

SECTION 15832

AIR CURTAINS, INDUSTRIAL

PART GENERAL

SECTION INCLUDES

Standard Models.  
High Velocity Models.  
Extra Power Models.  
WindGuard Models.  
Extra High Velocity Models.  
Extra High H Velocity Models.

RELATED SECTIONS

Section 08110 - Steel Doors and Frames.  
Section 08330 - Coiling Doors and Grilles.  
Section 08500 - Windows.  
Section 08580 - Pass Windows.  
Sections of Division 16 affecting, or affected by,  
construction activities of this section.  
Sections of Divisions 15 and 16 affecting, or affected  
by, construction activities of this section.

SUBMITTALS

Submit under provisions of Section 01300.  
Product Data: Manufacturer's descriptive literature for  
products specified in this section; indicate options  
specified.  
Shop Drawings: Indicate installation and connection  
details.  
Quality Assurance Submittals:

Certificates: Indicate compliance to Regulatory Requirements specified in QUALITY ASSURANCE Article of this section.

Manufacturer's instructions: Printed installation instructions for each specified product.

Closeout Submittals:

Operation and maintenance data: Manufacturer's printed instructions for operating and maintaining air curtain components.

Warranty documents: Issued and executed by manufacturer.

QUALITY ASSURANCE

Manufacturer Qualifications: Minimum five years documented experience producing respective products specified in this Section.

Regulatory Requirements: Product compliance with the following regulatory agencies:

Underwriters Laboratories listing.

National Electrical Code.

United States Food and Drug Administration.

United States Department of Agriculture.

DELIVERY, STORAGE, AND HANDLING

Store products of this section in manufacturer's unopened packaging until installation.

Maintain dry, heated storage area for products of this section until installation of products.

WARRANTY

Manufacturer's Warranty: Supply manufacturer's standard warranty against defects in product workmanship and materials.

PART PRODUCTS

MANUFACTURERS

Acceptable Manufacturer: Mars Air Doors, 14716 South Broadway, Gardena CA 90248; ASD. Tel: (213) 770-1555 or (800) 421-1266; Fax: (310) 324-3030.

Requests for substitutions will be considered in accordance with provisions of Section 01600.

Substitutions: Not permitted.

#### MANUFACTURED UNITS

##### Air Curtains:

Acceptable Product: Mars Model Number \_\_\_\_\_.

Product Description: Self-contained electrically-operated air curtain for mounting at head of openings.

##### Housing:

Welded metal, with factory-drilled mounting holes at each end for back wall mount.

Welded stainless steel, with factory-drilled mounting holes at each end for back wall mount.

Air direction vanes, adjustable +/- 20 degrees front to back.

Fixed die-punched louver assembly.

Expanded metal inlet screen.

Adjustable inlet louver damper, reducing air velocity up to 50 percent; field adjustable.

Color: Gray baked rust preventative, electrostatic polyurethane powder coating.

Blower Assembly: Belt-drive, double-width and double-inlet squirrel cage blower wheels, producing minimum velocity \_\_\_\_\_ feet per minute (\_\_\_\_\_ m/sec) at 3 feet (0.914 m) above floor with maximum opening height of 14 feet (4.267 m).

Blower Assembly: Direct-drive, double-width and double-inlet squirrel cage blower wheels, producing minimum velocity \_\_\_\_\_ feet per minute (\_\_\_\_\_ m/sec) at 3 feet (0.914 m) above floor with maximum opening height of 14 feet (4.267 m).

Motors: Single \_\_\_\_\_ horsepower, maximum \_\_\_\_\_ revolutions per minute, \_\_\_\_\_-speed.

Motors: Two \_\_\_\_\_ horsepower, maximum \_\_\_\_\_ revolutions per minute each, \_\_\_\_\_-speed.

Motors: Three \_\_\_\_\_ horsepower, maximum \_\_\_\_\_ revolutions per minute each, \_\_\_\_\_-speed.

Motors: Four 1/2 horsepower, maximum \_\_\_\_\_ revolutions per minute each, \_\_\_\_\_-speed.

Door-Activated Microswitch: Supply microswitch for automatic on/off control; turns air curtain on when door is opened and off when door is closed; field installed.

Type: Plunger.

Type: Roller.

Operating Noise Level: \_\_\_ decibels on A scale,  
measured from interior, 10 feet from unit.  
Utility Requirements: \_\_\_ Volts AC, \_\_\_\_\_-phase,  
\_\_\_ Ampere(s).

Air Curtains:

Acceptable Product: Mars Model Number E\_\_\_\_\_.

Product Description: Self-contained electrically-  
operated air curtain for mounting at head of  
openings.

Housing:

Welded metal, with factory-drilled mounting holes  
at each end for back wall mount.

Welded stainless steel, with factory-drilled  
mounting holes at each end for back wall mount.

Removable inlet screen.

Air direction vanes, adjustable +/- 20 degrees  
front to back.

Color: Gray baked rust preventative,  
electrostatic polyurethane powder coating.

Blower Assembly: Direct-drive, double-width and  
double-inlet squirrel cage stainless steel blower  
wheels, producing minimum velocity 1600 feet per  
minute at 3 feet above floor with maximum opening  
height of 14 feet.

Motors: UL-listed, heavy duty, direct drive,  
continuous duty type, totally enclosed with double-  
sealed lifetime pre-lubricated ball bearings,  
resilient mounted and protected by an automatic  
thermal overload switch; on-off control switch.

Motors: UL-listed, two-speed, heavy duty, direct  
drive, continuous duty type, totally enclosed with  
double-sealed lifetime pre-lubricated ball bearings,  
resilient mounted and protected by an automatic  
thermal overload switch; on-off control switch.

Motors: UL-listed, explosion-proof, heavy duty,  
direct drive, continuous duty type, totally enclosed  
with double-sealed lifetime pre-lubricated ball  
bearings, resilient mounted and protected by an  
automatic thermal overload switch; on-off control  
switch.

Quantity per Unit: \_\_\_\_\_.

Horsepower: \_\_\_\_\_.

Revolutions per Minute (RPM): \_\_\_\_\_.

Door-Activated Microswitch: Supply microswitch for  
automatic on/off control; turns air curtain on when  
door is opened and off when door is closed; field  
installed.

Type: Plunger.

Type: Roller.  
Operating Noise Level: \_\_\_ decibels on A scale,  
measured from interior, 10 feet from unit.  
Utility Requirements: \_\_\_ Volts AC, \_\_\_\_\_-phase,  
\_\_\_ Ampere(s).

Heavy-Duty Belt-Drive Air Curtains:

Acceptable Product: Mars WindGuard(tm) Model Number  
BD-\_\_\_\_-\_\_\_\_-\_\_\_\_\_.

Product Description: Self-contained electrically-  
operated air curtain for mounting at head of  
openings.

Housing:

Welded metal, with factory-drilled mounting holes  
at each end for overhead mount.

Welded stainless steel, with factory-drilled  
mounting holes at each end for overhead mount.

Removable inlet screen.

No air directional vanes allowed. Nozzle  
pivoting +/- 20 degrees front to back; internal  
damper to reduce air flow up to 50 percent; field  
adjustable

Color: Gray baked rust preventative,  
electrostatic polyurethane powder coating.

Blower Wheels: Dynamically balanced, producing  
minimum velocity 1600 feet per minute at 3 feet above  
floor with maximum opening height of 14 feet.

Average Velocity at Nozzle: 3400 feet per  
minute.

Average Velocity at Nozzle: 4000 feet per  
minute.

Average Velocity at Nozzle: 4700 feet per  
minute.

Motor: Single \_\_\_ horsepower, maximum \_\_\_\_\_  
revolutions per minute, \_\_\_\_\_-speed, with \_\_\_\_\_-  
speed on/off control switch.

Door-Activated Microswitch: Supply microswitch for  
automatic on/off control; turns air curtain on when  
door is opened and off when door is closed; field  
installed.

Type: Plunger.

Type: Roller.

Operating Noise Level: \_\_\_ decibels on A scale,  
measured from interior, 10 feet from unit.

Utility Requirements: \_\_\_ Volts AC, \_\_\_\_\_-phase,  
\_\_\_ Ampere(s).

Fastening Devices: Types recommended in manufacturer's  
printed installation instructions for indicated

substrates.

PART EXECUTION

EXAMINATION

Verification of Conditions: Required utilities are in correct location and are of correct capacities for specified products.

INSTALLATION

Install air curtain components in accordance with shop drawings and manufacturer's printed installation instructions.

Connection to utilities is specified in Sections of Divisions 15 and 16.

Install air curtains in accordance with manufacturer's printed installation instructions.

Connection to utilities is specified in Sections of Division 16.

END OF SECTION