

# THE WINDOW WASHER'S HANDBOOK: TIPS AND TRICKS TO BECOME A PRO

If a picture says a thousand words, dirty windows speak volumes. The reality is that people will judge an entire facility's cleaning and maintenance approach based on one seemingly simple task– window washing.

Even with its long history, the skilled trade of cleaning windows still provides immediate results and the satisfaction of a job well done. It's also one of the easiest trades to enter—with a small initial investment, along with speed and attention to detail, you can get your business or career started quickly and reap some of the highest trade profit margins.



Whether you're getting started as a professional

window washer, or looking to up your game, this guide provides essential terms, techniques and tips to do the job effectively and efficiently. Along with the latest trends and tools, this knowledge can be the difference between getting the results you want every time or losing money and customers figuring it out the hard way.

# WINDOW WASHING TERMINOLOGY

The best way to build a solid foundation starts with understanding some commonly used terms. While the "fake it 'til you make it" philosophy may work in other professions, that's not the case with window washing.

# WINDOW COMPONENTS

- **Brickmould**—decorative trim or moulding surrounding the head and sides of the window frame, often used in masonry construction such as stone or brick
- **Drip Cap**—moulding on top of the head brickmould or casing to deflect water away from the window
- **Glass Sealant**—protective barrier on glass to reduce maintenance and prolong glass life
- **Jamb**—the main vertical components that form the sides of a window
- Muntin Bar—short bar used to separate the glass in a sash into multiple lights, also called a divider or a grille
- **Sash**—the part of the window that surrounds the glass and holds the glass in place in the window frame

# PROFESSIONAL WINDOW CLEANING TOOLS & EQUIPMENT

- **Squeegee**—a tool that consists of a handle, channel and piece of rubber designed to remove water, soap solution and dirt from a pane of glass
- **T-Bar Washer**—T-shaped handle with sponge or cloth attached, used to get window wet with cleaning solution
- Extension Pole—allows operators to attach window cleaning tools and accessories to clean higher windows and other glass surfaces easier and safer
- Water-fed Pole—or "WFP," directly delivers water to clean windows up to six stories from the ground

# **DIFFERENT TYPES OF GLASS**

As you perform more jobs, you'll notice that some windows are faster and easier to clean than others. Chances are you're dealing with glass that has a coating. While there is no way to visually tell the difference, these coatings change the surface tension properties on glossy surfaces and affect how water reacts to them.

### Hydrophilic Glass

- Water "sheets" down the glass pane
- Faster water-fed window cleaning rinse times and no spots left behind

# Hydrophobic Glass

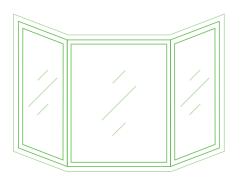
- Water "streams" down the glass pane
- Slower water-fed cleaning means slower rinse times and tends to leave spots

Invest in high-quality rubber for effortless window cleaning. Quality rubber makes all the difference, ensuring streak-free windows with minimal effort.

# WINDOW CLEANING 101

Every window cleaning job comes with its own unique challenges. Regardless of what the job throws at you, knowing the type of job, the windows involved, and the potential roadblocks will help you finish faster and avoid costly rework. Watch for the technique pro tips throughout the rest of the guide for helpful window cleaning ideas.

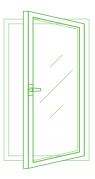
### **COMMON WINDOW TYPES AND CLEANING TIPS**



BAY

Contains a large center window and two flanking windows at 30°, 45°, or 90° angles to the wall.

Pro Tip: Use the technique for cleaning larger windows on the central fixed pane.



#### CASEMENT

Pivot on one side of the window frame and open outward from the building. Often referred to as "crank-out" windows. Awning windows are casements that are hinged at the top to tilt upwards from the bottom of the frame.

➡ Pro Tip: The 2-pull technique works great for cleaning most casement windows.



#### FRENCH

Contains muntin bars that separate the glass pane in doors and multiple window types into multiple sections or "lights."

➡ Pro Tip: Use a small squeegee with the fanning or 2-pull technique.



#### **DOUBLE HUNG**

Contains two sections, one over the other, that slide up and down on tracks on the inside of the window frame.

Pro Tip: Most double hung windows have sashes that tilt-in to clean both sides from the inside.

# **MAINTENANCE OR RESTORATIVE CLEAN?**

It's important to understand that there are different types of window cleaning jobs. Knowing the difference up front can help you develop more accurate estimates and approach each job with confidence.

While some jobs are specific to a situation, like being a part of finishing a recently completed construction project, most window cleaning jobs fall into two main categories.

# **MAINTENANCE CLEANING**

Most jobs you'll encounter will be standard maintenance cleans. These are typically part of a scheduled series of routine cleanings to keep windows and other hard surfaces looking fresh.

A little maintenance goes a long way. Regular care helps ensure windows last longer and provide optimal thermal performance. Make sure to advise your customers on the benefits of setting up a maintenance cleaning schedule to avoid costly window repair or replacement jobs down the road.

### **RESTORATIVE CLEANING**

These jobs are usually a more involved process for windows that haven't had regular maintenance in years or at all. Glass is a porous material and extra time without maintenance leads to stains and spots. As water dries, mineral deposits build up on windowpanes and frames.

These hard water stains, scratches, and other residue make restorative cleaning jobs more difficult and require different techniques and tools to do a thorough clean.

➡Pro Tip: Give yourself plenty of time and don't rush restorative cleaning jobs. These jobs require extra work to effectively clean the excessive build-up of dirt and grime.

Once stains have been removed, consider suggesting a glass sealer to your customer to minimize future stains. Additionally, scheduling regular maintenance cleaning will help your customer reduce the need for restorative cleaning in the future.

# PURE WATER TECHNOLOGY

While traditional tools work well for most jobs, you can be more profitable by using pure water to save time and money on every maintenance cleaning job.

With advanced technologies, like Pure Water, that use reverse osmosis and de-ionization to produce mineral-free water from ordinary tap water you can

ensure streak-free cleaning. Waterfed telescopic poles and brushes provide a single step process that produces streak-free windows in far less time. Plus, using pure water can help address any potential sustainable cleaning requirements on certain maintenance cleaning jobs.



# **TECHNO PAD**

Similar to a light sanding process, a <u>Techno Pad</u> and rubbing compound will likely be needed to remove mineral stains and deposits.



◆Pro Tip: Use a pole to complete as much of the scrubbing as possible – especially on larger windows. For smaller windows, use a ladder to get up close and personal and clean more efficiently.

# **REMOVING STUBBORN MARKS, DEBRIS AND DIRT**

After an initial scrubbing, it's not uncommon to find remaining marks, dirt and other debris. These "stuck-on" elements can be especially hard to remove if the glass and frame haven't been part of a regular cleaning schedule.



#### **SCRUBBING SLEEVES**

In addition to the Techno Pad, <u>scrubbing</u> <u>sleeves</u> can help remove stubborn marks on glass, frames, awnings and most other surfaces.



#### **SPEED BRUSHES**

<u>Speed Brushes</u> are another tool to consider for removing stuck-on elements from higher windows. They connect to water-fed pole systems and provide a more aggressive scrub with flared soft bristles to effectively clean all corners and edges of the window.



### **SCRAPERS AND BLADES**

For stubborn elements on outdoor windows that require more elbow grease to remove, <u>Scrapers and Blades</u> can also be used to remove a variety of stuck-on dirt and debris.

# **ESSENTIAL TOOLS FOR THE 21ST CENTURY TRADE**

While it may look simple, having the proper tools to do the job efficiently can make all the difference especially with hundreds of windows to clean and a tight schedule to keep. Advances in window washing equipment and new cleaning system technologies have made window cleaning easier, safer and more efficient for interior and exterior glass surfaces.

# **STARTER KIT**

Every window washer should have their own kit of modern, trusted tools and a belt or bucket to keep them readily accessible. A professional <u>starter kit</u> combines all the necessary tools to help new window cleaners do the job right. **A typical kit includes:** 





# Squeegee

Channels

- Holds the rubber in the squeegee—typically ranges in size from 6" to 22"
- Different materials for user preference and technique
- Brass, aluminum, composite, plastic and stainless steel

# Rubber

- Rubber selection is critical
- Harder rubbers perform best in warmer temps
- Softer rubber works better in colder temps but wears out faster
- Always have a variety of channel and rubber sizes on-hand for every job

# Handle

- Attaches to the channels to support the desired feel and technique
- Made of a variety of materials for user preference and technique

# NOT ALL RUBBER IS MADE EQUAL

Pros can't afford streaks. The rubber blade is the most important part of any window cleaning squeegee, precisely because it is the part that comes into direct contact with the glass and dirt. Look for flexibility in all temperatures so the rubber won't deform, which can cause streaking. UV and chemical resistance provide longer life and a lower cost of ownership.

# Vulcanized Natural Rubber (VNR)

- Made from rubber trees, includes additives to extend lifespan
- Compression molded, item by item with chemical and organic consistency
- <u>Pulex by IPC</u> has a process that uses only raw material with no impurities for the highest performance
- All Pulex rubber blades are VNR and every blade goes through a rigorous testing and a total quality qualification process



### T-Bar Washer

- Includes frame, handle and sleeve/sponge
- Use acrylic microfiber sleeves/sponges for higher quality and resistance



# Telescopic Extension Pole(s)

- Use to clean higher windows and other glass surfaces easier and safer
- Attach to window cleaning tools and accessories



# Scraper Holder & Blades

• 4" and 10" sizes are most used



# **Microfiber Cloths**

• Essential for detailing and other washing needs

# WHY USE MICROFIBER?

Microfiber outperforms cotton. Strong polyester and polyamide fibers provide maximum absorption and durability. It's also mildew and abrasion resistant and won't stretch or shrink.

#### Microfiber

- Absorbs 98% moisture compared to 70% for cotton cloths
- Easily washed with just clear water or mild soapy water
- Lasts through 500 washings—10X more than cotton cloths

#### Cotton

- Requires more effort to remove stubborn dirt and dust
- Smears mud onto surface pores and stays wet, breeding mold and mildew
- Bulky, hard to handle and requires immediate cleaning after use



# **INDOOR CLEANING**

#### **Pure Water Systems**

Pure water systems such as <u>Cleano</u> are specifically designed to deliver fast, efficient indoor window cleaning. **Cleano reduces labor by 50%** by reducing the need for setting up and moving ladders, and eliminating the need for buckets, soapy water and squeegees.

The lightweight cleaning system provides endless cleaning possibilities due to its innovative design and versatility.

Utilizing IPC's pure water window cleaning system, the Cleano allows for chemical-free cleaning—eliminating residue, streaks and marks.

In addition to cleaning windows, the Cleano system can be used on walls, furniture and other indoor surfaces.



#### **OUTDOOR CLEANING**

#### Water-Fed Pole Systems

Eliminate the need for ladders and effectively clean high windows from the ground for increased safety. Typically includes brushes and high-pressure water jets to effectively remove dirt, grime and other contaminants from outdoor windows. When combined with pure water technologies, this method is particularly effective for eliminating streaks and is environmentally friendly.

#### Pure Water Systems

Pure water systems use reverse osmosis and de-ionization processes to create mineral free water, providing incredible cleaning action and spot free windows, without using chemicals.

For commercial pure water maintenance cleaning applications, Pure Water systems like the <u>HydroCart</u> <u>Compact</u> are the perfect solution for schools, apartments, hotels, hospitals, clinics and other one-to-five story buildings. The lightweight portability provides easy transport and makes it the ideal entry level pure water system for window cleaners and facility managers.

# WINDOW CLEANING TECHNIQUES & TIPS

Whether it's a storefront display window or a multistory building with many windows, seasoned window cleaners make the job look easy. Make no mistake, this seemingly effortless work comes from honing the proper technique and using the right professional tools. Achieving better results in less time starts with a grasp of some go-to techniques and helpful tips.

# THE FANNING TECHNIQUE

This is the most common professional technique that is used to clean the majority of windows.

# Step 1: Scrub the Glass

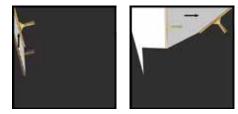
Using a soft scrubber on a T-Bar, wet the glass with your less dominant hand. Make sure you're covering all parts of the glass, including all corners.

⇒Pro Tip: Use an abrasive <u>Techno Pad</u> to remove any debris.

# Step 2: Cutting In

To start removing the water from the glass, place the end of the squeegee directly against the side frame and pull up to the top corner and across the top of the window. Maintain consistent pressure and keep your hand about 3" from the glass to ensure proper tool performance.

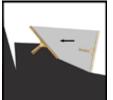
➡Pro Tip: Use a professional squeegee and refine your skill by starting with a smaller size.



# Step 3: Removing the Water

Keep working down the window moving side to side in a sweeping motion. Make sure to overlap the previous pass (dry portion) and get into all corners and the inside of the frame. → Pro Tip: Always use high-quality rubber for optimal control and durability.



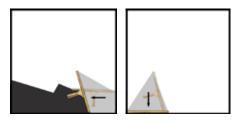




# Step 4: Finishing Pass

For the final pass, keep the squeegee against the bottom frame and pull across the bottom of the window. This final step is the most difficult part of the fanning technique and will require practice and repetition to hone your skill.

➡ Pro Tip: Remove dirt and excess water by wiping the blade clean with a microfiber towel.



# Step 5: Clean the Frame

At the end of the final pass, use a small 4" or 6" squeegee to remove any excess water

from the bottom of the window frame.

➡Pro Tip: Use a razor blade to gently remove stuck-on debris – ensuring you do not scratch the frame.

#### Step 6: Final Detailing

Use a microfiber towel to wipe away any water left on the frame from Steps 2 & 3.

◆Pro Tip: Be sure to avoid touching the glass during this final step to avoid rework.

# **THE 2-PULL METHOD**

As you refine your fanning technique, the 2-pull method is one way for beginners to achieve great results while keeping a good pace. The key to this approach is picking the right squeegee size. The squeegee must be wide enough to cover the entire glass width in only two pulls down the window—allowing for a few inches of overlap on each pull to avoid streaks.

### Step 1: Scrub the Glass

Using a soft scrubber on a T-Bar, start by wetting the entire top section of the window first, then thoroughly scrub the remaining parts of the glass pane using up and down strokes.

➡ Pro Tip: Use the end of the squeegee to remove any excess water from the frame.

### Step 2: First Vertical Pass

Starting at one top of the glass, complete a full pass down the glass pane maintaining consistent pressure against the glass and frame.



# Step 4: Clean the Frame

At the end of the final pass, use a small 4" or 6" squeegee to remove any excess water from the bottom of the window frame.

→ Pro Tip: Use a razor blade to gently remove stuck-on debris – ensuring you do not scratch the frame.

### Step 5: Final Detailing

Use a microfiber towel to wipe away any water left on the frame from Steps 2 & 3.

➡ Pro Tip: Be sure to avoid touching the glass during this final step to avoid rework.

# Step 3: Second Vertical Pass

Place the squeegee against the remaining top section and other corner of the frame. Slightly tilt the overlapping squeegee edge down and complete the second and final pass maintaining consistent pressure against the glass and frame. **Pro Tip:** Wipe the overlapping end of squeegee with a microfiber towel prior to the second pass.



# **CLEANING LARGER WINDOWS**

While larger squeegee sizes support the fanning method on most windows, this method is a good way to tackle larger single pane windows.

#### Step 1: Scrub the Glass

Using a soft scrubber on a T-Bar (connect to a pole for higher windows), start by wetting the entire top section of the window first then thoroughly scrub the remaining parts of the glass pane using up and down strokes.

➡ Pro Tip: Use a microfiber towel to remove any excess water from the top frame.

#### Step 2: Squeegee From the Top

Place the squeegee against the frame at the top corner (right-handed = upper right corner, left-handed = upper left corner).

➡ Pro Tip: For optimal control, durability and results, use high-quality rubber.



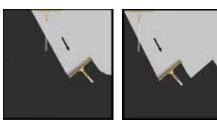
#### Step 3: Initial Vertical Pass

Tilt the squeegee edge and start the initial pass down the glass pane. Pull down maintaining consistent pressure against the glass and frame. Don't go all the way to the bottom.



#### Step 4: Work Down the Window

To maintain clean section(s), overlap the previous pass (dry portion) and tilt the squeegee blade toward the remaining wet section. Wipe the blade clean with a microfiber towel at the bottom of each pass.



# **Step 5: The Final Vertical Pass** Place the squeegee against the side frame and slightly tilt

the handle toward the frame – maintain tilt and pressure against the glass and frame as you pull down.

➡Pro Tip: Wipe the overlapping end of squeegee with a microfiber towel prior to the second pass.



#### Step 6: Remaining Horizontal Passes

Place the squeegee against the side vertical frame and overlap the dry portion. Maintain this overlap and tilt the squeegee down slightly as you pull across the window.

#### Step 7: Final Horizontal Pass

As you make the final pass across the bottom of the window, constantly keep the squeegee rubber tilted down slightly and touching the bottom frame.



#### Step 8: Tidy up the Final Pass

Near the end of the final pass, rotate the blade so it touches the vertical moulding and finish the final pass against the bottom frame.

#### Step 9: Final Detailing

Use a microfiber towel to wipe away any water left on the frame.

Pro Tip: Be sure to avoid touching the glass during this final step to avoid rework.

# **GOING BEYOND WINDOWS**

While windows will be the focus of most of your cleaning jobs, other surfaces like mirrors, solar panels and screens may be included in the scope of work.

# **STREAK-FREE MIRRORS**

Since they're typically located in high-use and heavy traffic areas, mirrors often have oily fingerprints that can be hard to remove. <u>Microfiber</u> cloths are the best choice to help you get clean, streak-free mirrors every time. Glass cleaners use detergents and simple tap water has minerals which will both leave streaks when cleaning mirrors. **Pure water** is a more effective solution on mirrors because it removes particles that cause streaking while being environmentally friendly.

# **CLEANING SOLAR PANELS**

The buildup of dirt, dust, pollution and pollen can cause solar panels to lose their efficiency. Since most solar panels can be hard to reach, a **water-fed pole** is an efficient way to clean solar panels and other high surfaces. Scratches on solar panels can also render them ineffective. Always use high-quality squeegees and soft cloths to maintain effective, long-term panel operation.

<u>Pure water systems</u> are ideal for solar panel maintenance cleaning jobs. Telescopic poles and 100' of industrial-strength hose provides effective **cleaning for up to five stories safely from the ground** while ensuring operator safety and maximizing efficiencies to finish high solar panel cleaning jobs faster.

# SCREEN CLEANING

Even with your best efforts, clean windows can still look dirty from dust, pollen and other particles sticking to window screens. Even with the delicate, porous materials of construction, cleaning window screens can be a breeze with the right tools and approach.

<u>Screen Washers</u> clean window screens **three to four times faster** than other methods. They **thoroughly clean both sides of a screen and frame simultaneously** while eliminating the potential for any damage during the cleaning process.



# ENSURE YOUR SUCCESS WITH THE RIGHT PARTNERSHIP

We are here to help get you started on the right path, your long-term success will often require more than experience, professional tools and techniques.

To make sure you deliver exceptional results on every job in less time, Pulex by IPC provides true partnership with valuable support programs and services, in addition to a broad line of professional window cleaning equipment. In fact, regular feedback and insights from our customers and distributor partners are the guiding force behind our innovative professional products and solutions.

<u>Learn more</u> about how partnering with Pulex by IPC can ensure your success by supporting your efforts to maximize efficiency and profitability.

# TALK TO AN EXPERT

IPC is your partner in cleaning. We want to share our best practices for creating clean and safe environments for employees and visitors. We can also provide you with specific cleaning insights related to your industry. Contact us to arrange a demonstration to find the right cleaning equipment for your facility. For more information, visit **ipceagle.com** or call **1-800-486-2775**.

