ARCHITECTURAL CONTOUR 10
Hot Water Heated Air Curtain
Data Sheet

Recommended for Mounting Heights to 10' (environmental separation) and 8' (insect control)

STANDARD CONSTRUCTION
- 12 ¾" high x 25 ¾" deep
- 1/2 hp motor(s) - ten speeds
- Factory installed Intelliswitch™ digital controller
- Clear satin anodized aluminum exterior
- Wall or Top Mounting
- High efficiency, low noise, articulating, three vane, Pro-V Nozzle
- Factory installed coil
- Filter (washable)

OPTIONS
- 1/2 hp EC motor(s) - ten speeds
- Custom Color or Stainless
- Rear cover for top mounting to conceal fasteners
- Berner AIR™ (smart controller & app, includes BACnet)

Energy Codes ASHRAE 90.1-2019, IECC 2018, and ASHRAE 189.1 vestibule exception validated by AMCA certification.
Refer to Velocity Projection Chart below for information.

Berner International Corporation certifies that the air curtains shown herein 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. Rated data shown is for base (unheated) units. The AMCA Certified Ratings Seal applies to airflow rate, average outlet velocity, outlet velocity uniformity, velocity projection and power rating at free delivery only.

Model AC10-E-2060W is not licensed to bear the AMCA seal.

2 Year Limited Warranty

Made in USA

indoor use

MODEL	Nozzle Width (in)	Max Vel. at Nozzle (fpm)	Avg. Outlet Vel. (fpm)	Air Volume (cfm)	Outlet Vel. Uniformity	Power Rating (kW)	Motor(s) @ hp	Coil Output (MBH)	Entering / Leaving Water Temp. (°F)	Water Flow (GPM)	Fluid Pressure Drop (FT. WG.)	Air Temp. Rise (°F)	Net Wt. (lbs)
AC10-E-1036W	36.00	3,522	1,916	1,317	80%	0.49	1 @ ½	33.2	180°/163°	4.0	0.5	23°	107
AC10-E-1042W	42.00	3,429	1,709	1,371	82%	0.50	1 @ ½	36.8	180°/161°	4.0	0.5	25°	119
AC10-E-1048W	48.00	3,179	1,773	1,625	88%	0.58	1 @ ½	44.7	180°/162°	5.0	0.8	25°	138
AC10-E-2060W	*60.00*	*3,425*	*1,788*	*2,049*	*80%*	*0.83*	*2 @ ½*	*59.4*	*180°/163°*	*7.0*	*1.6*	*26°*	*173*
AC10-E-2072W	72.00	3,522	1,916	2,634	80%	0.98	2 @ ½	74.3	180°/161°	8.0	2.1	26°	210
AC10-E-2084W	84.00	3,429	1,709	2,742	82%	1.00	2 @ ½	81.4	180°/159°	8.0	2.2	27°	234
AC10-E-2096W	96.00	3,179	1,773	3,250	88%	1.17	2 @ ½	97.4	180°/160°	10.0	3.6	27°	272
AC10-E-3108W	108.00	3,522	1,916	3,951	80%	1.48	3 @ ½	114.1	180°/159°	11.0	4.5	26°	310
AC10-E-3120W	118.00	3,522	1,801	4,059	80%	1.49	3 @ ½	121.7	180°/159°	12.0	5.5	27°	332
AC10-E-3132W	132.00	3,522	1,632	4,113	82%	1.50	3 @ ½	132.56	180°/161°	14.0	7.7	29°	352
AC10-E-3144W	144.00	3,179	1,773	4,875	88%	1.75	3 @ ½	150.68	180°/159°	15.0	9.1	28°	406

See sheet EP-274E for amp draws/total load requirements.
600/3/60 power supply includes extended cabinet, See drawing AC10-E-TWR-600

NOTES:
1. AC10-E-2060W - AMCA pending.
2. Standard connection top, same end supply/return.
3. Coil should be field supplied with a solenoid valve that energizes only when air curtain is energized. Consideration must be taken for freeze protection when necessary.
4. Coil performance based on 65°F entering air temperature.
5. Maximum leaving air temperature shall not exceed 120F.
6. Consult factory for alternate entering air & water temperatures or GPM's.

MODEL NUMBER CONFIGURATION

AC10-E-1 036 W A-AC-WCA -SS

Series	Version	# of Motors	Opening Width	Heat	Voltage	Motor Type	Opt. Control	Opt. Cabinet Finish
AC10	E	1, 2, 3	036" - 144"	W=Hot Water Heated	***AC & EC motors*** A = 120/1/60* B = 208/1/60 J = 240/1/60 V = 220/1/50 A-XI = 600/3/60 † ***EC motors only*** W = 277/1/60 †	AC= Standard Motor EC= Optional Motor	WCA= Berner AIR™ *smart control*	SS=Stainless Steel CC=Custom Color

for Standard offering, leave options (Opt.) blank

**Suitable for 50 Hz*
† Cabinet width increases for transformer

Sound level measured 10' (3m) from the unit in free field:
1 motor: Min./Max. Speed: 52/55 dBA
2 motors: Min./Max. Speed: 55/58 dBA
3 motors: Min./Max. Speed: 58/61 dBA

Sound data is not AMCA certified.

VELOCITY PROJECTION: Model AC10-E-1036W				
Distance from Nozzle (in)	40	80	120	160
Core Velocity (fpm)	1259	876	856	742
Uniformity (%)	83%	88%	92%	96%

ASHRAE 90.1-2019 vestibule exception requires, "a jet velocity of not less than 6.6 feet per second (400 fpm; 2.0 m/s) at 6.0 in (15 cm) above the floor."

Berner reserves the right to alter specifications without prior notice.

www.berner.com Berner International 800.245.4455
111 Progress Ave. / New Castle / PA / 16101 / USA

DS-274E
January, 2022

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ARCHITECTURAL CONTOUR 10

Hot Water Heated Air Curtain

Electrical Performance Sheet

MODEL	120/1/60 (voltage code A) MOTOR AMP DRAW = 8.5 each			208/1/60 (voltage code B) MOTOR AMP DRAW = 4.3 each			240/1/60 (voltage code J) or 220/1/50 (voltage code V) MOTOR AMP DRAW = 4.3 each		
	# CKTS	AMPS PER CIRCUIT	BREAKER RATING PER CIRCUIT	# CKTS	AMPS PER CIRCUIT	BREAKER RATING PER CIRCUIT	# CKTS	AMPS PER CIRCUIT	BREAKER RATING PER CIRCUIT
AC10-E-1036W AC10-E-1042W AC10-E-1048W	1	6.6	15	1	4.1	15	1	4.1	15
AC10-E-2060W AC10-E-2072W AC10-E-2084W AC10-E-2096W	1	13.2	20	1	8.2	15	1	8.2	15
AC10-E-3108W AC10-E-3120W AC10-E-3132W AC10-E-3144W	1	19.8	25	1	12.3	20	1	12.3	20

MODEL	600/3/60 (voltage code A-XI) XFMR 600/120 1 kVA per MTR @ 1.7 each MOTOR AMP DRAW= 6.6 each @ 120V			* Consult Factory 277/1/60 (voltage code W) MOTOR AMP DRAW = 3.6 each		
	# CKTS	AMPS PER CIRCUIT	BREAKER RATING PER CIRCUIT	# CKTS	AMPS PER CIRCUIT	BREAKER RATING PER CIRCUIT
AC10-E-1036W AC10-E-1042W AC10-E-1048W	1	1.7	15	*	*	*
AC10-E-2060W AC10-E-2072W AC10-E-2084W AC10-E-2096W	1	3.3	15	*	*	*
AC10-E-3108W AC10-E-3120W AC10-E-3132W AC10-E-3144W	1	5.0	15	*	*	*

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EP-276E
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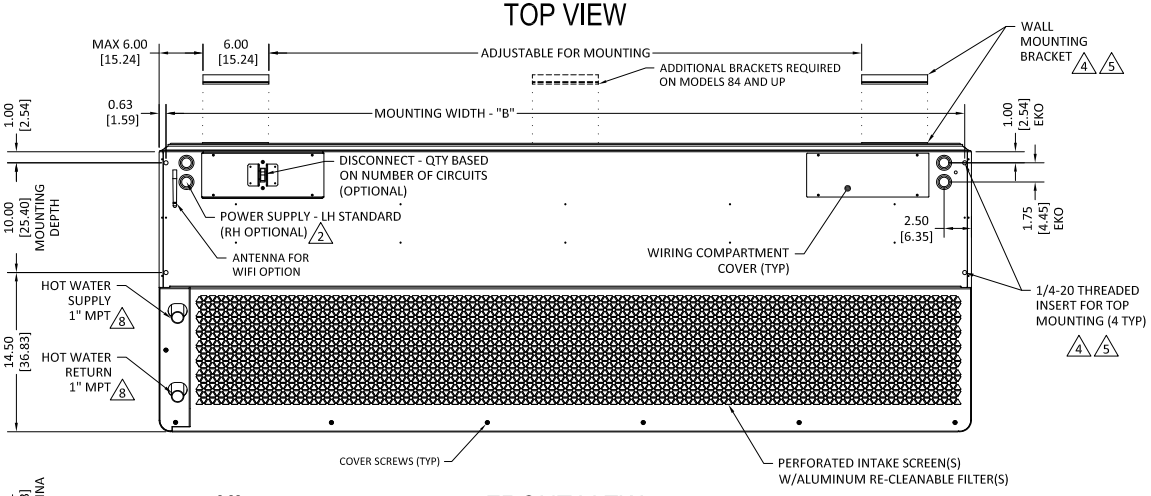
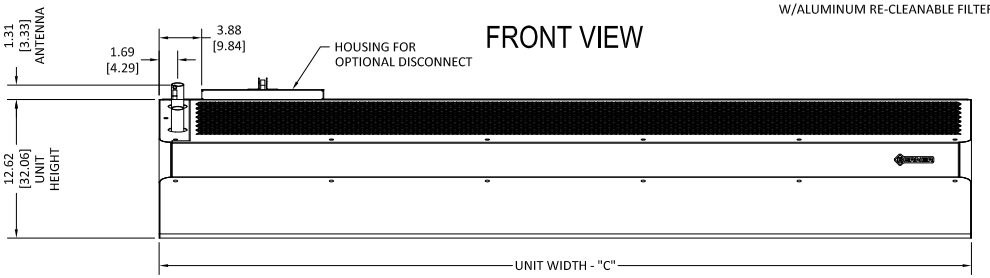
AC10-E WATER HEATED SYSTEM: 120 - 277V & 380V

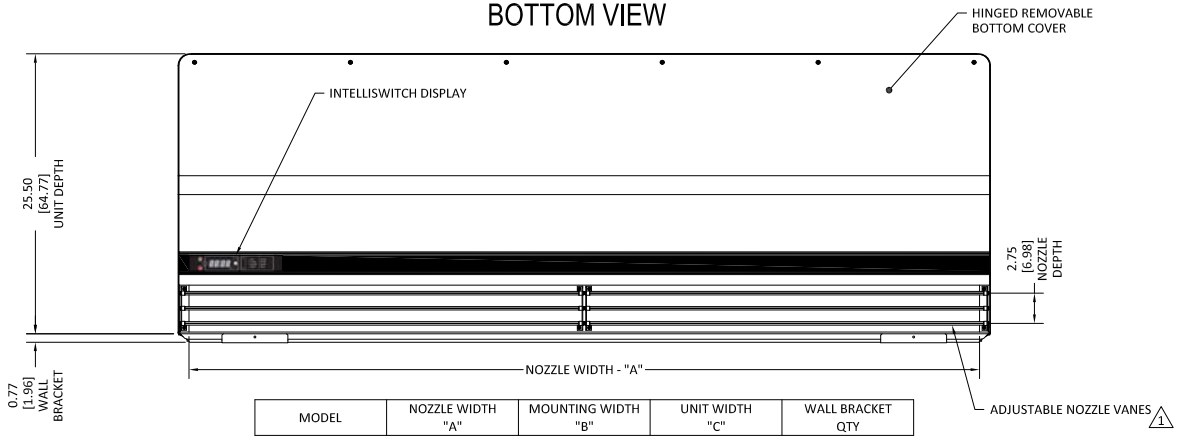
TOP VIEW



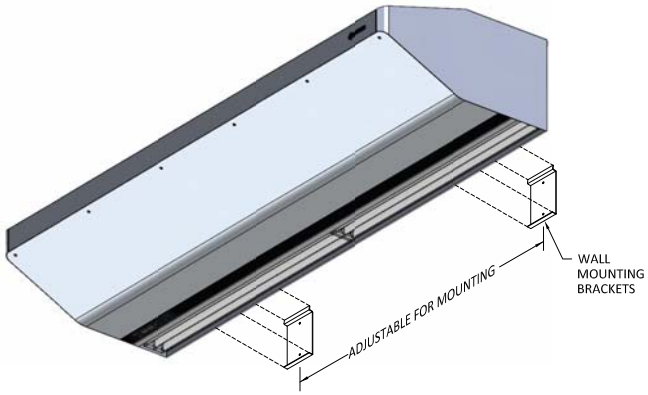
FRONT VIEW



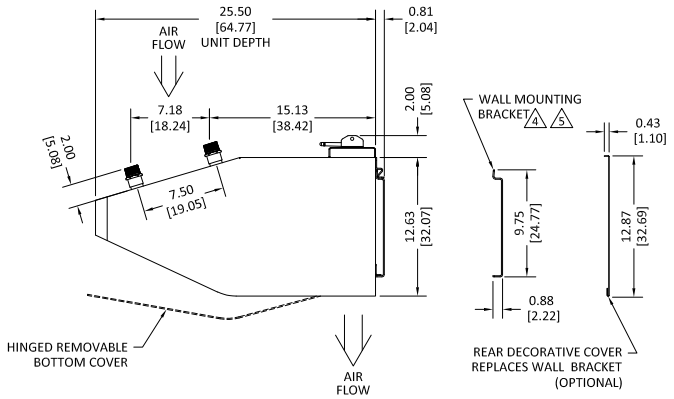
BOTTOM VIEW



MODEL	NOZZLE WIDTH "A"	MOUNTING WIDTH "B"	UNIT WIDTH "C"	WALL BRACKET QTY
AC10-E-1036W	36.00 [91.44]	36.75 [93.35]	38.00 [96.52]	2
AC10-E-1042W	42.00 [106.68]	42.75 [108.59]	44.00 [111.76]	2
AC10-E-1048W	48.00 [121.92]	48.75 [123.83]	50.00 [127.00]	2
AC10-E-2060W	60.00 [152.40]	60.75 [154.31]	62.00 [157.48]	2
AC10-E-2072W	72.00 [182.88]	72.75 [184.79]	74.00 [187.96]	2
AC10-E-2084W	84.00 [213.36]	84.75 [215.27]	86.00 [218.44]	3
AC10-E-2096W	96.00 [243.84]	96.75 [245.75]	98.00 [248.92]	3
AC10-E-3108W	108.00 [274.32]	108.75 [276.23]	110.00 [279.40]	3
AC10-E-3120W	118.00 [299.72]	118.75 [301.63]	120.00 [304.80]	3
AC10-E-3132W	132.00 [335.28]	132.75 [337.19]	134.00 [340.36]	3
AC10-E-3144W	144.00 [365.76]	144.75 [367.67]	146.00 [370.84]	4



END VIEW



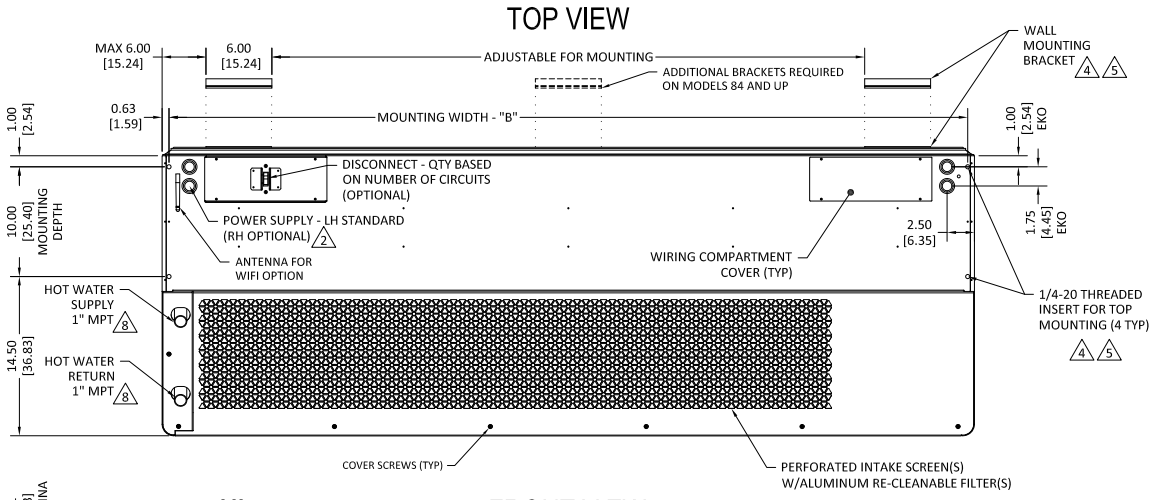
NOTES:

1. AIR CURTAIN MUST BE INSTALLED SO AIR STREAM IS NOT OBSTRUCTED WHEN DEFLECTED 20° TO EITHER SIDE OF ℄.
2. ELECTRICAL CONNECTIONS TO BE FLEXIBLE.
3. FIELD VERIFY DIMENSIONS.
4. ANCHORS TO SUPPORTING STRUCTURE BY OTHERS.
5. ADEQUACY OF SUPPORTING STRUCTURE IS TO BE VERIFIED BY A PROFESSIONAL STRUCTURAL ENGINEER.
6. THE LAST CHARACTER IN THE MODEL NUMBER – "W" DESIGNATES WATER HEATED UNIT.
7. DIMENSIONS IN INCHES [CENTIMETERS].
8. COIL CONNECTIONS LH STANDARD (AS SHOWN), OPTIONAL RH.

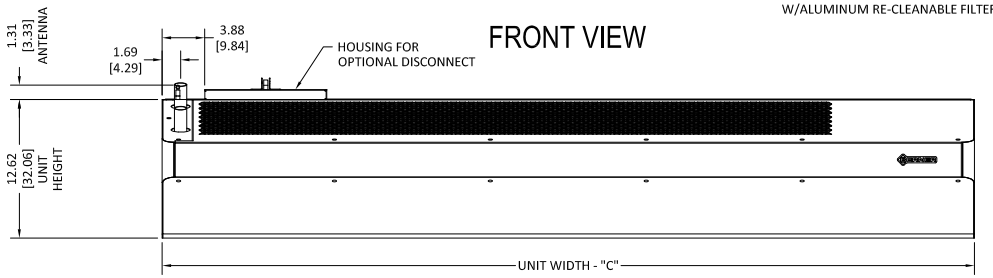
PROJECT		REV	-
LOCATION			
ARCHITECT			
ENGINEER			
DWG. NO.	AC10-E-WTR	TITLE:	BERNER
DATE	02FEB2022		MODEL AC10-E AIR CURTAIN 120 - 277V & 380V WATER HEATED SYSTEM
BY	D. Johnson		
REPLACES	22JAN2022		BERNER INTERNATIONAL CORP. NEW CASTLE,PA.
BY	D. Johnson		

AC10-E WATER HEATED SYSTEM: 600V

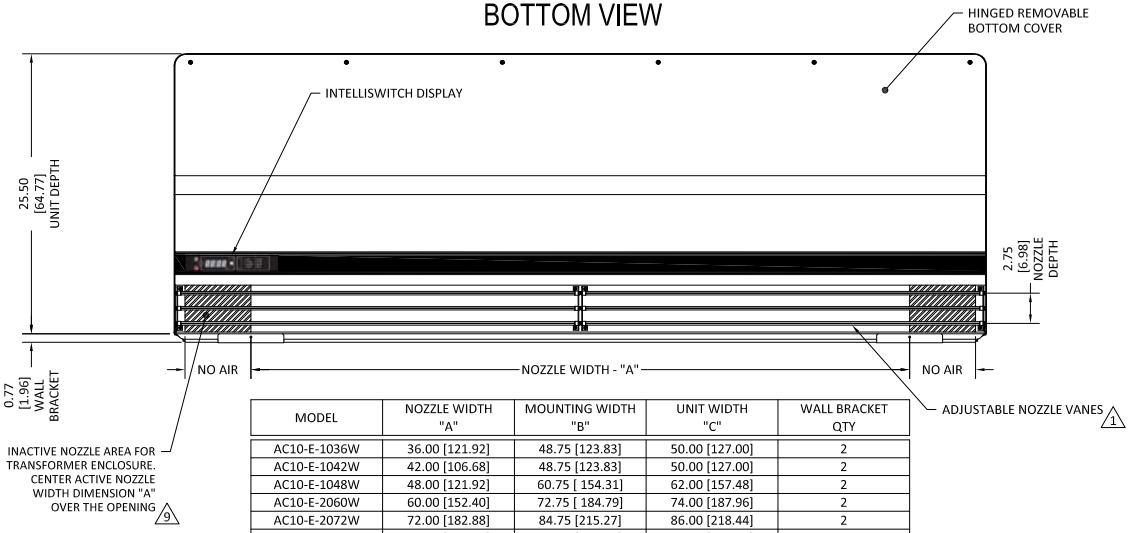
TOP VIEW



FRONT VIEW



BOTTOM VIEW



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AC10-E-1042W	42.00 [106.68]	48.75 [123.83]	50.00 [127.00]	2
AC10-E-1048W	48.00 [121.92]	60.75 [154.31]	62.00 [157.48]	2
AC10-E-2060W	60.00 [152.40]	72.75 [184.79]	74.00 [187.96]	2
AC10-E-2072W	72.00 [182.88]	84.75 [215.27]	86.00 [218.44]	2
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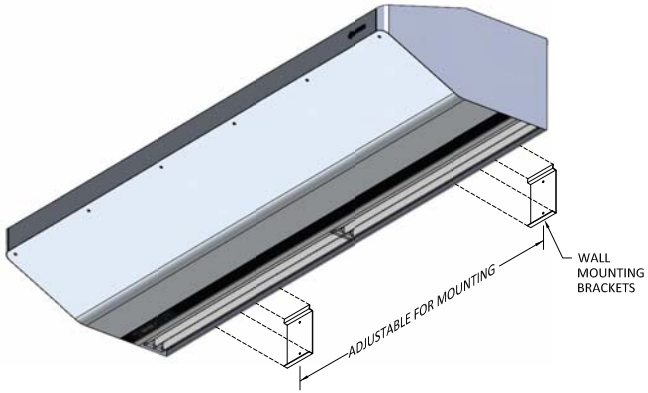
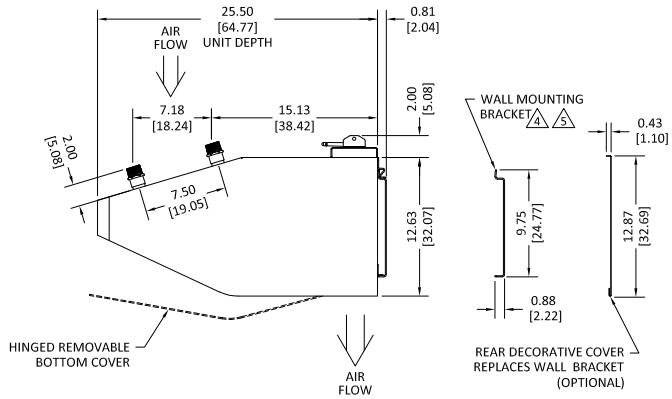
AC10-E-3120W	118.00 [299.72]	132.75 [337.19]	134.00 [340.36]	3
AC10-E-3132W	132.00 [335.28]	144.75 [367.67]	146.00 [370.84]	3
AC10-E-3144W	144.00 [365.76]	156.75 [398.15]	158.00 [401.32]	4



END VIEW



NOTES:

1. AIR CURTAIN MUST BE INSTALLED SO AIR STREAM IS NOT OBSTRUCTED WHEN DEFLECTED 20° TO EITHER SIDE OF ℄.
2. ELECTRICAL CONNECTIONS TO BE FLEXIBLE.
3. FIELD VERIFY DIMENSIONS.
4. ANCHORS TO SUPPORTING STRUCTURE BY OTHERS.
5. ADEQUACY OF SUPPORTING STRUCTURE IS TO BE VERIFIED BY A PROFESSIONAL STRUCTURAL ENGINEER.
6. THE LAST CHARACTER IN THE MODEL NUMBER – "W" DESIGNATES WATER HEATED UNIT.
7. DIMENSIONS IN INCHES [CENTIMETERS].
8. COIL CONNECTIONS LH STANDARD (AS SHOWN), OPTIONAL RH.
9. NO AIR FLOW, AREA HOUSES TRANSFORMER. CENTER ACTIVE NOZZLE WIDTH DIMENSION "A" OVER THE OPENING.

PROJECT		REV	-
LOCATION			
ARCHITECT			
ENGINEER			
DWG. NO.	AC10-E-WTR-600	TITLE:	BERNER
DATE	02FEB2022		MODEL AC10-E AIR CURTAIN 600V WATER HEATED SYSTEM
BY	D. Johnson		
REPLACES	28JAN2022		BERNER INTERNATIONAL CORP. NEW CASTLE,PA.
BY	D. Johnson		