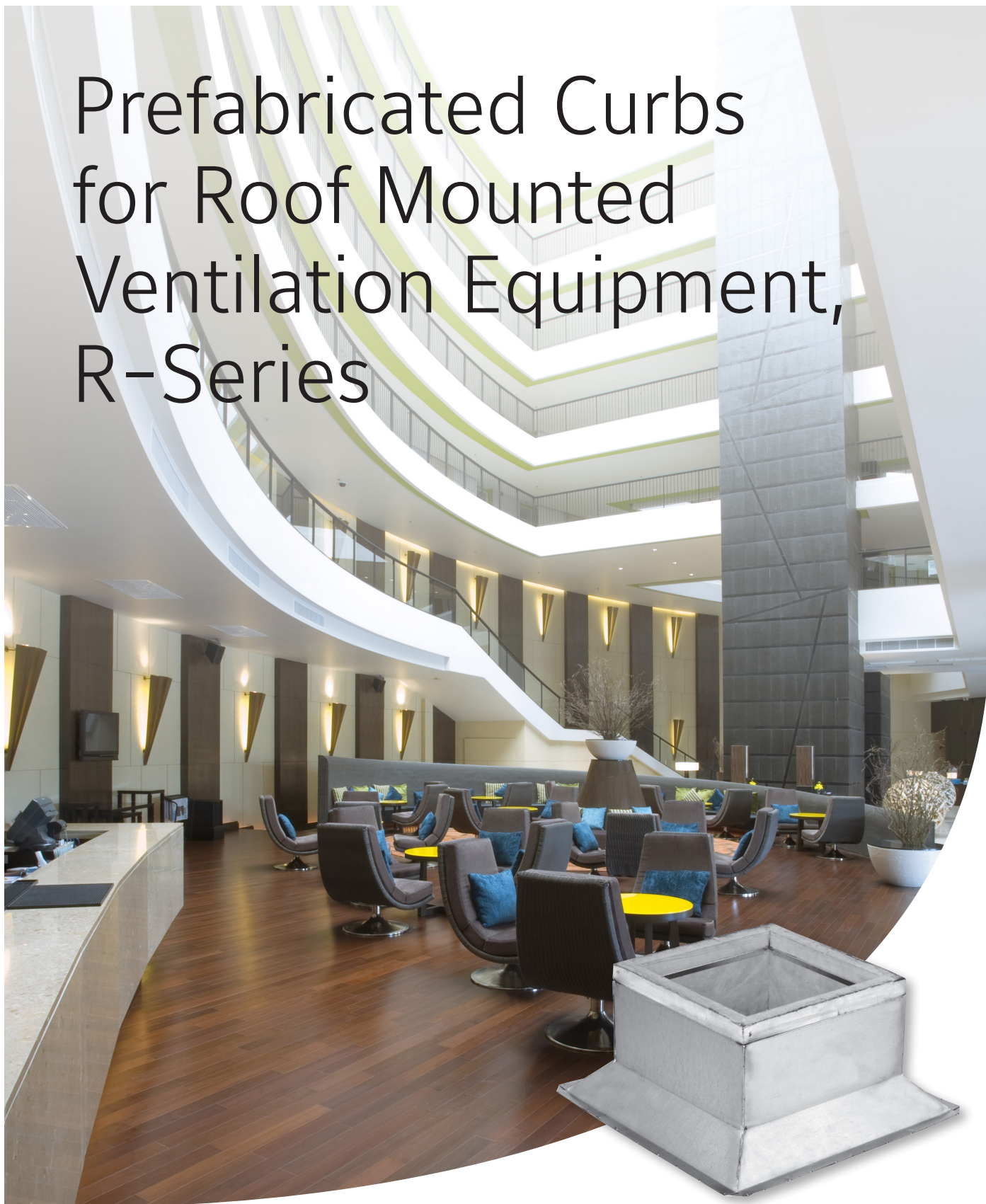


Prefabricated Curbs for Roof Mounted Ventilation Equipment, R-Series



 **YORK**[®]

BY JOHNSON CONTROLS

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BY JOHNSON CONTROLS

INTRODUCTION

Series of Prefabricated Roof Curbs

Eliminate guessing and potential problems by matching YORK® by Johnson Controls fans and vents with YORK® by Johnson Controls roof curbs.

- Ensure a tightly sealed roof through stable design and integral flashing.
- Factory-built curbs provide a consistent termination of the duct system.
- YORK® by Johnson Controls can coordinate orders for shipment or release of the curb portion early to allow close-in of the roof.
- Various curb heights are available.
- Standard configurations are canted, cantless, raised cant, or self-flashing curb designs.
- Sturdy wood-nailers are standard (except on SF curbs) and provide an ideal surface for positive mechanical fastening of YORK® by Johnson Controls fan or vent and roofing paper.
- Heavy 18 gauge galvanized steel or all aluminum construction is available.
- Features liquid tight, continuously-welded corner seams.
- Rigid, 1 ½" thick, 3 lb. glass fiber insulation attenuates sound and eliminates condensation.
- Features a wide range of special construction and options that include ventilated curbs, full metal liners, burglar bars, gasketing and more.



Standard Curb Construction

The UNIBEAM is the most economical prefabricated curb. Costs are similar or less than field-built wood or concrete curbs. UNIBEAMS are fabricated of galvanized steel or aluminum and incorporate fully welded seams.

Three configurations are available:

1. A cant strip built-in to facilitate placement of roofing paper or membranes for non-insulated roof decks.
2. A raised cant for decks with rigid insulation.
3. A straight-wall for decks with lightweight fill, single-ply roofing or tapered insulation.

All UNIBEAMS come with a wood nailer to facilitate the securing of roofing felts and the mounting of the fan or ventilator. 1 1/2" thick, rigid insulation is standard to provide thermal protection and sound attenuation.

The SF is a "self-flashing" prefabricated curb. A generous 3" curb fastening flange is provided to tie the curb into the roof deck. This design simplifies installation by eliminating the need for securing roofing papers up and onto the side of the curb wall. Roofing materials need only cover the flange. Accordingly, a wood nailer is not required but is available as an option. Closed-cell neoprene rubber gasketing is standard around the top of the curb. SF curbs are fully welded and available in galvanized steel or aluminum. 1 1/2" thick, rigid insulation is standard providing thermal protection and sound deadening.

Special Curbs

YORK® by Johnson Controls offers a variety of curbs and exhaust fans for use as a major component of the ventilation systems for commercial and institutional cooking equipment. Designs must frequently adhere to publication NFPA-96 (check local and state municipal codes). NFPA-96 requires that duct work extend a minimum of 18" above the roof surface. Furthermore, if duct work terminates into the base of an upwards discharge exhaust fan, there must be at least 40" of clearance between the exhaust fan discharge and the roof surface. YORK® by Johnson Controls can supply curb heights and exhaust fans which conform to NFPA-96.

In addition, some building codes require the use of ventilated mounting curbs or ventilated pedestals to assure clearances are maintained between hot ducts and combustible building materials. These devices, available in different heights, provide an approved arrangement for connecting the range hood and duct work to the roof fan. The use of a ventilated curb or ventilated pedestal permits the duct to pass through the roof opening and fasten to the curb without the hot exhaust duct contacting other parts of the building or roof members. Flanged duct sections can be inserted through the curb or pedestal from the top side for easy installation. Insulation is not provided on ventilated curbs. The ventilated curb is available in galvanized steel with an 18" height. Specify the UNIBEAM VENTILATED CURB or VENTILATED PEDESTAL.

FEATURES, BENEFITS, & ACCESSORIES

Sound Attenuators

Specifications often call for sound curbs or sound attenuating curbs. Operational sound is a fact of life for any roof fan, regardless of how expertly engineered or finely balanced. Curb mounted insulation helps absorb percentages of this sound. Insulation also mitigates outside noise coming into buildings. All YORK® by Johnson Controls roof curbs attenuate sound. The standard UNIBEAM and SF curb designs provide adequate sound attenuation for most installations. For instances where maximum sound attenuation is essential, a special sound absorbing insulation matrix can be provided in any UNIBEAM curb configuration with a special 16" height. Specify the ULTRA SONOTROL UNIBEAM CURB.

Single & Double Pitch Mounting

All YORK® by Johnson Controls curbs are available for installation on pitched surfaces. Providing the slope of the roof will assure an accurate match between roof curb and roof deck.

Metal Liners

Full metal liners are available for all designs except the ventilated curb. Liners are specified when exhaust air is corrosive or it is desirable or required to separate the insulation from the exhaust or supply air.

Burglar Bars*

When increased building security is a requirement, factory installed steel burglar bars can be supplied. Steel rods can be 1/2", 5/8" or 3/4" diameter. They are welded in place to form 6" on center squares.

* Requires special quote.

Hinged Sub-base (Fan Accessory)

Hinged sub-bases provide easy access to dampers or for inspecting duct work. A rust-resistant hinge arrangement permits unrestricted service and maintenance in the curb well. This base is available for all small and medium sized fans and ventilators.

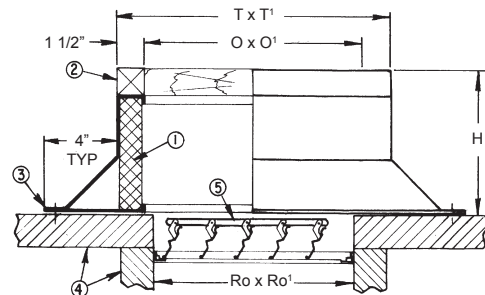
Holding Plate

A mounting pedestal, with removable access panel, provides the most effective means for inspection, cleaning or servicing backdraft dampers. It provides solid ventilator support and a tight seal that does not disturb the roof curbs or flashing.

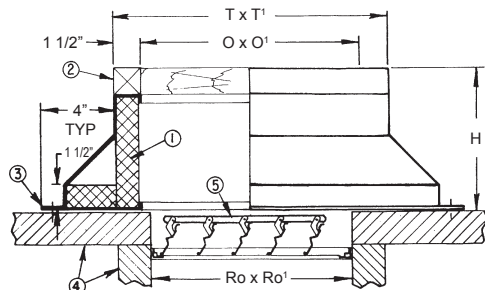
Ro: Roof Opening – For gravity ventilators, the Ro dimension should equal the throat dimension of the ventilator for maximum airflow.

T: Throat – The standard T dimension is 1 1/2" less than the overall dimension of the device to be mounted on the curb to assure that the curb fits into the base of the device. For SF Curb, T dimension is 1/2" less than the overall dimension of the device to be mounted. Inside dimension of curb opening is 3" less than T dimension.

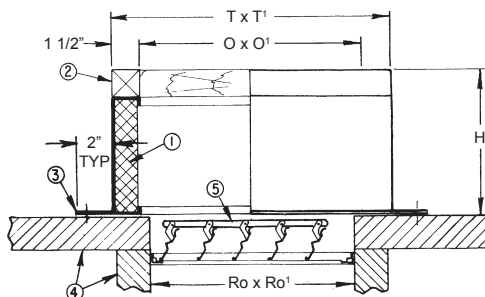
H: Height – Specify height required for each curb. Standard heights are 8", 12", 16" and 18". When motorized dampers are required, the curb height must be 12" minimum.



Unibeam Curb with Cant Strip

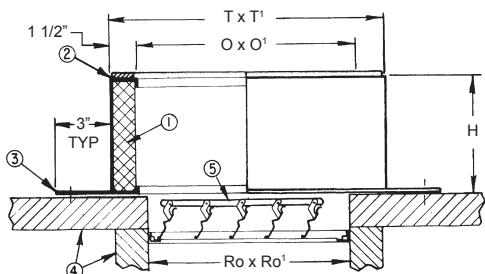


Unibeam Curb with Raised Cant



Unibeam Curb Straight Wall - Cantless

1. 1 1/2" 3lb. Density Rigid fiberglass Insulation
2. Wood Nailer
3. Curb Fastening Flange
4. Roof Structure - By Others
5. Backdraft Damper - Optional



SF Curb - Self-Flashing

1. 1 1/2" 3lb. Density Rigid Fiberglass Insulation
2. Neoprene Rubber Gasket
3. Curb Fastening Flange
4. Roof Structure - By Others
5. Backdraft Damper - Optional

CURB AVAILABILITY

Nominal "T" Dimension		EVD	EVU	CLD	CRDE	MAF
Vented	Unibeams					
13.5	13.5	-	-	-	-	-
14	14	-	-	-	-	-
14.75	14.75	-	-	-	-	-
16	16	-	-	-	-	-
16.75	16.75	-	-	-	-	-
17	17	EVD06R, EVD08S/R, EVD10S/R, EVD11SR/Q, EVD13VSR/Q, EVD06B, EVD08B	EVU08SR, EVU10SR, EVU11VSR/Q, EVU13VSR/Q	CLD06VSR	CRDE06VC	-
19	19	EVD16VSR/Q, EVD11B	EVU16VSR/Q	CLD12VSR	CRDE12VSR	-
19.5	19.5	-	-	-	-	-
20.5	20.5	-	-	-	-	-
21	21	-	-	-	-	MAF3010
23.25	23.25	EVD12B, EVD14B	EVU08B, EVU10B, EVU13B, EVU14B, EVU12BH, EVU13BH	-	-	-
23.5*	23.5*	-	-	-	-	MAF10V*, MAF10R*
24	24	-	-	-	-	-
24.5	24.5	-	-	-	-	-
26	26	-	-	-	-	MAF4012, MAF4015
27	27	EVD16B, EVD18B, EVD18V	EVU16B, EVU18B, EVU18V, EVU18BH	CLD20BC	CRDE20BC	-
29.5	29.5	-	-	-	-	MAF5018
30.5	30.5	-	-	-	-	-
32	32	EVD24B	EVU24B, EVU24BH	CLD24BC	CRDE24BC	-
33.5	33.5	-	-	-	-	-
34.5	34.5	-	-	CLD30BC	CRDE30BC	-
35	35	EVD30B	EVU30B	-	-	-
37	37	-	-	-	-	-
38.5	38.5	-	-	-	-	-
39.5	39.5	-	-	-	-	-
40.5	40.5	-	-	-	-	-
41.5**	41.5**	-	-	-	-	MAF20**, MAF30**
42.5	42.5	-	-	-	-	-
43	43	EVD36B	EVU36B	CLD40BC	CRDE40BC	-
45.5	45.5	-	-	-	-	-
46.5	46.5	-	-	-	-	-
47.5	47.5	-	-	-	-	-
49	49	-	-	-	-	-
51	51	EVDK420	-	-	-	-
51.5	51.5	-	-	-	-	-
52.5	52.5	-	-	-	-	-
55	55	-	-	-	-	-
56.5	56.5	-	-	-	-	MAF6020
57	57	-	MEVU50B	-	-	-
57.5	57.5	EVDJ48	-	-	-	-
58.5	58.5	-	-	-	-	-
62	62	EVDM542	-	-	-	-
63.5	63.5	-	-	-	-	-
64.5	64.5	-	-	-	-	-
65	65	-	-	-	-	-
66	66	-	-	-	-	-
69.5	69.5	-	-	-	-	-
70.5	70.5	-	-	-	-	-
81.5	81.5	-	-	-	-	-
82.5	82.5	-	-	-	-	-
94.5	94.5	-	-	-	-	-

Dimensions are in inches. *MAF10 unit is rectangular. T x T' = 23 1/2 x 17 1/2. **MAF20 and MAF30 units are rectangular. T x T' is 41 1/2 x 18 1/2.

CURB AVAILABILITY

Nominal "T" Dimension		PH-Series		PLD-Series		VU-Series			Weather Cap SVC
Vented	Unibeams	PHRC	PHRF	PLDE	PLDS	VUC, VUF, VUX	VUS	VUZ	
13.50	13.50	-	-	-	-	-	-	-	6
14.00	14.00	-	-	-	-	-	-	-	-
14.75	14.75	-	-	08	-	-	-	-	-
16.00	16.00	-	-	-	-	-	-	-	-
16.75	16.75	-	-	12	-	-	-	-	-
17.00	17.00	-	-	-	-	-	-	-	08, 10
19.00	19.00	-	-	-	-	-	-	-	12
19.50	19.50	-	-	14	14	-	-	-	-
20.50	20.50	-	-	-	-	-	-	-	-
21.00	21.00	-	-	-	-	-	-	-	-
23.25	23.25	-	-	-	-	-	-	-	14, 16
23.50	23.50	-	-	-	-	-	-	-	-
24.00	24.00	-	-	-	-	-	-	-	-
24.50	24.50	-	-	18	18	-	-	-	-
26.00	26.00	-	-	-	-	-	-	-	-
27.00	27.00	-	-	-	-	-	-	-	18, 20
29.50	29.50	-	-	-	-	-	-	-	-
30.50	30.50	-	-	-	-	-	-	-	-
32.00	32.00	-	-	-	-	-	24	-	24
33.50	33.50	24, 24T, 24W1, 24W2	24, 24T, 24W1, 24W2	-	-	-	-	-	-
34.50	34.50	-	-	-	-	24	-	24	-
35.00	35.00	-	-	-	-	-	-	-	30
37.00	37.00	-	-	-	-	-	30	-	-
38.50	38.50	-	-	-	-	-	-	-	-
39.50	39.50	30, 30T1, 30T2, 30W	30, 30T1, 30T2, 30W	-	-	-	-	-	-
40.50	40.50	-	-	-	-	30	-	30	-
41.50	41.50	-	-	-	-	-	-	-	-
42.50	42.50	-	-	-	-	-	-	-	-
43.00	43.00	36, 36W1, 36W2	36, 36W	-	-	-	36	-	36
45.50	45.50	-	-	-	-	-	-	-	-
46.50	46.50	-	-	-	-	36	-	36	-
47.50	47.50	-	-	-	-	-	-	-	-
49.00	49.00	-	-	-	-	-	42	-	-
51.00	51.00	-	-	-	-	-	-	-	42
51.50	51.50	42, 42W1, 42W2	42, 42W1, 42W2	-	-	-	-	-	-
52.50	52.50	-	-	-	-	42	-	42	-
55.00	55.00	-	-	-	-	-	48	-	-
56.50	56.50	-	-	-	-	-	-	-	-
57.00	57.00	-	-	-	-	-	-	-	-
57.50	57.50	48, 48W1, 48W2	48, 48W1, 48W2	-	-	-	-	-	48
58.50	58.50	-	-	-	-	48	-	48	-
62.00	62.00	-	-	-	-	-	-	-	-
63.50	63.50	54	54	-	-	-	-	-	-
64.50	64.50	-	-	-	-	54	54	54	-
65.00	65.00	-	-	-	-	-	-	-	-
66.00	66.00	-	-	-	-	-	-	-	-
69.50	69.50	60	60	-	-	-	-	-	-
70.50	70.50	-	-	-	-	60	60	60	-
81.50	81.50	72	-	-	-	-	-	-	-
82.50	82.50	-	-	-	-	72	-	72	-
94.50	94.50	-	-	-	-	-	-	-	-

Dimensions are in inches.

ENGINEERING SPECIFICATIONS

Model

RFA12 = Self Flashing, Aluminum, Size 12
 RFA18 = Self Flashing, Aluminum, Size 18
 RFG12 = Self Flashing, Galvanized, Size 12
 RFG18 = Self Flashing, Galvanized, Size 18
 RLCA16 = Sonotrol, Cant, Aluminum, Size 16
 RLCG16 = Sonotrol, Cant, Galvanized, Size 16
 RLNA16 = Sonotrol, No Cant, Aluminum, Size 16
 RLNG16 = Sonotrol, No Cant, Galvanized, Size 16
 RLRA16 = Sonotrol, Raised Cant, Aluminum, Size 16
 RLRG16 = Sonotrol, Raised Cant, Galvanized, Size 16
 RCA8 = Cant, Aluminum, Size 8
 RCA12 = Cant, Aluminum, Size 12
 RCA18 = Cant, Aluminum, Size 18
 RCG8 = Cant, Galvanized, Size 8
 RCG12 = Cant, Galvanized, Size 12
 RCG18 = Cant, Galvanized, Size 18
 RNG12 = No Cant, Galvanized, Size 12
 RNG18 = No Cant, Galvanized, Size 18
 RNA12 = No Cant, Aluminum, Size 12
 RNA18 = No Cant, Aluminum, Size 18
 RRA9 = Raised Cant, Aluminum, Size 9
 RRA12 = Raised Cant, Aluminum, Size 12
 RRA18 = Raised Cant, Aluminum, Size 18
 RRG9 = Raised Cant, Galvanized, Size 9
 RRG12 = Raised Cant, Galvanized, Size 12
 RRG18 = Raised Cant, Galvanized, Size 18
 RVA18 = Vented, Aluminum, Size 18
 RVG18 = Vented, Galvanized, Size 18

Outer Curb Dimension 1

See selection software.

Outer Curb Dimension 2

See selection software.

Roof Slope

0 = None
 S = Single Slope
 D = Double Slope

Roof Pitch

See selection software.

Side Slope

0 = None
 S = Short Side
 L = Long Side

Metal Liner

0 = None
 L = Liner

Damper Holding Plate

0 = None
 P = Damper Holding Plate

Neoprene Gasket

0 = None
 G = Gasket

Wooden Nailer

0 = None
 W = Wooden Nailer

At Johnson Controls, we truly understand HVAC systems. In fact, we produce some of the most robust HVAC equipment, parts and controls on the market today. But we don't just sell products. We also offer the expertise, services and strategic insight to make them work within your current system, optimizing your building's performance and lowering your overall costs. If you're interested in revolutionizing your HVAC system, contact an expert today. Otherwise, browse our full-suite of HVAC products.

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