

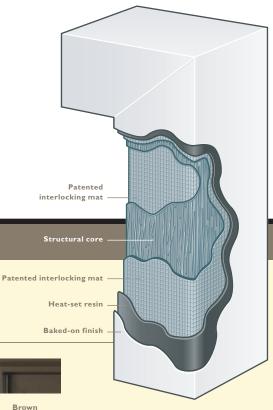
## FIBERGLASS COMPOSITE WINDOWS AND DOORS



#### PELLA® IMPERVIA® WINDOWS AND DOORS

Pella fiberglass composite windows and sliding doors made from Duracast® offer an advanced alternative for commercial buildings of all types. They ...

- are more durable than aluminum or vinyl.
- offer the thermal efficiency of wood.
- are priced competitively with vinyl and aluminum, while offering many performance advantages.
- come in an impressive array of styles, sizes and options to fit your specifications.
- are backed by The Power Of Yellow® Pella's best-in-class people, products, process and service.



## FEATURES AND OPTIONS

#### Pella Duracast

Pella's patented, five-layer, engineered fiberglass composite withstands extreme weather conditions.

#### **Color Options**











Choose from clear insulating glass; energy-saving, Low-E insulating glass with argon; or obscure privacy glass.

#### Grilles-Between-the-Glass

Available in a variety of standard and special patterns. Color matches frame.



Grille Profile



3/4" Aluminum Grilles-Betweenthe-Glass



Top Row



Prairie



Traditional

Special

## **Applied Grilles**

Available on fixed frame windows only. Available in a variety of standard and special patterns. Matches the frame in size and color to offer the look of fixed aluminum windows.



Grille Profile



I-5/8" Applied Grilles



Top Row



**Equally Divided** 



**Unequally Divided** 

### Hardware<sup>2</sup>







Bright Brass



Satin Nickel



Oil-Rubbed Bronze

#### Screens<sup>4</sup>

Fiberglass mesh screens available on venting units.



Double-Hung Window



Single-Hung Window



Sliding Window



Casement Window



Awning Window



Fixed Window (sash and frame)



Fixed Frame (frame only)



Special Shape (non-Duracast®)



3-Panel Sliding Window

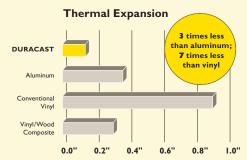


Sliding Door

#### **Energy Efficiency** DURACAST 2.4 times better than Aluminum-Clad thermally broken aluminum Aluminum with Thermal Break Aluminum with No Thermal Break 0.5 1.0 1.5 2.0 2.5 Frame U-Factor

#### **Energy Efficiency**

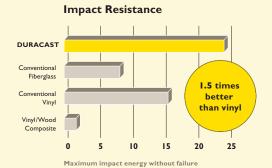
- · Unlike aluminum, which is a natural conductor, Duracast offers excellent insulating properties and superior energy efficiency.
- The U-Factor of the Duracast frame is 2.4 times better than thermally broken aluminum.
- · When compared to thermally broken aluminum, Duracast offers greater resistance to condensation and superior thermal comfort to those seated near windows.



Expansion of 25' lineal with 90° F change

## Thermal Expansion

- · Unlike vinyl or aluminum, Duracast offers low expansion and contraction rates that help ensure a consistent bond between sash and glass and a weathertight fit between sash and frame.
- Duracast withstands extreme heat (up to  $200^{\circ}$  F) without warping, sagging or softening like vinyl — even in dark colors.
- Duracast withstands extreme cold (as low as -40° F), unlike vinyl, which becomes brittle in extreme cold.



## **Impact Resistance**

· Duracast withstands major impacts without deformation, especially in cold weather. Under the same conditions, vinyl easily shatters.

#### **Durable Finish**

- · Duracast features a factory-applied powder-coat finish that is extremely hard and six times more scratch-resistant than vinyl.
- · Vinyl cannot be repaired easily if damaged.
- Aluminum is prone to corrosion in seacoast environments.

(inch-pounds)

In testing performed in accordance with ASTM testing standards, Pella's Duracast has displayed superior nce in strength, ability to withstand extreme heat and cold, and resistance to dents and scratches.

<sup>&</sup>lt;sup>2</sup> Standard lock hardware is finished in White, Tan or Brown to match the window or door color

<sup>&</sup>lt;sup>3</sup> Oil-Rubbed Bronze window hardware is a living finish that will develop its own unique patina with use

<sup>4</sup> Warning: Use caution when children or pets are around open windows and doors. Screens are not

<sup>&</sup>lt;sup>5</sup> Available Spring 2009.

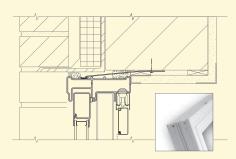


# ADVANCED ALTERNATIVE. LASTING VALUE.®

Outstanding commercial performance.	Opening Size Range $^{1}$ (W×H)		U-Factor <sup>2</sup>	Solar Heat Gain	Design Pressure
	Minimum	Maximum	(Total Unit)	Coefficient (Total Unit)	(PSF)
Double-Hung Window	l'6" x 2'6"	4'0" x 6'6"	.33	.29	<b>30 – 50</b> <sup>3</sup>
Single-Hung Window	l'6" x 2'0"	4'0" x 7'0"	.33	.32	<b>50</b> <sup>3</sup>
Sliding Window	2'0" x 1'0"	9'0" x 6'0"	.33	.32	30 – 50
Casement Window	l'5" x 2'0"	3'2" x 6'6"	P <sup>4</sup>	P <sup>4</sup>	P <sup>4</sup>
Awning Window	1'5" x 1'5"	5'0" x 5'0"	P <sup>4</sup>	P <sup>4</sup>	<b>P</b> <sup>4</sup>
Fixed Window	l'2" x l'2"	6'0" x 6'0"	.31	.32	50
Fixed Frame	l'0" x l'0"	Up to 50 sq. ft. <sup>5</sup>	.28	.33	50
Sliding Door	4'0" x 6'0"	8'0" x 8'0"	.34	.30	35 – 50
Pella® Fiberglass-Resin (Non-Duracast®) Special Shape Windows®	I'0" x I'0"	Up to 36 sq. ft. <sup>7</sup>	.28	.31	30

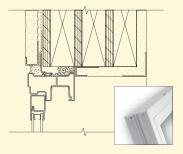
<sup>&</sup>lt;sup>1</sup> Sizes are available in 1/4" increments. Size subject to change. (Contact your local Pella representative.)

## Frame options for every wall condition.

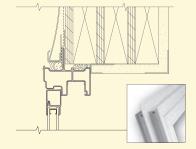


**BLOCK FRAME** (WITH CLIP ATTACHMENT)

Masonry openings or pocket replacement.



**BLOCK FRAME** (WITH OFFSET FIN) Wood framing and stucco.



INTEGRAL NAILING FIN Wood framing and siding.

Because we're always working to further refine our products and develop new ones, specifications may change without notice.



Always read the Pella Impervia\* Limited Warranty before purchasing or installing Pella Impervia products. See Limited Warranty for complete details at http://warranty.pella.com.



Pella Corporation is a proud volunteer partner in the Department of Energy's ENERGY STAR® program to promote the use of high-efficiency products.





 $<sup>^{2}\ \</sup>mathrm{Based}$  on Low-E insulating glass with argon.

 $<sup>^{\</sup>rm 3}$  Some units require an upgrade option to meet this rating.

<sup>&</sup>lt;sup>4</sup> P = Pending. Available Spring 2009.
<sup>5</sup> Maximum of 9'4" in either height or width.

<sup>&</sup>lt;sup>6</sup> Size range varies by shape. Reference the Pella Architectural Design Manual for size range by shape.

<sup>&</sup>lt;sup>7</sup> Maximum of 9'0" in width or 8'0" in height.