



Imperial LS™



AIR INFILTRATION

Minimize Air Infiltration and
Maximize Energy Savings & Comfort



Before Investing in New Windows, Always Compare the Air Infiltration Ratings.

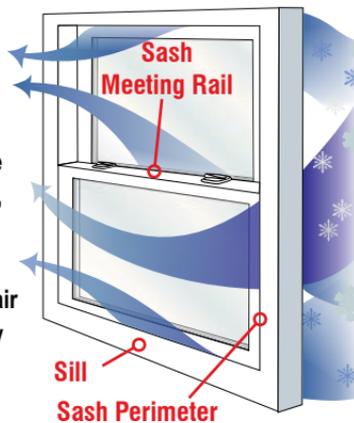
Facts You Should Know

The lower the CFM Rating...

- the less outside air will leak into your home.
- the more comfortable your home will be with fewer drafts.
- the less your furnace will run & the more money you'll SAVE.
- the smaller your carbon footprint.

WHY DO WINDOWS LEAK AIR?

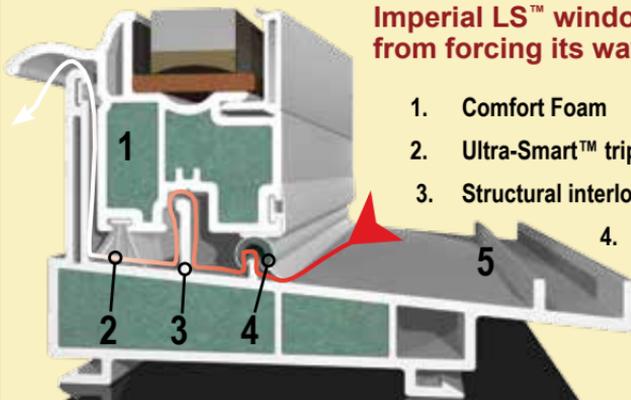
POINTS OF AIR INFILTRATION



Poorly designed windows don't have the built-in airlocks, weather stripping, and barriers necessary to keep air from forcing its way in. Without these design features, air will push between the sash meeting rails and around the sash perimeter where it meets the frame and sill.

We know how uncomfortable a home with leaky windows will be. So we loaded the Imperial LS™ window with weather barriers that go far beyond the industry standard and other manufacturer's window designs.

THE IMPERIAL LS™ DURA-SILL™ DESIGN PREVENTS AIR INFILTRATION THE BEST!



Numerous air barriers designed into Imperial LS™ windows prevent airflow from forcing its way into your home.

1. Comfort Foam
2. Ultra-Smart™ triple-fin weather stripping
3. Structural interlock in bottom sash
4. Soft-Seal straddle gasket
5. Dura Sill's double-walled sill dam

AIR INFILTRATION COMPARISON

CFM

(Cubic Foot per Minute)

=

GALLONS

=

12oz SODA CANS

1 CFM

of air leakage per minute



7.5 gallons
of air per minute



80 soda cans of air per minute
(960 oz/min)

INDUSTRY
STANDARD*

.30 CFM

of air leakage per minute



2.25 gallons
of air per minute



24 soda cans of air per minute
(288 oz/min)

Traditional Wood Residential
Double-Hung Windows
(Pella®/Marvin®/
Jeld-Wen®/Andersen®)

.23 CFM

of air leakage per minute

Industry Average Range
from 0.12 CFM to 0.30 CFM**



1.725 gallons
of air per minute



18.4 soda cans of air per minute
(220.8 oz/min)

Traditional Vinyl Residential
High-Performance
Double-Hung Windows
(Alside®/Simonton®/Champion®)

.15 CFM

of air leakage per minute

Industry Average Range
from 0.11 CFM to 0.21 CFM**



1.125 gallons
of air per minute



12 soda cans of air per minute
(144 oz/min)

Imperial
LS™

.02 CFM

of air leakage per minute



0.15 gallons
of air per minute



1.6 soda cans of air per minute
(19.2oz/min)

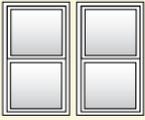
Imperial LS™ windows are **over 11 times more airtight**
than traditional wood residential double-hung windows.

*INDUSTRY STANDARD: AAMA® (American Architectural Manufacturers Association®) has set the Industry Standard for Maximum Allowable Air Infiltration at **0.30 CFM** (Cubic feet per minute) during a 25 MPH wind. This is equal to **2.25 GALLONS** or **24 SODA CANS** of air leaking through the window **EVERY MINUTE!**

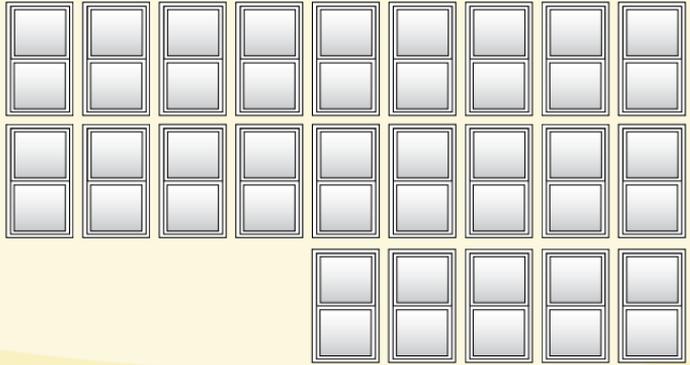
**References valid as of October 1, 2010 based on our competitor's web sites and independent testing.

Traditional Wood Residential Double-Hung Windows VS IMPERIAL LS Windows

(Pella®/Marvin®/
Jeld-Wen®/Andersen®)



Average
441.6 oz
air/minute



The amount of air that leaks through two traditional wood windows is equal to 23 Imperial LS Windows combined.

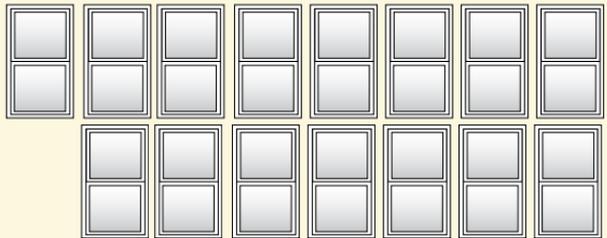
IMPERIAL LS WINDOWS are over 11 TIMES MORE AIRTIGHT than traditional wood residential double-hung windows.

Traditional Vinyl Residential High-Performance Double-Hung Windows VS IMPERIAL LS Windows

(Alside®/Simonton®/
Champion®)



Average
288 oz
air/minute



The amount of air that leaks through two traditional vinyl windows is equal to 15 Imperial LS Windows combined.

IMPERIAL LS WINDOWS are over 7 TIMES MORE AIRTIGHT than traditional vinyl residential high-performance double-hung windows.