



# ARCHITECTURAL ELITE 8

## Hot Water Heated Air Curtain

### Data Sheet

For Mounting Heights To 8' (environmental separation)

#### STANDARD CONSTRUCTION

- 11" high x 23" deep
- 1/5 hp EC motor(s)
- Intelliswitch™ digital controller - ten speeds
- Berner AIR™: Wireless Controller and App
- Cabinet: Brushed Stainless Steel, Grade 304 or better
- Bottom Panel: Clear satin anodized aluminum (Optional: White Aluminum, Custom Color or Stainless)
- Wall or Top Mounting
- High efficiency, low noise, articulating Pro-V Nozzle
- Filter (washable)
- Factory installed coil
- Optional: Rear cover for top mounting to conceal fasteners

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.

2 Year  
Limited  
Warranty



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)
AE08-E-1036W	36.00	2,245	1,584	891	52%	0.24	1 @ 1/5	27.4	180° / 166°	4.0	1.3	28°	72
AE08-E-1042W	42.00	2,150	1,641	1,077	54%	0.30	1 @ 1/5	33.8	180° / 166°	5.0	2.1	29°	82
AE08-E-1048W	48.00	2,228	1,681	1,261	58%	0.34	1 @ 1/5	38.8	180° / 164°	5.0	2.1	28°	91
AE08-E-1060W	60.00	2,175	1,582	1,483	53%	0.42	1 @ 1/5	46.7	180° / 161°	5.0	2.2	29°	111
AE08-E-1072W	72.00	1,865	1,767	1,988	75%	0.47	1 @ 1/5	61.8	180° / 162°	7.0	4.4	28°	133
AE08-E-2084W	84.00	2,150	1,641	2,154	54%	0.60	2 @ 1/5	69.0	180° / 160°	7.0	4.6	29°	160
AE08-E-2096W	96.00	2,228	1,681	2,522	58%	0.68	2 @ 1/5	82.4	180° / 161°	9.0	7.8	30°	180
AE08-E-2108W	108.00	2,228	1,626	2,744	53%	0.76	2 @ 1/5	90.4	180° / 159°	9.0	8.0	30°	199
AE08-E-2120W	117.00	2,175	1,622	2,966	53%	0.84	2 @ 1/5	98.9	180° / 160°	10.0	10.1	30°	214

See sheet EP-226E for amp draws/total load requirements.

600/3/60 & 277/1/60 power supplies include extended cabinet, See drawing AE08-E-HW-TR.

#### NOTES:

1. Standard connection top, same end supply/return.
2. 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.
3. Coil performance based on 65°F entering air temperature.
4. Maximum leaving air temperature shall not exceed 120°F.
5. Consult factory for alternate entering air & water temperatures or GPM's.

#### MODEL NUMBER CONFIGURATION

AE08-E-1 036 W A-EC-WCA -TB-LL-SA

Series	Version	# of Motors	Opening Width	Heat	Voltage	Motor Type	Control	Opt. Display	Supply/Return	Material/Finish	
AE08	E	1, 2	036" - 120"	W=Hot Water Heated	A=120/1/60* B=208/1/60 J=240/1/60 V=220/1/50 W=277/1/60 † A-XI=600/3/60 †	EC Motor	Wireless Controller Berner App	Remote Touchscreen	LL=Left Hand RR=Right Hand	Cabinet S=Stainless (std) A= Anod Alum W=White Alum C=Custom Color	Bottom Panel A=Anod Alum (std) W=White Alum S=Stainless C=Custom Color

\*Suitable for 50hz  
† Add 5" to cabinet width for transformer

Sound level measured 10' (3m) from the unit in free field:

1 motor: Min./Max. Speed: 50/53 dBA

2 motors: Min./Max. Speed: 50/53 dBA

Sound data is not AMCA certified.

#### VELOCITY PROJECTION: Model AE08-E-1036W

Distance from Nozzle (in)	40	80	120
Core Velocity (fpm)	1308	957	772
Uniformity (%)	68	85	90

ASHRAE 90.1-2019 vestibule exception requires, "a jet velocity of not less than 6.6 feet per second (2.0 m/s; 400 fpm) 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-226E  
August, 2020

120/1/60 (voltage code A) MOTOR AMP DRAW = 4.4 each				208/1/60 (voltage code B) MOTOR AMP DRAW = 2.5 each			240/1/60 (voltage code J) or 220/1/50 (voltage code V) MOTOR AMP DRAW = 2.5 each		
MODEL	# CKTS	AMPS PER CIRCUIT	BREAKER RATING PER CIRCUIT	# CKTS	AMPS PER CIRCUIT	BREAKER RATING PER CIRCUIT	# CKTS	AMPS PER CIRCUIT	BREAKER RATING PER CIRCUIT
AE08-E-1036W AE08-E-1042W AE08-E-1048W AE08-E-1060W AE08-E-1072W	1	4.4	15	1	2.5	15	1	2.5	15
AE08-E-2084W AE08-E-2096W AE08-E-2108W AE08-E-2120W	1	8.8	15	1	5.0	15	1	5.0	15

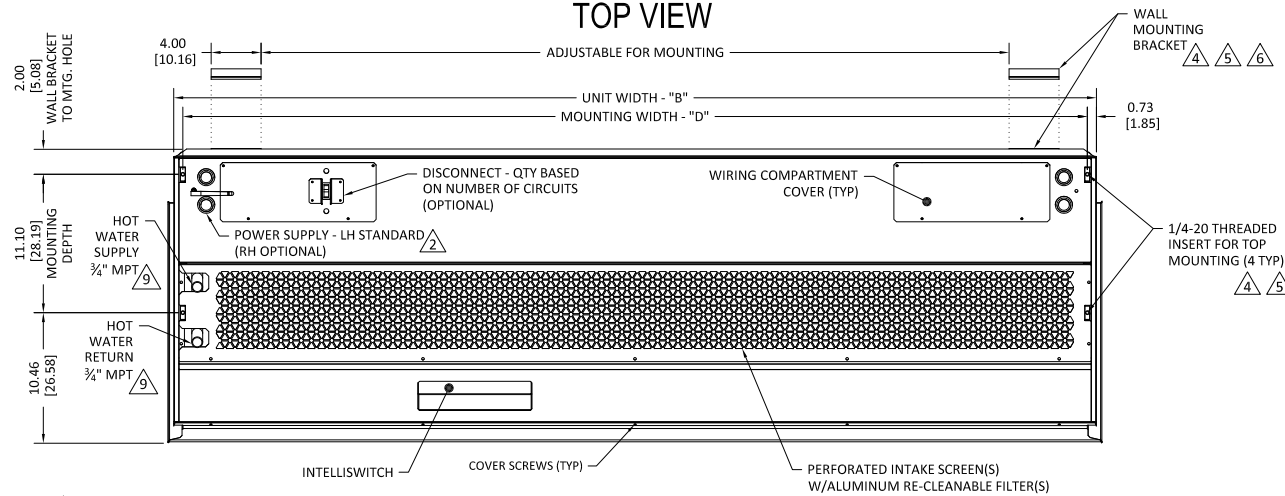
  

277/1/60 (voltage code W) MOTOR AMP DRAW = 2.2 each				600/3/60 (voltage code A-XI) XFMR 600/120 0.5kVA per MTR @0.8 each MOTOR AMP DRAW = 4.4 each @ 120V		
MODEL	# CKTS	AMPS PER CIRCUIT	BREAKER RATING PER CIRCUIT	# CKTS	AMPS PER CIRCUIT	BREAKER RATING PER CIRCUIT
AE08-E-1036W AE08-E-1042W AE08-E-1048W AE08-E-1060W AE08-E-1072W	1	2.2	15	1	0.8	15
AE08-E-2084W AE08-E-2096W AE08-E-2108W AE08-E-2120W	1	4.4	15	1	1.7	15

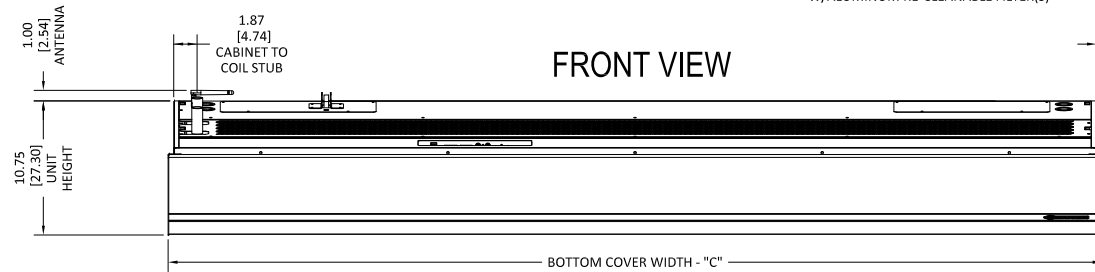
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# AE08-E HOT WATER HEATED SYSTEM: 120 - 240V & 380V

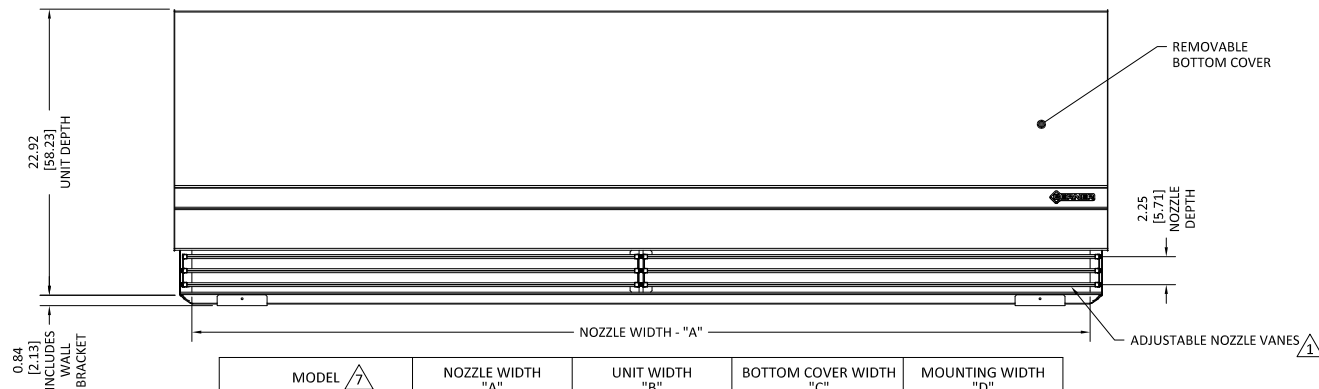
## TOP VIEW



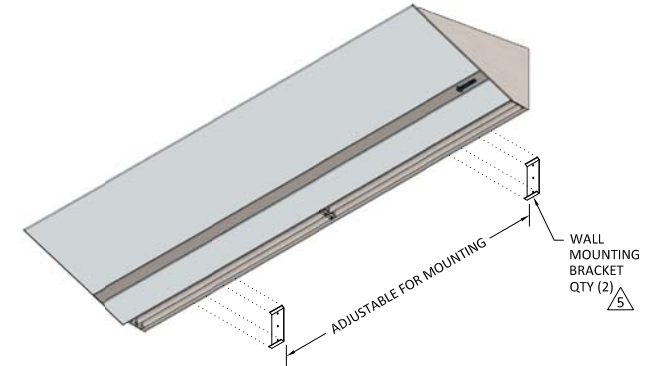
## FRONT VIEW



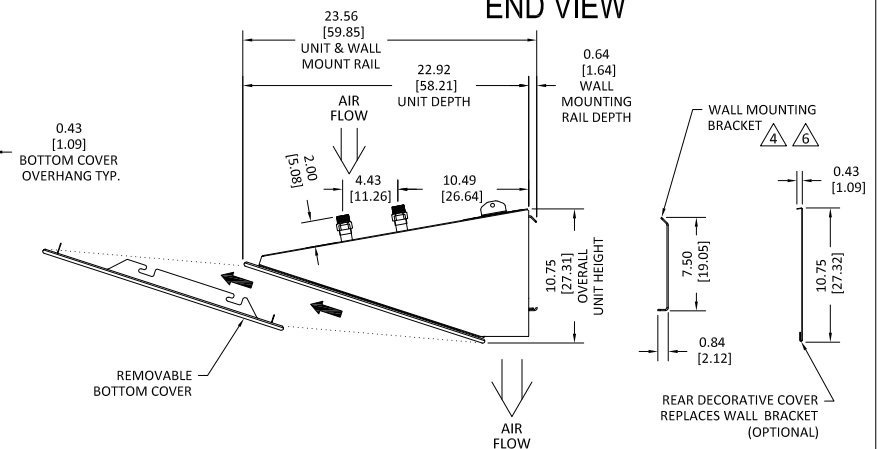
## BOTTOM VIEW



MODEL <sup>1</sup>	NOZZLE WIDTH "A"	UNIT WIDTH "B"	BOTTOM COVER WIDTH "C"	MOUNTING WIDTH "D"
AE08-E-1036W	36.00 [91.44]	38.00 [96.52]	38.85 [98.68]	36.50 [92.71]
AE08-E-1042W	42.00 [106.68]	44.00 [111.76]	44.85 [113.92]	42.50 [107.95]
AE08-E-1048W	48.00 [121.92]	50.00 [127.00]	50.85 [129.16]	48.50 [123.19]
AE08-E-1060W	60.00 [152.40]	62.00 [157.48]	62.85 [159.64]	60.50 [153.67]
AE08-E-1072W	72.00 [182.88]	74.00 [187.96]	74.85 [190.12]	72.50 [184.15]
AE08-E-2084W	84.00 [213.36]	86.00 [218.44]	86.85 [220.60]	84.50 [214.63]
AE08-E-2096W	96.00 [243.84]	98.00 [248.92]	98.85 [251.08]	96.50 [245.11]
AE08-E-2108W	108.00 [274.32]	110.00 [279.40]	110.85 [281.56]	108.50 [275.59]
AE08-E-2120W	117.00 [297.18]	119.00 [302.26]	119.85 [304.42]	117.50 [298.45]



## END VIEW



## NOTES:

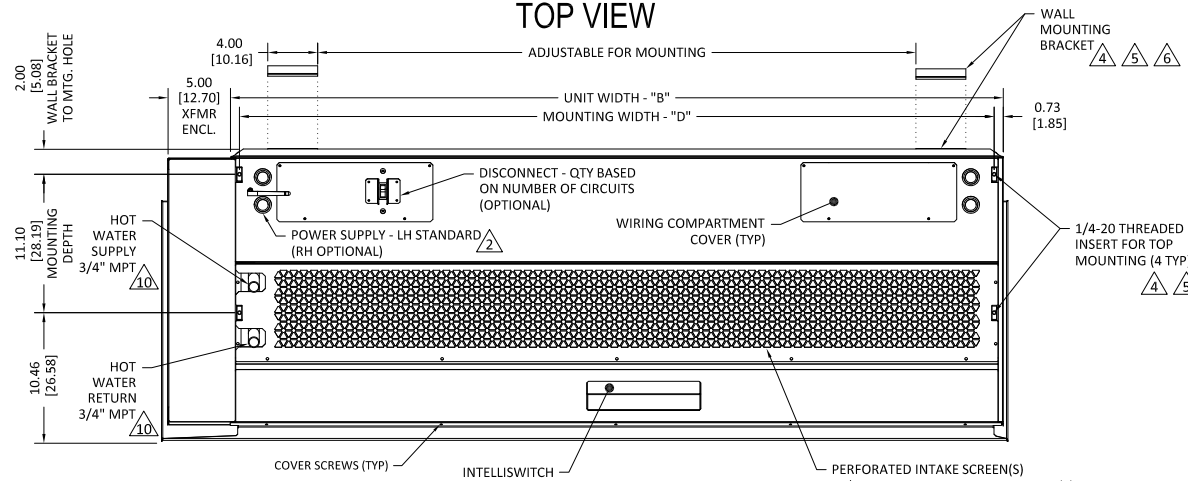
- <sup>1</sup> AIR CURTAIN MUST BE INSTALLED SO AIR STREAM IS NOT OBSTRUCTED WHEN DEFLECTED 20° TO EITHER SIDE OF C.
- <sup>2</sup> ELECTRICAL CONNECTIONS TO BE FLEXIBLE.
- <sup>3</sup> FIELD VERIFY DIMENSIONS.
- <sup>4</sup> ANCHORS TO SUPPORTING STRUCTURE BY OTHERS.
- <sup>5</sup> ADEQUACY OF SUPPORTING STRUCTURE IS TO BE VERIFIED BY A PROFESSIONAL STRUCTURAL ENGINEER.
- <sup>6</sup> UNIT MOUNTING HARDWARE INCLUDED, WALL MOUNTING BRACKET HARDWARE BY OTHERS.
- <sup>7</sup> THE LAST CHARACTER IN THE MODEL NUMBER - "W" DESIGNATES HOT WATER HEATED UNIT.
- <sup>8</sup> DIMENSIONS IN INCHES [CENTIMETERS].
- <sup>9</sup> COIL CONNECTIONS LH STANDARD (AS SHOWN), OPTIONAL RH.

SHEET 1 OF 1

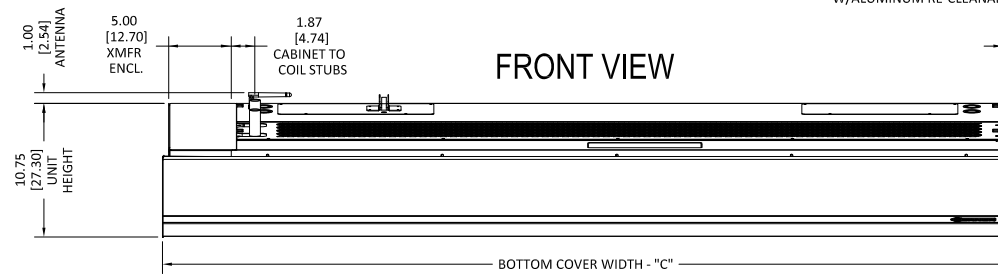
PROJECT		TITLE:	<b>BERNER</b>
LOCATION		DATE	17SEP2020
ARCHITECT		BY	S. Beil
ENGINEER		REPLACES	30JUL2020
		BY	S. Beil
			MODEL AE08-E AIR CURTAIN 120 - 240V & 380V HOT WATER HEATED SYSTEM
			BERNER INTERNATIONAL CORP. NEW CASTLE, PA.

# AE08-E HOT WATER HEATED SYSTEM: 277 & 600V

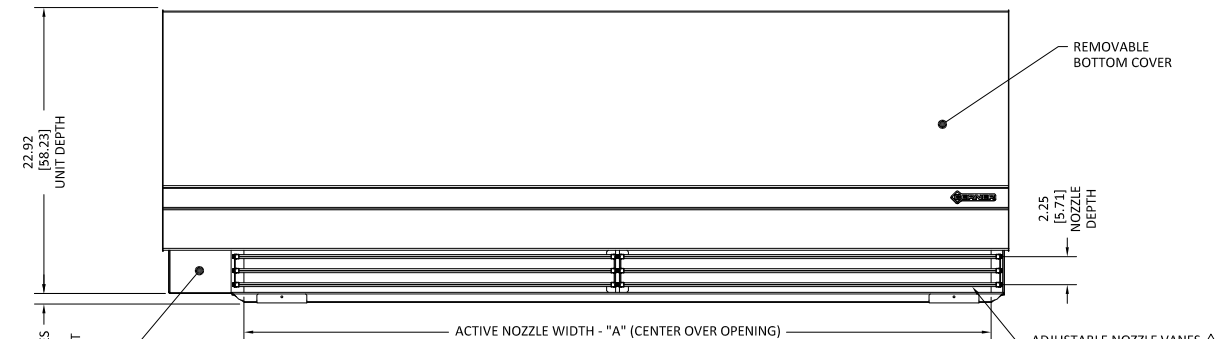
## TOP VIEW



## FRONT VIEW

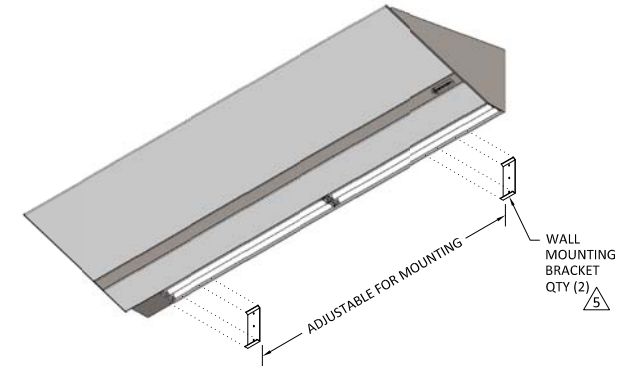


## BOTTOM VIEW

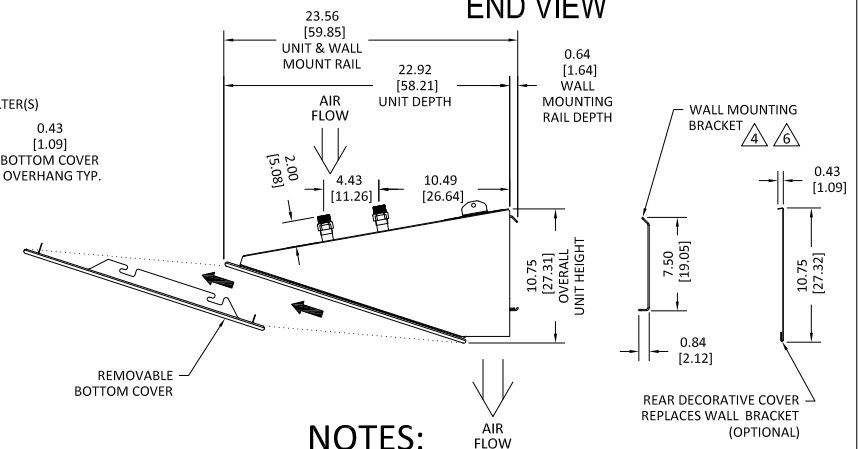


INACTIVE NOZZLE AREA FOR TRANSFORMER ENCLOSURE. CENTER ACTIVE NOZZLE WIDTH DIMENSION "A" OVER THE OPENING (9)

MODEL (7)	NOZZLE WIDTH "A"	UNIT WIDTH "B"	BOTTOM COVER WIDTH "C"	MOUNTING WIDTH "D"
AE08-E-1036W	36.00 [91.44]	38.00 [96.52]	43.85 [111.38]	36.50 [92.71]
AE08-E-1042W	42.00 [106.68]	44.00 [111.76]	49.85 [126.62]	42.50 [107.95]
AE08-E-1048W	48.00 [121.92]	50.00 [127.00]	55.85 [141.86]	48.50 [123.19]
AE08-E-1060W	60.00 [152.40]	62.00 [157.48]	67.85 [172.34]	60.50 [153.67]
AE08-E-1072W	72.00 [182.88]	74.00 [187.96]	79.85 [202.82]	72.50 [184.15]
AE08-E-2084W	84.00 [213.36]	86.00 [218.44]	91.85 [233.30]	84.50 [214.63]
AE08-E-2096W	96.00 [243.84]	98.00 [248.92]	103.85 [263.78]	96.50 [245.11]
AE08-E-2108W	108.00 [274.32]	110.00 [279.40]	115.85 [294.26]	108.50 [275.59]
AE08-E-2120W	117.00 [297.18]	119.00 [302.26]	124.85 [317.12]	117.50 [298.45]



## END VIEW



## NOTES:

- 1 AIR CURTAIN MUST BE INSTALLED SO AIR STREAM IS NOT OBSTRUCTED WHEN DEFLECTED 20° TO EITHER SIDE OF  $\phi$ .
- 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 UNIT MOUNTING HARDWARE INCLUDED, WALL MOUNTING BRACKET HARDWARE BY OTHERS.
- 7 THE LAST CHARACTER IN THE MODEL NUMBER - "W" DESIGNATES HOT WATER HEATED UNIT.
- 8 DIMENSIONS IN INCHES [CENTIMETERS].
- 9 NO AIR FLOW, AREA HOUSES TRANSFORMER. CENTER ACTIVE NOZZLE WIDTH DIMENSION "A" OVER THE OPENING
- 10 COIL CONNECTIONS LH STANDARD (AS SHOWN), OPTIONAL RH.

SHEET 1 OF 1

PROJECT		TITLE:	<b>BERNER</b>
LOCATION			MODEL AE08-E AIR CURTAIN 277 & 600V
ARCHITECT			HOT WATER HEATED SYSTEM
ENGINEER			BERNER INTERNATIONAL CORP. NEW CASTLE, PA.
DWG. NO.	AE08-E-HW-TR		
DATE	17SEP2020		
BY	S. Beil		
REPLACES	30JUL2020		
BY	S. Beil		