

made in 

Products

nac

Comfort | Energy Efficiency | Innovation

nac^H Air Curtain

nac^V Air Curtain

nac^S Air Curtain

nac^R High induction Fan heater



New technologies
in air diffusion

Acknowledgment

At NAD Klima, we are convinced that thermal comfort and effective air distribution in our living and working environments have a direct impact on our well-being and productivity. Since our beginnings, our mission has been to design and manufacture innovative, durable air distribution solutions perfectly adapted to the needs of modern buildings.

Our team, driven by passion and expertise, is committed every day to delivering high-performance, energy-efficient products designed with respect for the environment.

We sincerely thank our partners, clients, and employees for their trust and dedication. Together, we help create spaces that are more comfortable, healthier, and truly forward-looking.

Simon Ménard & Normand Pelletier
Co-owners



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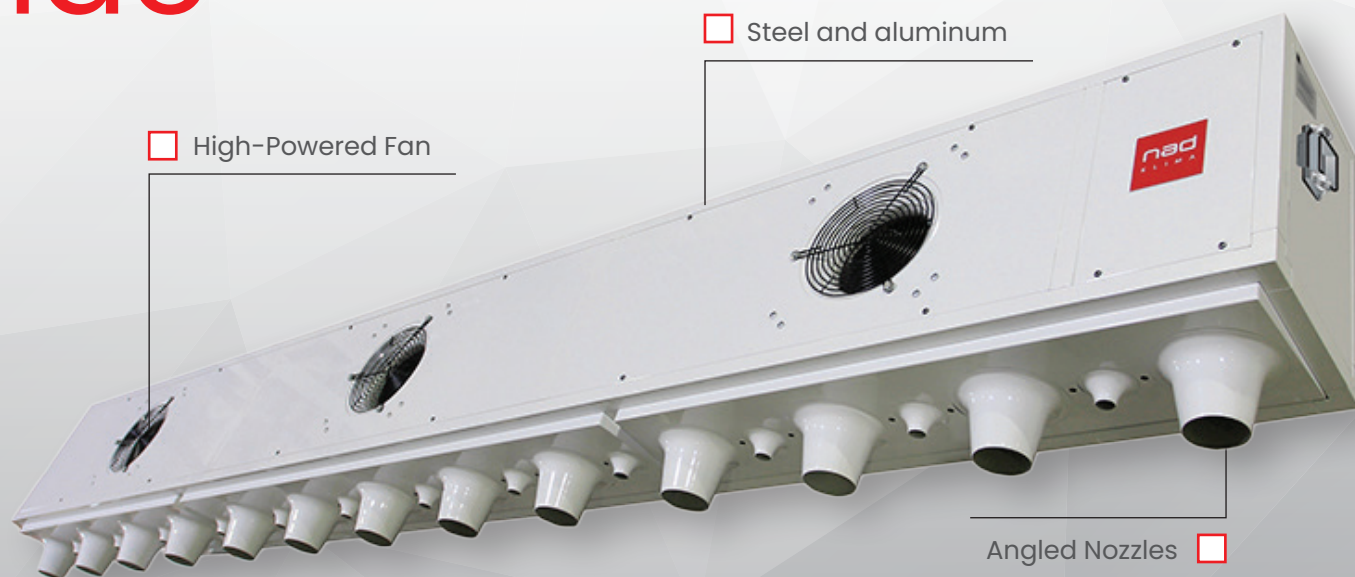
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PERFORMANCE TAILORED
FOR DEMANDING ENVIRONMENTS

nac^H





■ INTRODUCTION

The NAC H Air Curtain, designed by NAD Klima®, acts as an effective thermal barrier that retains indoor air during the opening of exterior doors, promotes energy savings, and enhances comfort.

Ideal for industries, mining facilities, and distribution centers, the NAC can be installed horizontally or vertically depending on the configuration of the garage doors.

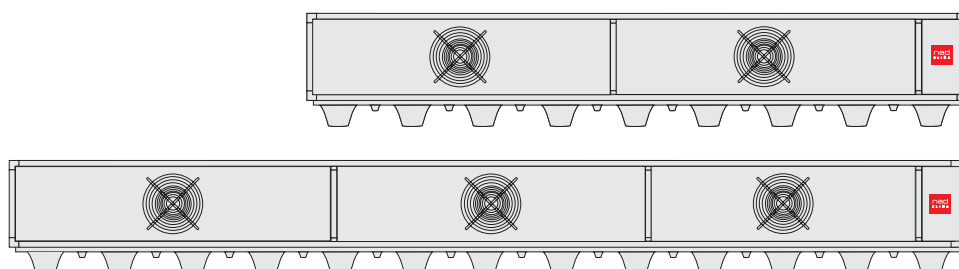
Its robust design in aluminum and steel, with fans and nozzles of various sizes oriented toward the door, ensures maximum efficiency.

■ CONFIGURATION

NAC H Air Curtains are made of aluminum and steel, with integrated fans to propel air through a system of nozzles directed toward the door.

The large and small nozzles create an effective thermal barrier, limiting the escape of warm air and the entry of cold air.

Each air curtain is custom-designed according to door dimensions (up to 20 feet high) to optimize comfort and energy efficiency.



* Choose a NAC Air Curtain and receive up to 50% in **energir** subsidies.

NAC Air Curtain

NAC Air Curtains are designed to enhance comfort and energy efficiency in a wide variety of environments.

They are suitable for both new and existing buildings.

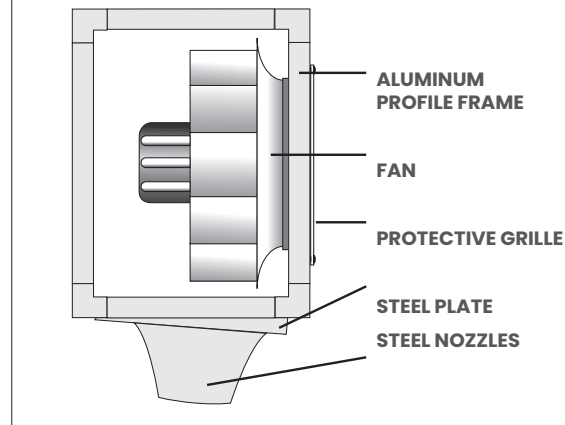
■ BENEFITS

- Eliminates the loss of heated or cooled air
- Promotes a more comfortable working environment
- Enables substantial energy savings
- Prevents dust and insect infiltration
- Easy to install thanks to its lightweight, compact structure
- Low power consumption
- Prevents ice buildup near doors

■ APPLICATIONS

- New or existing buildings
- Industries
- Warehouses
- Distribution centers
- Conveyor doors
- Mining facilities
- Oversized doors
- Transportation companies
- Refrigerated warehouses
- Exhibition centers
- Any building with a garage door

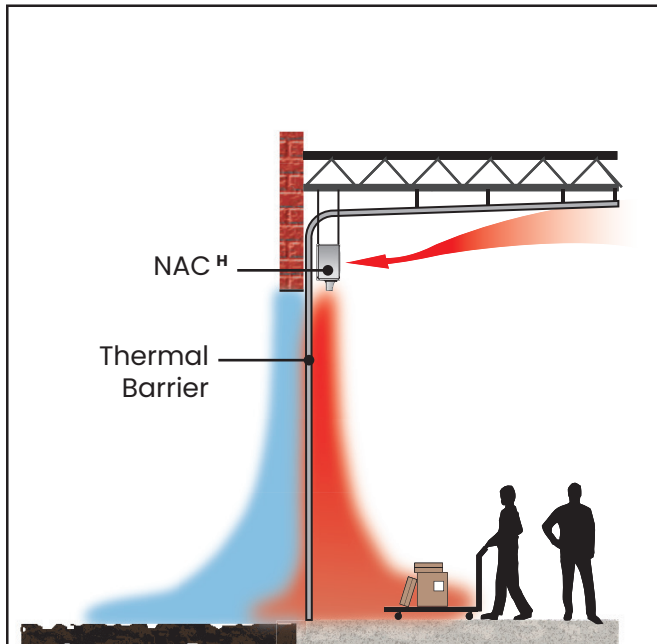
Design of NAC H Air Curtains



■ OPERATION

NAC H air curtains project air through conical nozzles, forming an effective thermal barrier.

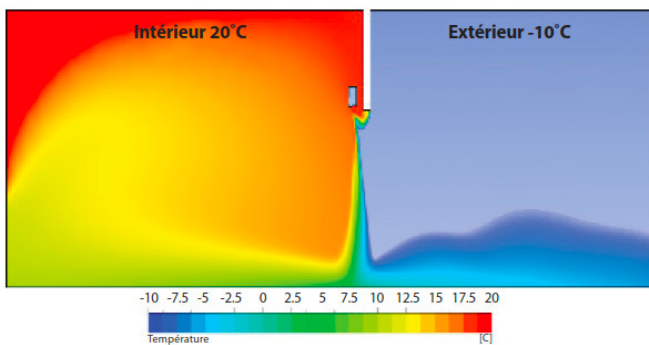
They operate without built-in heating, consume little electricity, and can reduce up to 90% of heat loss through infiltration, while maintaining a comfortable indoor environment.



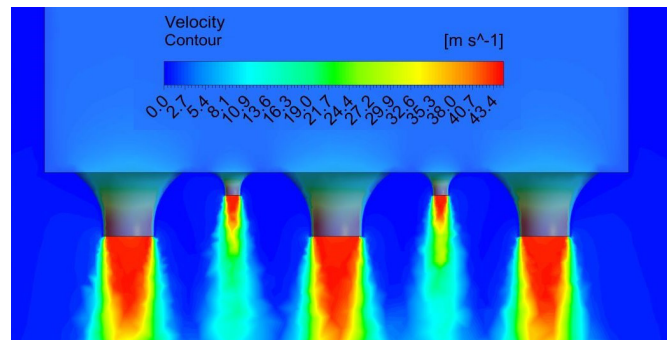
Air Projected Through Nozzles



Smoke Test with NAC H



Temperature Profile via CFD Simulations
- NAC H Air Curtain with 4 fans
- Door size: 3.7 m (12 ft) x 4.3 m (14 ft)





THERMAL EFFICIENCY
FOR CHALLENGING OPENINGS

nac^v

nac^V



■ INTRODUCTION

The NAC V Air Curtain, designed by NAD Klima®, acts as a vertical thermal barrier that helps retain indoor air while optimizing energy savings.

Ideal for industrial environments, warehouses, mines, and oversized doors, the NAC V is specifically designed for vertical installation beside garage doors, when horizontal installation is not feasible.

Its robust aluminum and steel construction incorporates powerful fans and nozzles directed toward the opening to maximize coverage and efficiency. Small nozzles placed between the larger ones enhance the barrier effect by reducing air leakage.

■ CONFIGURATION

The NAC V Air Curtain is constructed from an aluminum and steel assembly, with fans integrated directly into the panels.

Air is propelled through a system of conical nozzles, directed toward the door to form a continuous vertical thermal barrier that effectively limits the escape of warm or cold air.

Each unit is custom-designed according to the dimensions of the openings to be covered (up to 40 ft wide with no height limit), ensuring it meets the specific needs of each building.

NAC Air Curtains are designed to improve comfort and energy efficiency in a wide variety of environments.

They are suitable for both new and existing buildings.

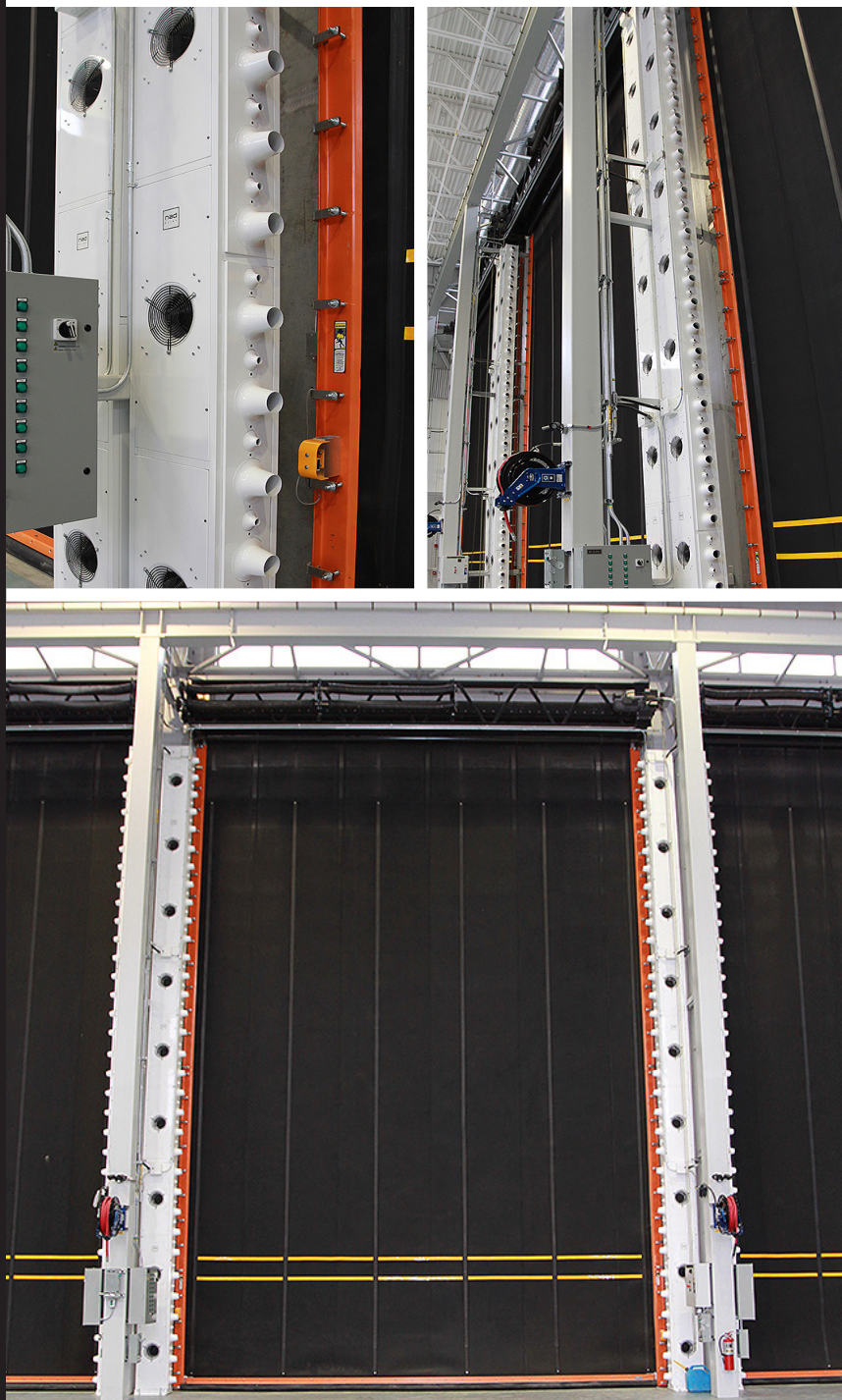
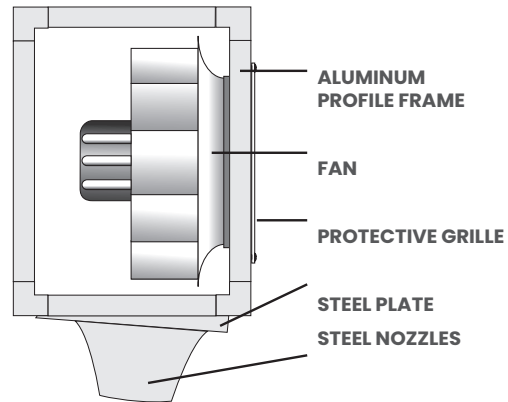
■ **BENEFITS**

- Prevents the loss of cold or warm air
- Promotes a more comfortable working environment
- Enables substantial energy savings
- Controls the infiltration of dust and insects
- Easy to install thanks to its lightweight and compact design
- Low electricity consumption
- Prevents ice formation near doors

■ **APPLICATIONS**

- Oversized doors
- New or existing buildings
- Industries
- Mining facilities
- Warehouses
- Transportation companies

Design of NAC H Air Curtains



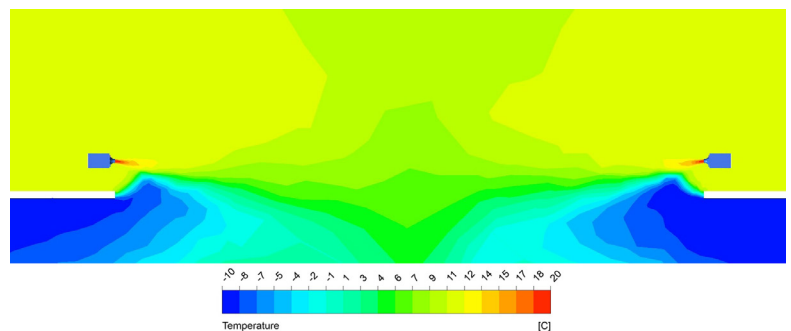
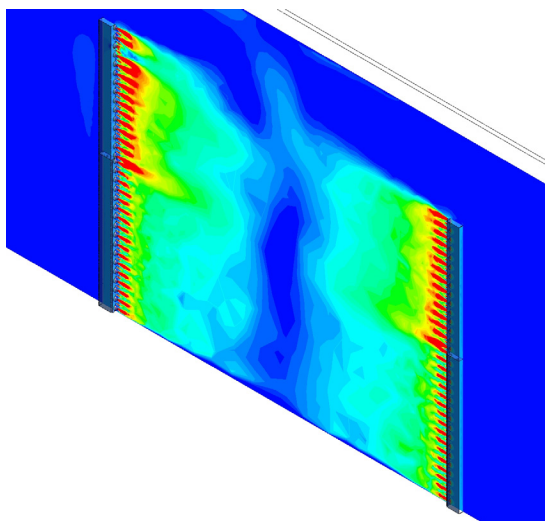
■ OPERATION

The NAC V Air Curtain projects air through conical nozzles in a vertical position, creating a continuous thermal barrier that covers the full height of the door without obstructing the work area.

They operate without integrated heating, consume little electricity, and can reduce heat exchange through infiltration by up to 90%, all while maintaining excellent indoor comfort.



Smoke Test with NAC V



Temperature and velocity profile from CFD simulations
- NAC V Air Curtain
- Door size: 12.2 m (40 ft) x 9.1 m (30 ft)



**THE PERFECT AIR CURTAIN
FOR YOUR LOADING DOCK DOORS**

nac^s



Steel Assembly

Integrated LED Light

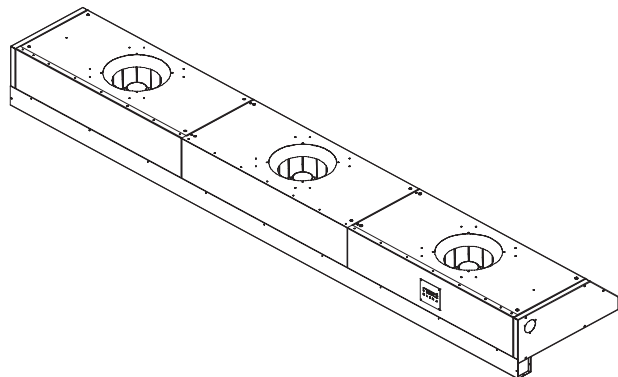
High-Powered Fan

■ INTRODUCTION

The NAC S Air Curtain, designed by NAD Klima®, acts as a thermal barrier that helps retain indoor air, thereby reducing energy loss and enhancing comfort.

It is ideal for industries, warehouses, and distribution centers, and can be installed horizontally or vertically depending on the configuration of the garage doors.

It is ideal for industries and warehouses, for smaller doors such as loading dock doors.

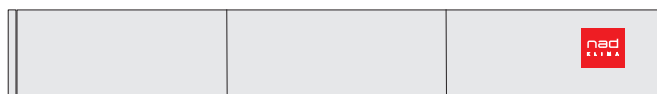


■ CONFIGURATION

Specifically designed for loading doors 2.4 m (8 ft) wide by 2.4 m to 2.7 m (8 to 9 ft) high.

The NAC S Air Curtain is constructed with steel panels featuring roller slots equipped with nozzles, and it includes integrated LED lights.

The low-noise fans are integrated directly into the steel panels. They recirculate ambient air and propel it through the nozzle rollers.



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NAC Air Curtains are designed to improve comfort and energy efficiency in a wide variety of environments.

They are suitable for both new and existing buildings.

■ BENEFITS

- Prevents the loss of cold or warm air
- Promotes a more comfortable working environment
- Enables substantial energy savings
- Controls the infiltration of dust and insects
- Easy to install thanks to its lightweight and compact design
- Low electricity consumption
- Prevents ice formation near doors
- integrated LED light

■ APPLICATIONS

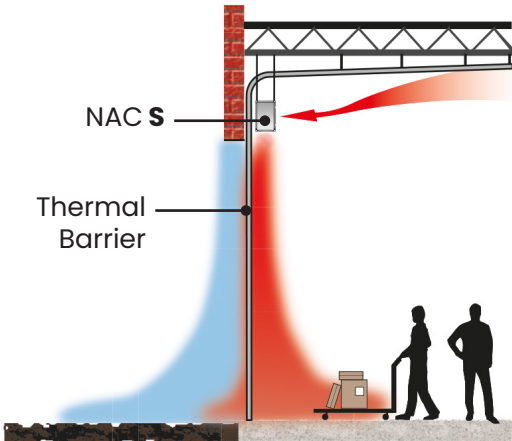
- New or existing buildings
- Distribution centers
- Loading docks
- Warehouses
- Industries
- Refrigerated warehouses
- Transportation companies
- Exhibition centers
- Any building with a garage door



■ OPERATION

The NAC S Air Curtain projects air through nozzle rollers, creating a continuous thermal barrier that covers the full height of the door without obstructing the work area.

Operating without integrated heating, it offers low energy consumption and can reduce heat exchange through infiltration by up to 90%, all while maintaining excellent indoor comfort.



Air Projected Through Nozzles



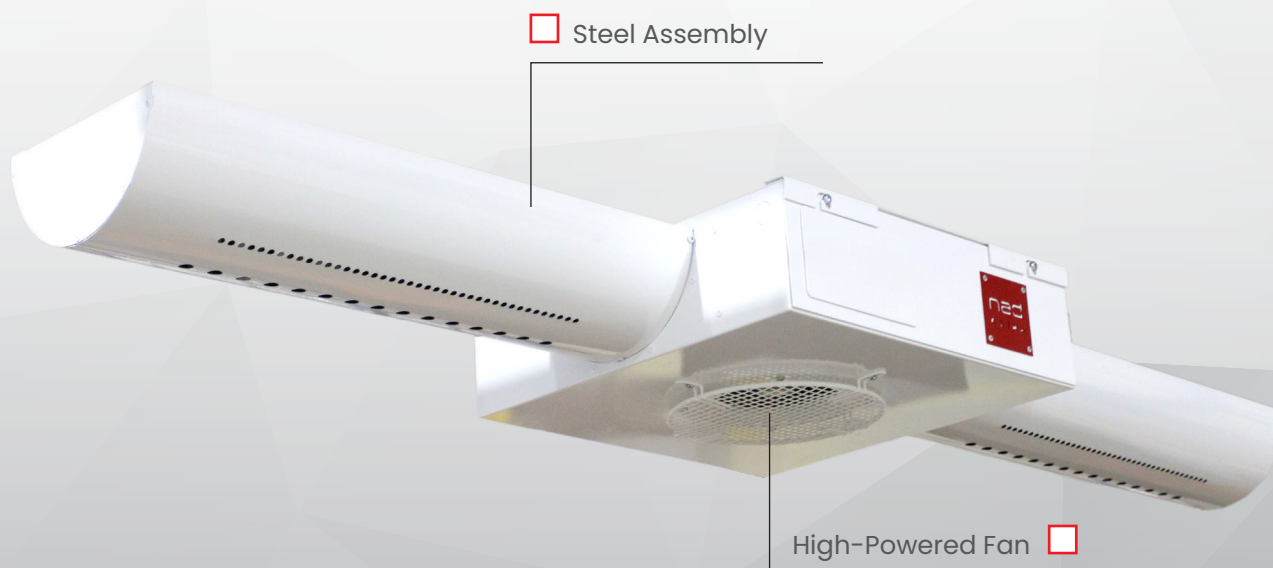
Smoke Test with NAC S



**ENERGY-EFFICIENT THERMAL
COMFORT FOR THE HOME**

nac^R

nac^R

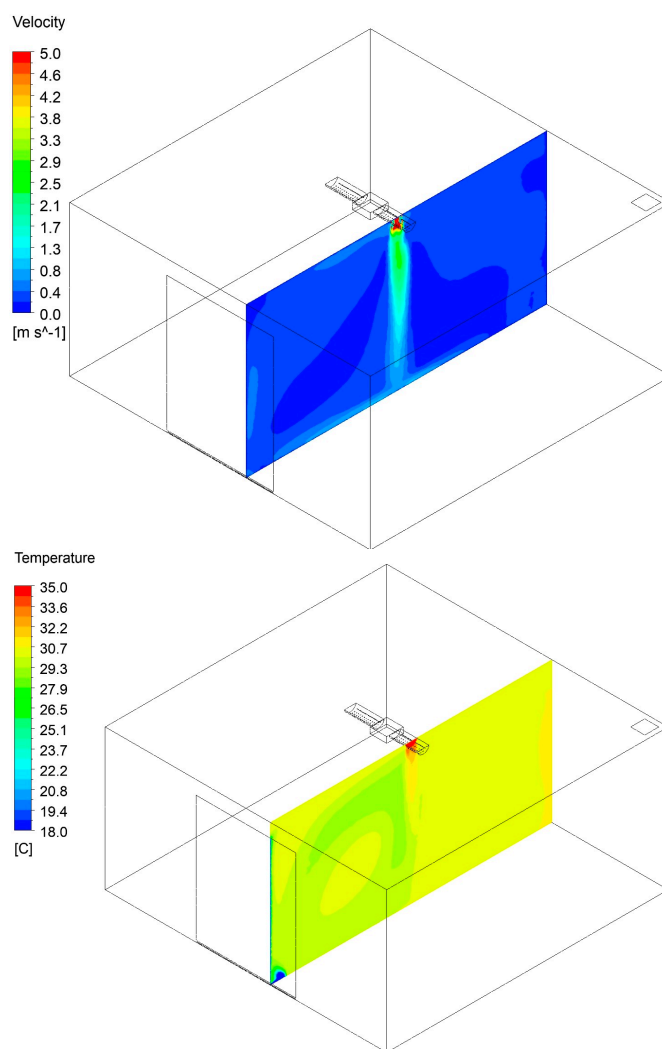


■ INTRODUCTION

Designed for garages and commercial entrances, the NAD Klima® NAC R creates optimal air circulation, maintaining a uniform temperature throughout the space.

Unlike traditional systems where cold air stays at floor level, the NAC R pushes warm air downward, allowing heat to distribute evenly throughout the space. The result is a comfortable environment from floor to ceiling.

The NAC-R is perfectly suited for heating building entrance vestibules. Made of steel, it features a simplified installation that allows it to be easily integrated into any type of ceiling.



Product Specifications

nac

nac^H Air Curtain

nac^V Air Curtain

nac^S Air Curtain

nac^R High induction Fan heater



nac^H Selection Table

NAC H – Horizontal Air Curtain with Vertical Jet

Door Width – ft (m)		10 (3.05)			12 (3.66)			Height ft (m)
Airflow	(cfm)	3600			5200			8' to 10' (2.4 - 3.0)
Speeds: nozzle / floor outlets	(ppm)	6500 / 610			7700 / 770			
Number of fans	(-)		3			4		
Motor voltage	(V)	115	230	575	115	230	575	
Number of phases	(~)	1	1	3	1	1	3	
Power per motor	(kW)	1.1	1.1	1.1	1.1	1.1	1.1	
Current per motor	(A)	9.4	4.7	1.28	9.4	4.7	1.28	
Total current	(A)	28.2	14.1	3.84	37.6	18.8	5.12	
Weight	(kg/lb)	130 / 290			140 / 310			

Door Width – ft (m)		12 (3.66)		14 (4.3)		16 (4.9)		18 (5.5)		20 (6.1)*		22 (6.7)*		24 (7.3)*		Height ft (m) 12 (3.7)
Airflow	(cfm)	5200		6300		6700		7000		7400		7900		8900		
Speeds: nozzle / floor outlets	(ppm)	7700 / 680		8200 / 750		8800 / 790		8600 / 760		8600 / 760		8500 / 750		9300 / 750		
Number of fans	(-)	4		5		6		6		7		8		10		
Motor voltage	(V)	230	575	230	575	230	575	230	575	230	575	230	575	230	575	
Number of phases	(~)	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
Power per motor	(kW)	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
Current per motor	(A)	2.8	1.28	2.8	1.28	2.8	1.28	2.8	1.28	2.8	1.28	2.8	1.28	2.8	1.28	
Total current	(A)	11.2	5.12	14	6.4	16.8	7.68	16.8	7.68	19.6	8.96	22.4	10.24	28	12.8	
Weight	(kg/lb)	140 / 310		165 / 370		190 / 430		240 / 535		270 / 600		300 / 670		400 / 800		

Door Width – ft (m)		12 (3.66)		14 (4.3)		16 (4.9)		18 (5.5)		20 (6.1)*		22 (6.7)*		24 (7.3)*		Height ft (m)
Airflow	(cfm)	5200		6300		6700		7000		7400		7900		8900		14 (4.3)
Speeds: nozzle / floor outlets	(ppm)	7700 / 590		8200 / 630		8800 / 630		8600 / 630		8600 / 630		8500 / 650		9300 / 650		
Number of fans	(-)	4		5		6		6		7		8		10		
Motor voltage	(V)	230	575	230	575	230	575	230	575	230	575	230	575	230	575	
Number of phases	(~)	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
Power per motor	(kW)	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
Current per motor	(A)	2.8	1.28	2.8	1.28	2.8	1.28	2.8	1.28	2.8	1.28	2.8	1.28	2.8	1.28	
Total current	(A)	11.2	5.1	14	6.4	16.8	7.7	16.8	7.68	19.6	8.96	22.4	10.24	28	12.8	
Weight	(kg/lb)	140 / 310		165 / 370		190 / 430		240 / 535		270 / 600		300 / 670		400 / 890		

Door Width – ft (m)		12 (3.66)	14 (4.3)	16 (4.9)	18 (5.5)	20 (6.1)*	22 (6.7)*	24 (7.3)*	Height ft (m)
Airflow	(cfm)	5800	6300	6700	7900	8200	8500	8900	16 (4.9)
Speeds: nozzle / floor outlets	(ppm)	8200 / 650	8200 / 530	8800 / 530	9000 / 660	9100 / 670	9300 / 580	9300 / 530	
Number of fans	(-)	5	5	6	8	8	9	10	
Motor voltage	(V)	230	575	230	575	230	575	230	
Number of phases	(~)	3	3	3	3	3	3	3	
Power per motor	(kW)	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
Current per motor	(A)	2.8	1.28	2.8	1.28	2.8	1.28	2.8	
Total current	(A)	14	6.4	14	6.4	16.8	7.68	22.4	
Weight	(kg/lb)	155 / 345	165 / 370	190 / 430	270 / 600	285 / 635	330 / 735	360 / 800	
Door Width – ft (m)		12 (3.66)	14 (4.3)	16 (4.9)	18 (5.5)	20 (6.1)*	22 (6.7)*	24 (7.3)*	Height ft (m)
Airflow	(cfm)	6200	6800	7500	7900	8200	9000	10500	18 (5.5)
Speeds: nozzle / floor outlets	(ppm)	9300 / 630	9000 / 620	9200 / 600	9000 / 530	9100 / 550	9600 / 600	11000 / 670	
Number of fans	(-)	6	6	8	8	8	10	12	
Motor voltage	(V)	230	575	230	575	230	575	230	
Number of phases	(~)	3	3	3	3	3	3	3	
Power per motor	(kW)	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
Current per motor	(A)	2.8	1.28	2.8	1.28	2.8	1.28	2.8	
Total current	(A)	16.8	7.68	16.8	7.68	22.4	10.24	28	
Weight	(kg/lb)	170 / 380	185 / 410	250 / 555	270 / 600	285 / 635	350 / 780	400 / 900	
Door Width – ft (m)		12 (3.66)	14 (4.3)	16 (4.9)	18 (5.5)	20 (6.1)*	22 (6.7)*	24 (7.3)*	Height ft (m)
Airflow	(cfm)	6200	7300	7500	8300	9200	9700	10500	20 (6.1)
Speeds: nozzle / floor outlets	(ppm)	9300 / 510	9400 / 500	9200 / 500	9400 / 500	11000 / 520	10800 / 500	11000 / 510	
Number of fans	(-)	6	7	8	9	10	11	12	
Motor voltage	(V)	230	575	230	575	230	575	230	
Number of phases	(~)	3	3	3	3	3	3	3	
Power per motor	(kW)	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
Current per motor	(A)	2.8	1.28	2.8	1.28	2.8	1.28	2.8	
Total current	(A)	16.8	7.68	19.6	8.96	22.4	10.24	25.2	
Weight	(kg/lb)	170 / 380	200 / 450	250 / 555	300 / 670	330 / 735	370 / 825	400 / 900	

Results obtained in the laboratory and through CFD simulations under normal operating conditions.

For door widths over 7.3 m (24 ft) and heights under 6.1 m (20 ft), the air curtain is supplied in two NAC H modules and requires assembly by the installer. Please refer to the installation guide.

NAC V : Installation of the Vertical Air Curtain with Horizontal Jet

For a vertical air curtain with a horizontal jet, data will be provided upon request only.

nac^S Selection Table

Door Width – ft (m)	8 (2.4)		Height ft (m)
Airflow	2700	2700	8 to 9 (2.4 to 2.8)
Speeds: nozzle / floor outlets	5400	450	
Number of fans	3	3	
Motor voltage	115	230	
Number of phases	1	1	
Power per motor	0.51	0.43	
Current per motor	4.3	1.88	
Total current	12.9	5.64	
Weight	63 / 140	63 / 140	

nac^R Selection Table

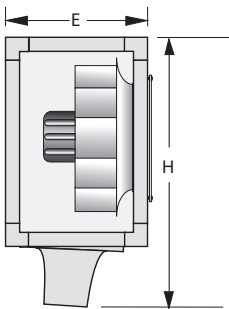
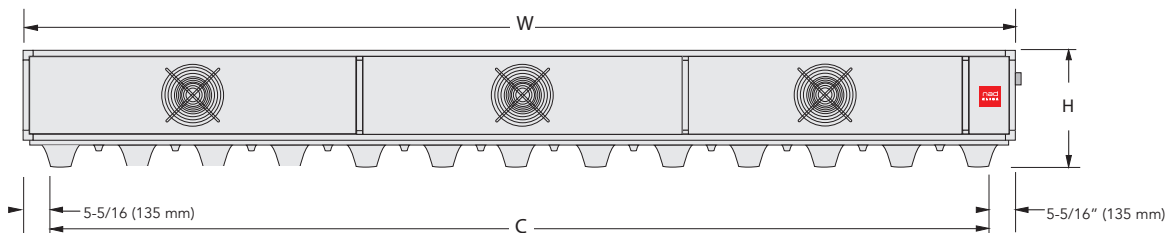
Voltage	240 V / 600 V	240 V / 600 V
Current	17.4 A / 3.9 A	21.7 A / 4.8 A
Power	4000 W*	5000 W*
Weight	20 lbs / 9 kg	20 lbs / 9 kg

* Other power ratings can be provided upon request.

nac^H / nac^V Dimensions and Installation

NAC H / NAC V - Horizontal with Vertical Air Jet

Door Width (C) – ft (m)	10 (3)	12 (3.7)	14 (4.3)	16 (5)	18 (5.5)	20 (6.1)	22 (6.7)	24 (7.3)	H	21 3/4" (553 mm)
Curtain Width (W) – ft (m)	10'-7" (3.23)	12'-7" (3.84)	14'-7" (4.45)	16'-7" (5.05)	18'-7" (5.66)	18'-9.7" (6.35)	18'-8.3" (6.92)	18'-6.9" (7.49)	E	11 7/8" (301 mm)



■ NAC H - HORIZONTAL INSTALLATION

The NAC S air curtain is installed beneath the door rails, as shown in Figures A and B. Its installation must not obstruct the opening or closing of the door.

The air curtain must be installed so that the nozzles are aligned with the door opening (Figures A, B, and C).

If the required clearance is insufficient, the air curtain must be installed at a height lower than the door opening.

The door must be adjusted so that it does not open above the nozzles (Figure C). An assessment should therefore be carried out based on the specific needs.

The NAC air curtain is suspended at the four corners using threaded rods (not supplied), placed outside the door frame. 3/8 in (9.5 mm) anchor rivets are provided for this purpose, directly on the air curtain frame.

■ NAC V - VERTICAL INSTALLATION

Modules must be installed on each side of the door. Each module is secured to the floor using the provided base and to the wall using the supplied anchor.

Threaded anchors are provided on the air curtain to ensure proper attachment.

Figure A - Installation Under the Rails

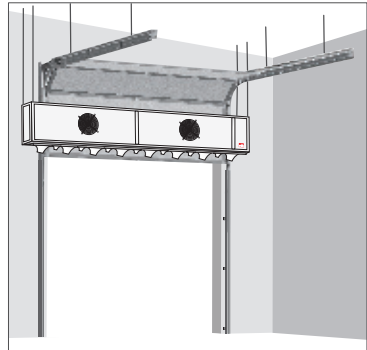


Figure B

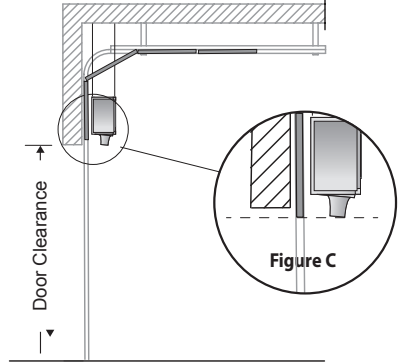


Figure E

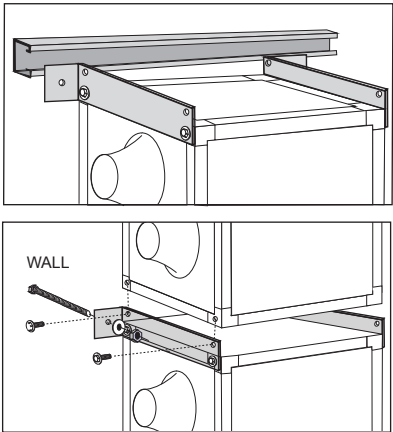
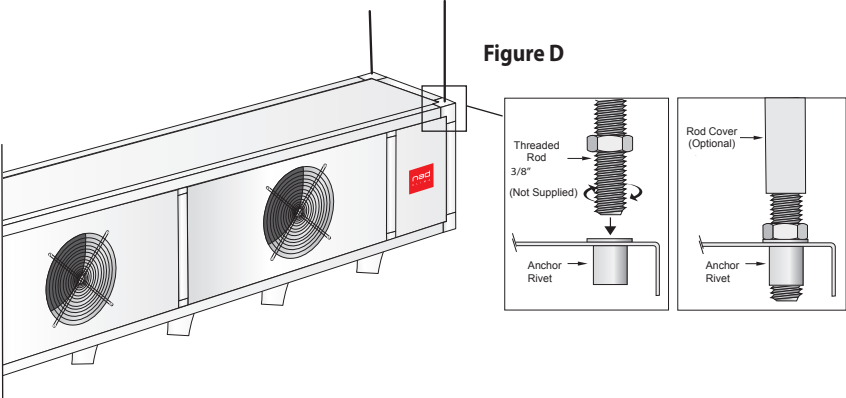
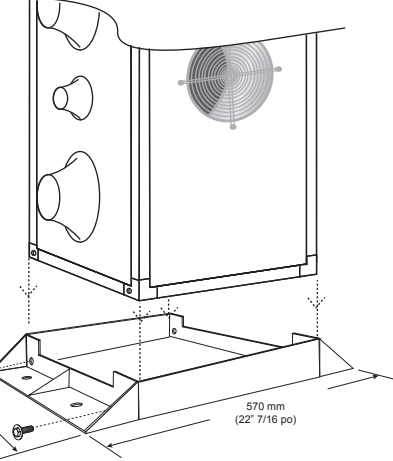


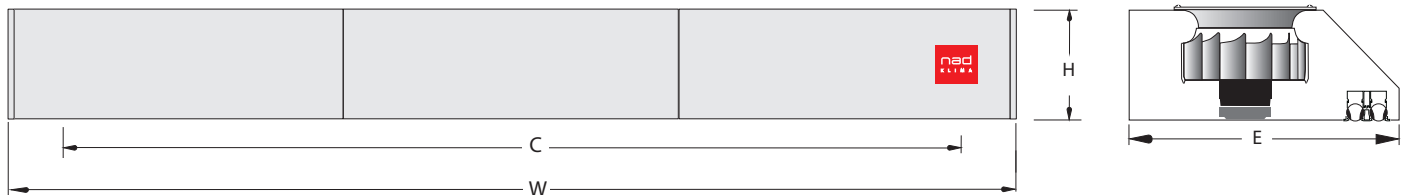
Figure F



nac^S Dimensions and Installation

NAC S - Horizontal with Vertical Air Jet

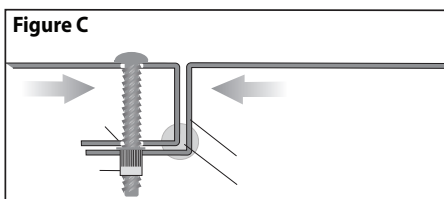
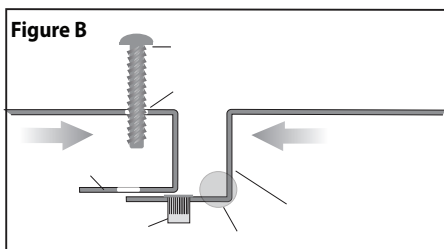
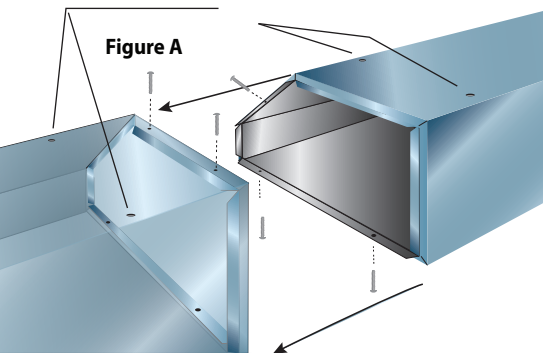
Door Width (C) – ft (m)	8 (2.4)	H	8" 7/32 po (209 mm)
Curtain Width (W) – ft (m)	8.6 (2.62)	E	20" 7/16po (519 mm)



■ NAC S – ASSEMBLY AND DISASSEMBLY

The NAC S is delivered in three factory-assembled sections. The sections are held in place using five (5) screws (Figure A), allowing a section to be easily removed for maintenance.

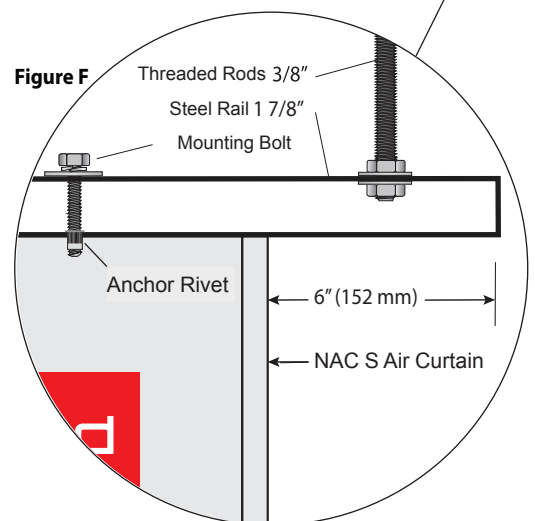
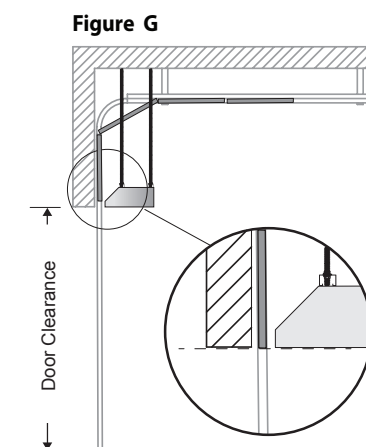
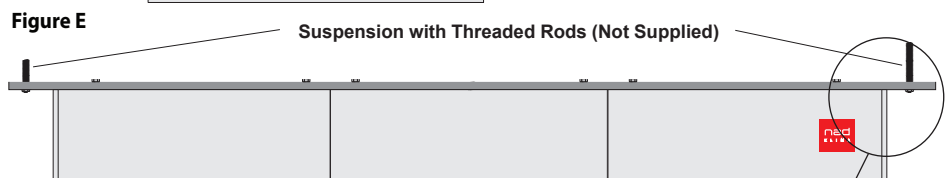
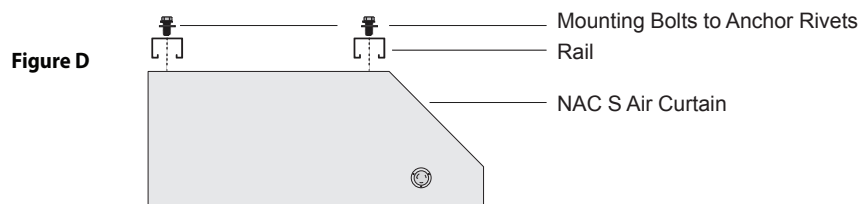
A sealing gasket (silicone), placed in the groove of the outer fold, ensures the air curtain is airtight.



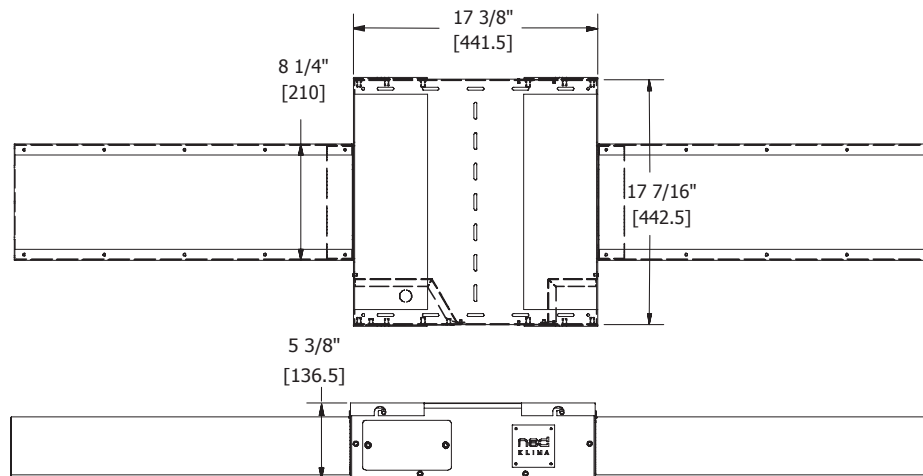
■ NAC S – HORIZONTAL INSTALLATION

To ensure a secure installation, NAC S air curtains are supported and held in place by steel rails. These rails are fastened with 9.5 mm (3/8") bolts at the ends and at the joints of the air curtain modules (Figures D, E, and F).

The air curtain is installed beneath the door rails, and its base must be aligned with the door clearance, as shown in Figure G. Ensure that its installation does not obstruct the opening or closing of the door.



nac^R Dimensions and Installation



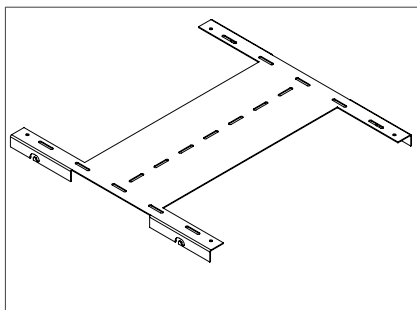
Standard Length 5'-5" [1663]*

■ NAC R – INSTALLATION

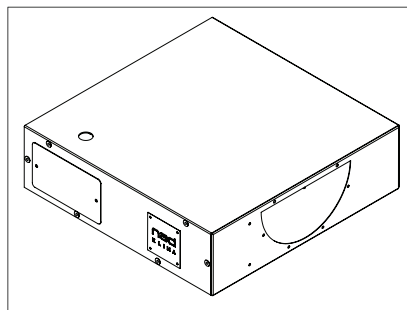
The NAC R is installed in a few steps. Once the support is mounted on the ceiling, the unit of the heater is secured to the support using four screws (supplied). The installation steps are described below:

SUPPLIED ITEMS

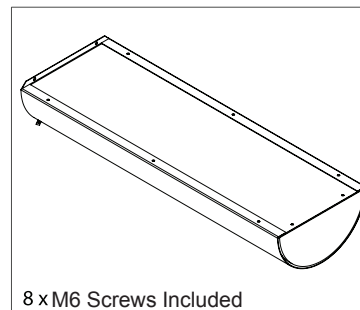
1 x Ceiling Bracket



1x Unit



2 x Perforated Ducts

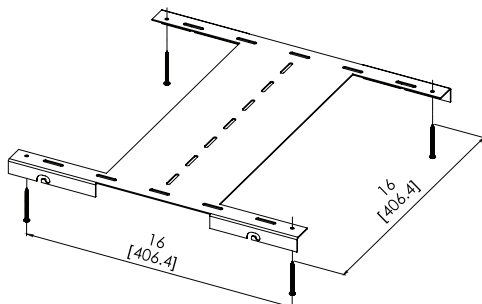


8 x M6 Screws Included

INSTALLATION

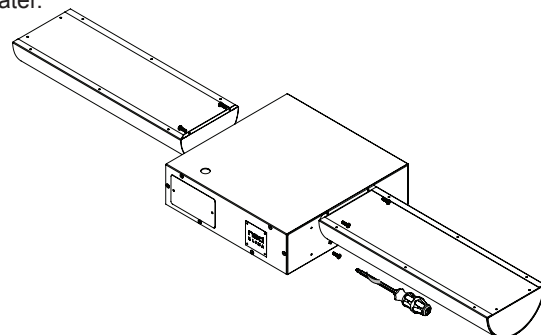
Step 1: Ceiling Bracket Installation

- Secure the bracket to the ceiling using the four screws provided in the assembly.
- It is important to ensure that the ceiling structure is strong enough to support the unit.



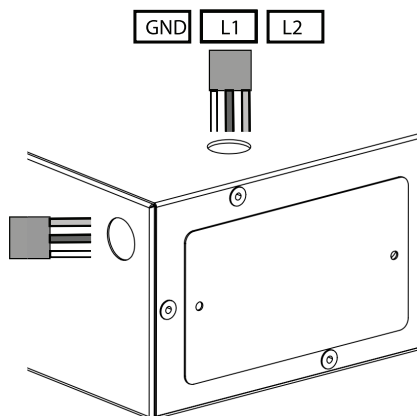
Step 2: Air Heater Assembly

- Assemble the unit and the two perforated ducts using the supplied M6 screws.
- If the model is not equipped with an integrated thermostat, a wall-mounted thermostat must be installed to control the air heater.



Step 3: Securing the heater to the bracket

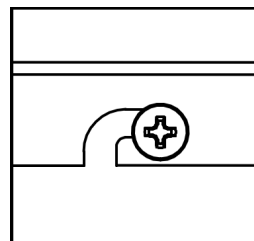
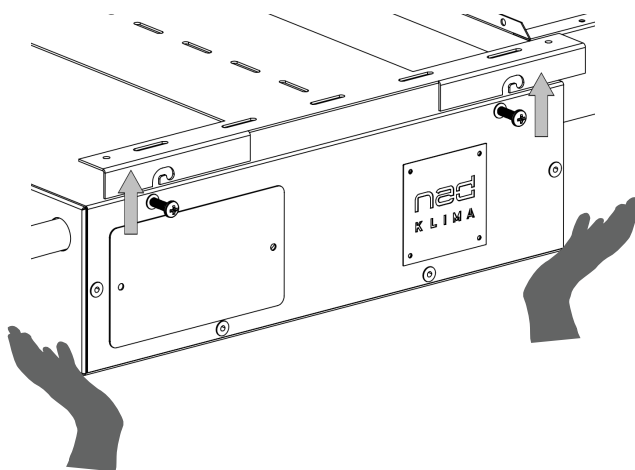
1. Pass the electrical wire through the hole located on the top or side of the air heater, depending on the location of the power cable.



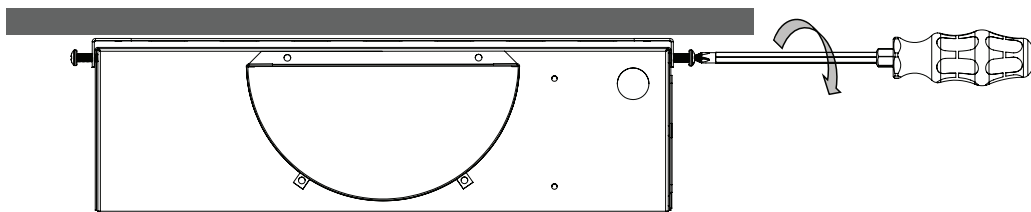
IMPORTANT

Before opening the panel, make sure the power supply is turned off.

2. Hang the unit on the bracket and ensure that the screws are properly aligned with the holes in the bracket.



3. Tighten the screws firmly to ensure the installation is secure.



nac^S / nac^V Control System

■ CONTROL PANEL

- The NAC air curtain is controlled by a control panel. Provided by NAD Klima, this unit features a “MAN – OFF – AUTO” selector.
- In “MAN” (manual) mode, the air curtain operates and stops when switched back to “OFF.”
- In “AUTO” mode, the air curtain is activated by an automatic switch that detects the door opening. An indicator light turns on when the air curtain is in operation. When the door closes, the switch stops the air curtain.
- The electrical connection between the air curtain and the control panel is made using a Heavy Duty Multipole Connector.

■ AUTOMATIC CONTROL SYSTEM

The automatic control system is designed for near-universal installation on most types of doors. It consists of two components: the switch and the magnetic trigger.

Automatic Control System

- Ensure that no objects interfere with the operation of the system.
- Place the magnet where it cannot be used as a handle to open or close the door.

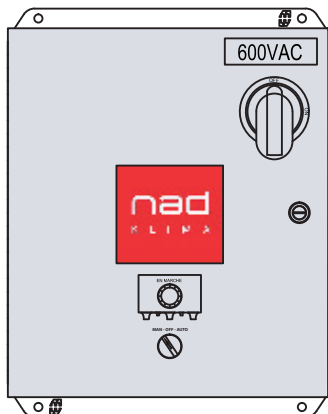
Install the Switch

A) Install the switch on the wall above the door. It is important to choose a location where nothing can obstruct its proper operation.

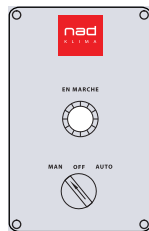
Install the magnetic trigger

B) Install the magnet so that it is at a maximum distance of 75 mm (3 in) from the switch. Secure it firmly to the door using the two screws provided. The magnet can be installed in various ways on the door.

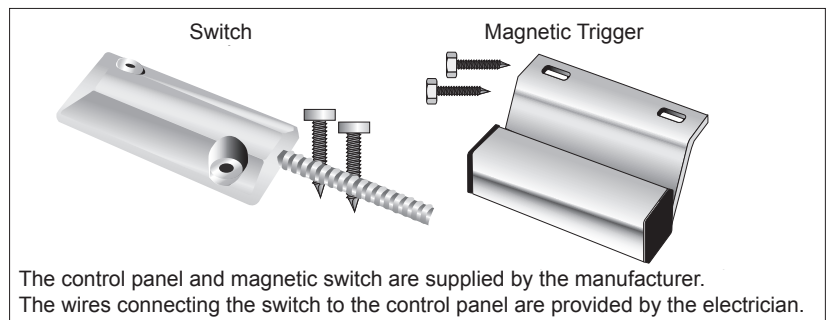
C) Connect the switch wires to the control panel wiring and ensure that the switch operates correctly.



Control Panel for NAC H / NAC V

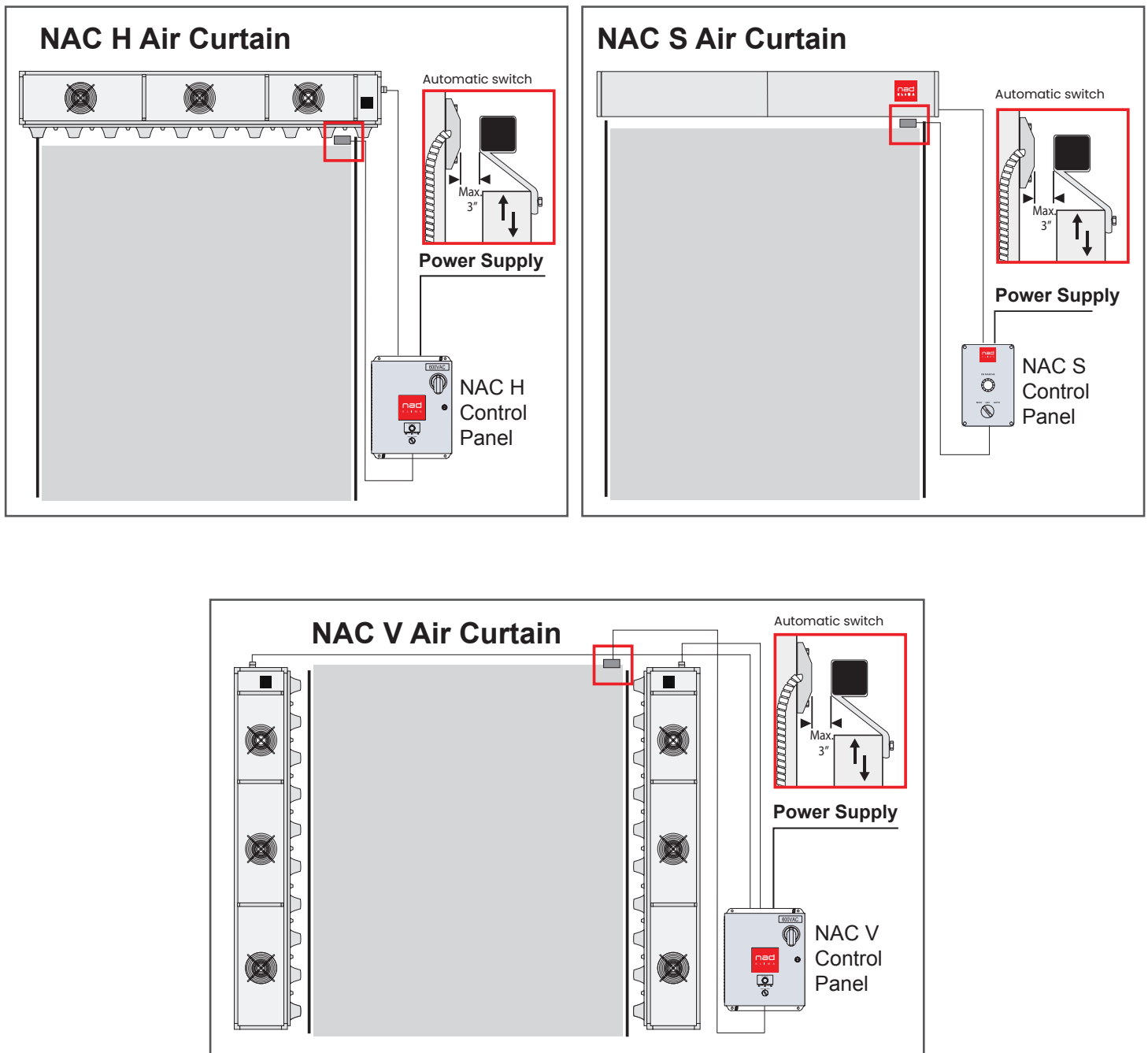


Control Panel for NAC S



Power
connector
socket

Wiring diagram from control panels to nac units



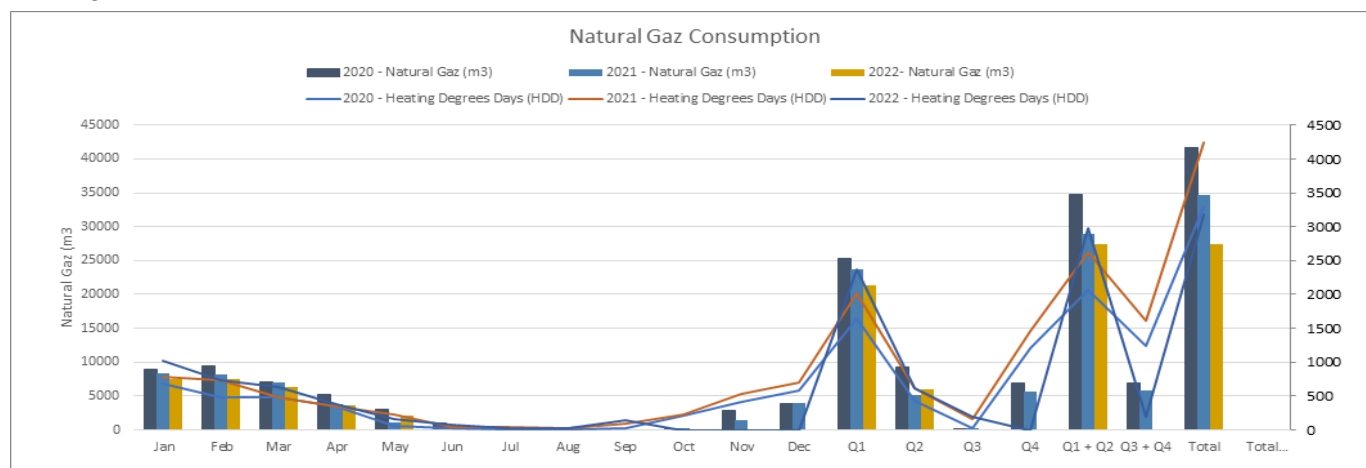
nac Energy Saving

Case Study / Énergir Calculator on a NAC H

In partnership with the University of Sherbrooke, a numerical and experimental study of NAC H units was conducted in 2021. The objective was to evaluate the performance of NAC units in a real-world setting.

The study was carried out on a garage door measuring 12 ft wide by 14 ft high, above which an NAC H-12-14 air curtain was installed.

During the study, temperature and airflow velocity measurements were recorded. These measurements demonstrated the effectiveness of the NAC, which was subsequently confirmed. Gas consumption data, the warehouse's primary heating source, were also collected.



The following table provides an example of the NAC's performance.

Year	NAC Installed	Degree Days (°C)	Gas Consumption (m3)	Gas Savings (m3) / %age
2020	Non	3500	41000	NA
2022	Oui	3000	27000	14000 / 34 %

Although the months of February 2021 and 2022 were colder than February 2020, the reduction in gas consumption proved significant. This demonstrated that using NAC-H units results in substantial energy savings, reaching nearly 34%.

Following this study, Énergir offers a subsidy for the installation of NAC units under the Studies and Implementation component of its energy efficiency program. A calculator has also been developed to estimate the payback period (PBP) as well as the subsidy amount.

Here is an example calculation: For this project, the NAC has a PBP of 2.2 years, and Énergir provides a subsidy covering 30% of the total project cost.

The table on the following page presents a numerical summary of the main project data.

nac Energy Saving

Follow-up, Case Study / Énergir Calculator on an NAC H

1. Data	
Province: Quebec	Estrie Region
Outdoor winter temperature	-15°C (5° F)
Indoor winter temperature	22°C (72° F)
2. Building Characteristics	
Door width	3.7 m (12 ft)
Door height	4.3 m (14 ft)
Annual natural gas consumption	20000 m ³
Natural gas cost	0.44 \$/m ³
3. Air Curtain Characteristics	
Number of fans	4
Voltage	575 VAC
Total air flow	5200 cfm
Air curtain cost	\$10,000
Operating hours per day	2 hours
Days per week	5 days
Weeks per year	28 weeks
Total hours of opening per year	225 h/year
4. Results	
Consumption without air curtain	20000 m ³
Consumption with air curtain *	9693 m ³
Annual quantity saved	10,307 m ³
5. Annual Savings	
Annual savings	\$4,535
Payback Period (PBP) before subsidy	2.2 years
Énergir grant	\$3,092
Payback Period (PBP) after subsidy	1.5 years
Grant / air curtain cost	30%

* Results based on the calculator developed by Énergir.



**CHOOSE A NAC AIR CURTAIN
AND RECEIVE UP TO**

50%
GRANT

energir
CERTIFIED NATURAL GAS PARTNER

nac Specifications

■ DESCRIPTION AND PHYSICAL CHARACTERISTICS

NAC H, NAC V

- Air curtains must be constructed from aluminum and satin-finished steel.
- Nozzles must be slightly angled toward the door. The angle and configuration of the nozzles must be adapted to the door dimensions.
- Fans must be available in 115 or 230 V single-phase, and 230 or 575 V three-phase.
- Air curtains must have an indicator light confirming operation.
- The air curtain must be powder-coated with "TGIC-free polyester" and have a smooth, easy-to-clean surface. Color, according to the RAL chart, is chosen by the architect or client.
- Vertical or horizontal installation must be available.

NAC S

- Air curtains must be constructed from satin-finished steel.
- Integrated nozzle rollers must be oriented toward the door. Orientation and configuration must be adapted to the door dimensions.
- Fans must be available in 115 V single-phase.
- The air curtain must have an indicator light confirming operation of the three fans.
- The air curtain must be powder-coated in white "TGIC-free polyester" with a smooth, easy-to-clean surface. Standard color is white (RAL9003). Other RAL colors, chosen by the architect or client, are optional.

■ PERFORMANCE

- Air curtains must create a thermal barrier enabling energy savings of up to 90% on air infiltration.
- Air jets must reach the floor across the full width of the curtain at air speeds above 500 ft/min for NAC H / V and 450 ft/min for NAC S.
- Fans must have an ingress protection rating (IP standard) against foreign objects (minimum 5) and water resistance (minimum 4) – IP54.
- Each fan must include internal thermal protection and overload protection.

■ CONTROL

- Air curtains must be equipped with an automatic magnetic trigger system (door-opening activation) provided by the manufacturer.
- The control panel must have a switch to select manual, automatic, or off mode.
- Optionally, the air curtain can be available with a speed variator.

■ CERTIFICATION

Air curtains must be approved according to CSA C22.2 No. 113 Fans and Ventilators or ANSI/UL – UL 507 Standard for Safety Electric Fans.

Required Quality: NAD Klima NAC H Air Curtain

Required Quality: NAD Klima NAC V Air Curtain

Required Quality: NAD Klima NAC S Air Curtain

Required Quality: NAD Klima NAC R Air Heater

NAC R

- Air heaters must be manufactured from satin-finished steel.
- Air outlet ducts must be perforated.
- Fan voltage must be 230 V single-phase or 600 V three-phase.
- The finish of the air heaters must be powder-coated with "TGIC-free polyester," providing a smooth, easy-to-clean surface. Color, according to the RAL chart, is chosen by the architect or client.

Codification nac^H / nac^V / nac^S

NAC	Product
H = Horizontal air curtain with vertical air jet for doors 10 ft (3 m) and high V = Vertical air curtain with horizontal air jet for doors 10 ft (3 m) and higher S = Horizontal air curtain for 8 ft wide doors (loading doors)	Installation
08 (2.4), 09 (2.75), 10 (3), 12 (3.66), 14 (4.3), 16 (5), 18 (5.5), 20* (6), 22* (6.7), 24* (7.3) *two modules required	Installation Width, ft (m)
08 (2.4), 09 (2.75), 10 (3), 12 (3.66), 14 (4.3), 16 (5), 18 (5.5), 20* (6), 22* (6.7), 24* (7.3), 26* (7.9), 28* (8.5), 30* (9.1) *two or more modules required in vertical installation	Door Height, ft (m)
1151 = 115/120 1~ 2301 = 208/230 1~ (special order for 8 ft wide doors) 2303 = 208/230 3~ (not available for 8 ft wide doors) 6003 = 575/600 3~ (not available for 8 ft wide doors)	Motor Voltage
X = Without variable speed control D = With variable speed control and rheostat	Airflow Control
9003 = White ____ = RAL color (specify RAL number)	Color
X = Without support S = With support (for vertical air curtain installation)	Vertical Installation
NAC - S - 08 - 08 - 1151 - X - 9003 - X	Example

Codification nac^R

NACR0521W : Ceiling-mounted unit heater, 5 kW, 240V/1ph, without thermostat
NACR0521TW : Ceiling-mounted unit heater, 5 kW, 240V/1ph, with built-in thermostat
NACR0563C24W : Ceiling-mounted unit heater, 5 kW, 600V/3ph, with 24V contactor
NACR0563CTW : Ceiling-mounted unit heater, 5 kW, 600V/3ph, with 24V contactor and built-in thermostat
NACR0421W : Ceiling-mounted unit heater, 4 kW, 240V/1ph, without thermostat

*Available in color: WHITE (W) or BLACK (B)



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IS OUR
ELEMENT*



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