

Architectural 3-Part Specifications

(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 six different models to suit every project. The EXTREMEAIR® is the high-speed, energy efficient hand dryer. **Features include Cold Plasma Clean® Technology (CPC SERIES Only) Adjustable Sound and Speed and Universal Voltage.** Specify the CPC SERIES for best hygiene and drying. Specify the AXT SERIES for high speed performance, HEPA filtration in a surface-mounted ADA compliant hand dryer. Specify the GXT SERIES for the fastest performance or the EXT ECO SERIES for more energy efficiency. The ADVANTAGE™ SERIES hand and hair dryers are the perfect replacement for the traditional dryer with more power and features in a heavy duty, compact and 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® CPC SERIES
American Dryer EXTREMEAIR® AXT ADA SERIES
American Dryer EXTREMEAIR® GXT SERIES
American Dryer EXTREMEAIR® EXT ECO SERIES
American Dryer ADVANTAGE™ AD SERIES
American Dryer GLOBAL® GX SERIES

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Warm-air dryers.

1.2 REFERENCES

- A. Certified for USA and Canada (cULus or cETLus)
 - 1. UL 499; UL Standard for Safety Electric Heating Appliances
 - 2. CSA C22.2 Canadian Standard for Hair Dressing Equipment
 - 3. UL867 Standard for Electrostatic Air Cleaners (EXTREMEAIR CPC SERIES)
 - 4. California Air Resource Board, CARB (EXTREMEAIR CPC SERIES)

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 five-year warranty when EXTREMEAIR series or ADVANTAGE series are specified. SELECT two-year warranty when the Global series is specified.

- 1. Warranty Period: [5] [2] years.

PART 2 - PRODUCTS

(Specifier Note: Product Information is proprietary to American Dryer, Inc. 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, LLC; 5700 McDermott Drive; Berkeley, IL 60163, 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 CPC**.)

- A. Automatic, High Speed, Cold Plasma Clean® Dryer [Insert drawing designation]
1. Basis-of-Design Product: American Dryer's **EXTREMEAIR CPC SERIES**.
 2. Cold Plasma Clean Technology dryer
 3. Dryer shall be manufactured in an EPA registered facility
 4. Adjustable Speed: 10 + seconds
 5. Adjustable Sound Level: 83 - 69 dB
 6. Universal Voltage 110-120/208/220-240 Volts, 50/60 Hz, 1500 W Max.
 7. Motor: 5/8 HP, 24,000 – 14,000 RPM adjustable, commutated through-flow discharge vacuum motor/blower with automatic resetting thermal protector.
 8. Adjustable Air Velocity: 19,000 – 10,000 LFM
 9. Air Temperature: 135°F at 72°F ambient temperature
 10. Heating Element: NiChrome resistance wire
 11. Energy Usage: 15KJ
 12. Mounting: Surface mounted
 13. Operation: Automatic, microprocessor-controlled infrared-sensor activated with timed power cut-off switch.
 - a. Maximum Operation Time: 35 seconds.
 14. Cover Material and Finish: [Flame retardant ABS polymer, with white finish] [Steel, with white epoxy finish] [Steel, with black graphite epoxy finish][Steel, with satin chrome finish] [Stainless steel type 304 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.)

15. 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:** ADD wall guard part no. ADA-WG below where ADA requirements limit hand dryer projections to 4 inches and recessing the dryer into the wall is not desired or when protecting the floor or wall from moisture is desired. Or, ADD recess kit part no. ADA-RK below to semi-recess the dryer into the wall where ADA requirements limit hand dryer projections to 4 inches.)

16. ADA Accessories [**None**] [**ADA-WG Wall Guard**] [**ADA-RK Recess Kit**]

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

- B. Automatic, High Speed, Surface-mounted ADA Compliant, Warm-Air Dryer [**Insert drawing designation**]

1. Basis-of-Design Product: American Dryer's **EXTREMEAIR AXT SERIES**.
2. Adjustable Speed: 12 seconds
3. Adjustable Sound Level: 87 - 83 dB @ operator ear with hands in the airstream
4. Universal Voltage 110-120/208/220-240 Volts, 50/60 Hz, 950 W
5. Motor: 5/8 HP, 31,000 RPM, commutated through-flow discharge vacuum motor/blower with automatic resetting thermal protector.
6. Adjustable Air Velocity: 19,800 LFM
7. Air Temperature: 132°F at 72°F ambient temperature
8. Heating Element: NiChrome resistance wire
9. Energy Usage: 11.4 KJ
10. Mounting: Surface mounted, ADA compliant
11. Filtration: HEPA filter
12. Operation: Automatic, microprocessor-controlled infrared-sensor activated with timed power cut-off switch.
 - a. Maximum Operation Time: 30 seconds.
13. Cover Material and Finish: [**Die cast aluminum, with white epoxy finish**] [**Die cast aluminum, with black epoxy finish**] [**Stainless steel type 304 with polished finish**] [**Stainless steel type 304 with no. 4 brushed finish**].

(**Specifier Note:** COORDINATE project electrical requirements with electrical engineer.)

14. Electrical Requirements: Universal Voltage automatically configures the dryer to operate on 110-120/208/220-240V, 50/60Hz, 950 W

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

- C. 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 - 69 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: 19,000 – 10,000 LFM
7. Air Temperature: 135°F at 72°F ambient temperature
8. Heating Element: NiChrome resistance wire
9. Energy Usage: 15KJ
10. Mounting: Surface mounted
11. Operation: Automatic, microprocessor-controlled infrared-sensor activated with timed power cut-off switch.

a. Maximum Operation Time: 35 seconds.

12. Cover Material and Finish: [**Flame retardant ABS polymer, with white finish**] [**Steel, with white epoxy finish**] [**Steel, with black graphite epoxy finish**][**Steel, with satin chrome finish**] [**Stainless steel type 304 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.)

13. 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:** ADD wall guard part no. ADA-WG below where ADA requirements limit hand dryer projections to 4 inches and recessing the dryer into the wall is not desired or when protecting the floor or wall from moisture is desired. Or, ADD recess kit part no. ADA-RK below to semi-recess the dryer into the wall where ADA requirements limit hand dryer projections to 4 inches.)

14. ADA Accessories [**None**] [**ADA-WG Wall Guard**] [**ADA-RK Recess Kit**]

(**Specifier Note:** RETAIN paragraph and sub-paragraphs below when specifying **EXTREMEAIR EXT ECO** series.)

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

1. Basis-of-Design Product: American Dryer's **EXTREMEAIR EXT ECO SERIES**.
2. Adjustable Speed: 12 + seconds
3. Adjustable Sound Level: 83 - 69 dB
4. Universal Voltage 110-120/208/220-240 Volts, 50/60 Hz, 500-300 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: 19,000 – 10,000 LFM
7. Air Temperature: 85°F at 72° ambient temperature
8. Energy Usage: 6KJ
9. Mounting: Surface mounted
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 black graphite epoxy finish**] [**Steel, with satin chrome finish**] [**Stainless steel type 304 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, 540 W Max. (Adjustable 540 W to 300 W)

(**Specifier Note:** ADD wall guard part no. ADA-WG below where ADA requirements limit hand dryer projections to 4 inches and recessing the dryer into the wall is not desired or when protecting the floor or wall from moisture is desired. Or, ADD recess kit part no. ADA-RK below to semi recess the dryer into the wall where ADA requirements limit hand dryer projections to 4 inches.)

13. ADA Accessories [**None**] [**ADA-WG Wall Guard**] [**ADA-RK Recess Kit**]

(**Specifier Note:** RETAIN paragraph and sub-paragraphs below when specifying American ADVANTAGE series.)

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

1. Basis of Design: American Dryer's ADVANTAGE AD series.
2. Drying Time: 25 seconds
3. Energy Usage: 35 KJ
4. Universal Voltage 110-120/208/220-240 Volts, 50/60 Hz, 1400 W Max.
5. Motor: 1/8 HP, 4,800 RPM automatic thermal protector.
6. Air Flow: 180 CFM
7. Air Velocity: 7,300 LFM
8. Sound Level: 67 dB
9. Heating Element: NiChrome resistance wire
10. Air Temperature: 120°F at 72°F ambient temperature
11. Mounting: Surface mounted
12. Operation: Automatic, microprocessor controlled infrared-sensor activated with timed power cut-off switch.
 - a. Hand Dryer Maximum Operation Time: 35 seconds.
 - b. HAIR Dryer Maximum Operation Time: 80 seconds.

13. Cover Material and Finish: [**Flame retardant ABS polymer, with white finish**] [**Steel, with white epoxy finish**] [**Steel, with black graphite 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.)

14. Electrical Requirements: Universal Voltage automatically configures the dryer to operate on 110-120/208/220-240V, 50/60Hz, 1400 W Max.

(Specifier Note: ADD wall guard part no. ADA-WG below where ADA requirements limit hand dryer projections to 4 inches and recessing the dryer into the wall is not desired or when protecting the floor or wall from moisture is desired. Or, ADD recess kit part no. ADA-RK below to semi recess the dryer into the wall where ADA requirements limit hand dryer projections to 4 inches.)

15. ADA Accessories [None] [ADA-WG Wall Guard] [ADA-RK Recess Kit]

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

A. 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: 56 KJ
4. Motor: 1/12 HP, 3,100 RPM, permanently lubricated, maintenance free, brushless induction motor with automatic resetting thermal protector.
5. Air Flow: 120 CFM
6. Air Velocity: 4,000 LFM
7. Sound Level: 63 dB
8. Heating Element: NiChrome resistance wire
9. Air Temperature: 120°F at 72°F ambient
10. Mounting: Surface mounted
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 electrostatically applied chip resistant black graphite epoxy finish] [18 gauge steel, with chrome-plated satin finish].
13. Electrical Requirements: 110-120 V, 12 A, 1400 W, 50/60 H
14. **(Specifier Note:** ADD wall guard part no. ADA-WG below where ADA requirements limit hand dryer projections to 4 inches and recessing the dryer into the wall is not desired or when protecting the floor or wall from moisture is desired. Or, ADD recess kit part no. ADA-RK below to semi recess the dryer into the wall where ADA requirements limit hand dryer projections to 4 inches.)

15. ADA Accessories [None] [ADA-WG Wall Guard] [ADA-RK Recess Kit]

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

3.4 PROTECTION

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