

(**Specifier Note**: The purpose of this guide specification is to assist the Specifier in correctly specifying Palmer Fixture high speed electric hand dryers and their installation. The Specifier needs to edit these guide specifications to fit the needs of each specific project. References have been made within the text of the specification to MasterFormat Section numbers and titles. The Specifier needs to coordinate these numbers and titles with sections included for the specific project. Throughout the guide specification, there are Specifier Notes to assist in the editing of the file.)

SECTION 10 28 00 HAND DRYERS

Palmer Fixture BluStorm



Palmer Fixture EcoStorm



PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Automatic, high speed, warm-air, energy efficient self-contained electric hand dryers

1.2 RELATED SECTIONS

- A. Section 06 10 00-Rough Carpentry: Blocking in stud partitions for mounting hand dryers
- B. Section 26 05 00-Wiring Methods: Electrical supply, conduit, wiring, boxes, and wiring devices for hand dryers

1.3 REFERENCES

A. ICC/ANSI A117.1-American National Standard for Accessible and Useable Buildings and Facilities

1.4 SUBMITTALS

- A. Submit in accordance with Section 01330-Submittal Procedures
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
 - 1. Preparation instructions and recommendations
 - 2. Operating instructions and recommendations
 - 3. Storage and handling requirements and recommendations
 - 4. Installation methods

(Specifier Note: DELETE LEED Submittals paragraph below if not project specific.)

- LEED Submittals: Provide documentation of how the requirements of Credit will be met
- D. Shop Drawings: Include dimensions, method of attachment, and electrical wiring

1.5 QUALITY ASSURANCE

- A. Hand Dryers shall be provided and installed in compliance with a ICC/ANSI A117.1
- B. UL and C-UL approved and shall bare UL and C-UL labels
- C. CE approved
- D. GreenSpec® Listed

1.6 DELIVERY, STORAGE AND HANDLING

- A. Deliver dryers and components in manufacturer's original, unopened, undamaged containers with identification labels intact
- B. Store dryers as recommended by manufacturer

1.7 WARRANTY

A. Provide manufacturer's standard limited warranty for period specified

(SELECT five year warranty when BluStorm is specified. SELECT three year warranty when EcoStorm is specified.)

1. Warranty Period: [5] [3] years

PART 2 - PRODUCTS

(**Specifier Note**: Product Information is proprietary to Palmer Fixture. If additional products are required for competitive procurement, contact Palmer Fixture for assistance in listing competitive products that may be available.)

2.1 MANUFACTURER

A. Basis-of-Design Manufacturer: Palmer Fixture; PO BOX 10887 Green Bay, WI 54307; Phone: 920-884-8698, Fax: 920-884-8699; Toll free 800-558-8678; website www.palmerfixture.com

(Specifier Note: DELETE appropriate paragraph below regarding substitutions.)

- No substitutions allowed
- 2. Subject to compliance with requirements, manufacturers of products of equivalent design may be acceptable if approved in accordance with Section 01630-Product Substitution Procedures

2.2 ELECTRIC HAND DRYERS

- A. Hand Dryer: High Speed, Automatic, Energy Efficient Electric Hand Dryer; BluStorm HD950 SS & HD951 SS; surface mounted; entire dryer internally grounded
 - 1. Warranty Period: 5 years limited warranty
 - 2. Drying time: 10-15 seconds
 - 3. Controls: Automatic on/off, activated by infrared sensor. Operates while hands are under dryer, automatically shuts off when hands are removed. Power cuts off automatically at 60 seconds in case of irregular use.
 - 4. Maximized Efficiency: Blue light indicates to user where hands should be placed for optimal drying time
 - 5. Filter Assembly: Optional air filter available
 - 6. Cover: One piece, vandal resistant with 2 vandal-proof lock screws, stainless steel with brushed finish

(**Specifier Note**: Include the following finish if required and DELETE if not required. Special cover option can include logos, mascots, or emblems. Call manufacturer for more information.)

- a. Image: Custom image available
- 7. Motor Type: 15/16HP, 700W Brush Type, Dual Ball Bearings
- 8. Heater Thermal Protection: Thermal Cut Off at 185°F (85°C)
- 9. Heating Element: 900W
- 10. Drip Proof: 1PX1
- 11. Isolation: Class 1
- 12. Air Output Temperature: 113° F (45°C), Ambient Temp, 68°F (20°C)
- 13. Air Speed: 169-225 MPH, Adjustable
- 14. RPM: 29000
- 15. Decibel Level: 77 +/-3 dB

(**Specifier Note**: DELETE one of the following power sources.)

- 16. Power Source: HD950 SS, 110/120 volt, 12.5 amp, 1600W
- 17. Power Source: HD951 SS, 220/240 volt, 8.5 amp, 1600W
- 18. Weight: 15 LBS (6.8 kg)
- 19. Nominal Size: 9 1/8 inches (232 mm) wide by 11 1/8 (283) inches high by 7 (178 mm) inches deep

(**Specifier Note**: Indicate mounting height on DRAWINGS or designate as part of specification; do not indicate mounting heights in both specifications and drawings. DELETE one of the following two paragraphs.)

- 20. Mount dryers at heights indicated on drawings
- 21. Mount at the following heights above floor surface, as measured from the bottom the dryer:
 - a. Men's Restrooms: 43 inches (1092 mm)
 - b. Women's Restrooms: 41 inches (1041 mm)
 - c. Children Ages 11-18: 39 inches (991 mm)
 - d. Children Ages 3-10: 33 inches (838 mm)
 - e. Restrooms for Persons with Physical Disabilities: 35 inches (889 mm)

(**Specifier Note**: SELECT recessed option below where ADA requirements limit projections to 4 inches.)

- B. Hand Dryer: High Speed, Automatic, Energy Efficient Electric Hand Dryer; BluStorm HD955 SS; surface mounted, recessed; entire dryer internally grounded
 - 1. Warranty Period: 5 years limited warranty
 - 2. Drying time: 10-15 seconds
 - 3. Controls: Automatic on/off, activated by infrared sensor. Operates while hands are under dryer, automatically shuts off when hands are removed. Power cuts off automatically at 60 seconds in case of irregular use.

- 4. Maximized Efficiency: Blue light indicates to user where hands should be placed for optimal drying time and efficiency
- 5. Cover: One piece, vandal resistant with 2 vandal-proof lock screws, stainless steel with brushed finish
- 6. Recessed: Unit meets ADA requirements
- 7. Motor Type: 15/16HP, 700W Brush Type, Dual Ball Bearings
- 8. Heater Thermal Protection: Thermal Cut Off at 185°F (85°C)
- 9. Heating Element: 900W
- 10. Drip Proof: 1PX1
- 11. Isolation: Class 1
- 12. Air Output Temperature: 113°F (45°C), Ambient Temp, 68°F (20°C)
- 13. Air Speed: 169-225 MPH, Adjustable
- 14. RPM: 29000
- 15. Decibel Level: 77 +/-3 dB
- 16. Power Source: HD955 SS, 110/120 volt, 12.5 amp, 1600W
- 17. Weight: 25 LBS (11.3 kg)
- 18. Nominal Size: 9 13/16 inches (249 mm) wide by 20 3/16 inches (513 mm) high by 7 1/8 (181 mm) inches deep

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- 19. Mount dryers at heights indicated on drawings.
- 20. Mount at the following heights above floor surface, as measured from the bottom of the dryer:
 - a. Men's Restrooms: 41 inches (1041 mm)
 - b. Women's Restrooms: 39 inches (991 mm)
 - c. Children Ages 11-18: 37 inches (940 mm)
 - d. Children Ages 3-10: 31 inches (787 mm)
 - e. Restrooms for Persons with Physical Disabilities: 33 inches (838 mm)
- C. Hand Dryer: High Speed, Automatic, Energy Efficient Electric Hand Dryer; EcoStorm HD940 & HD941; surface mounted; entire dryer internally grounded
 - 1. Warranty Period: 3 years limited warranty
 - 2. Drying time: 10-15 seconds
 - 3. Controls: Automatic on/off, activated by infrared sensor. Operates while hands are under dryer, automatically shuts off when hands are removed. Power cuts off automatically at 60 seconds in case of irregular use.
 - 4. Material: Entire unit manufactured with all recyclable materials
 - 5. Cover: One piece, vandal resistant with 2 vandal-proof lock screws

(**Specifier Note**: SELECT one of the following finishes and DELETE the one not required.)

- a. Finish: WH, steel, white finish
- b. Finish: SS, stainless steel, brushed finish
- c. Finish: XS, stainless steel, bright finish

- 6. Motor Type: 3/4HP, 500W Brush Type, Dual Ball Bearings7. Heater Thermal Protection: Thermal Cut Off at 282°F (139°C)
- 8. Heating Element: 500W
- 9. Drip Proof: 1PX1
- 10. Isolation: Class 1
- 11. Air Output Temperature: 131°F (55°C), Ambient Temp, 77°F (25°C)
- 12. Air Speed: 201 MPH
- 13. RPM: 18000
- 14. Decibel Level: 75 +/-3 dB

(**Specifier Note**: DELETE one of the following power sources.)

- 15. Power Source: HD940, 110/120 volt, 10.5 amp, 1000W16. Power Source: HD941, 220/240 volt, 5.5 amp, 1000W
- 17. Weight: 9 lbs (4.1 kg)
- 18. Nominal Size: 9 1/2 inches (241 mm) wide by 6 ½ inches (165 mm) high by 5 1/2 inches (140 mm) deep

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- 20. Mount at the following heights above floor surface, as measured from the bottom of the dryer:
 - a. Men's Restrooms: 43 inches (1092 mm)
 - b. Women's Restrooms: 41 inches (1041 mm)
 - c. Children Ages 11-18: 39 inches (991 mm)
 - d. Children Ages 3-10: 33 inches (838 mm)
 - e. Restrooms for Persons with Physical Disabilities: 35 inches (889 mm)
- D. Hand Dryer: High Speed, Automatic, Energy Efficient Electric Hand Dryer; EcoStorm HD945 SS; surface mounted, recessed; entire dryer internally grounded
 - 1. Warranty Period: 3 years limited warranty
 - 2. Drying time: 10-15 seconds
 - 3. Controls: Automatic on/off, activated by infrared sensor. Operates while hands are under dryer, automatically shuts off when hands are removed. Power cuts off automatically at 60 seconds in case of irregular use.
 - 4. Material: Entire unit manufactured with all recyclable materials
 - 5. Cover: One piece, vandal resistant with 2 vandal-proof lock screws
 - 6. Recessed: Unit meets ADA requirements
 - 7. Motor Type: 3/4HP, 500W Brush Type, Dual Ball Bearings
 - 8. Heater Thermal Protection: Thermal Cut Off at 282°F (139°C)
 - 9. Heating Element: 500W
 - 10. Drip Proof: 1PX1
 - 11. Isolation: Class 1

- 12. Air Output Temperature: 131°F (55°C), Ambient Temp, 77°F (25°C)
- 13. Air Speed: 201 MPH
- 14. RPM: 18000
- 15. Decibel Level: 75 +/-3 dB
- 16. Power Source: HD945, 110/120 volt, 10.5 amp, 1000W
- 17. Weight: 18 lbs (8 kg)
- 18. Nominal Size: 12 ½ inches (318 mm) wide by 15 ½ inches (394 mm) high by 5 ½ inches (140 mm) deep

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 - a. Men's Restrooms: 41 inches (1041 mm)
 - b. Women's Restrooms: 39 inches (991 mm)
 - c. Children Ages 11-18: 37 inches (940 mm)
 - d. Children Ages 3-10: 31 inches (787 mm)
 - e. Restrooms for Persons with Physical Disabilities: 33 inches (838 mm)

PART 3 - EXECUTION

3.1 GENERAL

A. Install hand dryers in accordance with manufacturer's installation guidelines and recommendations

3.2 PREPARATION

- A. Verify substrates have been properly prepared
- B. Coordinate location and installation of electric hand dryers with blocking and other fixtures
 - 1. Verify dryers will be located at least 2 feet apart
 - 2. Verify dryers will be located at least 12 inches from side of washbasin
 - 3. Verify dryers will be located at least 18 inches above any projection which may interfere with operation of automatic sensor
- C. Coordinate location and requirements for power supply, conduit, disconnect switches and wiring

3.3 INSTALLATION

- A. Install hand dryers level, plumb, and firmly anchored in locations and at heights indicated
- B. Install hand dryers using manufacturer recommended fasteners for each substrate

3.4 PROTECTION

A. Protect installed hand dryers after installation from damage during construction. If damage occurs, remove and replace damaged unit as required to provide units in their original, undamaged condition.

END OF SECTION