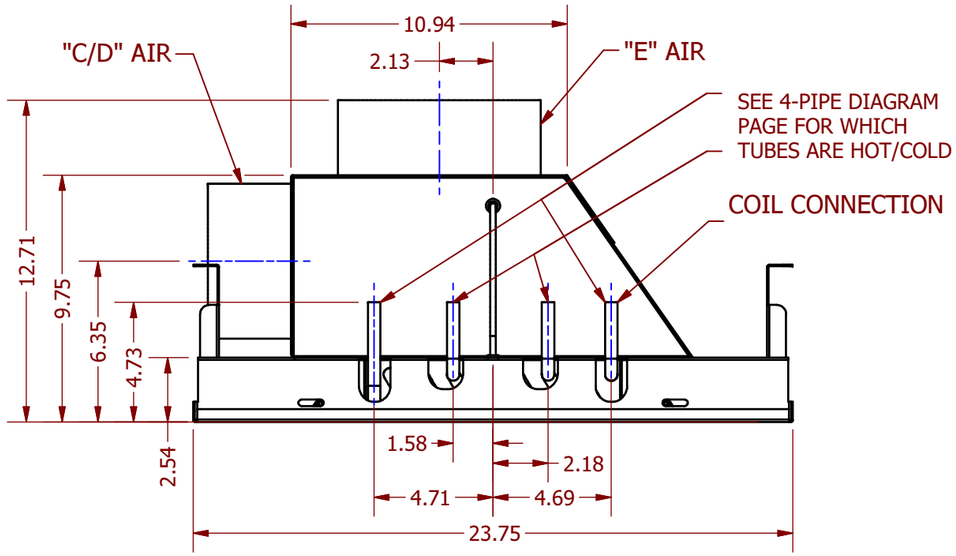
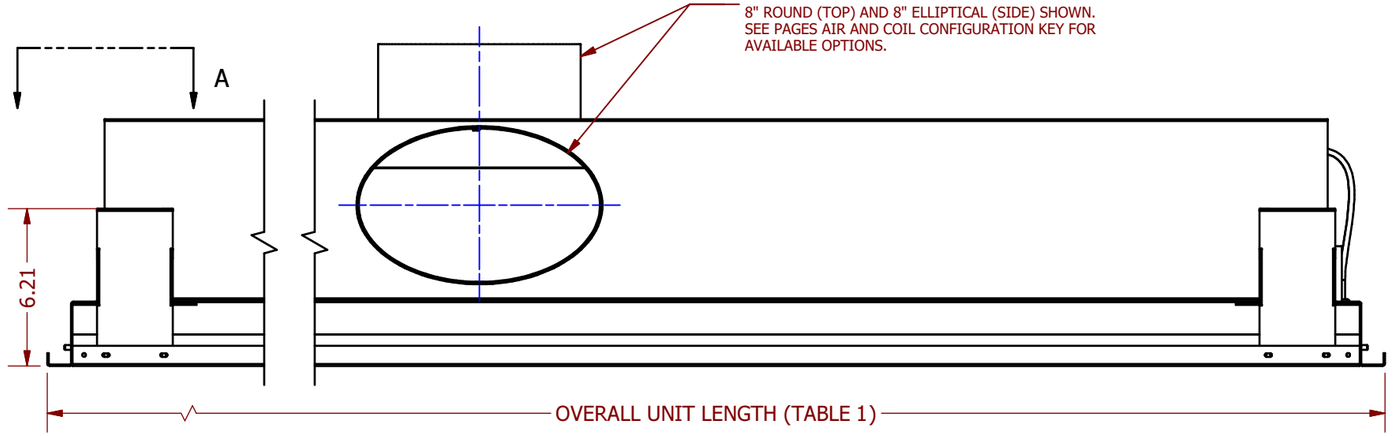
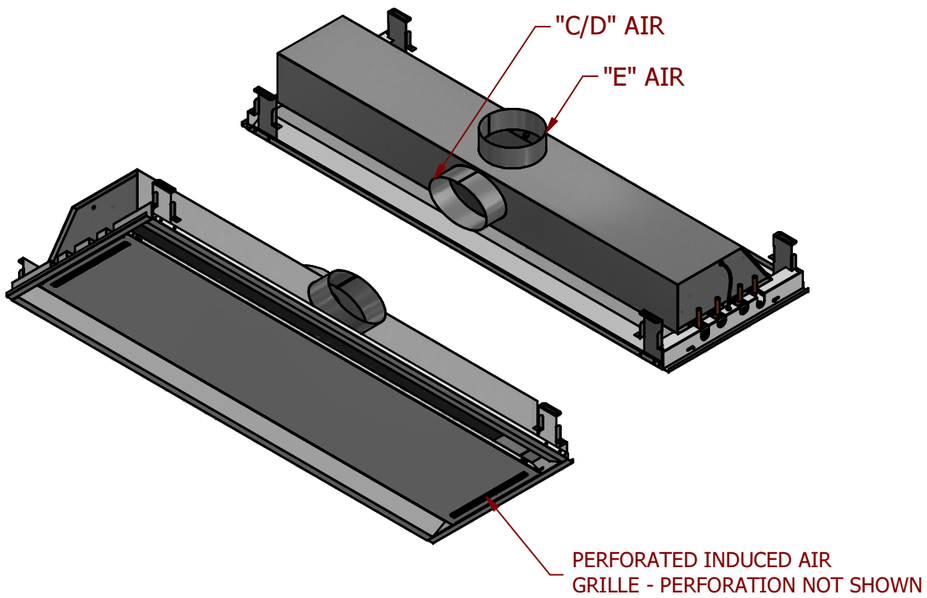
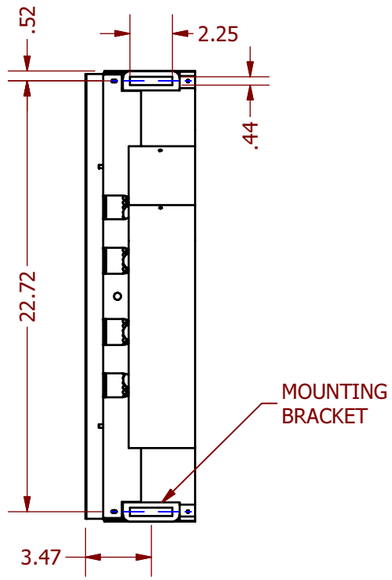








SECTION A-A

TABLE 1			
NOM UNIT LENGTH (FT)	OVERALL LENGTH (in)	DRY WEIGHT (LB)	WET WEIGHT (LB)
2	23.75	27	29
3	35.75	41	44
4	47.75	54	58
5	59.75	68	73
6	71.75	81	88
7	83.75	95	103
8	95.75	108	117
9	107.75	122	132
10	119.75	135	147

NOTES:

1. DRAWING INDICATES "E" & "D" AIR AND COIL CONNECTION HANDINGS.
   (REFER TO MODEL HANDINGS CONFIGURATION KEY FOR AVAILABLE OPTIONS).
2. 4-PIPE CONFIGURATION SHOWN. IN 2-PIPE CONFIGURATION ONLY CHILLED WATER CIRCUIT REMAINS.
3. ONE SUPPLY AIR SLOT IS BLOCKED OFF FOR ACB50 CONFIGURATION, ALL DIMENSIONS ARE THE SAME.
4. FACE COLOR WILL BE STANDARD WHITE UNLESS SPECIFIED OTHERWISE.

STANDARD ACB40 SUBMITTAL DRAWING

STRICTLY CONFIDENTIAL

DADANCO - A MESTEK CO.
47 Westfield Industrial Park Rd WESTFIELD, MA 01085
Ph. 413-568-9571 email: info@dadanco.com
www.dadanco.com

DADANCO - A MESTEK CO.

DRN	DL	6/20/2020
CKD	SL	6/20/2020
APPD	SL	6/20/2020
ISSUED		

TITLE: ACB40

STANDARD EDGE SUBMITTAL DRAWING

UNLESS NOTED OTHWISE ALL DIMENSIONS IN INCHES

ANSI STANDARD

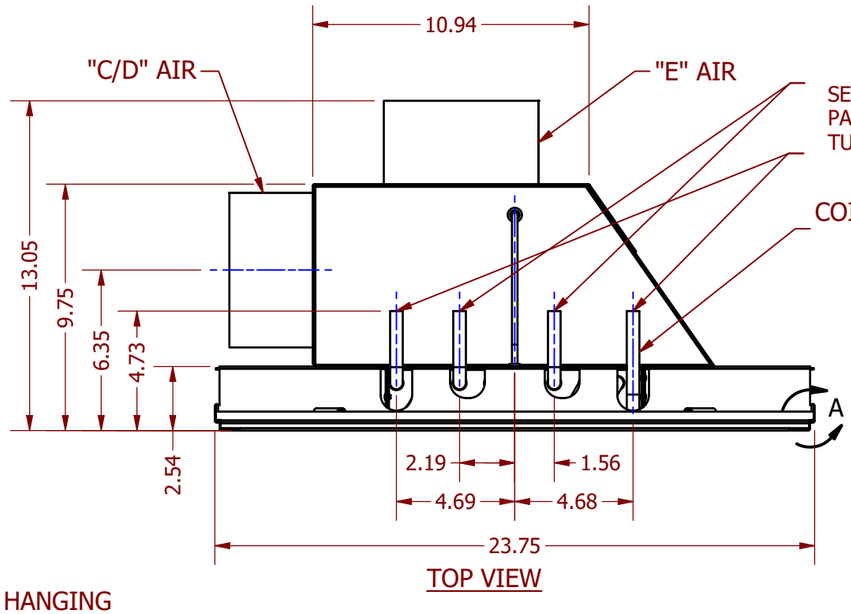
PROJECT NO: ACB40

File Name:

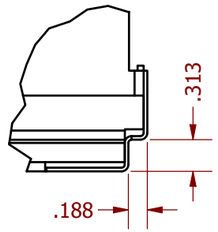
SCALE: NTS

SHEET: 1 / 1

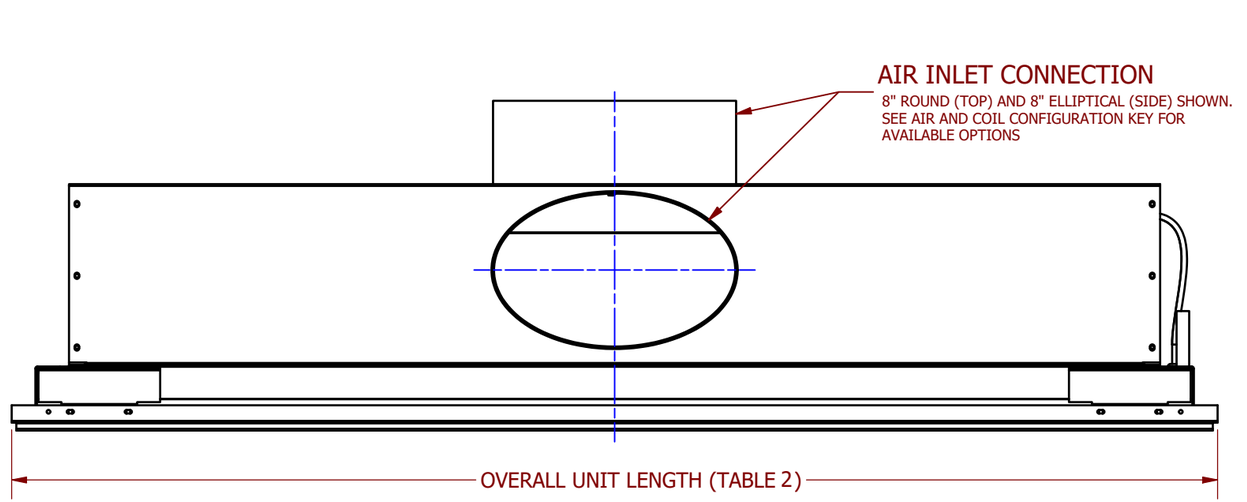
RELEASE: A

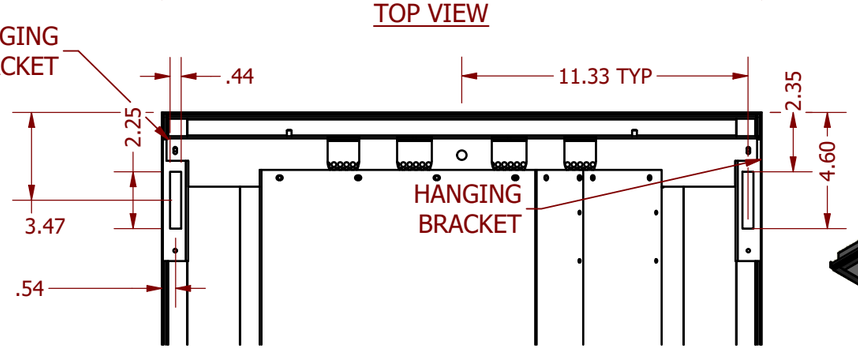


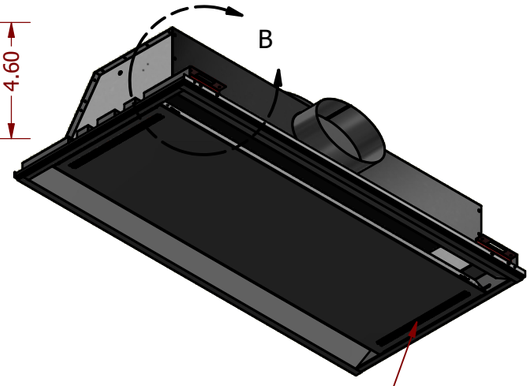
TOP VIEW

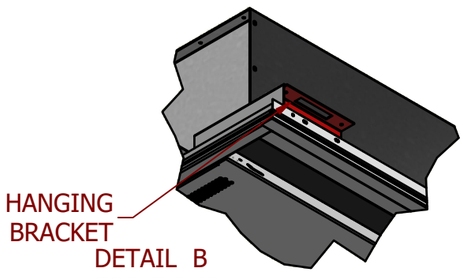


DETAIL A









DETAIL B
SCALE 0.13 : 1

TABLE 2			
NOM UNIT LENGTH (FT)	OVERALL LENGTH (in)	DRY WEIGHT (LB)	WET WEIGHT (LB)
2	23.75	27	29
3	35.75	41	44
4	47.75	54	58
5	59.75	68	73
6	71.75	81	88
7	83.75	95	103
8	95.75	108	117
9	107.75	122	132
10	119.75	135	147

NOTES:

1. DRAWING INDICATES "E" & "D" AIR AND COIL CONNECTION HANDINGS.
   (REFER TO MODEL HANDINGS CONFIGURATION KEY FOR AVAILABLE OPTIONS).
2. 4-PIPE CONFIGURATION SHOWN. IN 2-PIPE CONFIGURATION ONLY CHILLED WATER CIRCUIT REMAINS.
3. ONE SUPPLY AIR SLOT IS BLOCKED OFF FOR ACB50 CONFIGURATION, ALL DIMENSIONS ARE THE SAME.
4. FACE COLOR WILL BE STANDARD WHITE UNLESS SPECIFIED OTHERWISE.

ACB40 WITH TEGULAR EDGE SUBMITTAL DRAWING

STRICTLY CONFIDENTIAL

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47 Westfield Industrial Park Rd WESTFIELD, MA 01085
Ph. 413-568-9571 email: info@dadanco.com
www.dadanco.com

DADANCO - A MESTEK CO.

DRN	DL	10/20/2021
CKD	AK	10/20/2021
APPD	SL	10/20/2021
ISSUED		

TITLE: ACB40

TEGULAR EDGE SUBMITTAL DRAWING

UNLESS NOTED OTHWISE ALL DIMENSIONS IN INCHES

ANSI STANDARD

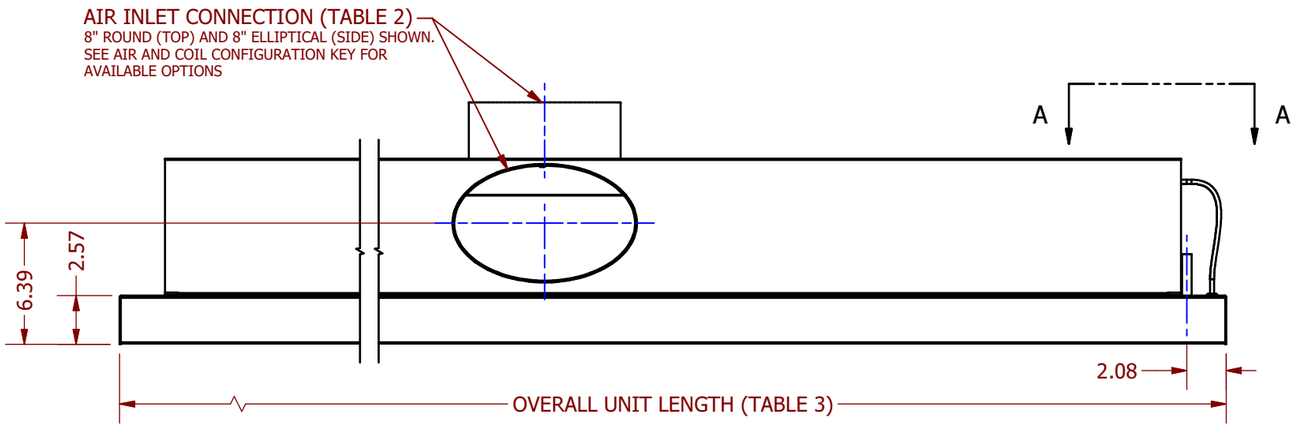
PROJECT NO: ACB40

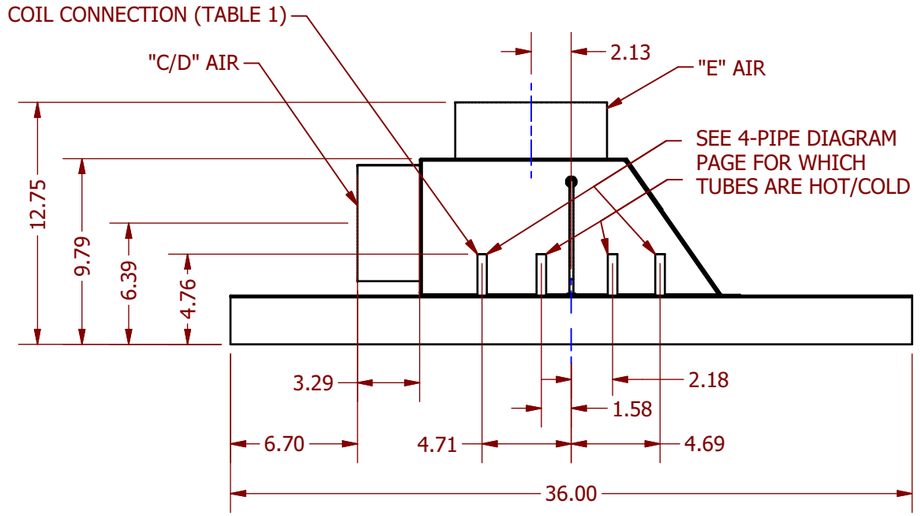
File Name:

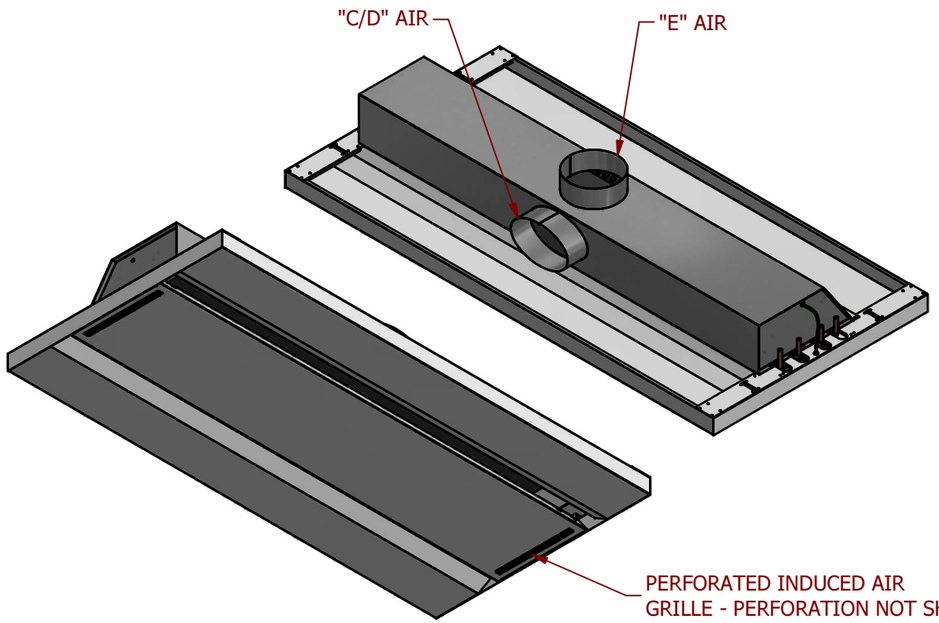
SCALE: NTS

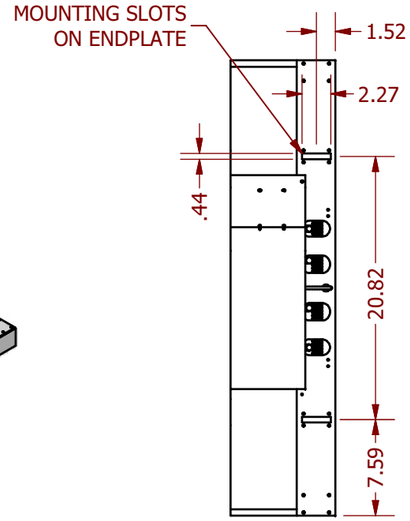
SHEET: 1 / 1

RELEASE: A









SECTION A-A

TABLE 3			
NOM UNIT LENGTH (FT)	OVERALL LENGTH (in)	DRY WEIGHT (LB)	WET WEIGHT (LB)
2	23.75	27	29
3	35.75	41	44
4	47.75	54	58
5	59.75	68	73
6	71.75	81	88
7	83.75	95	103
8	95.75	108	117
9	107.75	122	132
10	119.75	135	147

NOTES:

1. DRAWING INDICATES "D" & "E" AIR AND COIL CONNECTION HANDINGS
   (REFER TO MODEL HANDINGS CONFIGURATION KEY FOR AVAILABLE OPTIONS).
2. UNITS ARE PROVIDED WITH 1 DUCT CONNECTION.
3. 4-PIPE CONFIGURATION SHOWN, IN 2-PIPE CONFIGURATION, ONLY CHILLED WATER CIRCUIT REMAINS.
4. FACE COLOR WILL BE STANDARD BONE WHITE UNLESS SPECIFIED OTHERWISE.

ACB40 ACW SUBMITTAL DRAWING

STRICTLY CONFIDENTIAL

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47 Westfield Industrial Park Rd WESTFIELD, MA 01085
Ph. 413-568-9571 email: info@dadanco.com
www.dadanco.com

DADANCO - A MESTEK CO.

DRN	DL	6/20/2020
CKD	SL	6/20/2020
APPD	DL	6/20/2020
ISSUED		

TITLE: ACB40

EXPOSED (COANDA WINGS) SUBMITTAL DRAWING

UNLESS NOTED OTHWISE
ALL DIMENSIONS IN INCHES

ANSI STANDARD

PROJECT NO:

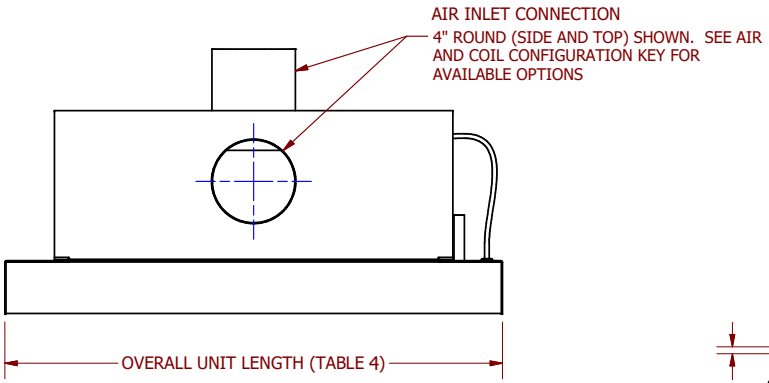
File Name:

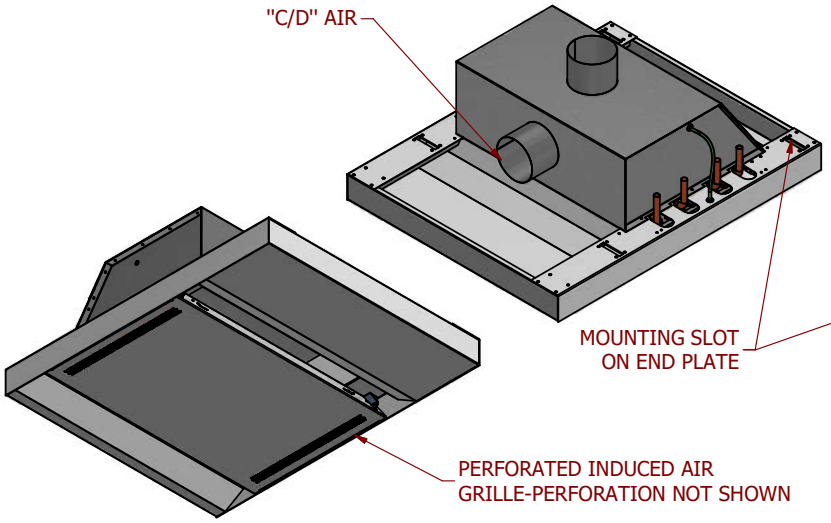
RELEASE: A

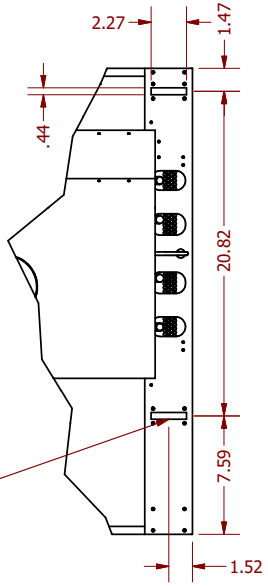
SCALE: NTS

SHEET: 1 / 1

SEE 4-PIPE DIAGRAM
PAGE FOR WHICH COIL
TUBES ARE HOT/COLD







TOP VIEW

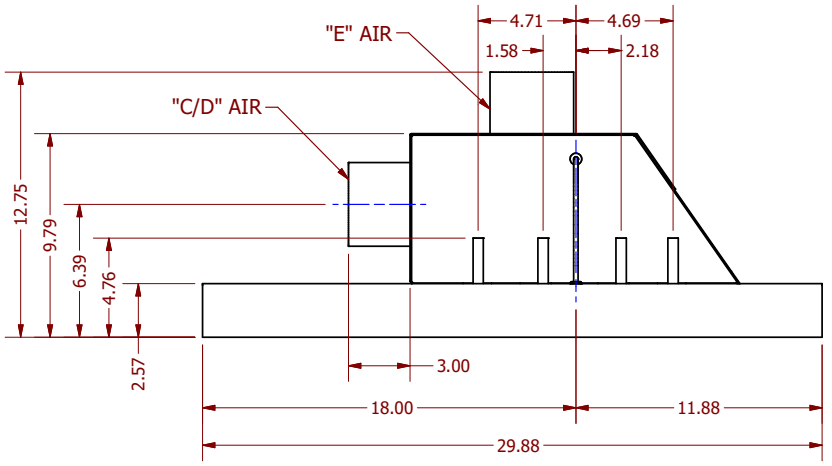


TABLE 4			
NOM UNIT LENGTH (FT)	OVERALL LENGTH (in)	DRY WEIGHT (LB)	WET WEIGHT (LB)
2	23.75	27	29
3	35.75	41	44
4	47.75	54	58
5	59.75	68	73
6	71.75	81	88
7	83.75	95	103
8	95.75	108	117
9	107.75	122	132
10	119.75	135	147

NOTES:

1. DRAWING INDICATES "C/D" & "E" AIR AND "D" COIL CONNECTION HANDINGS (REFER TO MODEL HANDINGS CONFIGURATION KEY FOR AVAILABLE OPTIONS).
2. UNITS ARE PROVIDED WITH 1 DUCT CONNECTION.
3. 4-PIPE CONFIGURATION SHOWN, FOR 2-PIPE CONFIGURATION, ONLY CHILLED WATER CIRCUIT REMAINS.
4. FACE COLOR WILL BE STANDARD WHITE UNLESS SPECIFIED OTHERWISE.

ACB50 ACW (ONE-SIDED) SUBMITTAL DRAWING

STRICTLY CONFIDENTIAL

DADANCO - A MESTEK CO.
47 Westfield Industrial Park Rd WESTFIELD, MA 01085
Ph. (413) 564-5657, Fax. (413) 568-2969
www.dadanco.com

DADANCO - A MESTEK CO.

DRN	TS	10/1/2021
CKD	DL	10/1/2021
APPD	DL	10/1/2021
ISSUED		

UNLESS NOTED OTHWISE ALL DIMENSIONS IN INCHES
ANGULAR TOL: 1.0°
LINEAR TOL: ±0.02"

ANSI STANDARD

TITLE: ACB50

EXPOSED (COANDA WING) SUBMITTAL DRAWING

PROJECT NO:

File Name:

SCALE: NTS

SHEET: 1 / 1

RELEASE: A

4-PIPE DIAGRAMS

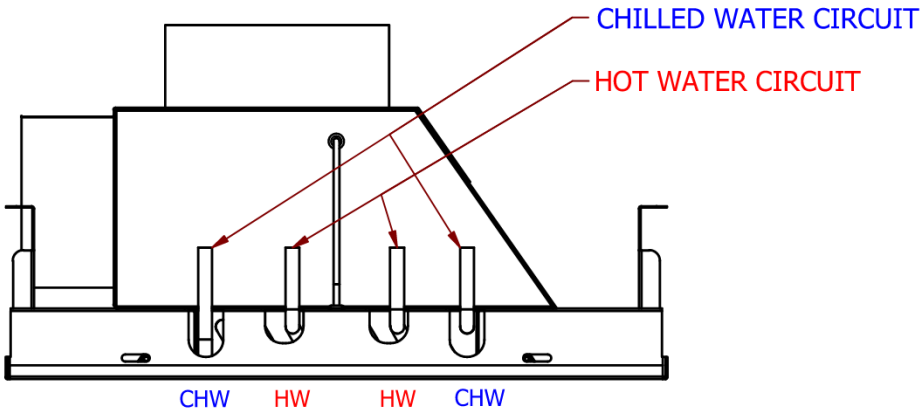
2 and 4-pipe coils come in single and dual circuit variants. For 4-pipe coils, the circuiting arrangement changes which connection tubes are used for chilled and hot water. Coil circuiting is indicated by digit 18 in the model number. "0" is for single circuit, "1" is for Dual Circuit. Within each circuit, either pipe can be used for supply or return. Circuiting is also shown on the performance schedule in the each project submittal:

Active Chilled Beams							
Unit Tag	Zone Name or Number	Number of Units	Model	Nozzle Config.	2 or 4 Pipe	Throw Direction	Model Length
							ft
ACB-1	1	1	DADANCO - ACB40	116-UN	4	2	8
ACB-2	2	1	DADANCO - ACB40	142-SN	4 - DC	2	8

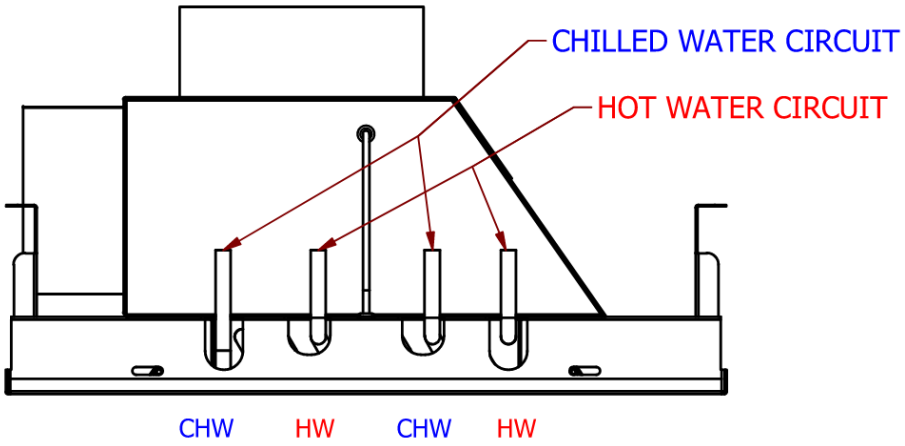
Single Circuit

Dual Circuit

4-PIPE SINGLE CIRCUIT



4-PIPE DUAL CIRCUIT



MODEL NUMBER & OPTIONS

A	C	B	4	0	-	0	6	-	1	0	0	S	-	6	R	C	-	2	C	S	0	0	-	0	B	0	0	0	-	0	0	0	0	0	0	0	-	0	0
1	2	3	4	5		6	7		8	9	10	11		12	13	14		15	16	17	18	19		20	21	22	23	24		25	26	27	28	29	30	31		32	33

Every Dadanco Active Chilled Beam and Induction Unit is identified, tagged, and built-to-order according to the above 33-digit model number. All options must be confirmed/approved in order to start production.

PERFORMANCE VARIATIONS (UNIT SPECIFIC)

All the following are determined by selections done with the Dadanco Active Chilled Beam selection software. Every project submittal includes a "performance submittal" page that contains includes this information for all units on the project.

Model (Digits 1-5)	Supply Air Pattern
ACB40	2-Way Throw
ACB50	1-Way Throw

Nominal Unit Length (Ft): Digits 6-7

Nozzle Configuration: Digits 8-11
Digits 8-10: Nozzle Qty
Digit 11: Nozzle Type (T, U, S, M)

Nozzle configuration determines the primary air flow rate & pressure drop for each unit, as well as the induced/secondary air flow rate.

Duct Connection Diameter* (in): Digit 12

Duct Connection Shape	Digit 13 Code
Round	R
Elliptical	E
Oblong/Oval	V

*Diameter for round connections
*Elliptical & oblong connections have the same circumference as round to fit standard flexible duct of that size.
*Elliptical and oblong only used when round of required size cannot fit in selected location. See handing pages for examples.

Coil Pipe Configuration	Digit 15 Code
2-Pipe	2
4-Pipe	4

2 and 4-pipe coils are both single 2-row finned-tube coils with the same number of tubes. 4-pipe coils split the tubes into two separate water circuits.

Coil Circuiting	Digit 18 Code
Single Circuit	0
Dual Circuit	1

*For 4-pipe coils, the circuiting refers to the cooling circuit only. The heating circuit of 4-pipe coils is always single circuit.

MODEL NUMBER & OPTIONS

```
A C B 4 0 - 0 6 - 1 0 0 S - 6 R C - 2 C S 0 0 - 0 B 0 0 0 - 0 0 0 0 0 0 0 0 - 0 0
1 2 3 4 5   6 7   8 9 10 11   12 13 14   15 16 17 18 19   20 21 22 23 24   25 26 27 28 29 30 31   32 33
```

GLOBAL OPTIONS

These options generally apply to all ACB40/50 units on a project, and are specified using the checkboxes below. (Std) indicates the standard option, all others are at additional cost.

Coil Connection Type	Digit 17 Code	
1/2" OD SWT (Std)	S	✔
1/2" Male NPT	M	
1/2" Female NPT	F	
1/2" Male SAE Flare (45°)	R	
1/2" Male JIC Flare (37°)	J	

Coil Vent/Drain Fittings	Digit 19 Code	
None (Std)	0	✔
Manual Air Vent & Drain Fitting	1	
Drain Plug Only	2	

With these models, the location of factory mounted air vents is never at a high point in the system. Therefore, it is recommended to install manual air vents in field piping instead. Drain plugs are only useful (but not required) , when un-installing an ACB.

Throw Adjustment Vanes	Digit 29 Code	
Excluded (Std)	0	✔
Included	A	

Strips of plastic vanes installed in supply air slots that allow re-direction of supply air to the left or right.

Lint Screen	Digit 25 Code	
Excluded (Std)	0	✔
Included	1	

Lint screens are generally not recommended for these models. Dust & debris can be easily cleaned by wiping & vacuuming the perf grille & coil without the addition of a screen.

Plenum Insulation	Digit 26 Code	
None (Std)	0	✔
1/4" Closed Cell	3	
1/2" Closed Cell	2	

Plenum Insulation should be used in any application where the primary air temperature will lower than the dew point of the ambient air around the top of the chilled beams. Strongly recommended whenever primary air temps are below 55°F and/or when units will be located in non-plenum spaces that may experience higher humidity levels than the occupied zone air. Failure to insulate when necessary can lead to condensation forming on the outside of the ACB casing.

1/4" closed cell has sufficient R-value to prevent condensation in typical applications.

Packing Option	Digit 32 Code	
Standard (Std)	0	✔
Low-Tack Adhesive Film	1	

Packing option refers to the covering applied to the painted face of the ACBs to protect the finish during shipping & handling. Standard is a non-adhesive foam sheet that is taped to each edge.

MODEL NUMBER & OPTIONS

```
A C B 4 0 - 0 6 - 1 0 0 S - 6 R C - 2 C S 0 0 - 0 B 0 0 0 - 0 0 0 0 0 0 0 - 0 0
1 2 3 4 5   6 7   8 9 10 11  12 13 14  15 16 17 18 19  20 21 22 23 24  25 26 27 28 29 30 31  32 33
```

UNIT-SPECIFIC OPTIONS

These options are often different between individual units on a project. Use the unit configuration schedule provided with each project submittal to specify which option applies to each unit.

Air Handing: Digit 14
Coil Handing: Digit 16

*These digits specify the location of duct and pipe connections. See pages 5-8 for details.

Border/Edge Options	Digit 24 Code	Shown On
Standard (Std)	0	Page 1
5/16" Tegular	T	Page 2
Coanda Wings	F	Page 3
Coanda Wing on Supply Air Side Only (ACB50)	1	Page 4

Tegular edges are used to match tegular ceiling tiles where the face of the tile sits below the ceiling gird.

Coanda wings should be used in most open ceiling applications to ensure proper air distribution. Coanda wings increase overal unit width from 2' to 3'.

ACB50 units supply air out of one side of the unit only. Only that side requires a coanda wing, which would bring the unit width to 30". That is what the "1" in this digit corresponds to. An "F" in this digit with an ACB50 unit puts Coanda wings on both sides, for a 36" width, matching the appearance of ACB40s with Coanda wings.

In either case, the Coanda wings are seamlessly built into the unit casing for superior appearance and strength compared to wings that are added-on to standard ACBs.

Color	Digit 21 Code	Color	Digit 21 Code
P1—White (Std)	B	WB2—Almond	H
VP1—Bright White	A	DB1—Dark Bronze	J
VP2—EggShell	C	SB6—Prime	K
DB5—Flat Black	E	SA1—Silver Aluminum	L
SB1—Light Grey	F	MC2—Champagne	M
SB7—Soft Dove	G	MC3—Bronze Mica	N
CC1—Custom Color 1	1	CC2—Custom Color 2	2

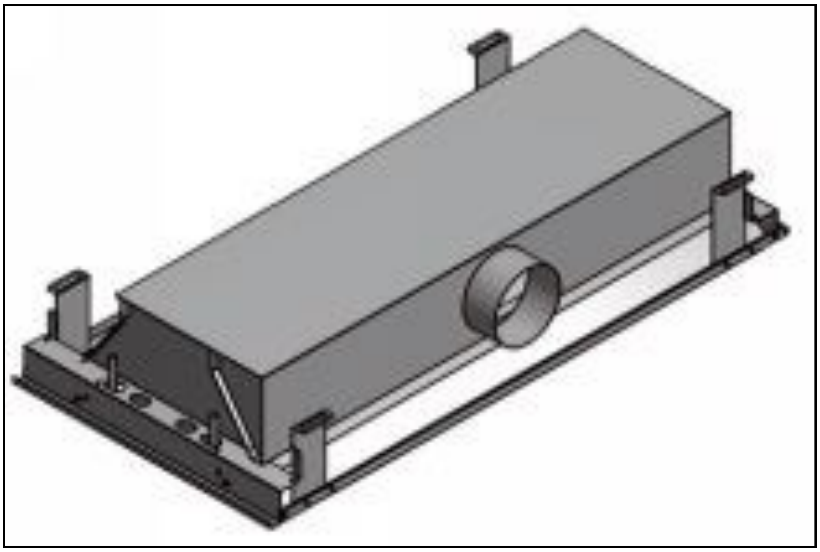
*P1-White is the standard color quoted and provided when no other is specified.
*All other (non-custom) colors listed are readily available, and are shown on the Mestek color chart. These colors are a cost-add over P1-White, but lower cost than custom colors. Physical samples of any Mestek colors (including P1) can quickly be mailed out upon request.
*Each custom color on a project is assigned a number, starting with 1. There can be any number of colors (including custom) on a project, each additional color at additional cost.
*Custom colors require additional time to perform a color match and get customer approval of color sample

AIR AND COIL CONFIGURATION KEY

ACB40 MODEL

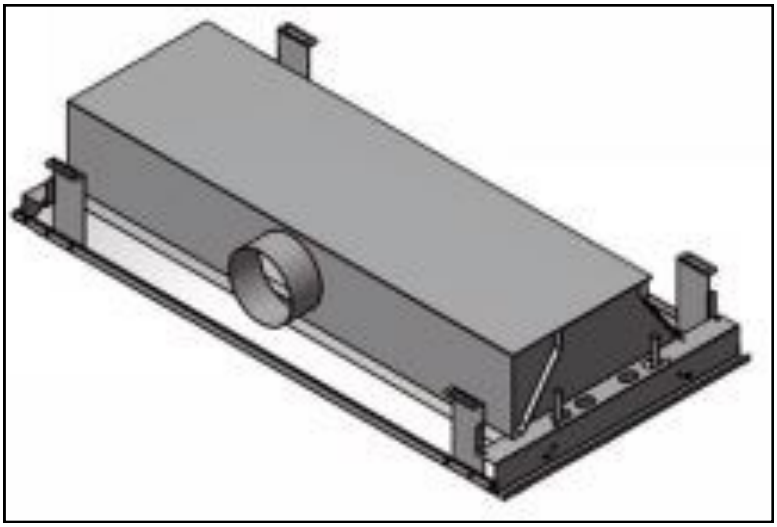
SIDE DUCT CONNECTION

Available Connection Sizes: 4", 5", 6" Round, 8" Elliptical



Air Connection	Max Recommended Primary Airflow (CFM)
4" Round	60
5" Round	95
6" Round	135
8" Elliptical	215

AIR: C
COIL: C



AIR: D
COIL: D

NOTE:
Air Handing is represented by digit 14 in the model number
Coil Handing is represented by digit 16 in the model number

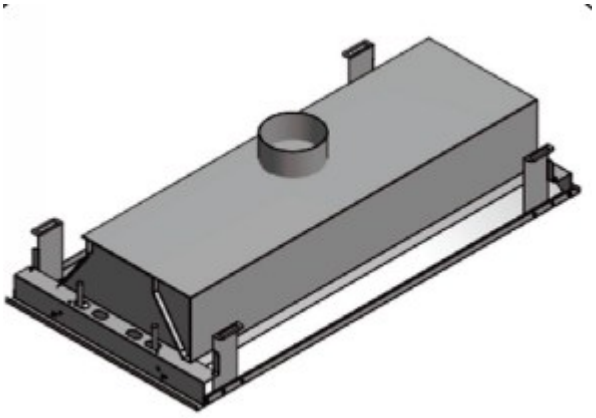
AIR AND COIL CONFIGURATION KEY

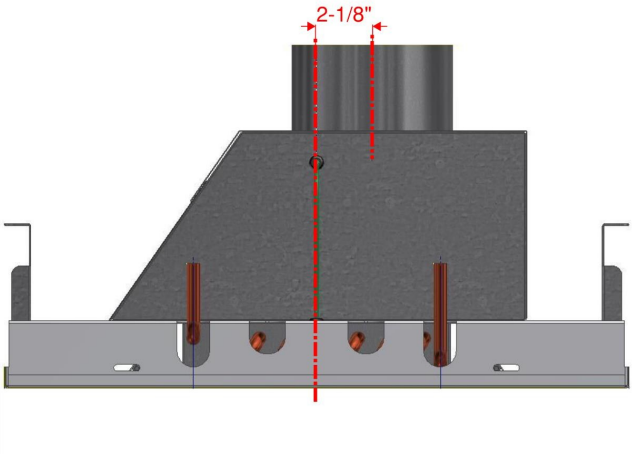
ACB40 MODEL

TOP DUCT CONNECTION

Available Connection Sizes: 4", 5", 6",8", 10" Round

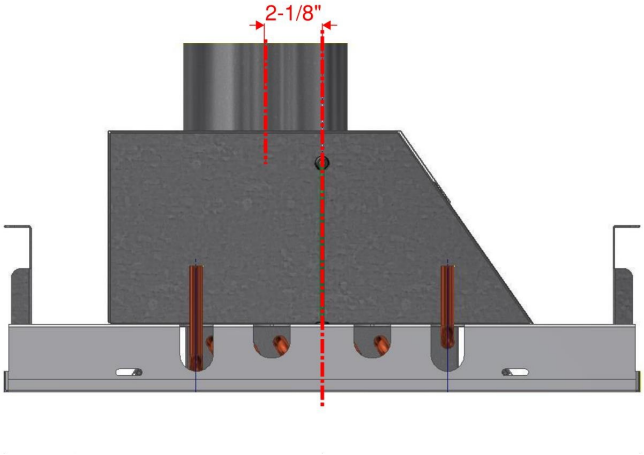
Air Connection	Max Recommended Primary Airflow (CFM)
4" Round	60
5" Round	95
6" Round	135
8" Round	245
10" Round	380





AIR: E
COIL: C

Center of duct connection is offset 2-1/8" to the **right** of ACB centerline



AIR: E
COIL: D

Center of duct connection is offset 2-1/8" to the **left** of ACB centerline

Top Connection Note:
The distinction between "C" and "D" coil handings is typically only important in exposed applications where the entire ACB is visible from the occupied space, and/or hard-ducted applications. They are needed to know the exact position of the duct connection along the width of the ACB, and to know which side the unit will have the vertical face of the plenum. In most cases, these things are not important, and the ACB can be rotated to get coil connections on the side needed. In that case, ACBs can be ordered with the handing of AIR:E, COIL:E, to indicate that either of the above configurations is acceptable.

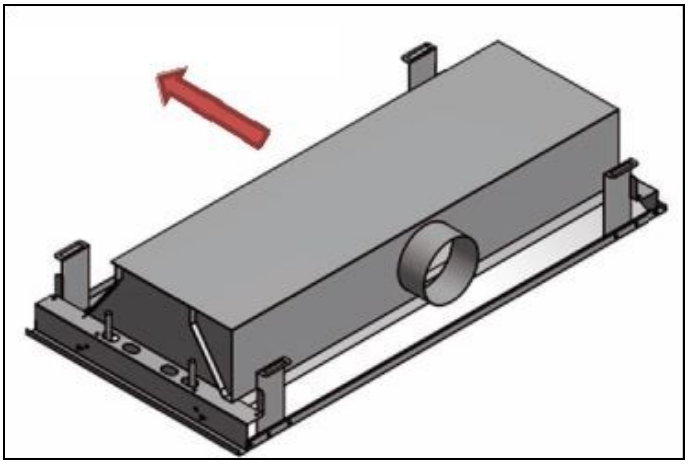
AIR AND COIL CONFIGURATION KEY

ACB50 MODEL

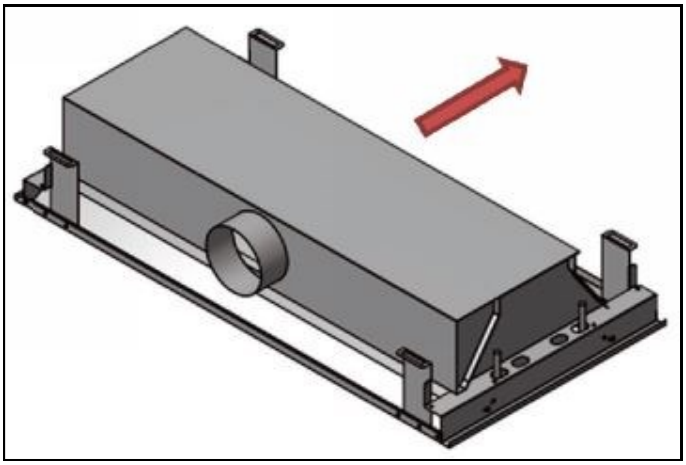
Red Arrow Indicates Supply Air Flow Direction

SIDE DUCT CONNECTION

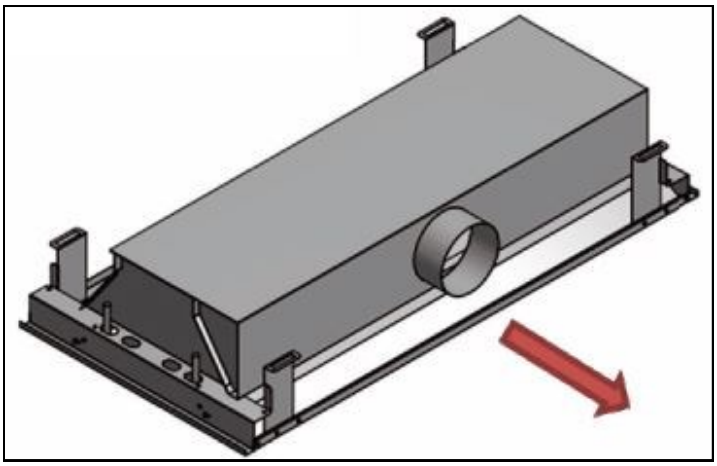
Available Connection Sizes: 4", 5", 6" Round, 8" Elliptical



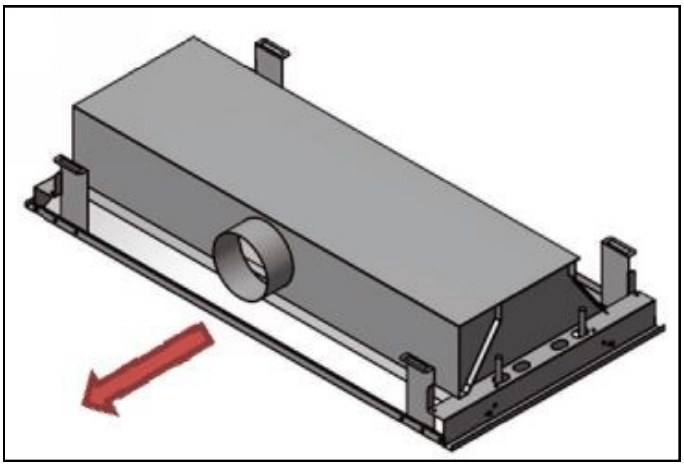
AIR: F
COIL: A



AIR: F
COIL: B



AIR: G
COIL: A



AIR: G
COIL: B

NOTE: Air Handing is represented by digit 14 in the model number
Coil Handing is represented by digit 16 in the model number

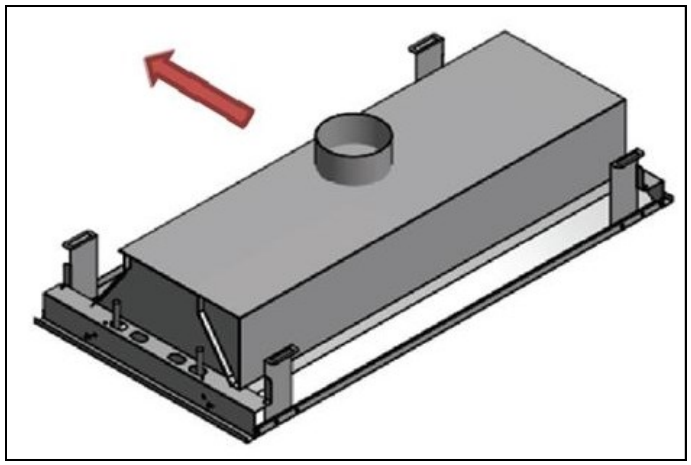
AIR AND COIL CONFIGURATION KEY

ACB50 MODEL

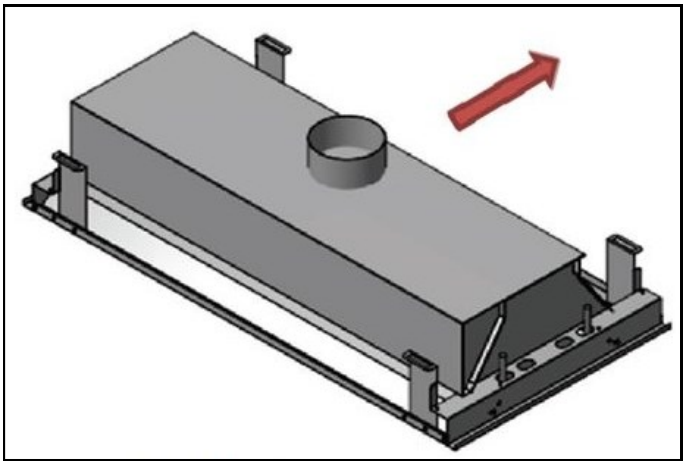
Red Arrow Indicates Supply Air Flow Direction

TOP DUCT CONNECTION

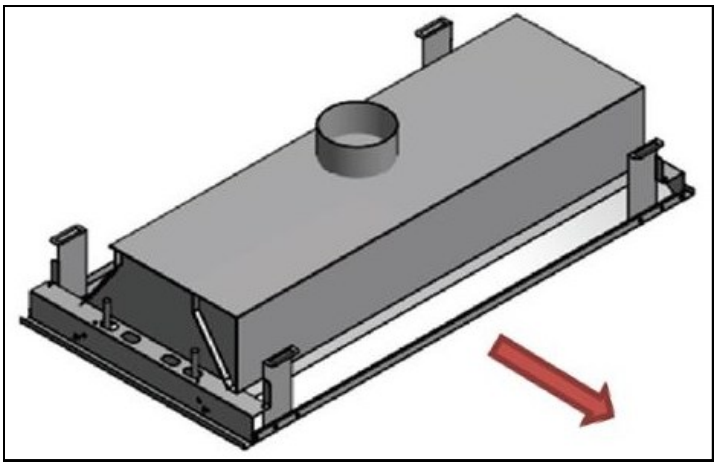
Available Connection Sizes: 4", 5", 6",8", 10" Round



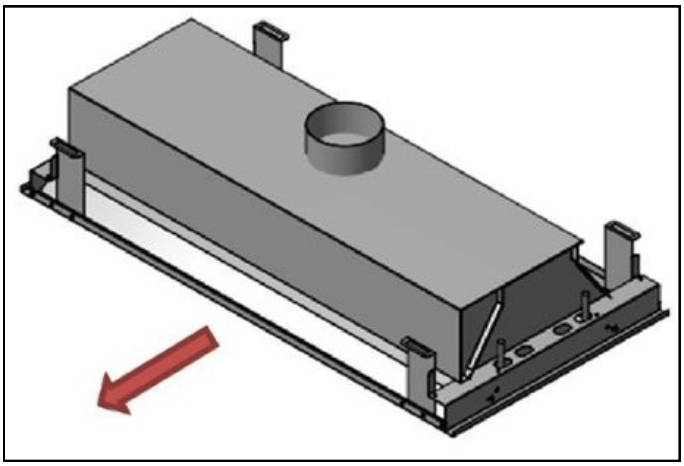
AIR: H
COIL: A



AIR: H
COIL: B



AIR: I
COIL: A



AIR: I
COIL: B

Top Connection Note:
The distinction between "H" and "I" air handings is typically only important in exposed applications where the entire ACB is visible from the occupied space. In that case, the "H" and "I" distinctions are used to ensure that in a row of end-to-end ACBs, the flat face of the plenums line up with each other. The "H" and "I" handings are also needed to know the exact position of the duct connection along the width of the ACB, since the connections are centered on the top plenum surface, not the overall unit. See ACB40_50 submittal drawing for dimensions.