Ligature Resistant Single Station Lavatory—Technical

Specifications
Wall-hung single station fixture is designed to minimize ligature points. The preassembled sprayhead module is equipped with an independent streamformer that is served by an infrared sensing module and solenoid valve (Model HSL1/IR), or an independent battery IR sensor and battery (Model HSL1/BIR3). Standard flow rate of .5 GPM meets industry standards for water conservation, while providing enough water to rinse hands quickly and efficiently. Operating range is 20–80 PSI.

Construction
Bowl and Sprayhead
Constructed of Terreon, a densified solid surface material composed of polyester resin, or TerreonRE, a densified solid surface material composed of a bio-based resin and preconsumer recycled granules. Terreon and TerreonRE are resistant to chemicals, stains, burns and impact. Surface damage can be easily repaired with everyday cleansers or fine grit abrasives. Terreon and TerreonRE are certified by NAHB to meet ANSI Z124.3, Z124.6 and ANSI/ICPA SS-1. Terreon and TerreonRE are GREENGUARD® certified as low-emitting materials.

Trap Cover Options
Stainless Steel Trap Cover
The stainless steel trap cover option conceals all plumbing to minimize ligature points. The stainless steel trap cover is constructed of 22 gauge type 304 stainless steel with a #4 finish. (4) ¾”/20 tamper proof fasteners and wall anchors are needed (supplied by installer).

High Impact Polymer Trap Cover
The high impact polymer trap cover offers a softer look with a neutral color. This unique design curves to the inside of the front apron to maximize ligature resistance and conceal all plumbing. This trap cover features a full perimeter integral flange, pre-drilled with 6 mounting locations to help seal against wall imperfections. This material is highly resistant to impact, abrasion and corrosion. This option is not compatible with a tankless electric water heater.

Vandal and Ligature Resistance
The molded sprayhead is bolted securely to the lavatory bowl and sits flush to the bowl to minimize ligature points. The Terreon and TerreonRE bowls are resistant to chemicals, stains, burns and impact. Damage is repairable. The chrome plated brass streamformer and activation mechanism are secured to the unit from inside the sprayhead module. The infrared sensor will automatically shut off water flow after 30–45 seconds if a vandal attempts to trigger constant operation. Optional trap cover completely conceals all valves, connections and other optional items underneath the deck.

Code Compliance and Certifications
ANSI Standards
Terreon and TerreonRE are certified by NAHB to meet ANSI Z124.3, Z124.6 and ANSI/ICPA SS-1.

cUPC Approval
SafeCare Single Lavatory Systems are Uniform Plumbing Code (UPC), International Plumbing Code (IPC) and National Plumbing Code of Canada (NPC) approved through the International Association of Plumbing and Mechanical Officials (IAPMO). Manufactured in compliance with IGC 156, CSA B45 Series (R08) & ASME A112.18.1/CSA B125.1.

This plumbing fixture is designed for hand washing only. It is not intended to dispense water for human consumption through drinking or for preparation of food or beverages.

Mounting
The HSL1 is designed to mount at different heights (adult and children) to comply with guidelines on reaches, clearances and operation for various codes including, ADA Accessibility Guidelines for Buildings and Facilities (ADAAG). Always check your local and state codes. The HSL1 can be supported by a surface-mounted bracket supplied by Bradley or in-wall carriers supplied by others. The surface-mounted bracket is constructed of 1” square structural tubing and is zinc-plated mild steel. The surface-mounted bracket also includes a locking device and leveling screws.

Standard product selections contained within this document are third party CERTIFIED to NSF/ANSI 372 meeting the Lead-Free content requirement. Any product configured with custom options will be COMPLIANT with NSF/ANSI 372 meeting the Lead-Free content requirement.

This plumbing fixture is non-cancelable and non-returnable.

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Standard Equipment

Model HSL1/IR includes bowl, a 110/24 VAC plug-in transformer, flexible stainless steel supply connection, P-trap, grid strainer and tailpiece. Battery included in HSL1/BIR3 only.

Thermostatic Tankless Electric Water Heater

The optional tankless electric water heater is equipped with a microprocessing temperature control capable of maintaining outlet temperature accuracy of +/- 1°F. Factory preset at 105°F. Flow switch activates heater only on demand with 99% efficiency. For easy service, the heater features a replacement cartridge element. Heaters not available with BIR3 activation.

<table>
<thead>
<tr>
<th>Model</th>
<th>KW</th>
<th>VAC</th>
<th>Amps</th>
<th>Temp. Rise @ 1 GPM</th>
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</thead>
<tbody>
<tr>
<td>EX95TMLB</td>
<td>9.5</td>
<td>240/208*</td>
<td>40</td>
<td>65°F</td>
</tr>
<tr>
<td>EX100TMLB</td>
<td>10</td>
<td>277</td>
<td>36</td>
<td>68°F</td>
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</table>

*240 volt can also be rated 208 volts with a 25% reduction in power

Activation Controls

Infrared Sensor

The streamformer is controlled by a solenoid valve. Hands placed within the bowl are detected by an infrared sensor module, which activates a flow of tempered water to the streamformer. Shut-off is automatic after hands are removed from the detection area. The infrared sensor uses a conical shaped transmitting beam, having a detection area adapted to, but not exceeding, the bowl perimeter. The detection area projects forward 15° to each side and 15° below horizontal. The infrared sensor automatically adapts to the bowl after power is turned on. The infrared sensor is not affected by varying color tones or darkness. Direct sunlight or bright washroom lights will not activate the system. Includes solenoid valve and a low voltage transformer as standard equipment:

- Solenoid - 24V, 50/60 Hz, ¾” NPT. Few moving parts, and resistant to most chemicals, minerals, and impurities often present in municipal water supplies.
- Low Voltage Transformer - Class II UL/CSA listed, 110/24 VAC plug-in transformer. Plugs into a standard GFCI protected electrical outlet.

Battery Infrared Sensor

The battery-powered sensor uses a zone-focused infrared transmitting beam, creating a large detection area not exceeding the bowl perimeter. The sensor is not affected by varying skin tones or darkness. When hands enter the detection area, the sensor starts water flow by opening the valve electronically. When hands leave the detection area, the sensor stops the flow of water by closing the electronically activated solenoid valve. The 6-volt DC, electronically activated solenoid valve has few moving parts providing reliable operation which is unaffected by most chemicals and minerals often present in municipal water supplies. The station is powered by a single lithium battery. Battery type is Duracell® DL 223A 6-volt lithium or equivalent (batteries included) with a life expectancy of 4–5 years or approximately 200,000 cycles.

Flow Control Rate

Operating range 20–80 psi. Flow restrictor keeps flow rate constant at all pressures. Flow rate: 0.5 GPM.

Standard Selections

Sprayhead Activation

- IR: Sprayhead w/Infrared Control
- BIR3: Sprayhead w/Battery Infrared Control

Supply (select one)

- TMA: Navigator Thermostatic Mixing Valve (Hot and Cold Supplies)
- TL: Single Tempered Line
- HEAT277: Tankless Electric Water Heater, 277 Volts (not available with BIR3 activations)
- HEAT240-208: Tankless Electric Water Heater, 240/208 Volts (not available with BIR3 activations)

Color of Terreon Bowl/Sprayhead Cover (select one)

Standard Colors

- CHAR
- COBBLE: Charcoal Gray
- DRIFT: Cobblestone
- DUNE: Driftwood
- E-GRAY: Sand Dune
- GRAPH: Empire Gray
- LANNON: Graphite
- LONDON: Lannonstone
- MOONSTONE: London Gray

Designer Colors ** (available at an additional charge)

- O-TAUPE
- PEBBLE: Organic Taupe
- PEP-WHT: Pebble Beach
- SAND: Peppered White
- S-CREEK: Sandtrap
- S-MIST: Stone Creek
- WHIT-SAND: Silver Mist
- WHITE: White Sand

TermoreoRE Colors ** (available at an additional charge)

- BIRCH-BARK
- MOONDUST: Birch Bark
- DUSK: Moon Dust
- OAT: Dusk
- RIVER: Oat

Trap Cover (select one)

- TC-AL: Stainless Steel Trap Cover
- TC-Coal: Coal High Impact Polymer Trap Cover* (only available with BRKT mounting option)

Mounting

- BRKT: Surface-Mounted Bracket
- NONE: Customer-Supplied Carrier

P-Trap

- S-CROME: Single Chrome-Plated P-Trap

*Not compatible with a tankless electric water heater.

** Non-cancelable, not-returnable

†This color contains large, randomly distributed chips.
HSL1 – Dimensions

Top View

Front View

HSL1 IR with Optional Stainless Steel Trap Cover

HSL1 IR with Optional Polymer Trap Cover
HSL1 – Dimensions

Side View - Stainless Steel Trap Cover

Standard Height

Side View - Polymer Trap Cover

Standard Height

Juvenile Height:
Ages 6 through 12

Juvenile Height:
Ages 6 through 12
HSL1 – Rough-in

Chart 1

<table>
<thead>
<tr>
<th>Rim Height</th>
<th>Vertical Height Adjustments A – E</th>
<th>Fixture Style</th>
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<tbody>
<tr>
<td>34&quot;</td>
<td>None</td>
<td>Standard Height</td>
</tr>
<tr>
<td>34&quot;</td>
<td>None</td>
<td>Wall-Hung</td>
</tr>
<tr>
<td>31&quot;</td>
<td>Subtract 3&quot;</td>
<td>Juvenile Height</td>
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Chart 2

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Qty.</th>
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<tbody>
<tr>
<td>A</td>
<td>½&quot; Nominal Copper Tubing for Hot/Cold Supplies, Stub-Out 2&quot; from Wall</td>
<td>2</td>
</tr>
<tr>
<td>B</td>
<td>1½&quot; NPT Drain, Stub-Out 2&quot; from Wall</td>
<td>1</td>
</tr>
<tr>
<td>C</td>
<td>110V GFCI Protected Electrical Outlet, I.R. and TouchTime Only</td>
<td>1</td>
</tr>
<tr>
<td>D</td>
<td>#10 Fasteners/Wall Anchors, Optional</td>
<td>2</td>
</tr>
<tr>
<td>E</td>
<td>Optional Heater, Electric Box Location, 4&quot; L x 4&quot; W x 4&quot; H</td>
<td>1</td>
</tr>
</tbody>
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