

Peerless

ARCHITECTURAL WINDOWS & DOORS

*Energy Innovation from the
Heartland of America*



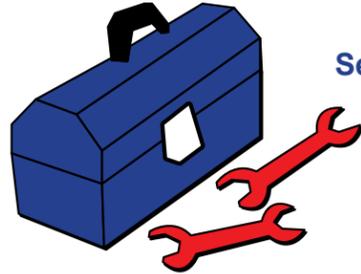
Peerless Success Recipe



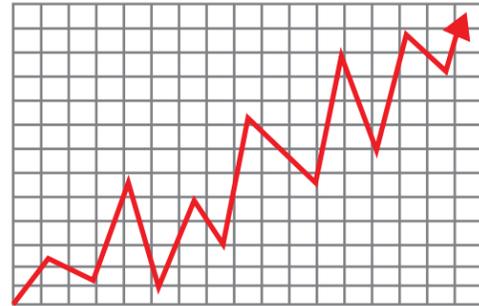
Safety 1st



Quality 2nd



Service 3rd



Productivity 4th

Customers Always!

People

Peerless is the Employer of choice within 50 miles of Fort Scott, with competitive pay, the best training, and proper evaluations. We employ people who are fully committed and engaged.

Leadership

Transformational not transactional. Taking a personal interest and empowering people to perform.

Best Architectural Window (AW) Design

We stay ahead with many systems and solutions that have a strong value which services the need in our market. Peerless is equipped with a strong Research and Development Team to meet needs.

Best Toolbox/Visual System

With Peerless you have access to the best product and promotional information in the industry. Using technology for learning makes everyone smarter and more capable.

Sales Team 100% Focused on Peerless

Our customers are our partners in promotion. We provide the highest level of customer service and best experience possible.

Best Customer Base in the Industry

80% of our business comes from 50 or less highly capable "A" Customers that are familiar with the Peerless System and Tools.

Provide Quality Service

Peerless strives to have the best estimating, engineering, project definition, order release process, shipping, warranties, and after the sale support.

World Class Manufacturing

Peerless is focused on reliability and lean designs and are continually improving and cutting waste. We partner with the best vendors in the industry for the highest quality products.

Controlled Growth

We focus on quality before quantity to provide the best product in the industry.

History

Peerless was founded in 1952 as Peerless Products, providing Storm Windows, Metal Awnings, Patio Carports, Sliding Glass Doors, Garage Doors and Folding Doors.

Today, Peerless Products is a 200,000 ft² facility, located in Fort Scott, Kansas. Peerless is a Mid-western manufacturer of high performance aluminum architectural and commercial windows and doors for new, replacement, and historical construction. Peerless is a member of the American Architectural Manufacturer's Association (AAMA), and we test all of our products to meet the most stringent quality standards set by AAMA.



Peerless when it was founded in 1952.

Peerless today



Vertical Integration & Lean Manufacturing



Peerless provides the highest performing quality Architectural (AW) rated Windows and Doors in the industry through Vertical Integration. At Peerless, we extrude our own aluminum, electrostatically paint our own material, fabricate and assemble our windows, and test all of our products to the most stringent standards available. Having control over all of these processes allows Peerless to maintain very strict quality control standards while enabling us to drive cost out of the process.

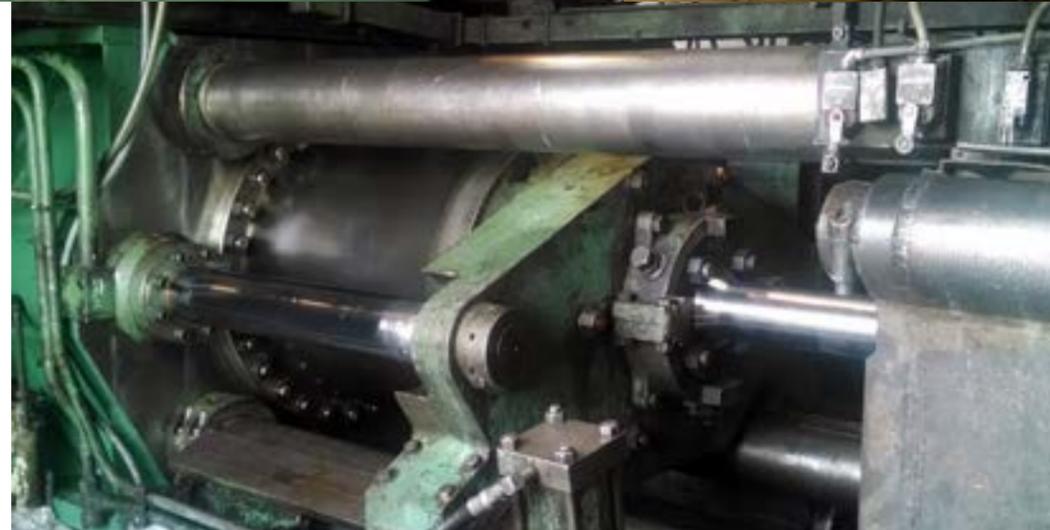


Peerless only works with the best manufacturers of glass, hardware, thermal break and other window components to provide our customers with the highest quality products available.

Peerless is committed to find problems with production, quality, or process. We use the Managing Daily Improvements (MDI) Method and 5 Why's to address problems on a day to day basis. Tracking our production is done using KPI's and helps Peerless to continually improve.

Peerless paint line dunk tanks

Here at Peerless we are very focused on lean manufacturing. We have taken the necessary steps to eliminate waste and inefficiencies in our manufacturing processes. Peerless holds Kaizen Events regularly and during this event a team is assembled to attack a problem with our facility, manufacturing process, or other processes. The Kaizen team's main goal is to improve and make Peerless better than ever before. The Kaizen team relies heavily on the standards of 5S which are set, sort, shine, standardize, and sustain.



Before 5S



After 5S



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A Vision of the Future

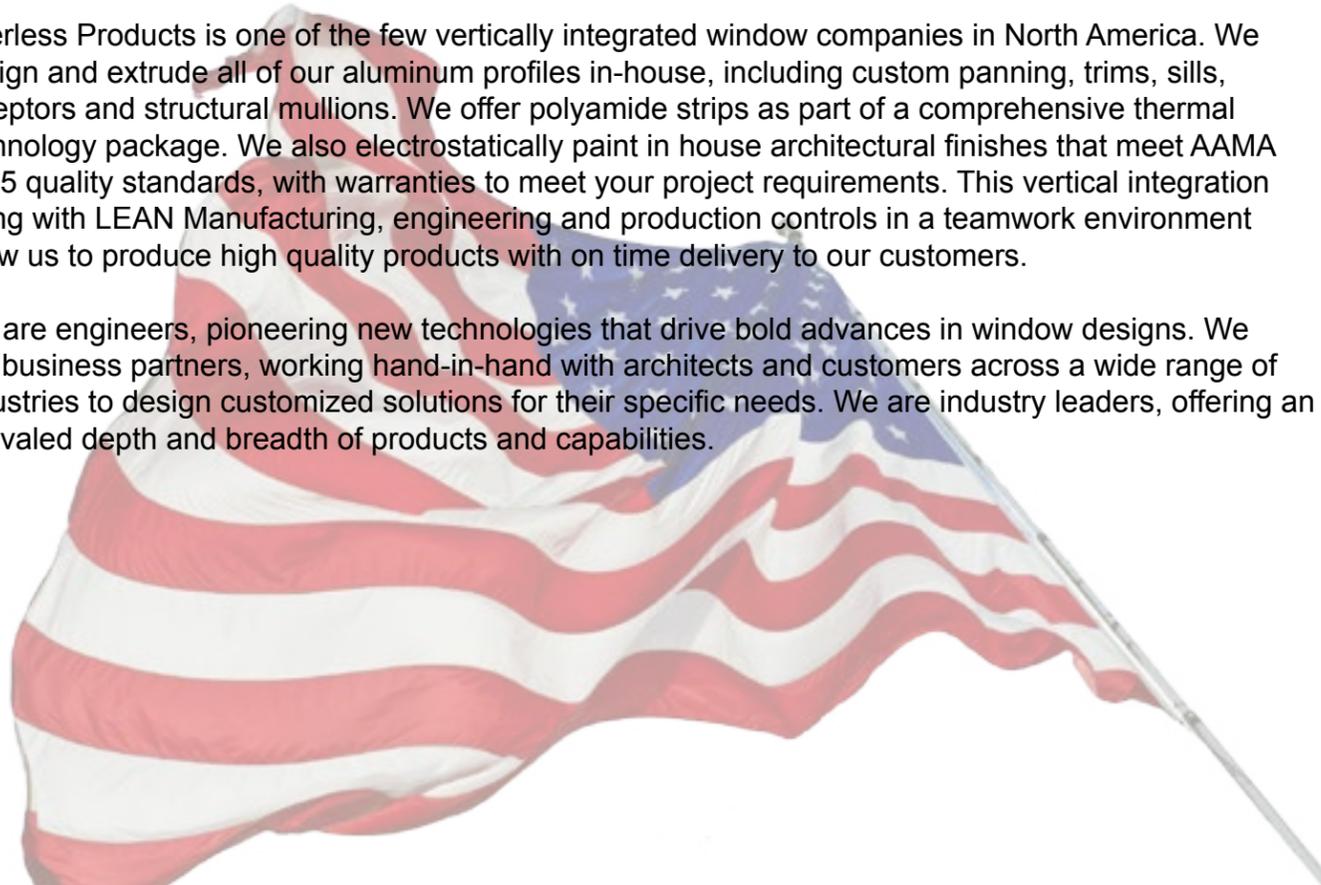
Here at Peerless, we have evolved our product development through the years to meet the custom needs of the Architectural community. Our goal is to continually provide products with maximum energy efficiency, superior air, water and acoustical performance. We also design our products for ease of installation and maintenance.

Our ENERGSAVE window series utilizes our exclusive technology that reduces energy use through lower heat flow and reduced air leakage. The ENERGSAVE series offers the lowest U-values available for AW-rated products. ENERGSAVE windows and doors provide architects, building owners and managers design flexibility, Green building enrichment, lower operating costs and ease of installation.

The complete line of Peerless products includes single and double hung windows, sliding windows, casement windows, projected windows, terrace and sliding glass doors and window wall. Capabilities include engineering, testing, aluminum extruding, anodizing and architectural paint finishing. Peerless provides blast, impact, acoustical and historical products for the Education, Healthcare, Government, Hospitality, Office and Multi-Family markets.

Peerless Products is one of the few vertically integrated window companies in North America. We design and extrude all of our aluminum profiles in-house, including custom panning, trims, sills, receptors and structural mullions. We offer polyamide strips as part of a comprehensive thermal technology package. We also electrostatically paint in house architectural finishes that meet AAMA 2605 quality standards, with warranties to meet your project requirements. This vertical integration along with LEAN Manufacturing, engineering and production controls in a teamwork environment allow us to produce high quality products with on time delivery to our customers.

We are engineers, pioneering new technologies that drive bold advances in window designs. We are business partners, working hand-in-hand with architects and customers across a wide range of industries to design customized solutions for their specific needs. We are industry leaders, offering an unrivaled depth and breadth of products and capabilities.



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Innovation

Peerless has continued to develop products through the years to meet the growing demand for energy efficient products. Our windows provide increased energy efficiency, strength of aluminum, flexibility of design, significant savings for facility managers and owner in operating costs, reduced field labor costs due to ease of installation, and green building enhancements.

The world has continued to have a growing demand for Energy Efficiency due to continuously rising high energy prices, increased energy use, natural gas and oil shortages, and air pollution and greenhouse gas emissions.

According to the Energy Information Administration, buildings in the United States use over 70% of the country's electricity, consume nearly 40% of its energy, and emit close to 40% of all its greenhouse gases.

The windows of a building dramatically affect its energy efficiency. In winter, heat loss through typical windows can boost a building's heating bill as much as 25 percent. In summer, the heat flow



Initiative (CBI) collaborates with the private sector, national laboratories, other federal agencies, and non-governmental organizations to advance energy-efficient and green commercial building technologies. ” — DOE

Peerless is contributing to the Net-Zero Energy Goal in Buildings by providing windows with the best overall design, frame, glass package, and spacer systems available.

Left Page: A G1T1 Tilt/Turn Window with a 0.343 u-value.

Right Page: A G541 with Grids with a 0.15 u-value.

Energy Efficiency

reverses, with sunlight warming the building's interior through its windows and causing air conditioners to work harder. Energy-efficient windows can help in both these situations. And if the building's electricity comes from a fossil-fuel power plant, installing energy-saving windows also shrinks the building's carbon footprint by reducing greenhouse gas emissions at that plant. Since the U.S. Environmental Protection Agency estimates that Americans spend nearly 90% of their time inside buildings, improvements within the building industry can have a vast impact.

Different Energy Codes that Peerless is influenced by are the Department of Energy (DOE), American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE), International Energy Conservation Code (IECC), and International Code Council (ICC).

The G500 series has been designed as the most energy

efficient line of Architectural Aluminum Windows in the industry. The series has the capability to achieve a U-value of .15, in addition to superior water, air and acoustical performance.

The G500 series incorporates aluminum bars placed within the thermal break to serve as an isolation piece to slow heat flow, while low-E foil is used on each side of the thermal break to reflect heat back out.

The Ultimate Goal is to build a Net-Zero Energy Building (NZEB). A net-zero energy building must produce as much energy on site as it consumes. Green Building and Sustainable Architecture significantly contribute to that goal. "By Executive Order 13514, the President mandated that by 2015, 15% of existing Federal buildings conform to new energy efficiency standards and 100% of all new Federal Buildings be Zero-Net-Energy by 2030. The U.S. Department of Energy's Commercial Building



Occupancy Comfort



Marriott 37 Street, New York, NY, G300 & G400 Series



More Sunlight will increase Occupancy Comfort and Satisfaction.



Improvements within the building environment can have a huge impact on an occupant's health, comfort, safety and welfare. This is extremely important since the U.S. Environmental Protection Agency estimates that Americans spend nearly 90% of their time inside buildings.

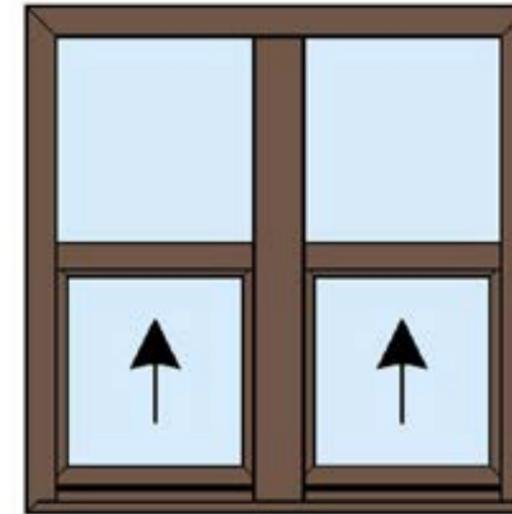
There have been several studies done which show that a better building environment will make employees more productive, satisfied and happy. Employees are also generally healthier and will take less sick days when in an enhanced environment. Peerless can contribute to this building environment by providing high quality, large windows. Large window openings will let in more natural light and increase the view to outside. Peerless also provides several types of operable windows which can let in fresh air on nice days. The durability of our Peerless windows is exceptional, so occupants can enjoy their operation for a very long time.

Our products are designed for increased energy efficiency and total performance by utilizing high performance frames, superior glass packages and innovative thermal barriers and spacer systems. Peerless can provide large window sizes without compromising the thermal performance of your project.

Ease of Installation



Tatnuck School used unitized single hung windows.



Top: Unitized single hung window

Right: Example of co-extruded panning, nailfin, and integral trim for easier installation.



All of our products have optimal designs to help make installation easier and more cost effective. Many of our designs are exclusive to Peerless and will save time when installing in the field.

The Peerless Slide In Grid System is a cost effective solution which eliminates potential leak spots, provides a clean appearance and minimizes sightlines. This slide in grid design easily replicates historic sightlines, reduces the number of vents needed in an opening and saves time and labor. This system sits in front of the glass and maintains a 1" IGU for superior thermal performance.

Peerless offers multiple windows in one master frame. Units are installed at the factory into one master frame and shipped to your location. We call this our Unitized Frames and they are a very cost effective solution. Unitized framing saves time and labor, is aesthetically pleasing, minimizes sightlines and reduces potential leak spots. This design also makes installation much easier than it normally would be.

Co-Extruded Accessories can be provided on most of our window products. We can co-extrude these accessories as part of the window frames. Types of accessories can include panning, trim, nailing fin, extended legs and much more. These co-extruded accessories provide easier installation, save time and labor and are very cost effective. They reduce the number of extra parts and pieces that are required for field installation.

For new construction there are also many options including 3-piece receptor, subsill, 3-piece mullion, stack mullion, or corner mullion. Custom installation pieces are also available upon request and engineer approval. Custom projects may result in longer lead times due to new dies.

Building Enhancements



Sheenan Hall Worcester State, Worcester MA, G100 Series



Left: Grand Marc, Boston, MA

Right: Victor, Boston, MA



The ENERGSAVE Series of Architectural Windows and Doors set the standard in the industry for Energy Efficient Innovative products. Below are some of the innovative features and benefits that ENERGSAVE Architectural Windows and Doors provide.

U values as low as .15 for increased energy efficiency.

Unique frame design that utilizes Peerless innovative technology of lower heat flow and reduced air leakage.

Mitered corners with no exposed edges for a clean architectural design.

Meeting rail without fasteners that penetrate frame for superior water performance.

Industry leading design flexibility and application innovation.

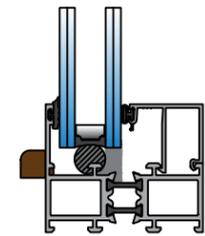
Projected Window Hardware Systems that eliminate the need for wicket screens and provide multi-locks with one single-action handle.

Different exterior and interior paint coatings/finishes in the unit for design flexibility.

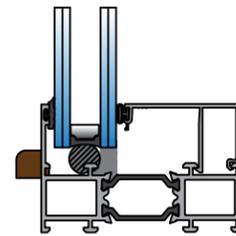


Oronoco, Alexandria VA, G200 Series

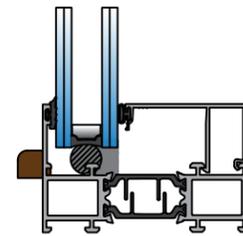
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G200
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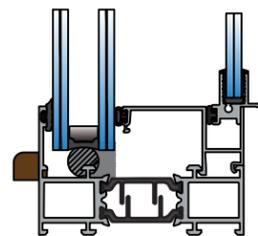
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Timeless

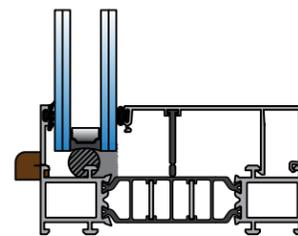
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GSL2 Horizontal Slider

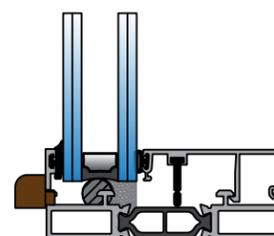
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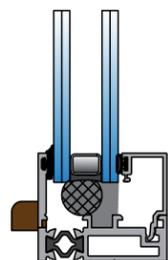
G400
3 1/4" Frame Depth



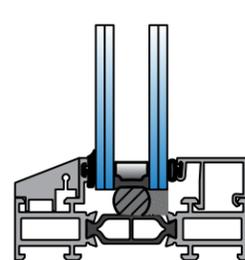
G500
4 1/4" Frame Depth



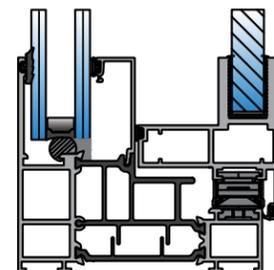
G600
3 1/4" Frame Depth



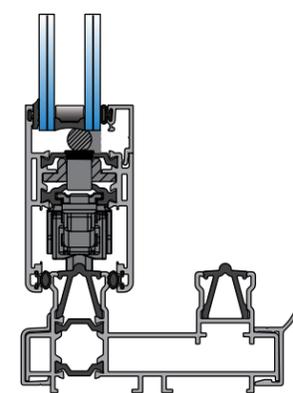
G700
2" Frame Depth



Timeless
3 1/4" Frame Depth



Protector
4 1/4" Frame Depth



GSL2 Horizontal Slider
4 1/4" Frame Depth

Overview of Window Systems

Peerless Window Model Numbers

	SERIES										
	G100	G200	G300	G400	G500	Protector Series	G600	G700	Timeless	GSL2	
Test Values											
U-Value	.314-.4	.309-.375	.3-.346	.236-.29	.15-.237	.238	.341-.391	.314-.4	.314-.4	.349	
AMMA Rating	AW60-100	AW60-100	AW60-100	AW60-100	AW60-100	AW70	AW70-100	AW60-100	AW60-100	AW80	
Design Features											
Max Glass Thickness	1"	1"	1"	1"	1 3/4"	1 3/8"	1"	1"	1"	1 3/8"	
Frame Depth	2 1/2"	3 1/4"	3 1/4"	3 1/4"	4 1/4"	4 1/4"	3 1/4"	2"	3 1/4"	4 1/4"	
Typical Wall Thickness	.080"	.080"	.080"	.080"	.080"	.080"	.050"-.078"	.125"	.062"-.078"	.070"	
Design Options											
Fixed	■	■	■	■	■	■	■	■	■		
Casement	■	■	■	■	■		■	■	■		
Dual Action	■	■	■	■	■						
Single Hung			■		■		■		■		
Double Hung			■		■		■		■		
Project In	■	■	■	■	■		■	■	■		
Project Out	■	■	■	■	■		■	■	■		
Horizontal Sliders										■	

*Test Glass-1/4" annealed soft Low E x Argon x 1/4" annealed

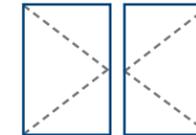
Fixed



G141 - G241 - G341 - G441 - G541
P141 - P541 - G641 - G741 - T641

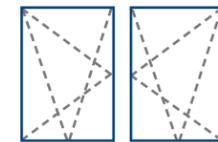
Casement

51: Outswing 61: Inswing



G151 - G161 - G251 - G261 - G351
G361 - G451 - G461 - G551 - G561
G651 - G661 - G751 - G761 - T651
G661

Dual Action



G1T1 - G2T1 - G3T1
G4T1 - G5T1

Single Hung



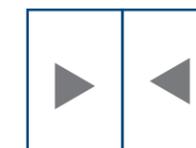
GSH3 - GSH5 - GSH6

Double Hung



GDH3 - GDH5 - GDH6

Horizontal Slider



GSL2

Project In



G111 - G211 - G311 - G411
G511 - G611 - G711 - T611

Project Out



G101 - G201 - G301 - G401
G501 - G601 - G701 - T601

For more information on window models visit our website peerlessproducts.com

Peerless R-Series

Peerless R Window Series, is ideal for the Southern climate zones where U-Values are not as stringent. The R Series is an energy efficient solution with the same cost point as pour and debridge product. The R Series uses a Polyamide Thermal Strip and is available in Fixed, Single Hung, and Slider configurations. This series has a U-Value range from .334-.427, which is dependent upon the glass and size.

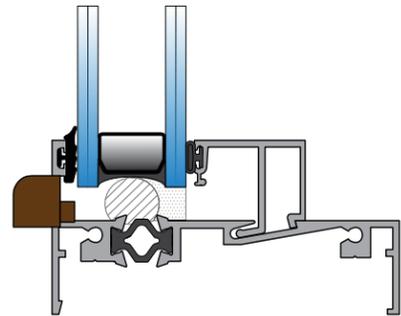
Typical Applications: This series can be used in Schools, Offices, Healthcare, and Government buildings. Certain Blast and Hurricane configurations are available.

Installation Accessories: There are many receptor and subsill options, along with many mullion options including Male/Female, 3 Piece, 3 Piece Tube, and Partition Mullions. There are also options for slide in strap anchors or return anchor legs on accessories. There are many R Series installation accessories for ease of installation and cost savings.

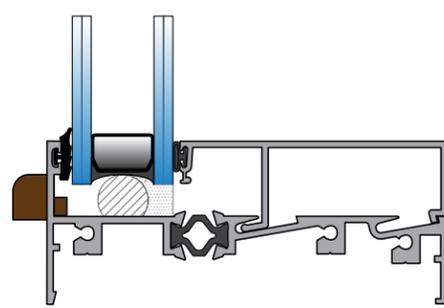
Rebirth.

Retro.

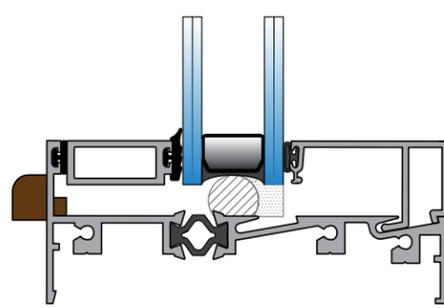
Reliable.



4160-R Fixed
Frame Depth 3 1/4"
U Value 0.334
AAMA AW 70
STC 35-40



4170-R Fixed
Frame Depth 4"
U Value 0.347
AAMA AW 70
STC 35-40



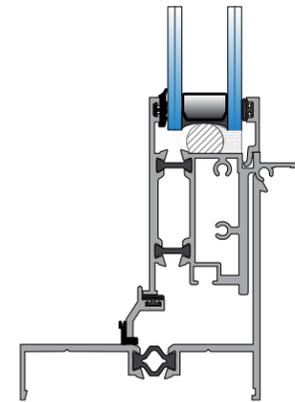
417A-R Fixed
Frame Depth 4"
U Value 0.347
AAMA AW 70
STC 35-40



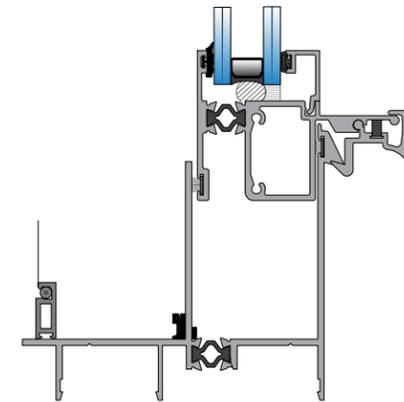
Texas A&M, College Station, TX, 4000 Single Hung

Better Product.

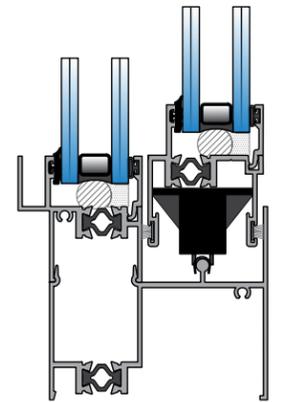
Traditional Look.



4130-R Single Hung
Frame Depth 3 1/4"
U Value 0.403
AAMA AW 50
STC 34-37



9150-R Single Hung
Frame Depth 4"
U Value 0.427
AAMA AW 85
STC 34-40



9530-R Slider
Frame Depth 3 1/4"
U Value 0.375
AAMA AW 50
STC 35

G100 Series

Frame Depth 2 1/2"
 U Value 0.314-0.4
 AAMA AW 60-100
 STC 27-46



G141
 A Fixed window with an AAMA rating of AW70, and a U-Value of 0.314.

The G100 series window is ideal for the Southeast region of the United States and Southern California where U-Values are not as stringent. The G100 series uses a 14.6 mm Polyamide Thermal Strip and is available in Fixed, Project Out, Project In, Dual Action, and Casement Outswing and Inswing configurations. The G100 can have up to four lites in one master frame with a maximum size of 80" x 80" for increased design flexibility and ease of installation. This series has a U-Value range from .314-.4, and a SHGC coefficient range of .271-.343, which is dependent upon the glass and size.

Typical Applications: The G100 is ideal for Schools and Universities where a 2 1/2" minimum frame depth is specified. This series can also be used in Offices, Healthcare, and Government buildings. Certain Blast and Hurricane configurations are also available.

Installation Accessories: There are many receptor and subsill options, along with many mullion options including Male/Female, 3 Piece, 3 Piece Tube, Corner, and Partition Mullions. There are also options for slide in strap anchors or return anchor legs on accessories. Many of the G100 installation accessories can be co-extruded onto the frame of the window for ease of installation and cost savings. Available hardware options include a single action handle with multiple locking points, which is standard, a longer handle option for ADA requirements, or an OS Operator handle with a flat screen.



G111
 A Project In, also known as a Hopper with an AAMA rating of AW 100, and a U-value of 0.4.



University of Rochester, Rochester, NY

Product Benefits

Energy Savings

- Lower U Value than many aluminum thermal windows.

Design Flexibility

- Unique frame design allows for multiple selection of glass types to meet low U values.

Third Party Certificates

- AMMA-Certified window for performance.
- IGCC-Certified insulating glass for long life.

Low Maintenance

- Vent hardware is easy to adjust if necessary.
- Durable metal handles and hinges for long life.

Finish and Color Choices

- Exterior and interior colors can be different.
- Standard or anodize paint colors.

Frame Choices

- Continuous head/sill/jamb eliminates mullions.
- Flange designs can eliminate field trimming.

Building Security

- One handle engages all vent perimeter locks.
- Optional key-operated handle equals no opening.

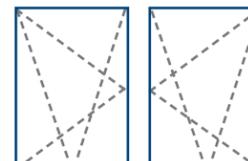
Field Labor Reductions

- Easy-to-remove glass films keeps glass clean.
- Dry exterior gaskets ensures interior reglazing.

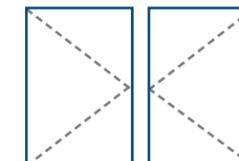
Fixed



Dual Action



Casement



Project In



Project Out



G200 Series

Frame Depth 3 1/4"
 U Value 0.309-0.375
 AAMA AW 60-100
 STC 27-35



G211
 A Project In/Hopper window with an AAMA rating of AW 100, and a U-Value of 0.375.

The G200 is the most versatile window in the ENERGSAVE series and is used a lot in the Central United States. This series uses a 32 mm Polyamide Thermal Strip and is available in Fixed, Project Out, Project In, Dual Action, and Casement Outswing and Inswing configurations. The G200 can have up to four lites in one master frame with a maximum size of 80" x 80" for increased design flexibility and ease of installation. This series is very similar to the G100 series, but it has a 3 1/4" frame depth. The G200 series has an overlap sash design meaning the sash depth is the same as the window frame depth. This series has a U-Value range from .309-.375, which is dependent upon the glass and size.

Typical Applications: The G200 is ideal for Window Wall applications in Multi-family buildings with a slab to slab construction. The series can withstand design pressures of 40-50 psf. The G200 is also our best seller for Blast and Hurricane projects due to the use of our co-extruded integral trim for anchoring. This series is ideal for Hospitals and Education facilities as well with its ability to provide limited access to blinds. A 1 3/4" IG is available for our standard frame; this allows triple glazing with internal blinds. There are jump in panel or hinged panel options which aid in acoustic ratings and can get STC Values in the mid to high 40's. This IGU Double Glazing Configuration greatly increases the overall U-Value for better energy performance.

Installation Accessories: There are many receptor and subsill options, along with many mullion options including Male/Female, 3 Piece, 3 Piece Tube, Corner, and Partition Mullions. There are also options for slide in strap anchors or return anchor legs on accessories. Many of the G200 installation accessories can be co-extruded onto the frame of the window for ease of installation and cost savings. Available hardware options include a single action handle with multiple locking points, which is standard, a longer handle option for ADA requirements, or an OS Operator handle with a flat screen. Peerless G200 series can marry up to a G200 Terrace Door, Outswing or Inswing.



G201
 A Project Out window, also know as an Awning with an AAMA rating of AW 100, and a U-Value of 0.363.



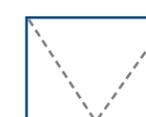
FIORI at Vitruvian Park
 Addison, TX

Product Benefits	
Energy Savings <ul style="list-style-type: none"> Lower U Value than many aluminum thermal windows. 	Design Flexibility <ul style="list-style-type: none"> Unique frame design allows for multiple selection of glass types to meet low U values.
Third Party Certificates <ul style="list-style-type: none"> AMMA-Certified window for performance. IGCC-Certified insulating glass for long life. 	Low Maintenance <ul style="list-style-type: none"> Vent hardware is easy to adjust if necessary. Durable metal handles and hinges for long life.
Finish and Color Choices <ul style="list-style-type: none"> Exterior and interior colors can be different. Standard or anodize paint colors. 	Frame Choices <ul style="list-style-type: none"> Continuous head/sill/jamb eliminates mullions. Flange designs can eliminate field trimming.
Building Security <ul style="list-style-type: none"> One handle engages all vent perimeter locks. Optional key-operated handle equals no opening. 	Field Labor Reductions <ul style="list-style-type: none"> Easy-to-remove glass films keeps glass clean. Dry exterior gaskets ensures interior reglazing.

Fixed



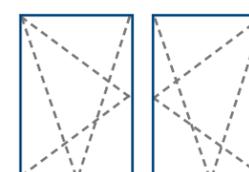
Project In



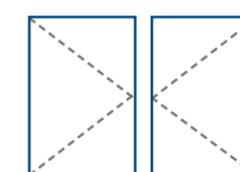
Project Out



Dual Action



Casement



G300 Series

Frame Depth 3 1/4"
 U Value 0.309-0.346
 AAMA AW 60-100
 STC 27-46



G351
 A Casement Outswing Left with an AAMA rating of AW 100, and a U-Value of 0.334.

The G300 series uses a 34 mm Polyamide Thermal Strip and is available in Fixed, Project Out, Project In, Casement Inswing and Outswing, Dual Action, Double Hung, and Single Hung. This series has a U-Value range from .30-.346, which is dependent upon the glass and size.

Typical Applications: The G300 is commonly used in the Northern territories such as North Dakota, Montana, and Wyoming. The G300 series window is a similar product to the G200, but should be used when you need a little extra in U-Value performance. Typically, the G300 tests .03 points better than a G200 series window.

Installation Accessories: There are many receptor and subsill options, along with many mullion options including Male/Female, 3 Piece, 3 Piece Tube, Corner, and Partition Mullions. There are also options for slide in strap anchors or return anchor legs on accessories. Many of the G300 installation accessories can be co-extruded onto the frame of the window for ease of installation and cost savings. Available hardware options include a single action handle with multiple locking points, which is standard, a longer handle option for ADA requirements, or an OS Operator handle with a flat screen. The G300 series can marry up to G300 Inswing and Outswing Terrace Doors.



G341
 A Fixed window with an AAMA rating of AW 70, and a U-Value of 0.3.



Uptown Condo, Minneapolis, MN

Product Benefits

Energy Savings

- Lower U Value than many aluminum thermal windows.

Design Flexibility

- Unique frame design allows for multiple selection of glass types to meet low U values.

Third Party Certificates

- AMMA-Certified window for performance.
- IGCC-Certified insulating glass for long life.

Low Maintenance

- Vent hardware is easy to adjust if necessary.
- Durable metal handles and hinges for long life.

Finish and Color Choices

- Exterior and interior colors can be different.
- Standard or anodize paint colors.

Frame Choices

- Continuous head/sill/jamb eliminates mullions.
- Flange designs can eliminate field trimming.

Building Security

- One handle engages all vent perimeter locks.
- Optional key-operated handle equals no opening.

Field Labor Reductions

- Easy-to-remove glass films keeps glass clean.
- Dry exterior gaskets ensures interior reglazing.

Fixed



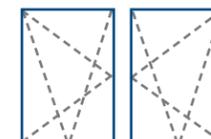
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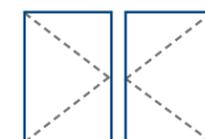
Project Out



Dual Action



Casement



Double Hung



Single Hung



G400 Series

Frame Depth 3 1/4"
U Value 0.25-0.281
AAMA AW 60-100
STC 27-48



G401
 A Project Out Awning window with an AAMA rating of AW 100, and a U-Value of 0.281.

The G400 series is very similar to the G200 series. This product can be triple glazed as an IGU/DG with optional internal blinds. There are jump in panel or hinged panel options which provide higher acoustics, getting STC values in the mid to high 40's. The IGU/DG configuration also greatly increases the overall U-Value for better energy performance. The G400 series uses a 34 mm Polyamide Thermal Strip just like the G300 thermal strip and is available in Fixed, Project Out, Project In, Dual Action, and Casement Outswing and Inswing configurations. This series has a U-Value range from .25-.281, which is dependent upon the glass and size.

Typical Applications: The G400 series is designed to be used when you need a lower U-Value and a better STC performance. This series will typically perform 0.06 U-Value points better than the G200 series.

Installation Accessories: There are many receptor and subsill options, along with many mullion options including Male/Female, 3 Piece, 3 Piece Tube, Corner, and Partition Mullions. There are also options for slide in strap anchors or return anchor legs on accessories. Many of the G400 installation accessories can be co-extruded onto the frame of the window for ease of installation and cost savings. Available hardware options include a single action handle with multiple locking points, which is standard, a longer handle option for ADA requirements, or an OS Operator handle with a flat screen. Peerless G400 series can marry up to the G300 series Single and Double Hung windows and the G300 series Inswing and Outswing Terrace Doors.



G441
 A Fixed window with an AAMA rating of AW 70, and a U-Value of 0.236.



Oklahoma City VAMC, Oklahoma City, OK

Product Benefits

Energy Savings

- Lower U Value than many aluminum thermal windows.

Design Flexibility

- Unique frame design allows for multiple selection of glass types to meet low U values.

Third Party Certificates

- AMMA-Certified window for performance.
- IGCC-Certified insulating glass for long life.

Low Maintenance

- Vent hardware is easy to adjust if necessary.
- Durable metal handles and hinges for long life.

Finish and Color Choices

- Exterior and interior colors can be different.
- Standard or anodize paint colors.

Frame Choices

- Continuous head/sill/jamb eliminates mullions.
- Flange designs can eliminate field trimming.

Building Security

- One handle engages all vent perimeter locks.
- Optional key-operated handle equals no opening.

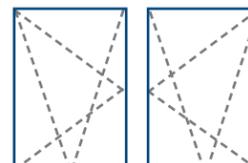
Field Labor Reductions

- Easy-to-remove glass films keeps glass clean.
- Dry exterior gaskets ensures interior reglazing.

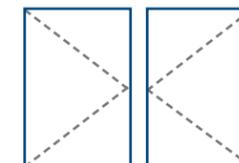
Fixed



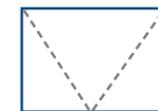
Dual Action



Casement



Project In



Project Out



G500 Series

Frame Depth 4 1/4"
U Value 0.15-0.237
AAMA AW 60-100
STC 27-46



G561
 A Casement Inswing Left with an AAMA rating of AW 80, and a U-Value of 0.176.

The G500 series is mostly used in the Northern extreme regions of the United States such as New York, Massachusetts, and Maine. This series should be used anywhere that very low U-Values are required. Peerless G500 uses a 57 mm Polyamide Thermal Strip and is available in Fixed, Project Out, Project In, Double Hung, Single Hung, Dual Action, and Casement Outswing and Inswing configurations. The G500 can have up to four lites in one master frame with a maximum size of 80" x 80" for increased design flexibility and ease of installation. This series has a U-Value range from 0.15-0.237, which is dependent upon the glass and size.

Typical Applications: Peerless G500 is ideal for window wall projects which require a design pressure of 50 psf or higher. It is the Peerless Best Seller for stringent U-Value requirements in Schools, Hospitals, Multi-family, and Government projects. Certain Blast and Hurricane configurations are also available. A 1 3/4" IG is available for our standard and grid pocket frames; this allows triple glazing with optional internal blinds. There are jump in panel or hinged panel options which aid in acoustic ratings and can get STC Values in the mid to high 40's. This IGU Double Glazing Configuration greatly increases the overall U-Value for better energy performance.

Installation Accessories: There are many receptor and subsill options to accommodate for slab deflection, and also many mullion options including Male/Female, 3 Piece, 3 Piece Tube, Corner, and Partition Mullions. There are different options for slide in strap anchors or return anchor legs on accessories. Many of the G500 installation accessories can be co-extruded onto the frame of the window for ease of installation and cost savings. Available hardware options include a single action handle with multiple locking points, which is standard, a longer handle option for ADA requirements, or an OS Operator handle with a flat screen. Peerless G500 series can marry up to G500 Outswing and Inswing Terrace Doors, GSL2 Horizontal Sliding windows, and GSD2 Horizontal Sliding Glass doors.



G5T1
 A Dual Action Casement Inswing Left with an AAMA rating of AW 60, and a U-Value of 0.16.



Grafton Municiple Bldg, Grafton, MA

Product Benefits

Energy Savings

- Lower U Value than many aluminum thermal windows.

Design Flexibility

- Unique frame design allows for multiple selection of glass types to meet low U values.

Third Party Certificates

- AMMA-Certified window for performance.
- IGCC-Certified insulating glass for long life.

Low Maintenance

- Vent hardware is easy to adjust if necessary.
- Durable metal handles and hinges for long life.

Finish and Color Choices

- Exterior and interior colors can be different.
- Standard or anodize paint colors.

Frame Choices

- Continuous head/sill/jamb eliminates mullions.
- Flange designs can eliminate field trimming.

Building Security

- One handle engages all vent perimeter locks.
- Optional key-operated handle equals no opening.

Field Labor Reductions

- Easy-to-remove glass films keeps glass clean.
- Dry exterior gaskets ensures interior reglazing.

Fixed



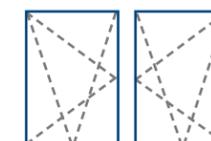
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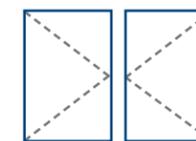
Project Out



Dual Action



Casement



Double Hung



Single Hung



Protector Series



P541
A Fixed window with an AAMA rating of AW 70, and a U-Value of 0.238.

The Peerless Protector Series features two Fixed window models which have been designed for facilities where the occupant's safety and welfare is a primary concern. The P541 and P141 Fixed windows are the only two models available in the Peerless Protector series line of products. Both of these window models have passed the drop test for the AAMA 501.8-12, standard test method for determination of resistance to human impact of window systems intended for use in psychiatric applications. The P541 and P141 Protector Series can withstand multiple interior human impacts up to 2,000 ft-lbs. The P541 and P141 also have added acoustic benefits.

The P541 Fixed window has an Interior Operating Panel with an overall frame depth of 4 1/4". The IGU can either be 1" or 1 3/8" with optional internal blinds. The vent is set at the interior of the frame and is comprised of extruded aluminum and 1/2" Lexan which is marine glazed with a wraparound vinyl channel. The P541 has a U-Value of 0.238, and it's thermal performance can vary slightly due to glass and size.

The P141 Fixed window is just the Interior Operating Panel with no IGU included. The P141 has a frame depth of 2 1/2" and it's thermal performance will vary depending on the type of window it is installed up against. This model will provide a vent on the interior of the existing window frame and is comprised of extruded aluminum and 1/2" Lexan which is marine glazed with a wraparound vinyl channel.

Typical Applications: The Peerless Protector Series is ideal for hospitals and other facilities that require psychiatric applications. The P541 should be used for full window replacement projects or for new construction projects. The P141 will butt up to most existing windows frames, providing a psychiatric application without a full window replacement job being necessary. Both models in the Protector Series feature a concealed multi-point locking system and a concealed 4-bar hinge system for added safety. Blast and Hurricane testing for the P541 and P141 are also available.



P141
A Fixed window designed to attach to the interior of an existing window.



Psychiatric Testing done at Peerless

P141
Frame Depth 2 1/2"

P541
Frame Depth 4 1/4"
U Value 0.238
AAMA AW 70
STC 27-36

Product Benefits

Product Benefits	
Energy Savings	Design Flexibility
<ul style="list-style-type: none"> Lower U Value than many aluminum thermal windows. 	<ul style="list-style-type: none"> Unique frame design allows for multiple selection of glass types to meet low U values.
Third Party Certificates	Low Maintenance
<ul style="list-style-type: none"> AMMA-Certified window for performance. IGCC-Certified insulating glass for long life. 	<ul style="list-style-type: none"> Vent hardware is easy to adjust if necessary. Durable metal hardware and hinges for long life.
Finish and Color Choices	Frame Choices
<ul style="list-style-type: none"> Exterior and interior colors can be different. Standard or anodize paint colors. 	<ul style="list-style-type: none"> Continuous head/sill/jamb eliminates mullions. Flange designs can eliminate field trimming.
Building Security	Field Labor Reductions
<ul style="list-style-type: none"> Concealed multiple point locking system. Tamper proof custodial locking mechanism. 	<ul style="list-style-type: none"> Easy-to-remove glass films keeps glass clean. Dry exterior gaskets ensures interior reglazing.

Fixed



G600 Series

Frame Depth 3 1/4"
 U Value 0.304-0.392
 AAMA AW 70-100
 STC 27-40



G641
 A Fixed window with an AAMA rating of AW 70, and a U-Value of .303.



GSH6
 A Single Hung window with an AAMA rating of AW50.

The ENERGSAVE G600 series is a cost effective solution which competes against older pour and debridge windows still being used in the window industry. The G600 remains at a similar price point as the pour and debridge windows while providing far superior window benefits. Some of the benefits for the G600 include mitered corners for a clean architectural design, two color finish capabilities, improved thermal performance with the thermal strip design, no risk for dry shrinkage, and typical Eurogroove hardware with multiple locking points operated by one handle. When you take into consideration all of these benefits and the similar cost points, why would you not choose the G600 series?

The G600 uses a 32 mm Unibar Polyamide Thermal Strip and is available in Fixed, Project Out, Project In, Double Hung, Single Hung, and Casement Outswing and Inswing configurations. The G600 can have up to four lites in one master frame with a maximum size of 80" x 80" for increased design flexibility and ease of installation.

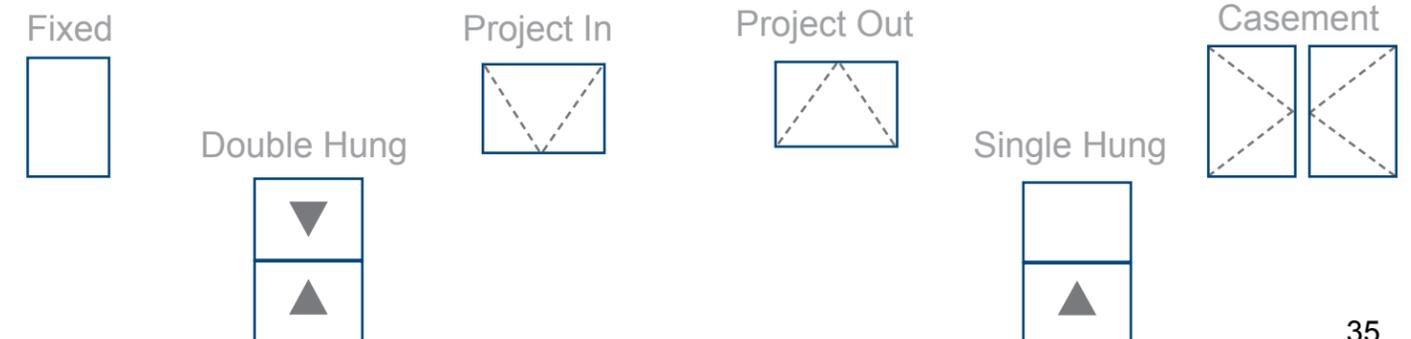
Typical Applications: The G600 series is ideal for single window "punched" openings or basic retro-fit openings in universities, schools, offices, hospitals, and so much more. It is also ideal for Historic applications due to the small sight lines of the frame and sash. This series has a frame depth of 3 1/4" and an overlap sash design with the sash being the same depth as the window frame. The IG is standard at 1 3/4" with 1 1/4" being available with a grid pocket frame. This product can be triple glazed with an IGU/DG with optional internal blinds. This IGU Double Glazing Configuration greatly increases the overall U-Value for better energy performance. The U-Value range of the G600 series is 0.304-0.392 and depends on the configuration, glass, and size. There are jump in panel or hinged panel options which aid in acoustic ratings and can get STC Values in the mid to high 40's. Certain Blast and Hurricane configurations are available.

Installation Accessories: There are many receptor and subsill options, along with many mullion options including Male/Female, 3 Piece, 3 Piece Tube, Corner, and Partition Mullions. There are also options for slide in strap anchors or return anchor legs on accessories. Many of the G600 installation accessories can be co-extruded onto the frame of the window for ease of installation and cost savings. Available hardware options include a white bronze single action handle with multiple locking points, which utilizes the Eurogroove system for installation. Long handle, Short handle, and Cam handle options are available. Peerless G600 series can marry up to the G200 Outswing and Inswing Terrace Doors.



Notre Dame University, Baltimore MD

Product Benefits	
Energy Savings <ul style="list-style-type: none"> Lower U Value than many aluminum thermal windows. 	Design Flexibility <ul style="list-style-type: none"> Unique frame design allows for multiple selection of glass types to meet low U values.
Third Party Certificates <ul style="list-style-type: none"> AMMA-Certified window for performance. IGCC-Certified insulating glass for long life. 	Low Maintenance <ul style="list-style-type: none"> Vent hardware is easy to adjust if necessary. Durable metal handles and hinges for long life.
Finish and Color Choices <ul style="list-style-type: none"> Exterior and interior colors can be different. Standard or anodize paint colors. 	Frame Choices <ul style="list-style-type: none"> Continuous head/sill/jamb eliminates mullions. Flange designs can eliminate field trimming.
Building Security <ul style="list-style-type: none"> One handle engages all vent perimeter locks. Optional key-operated handle equals no opening. 	Field Labor Reductions <ul style="list-style-type: none"> Easy-to-remove glass films keeps glass clean. Dry exterior gaskets ensures interior reglazing.



G700 Series

Frame Depth 2"
U Value 0.293-0.384
AAMA AW 70-100
STC 27-40



G741
 A Fixed window with an AAMA rating of AW 70, and a U-Value of 0.293.

Our Peerless G700 series is cost competitive against older pour and debridge windows being used in the industry right now. The G700 will provide many superior benefits while still being around the same cost point as pour and debridge windows. Some of these benefits include mitered corners for a clean architectural design, two color finish capabilities, improved thermal performance with the thermal strip design, no risk for dry shrinkage, and typical Eurogroove hardware with multiple locking points operated by one handle. With this cost effective solution providing so many advantages why would you not choose the G700 series?

The G700 uses a 14.6mm Unibar Polyamide Thermal Strip and is available in Fixed, Project Out, Project In, and Casement Outswing and Inswing configurations. The G700 can have up to four lites in one master frame with a maximum size of 80" x 80" for increased design flexibility and ease of installation. The G700 has a 2" frame depth with an overlap sash design with the sash being the same depth as the window frame.

Typical Applications: The G700 series is ideal for single window "punched" openings in Schools and Universities. This series should be used when a 1/8" wall thickness specified. A 1" IG is standard for the G700 series. Peerless G700 is available for Blast and Impact jobs in certain configurations. U-Values for the G700 can range from 0.293-0.384 depending on configuration, glass, and size.

Installation Accessories: There are many receptor and subsill options, along with many mullion options including Male/Female, 3 Piece, 3 Piece Tube, Corner, and Partition Mullions. There are also options for slide in strap anchors or return anchor legs on accessories. Many of the G700 installation accessories can be co-extruded onto the frame of the window for ease of installation and cost savings. Available hardware options include a white bronze single action handle with multiple locking points, which utilizes the Eurogroove system for installation. Long handle, Short handle, and Cam handle options are available.



G751
 A Casement Outswing Left window with an AAMA rating of AW100, and a U-Value of 0.384.

Product Benefits

Energy Savings

- Lower U Value than many aluminum thermal windows.

Design Flexibility

- Unique frame design allows for multiple selection of glass types to meet low U values.

Third Party Certificates

- AMMA-Certified window for performance.
- IGCC-Certified insulating glass for long life.

Low Maintenance

- Vent hardware is easy to adjust if necessary.
- Durable metal handles and hinges for long life.

Finish and Color Choices

- Exterior and interior colors can be different.
- Standard or anodize paint colors.

Frame Choices

- Continuous head/sill/jamb eliminates mullions.
- Flange designs can eliminate field trimming.

Building Security

- One handle engages all vent perimeter locks.
- Optional key-operated handle equals no opening.

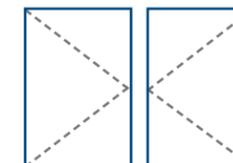
Field Labor Reductions

- Easy-to-remove glass films keeps glass clean.
- Dry exterior gaskets ensures interior reglazing.

Fixed



Casement



Project In



Project Out



Timeless Series

Frame Depth 3 1/4"
U Value 0.304-0.392
AAMA AW 70-100
STC 27-35



T605 Offset
 A Fixed over a Project Out Offset with an AAMA rating of AW 70, and a U-Value of 0.34.

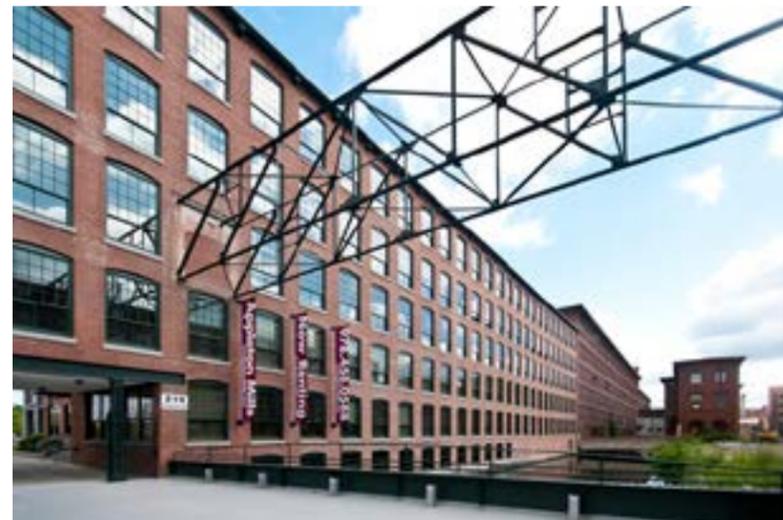
The T600 series has a 3 1/4" frame depth, and an overlap sash design with the sash being the same depth as the window frame. The IG is standard at 1" IG with a grid pocket frame. The U-value range is 0.304-0.392 and depends on the configuration, glass, and size. The G600 uses a 32 mm Unibar Polyamide Thermal Strip.

Peerless T600 can be used in Blast and Hurricane jobs with certain configurations. The configurations available are Fixed, Project Out, Project In, Single Hung, Double Hung, Dual Action, and Casement Outswing and Inswing. The G600 can master frame up to 4 lites at a maximum size of 80" x 80". This is the most economical G-Series Option, it is ideal for punched openings and basic retro-fit openings. The T600 is ideal for Historic applications due to the small sight line of the frame and sash. The T600 series is equipped with a slide in grid design that easily replicates historic sightlines, reduces the number of vents needed in an opening, and saves time and labor.

The T600 can marry up to the G200 series Inswing and Outswing Terrace Door. There are many receptor and subsill options, along with many mullion options including male/female, 3 Piece, Piece Tube, Corner, and Partition mullions. There are options for slide in strap anchors or return anchor legs on accessories, and accessories can be co-extruded. Available hardware includes Eurogroove with multi-point single handle locks in white bronze.



T641
 A Historic Fixed window with an AAMA rating of AW 70, and a U-Value of 0.303.



Appleton Mills, Lowell, MA

Product Benefits

Energy Savings

- Lower U Value than many aluminum thermal windows.

Design Flexibility

- Unique frame design allows for multiple selection of glass types to meet low U values.

Third Party Certificates

- AMMA-Certified window for performance.
- IGCC-Certified insulating glass for long life.

Low Maintenance

- Vent hardware is easy to adjust if necessary.
- Durable metal handles and hinges for long life.

Finish and Color Choices

- Exterior and interior colors can be different.
- Standard or anodize paint colors.

Frame Choices

- Continuous head/sill/jamb eliminates mullions.
- Flange designs can eliminate field trimming.

Building Security

- One handle engages all vent perimeter locks.
- Optional key-operated handle equals no opening.

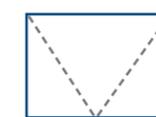
Field Labor Reductions

- Easy-to-remove glass films keeps glass clean.
- Dry exterior gaskets ensures interior reglazing.

Fixed



Project In



Project Out



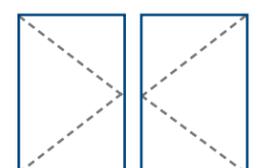
Double Hung



Single Hung



Casement



GSL2 Horizontal Slider

Frame Depth 4 1/4"
 U Value 0.349
 AAMA AW 80
 STC 35-42



Interior Side

The GSL2 Horizontal Sliding window, also called our T-Rex sliding window, has a 4 1/4" frame depth. The GSL2 is a compression sealed window which allows it to achieve a very high water resistance pressure at a low sightline. The maximum glass size is 1 3/8" for glazing exterior applied grids. The GSL2 uses a Polyamide Thermal Strip and has a U-Value of 0.349 depending on the configuration, glass, and size.

The ENERGSAVE GSL2 utilizes a component that is a true polyamide piece to attain the highest thermal performance. The T-Rex sill device component allows the frame to be separated in the middle and then rejoined. This design allowed Peerless to position the thermal break under each sash panel. Santoprene Bulb Gaskets and Foam Plugs are used to achieve additional air and water tightness. The GSL2 is a true thermally broken window system unlike any other available in the industry.

Installation Accessories: Peerless GSL2 has an interlocking two piece adjustable corner key design with equal length master frame legs. The available configurations are XX, XO, OX, XOX, OXO, and OXXO. There are many receptor and subsill options, along with many mullion options. Available hardware options are Giesse multi-point single handle locks, lift and slide rollers, or slide only rollers.



Exterior Side



Somerset Condo Hilton, Head Island, Hilton Head , SC

Product Benefits

Energy Savings

- Unique .349 U Value for horizontal Slider.
- CRF above 65 ensures reduced condensation.

Third Party Certifications

- AAMA- certified window for performance.
- IGCC- certified insulating glass for long life.

Sill Sightline

- Unique 2" sill sightline (matches jamb & head).

Design Flexibility

- Unique frame design allows for multiple selection of glass types to meet low U values.

Finish and Color Choices

- Exterior and interior colors can be different.
- Standard or anodize paint colors.

Field Labor Reductions

- Easy-to-remove glass films keeps glass clean.
- Dry exterior gaskets ensures interior reglazing.

Building Security

- Sash is sealed in frame when handle points up.
- Concealed latch prevents removal of open sash.

Low Maintenance

- Tested to AAMA 'Life Cycle' specifications.
- Nylon wheel resists corrosion for long life.

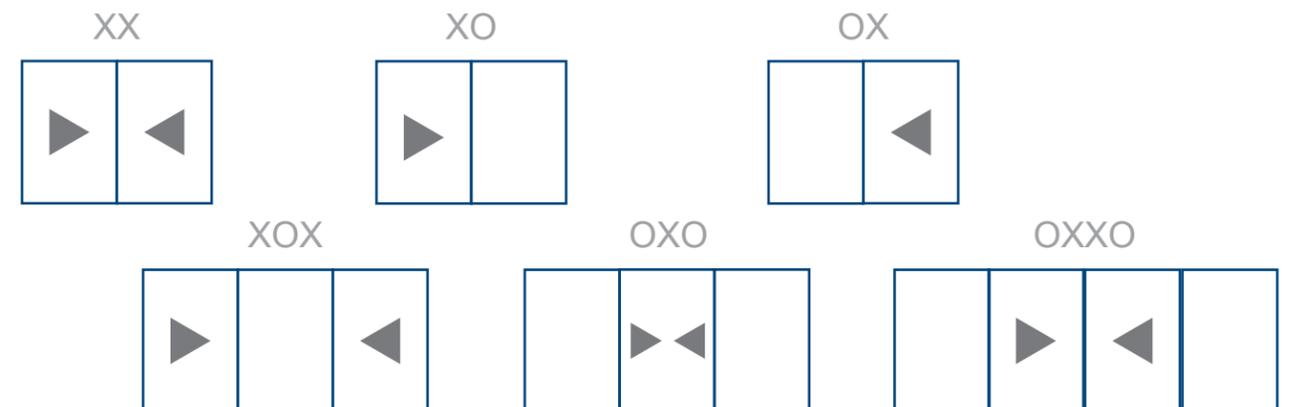


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French Doors, Nashville, TN, G200 Series

Door Systems

Terrace Doors

Frame Depth 3 1/4"-4 1/4"
 U Value 0.305-0.365
 AAMA AW 100
 STC 27-35



GTD3
 A G300 Series Terrace Door with bronze exterior and white interior, and a standard sill.

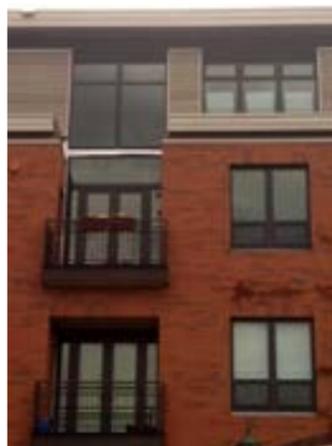
Peerless ENERGSAVE Terrace Doors are available in 3 different models; GTD2, GTD3, and GTD5. The GTD2 and GTD3 Terrace Doors have a 3 1/4" frame depth and the GTD5 has a 4 1/4" frame depth. All of the Terrace doors have a standard IGU size of 1". Exterior grids are another added feature of the Peerless Terrace Doors. The Terrace doors are available as an Inswing or Outswing, Left hand or Right hand configuration. French Doors are also available to provide an unobstructed larger opening by eliminating the need for a meeting rail or a vertical mullion between the doors. U-Value performance for the Terrace Doors ranges from 0.305-0.365 depending on the model, configurations, glass, and size.

Typical Applications: The Peerless Terrace Doors are ideal for condominiums and apartments. They should be used on patios or balconies. They are not to be used as entrance doors.

Installation Accessories: The ENERGSAVE Terrace Doors feature an optional 1/2" ADA sill with an AAMA rated 12 psf water performance. The Terrace doors are equipped with Eurogroove locking hardware. There are multiple cylinder options available; keyed exterior/keyed interior, keyed exterior/thumb turn interior, keyed interior only, and thumb turn interior only. There are many receptor and subsill options, as well as mullion options. Standard and custom panning is also available and our Terrace Doors use a fully adjustable XL butt hinge.



GTD5
 A G500 Series Terrace Door with an ADA 1/2" sill.



Green Leaf Lofts
 Minneapolis, MN

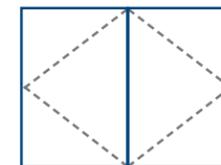
Product Benefits

Product Benefits	
Energy Savings <ul style="list-style-type: none"> Lower U-Values than National Standard for Terrace Doors. 	Design Flexibility <ul style="list-style-type: none"> Unique frame design allows for multiple selection of glass types to meet low U-values.
Third Party Certifications <ul style="list-style-type: none"> AAMA-certified window for performance. IGCC- certified insulating glass for long life. 	Finish and Color Choices <ul style="list-style-type: none"> Exterior and interior colors can be different. Standard or anodize paint colors.
Building Security <ul style="list-style-type: none"> One handle engages all panel perimeter locks. Operational key-operated handle equals no opening. 	Low Maintenance <ul style="list-style-type: none"> Panel Hardware easy to adjust, if necessary. Durable metal handles and hinges for long life.
Pre-hung Unit <ul style="list-style-type: none"> Installs easily with factory-set panel alignment. Reduces on-site adjustments of hardware. 	Field Labor Reductions <ul style="list-style-type: none"> Easy to remove glass film keeps glass clean. Dry exterior gaskets ensures interior reglazing.

Terrace Door



French Door



Sliding Doors

Frame Depth 4 1/4"
U Value 0.331
AAMA AW 40
STC 35-40



The GSD2 Sliding Glass Door, also called our T-Rex sliding door, has a 4 1/4" frame depth. The GSD2 is a compression sealed door which allows it to achieve a very high water resistance pressure at a low sightline. The maximum glazing size can be up to 1 3/8". This ENERGSAVE sliding door uses a concealed latch which prevents open panel removal. The GSD2 uses a Polyamide Thermal Strip and has a U-Value of 0.331 depending on the configuration, glass, and size. The GSD2 has a 2" sill sightline that matches the head and jamb.

The ENERGSAVE GSD2 is able to achieve a higher thermal performance due to the T-Rex sill component. This component allows the frame to be separated in the middle and then rejoined. With this design, Peerless is capable of positioning the thermal break under each sash panel making this sliding door a true thermally broken sliding door system unlike any other available in the industry. Santoprene Bulb Gaskets and Foam Plugs are used to achieve additional air and water tightness.

Typical Applications: The Peerless GSD2 Sliding Door is ideal for condominiums and apartments. They should be used on patios or balconies. They are not to be used as entrance doors.

Installation Accessories: Peerless GSD2 has an interlocking two piece adjustable corner key design with equal length master frame legs. The available configurations are XO, OX, XOx, OXO, and OXXO. There are multiple options for receptor and subsills, along with many mullion options. Hardware options include Giesse multi-point single handle locks, lift and slide rollers, and three cylinder options; keyed exterior/thumb turn interior, keyed interior only, and thumb turn interior only.



22 Water Street, Cambridge, MA

Interior Side
 Peerless Sliding Doors have the capability to have different Interior and exterior colors.



Exterior Side
 A GSD2 Sliding Door with bronze exterior paint.

Product Benefits	
Energy Savings <ul style="list-style-type: none"> Uniquely low U Value for horizontal sliding door. CRF above 65 ensures reduced condensation. 	Third Party Certifications <ul style="list-style-type: none"> AAMA- certified window for performance. IGCC- certified insulating glass for long life.
Sill Sightline <ul style="list-style-type: none"> Unique 2" sill sightline (matches jamb & head). 	Design Flexibility <ul style="list-style-type: none"> Unique frame design allows for multiple selection of glass types to meet low U values.
Finish and Color Choices <ul style="list-style-type: none"> Exterior and interior colors can be different. Standard or anodize paint colors. 	Field Labor Reductions <ul style="list-style-type: none"> Easy-to-remove glass film keeps glass clean. Dry exterior gaskets ensures interior reglazing.
Building Security <ul style="list-style-type: none"> Sash is sealed in frame when handle points up. Concealed latch prevents removal of open sash. 	Low Maintenance <ul style="list-style-type: none"> Tested to AAMA 'Life Cycle' specifications. Nylon wheel resists corrosion for long life.

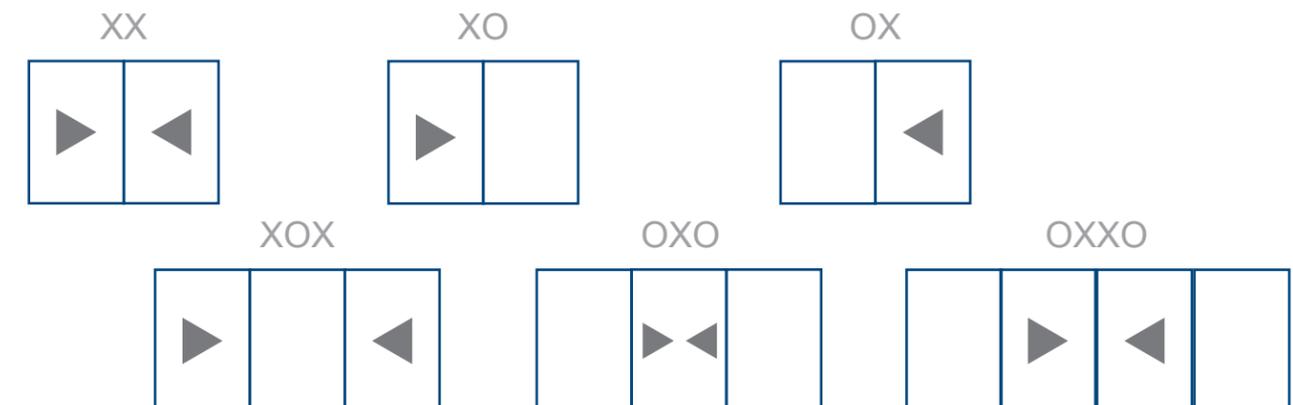


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Innovative New Designs

Dry Glaze

The Peerless Dry Glaze system is a more reliable method for glazing which is both consistent and dependable. This system utilizes a dry exterior gasket with a foam backer rod under the glass and an interior bead of silicone. Thermal performance, water management, and air infiltration have all be improved with the dry glaze system. The dry glaze system also provides a cleaner, more appealing look to our windows. Another major benefit of the dry glaze system is the ability to replace glass from the interior. We no longer have to get on the exterior of a building to cut and separate the glass from the wet silicone. With dry glaze, all we have to do is cut the interior silicone bead and then the glass can be removed from the dry exterior gasket with ease.

The dry glaze system method is easier to manufacturer than the old wet glaze method. This systems creates a safer plant environment and contributes towards lean technology practices. Peerless uses the superior dry glaze system on the complete line of ENERGSAVE products.



Weeps

Peerless uses durable and reliable weeps that out perform the current industry's standard weeping system. The weeps provide a cleaner, more appealing look to the windows. The weep cover is painted to match any available finish. Weeps are mechanically fastened which decreases the risk of losing pieces during installation. Peerless weep covers protect from wind and debris, allowing water to escape at all times.

Weeps ensure the window is going to keep the water from the interior of the building, and in return the windows and building will last longer.



Traditional Weep



Painted to Match Weep Cover

ENERGFRONT



Interior Side
Peerless ENERGFRONT is ideal for storefront replacements.

The Peerless ENERGFRONT system has been designed for applications that are traditionally windows, but have been replaced with Storefront. The ENERGFRONT system provides superior energy efficiency and ease of installation. Window kits for the ENERGFRONT system will be pre-cut, pre-fabricated, and ready for installation. Glass sizes for the windows will also be provided.

The ENERGFRONT system was designed with a narrow 2" sightline which is very similar to storefront systems. ENERGFRONT products also provide increased flexibility for your design requirements and spans can achieve a maximum size of 6' x 6'. This system is capable of achieving a very low 0.309 U-value and it has been water tested at 15 lbs, u-value is dependant on glass make up and size. The ENERGFRONT system has an air infiltration rate of 6.24 psf and a structural load pressure of 105 psf.

The Peerless ENERGFRONT system is innovative with weep covers that protect the system from air-born debris, and that are painted to match. Dry Glaze system allows for ease of installation and replacement of glass.



Exterior Side
ENERGFRONT is not intended for use in Entrances.



Fixed Floating Sash



Above:
3D model of Fixed Floating Sash
Bottom Left:
Project Out units within a Fixed window.
Bottom Right:
Fixed window with grids that replicate operable units.

Peerless Architectural Windows and Doors Fixed Floating Sash window is an innovative new design that allows an architect or building owner to satisfy the required sightlines of a projected window within a fixed window configuration. The Peerless Fixed Floating Sash design is a completely fixed window that resembles an operable style window within a fixed unit. The advantages of the Fixed Floating Sash is that it is more cost effective than an operable window, more thermally efficient and is ideal for projects that require maintaining the historic integrity of the building's facade. Additional savings in heating and cooling costs can be realized annually due to of the improved thermal efficiency of the Peerless design. Many industrial buildings such as warehouses and steel mills built prior to WWII were designed using larger windows to increase natural light. However, the windows were single paned units, with considerable air leakage and heat and cold transfer. Many of these buildings are now being renovated and used for other commercial applications which require more energy efficient product designs, while also replicating the architectural detail that defines the character of the structure and its historic significance.

Peerless designed the innovative Fixed Floating Sash to solve this dilemma and provide a superior window solution. The Fixed Floating Sash uses a slide in grid to replicate the sightlines needed for the project. This slide in grid is cost effective, aesthetically pleasing and easily matches a wide variety of historical sightlines a project may require. Recent projects have been completed using the Fixed Floating Sash with great success!

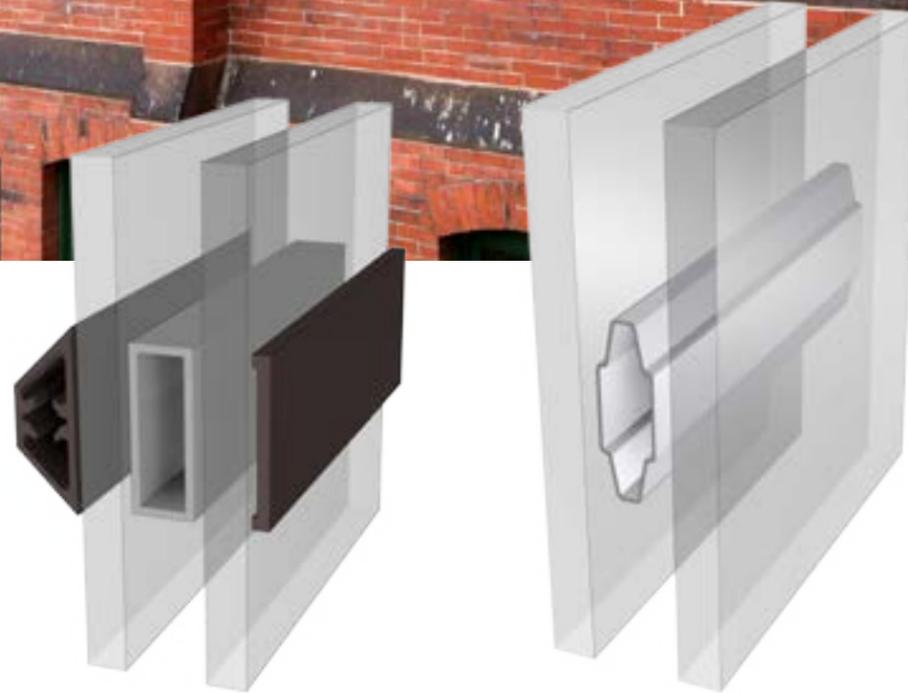
Before



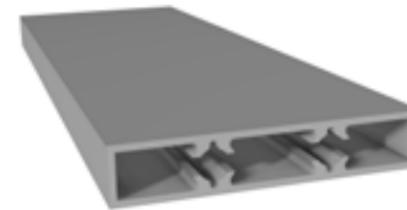
After



Historic Series



Receiver Pan option



Putty Grid Option



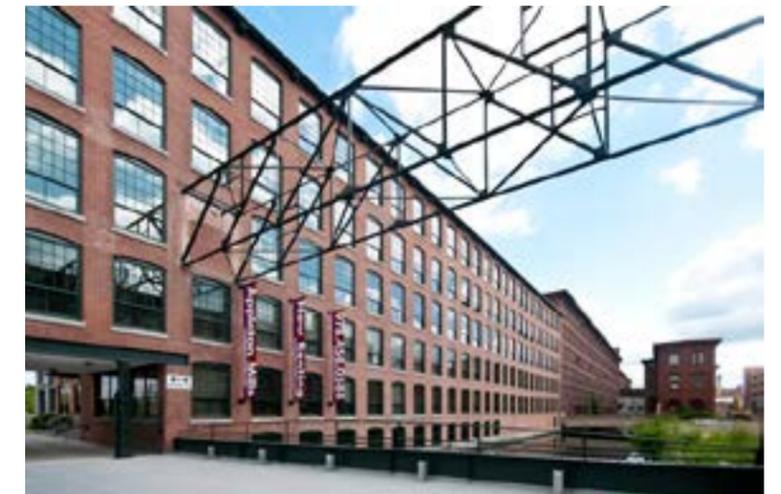
G541 with Slide in Grid

The Peerless TIMELESS Historic Products have been successfully designed and installed in historical buildings throughout the nation. These products tailor sightlines that match both wood and steel replacement applications. We offer a full line of scrolled panning and trim to closely match exterior profiles along with diverse selection of exterior, between the glass and interior grids.

Peerless innovative technology and design enhancements increase the performance of the products while their window and door designs, custom trim and historical panning replicate the architectural detail that defines the character of the structure and its historic significance.

The Peerless team continues to design products to architecturally preserve the past for generations to come while contributing to green principles and initiatives. Some historic window configurations include, Double Hung simulated Fixed, Offset Fixed, Single Hung/ Double Hung with Fixed above and below, side by side operable Casements with a Fixed lite above, stacked equal lite Fixed/Projected/Fixed and numerous other configurations to satisfy your Historic needs. Multiple units can also be assembled into one Master Frame at the manufacturing facility along with an optional flange design to make installation in the field easier and cost effective.

Appleton Mills, Lowell, MA



Historic Systems

Window Wall



Parcel 24,
Boston, MA



1620 Prince Street,
Alexandria, VA



120 Kingston, Boston, MA



JHU, Balitmore, MD



Interior view of Window Wall System



Prince Frederick in College
Park, MD used a small
Window Wall System to
add a dramatic corner to
the building.

Peerless ENERGSAVE Window Wall is offered in our G200, G300, G400, and G500 series. The GSL2 sliding window, GSD2 sliding door, and terrace doors are also available in window wall applications. Peerless Window wall can be done at large sizes for maximum daylighting.

Peerless Window Wall System is great for big projects and is more structurally sound than Curtain Wall. There are many different glass, film and coating options to meet stringent design specifications. The Window Wall System provides buildings with a dramatic exterior that shows off high quality architectural design. Our Window Wall System can accommodate concrete movement up to 1".

Peerless Window Wall System can come in many different configurations, including, fixed, fixed/project in, fixed/project out, fixed/casement, casement, fixed/tilt-turn, terrace door outswing, terrace door inswing, fixed/t-rex horizontal slider, and t-rex horizontal sliding door.

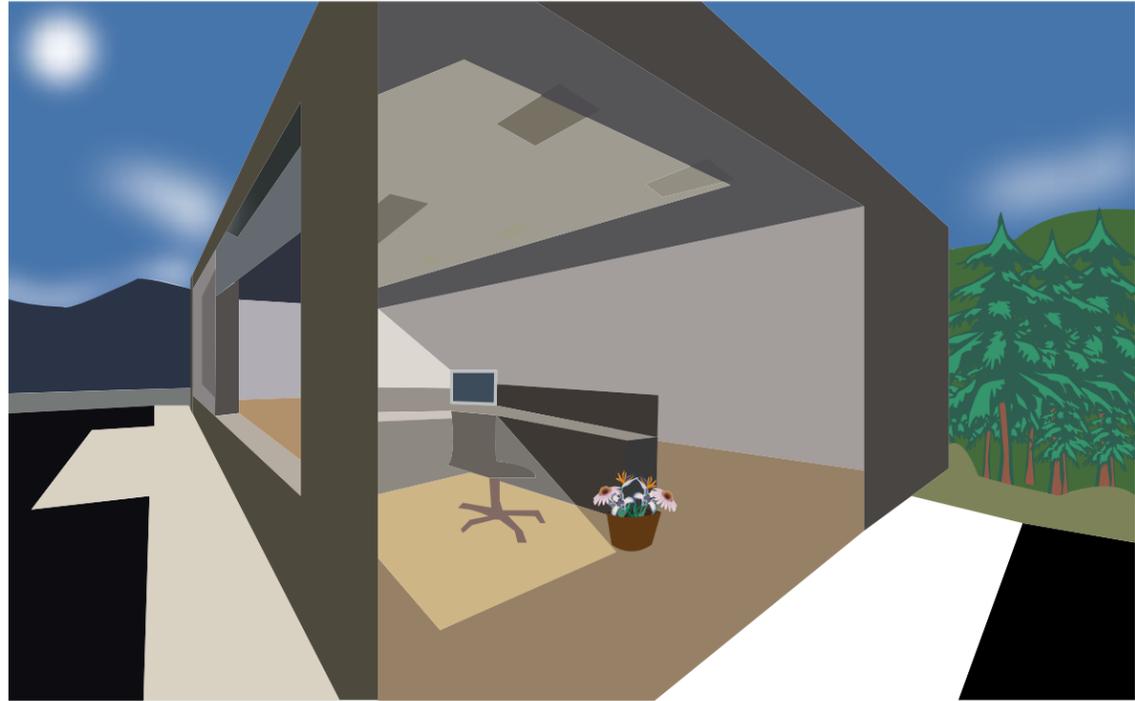
For more information on Peerless Window Wall Systems please visit www.peerlessproducts.com.



3D models of a Fixed
Window Wall System.

Peerless Window Wall System

With Daylight Redirecting Film



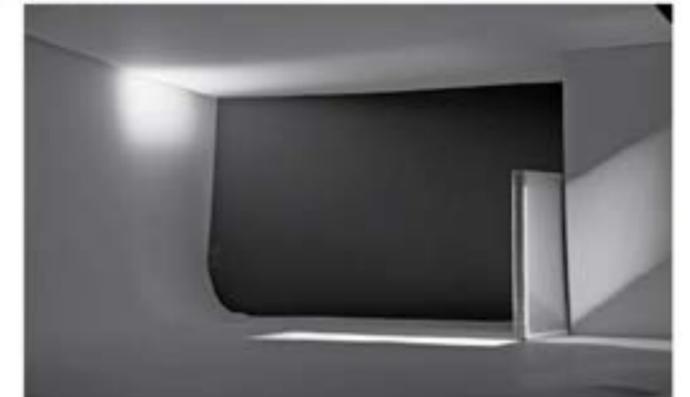
Without Daylight Redirecting Film



Redirecting Film



Left Photo: Front view of an IGU with Redirecting Film

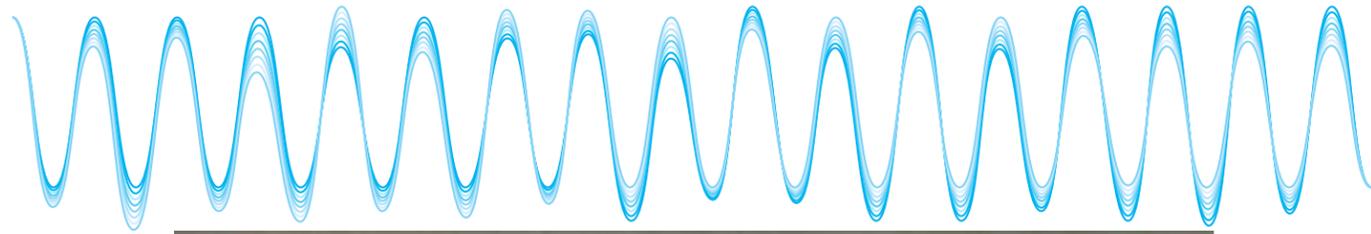


Right Photo: Side view of an IGU with Redirecting Film

The Peerless ENERGSAVE Series provides the ultimate in Energy Efficiency with narrow sightlines. This series expands natural daylighting which, increases occupants health, well being, and satisfaction. Daylighting reduces chronic work-related illness, increases productivity, minimizes environmental impact, and reduces utility use and costs.

With all the advantages of natural sunlight there are some problems associated with natural direct sunlight such as glare and inadequate dispersal of light into a room. Redirecting film brings natural light deeper into the interior of the building by changing the direction of light as it streams through windows. The film redirects light toward the ceiling, reducing the need for artificial light during the day.

Other films that are available at Peerless is Low E Soft coating, Low E hard coating, and Heat mirror.



Acoustic Products

STC Range 30-50

Peerless' acoustical abatement products are used for multi-family, residential and commercial applications around airports, train railways, and high traffic areas. Common commercial uses include hotels, downtown multi-family structures, hospitals and office buildings. Peerless ENERGSAVE windows are ideal for acoustical abatement applications with STC ranges of 30-50.



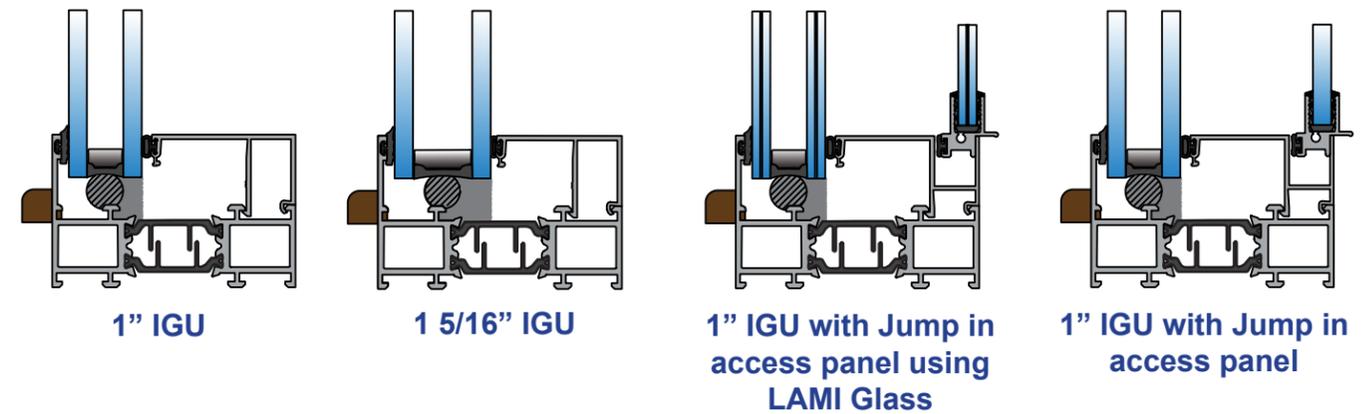
Hefner VAMC Bldg 7 in Salisbury, NY

Peerless Acoustical products are rated with STC and OITC. STC stands for Sound Transmittance Class, and is a rating on how much a window reduces airborne sound. OITC stands for Outdoor-Indoor Transmission Class and is a rating of the amount of sound that passes between the interior and exterior spaces in a structure.

Peerless windows are tested to the requirements of ASTM E90-09, which is the "Standard Test Method for laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions", and ASTM E2235-04¹, which is the "Standard Test Method for Determination of Decay Rates for Use in Sound Insulation Test Methods"



Hefner VAMC, Salisbury, NC, G400 Series



Acoustic Systems

Hurricane Systems



Hilton Garden Inn in Tampa, FL

Peerless offers a wide variety of Hurricane Impact Products to meet the growing demand for high performing Impact windows and doors. Our Hurricane Resistant products meet the stringent AAMA 506 specifications including- ASTM 1996 and 1886 for large missile impact requirements. Peerless products are also approved for statewide use in Florida according to FBC. Peerless Hurricane products also meet the Texas Department of Insurance regulations. Additionally, many of our products are tested as Hurricane Blast products to meet the needs of Coastal Blast Projects.

Tests are conducted in accordance with a missile Type D, 96", 9 lb wood 2 x 4, cycled at a specific positive and negative design pressure.



Typical Design for Hurricane Products



Homewood Suites in Tampa, FL.



Holiday Inn & Suites in Tallahassee, FL



Blast Systems

Ft Sam Houston, Houston, TX



Fort Belvoir, VA

Peerless offers the Aluminum Architectural rated Blast series, which meets DoD UFC 4-010-01 and can achieve U values as low as .15 which is unequalled in the industry. Peerless Blast products are anchored inward to allow the product to flex thereby absorbing energy and preventing transfer to the wall for increased structural integrity. The unit can be anchored at only the Head and Sill, which reduces field labor and costly installation mistakes.

Peerless offers innovative framing options that allow increased absorption and can drastically reduce the total number of field anchors required for installation. Installation is simplified with Integral blast trim and the option of pre-drilled installation screw holes. The interlayer of lami is .030. This simplified installation provides a substantial labor savings. All Peerless Blast products are shock tube tested for added durability and reliability. Windows are tested to the ASTM F1642, which provides a hazard rating that will allow you to assess the risk of personal injury and facility damage.



Camp Pendleton, CA

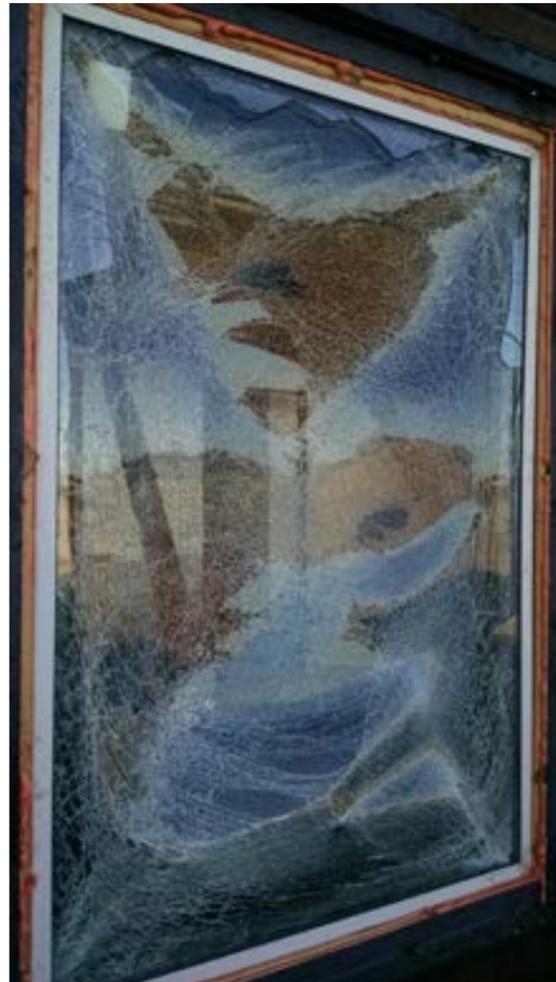


Fort Bliss, TX

Blast Systems

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AAMA Testing



Engineers getting a window ready for testing.

Peerless offers AW rated windows. Architectural Windows are rated according to American Architectural Manufacturers Association (AAMA). AW is the highest quality rated window available.

An AW rating means that the window was Lifecycle Tested, which verifies the durability of the window. This test shows our products' ability to maintain required or expected performance levels throughout a reasonably long service life.

Life cycle tests model the normal wear that can be expected due to the typical number of basic operating cycles and locking hardware opening/closing cycles experienced during the life of a typical AW class product.

Air leakage and water penetration tests are conducted both before and after life-cycling to evaluate any performance changes. There must be no damage to hardware and other components that would render the window inoperable. Life cycle testing ensures that a window is durable and will last for years.

Air is tested at 6.24 psf and has to achieve a 0.3 cfm/sf for sliding seals and a 0.1 cfm/sf for compression seals. Water is tested at 20% of the design pressure.



A window set up against the testing wall.

AAMA Requirements for AW and CW Windows					
	Minimum Performance Grade (PG)	Minimum Design Pressure (DP)	Minimum Structural Test Pressure (STP)	Minimum Water Resistance Test Pressure (psf)	Wind Speed Equivalent (mph)
CW	30	30.0	45 psf	4.5 psf	108
AW	40	40.0	60 psf	8 psf	125

Hurricane Testing



Homewood Suites in Tampa, FL

Peerless Products offers a wide variety of cutting-edge hurricane impact resistant products. Peerless Hurricane Windows and Door Tests are conducted in accordance with AAMA 1886-1996, or TAS, Protocol 201,202,203. Windows are impacted with a Type D Missile, a 96" 9 lb wood 2 x 4, cycled at a positive and negative design load.

Our products are approved for statewide use in Florida (TAS testing available for HVHZ and NOA requirements), and the Texas Department of Insurance regulations.

Hurricane large missile and small missile can be tested. During a hurricane, a very tall building will only be hit by large debris on the bottom section. The middle of the building will only be hit with small debris and the top section of the building will only need to withstand the wind gusts. Peerless products are ideal for the requirements of each building section.



Typical design for hurricane applications.



Blast Testing



Fort Belvoir in Fort Belvoir, VA

Peerless Blast Windows and Doors are tested to the ASTM F1642, which provides a hazard rating that will allow you to assess the risk of personal injury and facility damage.

Peerless Blast windows and doors meet DoD UFC 4-010-01 specifications. Anchored at only Head and Sill – reduces field labor and costly installation mistakes (Approximately only 20 total anchor screws are used to conventional 70 to 80). Anchored inward to allow product to flex thereby absorbing energy and preventing transfer to wall for increased structural integrity. Integral blast trim, with the option of pre-drilled installation is available. This simplifies installation and provides substantial labor savings. Products are assembled in one master frame for ease of installation.

Our blast products can be air shock tube tested which is where we hit our window with a specified burst of air. The damage which occurs is measured and our products are then given a rating. Another way we can test for blast is an arena test. In an arena test, a live charge is set in the middle with our windows surrounding it. The charge is set off and then the damage is measured and a rating is assigned.



Typical design for blast applications.



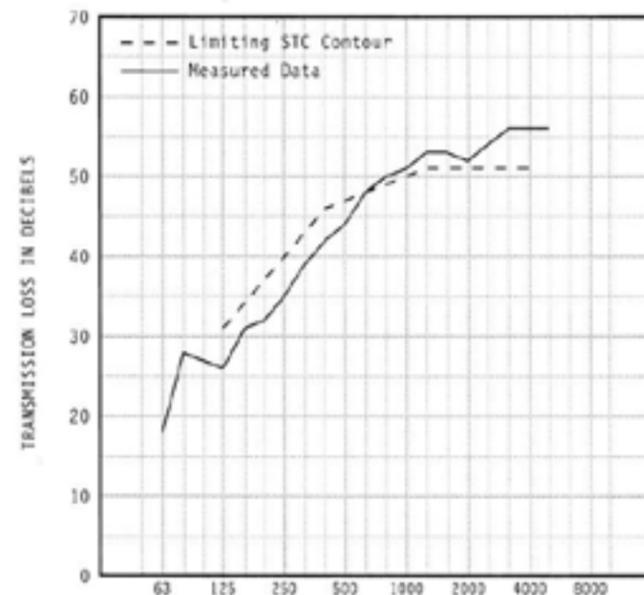
Acoustic Testing



G441 Fixed Window with interior take-out panel

During an acoustic test, there are two rooms with a wall in between them. Our windows are installed into this wall. One of the rooms has a microphone that rotates and the other room has speakers playing random white noise at varying levels of decibels. Noises can include frequencies that mimic people yelling, tv noise, or pounding fists. These sounds are for an STC rating. The microphone will pick up the sound that transfers through the window. The test will go on for a decent amount of time so they can compare the different frequencies. Then a range is determined depending on what frequencies our window prevented from transferring from one room to another.

OITC stands for Outdoor-indoor transmission class and is a rating of the amount of sound that passes between the interior and exterior spaces in a structure. For an OITC rating, the test will have outdoor noises such as, trains, airports, traffic, or concerts. This is why the OITC rating is more relevant for our window products.



Example of an STC Frequency Range Chart

Psychiatric Testing



P141 Psych Fixed Window

The Protector Series has passed the Drop Test for the AAMA 501.8-12, Standard Test Method for Determination of Resistance to Human Impact of Window Systems Intended for Use in Psychiatric Applications. The Protector Series can withstand up to 2,000 ft-lbs. of force.

During Psychiatric testing, our window products are installed up against our test wall. A bag weighing 200 lbs. is hoisted up into the air 10 ft. and then dropped. This impact applies a force of 2,000 ft-lbs. The dropped bag will simulate a human impact on the window product.

A 1/2" piece of Lexan is used on the interior of the window. The test bag is actually hitting this Lexan. The combination of the Lexan and our superior frames, the Protector Series is able to withstand the hit and remain intact providing increased safety and security for the buildings occupants.

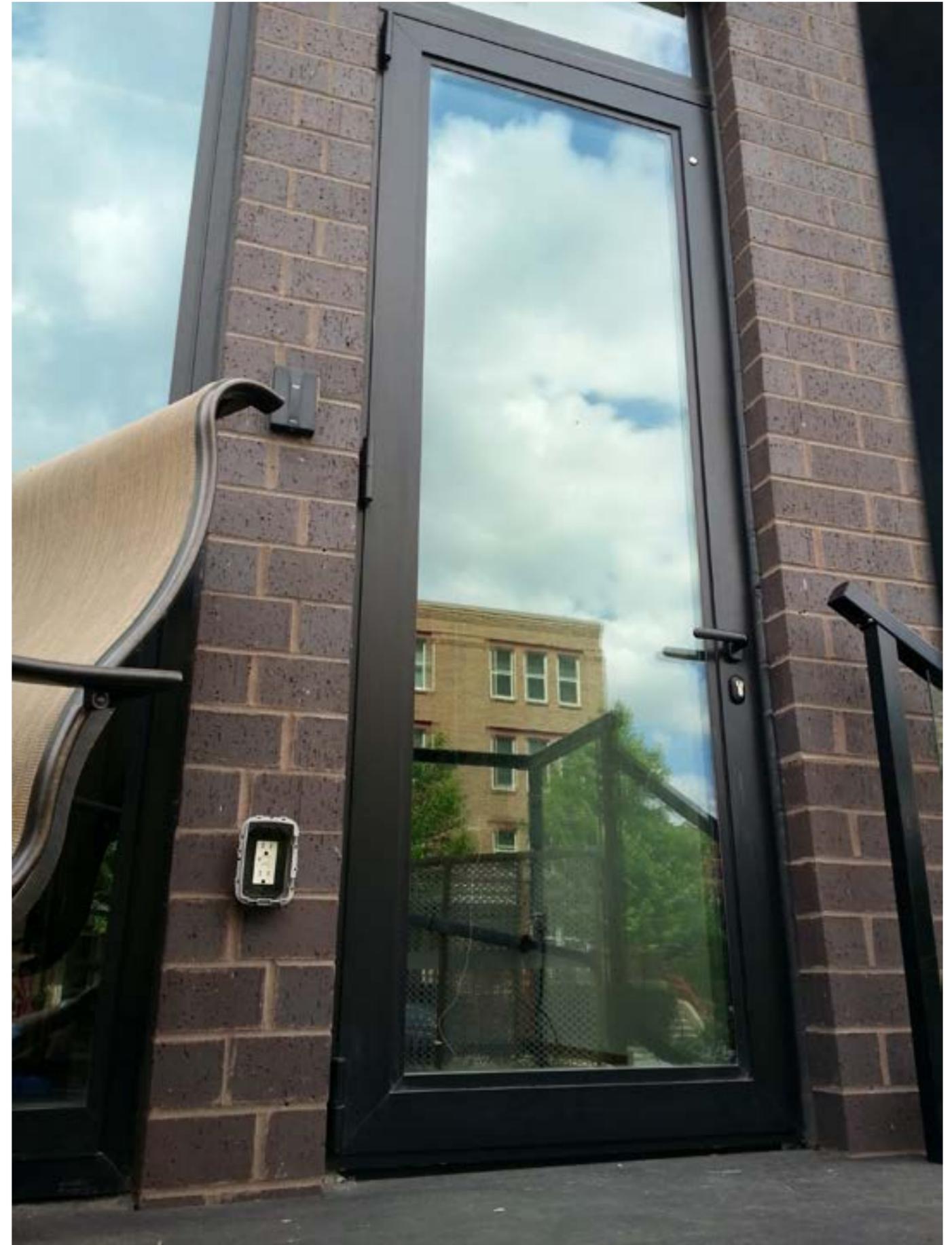
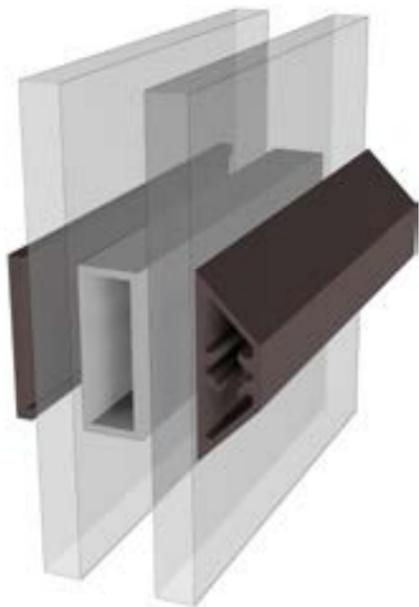
Window being Psych Tested at Peerless Facility.



Accessories

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Handle Hardware



Peerless offers a wide array of handles to meet all the needs of architects and customers. A couple types offered are Multi-point locks (MPL), Roto, and Outswing (OS) Operator.

MPL is a handle that locks at points in the frame, and only uses one handle to operate all locking points. Keyed handles are also an available option.

Roto handles are a gear driven device with a small handle that is used to crank open and close awning and casement windows.

OS Operator handles combines a window operator, multi-point locking, and a limit opening device into one integrated component. It does it all while attached to the frame, eliminating the need for an unsightly wicket.

MPL Handles

Peerless Multi-point lock handle comes standard as satin nickel, white, or black.



Silver Roto Handle

Contact us for more available hardware options.



OS Operator handles

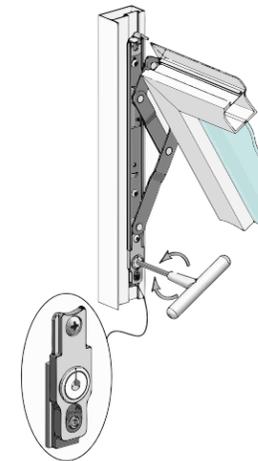


Custodial MPL

Hinge Hardware



XL Butt Hinge



Adjustable 4-Bar Hinge

Contact us for more available hinge options.

Numerous hinge options are available from Peerless to meet a variety of sash weights and operating forces. Some hinge options include standard 4-bar hinges, butt hinges and 90 degree concealed hinges. Certain hinges from Peerless are fully adjustable. These adjustments will ensure precise alignment of the window sash for the long life of the product. Keyed and non-keyed limit arms are also available depending on the project requirements. There are many different finish colors for hardware and custom colors are available, but may result in longer lead times.

All Peerless hardware is Life Cycle tested to simulate the normal wear which can be expected to occur due to the typical number of basic operating cycles and locking hardware opening/closing cycles experienced during the life of a window or door. Using only the best hardware, our Peerless Windows and Doors are guaranteed to last the test of time.



Non-Keyed Limit



Keyed Released Limit Arm



Dual Action Window Hinge

Panels

The standard panels we use at Peerless have a smooth or embossed Kynar 500 finish, solid plastic substrates, and a polystyrene core. Other finish options include porcelain on smooth steel and polyester baked enamel in smooth or embossed. Many color options, including custom colors are available to suit a wide variety of design requirements. All panel finishes are architectural-grade and will resist cracking, crazing, or fading in long-term harsh environments.

Panels are made to fit in the window frame like an IGU would, and aids in energy efficiency of the building.



Panel Samples



Grove Park Elementary, Baltimore MD

Louvers

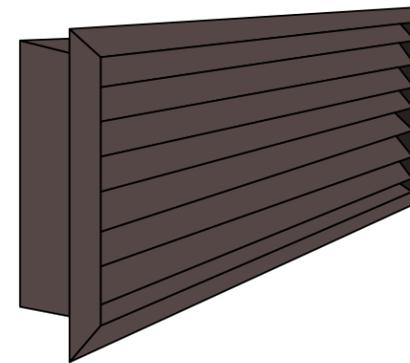
Louvers are a set of angled slats or flat strips that are combined and spaced at regular intervals over an area on a structure. Louvers permit desired airflow to occur while at the same time blocking unwanted rain, direct sunlight and debris from passing through.

Louvers are an integral part of Peerless windows we produce when the project calls for Packaged Terminal Air Conditioners, better known as PTAC's. These are units that are designed to condition a small area using both air-conditioning and heat. Most commonly these are integrated into the living area of hotels or condominiums.

Blank-off panels are used to fill-in and insulate the areas that are not needed for the PTAC air intake and exhaust. The panel seals off the space behind the louvered area and makes the louver more energy efficient.



Louvers can be painted to match any Peerless Standard Paint Color.



CO-OP 245, New York, NY

Glass



Double Glazed IGU

In order to achieve a low system U value, it is important that you start with a glass package that can also achieve a low U value. Insulated glass systems were designed to provide better insulation for a window system by trapping air between the panes of glass.

At Peerless, we offer Double or Triple Glazed options. Double Glazed is two solid sheets of glass separated by a spacer. This is also called an IGU or Insulated Glass Unit. Triple Glazed is three solid sheets of glass. The additional layer and air space gives better insulation value. Triple Glaze is use in extreme weather conditions or to reduce excessive sound transmission or outside noise.

Peerless also offers glass with films and coatings which can affect the energy efficiency, daylighting, occupant's comfort level, and total performance of the windows and doors. The types of films include Heat Mirror and Redirection film. There are also a variety Low E coatings available for different glass surfaces. Laminated Glass is also available for jobs that require it for higher glass performance.



Triple Glazed IGU



Preserve Film that is used on IGU's to protect the glass.

Grids



G605 with exterior putty grid

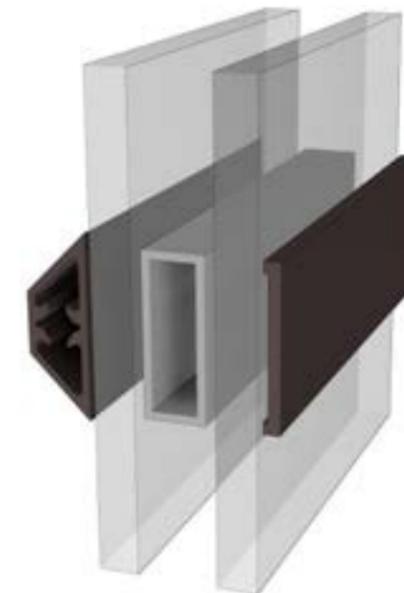
Peerless offers four different types of grids for different design specifications. Putty grids are secured on the exterior of the a window. Between the Glass (BTG) grids are secured between the 2 panes of an insulated glass unit. Tape on grids are applied like thin pieces of tape to the interior/exterior of the window to give the illusion of separated panes of glass. Slide In Grids will slide into an exterior grid pocket of our window frame. Slide In Grids are cost effective, eliminates potential leak spots, provide a clean architectural appearance, sit in front of the glass for increased thermal performance and can match many architectural sightlines which are required for a job.

Peerless grids are good for stringent design requirements. Grids help on historic jobs when you are trying to match wood windows that the building may have had previously.

Laser cut grids are also an option Peerless offers. Laser cut grid technology allow for elaborate shapes and configurations that can meet Architect design requirements. Laser cut grids also have cleaner joints and intersections. This technology can be successful in matching complicated historic architecture.



Byers Junior High School that used laser cut grids to match the historic quality of the building.



Slide in Grid is on the left with BTG in the middle and Tape Applied Grid on the right.

Blinds

Peerless works with the best vendors for between the glass blinds to ensure high quality and durability.

The IGU/Dual Glazed Metal Blinds are designed for long life and smooth operation. High quality, standard features come with extruded aluminum headrails and bottomrails, a slip clutch mechanism to minimize damage due to overtilting blinds, virgin aluminum alloy slats finished with an organic primer and a baked on enamel finish coat, convenient snap-in installation system, and corrosion resistant components throughout.

Special features are also available. Some options are round top, angled top, angled bottom, motorized blinds, and a variety of hardware options. A new hardware option is the pole operated blind knob, which is good for windows high in the wall with between the glass blinds. The pole gives you the ability to open and close the blinds without having to get a step stool.



Sample window with Between the Glass Blinds.



Blinds seen from the interior of a building.



Hefner VAMC Bldg 7 Salisbury, NC

Screens



3D model of Integral screen track on single hung window.

Peerless manufactures screens with the highest quality material available. Peerless has a variety of mesh to choose from and painted to match screen frames. A new product that is available is an integral screen track. A Screen is usually mounted on the window or door exterior and provides ventilation or transparency.

The different screen options are heavy screen mesh, charcoal aluminum, bright aluminum, stainless steel, fiberglass, and pet mesh. Our two standard screens are charcoal aluminum and fiberglass.



Both Projects utilized screens for their operable windows.



ADA Accessories



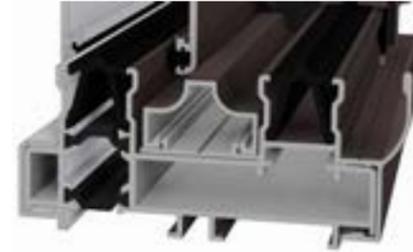
10 Inch Kickplate



ADA Sill Adapter



1/2 ADA Sill



ADA Sill Adapter



ADA extended handle

ADA Sill

Peerless Products terrace doors are capable of complying with the 1/2" Americans with Disabilities Act (ADA) sill requirements. It is difficult for manufacturers to attain a sill height of half an inch and still keep water out. The Peerless ENERGSAVE Terrace Doors meet the ADA sill requirements and does this with an AAMA rated 12 pound water test. To achieve that type of water pressure with conventional products, the sill would have to be 3" in height. The ENERGSAVE line of products utilizes the euro-groove hardware and interior weather stripping for a tighter compression. This is how the 1/2" sill height can be achieved.

ADA Sill Adapter

The purpose of the sill adapter is to make it easier for wheelchairs and walkers to glide smoothly through the Sliding Door. The sill adapter is located on the operable side and can be added to existing Sliding Doors. The sill adapter is available painted to match the frame. The Snap-in Sill Adapter can only be used on the following configurations; XO/OX/XOX/OXO.

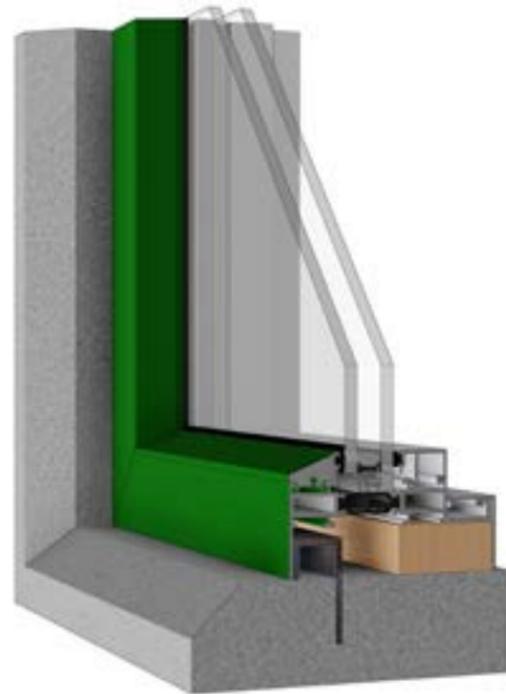
10 Inch Kick-plate

The 10" kick-plate would be an option when required by codes. The point of the 10" kick-plate is to keep people and wheelchairs from hitting the glass when propping the door open. Peerless has had success in using the 10" kick-plate for multi-family buildings. Another feature the 10" kick-plate offers is the higher sightline. The 10" kick-plate will not affect air and water performance in our Terrace Doors.

ADA Handle Hardware

Peerless offers extended handles which are necessary to achieve the ADA required 5 lbs. operating force on projected windows. ADA handles must be operable with no more than 5 lbs. of force. Peerless extended handles can achieve this requirement due to the extra leverage they provide. These handles provide a lever action and require no grabbing, pinching and twisting which is considered unacceptable by ADA standards.

Receptors, Subsills, Mullions



Tube Mullion



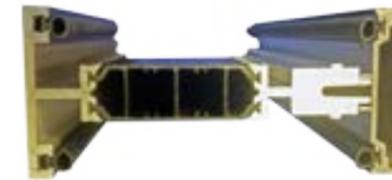
G641 Retrofit Option



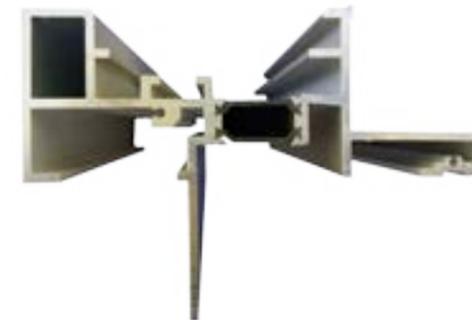
G241 with Co-Extruded Panning



G601 Extended Leg with Integral Trim



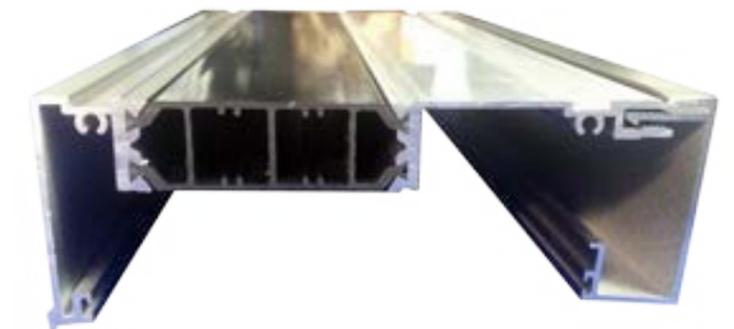
G500 Mullion



G200 Subsill

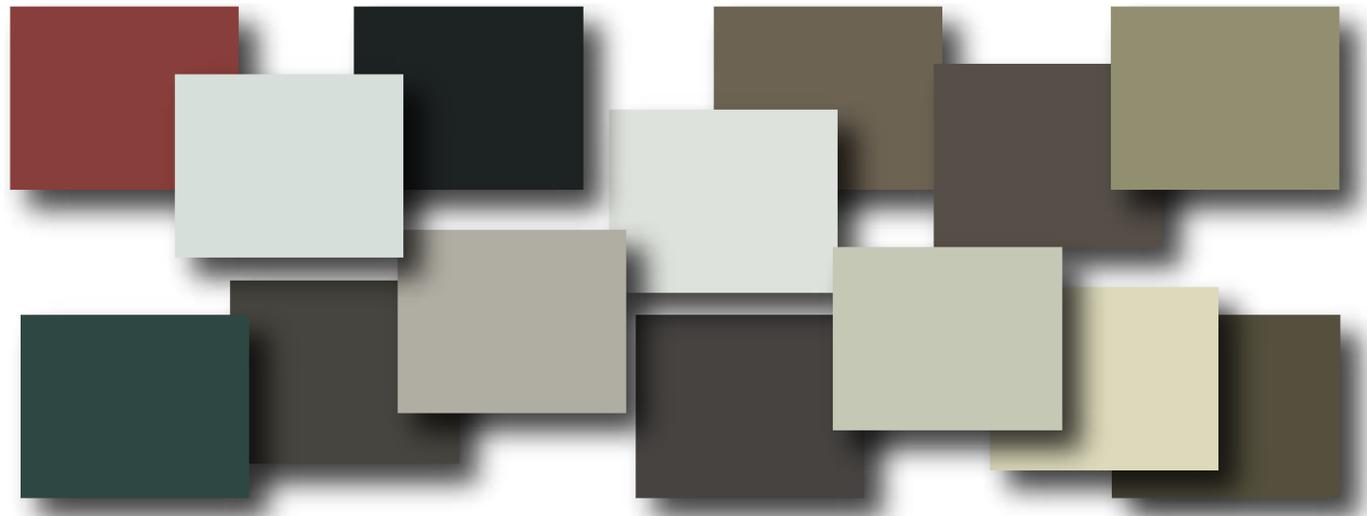
Peerless offers many different installation accessories to fit the need of any project. Some options for replacement projects include attached pan (secured to window), receiver pan (secured to opening), 2-piece interior trim, stack mullion (horizontal or vertical), or the 2-piece mullion cover (horizontal or vertical). For new construction there are also many options including 3-piece receptor (head and jambs only), subsill (sill only), 3-piece mullion (vertical only), stack mullion (horizontal only), or corner mullion (vertical only). Custom installation pieces are also available upon request and engineer approval. Custom projects may result in longer lead times due to new dies.

Peerless also offers co-extruded accessories with options of panning, trim, nailing fin, extended legs, etc. Co-extruded accessories save time, labor, and are cost effective. Having co-extruded accessories reduces the number of parts and pieces required for field installation making installs much simpler and easier.



Standard G500 Receptor

Installation Accessories



Peerless Standard Finish Colors

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Finishes

Paint



Brown Aquatic Center in Boston, MA utilized a custom Smoke Gray finish.

High performance Paint coatings extends the life of windows and doors and also protects the units from weathering. Weathering can result from sun, cold, UV radiation, moisture, acid rain, pollutants and salt.

Paint coating offers the ability for frames to be painted different colors on the interior and exterior of the buildings. Paint also allows for better color matching when trying to match other windows in the building. Peerless offers Anodize Paint finish to match the look of traditional Anodize finish.

Paint is tested to the AAMA 2605 Performance. AAMA 2605 is the high-performance exterior specification. A paint meeting this specification would be a 70% Kynar 500® PVDF resin-based coating. These finishes exhibit outstanding resistance to humidity, color change, chalk, gloss loss and chemicals.

Peerless offers a 10 year standard paint warranty, but can extend to 20 years depending on the circumstance. Warranty includes film integrity, allowed color change, and chalk rating #8. Peerless painted finishes are applied in-house through an electrostatic process.



Whittier Senior Living utilized AAMA 2605 Dark Bronze finish.



Sohotel in New York City utilized AAMA 2605 standard black finish.

Anodized Paint



401 Grove in San Francisco, CA utilized Dark Bronze finish.

Peerless offers anodized paint colors. These are colors that look similar to anodizing, however offer a variety of benefits compared to traditional anodizing. Benefits of coating include, a more consistent finish, as well as better warranties. In addition, these coating offer a shorter lead time than traditional anodized finish.

Unlike traditional anodize, anodize paint allows two color finish capabilities allowing more variety for the interior and exterior of the building. Color matching is also a simpler process with anodize paint than it is for traditional anodized finish.

Peerless offers a 10 year standard anodize paint warranty, but can extend to 20 years depending on the circumstance. Warranty includes film integrity, allowed color change, and chalk rating #8. Peerless painted finishes are applied in-house through an electrostatic process.



700 Harrison in Boston, MA utilized Clear finish.



North Quincy High School in Quincy, MA utilized a custom color of Redwood, with Almond mullion cover to create accents.

Order Process

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Order Process

**SECTION 085113 - ALUMINUM WINDOWS
(Architectural)**

TO FINISH YOUR SPECIFICATION: 1. Please read, react to, then delete comments in red or *stars*. 2. Please add or delete options in green or (parentheses). 3. Please replace preceding standards with options in blue [brackets] or delete options in blue [brackets]. 4. Finally, please revise paragraph numbers and/or letters, as necessary.

BEFORE USING YOUR FINISHED SPECIFICATION: Permit Peerless to review your edits to confirm your selected options do not restrict your desired operation or reduce the tested performance.

PART 1 - GENERAL

1.01 SECTION INCLUDES

A. Material: aluminum windows as on the drawings and specified in

Example of what a Specificaton looks like.



Easy Submittal Builder, a tool that helps put together submittal packets.

At Peerless Products, there are many steps to get a project ready before windows and doors can start being manufactured. The process begins with a Sales Coordinator who will prepare a preliminary price based on a quote take-off or a Request For Quotation (RFQ). The RFQ will be filled out according to the requirements of the specification. Many revisions or adds/deducts may be needed for this preliminary quote.

Once Peerless has won the job it will be considered a promised job and a Project Coordinator will now assume responsibilities for it. A delivery date will be established and the Project Coordinator will recheck the quote and finalize the pricing. At this time, a submittal packet will be provided to the customer for their approval. Shop drawings will also be in development. Once Peerless has received the shop drawings they will be given to one of our engineers to review and approve. When all of these steps are complete the job is now ready to be released for production.

A released job will now be keyed in as an order and placed onto our Peerless plant schedule. The metal will now be extruded, painted and fabricated. Then the material will be built into a window, thoroughly inspected and cleaned, tested and wrapped for shipping.

Through this whole process, Peerless strives for accurate and timely communication to ensure the job's success. Our Peerless Sales Coordinators, Project Coordinators and Engineers work together hand in hand to provide exceptional customer service.

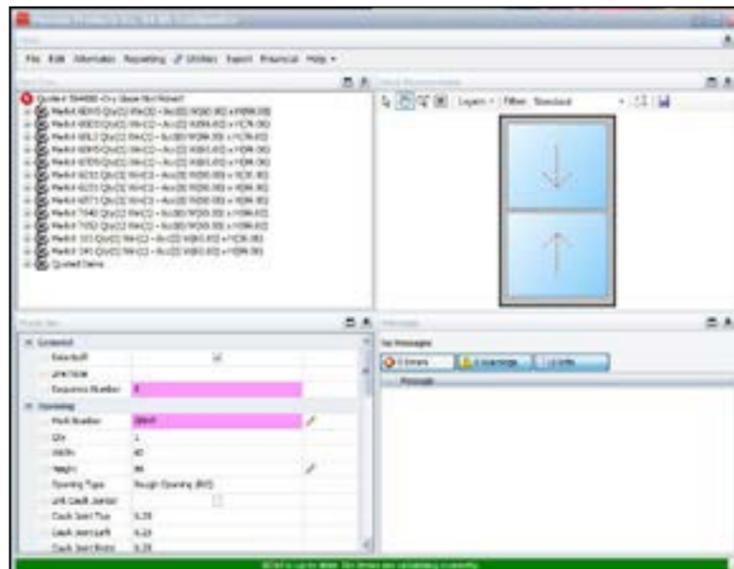
Quoting

Quoting at Peerless is done using our PPI Configurator and 2D software. During the order process the Sales Coordinator, who does the main amount of quoting, will receive a Request For Quotation (RFQ) from their sales representative. This initial quote can begin as just a budget price to give our customer an idea of the price. Over time, revisions will be made and this quote will become more detailed and accurate.

Once the customer has given us a purchase order, it becomes a promised job and the quote is now our Project Coordinators responsibility. The Project Coordinator will check the quote against the shop drawings to make sure sizes, quantity and any custom design features are quoted correctly.

Sample of a RFQ (Request for quote)

Quoting Screen in 2D.



Shipping



Windows in a truck ready for shipping.

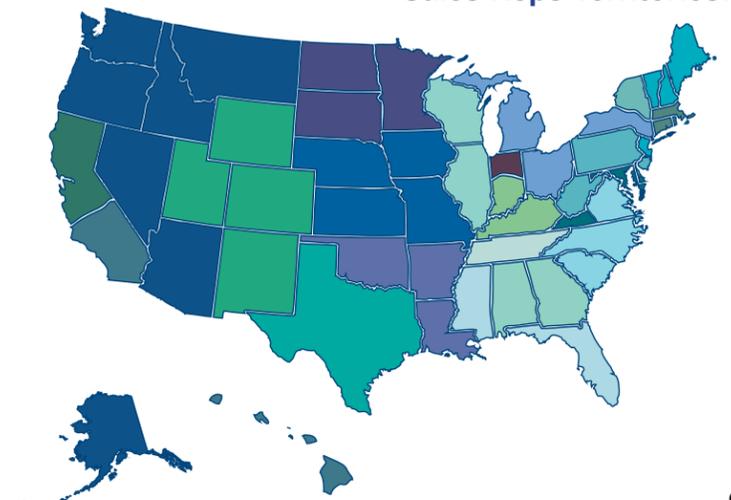
At Peerless, we ship all over the United States including Alaska and Hawaii. The shipping process at Peerless starts with the Shipping Managers assisting the Project Coordinators and Sales Reps to determine the best way to transport the products, and how many shipments it will take.

A final inspection during loading is done to ensure that the product is clean and packaged properly. The customer is then contacted to make sure they are ready to take their shipment on time and to find out if there are any special needs at the time of delivery. Next, the trucking company is contacted to get exact dates that the product can be delivered to the customer. The Shipping Manager then confirms the date, time and delivery address with our customer and sends confirmation sheets to the customer and trucking company so that all parties have the same information concerning delivery. Each custom job is hand loaded and secured by blocking and securing with straps and bracing to protect product during transit. Over the years we have developed these practices and have developed trained and dedicated personnel to ensure that each order is delivered with the care that it deserves.



Example of palletizing windows for easier loading and unloading of trucks.

Map divided by different Sales Reps Territories.



Customer Service Team



**B2 Atlantic Yard,
Brooklyn New York**

When a customer calls our Customer Service Team with a situation and it is determined to be a warranty related item we dispatch a Field Service Team to make a visit. Peerless Products will work to meet our customer's needs as quickly as possible. The Field Service Coordinator along with the customer service parts manager work together to make sure that the Service Teams have the parts they will need to complete the job and effectively communicate with the customer so they are aware of the schedule prior to the Service Teams arrival.

Not only does the Customer Service Team cover the needs of our customers out in the field, we also have a team inside the plant that is responsible for testing windows as they come off the production lines. This internal testing team puts randomly selected production windows through the AAMA 101 water testing procedure right here inside the Peerless Plant. This internal quality check helps to ensure a quality product arrives to your job site. Our computer system randomly selects over 2% of every lot of units produced. When a project calls for field testing of the windows by an independent agency, you can count on Peerless Products to be there. We mobilize crews nearly every week during peak construction season to attend air and water field testing on job sites all over the country. Our field testing teams have over 20 years experience in the window industry.



Peerles Field Service Team



Field Service Member checking the seal on a sliding window



Peerless Work Truck for After the Sale Service

Our Peerless Field Service provides various services and performs a range of functions for our customers that may be needed after the sale. With Safety being our top priority, our crews are trained several times throughout the year. This training includes OSHA 10, Quarterly Safety Meetings, and Lift Training Classes. Our Service Crews can mobilize to job sites to ensure our customers satisfaction throughout the various stages of construction.

During the times that our Field Service Teams are not on the road they join our internal quality team here in the Peerless Facility. Helping to do inspections through out every step in the process and by focusing on quality, Peerless is fostering a tradition of quality that extends to our customers all across the U.S.A. By focusing on the needs of our customers and looking to the future with an open mind and understanding, our customers can always rely on Peerless to be there when we are needed.



Field Service Member checking a window after water testing

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Peerless Cloud



Peerless workspace icon

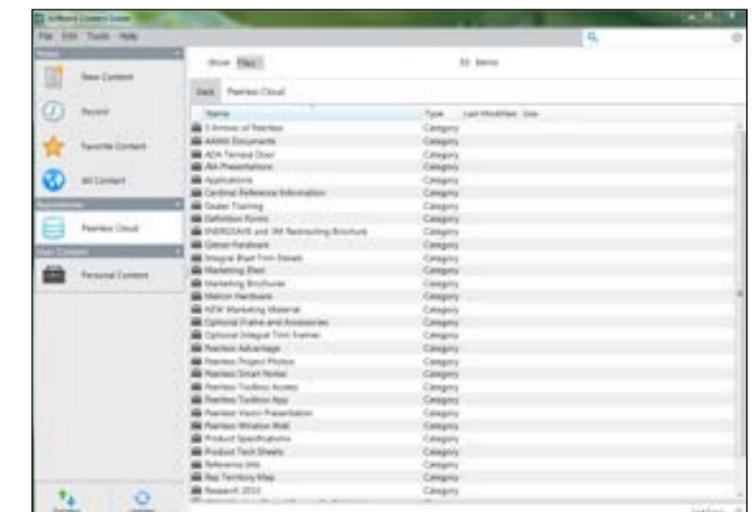


Peerless Cloud App

The Peerless Cloud offers many different files that are useful to anyone involved with Peerless. Some of the items that can be found on the Peerless Cloud are AIA Presentations, Brochures, Tech Sheets, Peerless Smart Notes, Specifications, Cardinal Reference Sheet, and Project Photos.

The Peerless Cloud can be accessed a couple ways. If you are working internally you can access the Peerless Cloud through the S drive. When not working internally you can either use your mobile phone with the Peerless Workspace, or your computer with the Airwatch Content Locker.

All files within the Cloud must be downloaded first before viewing. There are many free viewers you can download to open PDF, Powerpoint, Word, and Excel documents.

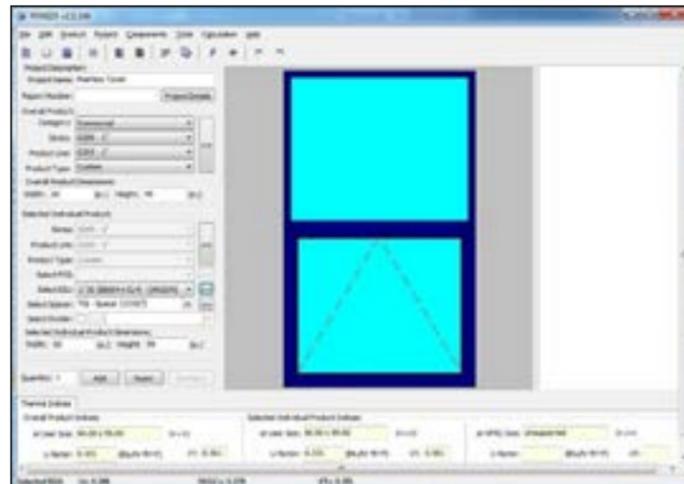


Fensize

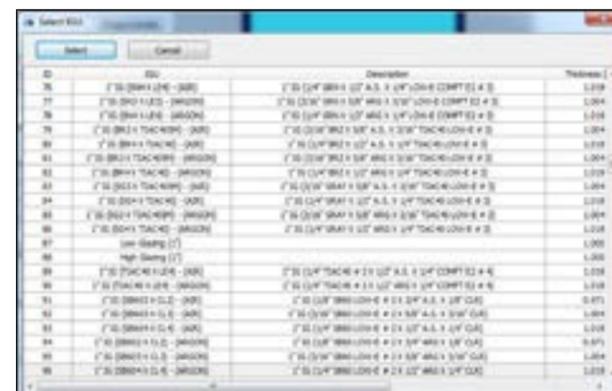
Fensize is a certified performance calculator which is available for all of the Peerless product lines. This tool is located on the Peerless Remote Desktop. The Fensize program will calculate the U-Value, SHGC and Visible Light Transmittance for an individual product. It can also provide a report with an average for a project as a whole. This Fensize report can be saved and shared as needed.

To get accurate values, you will need to know the series being used for your project, the specific models numbers for your configurations, sizes and glass make up. A quantity can also be added to your report for increased accuracy.

The results are shown for your "User Size" which is referring to your specific project size or NFRC size, if applicable. The values represent the whole system, both frame and glass which is why this Fensize tool is so beneficial.

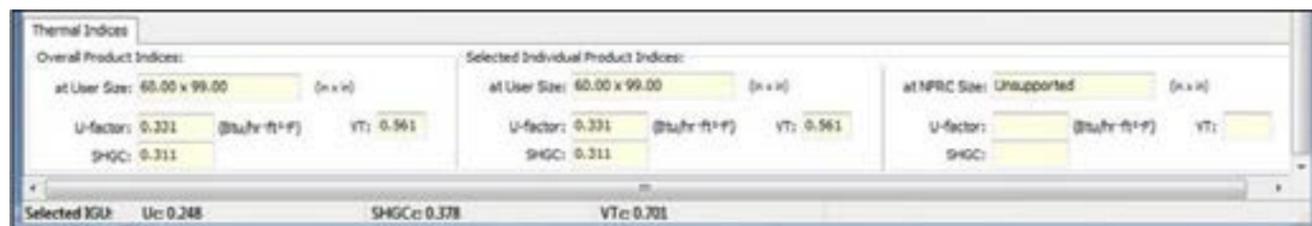


Fensize software window



Glass choices

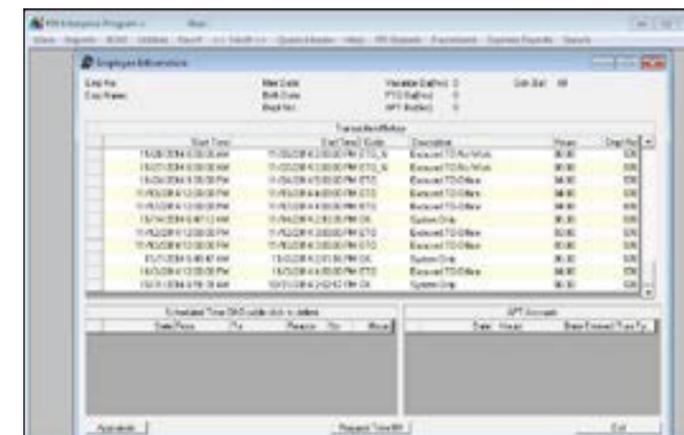
Results panel



2D/Configurator

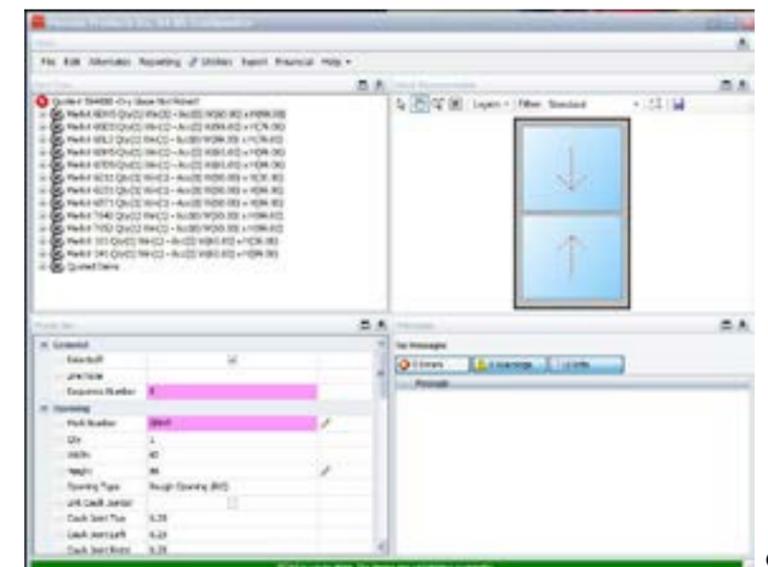
2D and PPI Configurator are programs that were made and are maintained by the Peerless IT department. 2D is used to quote, track orders, sequence shipping loads, and even export out 3D models of different window configurations at specific sizes.

PPI Configurator is used for assigning quote numbers, looking up projects, creating quick tickets and counter tickets, order tracking, tracking hours worked, and even seeing how many hours of vacation you have available. PPI Configurator and 2D are the two main software programs that are used at Peerless during the Order Process.



Time worked screen in PPI Configurator.

2D Configurator Quote Screen

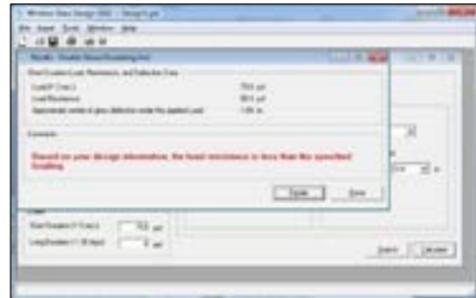


Window Glass Design

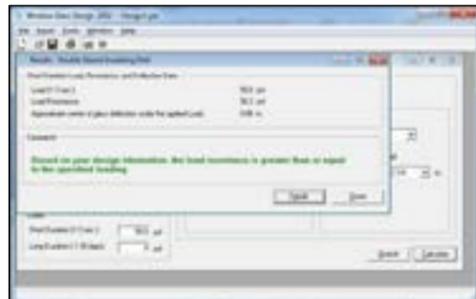
Window Glass Design is a certified glass performance calculator. This tool uses the size of the glass, the design pressure and the strength of the glass to determine if it will be able to withstand the pressures for a specific project application.

Enter the width and height of your piece of glass. Then specify the design pressure. Finally, you will select your "Glass Construction", for example an IGU with annealed glass at 1/4" thickness.

When the glass cannot withstand the design pressure the result is a red message that says "Based on your design information, the load resistance is less than the specified loading". If the glass can withstand the design pressure there will be a green message that says "Based on your design information, the load resistance is greater than or equal to the specified loading".



Error Message



Successful Message



Window Glass Design Interface

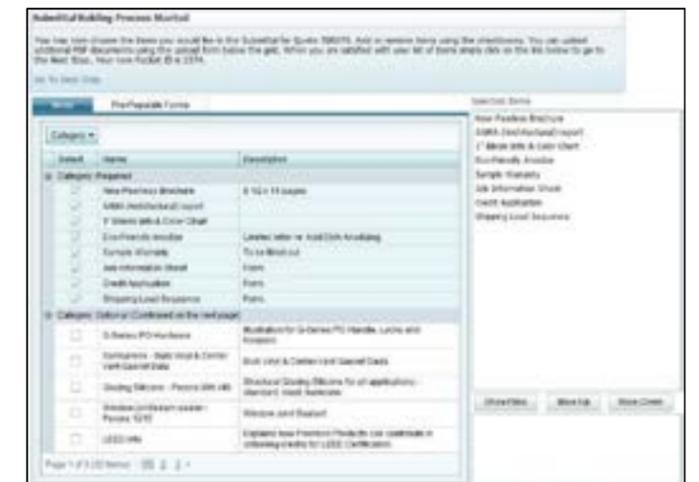
Easy Submittal Builder

The Easy Submittal Builder (ESB) is a tool developed by Peerless to create a submittal packet for you. This tool will build a submittal packet with all of the appropriate information based on a quote number entered. The ESB will pull the appropriate detail pages, test reports, tech sheets, glass information, etc. After creating a standard packet, the user is then free to add their own documents and make edits to the packet. In a matter of minutes a complete submittal packet is ready to go. This tool is very beneficial for the members of our Peerless team.

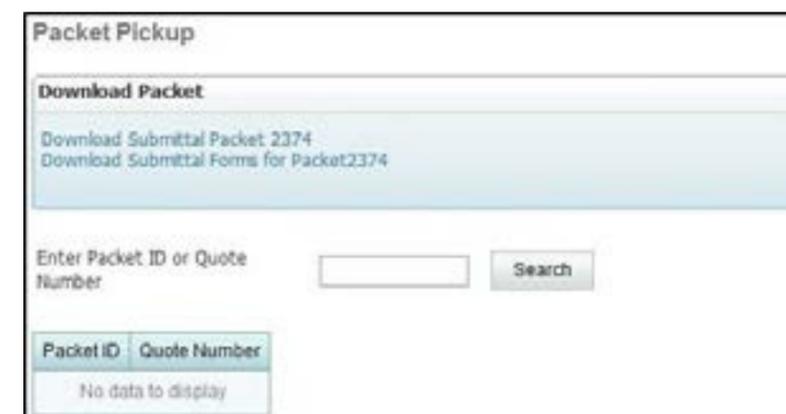
Enter Quote Number and click Search All Dates



Select the documents you want included in packet



Download Packet Screen



IBC Windload

IBC Windload is a certified design pressure calculator. This tool will assist with determining the pressures that a building must be able to withstand. To access the IBC tool, you need to be logged into the remote desktop. To calculate the Windload you will need the wind speed, importance factor, exposure category, building height, width, length, and roof slope. The program is equipped with notes that will explain what each category is and what appropriate options are.

The building data section must be filled out completely, but the Job Information section is optional. The Wall Openings section also has to be filled out. Once this is all done, the IBC tool will calculate the positive and negative design pressures for the specific building.



Note to explain category



The IBC Windload includes wind maps to help determine wind speed for the buldings territory.

INTERNATIONAL BUILDING CODE, 2000 DESIGN PRESSURES FOR OPENINGS (VERSION 1.01)							
BUILDING DATA				JOB INFORMATION			
Wind Velocity (mph)	120	Company	XYZ, Inc.	Prepared By	Employee		
Importance Factor	1.00	Client Name	John Doe	Job Description	Test Project	Building 1	
Exposure Category	B	Job Number	20000				
Internal Pressure Coefficient	+0.10						
Mean Roof Height (ft)	15						
Building Width (ft)	30						
Building Length (ft)	40						
Roof Slope (p:12)	0						
WALL OPENINGS							
OPENING MARK	OPENING DESCRIPTION	LOCATION ZONE	OPENING ELEV. (ft)	OPENING DIMENSIONS WIDTH (ft) HEIGHT (ft)	MAXIMUM POSITIVE PRESSURE (psf)	MAXIMUM NEGATIVE PRESSURE (psf)	
A	Typical CM Hung	B	0	4	0	24.4	-31.7

IBC Windload Window

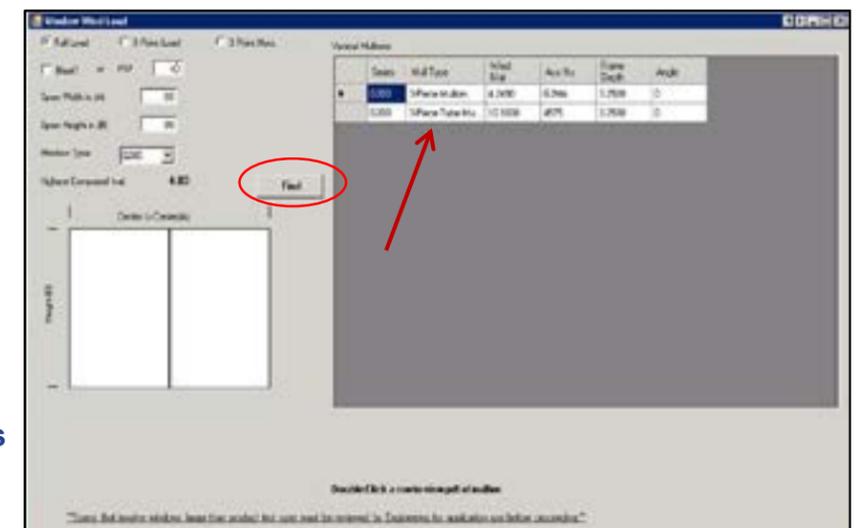
Mullion Calculator/Windload

The Mullion Calculator or Windload tool is a certified mullion performance calculator for all of our products. This tool is located on the Peerless remote desktop. Just double click the icon to open it. This tool will show you which mullions will work at your job design pressure.

Enter your design pressure, the width from the center of one window to the center of the next window, the window height and the window series.

When all the information is entered and has been checked for accuracy, click "Find". The mullions which will work under your specified design pressure will show up on the right hand side of the screen.

Information needed for calculation



Click Find to show results

Website

peerlessproducts.com

The Peerless website is a great resource for many of our beneficial tools. Our team members can order product binders, window samples and even glass samples. Other great tools include, the product selector, videos, project photos, SpecWizard and the Easy Submittal Builder.

Some of these tools on the website are only accessible with a log in. To sign in to the Peerless website there is a "Login" button at the top of the screen. This will direct you to a page where you can enter your Peerless login information. Once logged in you will have access to all of the tools listed above.

Login Box for Peerlessproducts.com



Once logged in your name should appear in the top right hand corner.



ARCAT/SpecWizard®

Peerless has worked with ARCAT to develop our SpecWizard. The SpecWizard will write a specification for you depending on the products which have been chosen. From our website homepage, click "SpecWizard". This will take you to the ARCAT website and you will see our Peerless profile.

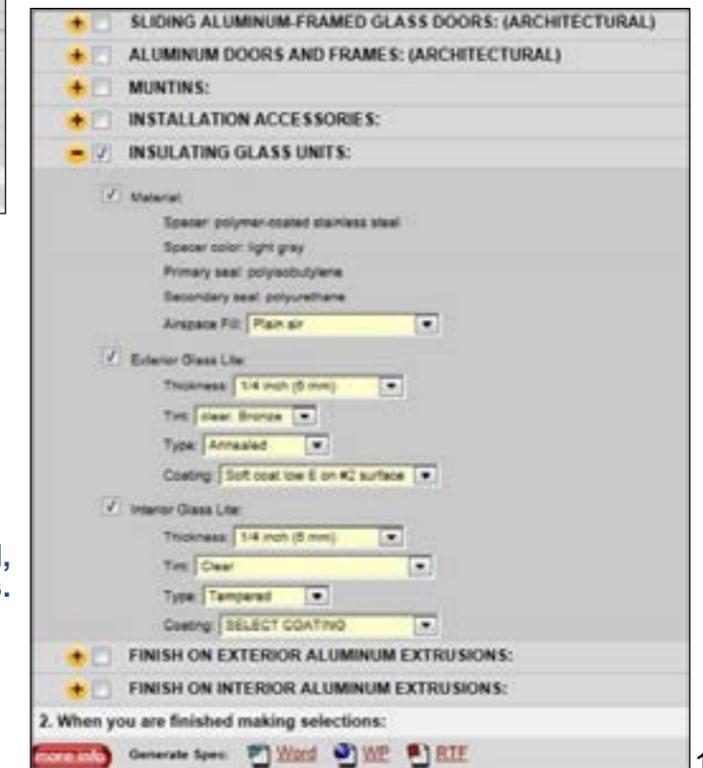
Select the products you want to be specified by checking the appropriate check boxes. All of our products are available for selection. You can even select installation accessories, mutins/grids, glass and aluminum finishes.

Once you have finished making all of your selections you can Generate your Spec. The specification will be generated into Word, WP or RTF. Just click the format you would like to create.

Spec Wizard Interface



Choice to Generate Word, WP, or RTF file types.

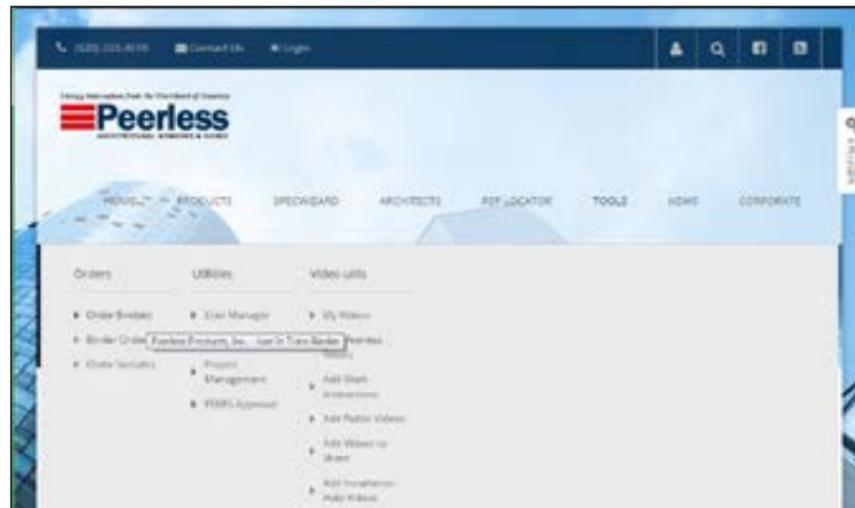


Order Binders

peerlessproducts.com

The Peerless product catalogs or binders can be ordered off our website. A login is required to order the binders. After logging on, our team members just need to provide an address for shipment. All orders are shipped within three business days. Binder orders can even be tracked to make sure they make their delivery.

Order Binders is located under Tools Tab.



Screen to enter the required information.



Order Samples

Cardinal Glass Sample

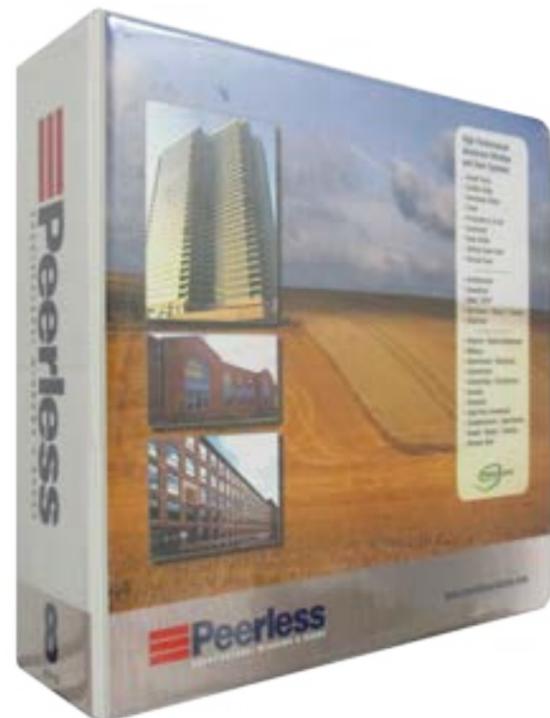


Peerless offers a wide variety of samples which can be ordered off the Peerless website. A login is required to order any of the available samples. After logging on, our team members just select the samples they require and then fill out the shipping information. Samples in stock are shipped within three business days. Samples out of stock will have to be ordered and will result in longer lead times. Available samples include, paint chips, hardware, full windows, window frames, window corners and glass IGU's.

Full Door Sample



G500 Frame Sample



Product Selector

peerlessproducts.com

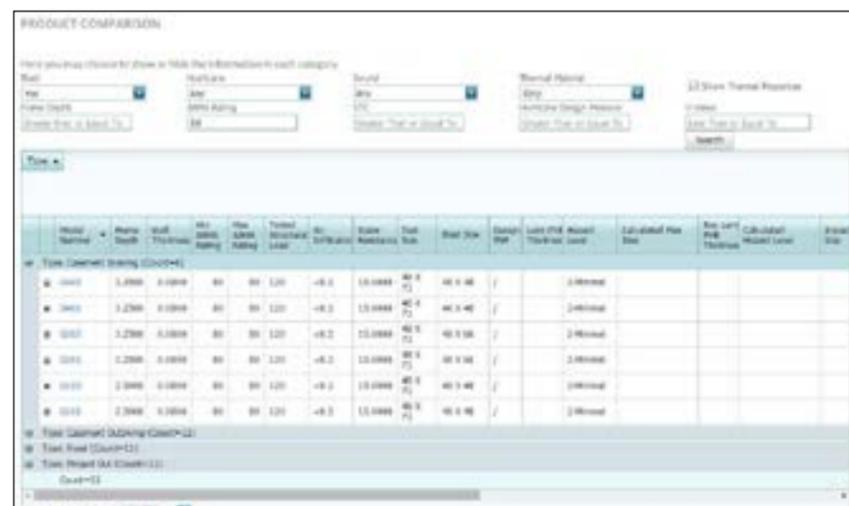
From our website homepage, click “Products” and then select “Product Selector”. This will take you to our Product Selector which is a tool that uses filters to narrow down your search and show you exactly which product is the best choice for your job requirements. You do not have to be logged into the website to use the product selector tool.

Use the filters at the top of the page to narrow down the list of our products. You can filter by blast, hurricane, sound, thermal material, frame depth, AAMA rating, STC, hurricane design pressure and U-value.

Product Selector Screen



Use the filter options to compare products.

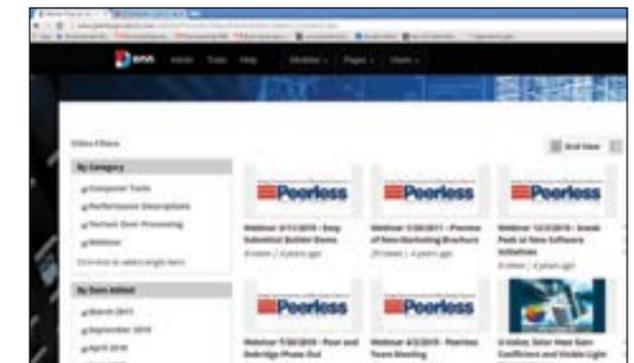
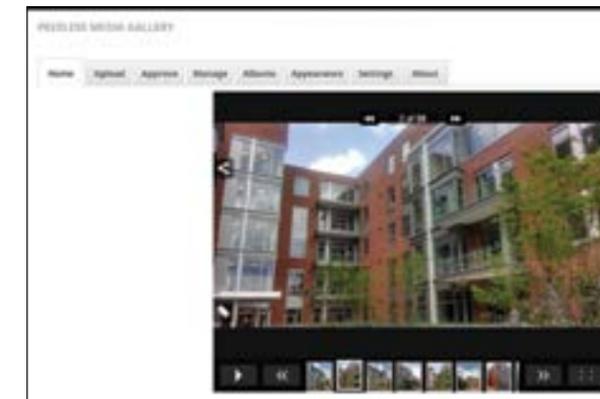


Peerless Photos & Videos

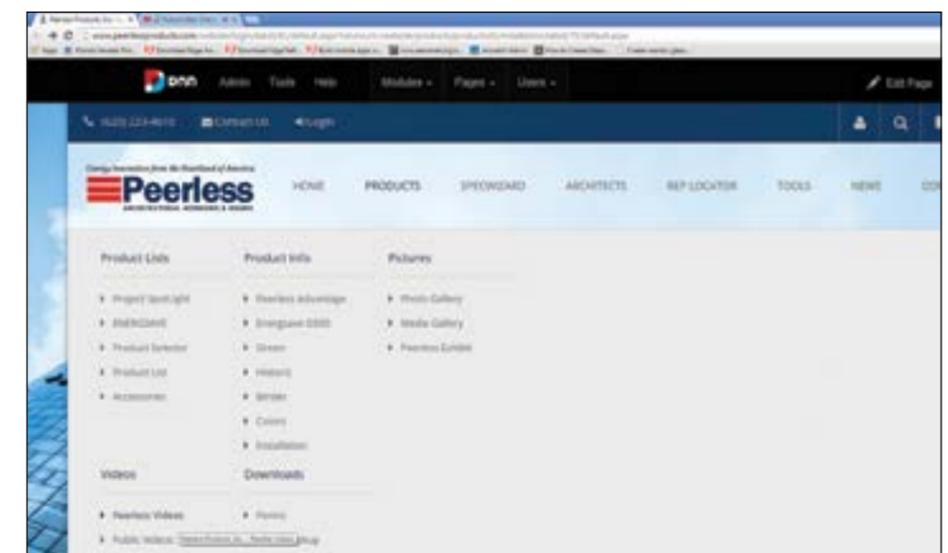
After you have logged into the Website, click on “Products” and then select the video category. Because you are signed in, you are able to see our Peerless Videos, Public Videos and Videos To Share. After making your selection, you will be taken to the video gallery for that category. Our videos can be shared as needed and are compatible for viewing on most media devices. There are also Video Filters which can help you narrow down your search if you are looking for a certain video in particular.

From our website homepage, click “Corporate” and then select “Photo Gallery”. This will take you to a slideshow of our Peerless Project Photos. Visitors to our website do not have to be logged in to view our Photo Gallery.

Peerless Photo Media Gallery



Under Products, select Peerless Videos or Peerless Photos

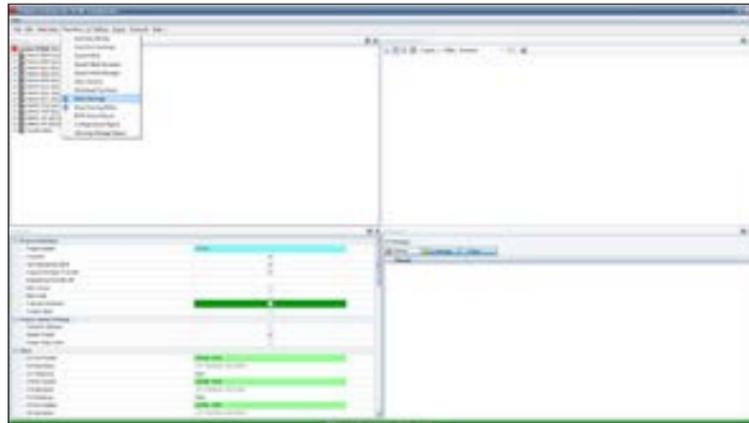


2D Shop Drawing Generator

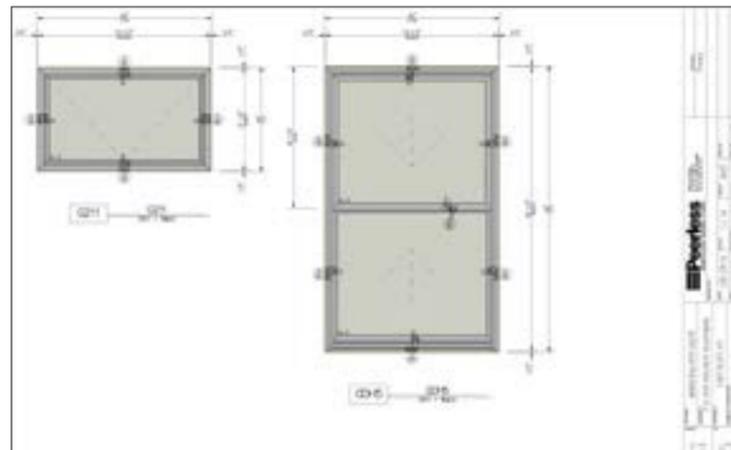
Peerless offers 2D shop drawings that are generated straight from the project quote. The shop drawings contain 3D models to give visuals to confirm the right product has been quoted. A link will be provided for customers to go and download all quote documents. In the future, the shop drawings will contain everything down to the hardware picks in order to streamline the project release process.

On the new Peerless Quotes website, customers will be able to login and generate shop drawings for download and review.

Exporting Shop Drawing from 2D Configurator



Example of a shop drawing



Peerless Quotes

quotes.peerlessproducts.com

Peerless Quotes is an online tool to help sales representatives or customers make quick changes to quotes such as, quantity and sizes. Once a customer reviews the quote they can sign off on it. When it is released by the customer a notification is sent to the project manager who then reviews it and releases it to be made for an order.

When changes are made new shop drawings can be requested and will be sent in an email. Previous shop drawings will also be available for download. Notifications will always be sent when pricing changes on a quote and may require contacting the Project Manager for further explanation.

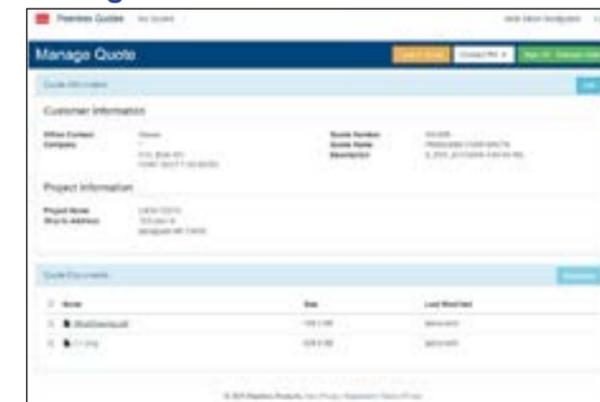
Peerless Quotes login screen



Simple quote editing view



Screen to choose quote and manage documents for download



Advanced quote editing view

