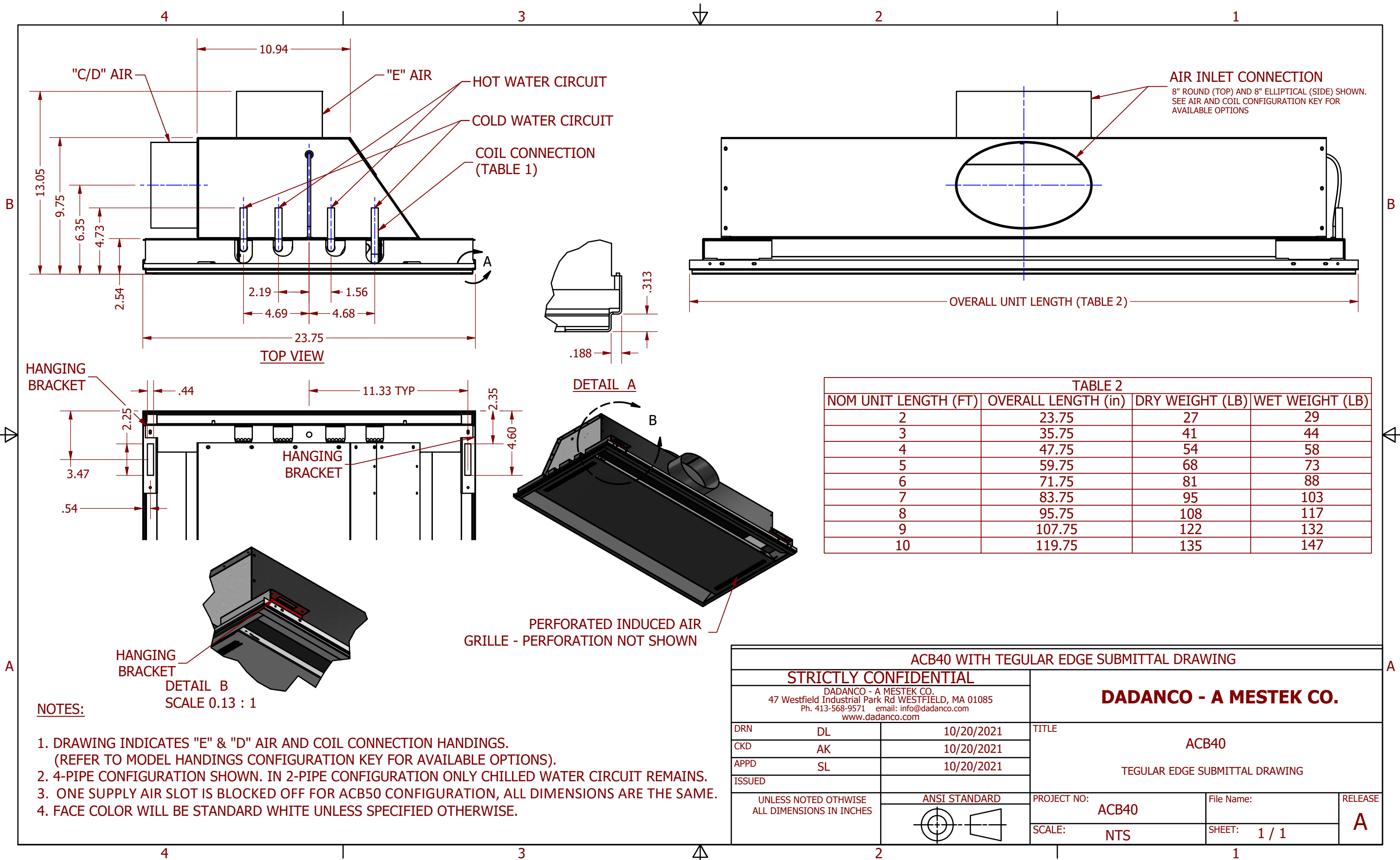


TABLE 1			
NOM UNIT LENGTH (FT)	OVERALL LENGTH (in)	DRY WEIGHT (LB)	WET WEIGHT (LB)
2	23.75	27	29
3	35.75	41	44
4	47.75	54	58
5	59.75	68	73
6	71.75	81	88
7	83.75	95	103
8	95.75	108	117
9	107.75	122	132
10	119.75	135	147

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

STANDARD ACB40 SUBMITTAL DRAWING				
STRICTLY CONFIDENTIAL			DADANCO - A MESTEK CO.	
DADANCO - A MESTEK CO. 47 Westfield Industrial Park Rd WESTFIELD, MA 01085 Ph. 413-568-9571 email: info@dadanco.com www.dadanco.com			ACB40	
DRN	DL	6/20/2020	TITLE	
CKD	SL	6/20/2020	STANDARD EDGE SUBMITTAL DRAWING	
APPD	SL	6/20/2020		
ISSUED				
UNLESS NOTED OTHERWISE ALL DIMENSIONS IN INCHES		ANSI STANDARD	PROJECT NO: ACB40	File Name:
			SCALE: NTS	SHEET: 1 / 1
				RELEASE A



- 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.

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

ACB40 WITH TEGULAR EDGE SUBMITTAL DRAWING				
STRICTLY CONFIDENTIAL			DADANCO - A MESTEK CO.	
DADANCO - A MESTEK CO. 47 Westfield Industrial Park Rd WESTFIELD, MA 01085 Ph. 413-568-9571 email: info@dadanco.com www.dadanco.com			ACB40	
DRN	DL	10/20/2021	TITLE	
CKD	AK	10/20/2021	ACB40	
APPD	SL	10/20/2021	TEGULAR EDGE SUBMITTAL DRAWING	
ISSUED			PROJECT NO: ACB40	
UNLESS NOTED OTHERWISE ALL DIMENSIONS IN INCHES		ANSI STANDARD	SCALE: NTS	RELEASE
			FILE Name:	A
			SHEET: 1 / 1	

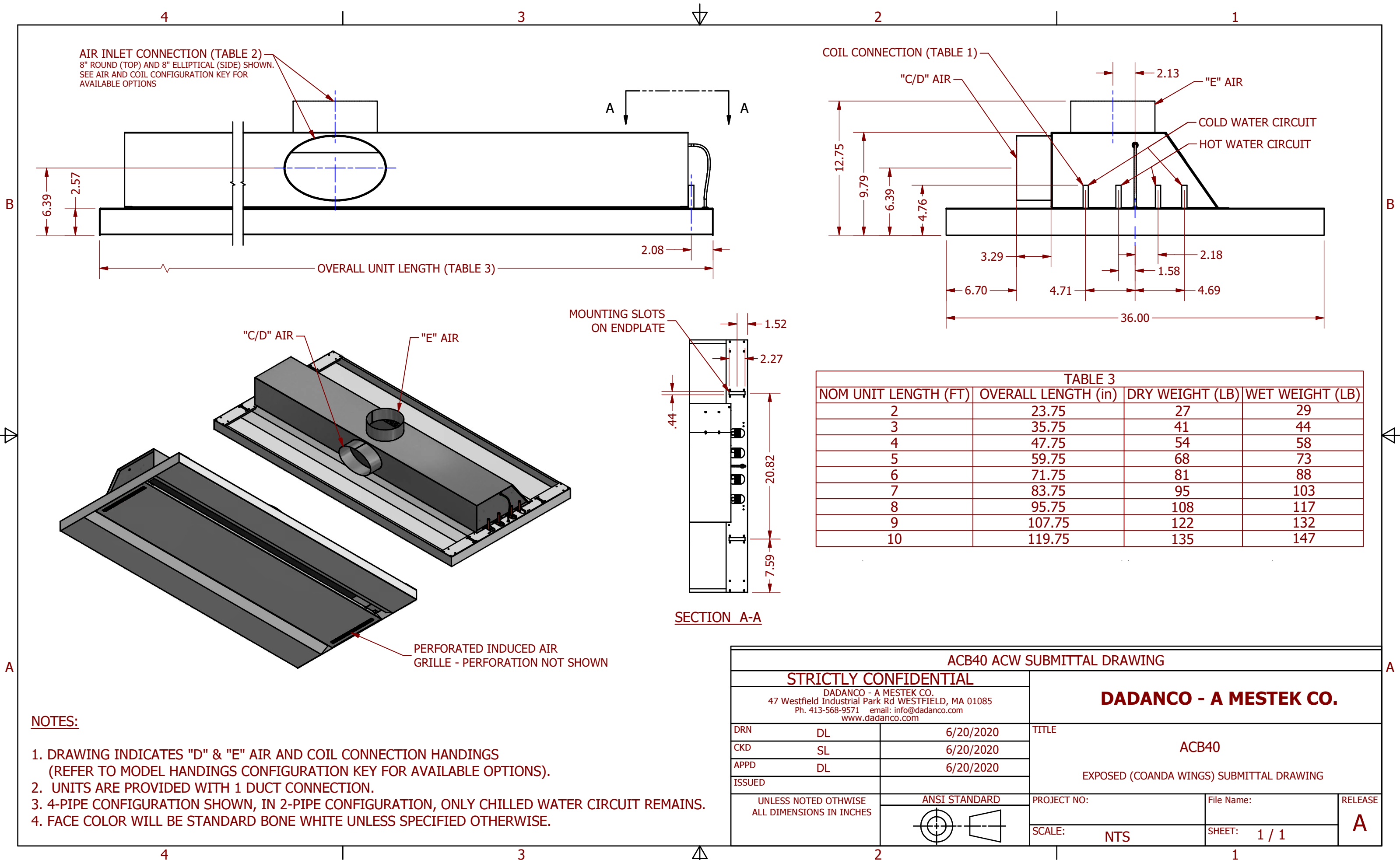
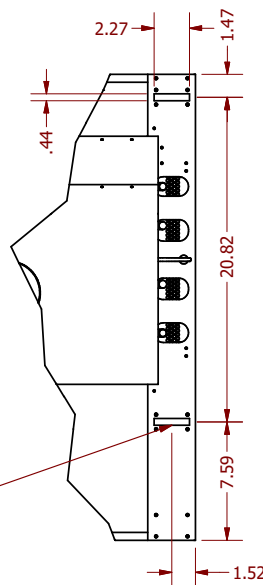
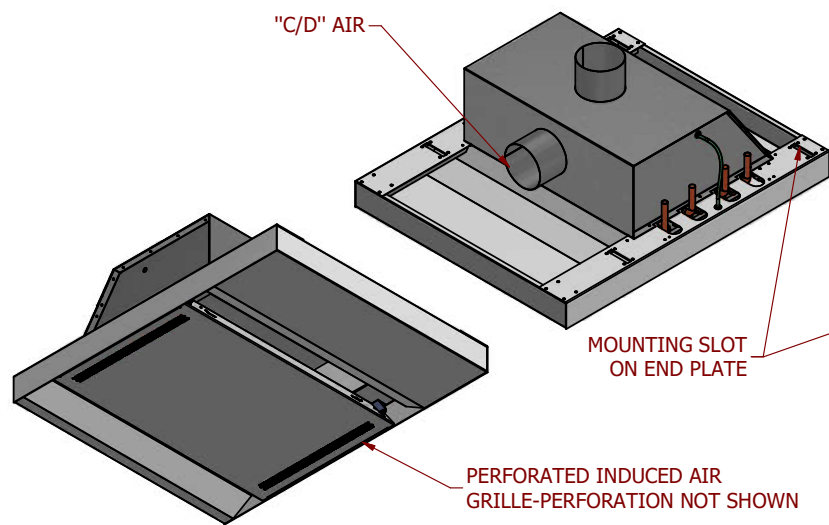
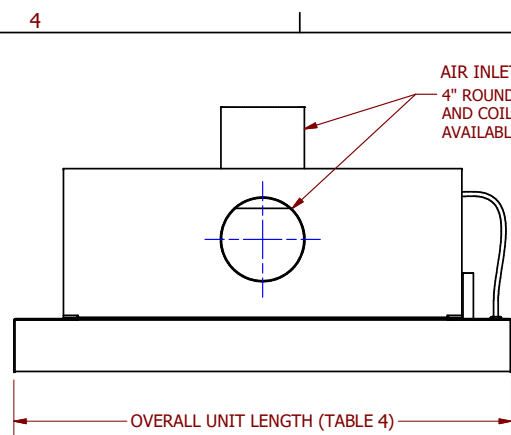


TABLE 3			
NOM UNIT LENGTH (FT)	OVERALL LENGTH (in)	DRY WEIGHT (LB)	WET WEIGHT (LB)
2	23.75	27	29
3	35.75	41	44
4	47.75	54	58
5	59.75	68	73
6	71.75	81	88
7	83.75	95	103
8	95.75	108	117
9	107.75	122	132
10	119.75	135	147

- 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			DADANCO - A MESTEK CO.	
DADANCO - A MESTEK CO. 47 Westfield Industrial Park Rd WESTFIELD, MA 01085 Ph. 413-568-9571 email: info@dadanco.com www.dadanco.com			ACB40	
DRN	DL	6/20/2020	EXPOSED (COANDA WINGS) SUBMITTAL DRAWING	
CKD	SL	6/20/2020		
APPD	DL	6/20/2020		
ISSUED				
UNLESS NOTED OTHERWISE ALL DIMENSIONS IN INCHES		ANSI STANDARD	PROJECT NO:	File Name:
			SCALE: NTS	SHEET: 1 / 1
				RELEASE <b>A</b>



TOP VIEW

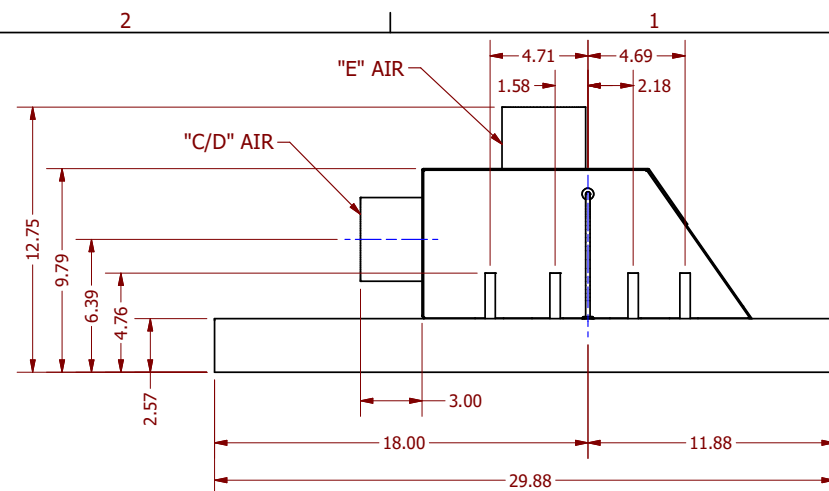


TABLE 4			
NOM UNIT LENGTH (FT)	OVERALL LENGTH (in)	DRY WEIGHT (LB)	WET WEIGHT (LB)
2	23.75	27	29
3	35.75	41	44
4	47.75	54	58
5	59.75	68	73
6	71.75	81	88
7	83.75	95	103
8	95.75	108	117
9	107.75	122	132
10	119.75	135	147

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.		
DADANCO - A MESTEK CO. 47 Westfield Industrial Park Rd WESTFIELD, MA 01085 Ph. (413) 564-5657, Fax. (413) 568-2969 www.dadanco.com			ACB50		
DRN	TS	10/1/2021	EXPOSED (COANDA WING) SUBMITTAL DRAWING		
CKD	DL	10/1/2021	PROJECT NO:		
APPD	DL	10/1/2021	SCALE: NTS		
ISSUED			SHEET: 1 / 1		
UNLESS NOTED OTHERWISE ALL DIMENSIONS IN INCHES ANGULAR TOL: 1.0° LINEAR TOL: ±0.02"			RELEASE A		
ANSI STANDARD					

## 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 hanging 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 5 - 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

### 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 Handling: Digit 14**  
**Coil Handling: 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 overall 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

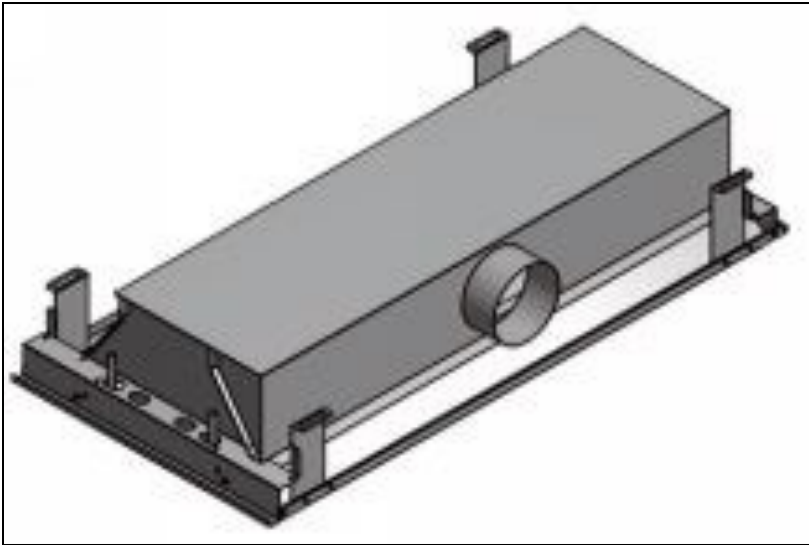


## AIR AND COIL CONFIGURATION KEY

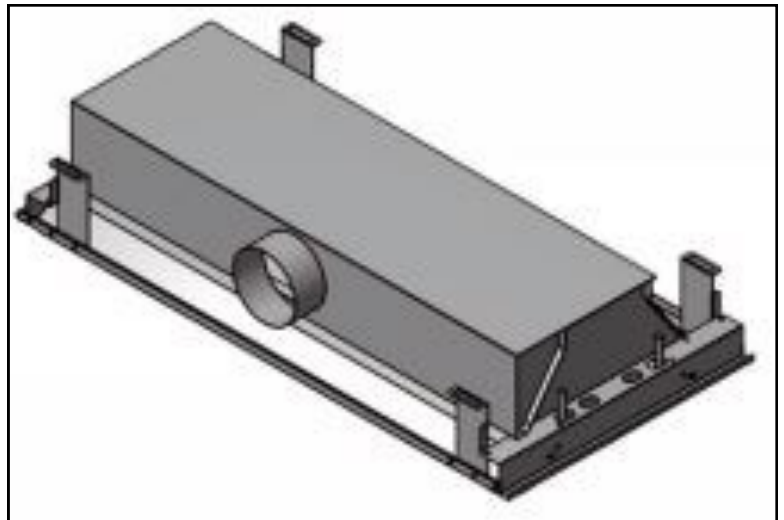
## ACB40 MODEL

### SIDE DUCT CONNECTION

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



**AIR: C**  
**COIL: C**



**AIR: D**  
**COIL: D**

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

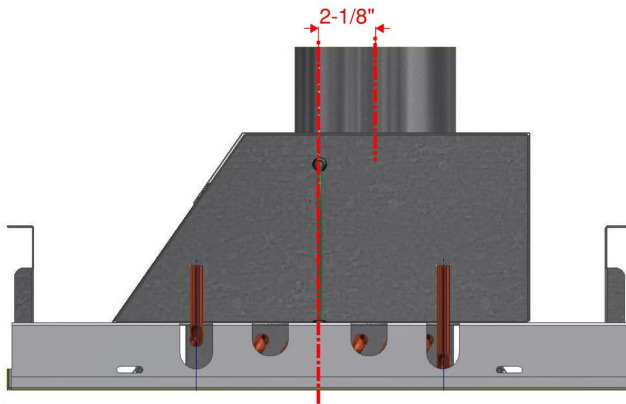
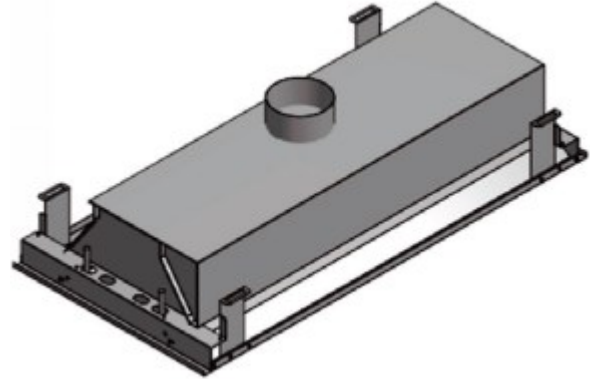


# AIR AND COIL CONFIGURATION KEY

## ACB40 MODEL

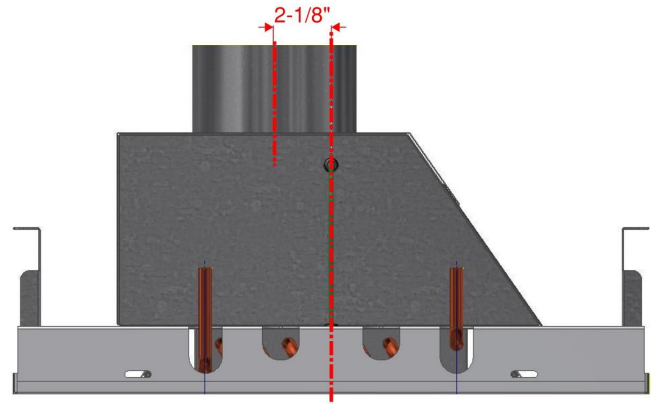
### TOP DUCT CONNECTION

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



**AIR: 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.

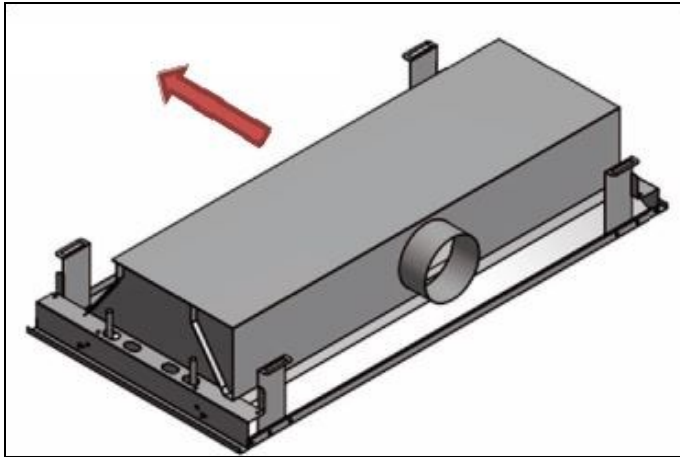
# AIR AND COIL CONFIGURATION KEY

## ACB50 MODEL

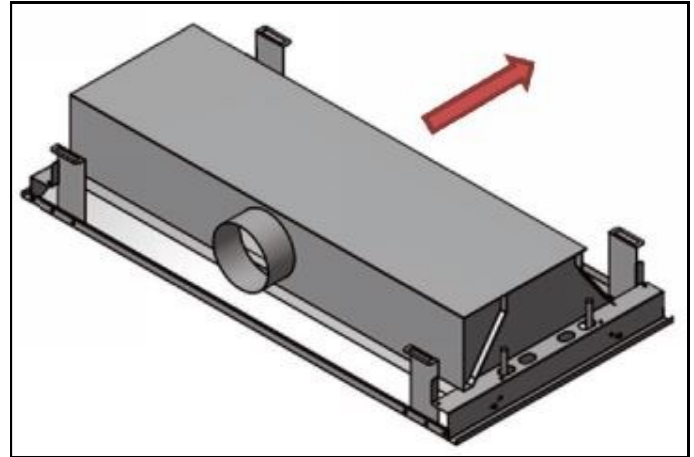
**Red Arrow Indicates Supply Air Flow Direction**

### SIDE DUCT CONNECTION

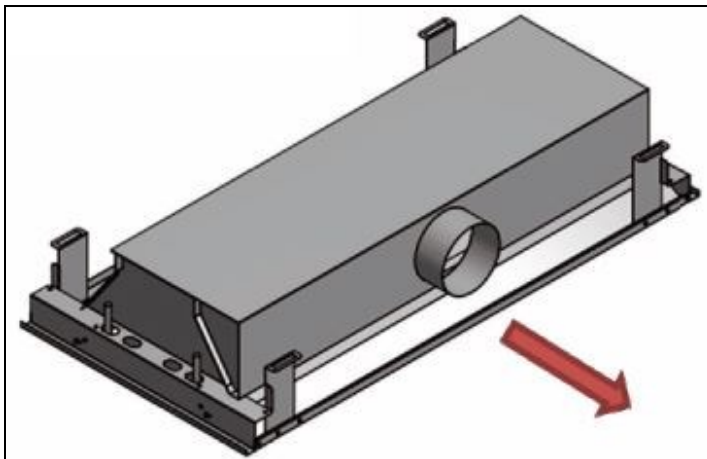
Available Connection Sizes: 4", 5", 6" Round, 8" Elliptical



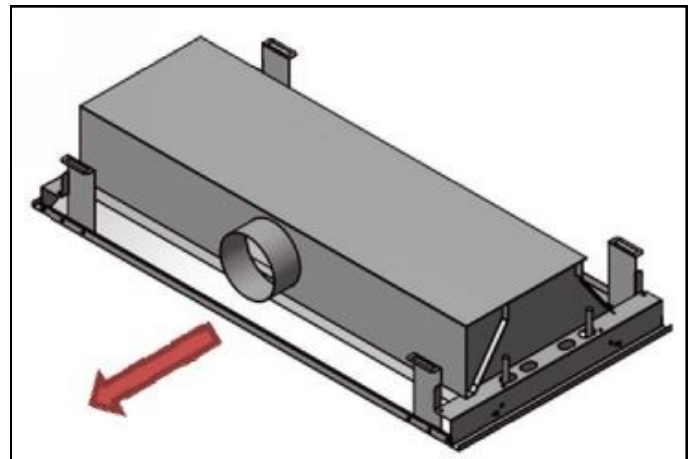
**AIR: F**  
**COIL: A**



**AIR: F**  
**COIL: B**



**AIR: G**  
**COIL: A**



**AIR: G**  
**COIL: B**

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

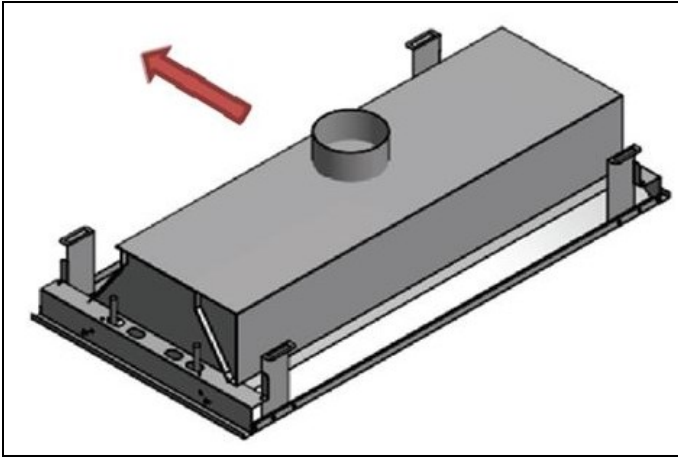
## AIR AND COIL CONFIGURATION KEY

## ACB50 MODEL

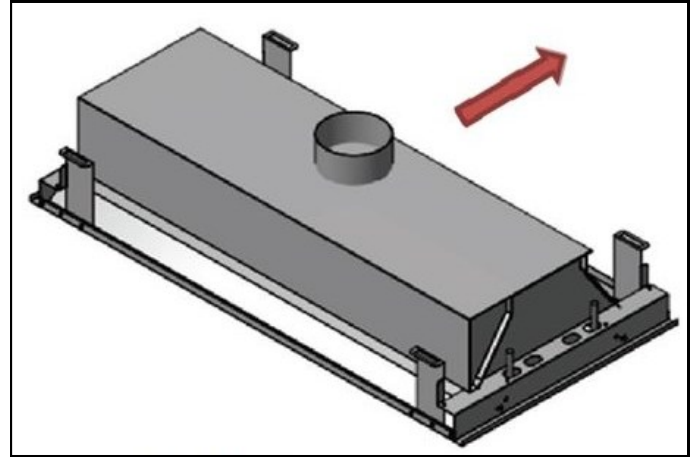
**Red Arrow Indicates Supply Air Flow Direction**

### TOP DUCT CONNECTION

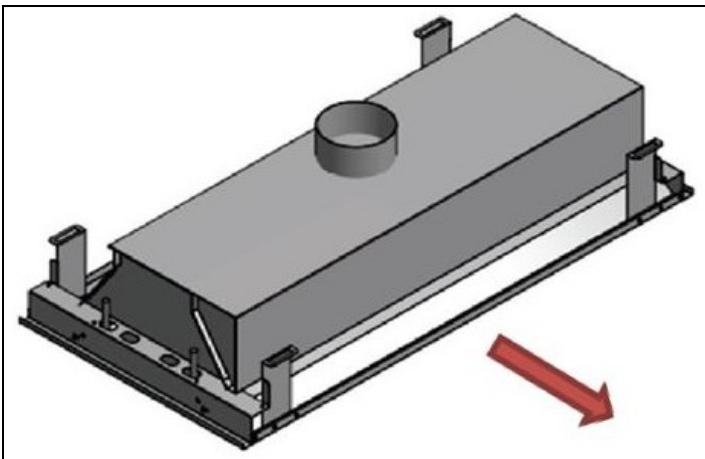
Available Connection Sizes: 4", 5", 6", 8", 10" Round



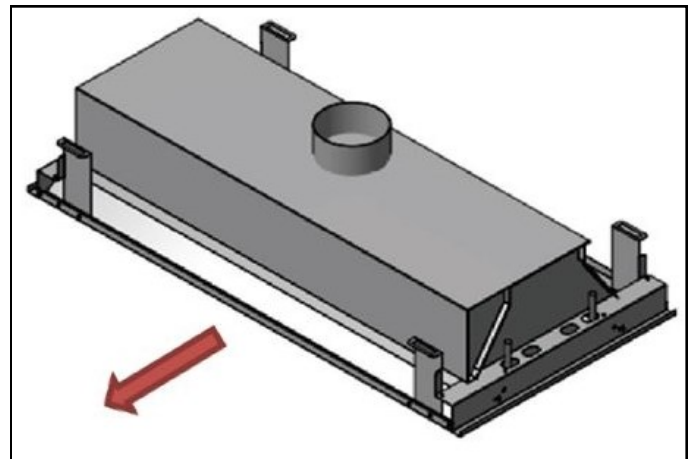
**AIR: H**  
**COIL: A**



**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.