SECTION 22 42 46

COMBINATION WATER TAP AND ELECTRIC HAND DRYER UNITS

1. GENERAL
   * + 1. CONDITIONS AND REQUIREMENTS
          1. The General Conditions, Supplementary Conditions, and Division 01 – General Requirements apply.
       2. SECTION INCLUDES
          1. Combination electric hand dryer and water tap units.
       3. RELATED SECTIONS

Specifier Note: In this article, specify work specified in other sections that is related to work of this section.

* + - * 1. Section 22 11 16 - Domestic Water Piping: Water supply to unit.
        2. Section 22 42 00 - Commercial Plumbing Fixtures: Sinks and water temperature control units.
        3. Division 26 - Electrical: Electrical systems and components.

Specifier Note: The following paragraph is a sample that may be used in this article. Add to or delete from the following as appropriate for the specific project.

* + - * 1. Section [xxxxx] – [Section Title]: [Include brief description of work specified in another section that is related to the work of this section.]
      1. SUBMITTALS

Specifier Note: In this article, specify various types of data to be furnished by the contractor before, during, or after construction. Topics included in this article are: product data, shop drawings, samples, design data, test reports, certificates, manufacturers’ instructions, manufacturers’ field reports, qualification statements, and closeout submittals.

* + - * 1. Submit under provisions of Section [01 33 00] [\_\_\_\_\_\_].
        2. Product Data: Provide construction details, dimensions, anchoring and mounting requirements, material and finish descriptions, electrical requirements, and manufacturer's warranty.
        3. LEED Product Data:

Specifier Note: Retain the following subparagraph for projects seeking LEED for New Construction, Core and Shell, or LEED for Schools certification. Delete those options that are not required after reviewing the LEED checklist for the project.

Product Data for Prerequisite WE 1 [and Credit WE 3] [, Credit WE 2, and Credit WE 3]: Documentation indicating flow and water consumption requirements.

Specifier Note: Retain the following subparagraph for projects seeking LEED for Commercial Interiors certification.

Product Data for Prerequisite WE 1: Documentation indicating flow and water consumption requirements.

Specifier Note: Retain the following subparagraph for projects seeking LEED for Existing Buildings certification.

Product Data for Prerequisite WE 1 [and Credit WE 2]: Documentation indicating flow and water consumption requirements.

* + - * 1. Operation and Maintenance Data: Provide for combination water tap and electric hand dryer units to include in maintenance manuals.
        2. Warranty: Provide sample of manufacturer’s standard warranty for parts and labour.
      1. QUALITY ASSURANCE

Specifier Note: In this article, describe qualifications, regulatory requirements, certifications, field samples, mock-ups, and pre-installation meetings.

* + - * 1. Product Certifications:

ETL listed in accordance with UL 507.

Approved by HACCP International as hygienically safe for use in the food and beverage industry.

cETL listed and labeled to comply with the requirements of the Standard(s) for Safety of Household and Similar Electrical Appliances (CAN/CSA‐E60335‐1).

cETL listed and labeled to comply with the requirements of the Standard(s) for Safety of Household and Similar Electrical Appliances ‐ Particular Requirements for Skin or Hair Care (CAN/CSA‐E60335‐2‐23).

ASME A112.18.1/CSA B125.1 Plumbing Supply Fittings compliant.

ANSI A117.1 Accessible and Usable Buildings and Facilities compliant.

CSA B651 Accessible Design for the Built Environment compliant.

10 CFR 429.28 Faucets compliant.

* + - * 1. Electrical Components, Devices, and Accessories: Listed and labeled in accordance with NFPA 70, by a qualified testing agency, and marked for intended location and application.
      1. DELIVERY, STORAGE AND HANDLING
         1. Deliver, store, and handle combination water tap and electric hand dryer units in manufacturer's protective packaging.
         2. Store combination units off of ground, under cover, and in a dry location. Handle according to manufacturer's written recommendations to prevent damage, deterioration, or soiling.
      2. COORDINATION
         1. Coordinate locations of combination water tap and electric hand dryer units with other work to prevent interference with clearances required for access, and for proper installation, adjustment, operation, cleaning, and servicing of combination electric hand dryers and water taps.
         2. Coordinate units with type of sinks specified in Section 22 42 00 to ensure compatibility. Verify that plugs are not installed in the sinks.

Specifier Note: Retain the first option in the subparagraph below for Models WD04 and WD06; retain the second option for Model WD05.

Sink Dimensions: Minimum 15 inches wide; minimum 13 inches front to back; [minimum four (5)] [maximum eight (8)] inches deep.

Sink Materials: Verify that sinks do not have highly polished surfaces such as shiny, reflective chrome.

* + - 1. WARRANTY
         1. Manufacturer's Standard Warranty: Manufacturer's standard form in which manufacturer agrees to repair, restore, or replace defective combination water tap and electric hand dryer units components and labour within specified warranty period.

Warranty Period: Five (5) years limited for labour and five (5) years for parts.

1. PRODUCTS
   * + 1. MANUFACTURERS
          1. Basis-of-Design Product: Subject to compliance with requirements, provide the combination electric hand dryer and water units Dyson Airblade Wash+Dry hand dryer manufactured by Dyson Canada Ltd. 312 Adelaide Street West, 7th Floor; Toronto, Ontario M5V 1R2; 1-866-236-3884, www.dysoncanada.ca or comparable product acceptable to the Architect.
          2. Substitutions will be considered under provisions of Section 01 25 00.
       2. COMBINATION WATER TAP AND ELECTRIC HAND DRYER UNITS

Specifier Note: Retain any of the following three paragraphs as required for a specific project and delete the other paragraphs.

Specifier Note: For Section A, Point 7/b, Point 7/d and Point 7/f in the subparagraph below, retain the first option if WD04 low voltage (LV) is specified; retain the second option if WD04 high voltage (HV) is specified.

* + - * 1. Combination Water Tap and Electric Hand Dryer Units: The combination water tap and electric hand dryer Dyson Airblade Wash+Dry hand dryer (Model WD04 Short); Item No. [247659-01 (LV)] [247908-01 (HV)].

Mounting: Surface mounted on sink.

Tap Construction: 304 Grade stainless steel with brushed finish.

Under Counter Motor Assembly Construction: Main unit constructed of molded ABS, PC, and PP.

Exterior Screw Type: Torx T15.

Water Ingress Protection Rating: Conform to IP35.

Filtration: 99.97 percent particulate efficiency HEPA filter with anti-microbial coating.

Operation: Touch-free infra-red activation.

Hand Dry Time: 14 seconds.

Airspeed at nozzle: [331 mph (533 km/h)] [341 mph (549 km/h)].

Operating Airflow: Up to 5.5 gallons/second (21 liters/second).

Rated Operating Noise Power: [80 db] [81 db]

Motor: Dyson Digital Motor (DDM), V4 switched reluctance brushless DC type; 81,000 rpm motor speed.

Electrical Requirements: [110-127V AC, 12 A, 1000 W] [200-240 V AC, 12 A, 1000 W].

Operating Temperature Range: 32⁰ - 104⁰ F (0⁰ - 40⁰ C).

Standby Power Consumption: Less than 0.5 W.

Water Operation:

Water Flow Rate: 1.9 liters/minute.

Tap Aerator: 1.9 liters/minute aerator outlet.

Tap Water Auto-Flush: Activates for 60 seconds after 24 hours of inactivity to flush standing water and help reduce bacteria growth.

Tap Power Supply: Mains supply.

Water Temperature Control: Thermostatic mixer not provided.

Water Pressure Required: 14.5 to 116 psi.

Specifier Note: For Section B, Point 7/b, Point 7/d and Point 7/f in the subparagraph below, retain the first option if WD05 low voltage (LV) is specified; WD05 is not available in high voltage (HV)

* + - * 1. Combination Electric Water Tap and Hand Dryer Units: The combination water tap and electric hand dryer Dyson Airblade Wash+Dry hand dryer (Model WD05 Tall); Item No. [247663-01 (LV)].

Mounting: Surface mounted on sink.

Tap Construction: 304 Grade stainless steel with brushed finish.

Under Counter Motor Assembly Construction: Main unit constructed of molded ABS, PC, and PP.

Exterior Screw Type: Torx T15.

Water Ingress Protection Rating: Conform to IP35.

Filtration: 99.97 percent particulate efficiency HEPA filter with anti-microbial coating.

Operation: Touch-free infra-red activation.

Hand Dry Time: 14 seconds.

Airspeed at nozzle: [331 mph (533 km/h)] [341 mph (549 km/h)].

Operating Airflow: Up to 5.5 gallons/second (20 liters/second).

Rated Operating Noise Power: [80 db] [81 db]

Motor: Dyson Digital Motor (DDM), V4 switched reluctance brushless DC type; 81,000 rpm motor speed.

Electrical Requirements: [110-127V AC, 12 A, 1000 W] [200-240 V AC, 12 A, 1000 W].

Operating Temperature Range: 32⁰ - 104⁰ F (0⁰ - 40⁰ C).

Standby Power Consumption: Less than 0.5 W.

Water Operation:

Water Flow Rate: 1.9 litres/minute.

Tap Aerator: 1.9 litres/minute aerator outlet.

Tap Water Auto-Flush: Activates for 60 seconds after 24 hours of inactivity to flush standing water and help reduce bacteria growth.

Tap Power Supply: Mains supply.

Water Temperature Control: Thermostatic mixer not provided.

Water Pressure Required: 14.5 to 116 psi.

Specifier Note: For Section C, Point 7b, and Point 7/f in the subparagraph below, retain the first option if WD06 low voltage (LV) is specified; WD06 is not available in high voltage (HV)

* + - * 1. Combination Water Tap and Electric Hand Dryer Units: The combination water tap and electric hand dryer Dyson Airblade Wash+Dry hand dryer (Model WD06 Wall); Item No. [247669-01 (LV)].

Mounting: Wall mounted above sink.

Tap Construction: 304 Grade stainless steel with brushed finish.

Recessed Motor Bucket Box: Galvanized steel.

Exterior Screw Type: Torx T15.

Water Ingress Protection Rating: Conform to IP35.

Filtration: 99.97 percent particulate efficiency HEPA filter with anti-microbial coating.

Operation: Touch-free infra-red activation.

Hand Dry Time: 14 seconds.

Airspeed at nozzle: [331 mph (533 km/h)] [341 mph (549 km/h)].

Operating Airflow: Up to 5.5 gallons/second (20 liters/second).

Rated Operating Noise Power: 80 db

Motor: Dyson Digital Motor (DDM), V4 switched reluctance brushless DC type; 81,000 rpm motor speed.

Electrical Requirements: [110-127V AC, 12 A, 1000 W] [200-240 V AC, 12 A, 1000 W].

Operating Temperature Range: 32⁰ - 104⁰ F (0⁰ - 40⁰ C).

Standby Power Consumption: Less than 0.5 W.

Water Operation:

Water Flow Rate: 1.9 litres/minute.

Tap Aerator: 1.9 litres/minute aerator outlet.

Tap Water Auto-Flush: Activates for 60 seconds after 24 hours of inactivity to flush standing water and help reduce bacteria growth.

Tap Power Supply: Mains supply.

Water Temperature Control: Thermostatic mixer not provided.

Water Pressure Required: 14.5 to 116 psi.

1. EXECUTION
   * + 1. EXAMINATION
          1. Examine roughing-in of water supply, sanitary drainage, and vent piping systems to verify actual locations of piping connections before unit installation.
          2. Examine counters and walls for suitable conditions where units will be installed.
          3. Verify availability and characteristics of electrical power. Drill minimum two (2) inch diameter holes for electrical service entrance through backplate.
          4. Do not begin installation until substrates are complete and ready for installation of units.
       2. INSTALLATION
          1. Install units in accordance with manufacturer’s written instructions, using fasteners appropriate to substrate indicated and recommended by manufacturer. Install units level, plumb, and firmly anchored in locations indicated.

Specifier Note: Delete the following subparagraph if the wall mounted model is not used on the project.

Install recessed motor bucket box in wall recess.

* + - * 1. Connect unit to fitting on water-supply line.
      1. CLEANING AND PROTECTION
         1. Adjust units for smooth operation. Replace damaged or defective components.
         2. Remove protective coverings from finished surfaces.
         3. Clean exposed surfaces using materials and methods recommended by manufacturer.

END OF SECTION

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