AIR HANDLING UNIT SCHEDULE - BASEMENT

TAG	TYPE	SUPPLY AIR		ECONOMIZER CFM	OUTSIDE AIR		SUPPLY FAN									PRE-HEAT COIL					HEATING WATER				COOLING COIL						CHILLED WATER				MANUFACTURER	MODEL NO.
		MAX. CFM	MIN. CFM		MAX. CFM	MIN. CFM	EXTERNAL S.P. (IN. OF WTR.)	TOTAL S.P. (IN. OF WTR.)	WHEEL TYPE	WHEEL DIA	MOTOR MAX. RPM	MOTOR QTY (EA)	MOTOR TOTAL KW	MOTOR VOLTS/ PHASE	FAN CONTROL	MAX FACE VELOCITY (FT / MIN.)	MAX. P.D. (IN. OF WTR.)	E.A.T. (°F)	MIN. CAPACITY (BTUH)	ROWS	E.W.T. (°F)	L.W.T. (°F)	MAX. P.D. (FT. OF WTR.)	GPM	MAX. FACE VELOCITY (FT / MIN.)	MAX. P.D. (IN. OF WTR.)	E.A.T. Db (°F)	E.A.T. Wb (°F)	SENSIBLE (BTUH)	TOTAL (BTUH)	ROWS	E.W.T. (°F)	L.W.T. (°F)	MAX. P.D. (FT. OF WTR.)	GPM		
AHU-B-2	MULTIZONE VAV	8,500	--	8,500	1,000	1,000	2.00	4.44	DIRECT	17.7	2213	2	6.99	460/3	VFD	570	0.14	45.0	414,820	1	180.0	160.0	4.49	41.4	510	0.63	80.0	67.0	232,240	327,280	4	42.0	57.0	6.38	43.5	TRANE	CSAA017UA

NOTES:

1. EXTERNAL STATIC PRESSURE INCLUDES ALL AIR DEVICES, TERMINAL UNITS, DUCTWORK, FITTINGS, AND DAMPERS WHICH ARE EXTERNAL TO THE AIR HANDLING UNIT. EXT. S.P. DOES NOT INCLUDE FILTERS, COILS, OR FACTORY FABRICATED RETURN AIR PLENUMS.
2. ALL MOTORS CONTROLLED BY VARIABLE FREQUENCY CONTROLLERS SHALL BE EQUIPPED WITH AEGIS SHAFT GROUNDING RING KIT TO BE INSTALLED BY EQUIPMENT MANUFACTURER OR INSTALLED IN THE FIELD BY CONTRACTOR.
3. TO BE INSTALLED BY A SEPERATE ENABLING PROJECT.

FAN COIL UNIT SCHEDULE (HYDRONIC) - BASEMENT

TAG	FAN		MOTOR				E.A.T.			COOLING COIL		CHILLED WATER				HEATING COIL			HEATING WATER				MANUFACTURER	MODEL NO.
	CFM	EXTERNAL S.P. (IN. OF WTR.)	QTY.	MAX. HP	VOLTS	PHASE	Db (°F)	Wb (°F)	TOTAL CAPACITY (BTUH)	SENSIBLE CAPACITY (BTUH)	MIN. ROWS	E.W.T. (°F)	L.W.T. (°F)	MAX. P.D. (FT. OF WTR.)	GPM	MIN. CAPACITY (BTUH)	E.A.T. (°F)	MIN. ROWS	E.W.T. (°F)	L.W.T. (°F)	MAX. P.D. (FT OF WTR.)	GPM		
FCU-B-2	880	0.75	1	1	460	3	94.2	70.6	44,890	38,170	6	44.0	60.0	0.97	5.6	70,290	26.3	1	180.0	150.0	2.04	7.0	TRANE	BCHE054

NOTES:

1. S.P. INCLUDES GRILLES, DUCTWORK, AND DAMPERS.
2. COOLING CAPACITY, HEATING CAPACITY AND CFM ARE REQUIRED. ALL UNITS SHALL HAVE NO LESS THAN THESE CAPACTIES.
3. DUCT MOUNTED HYDRONIC REHEAT COIL AND STEAM DISPERSION SHALL BE PROVIDED DOWNSTREAM OF THE SUPPLY DUCTWORK FOR THE FCU.
4. FCU SHALL BE CONTROLLED AS A SINGLE ZONE VAV SYSTEM.

FAN SCHEDULE - BASEMENT

TAG	SERVICE	LOCATION	CFM	T.S.P.	MAX. SONES	FAN TYPE	WHEEL		DRIVE	MOTOR				CONTROL	MANUFACTURER	MODEL NO.
							TYPE	DIA.		RPM	HP	VOLTS	PHASE			
EF-5	EXHAUST	CRISWELL BASEMENT	125	0.25	9	INLINE	FC	12	BELT	1725	1/6	115	1	BCS	Loren Cook Company	60SQN-B
EF-7	EXHAUST	CRISWELL BASEMENT	550	0.50	8	INLINE	FC	12	DIRECT	1200	1/6	115	1	BCS	Loren Cook Company	100SQN12D

NOTES:

1. STATIC PRESSURE INCLUDES CRILLES, DUCTWORK AND DAMPERS.
2. IN-LINE EXHAUST FANS SHALL BE SUSPEND FROM STRUCTURE WITH (4) - 1/2" ALL THREAD RODS AND MASON VIBRATION ISOLATOR SPRING HANGER WITH LDS RUBBER SPRING CUP.
3. EF-7 SHALL HAVE ALL ALUMINUM HOUSING AND COMPONENTS.

HOT WATER HEATING COILS

TAG	CFM	DUCT SIZE		AIR			MIN. ROWS	WATER				MANUFACTURER AND MODEL
		W "	H "	MAX. P.D. (IN. OF WTR.)	E.A.T. Db (°F)	L.A.T. Db (°F)		GPM	EWT (°F)	LWT (°F)	MAX. P.D. (FT. OF WTR.)	
HWC-1	880	16	15	0.134	55	95	2	2.79	180	150	3.35	TRANE-DSTB15016G0BA080BABA00A

NOTES:

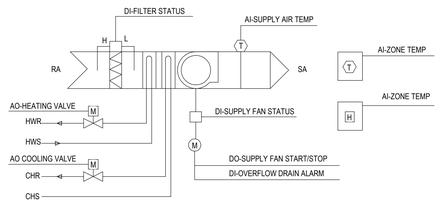
1. INSTALL IN SUPPLY DUCTWORK DOWNSTREAM OF FCU-B-2 AND AS LOCATED ON THE CONSTRUCTION DOCUMENTS.

ELECTRIC STEAM HUMIDIFIER

TAG	LOCATION	STEAM CAPACITY LB/HR	CFM	ELECTRIC VOLTS	ELECTRIC PHASE	MANUFACTURER & MODEL NUMBER
H-1	CHILLER ROOM	40	880	460	3	CAREL - UE010XM0U1

NOTES:

1. REFER TO ELECTRIC HUMIDIFIER MANUFACTURER FOR INSTALLATION INSTRUCTIONS.

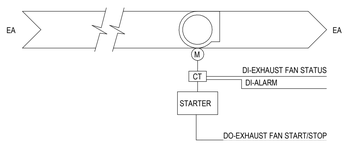


NOTES:

1. INSTALL NEW CONTROLS AS SHOWN FOR ALL FCU'S.

1 FAN COIL UNIT CONTROL DIAGRAM

SCALE: NO SCALE



2 EXHAUST FAN CONTROL DIAGRAM (CV)

SCALE: NO SCALE

TERMINAL UNIT SCHEDULE (SINGLE DUCT/HOT WATER REHEAT) - BASEMENT

TAG	LOCATION	NECK SIZE	COOLING MAX. CFM	COOLING MIN. CFM	HEATING MAX. CFM	HEATING MIN. CFM	MIN. INLET S.P. (IN. OF WTR.)	MAX. RD. DISCH. NC	RE-HEAT COIL E.A.T. (°F)	RE-HEAT COIL L.A.T. (°F)	RE-HEAT COIL MIN. CAPACITY (BTUH)	RE-HEAT COIL E.W.T. (°F)	RE-HEAT COIL L.W.T. (°F)	RE-HEAT COIL GPM	MANUFACTURER	MODEL NO.
VAV-B-6	SMALL DELIVERY B003	8"	500	150	150	150	0.25	<25	55	95	6,000	180	160	0.6	Titus HVAC	DESV

AIR DEVICE SCHEDULE - BASEMENT

TAG	DESCRIPTION	OPPOSED BLADE DAMPER	FINISH	PRICE MODEL NO.
S1	24"x24" SQ. PLAQUE FACE CEILING DIFFUSER 10"ø NECK	NO	OFF-WHITE	SCD
S2	12"x12" SQ. PLAQUE FACE CEILING DIFFUSER 6"ø NECK	NO	OFF-WHITE	SCD
2 S4	14"x8" SIDEWALL GRILLE, DOUBLE DEFLECTION, STEEL WITHOUT DAMPER, 12"x6" NECK	NO	WHITE ENAMEL	520
S5	12"x6" SIDEWALL GRILLE, DOUBLE DEFLECTION, STEEL WITHOUT DAMPER, 10"x4" NECK	NO	WHITE ENAMEL	520
S6	20"x10" SIDEWALL GRILLE, 45 DEGREES DOUBLE DEFLECTION, ALUMINUM WITHOUT DAMPER, 18"x8" NECK	NO	WHITE ENAMEL	620
S7	24"x24" SQ. LOUVERED FACE CEILING DIFFUSER 6"ø NECK	NO	WHITE ENAMEL	ASCD
R1	12"x12" PERFORATED FACE CEILING GRILLE 10"x10" NECK	NO	WHITE ENAMEL	PDDR-F-AL
R2	24"x24" PERFORATED FACE CEILING GRILLE 22"x22" NECK	NO	OFF-WHITE	PDDR
2 R3	12"x10" SIDEWALL GRILLE SINGLE DEFLECTION, STEEL WITHOUT DAMPER WITH 10"x4" NECK	NO	WHITE ENAMEL	<varies>
E1	24"x24" PERFORATED FACE CEILING GRILLE 6"ø NECK	NO	OFF-WHITE	PDDR
2 E2	24"x24" PERFORATED FACE CEILING GRILLE 10"ø NECK	YES	WHITE ENAMEL	PDDR

NOTES:

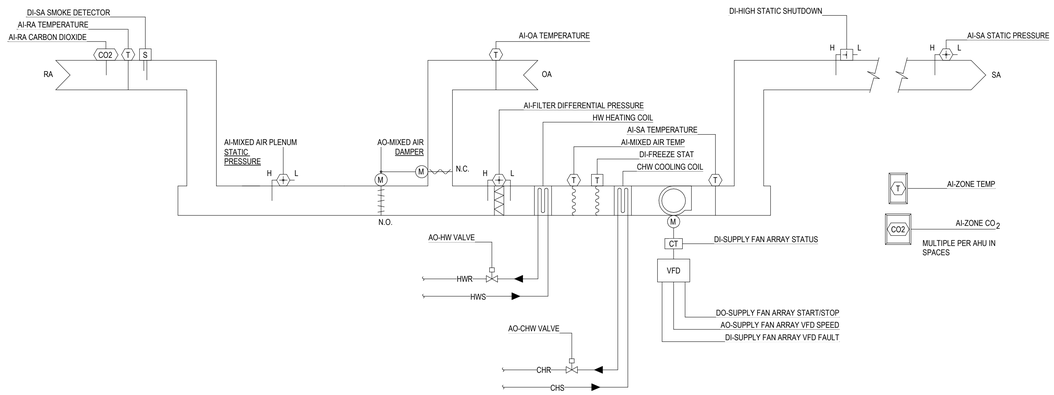
1. REFER TO ARCHITECTURAL DRAWINGS FOR CEILING TYPES.
2. ALL AIR DEVICES INSTALLED IN GYP BOARD, PLASTER, OR OTHER HARD CEILING SHALL HAVE A SEPARATE MOUNTING FRAME.
3. AIR DEVICES S6, S7, AND R1 SHALL BE ALUMINUM AIR DEVICES.

EXISTING TERMINAL UNIT SCHEDULE - BASEMENT

TAG	COOLING MAX. CFM	COOLING MIN. CFM	HEATING AIRFLOW (CFM)	REMARKS
(E) VAV-B-1	1,655	335	335	1 EXISTING - SEE NOTE 2
(E) VAV-B-2	340	100	100	1 EXISTING - SEE NOTE 2
(E) VAV-B-3	2,125	425	425	1 EXISTING - SEE NOTE 2
(E) VAV-B-4	615	125	125	1 EXISTING - SEE NOTE 2
(E) VAV-B-5	935	275	275	1 EXISTING - SEE NOTE 2

NOTES:

1. VAV BOXES LISTED ABOVE ARE EXISTING TO REMAIN.
2. AIRFLOWS FOR THIS VAV BOX HAS CHANGED. REVISED AIRFLOWS ARE SHOWN ABOVE.



3 AIR HANDLING UNIT CONTROL DIAGRAM

SCALE: NO SCALE

COMcheck Software Version COMcheckWeb

Mechanical Compliance Certificate

Project Information

Energy Code: 2021 IECC
Project Title: First Baptist Dallas - Criswell Basement Renovation
Location: Dallas, Texas
Climate Zone: 2a
Project Type: Alteration

Construction Site: Owner/Agent: Designer/Contractor:

Mechanical Systems List

Quantity System Type & Description

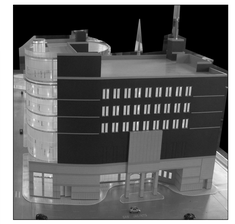
1 FCU-B-2 (Single Zone):
Heating: 1 each - Hydronic or Steam Coil, Hot Water, Capacity = 70 kBtu/h
No minimum efficiency requirement applies
Cooling: 1 each - Hydronic Coil, Capacity = 44 kBtu/h, Unknown Economizer
No minimum efficiency requirement applies
Fan System: FCU-B-2 – Compliance (Motor nameplate HP and fan efficiency method) : Passes

Fans:
FAN 1 Supply, Single-Zone VAV, 880 CFM, 1.0 motor nameplate hp, 0.95 fan energy index

Mechanical Compliance Statement

Compliance Statement: The proposed mechanical alteration project represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed mechanical systems have been designed to meet the 2021 IECC requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Richard Tran - EIT — Signature — 07/17/2025
Name - Title — Date



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BHB Project # 2024.170.000

12/19/2025

CURRENT SUBMISSION: ASI 02

#	DATE	SUBMISSION
	7/18/2025	CONSTRUCTION DOCUMENTS
1	10/21/25	ASI 01
2	12/19/25	ASI 02

FIRST BAPTIST DALLAS

CRISWELL BASEMENT RENOVATION MECHANICAL CONTROL DIAGRAMS AND SCHEDULES

175821 JOB NO.

M0.22 SHEET