Mobility access within washroom facilities

Because the Dyson Airblade Wash+Dry hand dryer is installed as a sensor operated dual use sink and hand drying unit within the restroom, it must maintain all lavatory sink knee and toe clearance requirements. The unit must be located on an accessible route and may not protrude into any required accessible clear area of other items, such as a door swing, required toilet clear area, urinal or fixed waste receptacle. The unit must be mounted within the reach range and space requirements. An accessible restroom is comprised of an accessible entrance, accessible turning space, and at least one type of accessible dispenser and fixture of each type. The Airblade WD04 Short Wash+Dry hand dryer would be considered a lavatory sink mounted unit, which should meet those requirements.

Clear floor ground space:

Often accessibility code concepts are concerned with people in a seated position who use wheelchairs, which naturally limits the height and depth of their reach range. Because of the design of the Airblade Wash+Dry hand dryer, the front approach is the only way the unit can be properly used, therefore the side approach standards should not apply. A clear area in front of the unit should be a minimum of 30” wide by 48” of length. This area can overlap a circulation path but should not overlap other required accessible areas, for example, a lavatory sink in restrooms with access to more than one user at one time. Single use restrooms can overlap accessible areas due to the fact that they are used by only one person at a time.

WD04 Short Wash+Dry unit:

WD04 Short Wash+Dry unit operable area would be approximately 37" above the finished floor, which would be considered to be within the proper accessible usability range. Like the Airblade V unit, with the understanding that hand drying occurs approximately 2 inches below the air edge blower, the 37" usable range would be compliant. The current Dyson Technical Specification recommends 4 inches from the floor for air intake, which would put the motor bucket within the non-compliant range. It is recommended to maintain the 9" toe clearance for all installations. The power cord should be kept out of the toe clearance area.


Note: Diagrams not to scale.
Conclusion

Based on the review of the three Airblade Wash+Dry sink integral faucet-hand dryers, it is concluded that in a standard restroom lavatory installation the Airblade WD04 Short Wash+Dry and WD06 Wall Wash+Dry mounted at the correct height would be compliant. As always, if a front approach clear area with no conflicting overlapping accessible areas exists, then the unit should comply with accessible requirements.


Note: Diagrams not to scale.
**TECHNICAL SPECIFICATION**

**Tap dimensions**
WD04: Height 6 1/4" (159mm), Width 11 15/16" (303mm), Depth 11 1/4" (286mm)

**Motor bucket dimensions**
WD04: Height 10 7/16" (266mm), Width 5 9/16" (142mm), Depth 7 7/16" (189mm)

**Minimum clearance**
Z: 4" (100mm) clearance from floor. ADA requires 9" (228mm) toe clearance.

---

**Fixing locations (4)**

**Water entry point**

**Rear cable entry point**

**Sink/worktop thickness**
Max 2 1/4" (57mm) / Min 1/4" (3.5mm)

**Fixing locations (4)**

**All dimensions shown in inches (+/- 3/16")**
TECHNICAL SPECIFICATION

Front Elevation

- Fixing locations: (4)
- Water entry point
- Fixing locations (4)

Side Elevation

- Fixing locations: (4)
- Water entry point
- Fixing locations (4)
- Rear cable entry point
- Fixing locations (4)

Tap dimensions

WD05: Height 12 3/16" (309mm), Width 11 15/16" (303mm), Depth 11 1/4" (286mm)

Motor bucket dimensions

WD05: Height 10 7/16" (266mm), Width 5 9/16" (142mm), Depth 7 7/16" (189mm)

Minimum clearance

- Z: 4" (100mm) clearance from floor. ADA requires 9" (228mm) toe clearance.

Sink/worktop thickness

Max 2 1/4" (57mm)
Min 7/16" (3.5mm)

Distance from the aerator to the end of the tap

Z

All dimensions shown in inches (+/- 3/16")

Sink/worktop thickness

Max 3 2 7/8" (835.5mm) / Min 2 1/2" (50.8mm)

Max 3 2 7/8" (835.5mm) / Min 2 1/2" (50.8mm)

Max 3 2 7/8" (835.5mm) / Min 2 1/2" (50.8mm)

Max 3 2 7/8" (835.5mm) / Min 2 1/2" (50.8mm)

Max 3 2 7/8" (835.5mm) / Min 2 1/2" (50.8mm)
**TECHNICAL SPECIFICATION**

**WD06**

**Tap dimensions**
WD06: Length 12 1/4" (312mm), Width 11 15/16" (303mm)

**Motor bucket dimensions**
WD06: Height 10 7/16" (266mm), Width 5 9/16" (142mm), Depth 7 7/16" (189mm)

**Minimum clearance**
Suggested installation height 37 9/16" (955mm) from finished floor to center of tap, depending on height of sink. Check installation guide for further details.
WD06 Wall installation
The Dyson Airblade Wash+Dry hand dryer is designed so that the motor unit is located behind the stud wall within a metal enclosure which is supplied with the Dyson Airblade Wash+Dry hand dryer (Fig.1). The vertical wall studs must be constructed so as to allow the metal enclosure to be fitted between them (Fig.2). One of the horizontal wall studs must be fitted a) so it holds the main weight of the metal duct and the unit, and b) so it is in the correct position for the tap stem.

For complete instructions, please refer to the printed installation guide supplied with the machine. It’s also available online at www.dyson.com/docs
## TECHNICAL SPECIFICATION

### Electrical

- **Input voltage:** Low Voltage = 100-120V, High Voltage = 200-240V  
- **Frequency:** Low Voltage = 50-60Hz, subject to voltage  
- **Motor specification:** 1000W digital brushless motor  
- **Motor Speed:** 81,000 rpm  
- **Motor Switching rate:** 5,400 per second  
- **Motor type:** Dyson digital motor – V4 brushless DC Motor  
- **Amp:** Recommended dedicated 15 amp circuit, Low Voltage = 9.56 amps at 110V, High Voltage = 4.54 amps at 220V  
- **Operating temperature range:** 0°C-40°C, 32°F-104°F  
- **Heater type:** None  
- **Standby power consumption:** Less than 0.5W

### Construction

- **Tap construction:** Stainless steel (brushed)  
- **Lead free**
- **Under counter motor bucket:** Molded ABS (main unit) also uses polycarbonate and polypropylene  
- **Exterior screw type:** Torx T15  
- **Water ingress protection rating:** IP35

### Filter

- **Sealed HEPA filter (glass fiber and fleece prelayer)**  
- **Removes 99.97% of particles, as small as 0.3 microns, including bacteria and viruses.**

### Operation

- **Touch-free infra-red activation**  
- **Hand dry time measurement:** 14 seconds*  
- **Operation lock-out period:** 30 seconds  
- **Airspeed at apertures:** Low Voltage = 331 mph (533 km/h), High Voltage = 341 mph (549 km/h)  
- **Maximum altitude:** 11,482 feet / 3,500 meters  
- **Rated operating noise power:** Low Voltage = 80 db(A) for WD04-06, High Voltage = 80 db(A) for WD06, 81 db(A) for WD04-05  
- **Sound pressure level @ 2m:** 66 db(A)†  
- **Operation airflow:** Up to 5.5 gallons/sec (21 liters/sec)

### Water operation

- **Water flow rate:** 0.5 gallons/min (1.9 liters/min) low flow fitted aerator, 1.0 gallons/min (3.8 liters/min) with aerator supplied with product  
- **Water temperature control:** Thermostatic mixer recommended (not supplied)  
- **Water pressure required:** 14.5-116 psi  
- **Tap power supply:** Mains supply  
- **Equipped with automatic flush –** every 24 hours for 60 seconds, after last use.

### Logistics

- **Net weight:** WD04 = 9.37 lb; WD05 = 9.96 lb; WD06 = 18.47 lb  
- **Packaged weight:** WD04 = 13.36 lb; WD05 = 14.64 lb; WD06 = 27.36 lb  
- **Packaged dimensions:** WD04 = H 11\frac{1}{6}" (303mm) × W 11\frac{1}{6}" (284mm) × D 11\frac{1}{6}" (291mm); WD05 = H 17" (434mm) × W 10\frac{1}{6}" (275mm) × D 11\frac{1}{6}" (288mm); WD06 = H 24" (610mm) × W 14\frac{1}{6}" (375mm) × D 11\frac{1}{6}" (302mm)  
- **UPC Barcodes:** Low Voltage/WD04: 885609014104, WD05: 885609014111, WD06: 885609014128; High Voltage/WD04: 885609014074, WD05: 885609014081, WD06: 885609014098

### Sink specification

The Dyson Airblade Wash+Dry hand dryer is compatible with most sink types. Ensure plugs are not installed in the sinks and avoid inserts with embedded plugs (e.g. ones that swivel or elevate).  

Using a specially designed test method, Dyson engineers evaluated the user experience of a wide range of sink types when used with the Dyson Airblade Wash+Dry hand dryer. For further details on our recommended sinks, please see the pre-installation guide on our website: dyson.com/docs  

We recommend avoiding sinks with the following geometric characteristics:  
- Flat bases immediately surrounding the drain hole, nominally within a 2\frac{15}{16}" (60mm) radius.  
- Sloping back and front wall transitions in relation to the base of the sink.  

See our pre-installation guide for further details: dyson.com/docs

### Sink dimensions:

- All sink measurements are internal unless stated otherwise.  
- Minimum width of sink: 15" (380mm), Front to back – Minimum: 13" (330mm)  
- Minimum depth of sink: 5" (127mm)  
- Maximum depth of sink for WD05 only: 8" (200mm)  
- (External measurement of vessel sink)

### Sink materials:

- Sinks with highly polished surfaces should be avoided, e.g. reflective chrome. Porcelain or brushed metal is ideal. When multiple taps are installed side-by-side, tap centers should be a minimum of 22\frac{7}{8}" (580mm) apart.

### Standard warranty

5 year parts, 5 year limited labor warranty.

### Product range

<table>
<thead>
<tr>
<th>Part number/SKU</th>
<th>WD04 Short</th>
<th>WD05 Tall</th>
<th>WD06 Wall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Voltage</td>
<td>247659-01</td>
<td>247663-01</td>
<td>247669-01</td>
</tr>
<tr>
<td>High Voltage</td>
<td>247908-01</td>
<td>247910-01</td>
<td>247915-01</td>
</tr>
</tbody>
</table>

### Accreditations

- Carbon Trust  
- HACCP International  
- Quiet Mark

WD04 Short and WD06 Wall are ADA compliant

---

*Dry time determined using Dyson test method 769 based on NSF P335 to a measurement of 0.1g residual moisture.  
† Sound pressure measured at 6.56 feet (2 meters) distance, in a semi-anechoic chamber.
Further documents are available online to download:

- Pre-installation guide
- Installation guide
- Dyson Airblade Wash+Dry hand dryer brochure
- Cleaning guide
- CAD drawings
- Installation videos

The Carbon label is a trademark of the Carbon Trust. HACCP International non-food certification mark is the registered trademark of HACCP International. HACCP International have certified Dyson products based on their recommended installation and operating conditions. Licensed by Dyson. Quiet Mark is a trademark of the Noise Abatement Society.