

(Specifier Note: The purpose of this guide specification is to assist the Specifier in correctly specifying American Dryer® 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. Brackets have been used to indicate when a selection is required. Unless otherwise noted, the first option is the standard feature.

*American Dryer® offers four different models to suit every project. The **EXTREME AIR** is THE HIGH SPEED HAND DRYER FOR THE NEXT GENERATION™. **Features include Adjustable Sound and Speed, Universal Voltage and an Anti-Microbial Infused Air Delivery System.** Specify the **GXT SERIES** for the fastest performance or the **EXT SERIES** for more energy efficiency. The **DR and A SERIES HAND DRYERS**' time-tested design features quiet, dependable operation in a heavy duty, vandal-resistant package. The **GX SERIES AUTOMATIC HAND DRYERS** provide a quiet and compact design to fit any budget. Contact an American Dryer® representative for further assistance with appropriate product selections.)*

SECTION 10 28 40 HAND DRYERS

American Dryer® **EXTREMEAIR® GXT SERIES**
American Dryer® **EXTREMEAIR® EXT SERIES**
American Dryer® **American® DR/A series**
American Dryer® **GLOBAL® GX series**

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Warm-air dryers.

1.2 REFERENCES

- A. Underwriters Laboratories, Inc. (UL for USA and C-UL for Canada)
 - 1. UL 499; UL Standard for Safety Electric Heating Appliances
 - 2. CSA C22.2 Canadian Standard for Hair Dressing Equipment

1.3 ACTION SUBMITTALS

- A. Refer to Section [01 33 00 Submittal Procedures] [Insert section number and title].

- B. Product Data: For each type of dryer indicated, including written installation instructions.

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

- C. LEED Submittals:
 - 1. Product Data for Credit EA1: For motor energy usage calculations.
- D. Shop Drawings: Include dimensions, method of attachment, and electrical wiring.
- E. Samples: Provide finish samples for each finish required.
- F. Warranty: Sample of special warranty.

1.4 CLOSEOUT SUBMITTALS

- A. Refer to Section [01 78 00 Closeout Submittals] [Insert section number and title].
- B. Maintenance data.

1.5 QUALITY ASSURANCE

- A. Dryers: Listed per UL 499 and CSA C22.2 and shall bear UL and C-UL label.

1.6 DELIVERY, STORAGE AND HANDLING

- A. Refer to Section [01 60 00 Product Requirements] [Insert section number and title].
- B. Deliver dryers and components in manufacturer's original, unopened, undamaged containers with identification labels intact.
- C. Store dryers as recommended by manufacturer.

1.7 WARRANTY

- A. Refer to Section [01 78 36 Warranties] [Insert section number and title].
- B. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of dryers that fail in materials or workmanship within specified warranty period.

(**Specifier Note:** SELECT ten year warranty when American® DR/A series is specified. SELECT three year warranty when Global® GX series with ABS cover is specified. SELECT five year warranty for all other models.)

1. Warranty Period: [10] [5] [3] years.

(**Specifier Note** SELECT sensor warranty five years for all models except Global GX series is three years.

2. Sensor Warranty Period: [5] [3] years.

PART 2 - PRODUCTS

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

2.1 MANUFACTURER

- A. American Dryer, Inc.; 33067 Industrial Road; Livonia, MI 48150, USA; Phone 734.421.2400, fax 734.421.5580; Toll free 800.485. 7003; website www.americandryer.com. Email: sales@americandryer.com.

(**Specifier Note:** DELETE paragraph below when substitutions are not allowed.)

1. Subject to compliance with requirements, manufacturers of products of equivalent design may be acceptable if approved in accordance with [Section 01 25 00 Substitution Procedures] [Insert section number and title].

2.2 WARM-AIR DRYERS

(**Specifier Note:** RETAIN paragraph and sub-paragraphs below when specifying EXTREMEAIR® GXT.)

- A. Automatic, High Speed, Warm-Air Dryer [Insert drawing designation]
 1. Basis-of-Design Product: American Dryer®'s EXTREMEAIR® GXT SERIES.
 2. Adjustable Speed: 10 + seconds
 3. Adjustable Sound Level: 83 - 63 dB
 4. Universal Voltage 110-120/208/220-240 Volts, 50/60 Hz, 1500 W Max.
 5. Motor: 5/8 HP, 24,000 14,000 RPM adjustable, commutated through-flow discharge vacuum motor/blower with automatic resetting thermal protector.
 6. Adjustable Air Velocity: 16,000 10,000 LFM

7. Air Temperature: 135°F
8. Energy Usage: 51 KJ

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

9. Mounting: [Surface mounted] [Semi-recessed].
10. Operation: Automatic, microprocessor-controlled infrared-sensor activated with timed power cut-off switch.
 - a. Maximum Operation Time: 35 seconds.
11. Cover Material and Finish: [Flame retardant ABS polymer, with white finish] [Steel, with white epoxy finish] [Steel, with satin chrome finish] [Stainless steel, with no. 4 brushed finish].

(**Specifier Note:** Supply with 110-120V when better efficiency is desired. Standby power with 120V supply consumes 1W versus 4W when 240V is supplied. 120V is also a more standard voltage. COORDINATE project electrical requirements with electrical engineer.)

12. Electrical Requirements: Universal Voltage automatically configures the dryer to operate on 110-120/208/220-240V, 50/60Hz, 1500 W Max. (Adjustable 1500 W to 800 W)

(**Specifier Note:** RETAIN paragraph and sub-paragraphs below when specifying E~~X~~TREMEAIR® E~~X~~T series.)

B. Automatic, High Speed, Warm-Air Dryer [Insert drawing designation]

1. Basis-of-Design Product: American Dryer®'s E~~X~~TREMEAIR® E~~X~~T SERIES.
2. Adjustable Speed: 12 + seconds
3. Adjustable Sound Level: 83 - 63 dB
4. Universal Voltage 110-120/208/220-240 Volts, 50/60 Hz, 540 W Max.
5. Motor: 5/8 HP, 24,000 14,000 RPM adjustable, commutated through-flow discharge vacuum motor/blower with automatic resetting thermal protector.
6. Adjustable Air Velocity: 16,000 10,000 LFM
7. Air Temperature: 135°F
8. Energy Usage: 22 KJ

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

9. Mounting: [Surface mounted] [Semi-recessed].
10. Operation: Automatic, microprocessor controlled infrared-sensor activated with timed power cut-off switch.

- a. Maximum Operation Time: 35 seconds.
11. Cover Material and Finish: [**Flame retardant ABS polymer, with white finish**] [**Steel, with white epoxy finish**] [**Steel, with satin chrome finish**] [**Stainless steel, with no. 4 brushed finish**].

PART 3 - (**Specifier Note:** Supply with 110-120V when better efficiency is desired. Standby power with 120V supply consumes 1W versus 4W when 240V is supplied. 120V is also a more standard voltage. COORDINATE project electrical requirements with electrical engineer.)

1. Electrical Requirements: Universal Voltage automatically configures the dryer to operate on 110-120/208/220-240V, 50/60Hz, 540 W Max. (Adjustable 540 W to 300 W)

(**Specifier Note:** RETAIN paragraph and sub-paragraphs below when specifying American® DR/A series.)

B. Warm-Air Dryer [**Insert drawing designation**]

1. Basis of Design Product: American Dryer®'s American® DR/A series.
2. Drying Time: 30 seconds
3. Energy Usage: 233 KJ
4. Motor: 1/10 HP, 3,200 RPM, permanently lubricated, maintenance free, brushless induction motor with automatic resetting thermal protector.
5. Air Flow: 160 CFM
6. Air Velocity: 5,500 LFM
7. Sound Level: 71 dB
8. Heating Element: NiChrome resistance wire.
9. Air Temperature: 130-145°F at 72°F ambient.
10. Mounting: Surface mounted

(**Specifier Note:** SELECT one of two operation paragraphs and sub-paragraphs below. Push button option is not available with cast iron or stainless steel cover. Coordinate selection with cover options in paragraph below.)

11. Operation: Automatic, microprocessor-controlled infrared-sensor activated with timed power cut-off switch.
 - a. Maximum Operation Time: 60 seconds.

OR

12. Operation: Push-button with heavy-duty 30 to 40 second timer.

(**Specifier Note:** Cast iron option is not available with 110-120V, 15A electrical requirements option below. COORDINATE selection with electrical requirements options in paragraph below.)

13. Cover Material and Finish: [One-piece, heavy duty, 16 gauge steel, with white enamel finish] [18 gauge, type 304 stainless steel with brushed finish] [One-piece, heavy duty, ¼-inch thick cast iron, with white porcelain enamel finish].
14. Nozzle: [360° revolving] [Fixed] chrome plated zinc die casting.

(**Specifier Note:** Standby power on 110-120V models consumes 1W versus 4W on 240V models. 120V is also a more standard voltage. However, SELECT 208-240V option to minimize transmission losses and achieve slightly better efficiency. SELECT 110-120V, 20A option for a 30 second versus 40 second drying time for the 110-120V, 15A option. SELECT 15A option for older buildings with limited electrical. COORDINATE project electrical requirements with electrical engineer.)

15. Electrical Requirements [110-120 V, 20 A, 2300 W, 60 H] [110-120 V, 15 A, 1725 W, 60 H] : [208-240 V, 10 A, 2300 W, 50/60 H].

(**Specifier Note:** RETAIN paragraph and sub-paragraphs below when specifying GLOBAL® GX series.)

C. Automatic, Warm-Air Dryer [Insert drawing designation]

1. Basis of Design: American Dryer®'s GLOBAL® GX series.
2. Drying Time: 40 seconds
3. Energy Usage: 153 KJ
4. Motor: 1/12 HP, 3,100 RPM, permanently lubricated, maintenance free, brushless induction motor with automatic resetting thermal protector.
5. Air Flow: 130 CFM
6. Air Velocity: 4,500 LFM
7. Sound Level: 63 dB
8. Heating Element: NiChrome resistance wire.
9. Air Temperature: 130°F at 72°F ambient.

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

10. Mounting: [Surface mounted] [Semi-recessed].
11. Operation: Automatic, microprocessor controlled infrared-sensor activated with timed power cut-off switch.
 - a. Maximum Operation Time: 60 seconds.
12. Cover Material and Finish: One-piece, [heavy duty, flame retardant ABS polymer, with white finish] [18 gauge steel, with electrostatically applied,

chip-resistant white epoxy finish] [18 gauge steel, with chrome-plated satin finish].

(**Specifier Note:** SELECT 110-120V option when better efficiency is desired. Standby power on the 120V model consumes 1W versus 4W on 240V models.120V is also a more standard voltage. COORDINATE project electrical requirements with electrical engineer.)

13. Electrical Requirements: [110-120 V, 12 A, 1500 W, 50/60 H] [208-240 V, 6 A, 1500 W, 50/60 H].

PART 4 - EXECUTION

4.1 GENERAL

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

4.2 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.

4.3 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.
- C. Apply bead of caulk around edges of cover to wall.

4.4 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