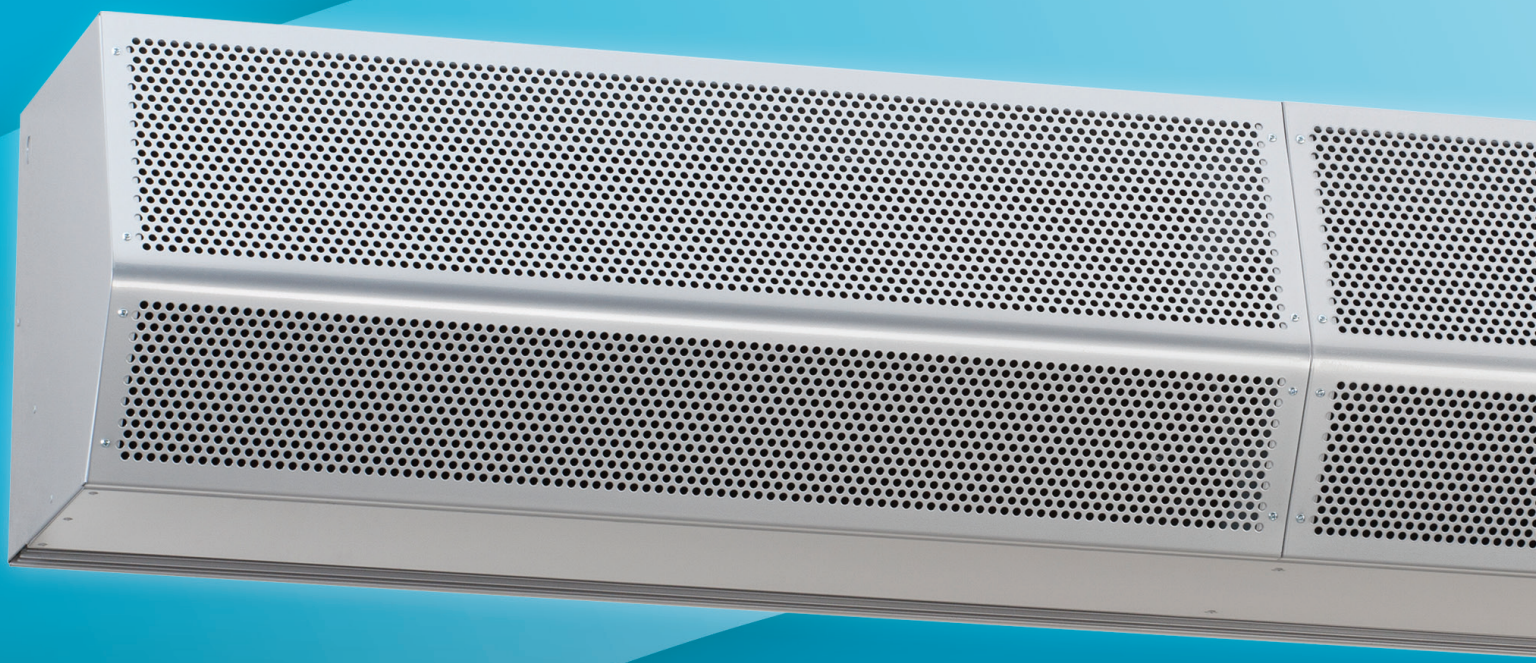
The most cost-effective environmental & sanitation barriers you'll never see



mars

atmosphere is everything

Industry Leading Energy Efficiency

How Does An Air Curtain Work?

By delivering a constant flow of air across an opening, an air curtain provides an invisible shield of air that separates environments in a building, whether it be climate controlled inside air from non-controlled outside air or internal work areas that need to be separated. It is also effective for inhibiting air borne contaminants, such as flying insects, dust, dirt, and fumes. Applications run from small pass-thru drive-up windows to retail stores to restaurants to larger warehouse and manufacturing loading dock doors.

Benefits

- → Environmental Separation
- → Energy Savings
- → Product Quality
- → Sanitation Barrier Against Air Borne Contaminants
- → Flying Insect Control

The Ultimate in Building Protection to Open Doors

Air transfers between the inside and outside of a building when its door is open.

Door Closed

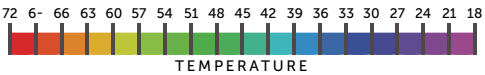
Air transfers between the inside and outside of a building when an air curatin is off and its door is open.

Open Door
Air Curtain OFF

Heat loss when door is opened.
8 minutes later (50 ft penetration)

Open Door
Air Curtain ON

Air curtain forms an effective thermal barrier minimum heat loss from the building.



Are You A Design Professional ?

Engineers/Architects/Foodservice Consultants
Construction & Facility Managers
National Chains and National Big Developers

If you design buildings – anything from restaurants to skyscrapers – air curtains will help make the inside environment more comfortable

Whether you are an Architect, Engineer or Consultant looking to specify matching equipment or you are an owner-operator wanting to ensure that the equipment that you are installing or replacing will perform flawlessly, using Mars brand custom accessories & controls is the best way to make sure the components you are using are the best ones for Mars' Air Curtains. You will find the accessories you need to control the units as needed for your specific application, as well as meet all safety and electrical codes - in the pages that follow.

For more information:

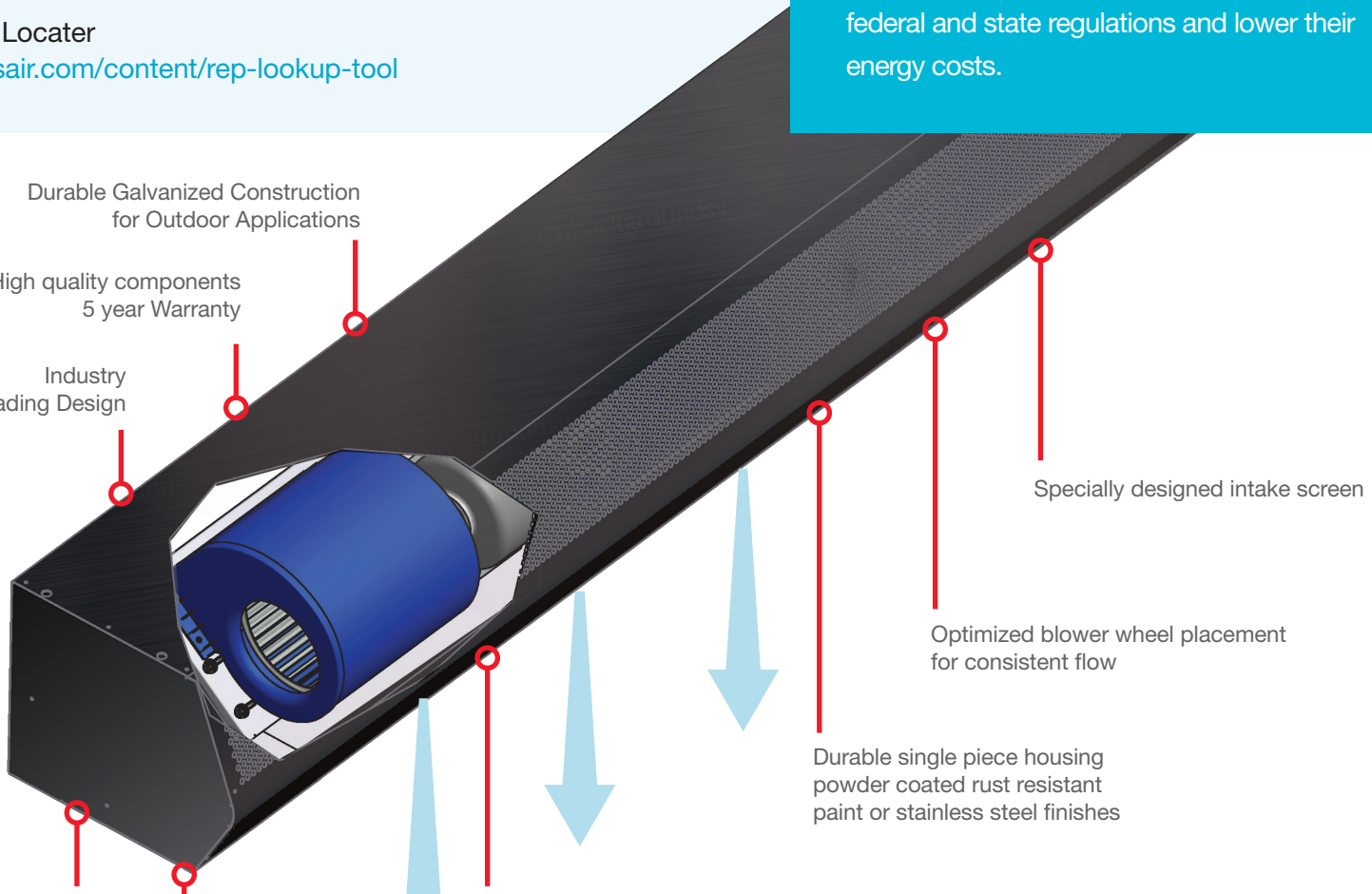
Product information
marsair.com/industry_professionals

Rep Locater
marsair.com/content/rep-lookup-tool

With over 50 years in business, Mars Air Systems is the international leader in air curtains.

Built in the USA, Mars manufactures some of the highest quality and most reliable air curtains on the market. And we're committed to maintaining our focus on quality and dependability so we can continue to be the market leader for another fifty years.

With industry-leading tools and services, Mars helps streamline the specification process for architects, engineers and food service consultants. Additionally, an extensive catalogue of air curtains means Mars can fit a range of applications and sizes; from drive-thru windows to warehouse doors. We give building owners and businesses the peace of mind of dedicated support and a reliable product, helping them to comply with federal and state regulations and lower their energy costs.



SERIES OVERVIEW

Commercial, Office, & Retail Applications

Office and commercial building operators want to save energy and maintain a constant internal temperature as people come and go. Retail shops want customers to be able to walk straight in, without having their heating and cooling costs skyrocket. Our LoPro, Standard, & Phantom series models can handle those jobs and provide the best performance on the market. In a variety of voltage, length and heating configurations, these Series are perfect for door heights up to 12' and best of all, have a typical payback of 12-24 months, which is among the fastest ROI in the HVAC equipment industry. Ideal for customer entrances, small receiving doors, and drive-up windows. Freight allowed within the continental US.

LoPro 2

- Installation heights
  Flying insect control up to 7'
  Temperature control up to 8'
- Variable speed motor and switch
- Slim aesthetic design
- Heat options available–electric, steam, hot water
- Standard color–Obsidian Black

Model	Door Width Inches	Door Height Feet	Air Velocity FPM @ Nozzle (Max)	Air Volume CFM @ Nozzle	FULL LOAD AMPS 1 Phase 115V	FULL LOAD AMPS 1 Phase 208V 230V	Motor Horse Power	dBA Sound Pressure Level	Net Wt. LBS. Unheated		
LPV2											
LPV2 25	25"	5'	1800	625	2.4	1.2/1.2	1 @ 1/6	49	20	–	ETL
LPV2 36	36"	7'-8'	1800	900	2.4	1.2/1.2	1 @ 1/6	49	32	–	ETL
LPV2 42	42"	7'-8'	1800	1050	2.4	1.2/1.2	1 @ 1/6	50	35	–	ETL
LPV2 48	48"	7'-8'	1800	1200	2.4	1.2/1.2	1 @ 1/6	52	40	–	ETL
LPV2 60	60"	7'-8'	1800	1500	2.6	1.4/1.4	1 @ 1/6	53	48	–	ETL
LPV2 72	72"	7'-8'	1800	1800	2.6	1.4/1.4	1 @ 1/6	53	58	–	ETL
LPV2 84-2	84"	7'-8'	1800	2100	4.8	2.4/2.4	2 @ 1/6	53	75	–	ETL
LPV2 96-2	96"	7'-8'	1800	2400	4.8	2.4/2.4	2 @ 1/6	53	83	–	ETL
LPV2 108-2	108"	7'-8'	1800	2700	5.0	2.6/2.6	2 @ 1/6	54	92	–	ETL
LPV2 120-2	120"	7'-8'	1800	3000	5.2	2.8/2.8	2 @ 1/6	54	102	–	ETL
LPV2 144-2	144"	7'-8'	1800	3600	5.2	2.8/2.8	2 @ 1/6	54	122	–	ETL

Standard 2

- Installation heights
  Flying insect control up to 8'
  Temperature control 10' to 12'
- Proprietary motor fan assembly for easy installation & maintenance
- Low profile design
- Heat options available–electric, steam, hot water
- Standard color–Obsidian Black
- AMCA rated models

Model	Door Width Inches	Door Height Feet	Avg Velocity (FPM)	Volume (cfm)	FULL LOAD AMPS 1 Phase 115V	FULL LOAD AMPS 1 Phase 208V 230V	FULL LOAD AMPS 3 Phase 208V 230V	FULL LOAD AMPS 3 Phase 460V	Motor Horse Power	dBA Sound Pressure Level	Net Wt. LBS. Unheated		
STD2													
STD2 36	36"	8'-12'	2206	1379	5.1	2.5/2.5	1.8/1.6	0.8	1 @ 1/2	66	60	AMCA	ETL
STD2 42	42"	8'-12'	1945	1418	5.1	2.5/2.5	1.8/1.6	0.8	1 @ 1/2	66	65	AMCA	ETL
STD2 48	48"	8'-12'	1730	1442	5.1	2.5/2.5	1.8/1.6	0.8	1 @ 1/2	66	70	AMCA	ETL
STD2 60 - 2	60"	8'-12'	2592	2700	5.1	2.5/2.5	1.8/1.6	0.8	1 @ 1/2	66	75	–	ETL
STD2 72-2	72"	8'-12'	2206	2758	10.2	5.0/5.0	3.6/3.2	1.6	2 @ 1/2	68	120	AMCA	ETL
STD2 84-2	84"	8'-12'	1945	2836	10.2	5.0/5.0	3.6/3.2	1.6	2 @ 1/2	68	125	AMCA	ETL
STD2 96-2	96"	8'-12'	1730	2884	10.2	5.0/5.0	3.6/3.2	1.6	2 @ 1/2	68	135	AMCA	ETL
STD2 108-3	108"	8'-12'	2206	4137	15.3	7.5/7.5	5.4/4.8	2.4	3 @ 1/2	71	175	AMCA	ETL
STD2 120-3	120"	8'-12'	2084	4341	15.3	7.5/7.5	5.4/4.8	2.4	3 @ 1/2	71	185	AMCA	ETL
STD2 144-3	144"	8'-12'	1730	4326	15.3	7.5/7.5	5.4/4.8	2.4	3 @ 1/2	73	200	AMCA	ETL

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- Performance data obtained from the correction factors shown herein are only an approximation and shall not be considered as part of the AMCA Certified Rating.

Phantom

- Installation heights
  PH10 Flying insect control up to 8'
  PH10 Temperature control 10' to 12'
  PH12 Flying insect control up to 10'
  PH12 Temperature control 12' to 14'
- Recessed mounted in ceiling for invisible coverage
- Utilized in premium design projects
- Durable aluminum construction
- Heat options available–electric, steam, hot water
- Standard color–Pearl White
- AMCA rated models

Model	Door Width Inches	Door Height Feet	Avg Velocity (FPM)	Volume (cfm)	FULL LOAD AMPS 1 Phase 115V	FULL LOAD AMPS 1 Phase 208V 230V	FULL LOAD AMPS 3 Phase 208V 230V	FULL LOAD AMPS 3 Phase 460V	Motor Horse Power	dBA Sound Pressure Level	Net Wt. LBS. Unheated		
PHANTOM 10													
PH10 36	36"	8'-12'	1947	1460	5.1	2.5/2.5	1.8/1.6	0.8	1 @ 1/2	66	60	AMCA	ETL
PH10 42	42"	8'-12'	1806	1580	5.1	2.5/2.5	1.8/1.6	0.8	1 @ 1/2	66	60	AMCA	ETL
PH10 48	48"	8'-12'	1632	1632	5.1	2.5/2.5	1.8/1.6	0.8	1 @ 1/2	66	65	AMCA	ETL
PH10 60-2	60"	8'-12'	2217	2771	10.2	5.0/5.0	3.6/3.2	1.6	2 @ 1/2	68	100	–	ETL
PH10 72-2	72"	8'-12'	1947	2920	10.2	5.0/5.0	3.6/3.2	1.6	2 @ 1/2	68	105	AMCA	ETL
PH10 84-2	84"	8'-12'	1806	3160	10.2	5.0/5.0	3.6/3.2	1.6	2 @ 1/2	68	125	AMCA	ETL
PH10 96-2	96"	8'-12'	1632	3264	10.2	5.0/5.0	3.6/3.2	1.6	2 @ 1/2	68	130	AMCA	ETL
PH10 108-3	108"	8'-12'	1947	4380	15.3	7.5/7.5	5.4/4.8	2.4	3 @ 1/2	71	170	AMCA	ETL
PH10 120-4	120"	8'-12'	2217	5541	20.4	10.0/10.0	7.2/6.4	3.2	4 @ 1/2	73	200	–	ETL
PH10 144-4	144"	8'-12'	1947	5840	20.4	10.0/10.0	7.2/6.4	3.2	4 @ 1/2	73	210	AMCA	ETL
PHANTOM 12													
PH12 42	42"	10'-14'	2824	2471	9.0	5.0/5.0	3.3/3.2	1.6	1 @ 1	70	90	AMCA	ETL
PH12 48	48"	10'-14'	2534	2534	9.0	5.0/5.0	3.3/3.2	1.6	1 @ 1	70	90	AMCA	ETL
PH12 60	60"	10'-14'	2207	2759	9.0	5.0/5.0	3.3/3.2	1.6	1 @ 1	70	95	–	ETL
PH12 72-2	72"	10'-14'	3097	4646	18.0	10.0/10.0	6.6/6.4	3.2	2 @ 1	73	155	AMCA	ETL
PH12 84-2	84"	10'-14'	2824	4942	18.0	10.0/10.0	6.6/6.4	3.2	2 @ 1	73	175	AMCA	ETL
PH12 96-2	96"	10'-14'	2534	5068	18.0	10.0/10.0	6.6/6.4	3.2	2 @ 1	73	180	AMCA	ETL
PH12 120	120"	10'-14'	2207	5518	18.0	10.0/10.0	6.6/6.4	3.2	2 @ 1	73	190	–	ETL
PH12 144-4	144"	10'-14'	3097	9292	36.0	20.0/20.0	13.2/12.8	6.4	4 @ 1	75	270	AMCA	ETL

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Restaurant, Food Retail & Food Preparation Applications

For restaurants, catering, and industrial food preparation facilities, protecting food, and customers, by keeping airborne contaminants and flying insects out is a must. They also need quick access to cold and frozen storage, with clear unobstructed views so their staff and facility remain safe. Our ETL Sanitation Certified models are certified to ANSI/NSF 37 standards, which means they are proven to perform in helping keep your food, facilities and customers safe. Ideal for customer entrances, drive-up windows, and receiving back doors. Freight allowed within the continental US.

ETL Sanitation

LPN 2

- ETL sanitation certified to ANSI/NSF 37 standards
- Installation heights
  Pass thru/drive-up/up to 5'
  Flying Insect and temperature control up to 7'
- Easy to install and maintain
- Washable aluminum mesh filter–Optional
- Heat options–not available
- Standard color–Obsidian Black
- Freight allowed within continental US
- Designed for pass through/drive-up windows and concession stand counters

Model	Door Width Inches	Door Height Feet	Avg Velocity FPM @ Nozzle (Max)	Air Volume (CFM) @ Nozzle	FULL LOAD AMPS 1 Phase 115V	FULL LOAD AMPS 1 Phase 208V 230V	Motor Horse Power	dBA Sound Pressure Level	Net Wt. LBS. Unheated			
LPN2												
LPN2 25	25"	5'	1800	625	2.4	1.2/1.2	1 @ 1/6	49	20		ETL LISTED	ETL SANITATION
LPN2 36	36"	7'	1800	900	2.4	1.2/1.2	1 @ 1/6	49	32		ETL LISTED	ETL SANITATION
LPN2 42	42"	7'	1800	1050	2.4	1.2/1.2	1 @ 1/6	50	35		ETL LISTED	ETL SANITATION
LPN2 48	48"	7'	1800	1200	2.4	1.2/1.2	1 @ 1/6	52	40		ETL LISTED	ETL SANITATION
LPN2 60	60"	7'	1800	1500	2.6	1.4/1.4	1 @ 1/6	53	48		ETL LISTED	ETL SANITATION
LPN2 72	72"	7'	1800	1800	2.6	1.4/1.4	1 @ 1/6	53	58		ETL LISTED	ETL SANITATION
LPV2 84-2	84"	7'	1800	2100	4.8	2.4/2.4	2 @ 1/6	53	75		ETL LISTED	ETL SANITATION
LPV2 96-2	96"	7'	1800	2400	4.8	2.4/2.4	2 @ 1/6	53	83		ETL LISTED	ETL SANITATION
LPV2 108-2	108"	7'	1800	2700	5.0	2.6/2.6	2 @ 1/6	54	92		ETL LISTED	ETL SANITATION
LPV2 120-2	120"	7'	1800	3000	5.2	2.8/2.8	2 @ 1/6	54	102		ETL LISTED	ETL SANITATION
LPV2 144-2	144"	7'	1800	3600	5.2	2.8/2.8	2 @ 1/6	54	122		ETL LISTED	ETL SANITATION

N 2

- ETL sanitation certified to ANSI/NSF 37 standards
- Installation heights
  Flying insect and temperature control up to 7'
- Designed for front doors
- Easy to install and maintain
- Washable aluminum mesh filter–Optional
- Heat options–not available
- Standard color–Obsidian Black

Model	Door Width Inches	Door Height Feet	Avg Velocity (fpm)	Volume (cfm)	FULL LOAD AMPS 1 Phase 115V	FULL LOAD AMPS 1 Phase 208V 230V	FULL LOAD AMPS 3 Phase 208V 230V	FULL LOAD AMPS 3 Phase 460V	Motor Horse Power	dBA Sound Pressure Level	Net Wt. LBS. Unheated			
N2														
N2 36	36"	7'	2206	1379	5.1	2.5/2.5	1.8/1.6	0.8	1 @ 1/2	66	60	AMCA	ETL LISTED	ETL SANITATION
N2 42	42"	7'	1945	1418	5.1	2.5/2.5	1.8/1.6	0.8	1 @ 1/2	66	65	AMCA	ETL LISTED	ETL SANITATION
N2 48	48"	7'	1730	1442	5.1	2.5/2.5	1.8/1.6	0.8	1 @ 1/2	66	70	AMCA	ETL LISTED	ETL SANITATION
N2 72-2	72"	7'	2206	2758	10.2	5.0/5.0	3.6/3.2	1.6	2 @ 1/2	68	120	AMCA	ETL LISTED	ETL SANITATION

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- Performance data obtained from the correction factors shown herein are only an approximation and shall not be considered as part of the AMCA Certified Rating.

NH 2

- ETL sanitation certified to ANSI/NSF 37 standards
- Installation heights
  Flying insect & temperature control up to 7'
- Designed for back doors
- Easy to install and maintain
- Washable aluminum mesh filter–Optional
- Heat options–not available
- Standard color–Titanium Silver

Model	Door Width Inches	Door Height Feet	Avg Velocity (fpm)	Volume (cfm)	FULL LOAD AMPS 1 Phase 115V	FULL LOAD AMPS 1 Phase 208V 230V	FULL LOAD AMPS 3 Phase 208V 230V	FULL LOAD AMPS 3 Phase 460V	Motor Horse Power	dBA Sound Pressure Level	Net Wt. LBS. Unheated			
NH2														
NH2 36	36"	7'	2389	1792	9.0	5.0/5.0	3.3/3.2	1.6	1 @ 1	70	115	AMCA	ETL LISTED	ETL SANITATION
NH2 42	42"	7'	2654	2322	9.0	5.0/5.0	3.3/3.2	1.6	1 @ 1	70	120	AMCA	ETL LISTED	ETL SANITATION
NH2 48	48"	7'	2447	2447	9.0	5.0/5.0	3.3/3.2	1.6	1 @ 1	70	125	AMCA	ETL LISTED	ETL SANITATION

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- Rated data shown are only for base (unheated) units, as shown.
- Performance data obtained from the correction factors shown herein are only an approximation and shall not be considered as part of the AMCA Certified Rating.

MARS Air Systems, LLC certifies the Standard 2, Phantom, N2, NH2, High Velocity 2, and the Windstopping series are licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and comply with the requirements of the AMCA Certified Ratings Program.

AMCA = amca CERTIFIED RATINGS AIR PERFORMANCE

ETL LISTED = ETL LISTED Intertek

ETL SANITATION = ETL SANITATION Intertek

Larger Entrance Door & Receiving Door Applications

Hot summers and cold winters mean docks and facility entrances are an unprotected leak for your heating & cooling costs to fly away. The bigger the door, the more money it is probably costing you in energy loss. Our High Velocity and Extra Power Series are top performers in their category and can keep your conditioned air in the building while allowing people, forklifts and vehicles to move freely across the opening. This means your people can get work done, while you save money. Ideal for large entrances, loading docks, and receiving doors. Freight allowed within the continental US (except gas fired units).

High Velocity 2

- Installation heights
  Flying insect control up to 10'
  Temperature control 12' to 14'
- AMCA rated models
- Proprietary motor fan assembly for easy installation & maintenance
- Best value for mid-sized warehouse doors
- Heat options available – electric, steam, hot water, gas
- Standard color – Titanium Silver
- Freight allowed within continental US (except gas fired)

Model	Door Width Inches	Door Height Feet	Avg Velocity (fpm)	Volume (cfm)	FULL LOAD AMPS 1 Phase 115V	1 Phase 208V 230V	3 Phase 208V 230V	3 Phase 460V	Motor Horse Power	dBA Sound Pressure Level	Net Wt. LBS. Unheated		
HV2													
HV2 36	36"	10'-14'	2389	1792	9.0	5.0/5.0	3.3/3.2	1.6	1 @ 1	70	115	AMCA	ETL
HV2 42	42"	10'-14'	2654	2322	9.0	5.0/5.0	3.3/3.2	1.6	1 @ 1	70	120	AMCA	ETL
HV2 48	48"	10'-14'	2447	2447	9.0	5.0/5.0	3.3/3.2	1.6	1 @ 1	70	125	AMCA	ETL
HV2 60	60"	10'-14'	2208	2760	9.0	5.0/5.0	3.3/3.2	1.6	1 @ 1	70	140	–	ETL
HV2 72-2	72"	10'-14'	2389	3584	18.0	10.0/10.0	6.6/6.4	3.2	2 @ 1	73	220	AMCA	ETL
HV2 84-2	84"	10'-14'	2654	4644	18.0	10.0/10.0	6.6/6.4	3.2	2 @ 1	73	235	AMCA	ETL
HV2 96-2	96"	10'-14'	2447	4894	18.0	10.0/10.0	6.6/6.4	3.2	2 @ 1	73	250	AMCA	ETL
HV2 108-3	108"	10'-14'	2389	5736	27.0	15.0/15.0	9.9/9.6	4.8	3 @ 1	75	330	AMCA	ETL
HV2 120-2	120"	10'-14'	2208	5519	18.0	10.0/10.0	6.6/6.4	3.2	2 @ 1	73	275	–	ETL
HV2 120-3	120"	10'-14'	2678	6693	27.0	15.0/15.0	9.9/9.6	4.8	3 @ 1	75	345	AMCA	ETL
HV2 144-3	144"	10'-12'	2447	7341	27.0	15.0/15.0	9.9/9.6	4.8	3 @ 1	75	375	AMCA	ETL

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- Performance data obtained from the correction factors shown herein are only an approximation and shall not be considered as part of the AMCA Certified Rating.

Extra Power 2

- Installation heights
  Flying insect control up to 12'
  Temperature control up to 16'
- Proprietary motor fan assembly for easy installation & maintenance
- Best value for large-sized warehouse doors
- Heat options available – steam, hot water, gas
- Standard color – Titanium Silver

Model	Door Width Inches	Door Height Feet	Avg Velocity (fpm)	Volume (cfm)	FULL LOAD AMPS 3 Phase 208V 230V	3 Phase 460V	Motor Horse Power	dBA Sound Pressure Level	Net Wt. LBS. Unheated		
EP2											
EP2 96-2	96"	12'-16'	4800	9600	16.6/15.2	7.6	2 @ 3	79	280	–	ETL
EP2 108-2	108"	12'-16'	4200	9600	16.6/15.2	7.6	2 @ 3	79	295	–	ETL
EP2 120-2	120"	12'-16'	3840	9600	16.6/15.2	7.6	2 @ 3	79	305	–	ETL
EP2 120-3	120"	12'-16'	5760	14400	24.9/22.8	11.4	3 @ 3	81	390	–	ETL
EP2 144-3	144"	12'-16'	4800	14400	24.9/22.8	11.4	3 @ 3	81	420	–	ETL

AMCA = amca certified ratings AIR PERFORMANCE AIR MOVEMENT AND CONTROL ASSOCIATION INTERNATIONAL, INC.

ETL LISTED = ETL LISTED c US Intertek

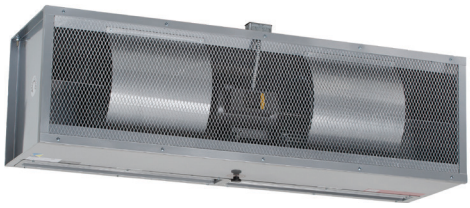
ETL SANITATION = ETL SANITATION LISTED Intertek

CSA = CSA

Large Dock Door & Heavy Industrial Applications

When it comes to larger doors and major industrial projects in the Mining, Oil & Gas, and Industrial Food Preparation arenas, no one can match the performance of the Mars Windstopping and Windguard Series. Featuring a variety of configurations, including direct or belt driven options, and gas-fired or hydronic heating solutions, these are the ultimate in performance in the harshest of conditions, including minus zero cold, 100 plus degree heat, high humidity, and saline environments.

Windstopping

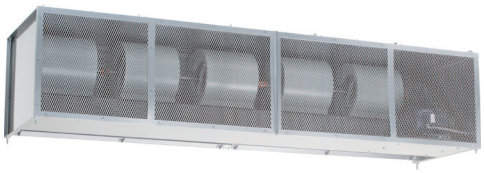


- Installation heights
  WMI Flying insect control up to 14'
  WMI Temperature control 16' to 18'
  WMH Flying insect control up to 16'
  WMH Temperature control 18' to 20'
  Wind resistance up to 15 mph
- Direct drive unit for heavy industrial projects
- AMCA rated models
- Heat options available – hot water, steam, gas
- Standard Color – Titanium Silver
- Freight not included

Model	Door Width Inches	Door Height Feet	Avg Velocity (fpm)	Volume (cfm)	FULL LOAD AMPS 3 Phase 208V 230V	460V	Motor Horse Power	dBA Sound Pressure Level	Net Wt. LBS. Unheated		
WMI											
WMI 96-2	96"	14'-18'	2614	7842	14.4/14.0	7.0	2 @ 2	66	515	AMCA	CSA
WMI 120-2	120"	14'-18'	3205	9474	28.4/21.2	10.6	2 @ 3	66	610	AMCA	CSA
WMI 144-2	144"	14'-18'	3009	13422	28.4/21.2	10.6	2 @ 3	66	695	AMCA	CSA
WMI 168-3	168"	14'-18'	2920	15060	42.6/31.8	15.9	3 @ 3	67	880	AMCA	CSA
WMI 192-4	192"	14'-18'	2614	15684	28.8/28.0	14.0	4 @ 2	68	1030	AMCA	CSA
WMH											
WMH 96-2	96"	16'-20'	4466	13190	38.0/31.6	15.8	2 @ 5	69	635	AMCA	CSA
WMH 120-2	120"	16'-20'	4231	15670	38.0/31.6	15.8	2 @ 5	69	735	AMCA	CSA
WMH 144-2	144"	16'-20'	3816	17022	--/42.0	21	2 @ 7	72	890	AMCA	CSA
WMH 168-3	168"	16'-20'	3822	19845	57.0/47.4	23.7	3 @ 5	70	1060	AMCA	CSA
WMH 192-4	192"	16'-20'	4466	26380	76.0/63.2	31.6	4 @ 5	72	1275	AMCA	CSA

- The AMCA Certified Rating Seal applies to airflow rate, average outlet velocity, outlet velocity uniformity, velocity projection and power rating at free delivery only.
- Rated data shown are only for base (unheated) units, as shown.
- Performance data obtained from the correction factors shown herein are only an approximation and shall not be considered as part of the AMCA Certified Rating.

Windguard



- Housing profile – 28" x 36"
- Installation heights
  Flying insect control 14' to 30'
  Temperature control 14' to 34'
  Wind resistance up to 30 mph
- Belt driven unit for heavy industrial projects
- Heavy duty TEFC motors
- Heat options available – hot water, steam, gas
- Standard Color – Titanium Silver
- Freight not included

Model	Door Width Inches	Door Height Feet	Max Velocity (fpm)	Max Volume (cfm)	FULL LOAD AMPS 3 Phase 208V 230V	460V	Motor Horse Power	dBA Sound Pressure Level	Net Wt. LBS. Unheated		
BD											
BD14 96	96"	14'-18'	4500	11700	14.2/13.0	6.5	1 @ 5	73	600	–	–
BD14 120	120"	14'-18'	4500	14650	14.2/13.0	6.5	1 @ 5	73	700	–	–
BD14 144	144"	14'-18'	4500	17600	21.6/20.0	10	1 @ 7.5	74	800	–	–
BD14 168	168"	14'-18'	4500	20500	21.6/20.0	10	1 @ 7.5	74	900	–	–
BD14 192	192"	14'-18'	4500	23450	28.0/26.0	13	1 @ 10	75	1000	–	–
BD18 96	96"	18'-22'	5100	13800	21.6/20.0	10	1 @ 7½	74	650	–	–
BD18 120	120"	18'-22'	5100	17255	21.6/20.0	10	1 @ 7½	75	750	–	–
BD18 144	144"	18'-22'	5100	20700	28.0/26.0	13	1 @ 10	75	850	–	–
BD18 168	168"	18'-22'	5100	24100	28.0/26.0	13	1 @ 10	76	950	–	–
BD18 192	192"	18'-22'	5100	27600	42.0/40.0	20	1 @ 15	76	1050	–	–
BD22 96	96"	22'-26'	6000	16250	28.0/26.0	14	1 @ 10	75	700	–	–
BD22 120	120"	22'-26'	6000	20300	42.0/40.0	20	1 @ 15	76	800	–	–
BD22 144	144"	22'-26'	6000	24350	42.0/40.0	20	1 @ 15	76	900	–	–
BD22 168	168"	22'-26'	6000	28400	55.0/51.0	25.5	1 @ 20	77	1000	–	–
BD22 192	192"	22'-26'	6000	32500	55.0/51.0	25.5	1 @ 20	77	1100	–	–
BD26 96	96"	26'-30'	6500	18700	42.0/40.0	20	1 @ 15	76	750	–	–
BD26 120	120"	26'-30'	6500	23400	55.0/51.0	25.5	1 @ 20	77	850	–	–
BD26 144	144"	26'-30'	6500	29200	65.0/60.0	30	1 @ 25	78	950	–	–
BD26 168	168"	26'-30'	6500	32700	65.0/60.0	30	1 @ 25	78	1050	–	–
BD26 192	192"	26'-30'	6500	37400	78.0/71.0	35.5	1 @ 30	79	1150	–	–
BD30 96	96"	30'-34'	6950	19200	55.0/51.0	25.5	1 @ 20	77	800	–	–
BD30 120	120"	30'-34'	6950	24900	65.0/60.0	30	1 @ 25	78	900	–	–
BD30 144	144"	30'-34'	6950	30300	78.0/71.0	35.5	1 @ 30	79	1000	–	–
BD30 168	168"	30'-34'	6950	33000	78.0/71.0	35.5	1 @ 30	79	1100	–	–
BD30 192-2	192"	30'-34'	6950	38100	110.0/102.0	51	2 @ 20	80	1200	–	–

Mars Factory Recommended and Approved Accessories

Our air curtains are constructed from high-quality components and are designed for years of reliable use. To ensure the unit you purchase performs as expected, and continues to perform for years to come, use Mars factory approved accessories. The switches, controls, panels and brackets below are designed and tested specifically for our units. This means they are easy to install and configure, and eliminates concerns about failure or incompatibility presented by 3rd party, unapproved accessories. For design consultants and specifiers, specifying factory approved accessories means you can be sure the units will perform up to the highest expectations and reduces field coordination issues.

DOOR LIMIT / ACTIVATION SWITCHES

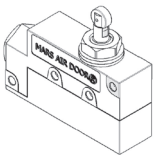
Mechanical

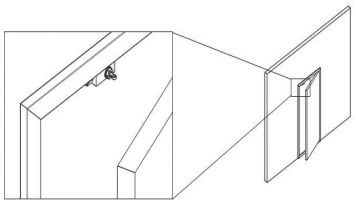
Door limit switches turn the air curtain on when the door opens and off when the door closes.

Note: An optional motor control panel or controller will be required if the total field conditions exceed ANY of the specified voltage, phase, amp or HP parameters as referenced below when a wired mechanical door limit switch is used

Combination Plunger/Roller

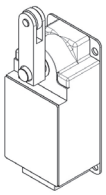
Ideal Use: All types of Doors.
Part # 99-014 – 250 Volts, 1ø, 20 Amps, 1 HP Max, NC/NO, 1 Pole, NEMA 1
Available in Washdown & Explosion Proof Design

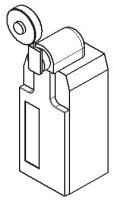


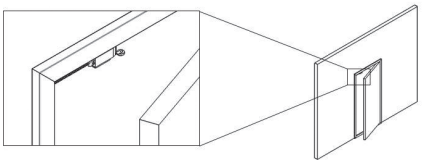


Roller Type

Ideal Use: Dual swing, sliding & roll-up doors.
Part # 99-267 - 250 Volts, 1ø, 10 Amps, 1/2 HP Max, NC/NO, 1 Pole, NEMA 4X
Part # 99-015 - 600 Volts, 1ø, 20 Amps, 1 HP Max, NC/NO, 1 Pole, NEMA 4X
Available in Washdown & Explosion Proof Design







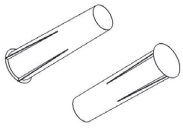
Magnetic

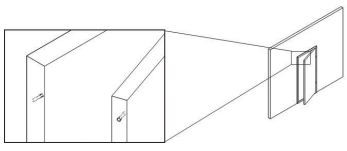
Door limit switches turn the air curtain on when the door opens and off when the door closes.

Note: An optional motor control panel or controller is required when a wired magnetic door limit switch is used.

Commercial Plastic Flush Mounted

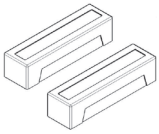
Ideal Use: Doors where wiring and switches need to be concealed.
Part # 99-275 – 24 Volts, 1/2 Amp, NC/NO, Wired, NEMA 1

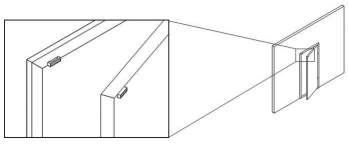




Commercial Plastic Surface Mounted

Ideal Use: Doors where wires cannot be concealed in walls.
Part # 99-018 – 24 Volts, 1/2 Amp, NC/NO, Wired, NEMA 1

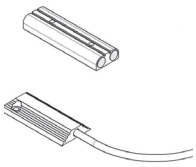


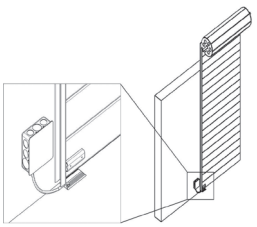


Recommended

Industrial Aluminum Floor Mounted

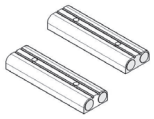
Ideal Use: Roll-up doors with fork lift traffic.
Part # 99-124 – 24 to 120 Volts, 3 Amps, NC/NO, Wired, NEMA 1

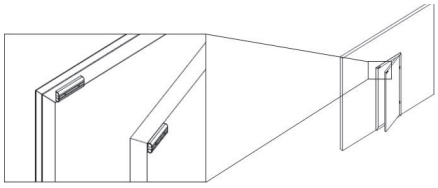




Industrial Aluminum Surface Mounted

Ideal Use: Doors where wires cannot be concealed in walls.
Part # 99-125 – 24 to 120 Volts, 3 Amps, NC/NO, Wired, NEMA 1





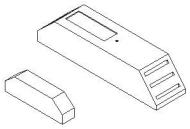
Wireless

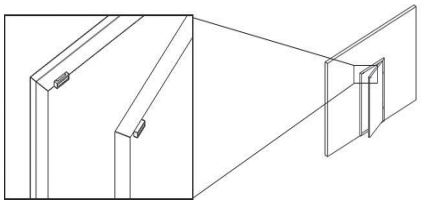
Door limit switches turn the air curtain on when the door opens and off when the door closes.

Commercial Plastic Wireless Surface Mounted

Ideal Use: Doors with lower traffic where no exposed wires are allowed.
Part #/Kit # J0053 (115V) or Kit # J0054 (208/230V),

- → Includes Wireless Switch and Switch Controller
- → Solar Charged





CONTROLLERS

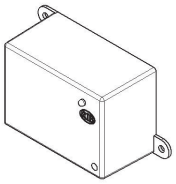
Solid State Controllers

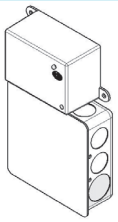
Solid state controllers are required when there is a need to adjust or delay the turn-off time of the air curtain and/or the speed.

Note: Solid state controllers are limited to the voltage, phase, amp or HP parameters specified for each type.

Controller without Time Delay

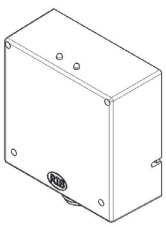
Part # 99-052 – ½ HP, 120 Volts, ½ Amp, NC/NO, NEMA 1
Part # 99-053 – ½ HP, 208/230 Volts, ½ Amp, NC/NO, NEMA 1

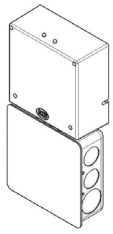




Controller with Adjustable Time Delay

Part # 99-050 – ½ HP, 120 Volts, ½ Amps, NC/NO , 5–600 sec Time Delay, NEMA 1
Part # 99-051 – ½ HP, 208/230 Volts, ½ Amps, NC/NO , 5–600 sec Time Delay, NEMA 1





Recommended

MOTOR CONTROL PANELS AND VARIABLE FREQUENCY DRIVE (VFD)

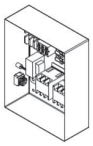
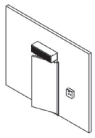
Unheated, Electric, Steam, Hot Water, Indirect Fired Gas

Door limit switches turn the air curtain on when the door opens and off when the door closes and can be used in conjunction with control panels when automatic control of an air curtain is requred.

Note: All unheated panels are remote mounted (except electric heated) as standard. (Optional unit installation available).
Additional panel ratings and materials available. HOA(Hands/Off/Auto) switch is a standard feature on a motor control panel.

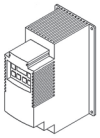
NEMA 1 (IP 10) Panel

For indoor use only. Provides protection from dust.
Enclosures may be painted metal, fiberglass or stainless steel. Available in NEMA 4X (indoor or outdoor use), Washdown & Explosion Proof, HOA(Hand/Off/Auto) switch is a standard feature.

Variable Frequency Drives (VFD)

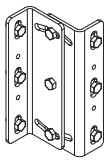
Used when variable speed is desired on applicable 3 phase motors. Can be panel mounted or stand alone. For information and additional capabilities – Consult Factory

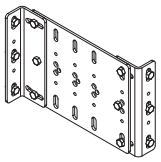


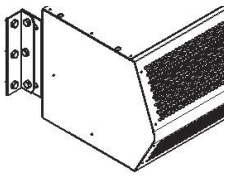
MOUNTING HARDWARE

Adjustable Mounting Brackets

Used when an air curtain needs to be mounted slightly away from mounting wall surface.
Part # J0741
Part # J0702

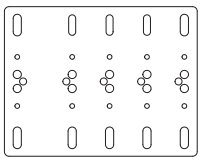
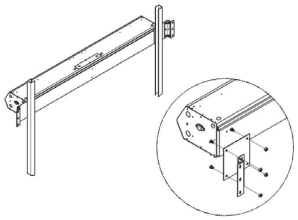

Part # J0741


Part # J0702



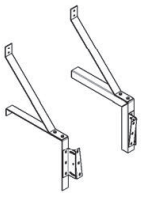
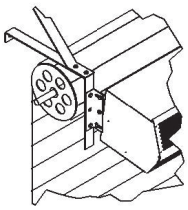
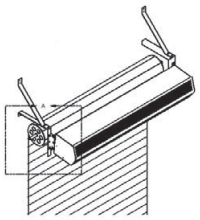
Side Extension Plates

Used when an air curtain needs to have its mounting holes extended beyond the width of its housing.
Note: Often used in conjunction with adjustable mounting brackets
Part # J0731

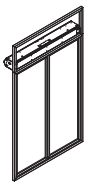
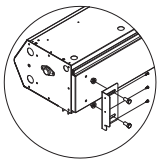
Extended Wall Mounting Brackets

Used when an air curtain needs to clear larger obstructions above a door opening, such as roll up doors
Part # J0008G - 10” Clearance
Part # J0009G - 16” Clearance
Part # J0010G - 19” Clearance
Part # J0011G - 23” Clearance

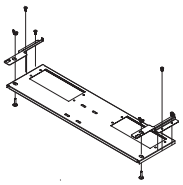
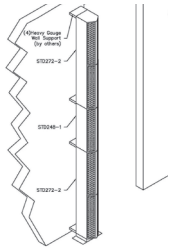
Transom Mounting Bracket

Used when an air curtain needs to be mounted to a window above a door
Part # J0041

Vertical Mounting Kit

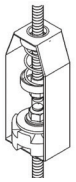
Used when the air curtain needs to be mounted along the side of the door
Consult factory for more information

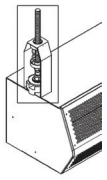



Recommended

Isolation & Dampening Hardware – Consult Factory

Vibration isolation hangers are used to isolate both vibration and noise on air curtains that are suspended from a ceiling





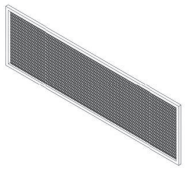
FILTERS

Used to capture large particulates in the installation space. Expanded Aluminum filters are used when washable or reusable filters are required. Paper filters are used when throw away or disposable filters are required.

Note: Additional materials and filter construction are available.

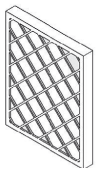
¼", ½" 1" & 2" Aluminum Mesh

Washable expanded aluminum. Contact factory for filter part numbers.



½", 1"& 2" Paper

Throw away pleated filters require an externally mounted filter frame. Contact factory for frame and filter kit part numbers.



CUSTOM MATERIALS, COATINGS, FINISHES & COLORS

Colors

Standard color choices by Series (see Series Overview — Pages 4–7). Special or Custom Colors — Consult Factory.

Materials

Stainless steel, aluminum and other materials available. Contact the factory for other materials.

Finishes

Brushed, grained or annodized aluminum. Brushed, grained or polished stainless steel. Heresite anti-corrosion coating.

SPECIALTY CONSTRUCTION

Hazardous Environments / Explosion Proof

Class 1, Division 1, Group D, NEMA 12

Designed for use in applications where combustible gases or dust particles are present. Typical installation include flour, grain, and lumber mills as well as various gas production facilities. The housing, components, motor(s), and blower wheels are designed and constructed of materials to reduce or contain electrical sparks that can ignite combustion of these elements

Washdown / Corrosion Resistant

Brushed aluminum, anodized aluminum, brushed 304 SS, brushed 316 SS, IP56, NEMA 3R, 4, 4X

Designed for use in applications where caustic conditions exist. Typical installations include exposure to salt water or air, brining operations such as tomato and pickle food processing plants, or operations that require the air curtains to be hosed off directly with water. The housing, components, motor(s) and blower wheels are designed and constructed of materials that will not corrode.

Prison Package / Tamper Proof

Designed for use in applications where security of personnel is critical. Typical installation includes prisons and correctional facilities. The housing and any surface mounted components cannot be disassembled without a special tool (included with unit).

Recommended

VALUES STATEMENT

At Mars Air Systems, our commitment is to:

Be Honest: Our interactions are genuine, heart-felt and sincere. We respect each other's opinions and views, which fosters open dialog, creativity, and trust.

Be Passionate: We engage fully, in work and in life. We work with integrity, loyalty and dedication. We live life with a commitment to family, friends, community, self, and play.

Be Bold: The Company grows when our team members grow. We challenge each other to try new things and learn from our successes and mistakes.

Be Team: We share a common vision and embrace a common work ethic. We treat each other with humility and respect. We continually recognize the contributions of others and share the credit for our successes.

Perfect the Customer Experience: We continually challenge ourselves to improve, automate, innovate, and perfect the personal experience.

Give Back: We give back to the earth through product design that contributes to our planet's sustainability. The Mars team gives back to the communities in which they work, live and play.

ADDITIONAL INFORMATION

For info on how quickly our units pay for themselves in energy savings, visit:
marsair.com/ROI

For a demonstration of how air curtains work, see our CFD slides at:
marsair.com/CFD

For help selecting the right unit for your application, go to:
marsair.com/configurator

For submittal information,specifications, and manuals, download:
marsair.com/techinfo

See how air curtains work:
marsair.com/introvideo

mars atmosphere is everything

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