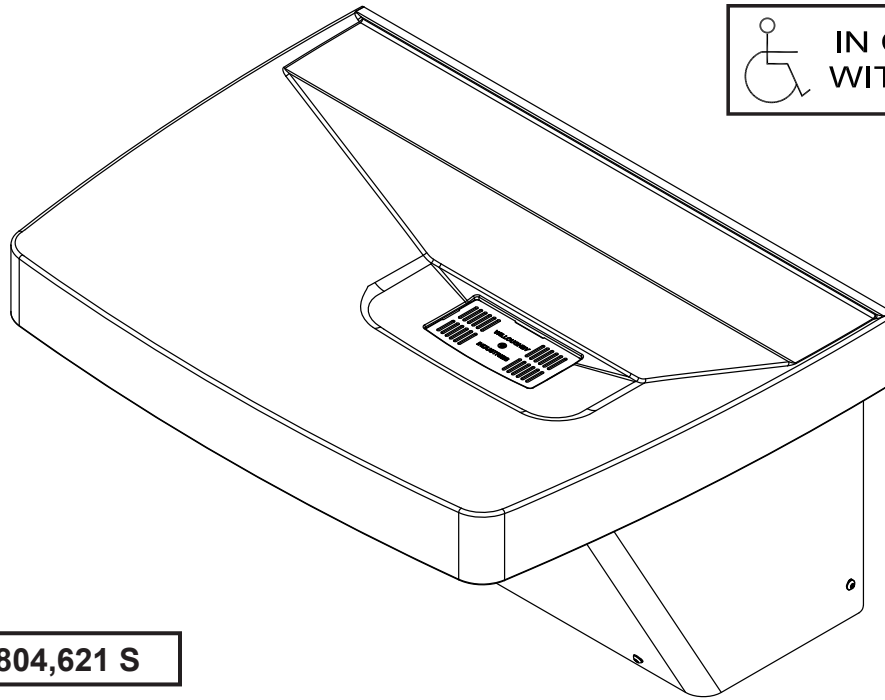


**WILLOUGHBY
SOLID SURFACE
LAVATORY SYSTEM**

**INSTALLATION AND
OPERATION MANUAL**



IN COMPLIANCE
WITH A.D.A. 2010



PATENTED: D804,621 S

MODEL:

WELS-2230 ENVY

Envy Series Single Station Solid Surface Lavatory System

TABLE OF CONTENTS

PRE-INSTALLATION INFORMATION.....	3	INSTALLATION INSTRUCTIONS	
PHYSICAL DIMENSIONS	4	Step 1: Pedestal Mounting	9
ROUGH-IN DIMENSIONS	5	Step 2: Drain Assembly.....	9
EXPLODED-VIEW DIAGRAM.....	6	Step 3: Solid Surface Lavatory Mounting	10
RECOMMENDED EQUIPMENT & SUPPLIES.....	7	Step 4: Final Assembly.....	11
CHECK CONTENTS.....	8	CARE AND MAINTENANCE	12
		WARRANTY	13



WILLOUGHBY

COUNT ON US.

1.800.428.4065 TOLL FREE | www.willoughby-ind.com



(PAGE LEFT INTENTIONALLY BLANK)

PRE-INSTALLATION INFORMATION

INSTALLATION NOTICE!

CHECK ROUGH-IN LOCATIONS **PRIOR** TO INSTALLATION

FLUSH LINES THOROUGHLY **PRIOR** TO HOOK-UP

When installing the Willoughby Industries' **WELS-2230 Envy** Lavatory System:

Before Step 1 of the Installation Instructions, ensure that rough-ins are in the correct location.

It is essential that the water supply lines be thoroughly flushed prior to making final connection to the hot and cold water supply lines. These lines **must be flushed** sufficiently to remove the small particles of debris that are inherent with new construction projects.

If this debris is not removed, the valving in these units will be damaged. Do not attempt to remove the aerators to flush debris out of the lavatory. The damage can only be fixed by replacing the valves. Damage to valves caused by debris will not be covered by the manufacturer's warranty.

INSTALLATION NOTICE!

CHECK ROUGH-IN LOCATIONS **PRIOR** TO INSTALLATION

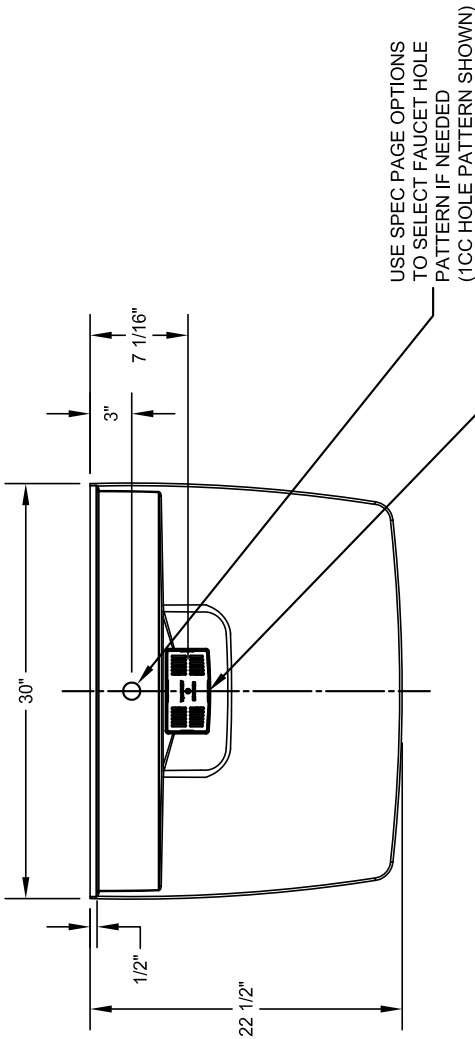
FLUSH LINES THOROUGHLY **PRIOR** TO HOOK-UP

PHYSICAL DIMENSIONS- WELS-2230

IN COMPLIANCE WITH A.D.A. 2010



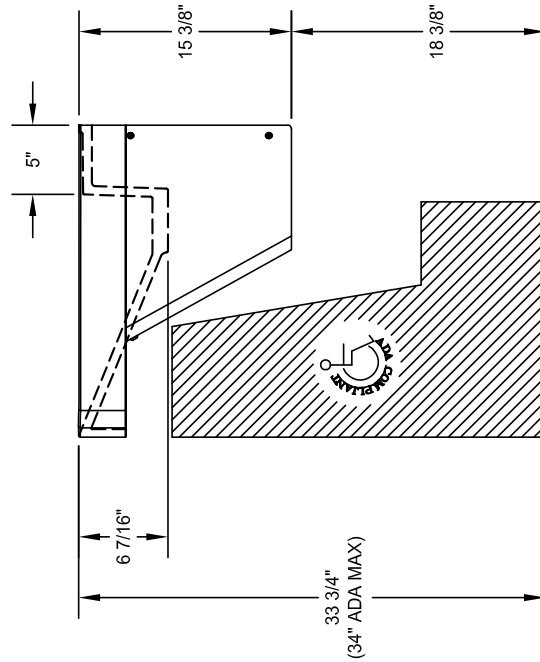
*NOTE:
 34" A.F.F. RIM HEIGHT SHOWN (MAX ADULT ADA), ADJUST DIMENSIONS ACCORDINGLY FOR ALTERNATE HEIGHTS.



HEAVY-GAUGE STAINLESS STEEL DRAIN GRATE

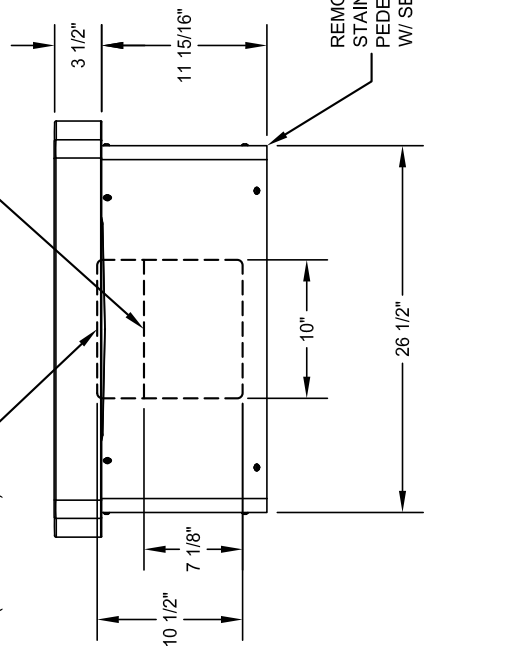
10" X 10 1/2" BACKPLATE ACCESS HOLE FOR SUPPLY, DRAIN, AND GFCI OUTLET AS NEEDED (BY OTHERS)

BOTTOM OF BASIN



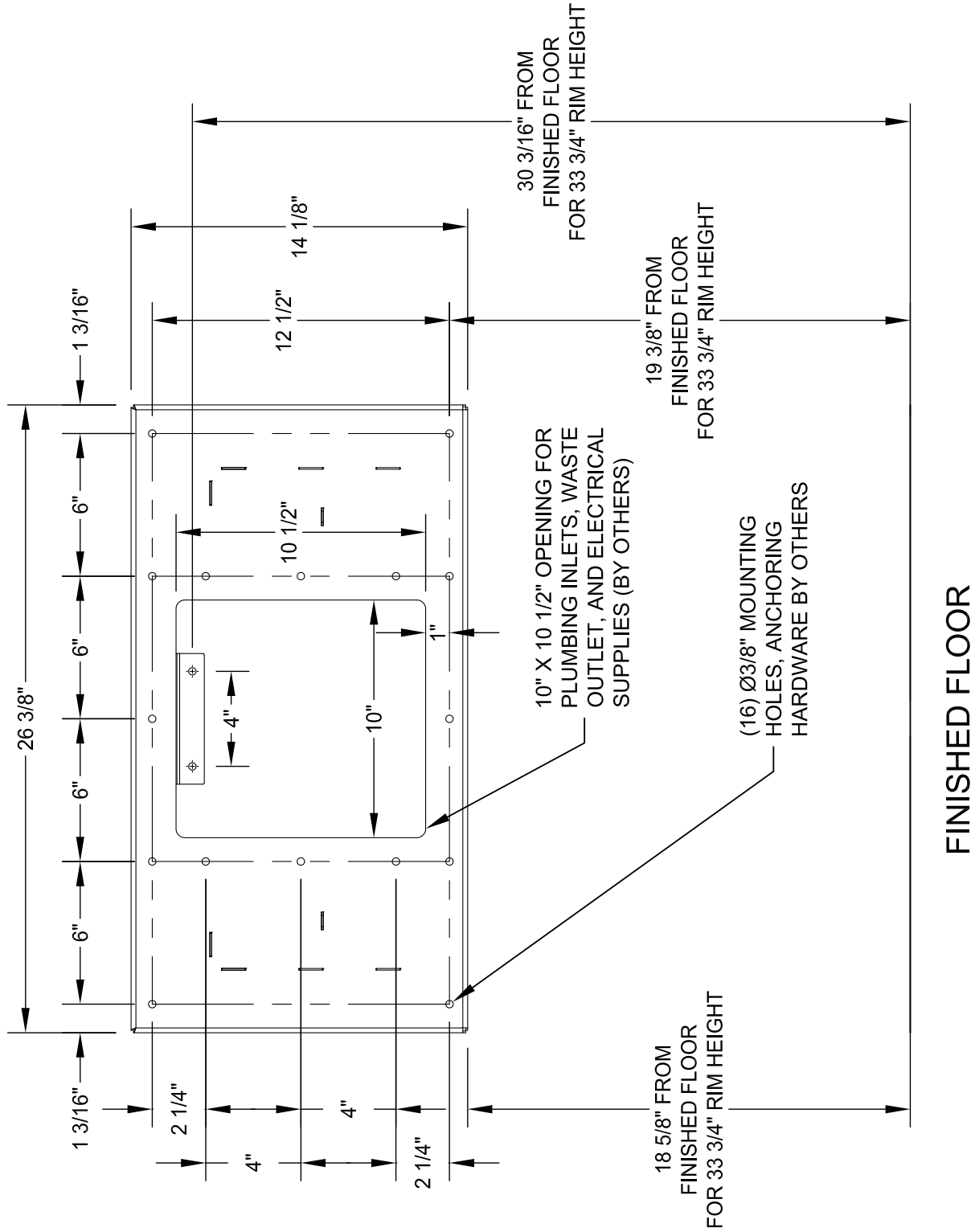
33 3/4" (34" ADA MAX)

REMOVABLE STAINLESS STEEL PEDESTAL / SHROUD W/ SECURITY SCREWS



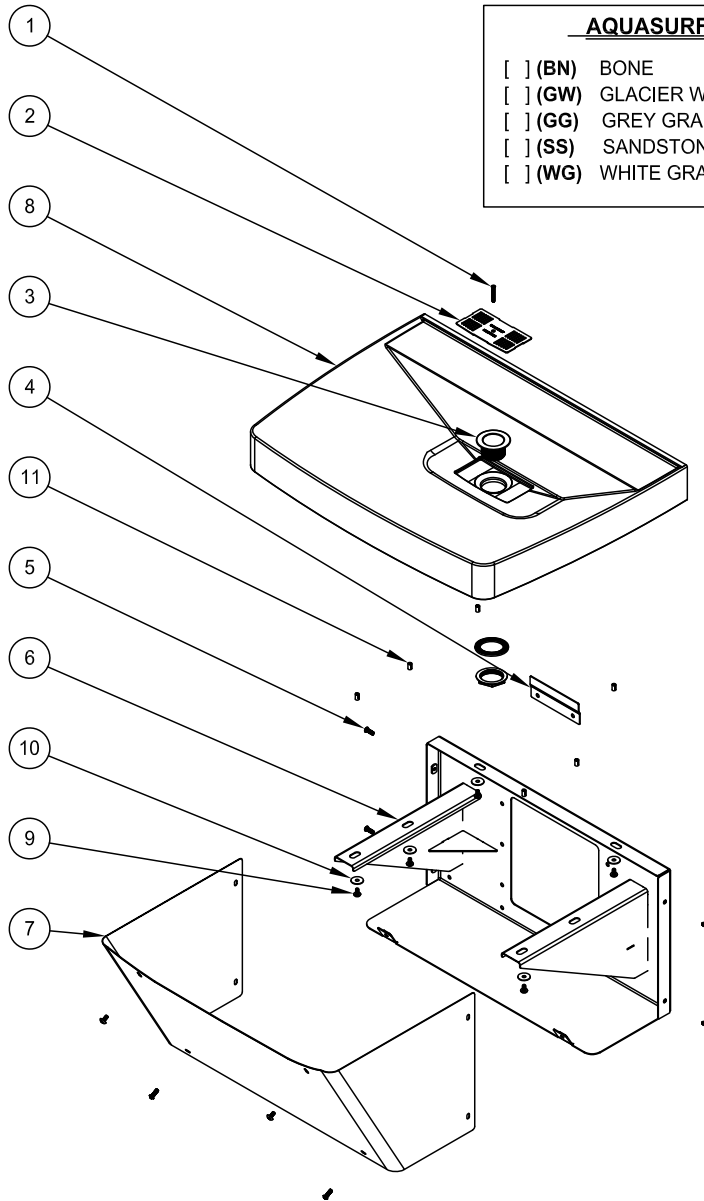
FINISHED FLOOR

ROUGH-IN DIMENSIONS- WELS-2230



FINISHED FLOOR

EXPLODED-VIEW DIAGRAM- WELS-2230



- AQUASURF SOLID SURFACE COLORS:**
- | | |
|------------------------|-------------------------|
| [] (BN) BONE | [] (BG) BLACK GRANITE |
| [] (GW) GLACIER WHITE | [] (NB) NOCTURNAL BLUE |
| [] (GG) GREY GRANITE | [] (RC) RED CORAL |
| [] (SS) SANDSTONE | [] (SG) SEA GREEN |
| [] (WG) WHITE GRANITE | |

*NOTE: "XX" REPRESENTS THE WASHFOUNTAIN COLOR. SELECT COLOR FROM ABOVE.

ITEM #	PART #	DESCRIPTION	QTY.
1	800176	SCREW, #10-32 X 2", SS FH PHILLIPS	1
2	S600677	TRENCH DRAIN COVER - WELS-2230	1
3	380276	DRAIN ASSEMBLY, 1-1/2"	1
4	800005	Z-CLIP - 6" NOMINAL (5-1/2")	1
5	4502SSN	SCREW, 1/4-20 x 3/4 SECURITY SCREW (BH)	8
6	S600669	PLATE MOUNT WELDMENT, REAR SUPPORT - WELS-2230	1
7	S600674	WELS SHROUD, 1-STATION LAVATORY	1
8	801601-XX	1-STATION LAVATORY, WELS-2230	1
9	800144	SCREW, PHILLIP (TH), S/S, 1/4-20 X 1/2" TRUSS HEAD	6
10	600650	1/4 x 1" OD FLAT WASHER	6
11	991020	INSERT, BRASS, 1/4-20 x 1/2" AQUA HARDWARE, KNURLED	6

RECOMMENDED EQUIPMENT AND SUPPLIES

Equipment and Tools:

- Safety Glasses

NOTE: ALWAYS WEAR SAFETY GLASSES WHEN WORKING WITH POWER TOOLS.

- Electric Drill with compatible Drill Bits; Screwdrivers (Phillips & TT-27 head) also recommended
- Caulking Gun
- Common Builders Tools, including:
 - Tape Measure, Scribe or Pencil, Level, Square, Hammer/Mallet, File, Extension Cord, etc.
- Clean-up Tools and Supplies, including:
 - Masking Tape, Putty Knife/Caulk Remover Tool, Denatured Alcohol, Rags, etc.
- Blanket or Padding to protect solid surface from damage during installation

Building Supplies:

- Appropriate Wall Anchor Hardware
- Faucet and Supply Piping
- P-trap, Hardware for waste outlet connections, Waste Piping
- Appropriate Caulking and Construction Adhesives (if needed)
- Sand Paper, 80 - 220 Grit
- Framing Materials appropriate to the installation (if needed)
- Construction Shims (if needed)

WARNING:

WILLOUGHBY INDUSTRIES DOES NOT ASSUME ANY
RESPONSIBILITY FOR PERSONAL INJURY OR DAMAGE
TO EQUIPMENT DUE TO AN IMPROPERLY INSTALLED
WELS-2230 ENVY LAVATORY SYSTEM

CHECK CONTENTS

- Separate all parts from packaging and make sure all parts are accounted for before discarding any packaging material. If any parts are missing, do not attempt to install the WELS-2230 Envy Lavatory System until you obtain the missing parts.

NOTE: Before beginning installation, all supply, drain and waste piping for the WELS-2230 must be completed according to specified rough-ins. If you have not received rough-in details, please contact Willoughby Industries, Inc.

IMPORTANT NOTES:

- THESE INSTALLATION INSTRUCTIONS COVER ALL MODELS OF THE WILLOUGHBY INDUSTRIES **WELS-2230 ENVY LAVATORY SYSTEMS**; OMIT ANY STEPS WHICH MAY NOT APPLY TO THE SPECIFIC MODEL YOU ARE INSTALLING.
- BE SURE TO FLUSH ALL WATER SUPPLY LINES BEFORE COMPLETING ANY CONNECTIONS.

INSTALLATION INSTRUCTIONS

Step 1: Pedestal Mounting

Note: Wall anchoring hardware by others; use wall anchors appropriate for the wall type.

1. Unpack the Pedestal & remove the Security Screws holding the Shroud to Plate Mount Weldment.
2. Mount the 6" Z-clip to the wall as shown on the Rough-in Detail. Make sure adequate backing exists to securely mount the Lavatory.
3. **If not yet completed, install the supply and waste rough-ins appropriate to the installation. Refer to the Rough-in Detail for backplate access hole measurements (all by others).**
4. Lift the Plate Mount Weldment & place it into the Z-clip.
5. Level the Plate Mount Weldment, making sure that it remains flush to the wall, to mark and drill holes for the wall anchors; the Plate Mount Weldment has (16) usable $\text{Ø}3/8$ " mounting holes.
6. Re-check the Plate Mount Weldment is level front-to-back and side-to-side & secure the Pedestal with anchors through the (16) mounting holes in the Plate Mount Weldment.

Step 2: Drain Assembly

1. Unpack the Solid Surface Lavatory, check condition.
2. Apply a small strand of silicone caulk on the underside of the Drain Basket lip (**SEE FIG. 1**).
3. Insert the Drain Basket into the Lavatory drain hole.
4. Secure the Drain Basket in place:
Fit the Rubber Washer onto the Basket from the underside of the Lavatory, then tighten the Locknut onto the Basket, sandwiching the Washer against the Lavatory.

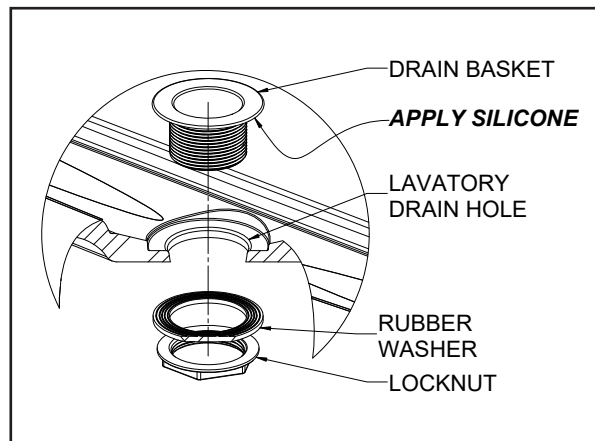


FIG. 1- DRAIN INSTALLATION

Note: Over-tightening the Locknut can damage the Lavatory and Drain Assembly.

INSTALLATION INSTRUCTIONS (CONT.)

Step 3: Solid Surface Lavatory Mounting

Note: Over-tightening assembly screws can damage the Lavatory or Pedestal Assembly.

1. With assistance, place the Solid Surface Lavatory on the Pedestal support arms (**SEE FIG. 2**).
2. Align the bottom (6) Brass Inserts in the Lavatory with the corresponding through-mounting holes in the Pedestal: (2) hole in each Pedestal support arm, (2) on the top Plate Mount Weldment rail.
3. Insert and adequately tighten the (6) Truss-head Screws into the Lavatory Brass Inserts.
Do not over-tighten; make sure the back surface of the Lavatory remains flush to the wall.
4. Verify that the Lavatory has remained level and flush against the wall so that water will drain correctly once installation is complete.

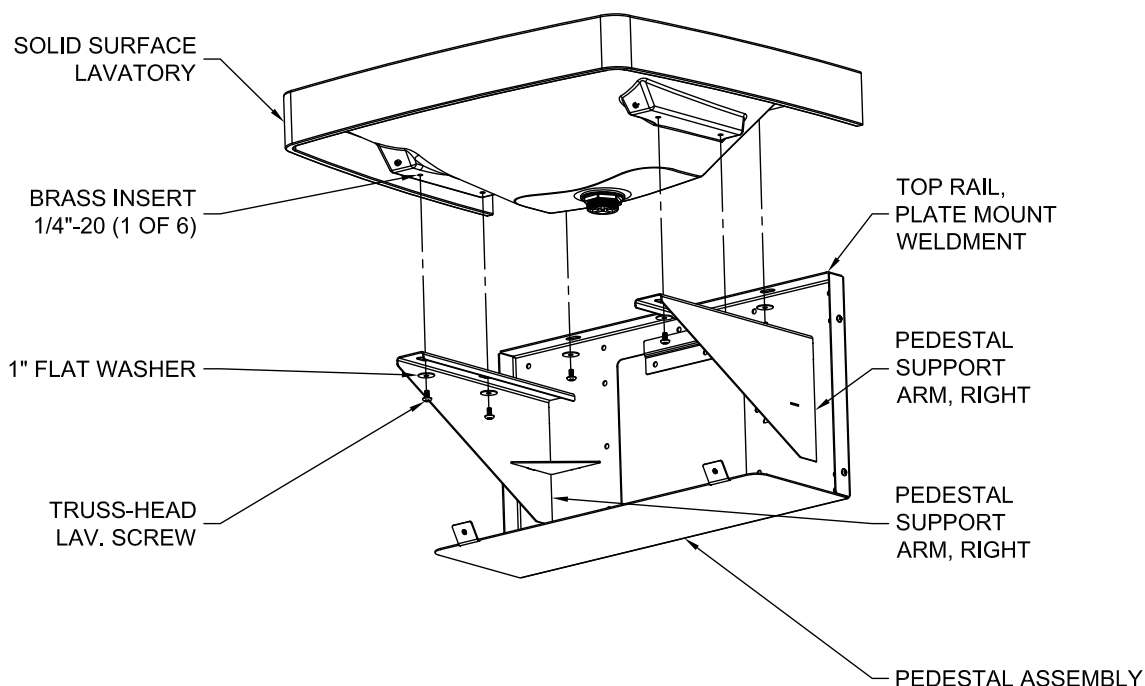


FIG. 2- LAVATORY MOUNTING

INSTALLATION INSTRUCTIONS (CONT.)

Step 4: Final Assembly

Note: Over-tightening assembly screws can damage the Lavatory or Pedestal Assembly.

1. Install the Drain Cover into the Lavatory trench drain using the included Drain Screw (SEE FIG. 3).
2. Install faucet and any additional plumbing accessories (all provided by others; refer to accessory manufacturers' recommended installation instructions).

NOTE: PLUG-IN TRANSFORMER (IF NEEDED) MUST BE USED WITH A GROUND FAULT INTERRUPT (GFCI) RECEPTACLE TO HELP PREVENT POSSIBLE ELECTRICAL SHOCK.

3. Once all plumbing has been completed and adequately tested, replace the Lavatory Shroud using the Security Screws removed in Step 1 (SEE FIG. 3). For best fit, finger-tighten the Side Screws before finger-tightening the Front Screws; once Front Screws are in place, fully-tighten the Sides.

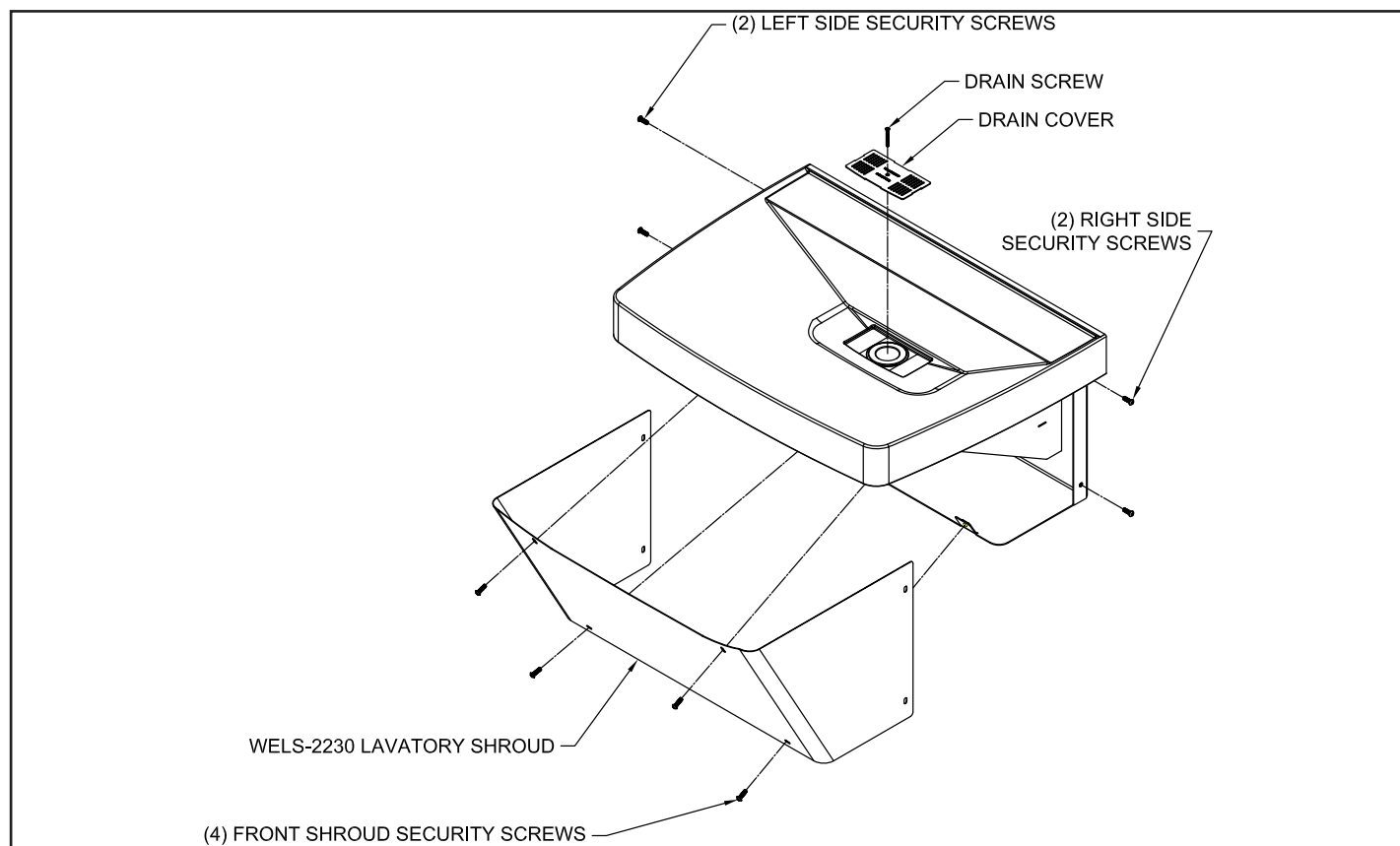


FIG. 3- MOUNT DRAIN COVER AND REPLACE SHROUD

CARE AND MAINTENANCE

Solid Surface Care

Aquasurf® surfaces may be easily cleaned using conventional cleaning agents such as an ammonia based liquid cleaner, (glass cleaner).

Dry stains on a matte finish can be removed with a 3M Scotch-Brite gray scouring pad or a mild abrasive cleaner.

Burns or scorches can be removed by sanding with coarse grit sandpaper followed by finer grit (220) sandpaper. Follow sanding with a 3M Scotch-Brite gray pad (or equivalent) to match finish of sanding area to surrounding area. A final buffing may be required on polished surfaces. Accidental nicks or chips can be repaired with special patch kits available in all Aquasurf® colors.

Avoid exposing Aquasurf® surfaces to strong chemicals such as acetone's; paint removers and sulfuric acid or hydrochloric chemical cleaners. Exposure to strong chemicals may result in permanent damage to Aquasurf® surfaces.

Stainless Steel Care

Stainless Steels are basically alloys of iron and chromium and are corrosion resistant. Stainless steel has a bright surface that is easy to clean and is free from oxides. Therefore, cleaning of stainless steel is relatively simple and easy if done on a regular basis.

Frequency of cleaning should depend on the rate at which the fixture becomes dirty. Remember that fresh (soft) deposits of all kinds are relatively easy to remove, while removing older (hard) deposits are much more difficult. Establish a cleaning SCHEDULE.

Routine cleaning should involve ordinary soap or detergent and water, applied with a sponge, brush or cloth. Baking soda, borax or any of several non-abrasive commercial cleansing agents can help hasten the cleaning action. After scrubbing, rinse THOROUGHLY and wipe dry.

DO NOT use common steel wool, scouring pads, scrapers, wire brushes, files or other steel tools to clean stainless steel. Such items will scratch the surface or leave small particles of iron imbedded in the surface, which will eventually rust and stain the surface - even appearing as if the stainless itself was rusting.

Certain chemical compounds, if used on stainless steel, can give the appearance of rust and if allowed to stand for long periods of time, can pit the surface of even stainless. Products containing hydrochloric acid, muriatic acid or potassium hydrochloride can ruin the surface.

WARRANTY

Aquasurf® Solid Surface Products are a homogeneous blend of resins, mineral filler and colorant manufactured for panels, molded and/or shaped products and components. Aquasurf® Solid Surface products provide a luxurious appearance with the durability of stain proof, impact resistant, burn resistant material with ease of maintenance and cleaning.

Willoughby Industries, Inc. warrants to commercial and institutional purchasers only that each unit will be free from defects in workmanship and materials under normal use and service upon the following terms and conditions. The period during which Aquasurf® components are warranted as follows:

1. Aquasurf® solid surface components are warranted for 2 years from date of shipment.
2. All other components warranted for 1 year from date of shipment.

This warranty does not cover installation or any other labor charges and does not apply to any components damaged by accident, abuse, improper installation or improper maintenance. This warranty does not cover any installation that did not comply with national, state and local building, plumbing or electrical codes. The warranty is limited to replacing or repairing at Willoughbys option, transportation charges prepaid by the purchaser, any Aquasurf® component or part which upon our inspection shall be deemed as defective within the limitations of this warranty. The replacement or repair of defective units as stated in this warranty shall constitute the sole remedy of the purchaser and the sole liability of Willoughby Industries, Inc. Willoughby Industries, Inc. shall not otherwise be liable under any indirect damages caused by defects in the repair or replacement thereof.

This warranty only extends to commercial and institutional purchasers and does not extend to any others, including consumer customers of commercial institutional purchasers. This warranty is in lieu of all other warranties, expressed or implied, including implied warranty of merchantability or fitness or a particular purpose or otherwise.