TRANE®

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Application Guide

XB-APG03-EN
Low OD Ambient Operation
Unit Mounting
Minimum Clearances

For Trane XB Model Family and Trane 2.5 - 6 Ton 3 Phase Outdoor Models

Purpose:

The purpose of this bulletin is to provide cumulative application criteria as related to the Trane XR style cooling units and heat pumps.

This bulletin discusses:

I. Off Season Cooling Operation
II. Unit Mounting
III. Minimum Operating Clearances

ISSUED BY:
Product Training and Application Department
Trane
Tyler, Texas

Section I - Off Season Cooling Operation:

The Trane XB models, as well as the 3 phase models may be operated in the cooling mode to 55°F as shipped from the factory when applied with an indoor FCCV. Where required, these units, with appropriate accessories, may be applied to operate at outdoor temperatures below 55°F
Please refer to the accessory table below when determining if the desired model unit will operate at the specified conditions and required accessories

	Ambient Temperature in Cooling Mode Operation									
Model Family	**55 F**	**45 F**	**30 F**			**0 F**				
TTB012 - 024	As Shipped	TXV	AY28X079	TXV	CCHT	Not Approved				
XB10 Cooling Unit	As Shipped	TXV	AY28X079	TXV	CCHT	BAYLOAM103	Non Bleed TXV	CCHT*	Quick Start Accessory*	Solenoid Valve**
XB12 Cooling Unit	As Shipped	TXV	AY28X079	TXV	CCHT	BAYLOAM103	Non Bleed TXV	CCHT*	Quick Start Accessory*	Solenoid Valve**
3 phase 12 SEER Cooling Unit	As Shipped	TXV	AY28X079	TXV	CCHT	BAYLOAM103	Non Bleed TXV			Solenoid Valve**
3 phase 10 SEER Cooling Unit	As Shipped	TXV	AY28X079	TXV	CCHT	BAYLOAM103	Non Bleed TXV			Solenoid Valve**
XB10 Heat Pump	As Shipped	TXV	AY28X084	TXV	CCHT	BAYLOAM103	Non Bleed TXV	CCHT*	Quick Start Accessory*	
XB12 Heat Pump	As Shipped	TXV	AY28X084	TXV	CCHT	BAYLOAM103	Non Bleed TXV	CCHT*	Quick Start Accessory	
3 phase 12 SEER Heat Pump	As Shipped	TXV	AY28X084	TXV	CCHT	BAYLOAM103	Non Bleed TXV			
3 phase 10 Heat Pump	As Shipped	TXV	AY28X084	TXV	CCHT	BAYLOAM103	Non Bleed TXV			

* Unit requires start accessory only if it is not factory installed. Check general specifications located in product data to determine if unit is equipped with factory installed quick start components.

* *Solenoid valve required if:

1. Liquid line is one size larger than factory connection. (example: factory connection is 3/8" and the existing liquid line is 1/2") Please refer to publication 32-3009-03 or latest edition for approved line sizes.
2. Off cycle time will be longer than 30 minutes during low ambient cooling operation.

Compressor Sump Heaters:

Reciprocating Compressor: BAYCCHT300
Scroll Compressor: BAYCCHT301

Evaporator Defrost Control Kits:

AY28X079: Cooling only
AY28X084: Heat pumps

Head Pressure Controller:

BAYLOAM103: Approved for heat pumps and cooling units

Wind Shields:

Please refer to page 14 of this document for information regarding wind shields when low ambient cooling operation is required.

More Information:

As noted in the above table, the XB10 and 3 phase outdoor units may be operated to 0°F if necessary, by applying the BAYLOAM103 head pressure controller and other required accessories. The BAYLOAM103 is a newly developed head pressure controller that cycles the OD fan as needed to maintain liquid line temperature as set by the DIP switches located on the control. There is no need to change the outdoor fan motor on approved products since the controller does not vary the frequency to the motor. For more information publication number 18-HE46D1-1or latest version, should be consulted.

TTB012 - 024 and XB10 Crankcase Heat and Start Kit Matrix:

This matrix is provided to supply information regarding current products. However, due to product improvement, it is recommended to refer to product data for most current information regarding factory installed features. Table print date March 14, 2003.

Unit Model	Required CCHT	Required Hard Start Kit	Unit Model	Required CCHT	Required Hard Start Kit
TTB012C100A	BAYCCHT300	BAYKSKT261	2TWB0012A1000A	Factory Installed	BAYKSKT257
TTB018C100A	BAYCCHT300	BAYKSKT261	2TWB0024A1000A	Factory Installed	BAYKSKT257
TTB024C100A	BAYCCHT300	BAYKSKT261	2TWB0030A1000A	Factory Installed	BAYKSKT257
2TTB0030A1000A	BAYCCHT300	BAYKSKT257	2TWB0036A1000A	Factory Installed	BAYKSKT257
2TTB0036A1000A	BAYCCHT300	BAYKSKT257	2TWB0042A1000A	Factory Installed	BAYKSKT257
2TTB0042A1000A	BAYCCHT300	BAYKSKT257	2TWB0048A1000A	Factory Installed	BAYKSKT257
2TTB0048A1000A	BAYCCHT300	BAYKSKT257	2TWB0060A1000A	Factory Installed	BAYKSKT257
2TTB0060A1000A	BAYCCHT300	BAYKSKT257	2TWB2018A1000A	Factory Installed	Factory Installed
2TTB2018A1000A	BAYCCHT300	Factory Installed	2TWB2024A1000A	Factory Installed	Factory Installed
2TTB2024A1000A	BAYCCHT300	Factory Installed	2TWB2030A1000A	BAYCCHT301	BAYKSKT260
2TTB2030A1000A	BAYCCHT301	BAYKSKT260	2TWB2036A1000A	BAYCCHT301	BAYKSKT260
2TTB2036A1000A	BAYCCHT301	BAYKSKT260	2TWB2042A1000A	BAYCCHT301	BAYKSKT260
2TTB2042A1000A	BAYCCHT301	BAYKSKT260	2TWB2048A1000A	Factory Installed	BAYKSKT260
2TTB2048A1000A	BAYCCHT301	BAYKSKT260	2TWB2060A1000A	Factory Installed	BAYKSKT260
2TTB2060A1000A	BAYCCHT301	BAYKSKT260			

3 phase products:

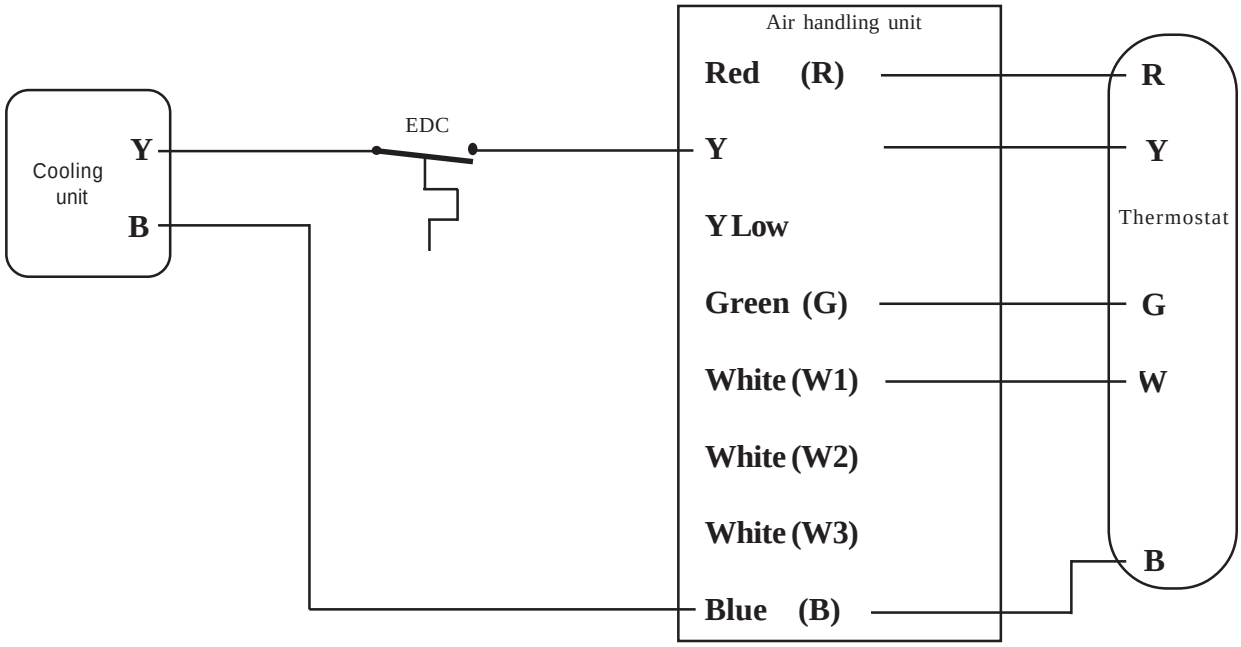
All 2.5 to 6 ton three phase split system cooling units and heat pumps are shipped from the factory with compressor crankcase heat. Three phase compressor do not require start capacitors and start relays.

Definitions and information:

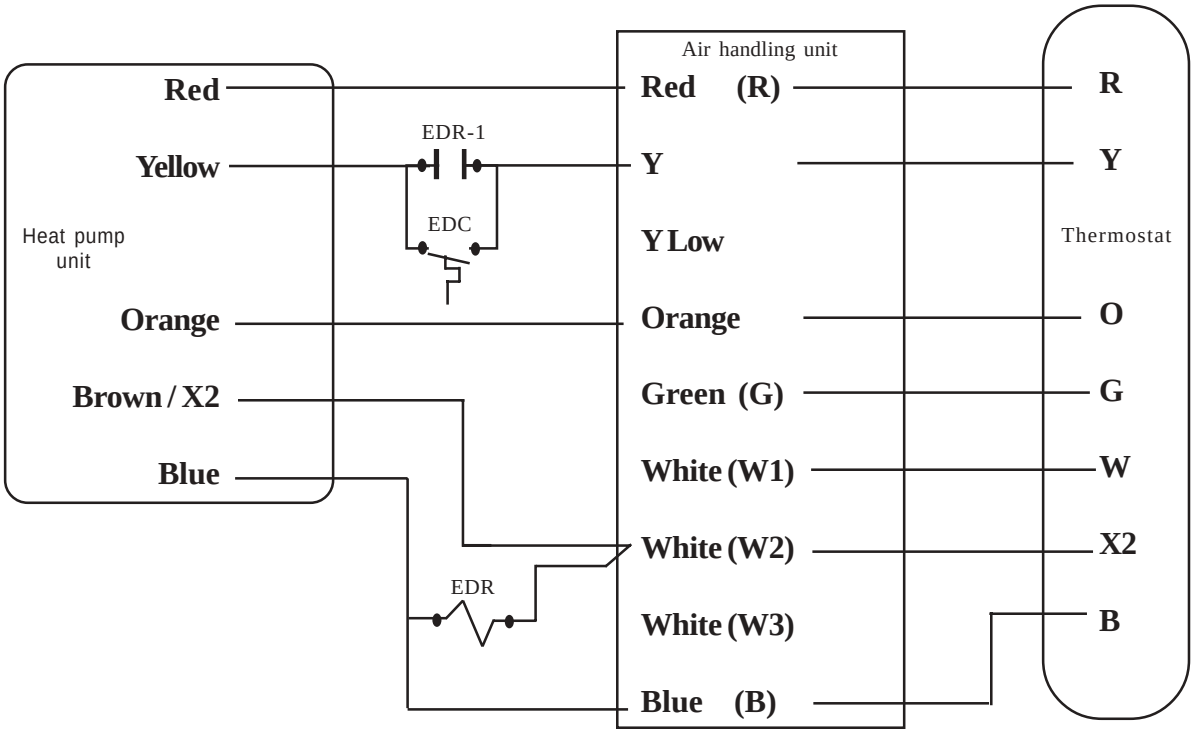
CCHT - Compressor Crankcase Heater
TXV - Thermostatic Expansion Valve
Bleed: This type of TXV will allow the refrigerant pressures between the high side and low side to equalize through the valve during the off cycle.
Non Bleed: This type of TXV will not allow the refrigerant pressures between the high side and low side to equalize through the valve during the off cycle. When using this type of valve on single phase units with reciprocating style compressors, compressor start components are required. Check product data specifications for most current information.

Typical wiring when using the evaporator defrost control (EDC):

Cooling Split System and AY28X079 Evaporator Defrost Control



Heat Pump Split System and AY28X084 Evaporator Defrost Control

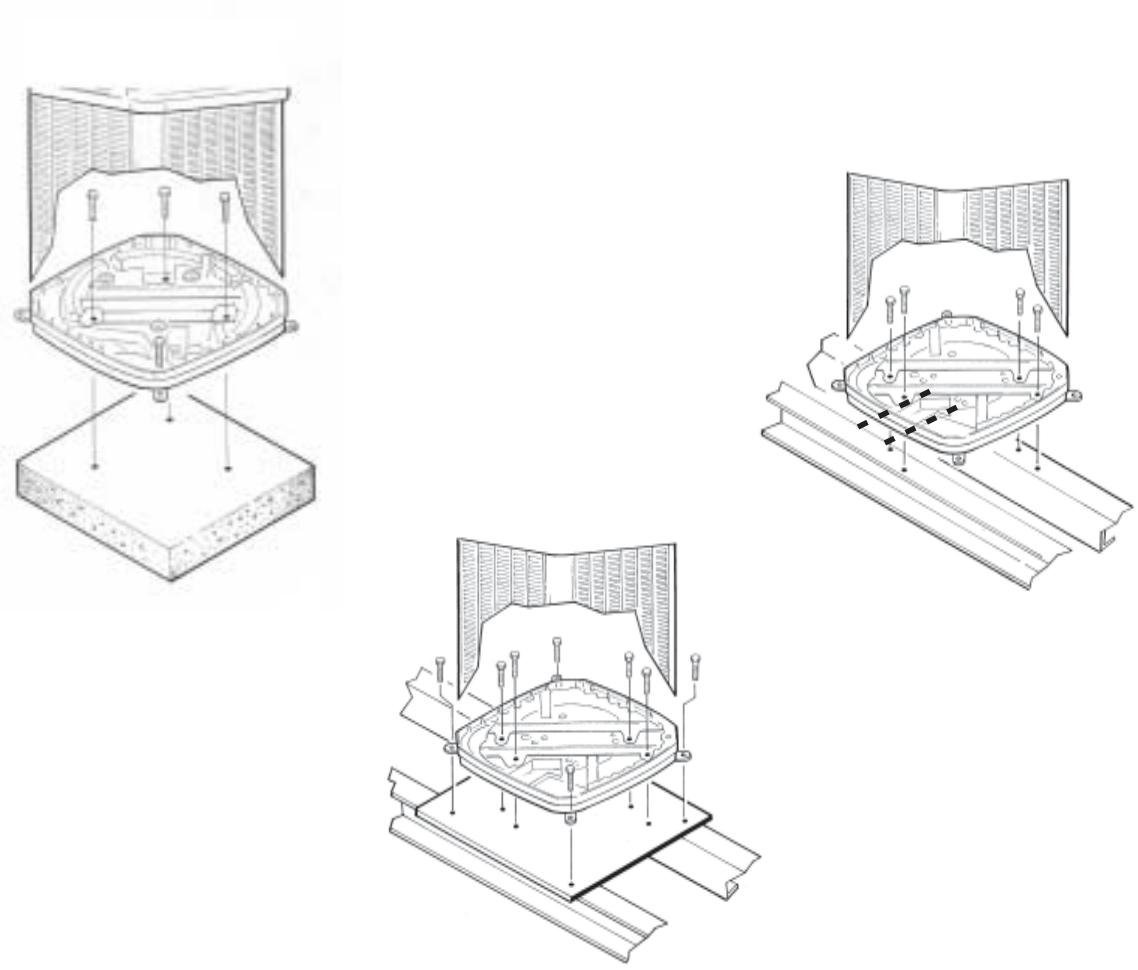


SECTION II - Unit Mounting:

This section describes appropriate methods for mounting and securing the XB10 2.5 through 5 ton units and Trane 2.5 to 6 ton three phase split systems. However, if these units are to be mounted in a region where high winds are an issue, please refer to the Trane BAYECMT001 extreme conditions mounting kit. In seizmic zones the unit shall be secured according to local code; this may require a local P.E.'s stamp.

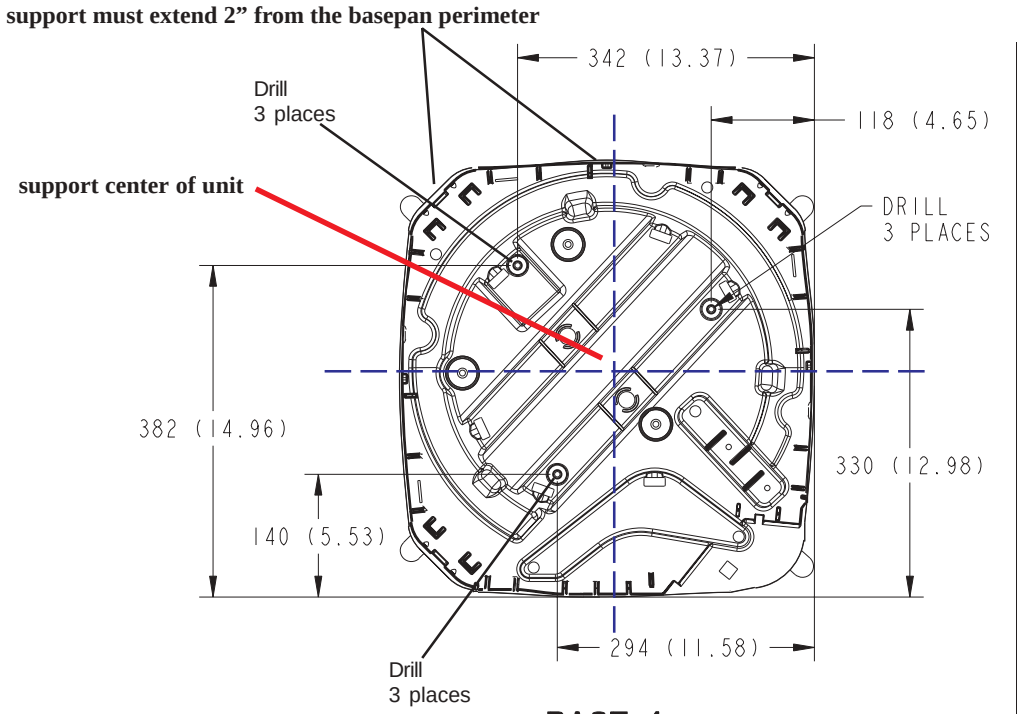
When mounting or securing Trane residential style condensing units and heat pumps please observe the following.

1. Anytime the unit is to be supported from the edge, the supporting material must extend minimum two inches beyond the perimeter of the unit's base.
2. The mounting hole locations are molded in the basepan, however, must be drilled through.
   a) Hole locations are identified on page 7 and 8 of this document as well as the unit installation guide.
3. Washers should be placed in between the fastener head and the basepan.
4. Trane recommends supporting the center of the unit with a cross member if unit is not mounted on plate.
5. Base 1 pans have only three mounting hole locations.
6. Base 2, 3, and 4 pans have four mounting hole locations.
7. Drill size / bolt diameter shall be 5/16".
8. TTB012, 018, and 024C units do not have factory provision for unit mounting.

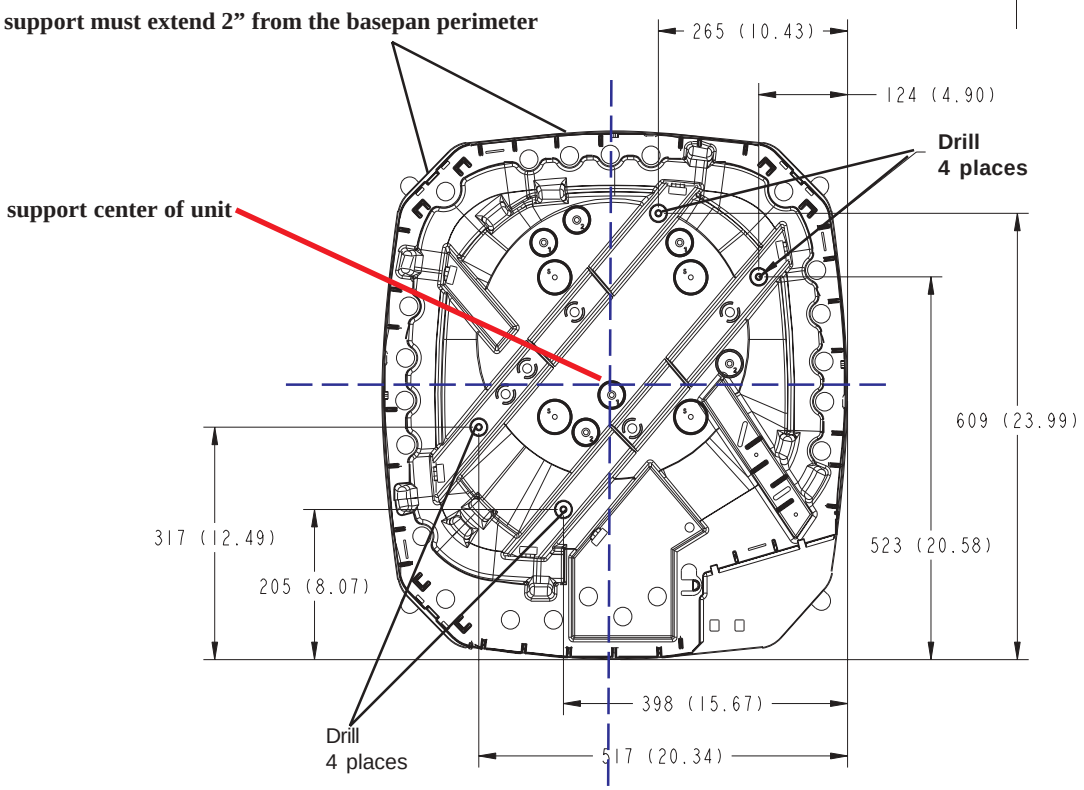


Drawings for illustration purposes only.

BASE PAN MOUNTING HOLE LOCATIONS
(location only, holes must be drilled)



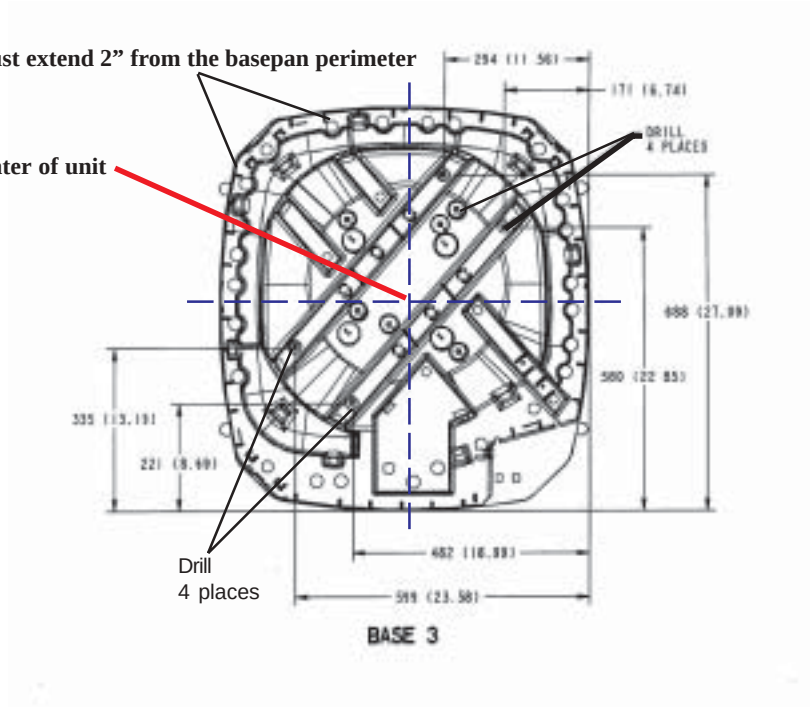
BASE 1

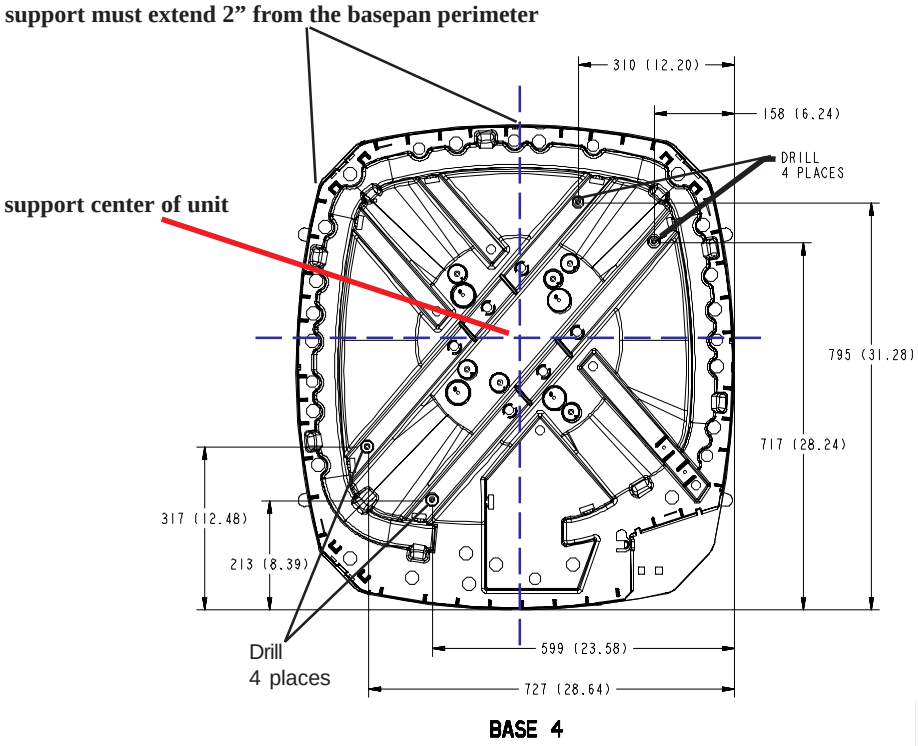


BASE 2

If supporting the base pan from the perimeter, the support must extend under the base pan at least 2”. Trane recommends supporting the middle of the base pan with a cross member.

BASE PAN MOUNTING HOLE LOCATIONS
(location only, holes must be drilled)





If supporting the base pan from the perimeter, the support must extend under the base pan at least 2”. Trane recommends supporting the middle of the base pan with a cross member.

Section III - Minimum Operating Clearances

This section discusses installating the TTB012, 018 and 024C, XB10, and 3 phase condensing unit / heat pump where spacing is limited. When installing Trane outdoor units in a location where clearance to other units, walls, fences, etc are limited these concerns must be addressed:

1. System Operation - Adequate airflow must be provided to and away from the condensing unit / heat pump in order to enable appropriate heat transfer. If this is accomplished, head pressure will remain within an effective operating range.
2. System Servicability - Sufficient working space must be allowed for the HVAC service technician to properly maintain the condensing unit / heat pump. Furthermore, space must be allowed for major component change out in the event of a failure. Working space is determined by the Local, State and National Codes. (See National Electric Code Table 110.26 for explanation.)
3. Space Maintenance - Appropriate area must be allowed in order to maintain the ground area where the units are positioned to prohibit debris from collecting on the panels, thus further providing unobstructed airflow to the condensing unit.
3. State, Local Codes, and National Codes shall prevail. Check with the local jurisdiction before installation to assure compliance.

Numerous projects require minimum clearances between outdoor units and adjacent walls, fences and other units. The obstruction in question is usually one of the following:

1. One or more walls of an adjacent building.
2. Fences or barriers provided to reduce sound transmission or visually screen the equipment.
3. Other outdoor units in a multi-unit installation.
4. A combination of the above.
5. Overhangs

The prime considerations involved in establishing minimum clearances are:

1. Adequate airflow to the outdoor coil with minimum recirculation.
2. Service access to the equipment.
3. Compliance with the National Electric Code and other applicable codes.
4. Design temperature - Design temperatures greater than 105F require additional consideration.

I. In order to assure that adequate airflow reaches the XR condensing unit, size free air passages at 300 Feet Per Minute maximum velocity. See condensing unit airflow performance on page 23 of this document.

II. The importance of providing proper service access to equipment cannot be overemphasized. The HVAC service technician's job may be performed with greater ease and lower cost if adequate service space is allowed.

III. Knowledge of the National Electric Code and other applicable codes for the job sight location is a necessity in order to satisfy local inspectors. These codes are in place for service as well as safety.

IV. Be sure to read all provisions and footnotes contained in this document. When ambient temperatures exceed 105F, more space may be required for minimum operating clearances.

1. Installation of a single condensing unit / heat pump in a corner with free air space on top.

A) For locations where the design ambient temperature is below 105F:

1) 1.0 feet clearance on 2 sides - If shrubbery is to be placed by the unit other side, then allow 1.0 Feet minimum clearance from the unit

2) Service access side minimum 3 feet minimum clearance. Consult Local, State, and National Electric Codes for minimum service clearance.

B) For locations where the design ambient temperature exceeds 105F:

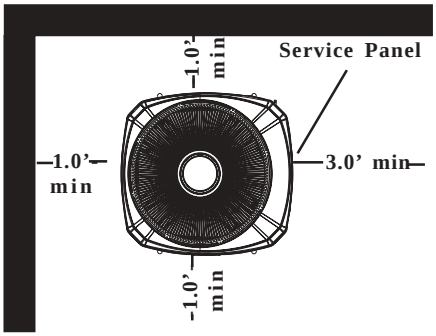
1) 1.5 feet clearance on 2 walls. - If shrubbery is to be placed by the unit other side, then allow 1.0 Feet minimum clearance from the unit.

2) Service access side minimum 3 feet minimum clearance.

C) If unit is located in such a way that service panel is facing the wall

1) NEC requires minimum 3 feet between the unit and the wall

a) This space may be increased to 3 1/2 feet. Consult the National Electric Code for more information regarding minimum clearances for working spaces.



5 feet minimum unrestricted top clearance shall be provided.

2. Installation of two or more units where two adjacent walls form a corner.

A) For locations where the design ambient temperature is below 105F:

1) Corner unit shall have1.5 feet clearance from side wall and 1.0 feet clearance from back wall.

2) 1 feet clearance in between units, unless service panels face each other. (if service panels face each other, this clearance may be increased to 4 feet per NEC)

B) **For locations where the design ambient temperature exceeds 105F:**

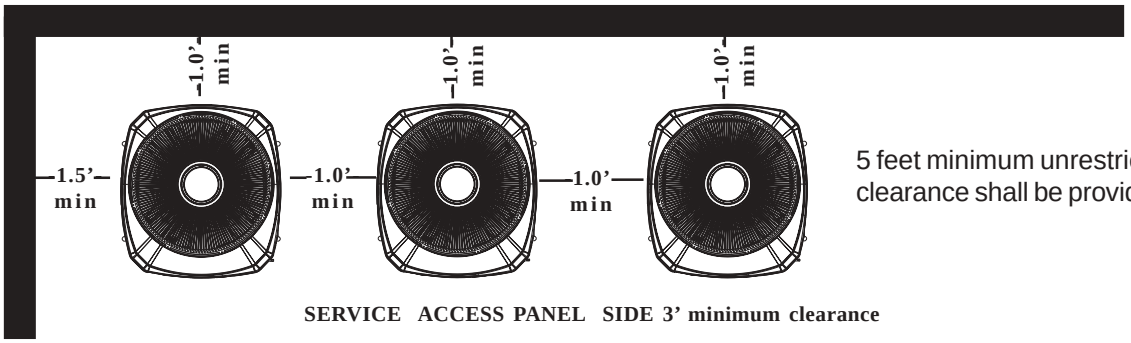
1) 2.0 feet clearance from both walls.

2) 2 feet clearance in between units, unless service panels face each other. (if service panels face each other, this clearance may be increased to 4 feet per NEC)

C) If unit's are located in such a way that the service panels are facing the wall

1) NEC requires minimum 3 feet between the unit and the wall

a) This space may be increased to 3 1/2 feet. Consult the most current edition of the National Electric Code for more information regarding minimum clearances for working spaces.



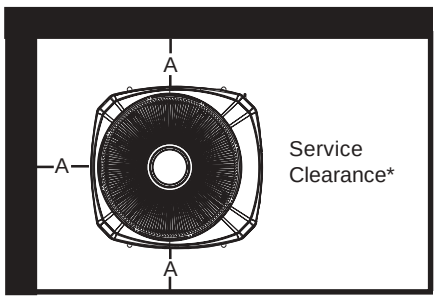
5 feet minimum unrestricted top clearance shall be provided.

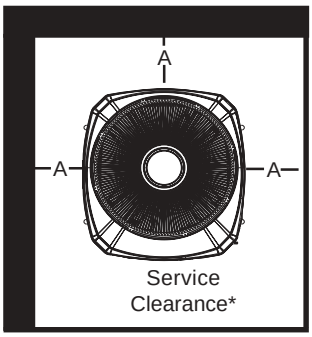
SERVICE ACCESS PANEL SIDE 3' minimum clearance

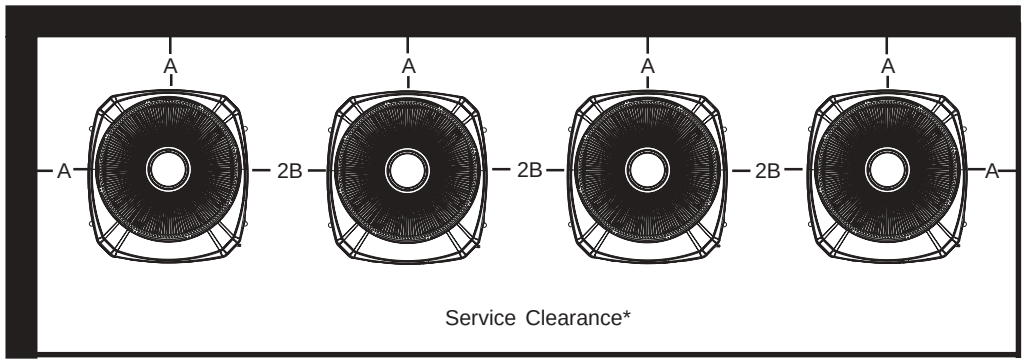
3. Units surrounded on all four sides:

A. If installed unit(s) is / are surrounded by 2 walls and a solid fence, fence height on two sides shall be no higher than the height of the unit. In this application knockouts or louvers shall be provided on two sides minimum with free area to provide maximum 300 FPM velocity. Cutting a portion of the lower fence on two sides to accomplish 300 FPM maximum velocity is acceptable provided debris, dirt, and grass is prohibited from accumulating or growing to obstruct the opening. Refer to page 18 of this document for outdoor unit airflow. Please refer to table below for minimum clearances.

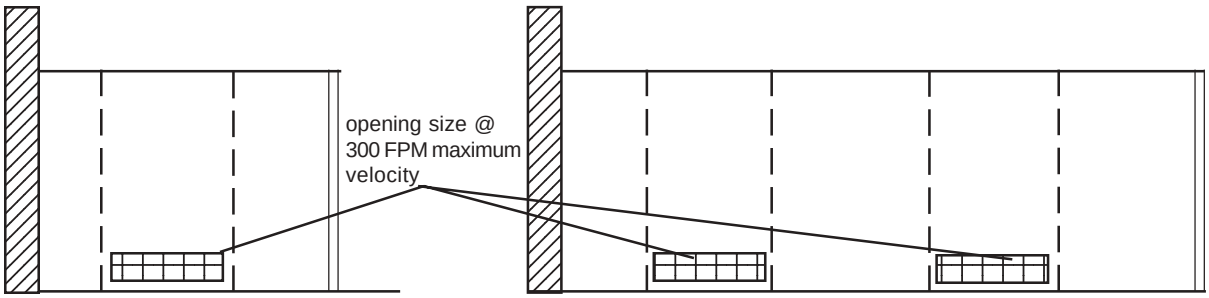
5 feet minimum top clearance shall be provided.







* If removable panels are used and acceptable to local inspection agency, the clearance to the removable panel may be reduced to (1.5 X A)



SIngle Unit - Solid Fence

Multiple Units Solid Fence

Solid Fence: If fence height is taller than unit(s), provide openings in fence that will provide maximum 300 FPM air velocity. These openings shall be located at the lower portion of the fence. If acceptable, the fence may be raised to provide open bottom clearance of fence height above the unit.

These clearances apply in geographical locations in which the maximum design outdoor dry bulb = 105F or less.

Minimum Clearances

Base Size	A	B	Service Clearance
1	1'	6"	36"*
2	1'	7"	36"*
3	1'	8"	36"*
4	1'	9"	36"*
2T*A0072	1.5	12"	36"*

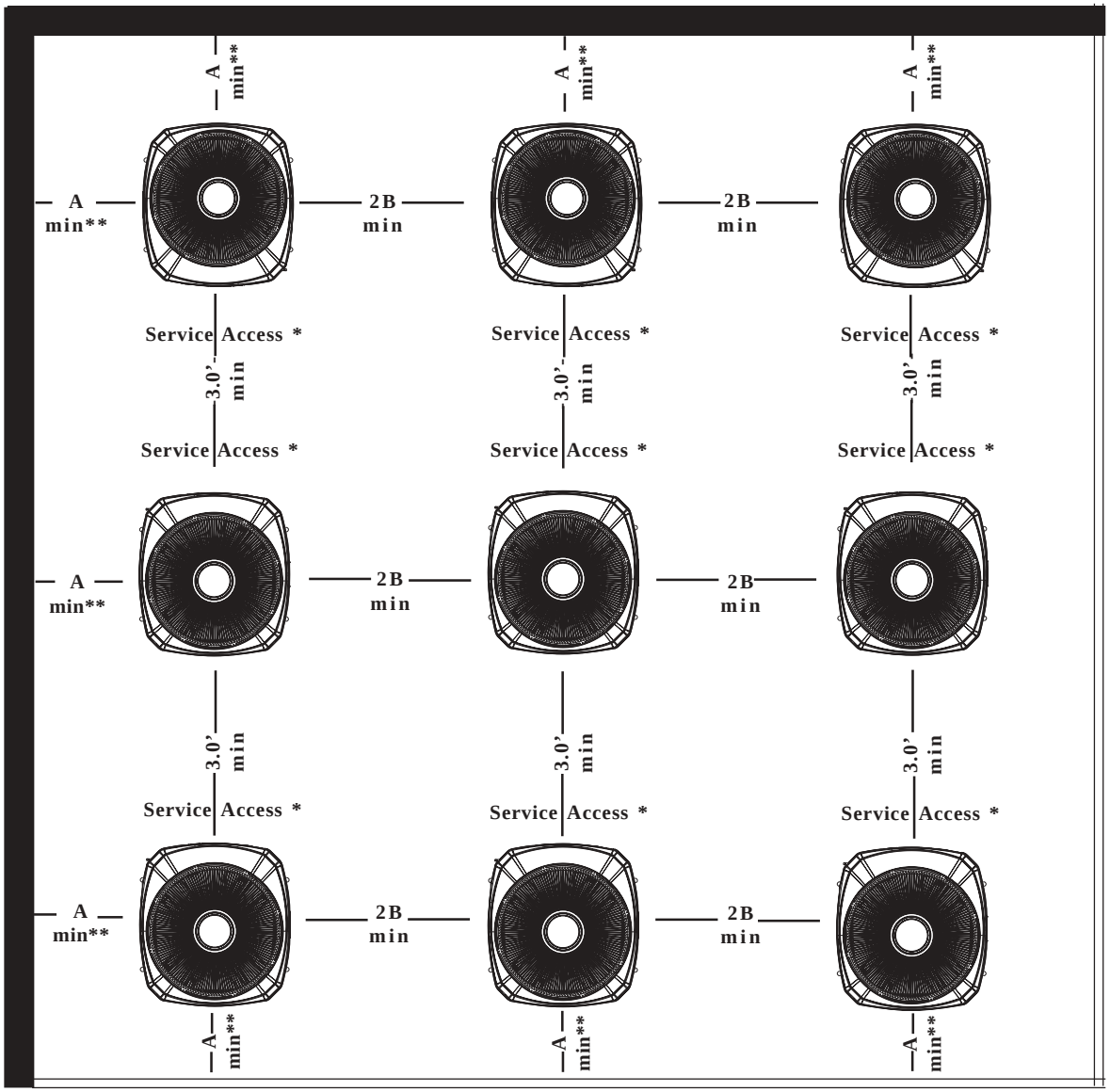
4. Installation of multiple units on a pad or rooftop where the top clearance is open.

A) Refer to minimum clearance table in the lower corner of this page for clearances

B) National Electric Code requires 3 feet minimum (4 feet if certain conditions are present) clearance between service access panel and adjacent unit. If service access panel faces the wall, the required space between the the wall and the unit shall be minimum 3 feet. (May require as much as 3 1/2 feet)

C) Walls shall not be higher than top of units.

D) National, State, and Local Codes must be observed.



*** Units may be rotated in order that service access sides face each other provided that 3 feet minimum clearance be maintained between the units. In order to comply with NEC, this may increase to 4 feet minimum clearance.**

**** If wall or fence is to be constructed around the entire perimeter of the mechanical yard, Maintain minimum 1.5 feet clearance from the units. The fence height shall not exceed that of the unit. It is recommended to install louvers in the fence to allow no greater than 300 feet per minute velocity. Consult the table on page 18 for unit airflow. Place louvers in the lower section of the fence by each unit in order to provide air access to each unit located by the fence. The lower portion of the fence may also be cut in order to equal the calculated free area.**

Base Size	A	B	Service Clearance
1	1'	6"	36"*
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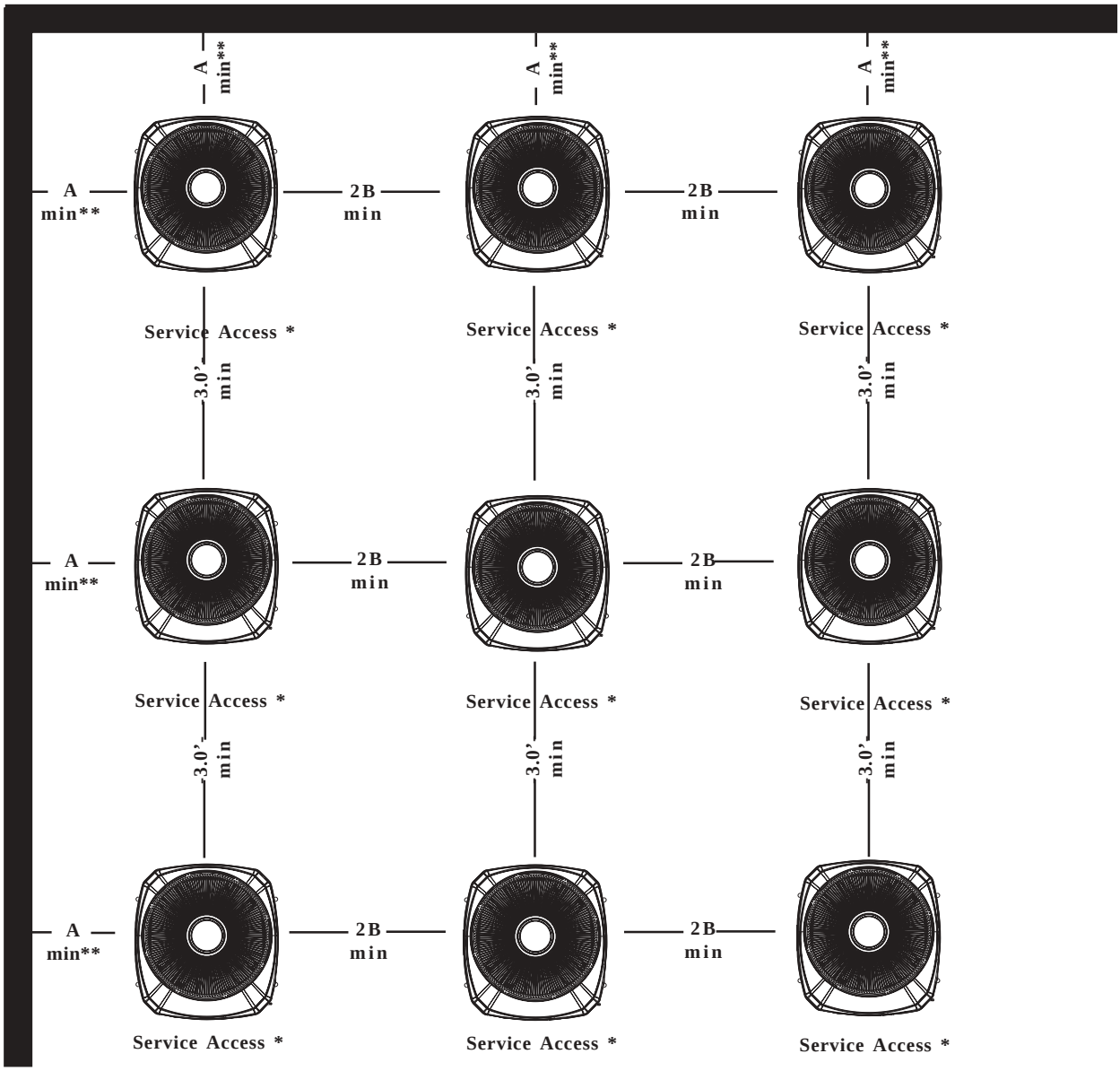
C) Walls / Fence height shall not be higher than top of units.

D) National, State, and Local Codes must be observed.



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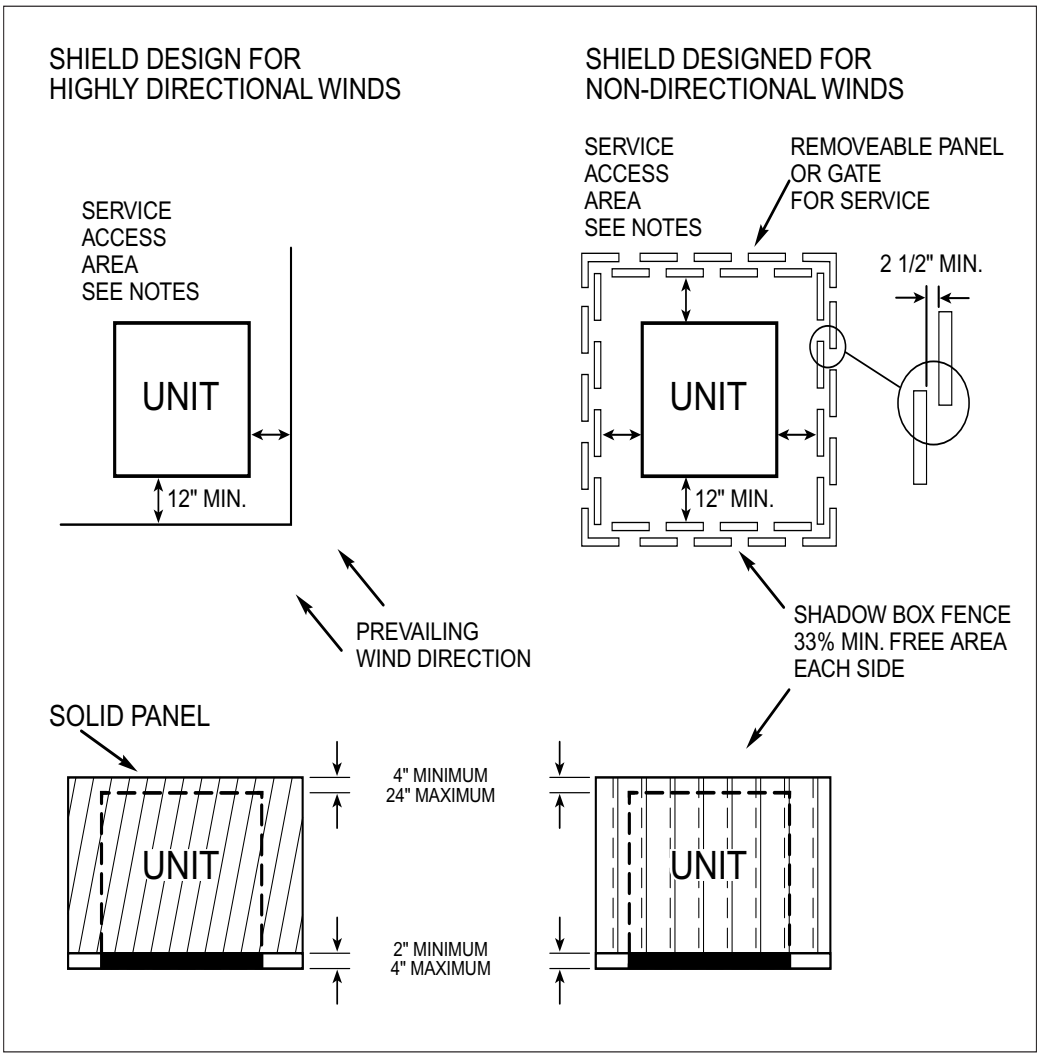
3	1'	8"	36"*
4	1'	9"	36"*
2T*A0072	1.5	12"	36"*

Windshields:
If low ambient operation to 0F is required, windshields are a must in order to block prevailing winds from impacting system performance at low outdoor temperatures.



Note:
Minimum working clearance must be in compliance with the National Electric Code. Currently, the minimum clearance between a wood or suitable grounding material type fence requires minimum 3 feet. If other material is used to form the windshield, the minimum space may be increased to 3.5 feet. Please consult the 2002 or current Edition of the National Electric Code, Article 110 for the most up to date information

Electrical Code Information

Compliance with Local, State, and National Codes is a must on every HVAC Installation. This page discusses the criteria regarding minimum working spaces as defined in the 2002 National Electric Code. The main concern is the safety of the HVAC service / maintenance person. Minimum working clearances are specified in the National Electric Code (NEC) Article 110.26

For electrical equipment that from ground to power the voltage is 600 volts or less:
The National Electric Code specifically states that service area around electrical equipment shall provide sufficient access, and shall be properly maintained in order to permit safe operation and maintenance of the equipment. Table 110.26 as well as the figures beside the table describe the minimum clearance for proper service and access to electrical equipment.

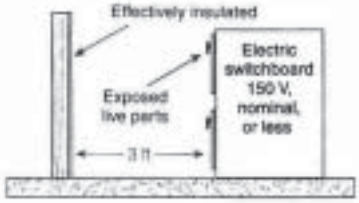
Trane residential and light commercial condensing units ranging from 1 to 6 ton require access to the side service panel as indicated on the previous pages to gain access to the electrical controls.

The table and figure below are excerpts from the National Electric Code 2002:

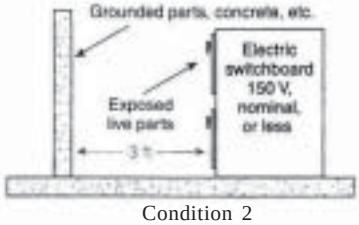
Table 110.26(A)(1) Working Clearances

Nominal Voltage to Ground	Minimum Clear Distance		
	Condition 1	Condition 2	Condition 3
0-150	900 mm (3 FT)	900 mm (3 FT)	900 mm (3FT)
151-600	900 mm (3FT)	1 M (3.5FT)	1.2 mm (4FT)

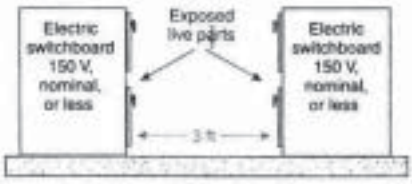
Note: Where the conditions are as follows
Condition 1 - Exposed live parts on one side and no live or grounded parts on the other side of the working space, or exposed live parts on both sides effectively guarded by suitable wood or other insulating materials. Insulated wire or insulated busbars operating at not over 300 volts to ground shall not be considered live parts
Condition 2 - Exposed live parts on one side and grounded parts on the other side. Concrete, brick, or tile walls shall be considered as grounded.
Condition 3 - Exposed live parts on both sides of the work space (not guarded as provided in Condition 1) with the operator between.



Condition 1
(3 ft min. for 151 - 600 V)



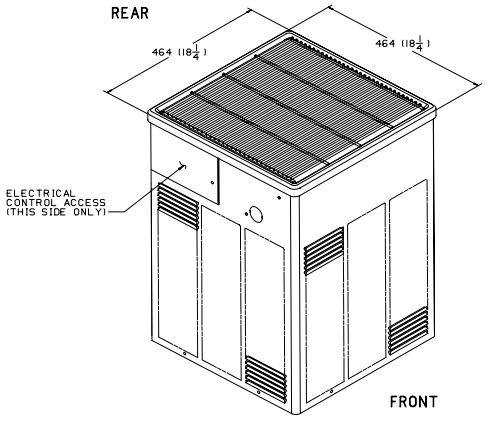
Condition 2
(Space would increase to 3 1/2 ft for 151 - 600 V)



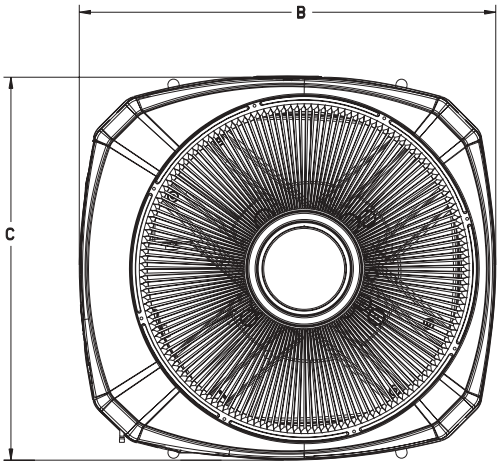
Condition 3
(Space would increase to 4 ft for 151 - 600 V)

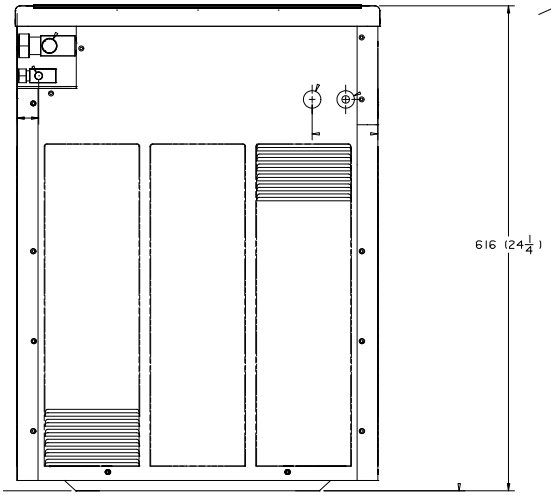
Unit Dimensions

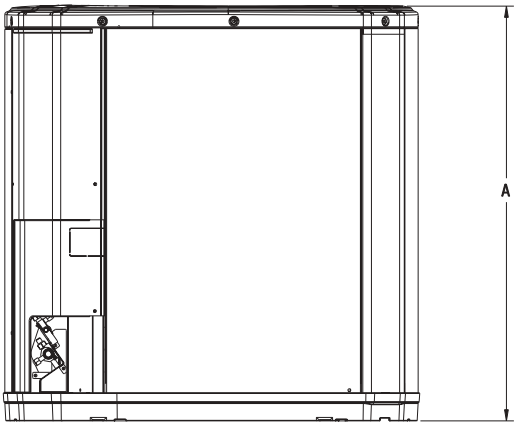
TTB012 - 024



2TTB*030 - *060A
2TWB*030 - *060A



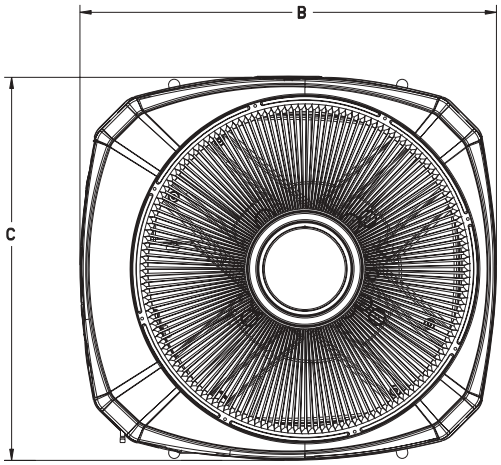


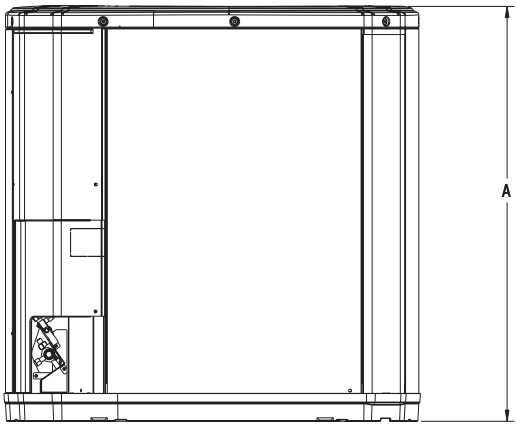


Model	Base	A	B	C	Model	Base	A	B	C
TTB012C	18"	24 1/4"	18 3/4"	18 3/4"	2TWB0012A	2	25 5/8"	28 1/2"	25 5/8"
TTB018C	18"	24 1/4"	18 3/4"	18 3/4"	2TWB0018A	2	25 5/8"	28 1/2"	25 5/8"
TTB024C	18"	24 1/4"	18 3/4"	18 3/4"	2TWB0024A	2	25 5/8"	28 1/2"	25 5/8"
2TTB0030A	2	25 5/8"	28 1/2"	25 5/8"	2TWB0030A	2	28 3/4"	28 1/2"	25 5/8"
2TTB0036A	2	25 5/8"	28 1/2"	25 5/8"	2TWB0036A	2	28 3/4"	28 1/2"	25 5/8"
2TTB0042A	2	28 3/4"	28 1/2"	25 5/8"	2TWB0042A	3	32 3/4"	32 5/8"	29 3/4"
2TTB0048A	2	28 3/4"	28 1/2"	25 5/8"	2TWB0048A	3	32 3/4"	32 5/8"	29 3/4"
2TTB0060A	3	32 3/4"	32 5/8"	29 3/4"	2TWB006A	4	33 1/8"	37 1/4"	34 1/4"

Model	Base	A	B	C	Model	Base	A	B	C
2TTB2018A	2	25 5/8"	28 1/2"	25 5/8"	2TWB2018A	2	25 5/8"	28 1/2"	25 5/8"
2TTB2024A	2	28 3/4"	28 1/2"	25 5/8"	2TWB2024A	2	28 3/4"	28 1/2"	25 5/8"
2TTB2030A	2	28 3/4"	28 1/2"	25 5/8"	2TWB2030A	2	28 3/4"	28 1/2"	25 5/8"
2TTB2036A	2	32 3/4"	28 1/2"	25 5/8"	2TWB2036A	3	32 3/4"	32 5/8"	29 3/4"
2TTB2042A	3	32 3/4"	32 5/8"	29 3/4"	2TWB2042A	3	32 3/4"	32 5/8"	29 3/4"
2TTB2048A	3	36 3/4"	32 5/8"	29 3/4"	2TWB2048A	3	36 1/4"	32 5/8"	29 3/4"
2TTB2060A	3	36 3/4"	32 5/8"	29 3/4"	2TWB2060A	4	41 1/8"	37 1/4"	34 1/4"

2TTA0, 2TWA0, 2TTA2, 2TWA2 Unit dimensions





Model	Base	A	B	C		Model	Base	A	B	C
2TTA0030A	2	25 5/8"	28 1/2"	25 5/8"		2TWA0030A	2	28 3/4"	28 1/2"	25 5/8"
2TTA0036A	2	25 5/8"	28 1/2"	25 5/8"		2TWA0036A	2	28 3/4"	28 1/2"	25 5/8"
2TTA0042A	2	28 3/4"	28 1/2"	25 5/8"		2TWA0042A	3	32 3/4"	32 5/8"	29 3/4"
2TTA0048A	2	28 3/4"	28 1/2"	25 5/8"		2TWA0048A	3	32 3/4"	32 5/8"	29 3/4"
2TTA0060A	3	32 3/4"	32 5/8"	29 3/4"		2TWA0060A	4	33 1/8"	37 1/4"	34 1/4"
2TTA0072A	4	41 1/8"	37 1/4"	34 1/4"		2TWA0072A	4	41 1/8"	37 1/4"	34 1/4"
2TTA2030A	2	28 3/4"	28 1/2"	25 5/8"		2TWA2030A	2	28 3/4"	28 1/2"	25 5/8"
2TTA2036A	2	32 3/4"	28 1/2"	25 5/8"		2TWA2036A	3	32 3/4"	32 5/8"	29 3/4"
2TTA2042B	3	32 3/4"	32 5/8"	29 3/4"		2TWA2042A	3	32 3/4"	32 5/8"	29 3/4"
2TTA2048A	3	36 3/4"	32 5/8"	29 3/4"		2TWA2048A	3	36 3/4"	32 5/8"	29 3/4"
2TTA2060A	3	36 3/4"	32 5/8"	29 3/4"		2TWA2060A	4	41 1/8"	37 1/4"	34 1/4"

***Table produced March 2003. For the most current information, please refer to specific equipment Product Data.**

XB, 2TTA, and 2TWA Outdoor Unit Airflow Table							
XB10		XB12		2TTA0 / 2TWA0		2TTA2 / 2TWA2	
Unit Model Number	CFM	Unit Model Number	CFM	Unit Model Number	CFM	Unit Model Number	CFM
TTB012C100A	1595			2TTA0030A3 / A4	2550	2TTA2030A3 / A4	2500
TTB018C100A	1595	2TTB2018A1000A	1600	2TTA0036A3 / A4	2500	2TTA2036A3 / A4	2500
TTB024C100A	1530	2TTB2024A1000A	2500	2TTA0042A3 / A4	2475	2TTA2042B3 / B4	2700
2TTB0030A1000A	2175	2TTB2030A1000A	2500	2TTA0048A3 / A4	2475	2TTA2048A3 / A4	3400
2TTB0036A1000A	2175	2TTB2036A1000A	2500	2TTA0060A3 / A4	3700	2TTA2060A3 / A4	3900
2TTB0042A1000A	2500	2TTB2042A1000A	2700	2TTA0072A3 / A4	4225		
2TTB0048A1000A	2500	2TTB2048A1000A	3400	2TWA0030A3 / A4	2475	2TWA2030A3 / A4	2500
2TTB0060A1000A	3700	2TTB2060A1000A	3900	2TWA0036A3 / A4	2475	2TWA2036A3 / A4	3325
2TWB0012A1000A	1575			2TWA0042A3 / A4	3325	2TWA2042A3 / A4	3325
2TWB0018A1000A	1575	2TWB2018A1000A	1600	2TWA0048A3 / A4	3700	2TWA2048A3 / A4	3700
2TWB0024A1000A	2175	2TWB2024A1000A	2000	2TWA0060A3 / A4	4400	2TWA2060A3 / A4	4400
2TWB0030A1000A	2475	2TWB2030A1000A	2500	2TWA0072A3 / A4	4400		
2TWB0036A1000A	2475	2TWB2036A1000A	3325				
2TWB0042A1000A	3325	2TWB2042A1000A	3325				
2TWB0048A1000A	3675	2TWB2048A1000A	3700				
2TWB0060A1000A	4400	2TWB2060A1000A	4400				

Required Opening = CFM / 300 FPM

Example:

Given:

Qty of 4 units in a mechanical yard, surrounded by a fence. Units are 2TWA2060A100A's -

Required:

Determine free air opening space required in fence -

Solution:

4400 CFM X Qty of 4 = 17,600 CFM

17600 CFM / 300 FPM = 58.67 square feet

Round 58.67 to 59 square feet of free air opening in the 4 fence sections surrounding the mechanical yard.

NOTES

It's Hard To Stop A Trane.®

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6200 Troup Highway
Tyler, TX 75707
http://www.trane.com

Literature Order Number		
File Number	XB-APG03-EN	03/04
Supersedes	XB-APG02-EN	01/03
Stocking Location		