This section includes editing notes to assist the user in editing the section to suit project requirements. These notes are included as hidden text, and can be revealed or hidden by the following method in Microsoft Word:

 Display the FILE tab on the ribbon, click OPTIONS, then DISPLAY. Select of deselect HIDDEN TEXT.

This guide specification section has been prepared by World Dryer Corporation for use in the preparation of a project specification section covering SMARTdri automatic, high-efficiency heated air hand dryers.

The following should be noted in using this specification:

Hypertext links to manufacturer websites are included after manufacturer names to assist in product selection and further research. Hypertext links are contained in blue, e.g.:

 [www.astm.com](http://www.astm.com)

Optional text requiring a selection by the user is enclosed within brackets and as red text, e.g.: “Color: [Red.] [Black.]"

Items requiring user input are enclosed within brackets and as red text, e.g.: "Section [\_\_ \_\_ \_\_ - \_\_\_\_\_\_\_\_]."

Optional paragraphs are separated by an "OR" statement included as red text, e.g.:

\*\*\*\* OR \*\*\*\*

For assistance in the use of products in this section, contact World Dryer Corporation by calling 800-323-0701, by email at info@worlddryer.com, or visit their website at [www.worlddryer.com](http://www.worlddryer.com).

**SECTION 10 28 14 - ELECTRIC HAND DRYERS**

1. **GENERAL**
	1. SUMMARY
		1. Section Includes: Electric hand dryers.

Edit the following to coordinate with other sections in the Project Manual.

* + 1. Related Sections:
			1. Section [06 10 00 - Rough Carpentry] [\_\_ \_\_ \_\_ - \_\_\_\_\_\_]: Blocking in stud partitions for mounting hand dryers.
			2. Section [\_\_ \_\_ \_\_ - \_\_\_\_\_\_]: Electrical supply, conduit, wiring, boxes, and wiring devices for hand dryers.
	1. SUBMITTALS
		1. Action Submittals:
			1. Shop Drawings: Show dimensions, method of attachment, and required supports.
			2. Product Data: Manufacturer's data sheets on each product to be used, including:
				1. Preparation instructions and recommendations.
				2. Operation instructions and performance.
				3. Storage and handling requirements and recommendations.
				4. Installation methods.
		2. Closeout Submittals:
			1. Operation and Maintenance Data.
	2. QUALITY ASSURANCE
		1. Hand Dryers: Certified to Underwriters Laboratory (UL), Inc. and Canadian Standards Association (CSA); bear UL or ETL markings.
	3. WARRANTIES
		1. Provide manufacturer’s 10 year limited warranty (7 years motor and controls) excluding filters.
1. **PRODUCTS**
	1. MANUFACTURERS
		1. Contract Documents are based on products by World Dryer Corporation, 800-323-0701, [www.worlddryer.com.](http://www.worlddryer.com)
		2. Substitutions: [Refer to Division 01.] [Not permitted.]
	2. MANUFACTURED UNITS
		1. Hand Dryers:
			1. Type: High efficiency, heated.
			2. Source: SMARTdri by World Dryer Corporation.

Recess mounted dryers comply with the Americans with Disabilities Act (ADA).

* + - 1. Mounting: [Surface] [Recess] mounted.

Retain the following for recess mounted dryers,

* + - 1. Recess mounting kit: Provide 16 gage, Type 304 stainless steel recessing kits with brushed finish; Model KKR-973.

In the following, 1200 watts, 5 Amps, 220-240 VAC, 50 Hz is available for export only.

* + - 1. Electrical rating: [1200 watts, 10 Amps, 110 -120 VAC, 50/60 Hz.] [1250 watts, 5.2 Amps, 208-240 VAC, 50/60 Hz.] [1200 watts, 5 Amps, 220-240 VAC, 50 Hz.]

In the following retain single port for SMARTdri Plus and multi-jet diffused for SMARTdri.

* + - 1. Nozzle type: [Single port.] [Multi-jet diffused.]

In the following retain 77 CFM for SMARTdri Plus and 100 CFM for SMARTdri.

* + - 1. Air flow: [77 CFM at 250 MPH (22,000 LFM).] [100 CFM at 265 MPH (23,320 LFM)].
			2. Intake air filter: Coarse air filter.
			3. Motor: Universal type, through-flow discharge vacuum type with automatic resetting thermostat; 1.07 HP, 23,400 RPM.
			4. Electronic controls:
				1. Automatic infrared optical sensor; operates while hands are under blower. Shutoff within 3 seconds after hands removed or 30 seconds if hands are not removed.
				2. Three position motor control and ON/OFF heater control to customize air performance / dry time, energy efficiency, sound level and user comfort as desired.

In the following retain 140 degrees F for SMARTdri Plus and 110 degrees F for SMARTdri.

* + - 1. Heater:
				1. Nichrome wire element mounted inside plenum housing with dual level safety protection - automatic resetting thermostat to open when air flow is restricted and close when air flow is resumed with backup one use thermal cutoff.
				2. Heated air temperature: [140 degrees F] [110 degrees F] at 70 degrees F ambient temperature.

In the following retain 68 dBa for SMARTdri Plus and 69 dBa for SMARTdri.

* + - 1. Sound level: [68] [69] dBA at 79 inches (2 m).
			2. Anti-microbial technology: Protects treated surfaces on the dryer by inhibiting growth of bacteria, mold, and fungus that can cause stains, odors or deterioration.
			3. Ingress protection rating: IP24.
			4. Cover material: One piece, heavy duty, die-cast aluminum, [white enamel] [black enamel] finish.

\*\*\*\* OR \*\*\*\*

* + - 1. Cover material: One piece, vandal resistant, stainless steel, [polished] [brushed] finish.
1. **EXECUTION**
	1. INSTALLATION
		1. Install in accordance with manufacturer's instructions and approved Shop Drawings.

Accessible layout for persons with physical disabilities must ensure a minimum clear floor space of 30 x 48 inches (762 x 1219 mm) in front of or parallel to hand dryers. Hand dryer may project into this clear space if there is a 29 inch (737 mm) minimum knee and toe space beneath the hand dryer. It is recommended to install at least one hand dryer for persons with physical disabilities in multiple hand dryer installations.

Depending on placement of hand dryers in facilities accessible to persons with physical disabilities, maximum projection from wall may be restricted to 4 inches (102 mm). Some dryers are available with recess mounting kits.

* + 1. Mount dryers at heights [indicated on Drawings.] [indicated on manufacturer’s mounting templates.]

Retain the following if recess mounting kits are required.

* + 1. Install dryers with recess mounting kits with maximum 4 inch (102 mm) maximum projection from wall surface, in compliance with [applicable accessibility code.] [ANSI A117.1.]
	1. CLEANING AND TESTING
		1. Remove protective packaging.
		2. Clean surfaces with mild soap solution. Do not use abrasives.
		3. Inspect installed dryers to verify mounting is rigid and electrical connections are proper.
		4. Test each dryer to verify operation and performance.
	2. PROTECTION
		1. Protect dryers from construction activities until just prior to Substantial Completion.
	3. DEMONSTRATION
		1. Demonstrate operation and maintenance of dryers to Owner.

END OF SECTION