

Design temperatures regularly reach -30 to -40C. Triple pane delivers meaningful ROI with an 8 to 12 year payback on north and west-facing windows.

#### Calgary / Alberta

**Recommendation: Triple pane recommended for north/west**

Design temperatures of -25 to -30C. Triple pane on exposed faces is justified. South-facing windows benefit from solar gain and often perform well with quality double pane.

#### Toronto / Southern Ontario

**Recommendation: Double pane usually sufficient**

Design temperature around -18 to -20C. ENERGY STAR double pane meets modern code and delivers good performance. Triple pane is optional for noise reduction or premium builds.

#### Northern regions (ON, MB, SK, AB north)

**Recommendation: Triple pane strongly recommended**

Extreme temperature cycling and prolonged cold means triple pane is the right choice for every exposure.

### Understanding the Cost Premium

Triple pane adds roughly \$80 to \$200 per window over equivalent double pane. On a 15-window project, that's \$1,200 to \$3,000 extra upfront.

In Winnipeg, energy savings from triple pane can recover this cost in 8 to 12 years. In Toronto, payback is longer and may not justify the premium unless noise reduction is a priority.

---

### **Get Expert Advice from NorthShield**

NorthShield installs both double and triple pane windows across Winnipeg, Toronto, and Calgary. We'll help you choose the right option for your climate and budget.

[www.northshield.ca](http://www.northshield.ca)