



Liberty Series

## LAW4000

All Wood • For Remodeling And New Construction • Awning Window

### PRODUCT SPECIFICATIONS

#### FRAME

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- Head, jamb and sill frame parts are constructed of kiln dried ponderosa pine, treated with a water repellent preservative to protect from rot and insects. Optional mahogany available.
- Head, jamb and sill frame parts are tenoned, glued and nailed.
- Frame thickness: 1  $\frac{5}{16}$ " at jamb, head and sill.
- Standard jamb depth: 4  $\frac{9}{16}$ "
- Available with optional  $\frac{3}{8}$ " foam wrap for air tight installation.

#### SASH

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- Sashes are of kiln dried ponderosa pine, treated with a water repellent preservative. Optional mahogany available.
- Sash joints are tenoned, glued and nailed from the interior.
- Silicone glazed from the interior for a positive water tight seal.
- Overall finish sash thickness: 1  $\frac{3}{4}$ ". Sash profile dimension is 2".

#### EXTERIOR FINISH

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- Standard factory primed white in pine (standard) or mahogany.
- Available in unfinished natural wood or prefinished white in pine (standard) or mahogany. Contact Trimline dealer for custom color details.

#### INTERIOR FINISH

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- Standard in unfinished natural wood in specified species (pine (standard) or mahogany) which can be painted or stained.
- Available factory primed or prefinished white in pine (standard) or mahogany. Contact Trimline dealer for custom color details.

#### HARDWARE

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- A single point or multi-point locking system is utilized and consists of concealed two-bar stainless steel hinges as well as a dual arm operator and zinc alloy cover with folding handle which nests compactly into the cover making it virtually disappear.
- All hardware components are of a zinc alloy in matching finish available in: Polished brass, antique brass, chrome, brushed chrome, oil rubbed bronze, pewter and brushed nickel as well as white, earthtone and beige.

#### WEATHERSTRIPPING

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- Standard double weatherstripping system. The frame parts have a full surround foam style weatherstripping. The sash is completely surrounded by Q-lon weatherstripping. Together they seal the sash to the frame providing superior thermal performance.

#### GLASS

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- Standard clear  $\frac{5}{8}$ " thick insulating glass, consisting of "double strength" 3 mm annealed glass,  $\frac{3}{8}$ " air space using Tremco's EnerEDGE® warm-edge, dual-seal silicone foam spacer, hermetically sealed with hot melt butyl.
- All insulating glass units meet IGMA and NFRC 706 requirements for seal durability and gas retention per ASTM E2190, E2188-10 & E2189-10.
- Other glazing options Comfort E and Comfort E Plus Low E with argon gas, obscure, tempered, laminated, bronze or grey tint. Decorative glass also available.

#### INSECT SCREENS

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- Standard full screen of .019" thick roll formed aluminum mounted in a wooden screen track.
- Standard colors available: white, bronze, earthtone, beige, black and hunter green. Custom colors also available.
- Charcoal fiberglass screen cloth (18 x 16 mesh) standard; optional screen mesh available in charcoal or aluminum color wire or Better View™ high transparency screening in charcoal fiberglass cloth only.

#### GRILLES

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- **Simulated Divided Lites (SDL)** in a classic putty glazed  $\frac{5}{8}$ ",  $\frac{7}{8}$ ", 1", 1  $\frac{1}{4}$ " or 1  $\frac{1}{2}$ " wood (optional cPVC) muntin profile permanently applied to exterior of the insulated glass. Double faced tape is used to apply muntin to the glass which first is prepared with a saline type glass bonding and coupling agent before muntin is applied to help ensure lasting adhesion. An optional between the glass dark bronze shadow bar is available for an authentic true divided lite look. Interior wood in pine (standard) or mahogany matching the interior wood species in either permanent or removable style  $\frac{5}{8}$ " or  $\frac{7}{8}$ " wide divided lite patterns only. Removable style not available in 1", 1  $\frac{1}{4}$ ", 1  $\frac{1}{2}$ "

widths.

- **True Divided Lites (TDL):** Available in 1 1/8" width in pine only. TDL bar has the look of historically accurate true putty glazing.
- **Full surround removable wood grilles** available in 5/8" or 7/8" wide classic double stepped profile matching window interior wood species in pine (standard) or mahogany in a wide array of standard or custom divided lite patterns only. Grille frame utilizes a snap-in installation with concealed hardware.
- **In-glass aluminum "GBG"** (Grille Between the Glass) muntins are available in 5/8" flat profile or 7/8" sculptured profile in all standard exterior cladding color finishes for dust free easy cleaning. Available in either divided lite or diamond patterns.
- **Combo wood-aluminum:** 5/8" flat or 3/4" sculptured in-glass aluminum muntin with either permanently applied (see SDL) or removable wooden interior wood grille in pine (standard) or mahogany.

## ACCESSORIES

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- Brickmoulds available in over a dozen different profiles.
- A standard zero clearance mullion is used for factory mulling of windows without increasing the combined unit dimension of the windows mulled.
- Interior wooden mullion covers in pine (standard) or mahogany are provided loose.
- 1 1/16" interior wooden jamb extension in pine (standard) or mahogany are factory applied to the perimeter of the window and are available in custom sizes to provide an overall jamb depth up to 9".

## WARRANTY

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- Limited 10 year.
- 20 years non-prorated on insulating glass.
- Non-square, decorative/leaded glass 5 years.

## PERFORMANCE

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### Thermal Ratings

Glazing	U-Value	R-Value	SHGC	VT	CRF
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Comfort E – 3mm RLE CS-36 (#2) / Clear / Argon

Comfort E Plus – 3 mm RLE CS-36 (#2) / CS-72 (#4) / Argon

SHGC = Solar Heat Gain Coefficient

VT = Visible Transmittance

### Structural Ratings

Test Speciman	Air Infiltration	Performance Class-Grade
32.0" x 60.0" (813 mm x 1524 mm)	.03 cfm/ft <sup>2</sup>	CW-60

## TEST STANDARDS

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- NFRC certified: meets or exceeds rating and labeling requirements as per NFRC 100, 200 and 500 test procedures.
- AMMA/WDMA/CSA 101/I.S.2/A440-05
- ENERGY STAR® certified