

Vinyl Windows and Patio Doors Owner's Manual



Pella[®] 350 Series • Pella 250 Series • Encompass by Pella[®] • ThermaStar by Pella[®]





Rest assured that Pella's commitment to service is as strong as its windows and doors. For

Congratulations on your purchase of Pella® vinyl products! You have joined a select group of homeowners who have made their homes more beautiful and comfortable with Pella windows and doors. With proper installation, care and operation, your vinyl windows and patio doors will provide years of enjoyment and make every day a little easier. Read this manual thoroughly during your first few days of ownership so you feel comfortable operating, cleaning and maintaining your Pella vinyl products. Then refer to it in the future should a question arise. more than 85 years, your complete satisfaction has been of utmost importance to us. If you have any questions or concerns or would like to learn more about your vinyl windows and patio doors, help is as close as your Pella retailer of vinyl products or at pella.com. We're here for you today ... and for years to come.



HOW TO USE YOUR OWNER'S MANUAL

OVERVIEW

The Pella* Vinyl Windows and Patio Doors Owner's Manual contains specific information for each style of product. Use the drawings and descriptions next to each section of the Table of Contents to help locate the information you need. For the most up-to-date owner's manuals and warranties for all Pella products, go to pella.com.



- 2.2 Cleaning the exterior glass from the interior
- 2.3 Cleaning flat screens
- 2.3 Cleaning the weep system
- 2.3 Cleaning the interior and exterior frame and sash material
- 2.3 Cleaning the hardware finish

s	CASEMENT AND AWNING WINDOWS

Have one sash that hinges open with a crank.

s	SLIDING PATIO DOORS
	The operable door(s)
	opon and close

open and close.

SLIDING WINDOWS

- 3.1 Operation 3.1 Screens
- 3.1 Grilles
- 3.1 Cleaning
 - 3.1 Cleaning the glass
 - 3.2 Spot-cleaning stubborn materials on all glass
 - 3.2 Cleaning the exterior glass from the interior
 - 3.2 Cleaning flat screens
 - 3.2 Cleaning the weep system
 - 3.2 Cleaning the interior and exterior frame and sash material
 - 3.2 Cleaning the hardware finish

CASEMENT AND AWNING WINDOWS

- 4.1 Operation
- 4.1 Screens
- 4.1 Grilles
- 4.1 Cleaning
 - 4.1 Cleaning the glass
 - 4.2 Spot-cleaning stubborn materials on all glass
 - 4.2 Cleaning flat screens
 - 4.2 Cleaning the weep system
 - 4.2 Cleaning the interior and exterior frame and sash material
 - 4.2 Cleaning the hardware finish

SLIDING PATIO DOORS 5.1 Operation 5.1 Locking system 5.1 Screens 5.1 Grilles

- 5.1 Blinds
- 5.2 Shades
- 5.2 Cleaning
- 5.2 Cleaning the glass
- 5.2 Spot-cleaning stubborn materials on all glass
- 5.2 Cleaning screen doors
- 5.3 Cleaning Rolscreen* patio screen doors
- 5.3 Cleaning the weep system
- 5.3 Cleaning the interior and exterior frame
- 5.3 Cleaning the hardware finish

RECOMMENDED MAINTENANCE

6.1 Overview

- 6.1 Exterior
- 6.1 Cleaning the weatherstrip
- 6.1 Double- and single-hung windows
- 6.1 Sliding windows
- 6.1 Casement windows
- 6.2 Awning windows
- 6.2 Sliding patio doors
- 6.2 Sliding screen doors
- 6.3 Salt spray environments

TROUBLESHOOTING

7.1 Overview

- 7.1 Glass breakage/damage
- 7.1 Sliding windows
- 7.1 Double- and single-hung windows
- 7.2 Casement windows
- 7.3 Sliding patio doors
- 7.3 Sliding screen doors
- 7.3 Preventing condensation
- 7.5 Unit ID Number: Service made simpler
- 7.6 EIFS/synthetic stucco
- 7.6 NFRC label

WARRANTY

Please visit pella.com/warranty.

DOUBLE-HUNG WINDOWS

OPERATION

To open the window, unlock the lock located on the top of the venting (lower) sash. Larger windows may have two locks. You can open either the upper or lower sash, or both, depending on your preference. To promote good air circulation in a room, open both the upper and lower sash a few inches.

To close the window, push the sash back to the closed position and lock the window. Reengaging the lock will automatically align and center the sashes together for a tight seal.

If your windows feature AutoLock, they are designed to lock automatically

when closed. Please double check that the lock is engaged.

Sash Lock (Styles vary by product type.)



Autol ock (Styles vary by product type.)

SCREENS

Pella[®] 350 Series and Encompass by Pella[®]

Removing a screen requires two hands. To remove the screen from the interior of the house/building, raise the lower sash by one-third and lower the upper sash by one-third. Then pull in on the four clips or plungers located in each corner (1 and 2) until they disconnect. Grasping the screen with two hands at the bottom, tilt the top of the screen away from the house/building and lift the bottom. This should release the screen from the track. Carefully tilt and turn the screen so that it fits through the open window. Then pass the screen through the window to the inside of the house/building (3).





3

Pella 250 Series

Removing a screen requires two hands. To remove the screen from the interior of the house/building, raise the lower sash by one-third and lower the upper sash by one-third. Pull both tabs on either the right or left side of the screen, pulling toward the opposite side (1 and 2). This will allow the screen to clear the opening. Once clear, gently push the screen toward the exterior of the house/building. This should release the screen from the track. Carefully tilt and turn the screen so that it fits through open window then pass the screen through the window to the inside of the house/building (3).

To replace the screen, reverse the process above and make sure the four pull tabs are engaged.



NOTE: Depending on the size of your unit, there may be only two pull tabs, but the process will be virtually the same.



CAUTION: Use caution when children or pets are around open windows and patio doors. Screens are not designed to retain children or pets.

GRILLES

Aluminum grilles-between-the-glass

The aluminum grilles-between-the-glass are permanently installed between panes of glass, so they stay clean and never need to be removed.

Permanent grilles

Pella 350 Series and Pella 250 Series



CLEANING

Cleaning the glass

1. Use an ammonia-free glass cleaner such as Pella[™] Glass and Window Cleaner. Or you may use a premixed vinegar-based cleaning solution (or make your own with one part white vinegar to 10 parts water), and apply to a soft, clean, lint-free microfiber cloth or paper towel. Feel free to be generous with the amount of cleaner you apply to the cloth or paper towel, but avoid getting any cleaning solutions on the wood, fiberglass or vinyl frames, as they may discolor the finish.

2. Rub from several different directions.

3. Rinse with clear water if streaks remain after cleaning.

CAUTION: Do not use glass cleaners that are ammonia- or alcohol-based. They may leave streaks or produce a film that attracts moisture or dust. Do not use a razor blade to scrape off stubborn materials - doing so may leave permanent marks on the glass or scratches that could cause glass breakage.

Spot-cleaning stubborn materials on all glass

To remove any markings from grease, oil, tape, adhesive, crayons or paint, or marks from plastics that may have come in contact with the glass:

- 1. Apply a solvent such as acetone, rubbing alcohol, or mineral spirits to a clean, dry, lint-free microfiber cloth or paper towel.
- 2. Rub on the areas of glass that need spot-cleaning only. Avoid getting any solvents on the wood, fiberglass or vinyl frames, as they may discolor the finish.
- 3. Wipe clean using a clean, dry, lint-free microfiber cloth or paper towel.

4. Then clean the glass as instructed above.

CAUTION: Do not use a razor blade to scrape off stubborn materials - doing so may leave permanent marks on the glass or scratches that could cause glass breakage. Contact the Pella Window and Door Showroom nearest you for special cleaning instructions.

Cleaning the exterior glass from the interior

You can tilt both sashes of the double-hung window to the interior of the room for easier cleaning of the exterior glass.

- 1. Unlock and slightly raise the lower sash. Release the tilt latches located on the top of the lower sash, and pull the sash toward the interior of the room.
- 2. Carefully tilt the lower sash until it rests on the trim.
- 3. Pull down the upper sash until you can put your hands comfortably and safely on the top of the sash.
- 4. Release the tilt latches on the top of the upper sash, and pull the sash toward the interior. Carefully lower the upper sash to rest against the lower sash.
- 5. Clean the exterior glass of the upper sash, then lift and rotate it upright. Push it back into its normal position while pulling the tilt latches in. Reengage the latches. Raise sash to a fully closed position.
- 6. Clean the exterior glass of the lower sash, then lift and rotate it upright. Push it back into its normal operating position while pulling the tilt latches in. Re-engage the latches. Lower sash to a fully closed position.



For exterior glass-cleaning solution, follow the "Cleaning the glass" steps.

If your products have permanent Simulated-Divided-Light grilles, please refer to the cleaning section for general maintenance information.







Cleaning flat screens

To clean the fiberglass screen cloth, either remove the screen (see page 1.1) and gently wash it with soap and water, rinse thoroughly with clean water and dry. Or use the drapery brush attachment on your vacuum cleaner.



CAUTION: Use caution when children or pets are around open windows and patio doors. Screens are not designed to retain children or pets.

Cleaning the interior and exterior frame and sash material

Begin cleaning by vacuuming dirt from the sill and track areas. Then wash the window frame and sash with a mixture of mild dish soap and water, rinse thoroughly with clean water and dry.

WARNING: Do not use abrasive or caustic solvents as they may damage your windows. Do not scrape or use tools that might damage the surface. Do not power-wash.

Cleaning the weep system

It is normal for water to accumulate in the sill and track. The water is intended to drain to the outside via the drainage or "weep" holes. Check to make sure that the weep holes are clear of obstruction (dirt, sand or building materials). To clean the weep holes, use a small, soft brush to clear the opening. Weep holes are located both inside and outside the window in the bottom of the frame. If the window is "stacked," there may be weep holes between the units.



Cleaning the hardware finish

A soft cloth and mild cleaner may be used on all hardware finishes for vinyl double-hung windows.

SINGLE-HUNG WINDOWS

OPERATION

To open the window, unlock the lock located on the top of the venting (lower) sash. Larger windows may have two locks. Open the window by raising the lower sash.

To close the window, push the sash back to the closed position and lock the window. Reengaging the lock will automatically align and center the sashes together for a tight seal.

If your windows feature AutoLock, they are designed to lock automatically when closed. Please double check that the lock is engaged.

SCREENS

Removing a screen requires two hands. To remove the screen from the interior of the house/building, fully open the lower sash. Grasping the screen handle, push the top of the screen frame upward or vertical and then push the bottom of the frame screen toward the exterior of the house/building (1). This should release the screen from the track. Carefully tilt and turn the screen so that it fits through the open window. Then pass the screen through the window to the inside of the house/building (2).

To replace the screen, reverse the process above and make sure the handle is engaged.



CAUTION: Use caution when children or pets are around open windows and patio doors. Screens are not designed to retain children or pets.

GRILLES

Aluminum grilles-between-the-glass

The aluminum grilles-between-the-glass are permanently installed between panes of glass, so they stay clean and never need to be removed.

Permanent Simulated-Divided-Light grilles

Pella 350° Series and Pella 250 Series

If your products have permanent Simulated-Divided-Light grilles, please refer to the cleaning section for general maintenance information.

CLEANING

Cleaning the glass

solutions on the wood, fiberglass or vinyl frames, as they may discolor the finish.

2. Rub from several different directions.

3. Rinse with clear water if streaks remain after cleaning.



CAUTION: Do not use glass cleaners that are ammonia- or alcohol-based. They may leave streaks or produce a film that attracts moisture or dust. Do not use a razor blade to scrape off stubborn materials - doing so may leave permanent marks on the glass or scratches that could cause glass breakage.



1

1. Use an ammonia-free glass cleaner such as Pella[™] Glass and Window Cleaner. Or you may use a premixed vinegar-based cleaning solution (or make your own with one part white vinegar to 10 parts water), and apply to a soft, clean, lint-free microfiber cloth or paper towel. Feel free to be generous with the amount of cleaner you apply to the cloth or paper towel, but avoid getting any cleaning

Spot-cleaning stubborn materials on all glass

To remove any markings from grease, oil, tape, adhesive, crayons or paint, or marks from plastics that may have come in contact with the glass:

- 1. Apply a solvent such as acetone, rubbing alcohol, or mineral spirits to a clean, dry, lint-free microfiber cloth or paper towel.
- 2. Rub on the areas of glass that need spot-cleaning only. Avoid getting any solvents on the wood, fiberglass or vinyl frames, as they may discolor the finish.
- 3. Wipe clean using a clean, dry, lint-free microfiber cloth or paper towel.
- 4. Then clean the glass as instructed above.

CAUTION: Do not use a razor blade to scrape off stubborn materials - doing so may leave permanent marks on the glass or scratches that could cause glass breakage. Contact the Pella Window and Door Showroom nearest you for special cleaning instructions.

Cleaning the exterior glass from the interior

For windows featuring a **TILTING** lower sash. (Instructions for removable lower sash are below.)

Lower sash only.

- 1. Unlock and slightly raise the lower sash. Release the tilt latches located on the top of the lower sash, and pull the sash toward the interior of the room. (The screen does not need to be removed to clean the exterior glass.)
- 2. Continue lowering the lower sash until it rests on the trim.
- 3. Clean the exterior glass of the lower sash, then lift, rotate upright and push it back into its normal operating position.

WARNING: Do not use the sash to support your body weight because the sash can pivot under pressure.

For windows featuring a **REMOVABLE** lower sash. (Instructions for tilting lower sash are above.)

You can remove the lower sash of the single-hung window for easier cleaning of the exterior glass.

- 1. Locate the take-out clips at the top of the sides of the window. Pop up the bottom of the take-out clips with a flathead screwdriver.
- 2. Unlock the window and raise the lower sash until the sash balances engage the take-out clips (i.e., until the sash is raised above the take-out clips). Slide the sash to one side, allowing the opposite side to clear the frame. Remove the sash and set it aside for cleaning.

CAUTION: Sash may be heavy.

Lay sash flat to wash the exterior glass on the vent panel. To wash the fixed panel from the interior of the building, remove the screen and reach out to wash the exterior glass.

CAUTION: Do not extend your body out of the window. If the entire glass of the fixed panel cannot be reached from the interior of the house/building, wash the fixed panel from the exterior of the house/building.

If cleaning the glass from the exterior, follow the "Cleaning the glass" steps.

Cleaning flat screens

To clean the fiberglass screen cloth, remove the screen and gently wash it with soap and water, rinse thoroughly with clean water and dry with a paper towel. Or use the drapery brush attachment on your vacuum cleaner.



CAUTION: Use caution when children or pets are around open windows and patio doors. Screens are not designed to retain children or pets. STOP

Cleaning the weep system

It is normal for water to accumulate in the sill and track. The water is intended to drain to the outside via the drainage or "weep" holes. Check to make sure that the weep holes are clear of obstruction (dirt, sand or building materials). To clean the weep holes, use a small, soft brush to clear the opening. Weep holes are located both inside and outside the window in the bottom of the frame. If the window is "stacked," there may be weep holes between the units.

Cleaning the interior and exterior frame and sash material

Begin cleaning by vacuuming dirt from the sill and track areas. Then wash the window frame and sash with a mixture of mild dish soap and water, rinse thoroughly with clean water and dry.



WARNING: Do not use abrasive or caustic solvents as they may damage your windows. Do not scrape or use tools that might damage the surface. Do not power-wash.

Cleaning the hardware finish

A soft cloth and mild cleaner may be used on all hardware finishes for vinyl single-hung windows.







SLIDING WINDOWS

OPERATION

To open the window, unlock the lock located in the middle of the venting (moving) sash. Larger windows may have two locks. Slide the window open. To close the window, slide the sash back to the closed position and lock the window. Reengaging the lock will automatically align and center the sashes together for a tight seal.

If your windows feature AutoLock, they are designed to lock automatically when closed. Please double check that the lock is engaged.



Sash Lock (Styles vary by product type.)



AutoLock (Styles vary by product type.)

SCREENS

Removing a screen requires two hands. To remove the screen from the interior of the house/building, fully open the venting sash. Grasping the screen handles with two hands, push toward the opposite side of the screen frame and then push the handle side of the screen frame toward the exterior of the house/ building (1). This should release the screen from the track. Carefully tilt and turn the screen so that it fits through the open window. Then pass the screen through the window to the inside of the house/building (2).



To replace the screen, reverse the process above and make sure the handles are engaged.

CAUTION: Use caution when children or pets are around open windows and patio doors. Screens are not designed STOP to retain children or pets.

GRILLES

Aluminum grilles-between-the-glass

The aluminum grilles-between-the-glass are permanently installed between panes of glass, so they stay clean and never need to be removed.

Permanent Simulated-Divided-Light grilles

Pella[®] 350 Series and Pella 250 Series

If your products have permanent Simulated-Divided-Light grilles, please refer to the cleaning section for general maintenance information.

CLEANING

Cleaning the glass

1. Use an ammonia-free glass cleaner such as Pella[™] Glass and Window Cleaner. Or you may use a premixed vinegar-based cleaning solution (or make your own with one part white vinegar to 10 parts water), and apply to a soft, clean, lint-free microfiber cloth or paper towel. Feel free to be generous with the amount of cleaner you apply to the cloth or paper towel, but avoid getting any cleaning solutions on the wood, fiberglass or vinyl frames, as they may discolor the finish.

2. Rub from several different directions.

3. Rinse with clear water if streaks remain after cleaning.



CAUTION: Do not use glass cleaners that are ammonia- or alcohol-based. They may leave streaks or produce a film that attracts moisture or dust. Do not use a razor blade to scrape off stubborn materials - doing so may leave permanent marks on the glass or scratches that could cause glass breakage.

Spot-cleaning stubborn materials on all glass

- 1. Apply a solvent such as acetone, rubbing alcohol, or mineral spirits to a clean, dry, lint-free microfiber cloth or paper towel.
- 2. Rub on the areas of glass that need spot-cleaning only. Avoid getting any solvents on the wood, fiberglass or vinyl frames, as they may discolor the finish.
- 3. Wipe clean using a clean, dry, lint-free microfiber cloth or paper towel.
- 4. Then clean the glass as instructed above.

CAUTION: Do not use a razor blade to scrape off stubborn materials - doing so may leave permanent marks on the glass or scratches that could cause glass breakage. Contact the Pella Window and Door Showroom nearest you for special cleaning instructions.

Cleaning the exterior glass from the interior

You can remove the venting sash of the sliding window for easier cleaning of the exterior glass. Unlock the window and slide to the fully open position. Ensure that the sash has cleared the anti-lift clip located at the top of the frame. Grasp the sash, and lift up and out of the bottom track.



Lay sash flat to wash the exterior glass on the vent panel. To wash the fixed panel from the interior of the building, remove the screen and reach out to wash the exterior glass.

wash the fixed panel from the exterior of the building.

For exterior glass-cleaning solution, follow the "Cleaning the glass" steps on page 3.1.

Cleaning flat screens

To clean the fiberglass screen cloth, remove the screen and gently wash it with soap and water, rinse thoroughly with clean water and dry. Or use the drapery brush attachment on your vacuum cleaner.



CAUTION: Use caution when children or pets are around open windows and patio doors. Screens are not designed to retain children or pets.

Cleaning the weep system

It is normal for water to accumulate in the sill and track. The water is intended to drain to the outside via the drainage or "weep" holes. Check to make sure that the weep holes are clear of obstruction (dirt, sand or building materials). To clean the weep holes, use a small, soft brush to clear the opening. Weep holes are located both inside and outside the window in the bottom of the frame. If the window is "stacked," there may be weep holes between the units.

Cleaning the interior and exterior frame and sash material

water, rinse thoroughly with clean water and dry.

Do not power-wash.

Cleaning the hardware finish

A soft cloth and mild cleaner may be used on all hardware finishes for vinyl sliding windows

- To remove any markings from grease, oil, tape, adhesive, crayons or paint, or marks from plastics that may have come in contact with the glass:

 - CAUTION: Do not extend your body out of the window. If the entire glass of the fixed panel cannot be reached from the interior of the building,

 - Weep Hole

- Begin cleaning by vacuuming dirt from the sill and track areas. Then wash the window frame and sash with a mixture of mild dish soap and
 - WARNING: Do not use abrasive or caustic solvents as they may damage your windows. Do not scrape or use tools that might damage the surface.







CASEMENT AND AWNING WINDOWS

OPERATION

Vinyl casement windows feature a convenient locking system - a single, easy-to-reach sash lock handle operates both locks on casement windows. To open the window, lift the sash lock handle to unlock the window, then rotate the handle and crank. Be sure to unlock the window before you try to open it – otherwise, you'll risk damaging the operating mechanism. To close the window, reverse the steps. Be sure to lock the sash whenever the window is closed.



Awning windows are similar to casement windows that have been turned on their side. Awning windows are designed to be opened to a 45° angle or less. They feature dual sash locks - both locks must be released before opening.

SCREENS

Flat screens

Removing a flat screen requires two hands. To remove the screen, pull the clips or plungers, located on the screen frame, inward and out of the slots in the window frame (1). Grab the screen frame securely, then carefully lower the screen from the window into the home (2).

To install the flat screen, place the screen in the window opening. Pull the clip or plunger inward while pushing the screen into the window. Then reengage the plunger in the slots on the sides of the window.



CAUTION: Use caution when children or pets are around open windows and patio doors. Screens are not designed to retain children or pets.



GRILLES

Aluminum grilles-between-the-glass

The aluminum grilles-between-the-glass are permanently installed between panes of glass, so they stay clean and never need to be removed

Permanent Simulated-Divided-Light grilles

Pella 350 Series

If your products have permanent Simulated-Divided-Light grilles, please refer to the cleaning section for general maintenance information.

CLEANING

Cleaning the glass

1. Use an ammonia-free glass cleaner such as Pella[™] Glass and Window Cleaner. Or you may use a premixed vinegar-based cleaning solution (or make your own with one part white vinegar to 10 parts water), and apply to a soft, clean, lint-free microfiber cloth or paper towel. Feel free to be generous with the amount of cleaner you apply to the cloth or paper towel, but avoid getting any cleaning solutions on the wood, fiberglass or vinyl frames, as they may discolor the finish.

2. Rub from several different directions.

3. Rinse with clear water if streaks remain after cleaning.

CAUTION: Do not use glass cleaners that are ammonia- or alcohol-based. They may leave streaks or produce a film that attracts moisture or dust. Do not use a razor blade to scrape off stubborn materials - doing so may leave permanent marks on the glass or scratches that could cause glass breakage.

Spot-cleaning stubborn materials on all glass

- 1. Apply a solvent such as acetone, rubbing alcohol or mineral spirits to a clean, dry, lint-free microfiber cloth or paper towel.
- 2. Rub on the areas of glass that need spot-cleaning only. Avoid getting any solvents on the wood, fiberglass or vinyl frames, as they may discolor the finish.
- 3. Wipe clean using a clean, dry, lint-free microfiber cloth or paper towel.
- 4. Then clean the glass as instructed in previous section.

CAUTION: Do not use a razor blade to scrape off stubborn materials - doing so may leave permanent marks on the glass or scratches that could cause glass breakage. Contact the Pella Window and Door Showroom nearest you for special cleaning instructions.

Cleaning flat screens

Standard fiberglass screens

To clean the fiberglass screen cloth, either remove the screen and gently wash it with soap and water, rinse thoroughly with clean water and dry. Or use the drapery brush attachment on your vacuum cleaner.



CAUTION: Use caution when children or pets are around open windows and patio doors. Screens are not designed to retain children or pets.

Cleaning the weep system

Encompass by Pella[®] and ThermaStar by Pella[®]

It is normal for water to accumulate in the sill and track. The water is intended to drain to the outside via the drainage or "weep" holes. Check to make sure that the weep holes are clear of obstruction (dirt, sand or building materials). To clean the weep holes, use a small, soft brush to clear the opening. Weep holes are located both inside and outside the window in the bottom of the frame. If the window is "stacked," there may be weep holes between the units.

Cleaning the interior and exterior frame and sash material

Begin cleaning by vacuuming dirt from the sill and track areas. Then wash the window frame and sash with a mixture of mild dish soap and water, rinse thoroughly with clean water and dry.

Do not power-wash.

Cleaning the hardware finish

A soft cloth and mild cleaner may be used on all hardware finishes for vinyl casement and awning windows.

- To remove any markings from grease, oil, tape, adhesive, crayons or paint, or marks from plastics that may have come in contact with the glass:

- WARNING: Do not use abrasive or caustic solvents as they may damage your windows. Do not scrape or use tools that might damage the surface.









SLIDING PATIO DOORS

OPERATION

Locking System

Thumbturn lock

The thumbturn lock is located on the flat panel behind the door handle. To lock the door, fully close the venting/sliding panel and turn the thumbturn to a vertical locked position. To unlock the door, turn the thumbturn in the opposite direction.

SCREENS

To remove the screen door for storage, lift the screen and tilt the bottom portion of the screen away from the sliding door while lifting the screen out of the sill frame track (1).

Pella[®] 350 Series patio doors with Rolscreen[®] retractable screen

To remove the retractable Rolscreen, remove the retainer clips at both the head and the sill (2), lift slightly, and tilt the bottom of the Rolscreen cassette away from the sliding patio door and remove from the notches in the frame.

Save the notch cover that is located at the top of the frame as well as the retainer clips for later installation.

FYI NOTE: Use a putty knife to lift the rollers out of the bottom channel.

CAUTION: Use caution when children or pets are around open windows and patio doors. Screens are not designed to retain children or pets. STOP

GRILLES

Aluminum grilles-between-the-glass

The aluminum grilles-between-the-glass are permanently installed between panes of glass, so they stay clean and never need to be removed.

BLINDS

Blinds-between-the-glass

Pella 350 Series, Encompass by Pella® and ThermaStar by Pella®

The aluminum blinds-between-the-glass are permanently installed between panes of glass, so they stay clean and never need to be removed.

Blinds-between-the-glass operation

Move the operators up and down in a slow and steady motion. The operators are attached to the operating mechanism with high-powered magnets. Moving the operators abruptly could cause the operator to become disengaged from the magnet.

NOTE: If a handle becomes disengaged from the operator and remains FYI attached to the track, slide the operator up and down until the magnet reengages. Slowly slide the handle all the way to the top of the track to fully engage the handle with the operator.

If the blind does not completely lower on one side, using the tilt operator, ensure the slats are in the open position, then raise and lower the blind.



SHADES

Shades-between-the-glass

Pella[®] 350 Series

The cellular shades are permanently installed between panes of insulating glass, so they stay clean and never need to be removed.

Shades-between-the-glass operation

Move the operators up and down in a slow and steady motion. The operators are attached to the

operator to become disengaged from the magnet.



NOTE: If a handle becomes disengaged from the operator and remains attached to the track, slide the operator up and down until the magnet reengages. Slowly slide the handle all the way to the top of the track to fully engage the handle with the operator.

CLEANING

Cleaning the glass

- solutions on the wood, fiberglass or vinyl frames, as they may discolor the finish.
- 2. Rub from several different directions.
- 3. Rinse with clear water if streaks remain after cleaning.



Spot-cleaning stubborn materials on all glass

To remove any markings from grease, oil, tape, adhesive, crayons or paint, or marks from plastics that may have come in contact with the glass:

- 1. Apply a solvent such as acetone, rubbing alcohol, or mineral spirits to a clean, dry, lint-free microfiber cloth or paper towel.
- discolor the finish.
- 3. Wipe clean using a clean, dry, lint-free microfiber cloth or paper towel.

4. Then clean the glass as instructed above.

CAUTION: Do not use a razor blade to scrape off stubborn materials - doing so may leave permanent marks on the glass or scratches that could cause glass breakage. Contact the Pella Window and Door Showroom nearest you for special cleaning instructions.

Cleaning screen doors

To clean the fiberglass screen cloth, use a vacuum cleaner with the upholstery brush attachment, If necessary, use the exhaust feature to blow debris off the exterior side of the screen. For greasy deposits, use hot water and mild detergent, rinse with clean water and dry.



CAUTION: Use caution when children or pets are around open windows and patio doors.



Unlocked

operating mechanism with high-powered magnets. Moving the operators abruptly could cause the



1. Use an ammonia-free glass cleaner such as Pella[™] Glass and Window Cleaner. Or you may use a premixed vinegar-based cleaning solution (or make your own with one part white vinegar to 10 parts water), and apply to a soft, clean, lint-free microfiber cloth or paper towel. Feel free to be generous with the amount of cleaner you apply to the cloth or paper towel, but avoid getting any cleaning

Do not use a razor blade to scrape off stubborn materials - doing so may leave permanent marks on the glass or scratches that could cause

2. Rub on the areas of glass that need spot-cleaning only. Avoid getting any solvents on the wood, fiberglass or vinyl frames, as they may







Screens are not designed to retain children or pets.

Cleaning Rolscreen* patio screen doors

Pella 350 Series

Rolscreen patio screen doors should be in the closed position for cleaning. For normal dust and dirt, use a vacuum cleaner with the upholstery brush attachment. If necessary, use the exhaust feature to blow debris off the exterior side of the screen. For greasy deposits, use hot water and mild detergent. If you wash your screen, rinse thoroughly with clean water and make certain it is dry before operating it.



Cleaning the weep system

It is normal for water to accumulate in the sill and track. The water is intended to drain to the outside via the drainage or "weep" holes. Check to make sure that the weep holes are clear of obstruction (dirt, sand or building materials). To clean the weep holes, use a small, soft brush to clear the opening. Weep holes are located both inside and outside the door in the bottom of the frame.

Ween Hole

Cleaning the interior and exterior frame

Begin cleaning by vacuuming dirt from the door track areas. Then wash the door frame with a mixture of mild dish soap and water, rinse thoroughly with clean water and dry.

WARNING: Do not u Do not power-wash. WARNING: Do not use abrasive or caustic solvents as they may damage your patio doors. Do not scrape or use tools that might damage the surface.

Cleaning the hardware finish



RECOMMENDED MAINTENANCE

Pella recommends you inspect your windows and doors at least annually as part of a home checkup. Recommended maintenance can prolong the life of your windows and patio doors and will help ensure maximum warranty coverage. As needed, clean your windows and patio doors, and recaulk around them to help maintain optimal performance. Also be sure to regularly check for leaks, improper drainage above or around vents, and sprinkler systems that may subject your windows and doors to prolonged water exposure. With recommended care, your Pella* windows and patio doors can reward you with many years of beauty and performance.

Exterior

OVERVIEW

An annual checkup can help preserve and maintain the beauty of your vinyl products for years to come.

Inspect the sealant/caulking on the exterior perimeter of your windows and patio doors at least once a year. The sealant/caulking helps create a watertight seal between the window and door frames and the exterior siding (whether it is vinyl, cedar, aluminum, brick, etc.). It is extremely important that the sealant/caulking remains intact and in good condition at all times. Pay particular attention to the caulking at the lower corners of windows and under joints between windows in combinations (a grouping of individual windows). The sealant material should not be cracked, broken or missing - or it may cause premature failure of your vinyl windows and patio doors or other parts of your home. Deterioration that occurs as a result of improper or insufficient maintenance is not covered by the vinyl window and patio door Limited Lifetime Warranty.*

Cleaning the weatherstrip

To remove any deposits - such as grease, oil or stains - that may have come in contact with the weatherstrip, apply a small amount of concentrated fabric cleaner or carpet cleaner - such as Spray-n-Wash*, OxiClean* Fabric Cleaner or Resolve* Carpet Cleaner - to the weatherstrip. Scrub the cleaner into the weatherstrip with a toothbrush or similar applicator. Continue applying cleaner until the deposits are no longer visible. Rinse weatherstrip with clean water, and dry with a paper towel.



Double- and single-hung windows

Keep weatherstrip clean and lubricated to ensure the sash operates smoothly. You may want to apply a thin layer of paraffin or other dry lubricant (Teflon* Dry Lubricant or Gulf Wax*, available at most home improvement

stores, works well). Do not use oily lubricants; they attract dust and grime, which will eventually restrict the window's movement.



Sliding windows

Keep the track free of debris that could affect operation of the window. Remove the sliding panel (see page 3.1 for complete details). Inspect and clean the rollers on the bottom of the slide panel.

Casement windows

To keep the window operating smoothly, clean the window track occasionally with a brush. To help prevent the sash from sticking, apply a thin layer of paraffin or other dry lubricant (Teflon* Dry Lubricant or Gulf Wax*, available at most home

improvement stores, work well) to the weatherstripping. Do not use oily lubricants; they attract dust and grime, which will eventually restrict the window's movement. You can remove the operating crank on your window by loosening the set screw located on the bottom of the crank. It's important to keep the set screw tight; using a crank handle with a loose set screw causes the crank and operator stud to wear.

* See written warranty for complete details at pella.com/warranty.



Awning windows

Keep the window track free of dirt and debris. As with casement windows, to help prevent the sash from sticking, you may want to apply a thin layer of paraffin or other dry lubricant (Teflon^{*} Dry Lubricant or Gulf Wax^{*}, available at most home improvement stores, work well). **Do not use oily lubricants;** they attract dust and grime, which will eventually restrict the window's movement.



Sliding patio doors

For proper operation, keep the door track free of debris. You can adjust the rollers located in the bottom of the door if necessary. The lock strike can also be adjusted if needed. (See page 7.3 for detailed instructions.) You may want to apply a thin layer of paraffin or other dry lubricant (Teflon[®] Dry Lubricant or Gulf Wax[®], available at most home improvement stores, work well). **Do not use oily lubricants;** they attract dust and grime, which will eventually restrict the door's movement.

Cleaning under the track

Open the sliding patio door panel. Make sure the top of the panel has cleared the anti-lift clips in the lower track. Grasp the panel with both hands, and lift up to remove it from the lower track. Then pull down to remove it from the upper channel (1). Pry up the track from the door frame with an Allen wrench or flathead screwdriver. Grasp the track and lift it all the way out (2).



Vacuum out any debris, and thoroughly clean the lower channel with warm soapy water, rinse thoroughly with clean water and dry with a paper towel.

To replace, insert the lower track into the door frame and press it down all the way across. Reinstall the sliding patio door panel by lifting it up into the upper channel of the frame. Line up the panel with the bottom track, and gently lower the panel into the frame. Check for smooth operation by opening and closing the door.



Sliding screen doors

It is important to keep the upper and lower door tracks free of dirt and debris. The rollers on the top of the screen can be adjusted if necessary. (See page 7.3 for complete details.) If the screen becomes dirty, you can clean it by using a vacuum cleaner with the drapery brush attachment.

Cleaning under the track

Open the sliding screen door. You might have to adjust screen rollers so they can clear the lower track. (See page 7.3 for detailed instructions.) From the exterior, grasp the screen door with both hands and lift up to remove it from the lower track. Then pull down to remove it from the upper channel (1). Pry up the track from the door frame with an Allen wrench or flathead screwdriver. Grasp the track and lift it all the way out (2).



Vacuum out any debris, and thoroughly clean the lower track with warm soapy water, rinse thoroughly with clean water and dry with a paper towel.

To replace, insert the lower track into the door frame and press it down all the way across. Reinstall the sliding screen door by lifting it up into the upper channel of the frame. Tilt in the bottom of the screen door, and set it on the lower track. Adjust the screen rollers if necessary. (See page 7.3 for detailed instructions.) Check for smooth operation by opening and closing the door.

Salt spray environments

The seacoast environment is extremely hard on all sorts of products (automobiles, recreational vehicles, building products, etc.). Any product used in a seacoast location will require more frequent inspection and maintenance to help it last as long as possible in this harsh environment. Windows and doors are no different from other products in this respect.

If your home is in a coastal environment and is subjected to wind-driven salt spray or salt fog, clean the exteriors, including operation hardware, using mild detergent soap, rinse thoroughly with clean water and dry at least quarterly – and more often if necessary – to prevent salt and other abrasive materials from building up on the exterior surfaces.



TROUBLESHOOTING

OVERVIEW

If you have a concern with your vinyl product or need additional assistance from an experienced professional, consult your Yellow Pages (under "Windows") for the Pella Window and Door Showroom nearest you or use the store finder at pella.com.

Glass breakage/damage

In the event of glass breakage, consult the Pella Window and Door Showroom nearest you for assistance. Be sure to have your Pella* Unit ID Number handy (see page 7.5). For safety reasons and to ensure optimum performance, we strongly advise you consult a professional for glass replacement.

U.S. federal law and most local codes require the use of tempered glass in doors and other specific applications. Tempered glass can withstand greater impact than ordinary glass, but it is sensitive to scratches. Scratches can cause immediate or delayed breakage. If the glass is tempered, it will break into small, rounded pieces. If tempered glass is broken, likely by law it must be reglazed or replaced with tempered glass.



Sliding windows

The sash is hard to open and close. The sash rolls on a track inside the frame. Over time, dirt and debris can get in or on the track, making it harder to open and close the sash. Remove the sash and check for weld flash (tiny pieces of vinyl). Use a vacuum cleaner with the brush attachment to clean out the debris in the track to make the sash easier to operate.

Double- and single-hung windows

The sash is hard to open and close. Vinyl double-hung and some single-hung windows tilt for easy cleaning. If these windows are not properly repositioned after washing, they may be difficult to open and close.

One cause could be an insecure balance clip, which occurs when the sash balance is not hooked properly to the hole at the tip of the jamb track.

- 1. Remove the lower sash by pulling it toward you until it's perpendicular to the frame. Lift straight up on one side until the locking pivot bar of the sash is released from the sash balance (1). Repeat on the other side. Lift the sash up and out of the window frame, then set it aside in a safe location.
- 2. Using a flathead screwdriver, rotate the balance shoe a quarter-turn to lock the balance's position (2).
- 3. Using straight or bent needle-nosed pliers, pull up on the hook until it aligns with the hole at the top of the jamb track, then insert the hook into the hole (3).





A window that makes noise when it's opened or closed could be resolved with spray lubricant, by the adjusting the screws rubbing on the balance spring (3a) or by smoothing the burrs from the installation holes rubbing on the balance system (3b).

- 1. Remove the lower sash by pulling it toward you until it's perpendicular to the frame. Lift straight up on one side until the locking pivot bar of the sash is released from the sash balance (1). Repeat on the other side. Lift the sash up and out of the window frame, then set it aside in a safe location.
- 2. Expose the installation holes by raising or lowering the balance.
- 3. (3a) If the screw is rubbing on the balance spring, drive it in three to four clockwise turns so it does not rub. If it's still rubbing, file down the head of the screw with a metal file. (3b) If the burrs are rubbing on the balance assembly, use a deburring tool or the back of a utility knife to smooth the perimeter of the holes to remove the burrs.

Debris in the balance track can cause the balance assembly to start making noise and affect smooth operation. This can be remedied by completely lowering the sash (just above the top of the sill), tilting the sash in (allowing access to the balance pocket) then removing debris from the balance pocket using a dusting cloth or vacuum. Wiping the full length of the spring coil clean is required.

To replace the lower sash, make sure the exterior side is facing up, then insert one sash-locking pivot bar into the bottom of the window, where the balance is the lowest. Repeat on the other side. Push the sash downward until it's perpendicular to the frame. Then tilt it upward and engage the tilt locks at the top. Raise and lower the sash a few times to make sure it operates correctly.

Also, over time, dirt and debris can make it harder to open and close the sash. Cleaning the frame and applying a thin layer of paraffin or other dry lubricant (Teflon* Dry Lubricant or Gulf Wax*, available at most home improvement stores, work well) will make the sash easier to operate. Do not use oily lubricants; they attract dust and grime, which will eventually restrict the window's movement.

Casement windows

The sash does not open. Make sure the sash lock handle is completely disengaged. Turn the crank slightly, and apply slight pressure to the sash near the lock assembly. The sash should snap open. Then open the window and check the surface of the weatherstripping. You may want to apply a thin layer of paraffin or other dry lubricant (Teflon* Dry Lubricant or Gulf Wax*, available at most home improvement stores, work well). Do not use oily lubricants; they attract dust and grime, which will eventually restrict the window's movement.

The sash does not open smoothly. Check to see that the sash guide is clean. Dirt and debris in the track will affect operation. If needed, clean with soapy water or a dry brush. You may want to apply a thin layer of paraffin or other dry lubricant (Teflon* Dry Lubricant or Gulf Wax*, available at most home improvement stores, work well). Do not use oily lubricants; they attract dust and grime, which will eventually restrict the window's movement. If your sash drags (hits the frame), something is not square. Call your Pella retailer for assistance.

The operator crank comes off. There is a set screw located on the bottom of the crank handle. Tighten it.

The lock handle comes off. The lock handle is designed to be removable. Push it back into the opening with the handle in the locked position. It should snap back in place.













Sliding patio doors

The door does not slide smoothly. There are several possible causes. The track the door slides on may have debris on it, causing it to drag. If so, simply clean the track below the sliding panel. If this does not work, you may need to adjust the rollers to raise the door clear of the track. Adjust the rollers up or down to make sure that the edge of the movable door is parallel to the side of the door frame. The adjustment screws are located on either side of the movable door, near the bottom. The lower of the two screws is the adjustment screw. Turn the adjusting screw clockwise to raise the end of the door and counterclockwise to lower it.

The door lock doesn't latch. To adjust the keeper, mark its current location with a pen or pencil. Remove all four screws and the keeper from the door frame. Slide the keeper up or down to align with the lock, then replace the screws in their original holes. Shut the door and operate the lock to ensure correct placement of the keeper.







FYI

Sliding screen doors

should move smoothly on its track. Apply a thin layer of paraffin or other dry lubricant (Teflon® Dry Lubricant or Gulf Wax®, available at most home improvement stores, work well). Do not use oily lubricants; they attract dust and grime, which will eventually restrict the door's movement

The screen door does not slide smoothly. The screen



The screen rollers can be adjusted by use of the roller adjustment screw located on the top and bottom rails of the screen door. If the screen door is tight on the bottom, turn the adjusting screws clockwise to raise the door. If the screen door is too tight at the top, turn the adjusting screws counterclockwise to lower the door. Level the screen door so the edge aligns with the lock jamb of the frame.

NOTE: Depending on the model of your door, the adjusting screw will be located on either the lower inside (1) or lower outside of the frame (2).

Preventing condensation

Understanding condensation.

Moisture is present in all homes, but when it becomes excessive, homeowners need to take an active role in protecting their investment.

Humidity and condensation.

Humidity is a measure of the amount of water vapor in the air.

Condensation is water that forms when warm, moist air hits a cooler surface. In homes, it might occur on surfaces such as windows, bathroom walls and cold-water pipes.

When interior humidity levels are too high, relative to cooler outdoor temperatures, condensation can form on the coldest surface in a room often the glass in a window or door. While windows and doors do not cause condensation, they may be one of the first places it shows up.

What causes condensation?

Excess humidity is typically the cause of condensation. There are many sources for moisture in a home: showers, dishwashers, clothes washers and dryers, houseplants, humans and pets, among others. In newly built homes, additional moisture may escape from building materials such as lumber, plaster and masonry for up to three heating seasons - even with proper airflow and temperature management.

Older vs. newer homes.

Condensation may be less of an issue in older homes if conditions allow for more air exchange between indoors and out, often from around aging, loose or poorly installed windows and doors. However, the tradeoff is higher energy bills.

Newer homes, on the other hand, are more airtight and energy-efficient. Many have vapor barriers - plastic within the wall cavity that blocks moisture passage in either direction. With tighter-fitting doors and windows, vapor barriers and increased insulation, heating and cooling costs are lower - but humidity levels must be monitored more closely.

No matter when your home was built, the key is to strike the right balance when it comes to humidity levels. Air that's too dry can cause furniture to dry out and crack, joints and studs to shrink and twist, and paint and plaster to crack. Excessive moisture in the home can cause paint to peel and insulation to deteriorate, and condensation on windows and doors can damage sills and trim.

Measuring and controlling humidity.

To determine how much humidity is present in your home, you can humidity gauge from a hardware store or home center. Invest in a q greater potential accuracy in assessing humidity levels, or consult ar way to monitor the interior humidity level is to watch your windows. condensation begins to form, wipe it off to reduce the humidity, ope on exhaust fans or dehumidifiers, or minimize sources of moisture.

The University of Minnesota Laboratories provides a chart showing recommended relative humidity levels for the home.

Exterior condensation.

Exterior condensation on windows occurs primarily in the morning when days are warm and humid, but nights are cool. Typically, it clears as the day warms. Exterior condensation can occur at any time, especially in warm, humid climates where interior temperatures are cooler than outdoor conditions. Exterior condensation means that windows are doing their job properly. However, if you spot excessive condensation on the inside of your windows, check your inside humidity - it may be a signal of potential problems if not addressed.

Fogging between the panes of sealed glass.

Fogging between the panes of sealed insulating glass indicates a problem with a seal, not excess humidity. Contact your Pella retailer for information.

Tips for wintertime moisture management.

- Closely monitor the furnace humidifier and any other humidifying devices.
- Be sure louvers and vents for the attic, basement and/or crawl space are open, adequately sized and cross-ventilated.
- Run exhaust fans for the kitchen, bathroom and laundry rooms for longer periods.
- Make sure exhaust fans vent directly outside, not into attics or crawl spaces.
- Be sure chimneys are free and clear, so moisture in combustion gases can escape.
- Make sure your furnace is in proper working order and is serviced regularly.
- Store firewood outside or in the garage as wood dries, it gives off moisture.
- Install energy-efficient windows, such as those that have earned the ENERGY STAR*.

For more information on condensation in the home, consult the following:

- The University of Minnesota Laboratories, http://www.dehs.umn.edu

	Maximum Recommend	led Humidity Levels
n purchase a	Outside Temperature	Inside Humidity
quality unit for	20° F to 40° F	Not over 40%
	10° F to 20° F	Not over 35%
an expert. Another	0° F to 10° F	Not over 30%
s. When interior	-10° F to 0° F	Not over 25%
oen windows, turn	-20° F to -10° F	Not over 20%
	-20° F or below	Not over 15%
	Basad an anaine aire a studi	

Based on engineering studies at 70° F conducted at the University of Minnesota Laboratories.

• Open window coverings - such as blinds, shades, drapes and curtains - during daylight hours to increase airflow over the glass.

• Follow the manufacturer's instructions for venting gas appliances. In most cases, that will mean directing vents to the outside of the home.

• Building Research Council at the School of Architecture, University of Illinois at Urbana-Champaign, http://brc.arch.uiuc.edu/f62.htm

• Home Moisture Problems (Series 1437), published by the Oregon State University Extension Services, http://extension.oregonstate.edu/catalog/

Unit ID Number: Service made simpler

To help save you time if your product ever needs service or repair, Pella includes a special identification number. You will find this number in an upper corner in the airspace between the glass panels or on the visible glass in a lower corner.



PELLA DOUBLE HUNG G0310047019 - NFRC APR 16 2003



ADDITIONAL INFORMATION

EIFS/synthetic stucco

Vinyl products should not be used in barrier Exterior Insulation and Finish Systems (EIFS, also known as synthetic stucco) or similar systems – except in the states of Arizona, California, Colorado, Nevada, New Mexico and Utah. Pella makes **no warranty of any kind on and assumes no** responsibility for vinyl windows and doors manufactured by Pella installed in barrier EIFS. In the states listed above, the installation of Pella^{*} products in EIFS or similar barrier systems must be in accordance with Pella's instructions for that type of construction.

NFRC label

Vinyl windows and doors manufactured by Pella labeled with the National Fenestration Rating Council^{*} (NFRC) Energy Performance label are tested in accordance with NFRC standards. NFRC ratings are based on a combination of computer simulations and physical testing of product samples. For details on NFRC Energy Performance ratings, go to nfrc.org.

What's so special about the NFRC label?

It represents one standard testing method from an independent source for all kinds and brands of windows and doors. It replaces a system of individual manufacturers testing their own products with many different testing standards. With this label, you can make direct comparisons. Keep in mind, energy efficiency is just one of the many important qualities to look for in windows and patio doors. The NFRC has one single purpose: to establish and improve upon uniform energy-rating procedures for all brands of windows and doors.

This nonpartisan coalition of professionals includes home and commercial builders, product designers and specifiers, manufacturers, consumer advocates, utility company energy specialists, and government agencies.

Pella Corporation is a member of the NFRC and supports its work on behalf of homeowners and the building industry. If you have questions about the NFRC, feel free to write to NFRC, 1300 Spring Street, Suite 500, Silver Spring, MD 20910. Or call 301-589-1776, fax 301-588-0854 or visit nfrc.org.

Warranty

One of the best warranties in the business. Pella vinyl windows and patio doors are backed by the Pella Limited Lifetime Warranty. See written warranty for complete details at pella.com/warranty.

		inspection; SAVE for future reference
	Designe	
Num Y	Caseme	
		de Left (LH)
		ed Low-E
National Fenestr	ation 5/8" IG	Argon
Rating Counc	clear Pa	inel
CERTIFIE	D CPD: PE	L – N – 016
E	NERGY PERF	ORMANCE RATINGS
U-Fa	ctor	Solar Heat Gain Coefficient
0.29	1.65 (Metric 50)	0.22
AD	DITIONAL PI	ERFORMANCE RATINGS
Visible Tran	smittance	
0.4	10	
suitability of any prod	uct for any specific us	ecommend any products and does not warrant the e. For more information, call (641) 621-3114 or visit RC's web site at www.nfrc.org.
suitability of any prod Pella's web site at www Wind Load Design Pressure (DP) (prf)	uct for any specific us wpella.com or visit N Répons	ecommend any products and does not warrant the e. For more information, call (641) 621-3114 or visit
suitability of any prod Pella's web site at www Wind Load Design Pressure	uct for any specific us wpella.com or visit N	ecommend any products and does not warrant the a. For more information, call (641) 621-3114 or visit RCX web size at www.nfr.org. Qualified for highlighted area.
valatiking of any prod Pullas web site at www Itera Laad Deligo Pressure (297 (sel) + 500/- 500 Per ASTM E330 Canada Preformance Classification CANCSA AA40:00 A3. At Laskage C3 Wind Resist.	Canada 1-860-887-3000 emergytacge ca Exempting ca Exempting ca Exercise Exe	women and expanding and dear was the dear was the set of the set o
subability of any proof World Load Design Preurse (D ²) pint Poly (D ²) pint Poly (D ²) pint Canada Poly (D ²) pint Canada Canada A Ar Lakago D ²	ut for any specific ac yearlies ac yearlie	
subability of any proof Multiclassic bial and with log piper. (D) piper (D)	Lat of any specific ac your of	n for meta-dimension of discretion of the analysis of the second

NOTE: For example purposes only. NFRC ratings vary by product.