

ADD-ALTERNATE - DEMO & NEW PACKAGED AIR COOLED WATER CHILLER UNIT SCHEDULE

DEMO & NEW CHILLER MARK NUMBER	EXIST. "McQUAY" & NEW "DAIKIN" MODEL NO's	CHILLER MODE OF OPER.	CHILLER TOTAL RATED TONS CAPACITY	CHILLER TOTAL WATER FLOW GPM	CHILLER EVAP. MAX. P.D. FT.	EWT 'F	LWT 'F	KW IN	EER & IPLV	COMPRESSORS				CONDENSING FANS				UNIT TOTAL MAX. DESIGN OPER. AMPS & (MOC-P-A.)	DESIGN MAX. & (MIN.) AMBIENT TEMP 'F	UNIT VOLTAGE V/PH/Hz	NOTES AND ACCESSORIES REQUIRED	
										TOTAL NUMBER	TOTAL MAX KW ALLOW.	RLA EACH	LRA EACH	TOTAL NO. EACH	MAX KW ALLOW. EACH	FLA EACH	LRA EACH					CONTROLS KW
DEMO EXISTING ACC-1	EXIST. "McQUAY" #ALR185D	CHILLER	158	493	25	48	38	158.0	-	(4) RECI.	227.3	93	330	14	1.5	2.8	15	2	420A.(500)	85 (20)	460/3/60	1(a) THRU 16
NEW ACC-1 CHILLER	NEW "DAIKIN" #AGZ110E	CHILLER	99.0	250/300	20	48	38	123.2	9.647 & 15.87	(4) SCROLL	-	(2) 37.8 & (2) 54.5	(2) 310.0 & (2) 320.0	8	1.5	3.6	18	2	227.1A.(250)	95 (20)	460/3/60	1(b) THRU 16

- NOTES AND ACCESSORIES**
- (a) SEMI-HERMETIC OR (b) SCROLL COMPRESSORS
 - PART WINDING START
 - CIRCUIT BREAKERS
 - REPLACEABLE FILTER DRYER
 - 115 VOLT CONVENIENCE OUTLET
 - NON-FUSED DISCONNECT SWITCH
 - ANTI-RECYCLE TIMER
 - 115 VOLT CONTROL TRANSFORMER
 - PHASE FAILURE-REVERSAL PROTECTION
 - WATER FLOW SWITCH-FIELD MOUNTED
 - HOT GAS BYPASS-BOTH CIRCUITS
 - 5 YEAR COMPRESSOR "PARTS ONLY" WARRANTY
 - (8)-STEP MIN. CAPACITY CONTROL
 - "MICROTECH" DDC STAND-ALONE CONTROLLER
 - OPEN PROTOCOL WITH "BAS" CONTRACTOR
 - ALL CAPACITIES & PERFORMANCES ARE BASED ON 25% ETHYLENE GLYCOL-WATER SOLUTION.

(ADD-ALTERNATE-ADJUST BLDG CHW PUMP)

EXISTING BLDG CHW PUMP-CHWP-3

EXIST. PUMP MARK	EXIST CHWP "ACO" MODEL NO.	EXIST CHWP-3 PUMP SERVICE	CHWP-3 PUMP RPM	CHWP-3 TOTAL GPM(ADJ.)	CHWP-3 TDH(ADJ.)	CHWP-3 MOTOR HP	CHWP-3 VOLTAGE V/PH/Hz
CHWP-3	FM3010	BLDG. SYSTEM CHW	1760	~350	~90-FT.	15	460/3/60

(ADJUSTED & RE-BALANCE) (ADJUSTED)(ADJUSTED)

- NOTES :**
- EXIST. CHWP-3 PUMP SHALL BE NEWLY-ADJUSTED & RE-BALANCED FOR NEW TOTAL ADJUSTED CHWS WATER FLOW & HEAD (TDH) & SHALL BE RECORDED BY CERTIFIED TEST AND BALANCE CONTRACTOR TO ASSURE THE ABOVE FLOW RATES ARE ADJUSTED FOR THE ADD-ALTERNATE CHILLER REPLACEMENT PORTION OF PROJECT WORK TO BE DONE UNDER "ADD-ALTERNATE" FOR NEW CHILLER REPLACEMENT WORK.

(ADD-ALTERNATE-ADJUST CHW PUMPS & PFHE FLOWS)

PACKAGED CHW TRANSFER/PUMPING UNIT

PUMP NO.	OPERATION	"SYSTECON" MODEL NO.	PUMP SERVICE	GPM	FT. HD.	HP	RPM	VOLTAGE V/PH/Hz	HEAT EXCHANGER DATA (PFHE)										
									(ADJUST) HOT SIDE WATER				(ADJUST) COLD SIDE WATER						
									OPERATION	PIPE SIZE	GPM (ADJUST)	INLET TEMP. 'F	OUTLET TEMP. 'F	MAX. ΔP	PIPE SIZE	(ADJUST) GPM	INLET TEMP. 'F	OUTLET TEMP. 'F	MAX. ΔP
EXIST CHP-1	PRESENT	F1030AM	CHW PRIMARY	250	90	15	1760	460/3/60	PRESENT	6"	350(ADJ.)	52.0	42.0	5.3	6"	250/300	39.0	48.6	7.0
EXIST CHP-2	PRESENT	F1030AM	CHW PRIMARY	250	90	15	1760	460/3/60	FUTURE	6"	600	52.0	42.0	6.9	6"	670	39.0	48.6	8.7

(ADJUSTED) (ADJUSTED) (ADJUSTED & RE-BALANCE)

- NOTES :**
- ADD-ALTERNATE THIS PROJECT REQUIRES T&b BALANCING PUMPS SHALL BE SIZED FOR GPM LISTED, MULTIPURPOSE VALVES SHALL BE RE-BALANCED & SET FOR AD-ALTERNATE GPM CAPACITY.
 - EXIST. UNIT HAS A CENTRIFUGAL VORTEX TYPE FULL WATER FLOW SEPARATOR UNIT WITH LIQUID RECOVERY SYSTEM AS PART OF ORIGINAL EQUIPMENT INSTALLED.

- NOTES :**
- COLD SIDE INLET TEMP. INDICATES 1 DEG. F. LINE LOSS.

DIFFUSERS, REGISTERS & GRILLES SCHEDULE

PRICE INDUSTRIES, INC. MODEL NO. OR APPROV. EQUAL	SERVICE	AIRFLOW (CFM) SUPPLY	NECK SIZE INCHES	PRESS DROP I. W. G.	ACCESSORIES REQUIRED	SYMBOL FOR SHOP DWGS SUBMITTAL USE ONLY
FOR ALL LAY-IN CEILING SUPPLY AIR DIFFUSERS APPLICATIONS:						
SMD-D-TB	SUPPLY	0-80WY	6"x6"	AS NOTED	1,2,3,4	A
SMD-D-TB	SUPPLY	250-430WY	9"x9"	AS NOTED	1,2,3,4	B
SMD-D-TB	SUPPLY	300-440WY	12"x12"	AS NOTED	1,2,3,4	C
SMD-D-TB	SUPPLY	450-460WY	15"x15"	AS NOTED	1,2,3,4	D
PDN-D-TB	SUPPLY	0-FD00 FACE	6"ø	AS NOTED	1,2,3,4	D1
PDN-D-TB	SUPPLY	18-FD00 FACE	8"ø	AS NOTED	1,2,3,4	D2
PDN-D-TB	SUPPLY	28-FD00 FACE	10"ø	AS NOTED	1,2,3,4	D3
FOR ALL LAY-IN CEILING RETURN OR EXHAUST GRILLE APPLICATIONS:						
PDDR-D-TB	RET/EXH	0-FD00 FACE	6"ø	AS NOTED	1,2,3,4	E
PDDR-D-TB	RET/EXH	18-FD00 FACE	8"ø	AS NOTED	1,2,3,4	F
PDDR-D-TB	RET/EXH	28-FD00 FACE	10"ø	AS NOTED	1,2,3,4	G
PDDR-D-TB	RET/EXH	45-FD00 FACE	12"ø	AS NOTED	1,2,3,4	H
PDDR-D-TB	RET/EXH	53-FD00 FACE	14"ø	AS NOTED	1,2,3,4	J
PDDR-D-TB	RET/EXH	72-FD00 FACE	16"ø	AS NOTED	1,2,3,4	K
PDDR-D-TB	RET/EXH	82-FD00 FACE	22"x22"	AS NOTED	1,2,3,4	L
FOR ALL EXPOSED BOT/DUCT MOUNTED AND HARD CEILING SURFACE MOUNTED SUPPLY AIR DIFFUSERS APPLICATIONS:						
SMD-D	SUPPLY	0-40WY	6"x6"	AS NOTED	1,2,3,5	M
SMD-D	SUPPLY	150-420WY	9"x9"	AS NOTED	1,2,3,5	N
SMD-D	SUPPLY	250-440WY	9"x9"	AS NOTED	1,2,3,5	P
SMD-D	SUPPLY	425-460WY	12"x12"	AS NOTED	1,2,3,5	Q
SMD-D	SUPPLY	650-480WY	15"x15"	AS NOTED	1,2,3,5	R
SMD-D	SUPPLY	900-490WY	18"x18"	AS NOTED	1,2,3,5	S
SMD-D	SUPPLY	50-420WY	PLAN SIZES	AS NOTED	1,2,3,5	T
FOR ALL EXPOSED SIDEWALL DUCT MOUNTED AND HARD SIDEWALL SURFACE MOUNTED SUPPLY AIR GRILLE APPLICATIONS:						
5200	SUPPLY	0-28WY	8"x6"	AS NOTED	1,2,3,5	U
5200	SUPPLY	200-220WY	2"x4"	AS NOTED	1,2,3,5	V
5200	SUPPLY	270-230WY	2"x6"	AS NOTED	1,2,3,5	W
5200	SUPPLY	370-250WY	4"x8"	AS NOTED	1,2,3,5	X
5200	SUPPLY	575-270WY	18"x10"	AS NOTED	1,2,3,5	Y
5200	SUPPLY	730-280WY	18"x10"	AS NOTED	1,2,3,5	AA
5200	SUPPLY	890-290WY	18"x12"	AS NOTED	1,2,3,5	BB
5200	SUPPLY	1080-290WY	20"x10"	AS NOTED	1,2,3,5	CC
5200	SUPPLY	1080-290WY	PLAN SIZES	AS NOTED	1,2,3,5	CC
FOR ALL EXPOSED SIDEWALL DUCT MTD. AND HARD SIDEWALL SURFACE MTD. RETURN/EXHAUST AIR GRILLE APPLICATIONS:						
5300	RET/EXH	0-18WY	8"x8"	AS NOTED	1,2,3,5	DD
5300	RET/EXH	200-190WY	10"x8"	AS NOTED	1,2,3,5	EE
5300	RET/EXH	270-180WY	12"x8"	AS NOTED	1,2,3,5	FF
5300	RET/EXH	370-180WY	4"x8"	AS NOTED	1,2,3,5	GG
5300	RET/EXH	575-170WY	14"x14"	AS NOTED	1,2,3,5	HH
5300	RET/EXH	730-180WY	18"x14"	AS NOTED	1,2,3,5	JJ
5300	RET/EXH	890-190WY	18"x18"	AS NOTED	1,2,3,5	KK
5300	RET/EXH	1080-190WY	24"x18"	AS NOTED	1,2,3,5	LL
5300	RET/EXH	100-160WY	PLAN SIZES	AS NOTED	1,2,3,5	LL

- NOTES/ACCESSORIES:** (VENDOR TO VERIFY ALL FRAMES AND STYLES FOR ALL DEVICES w/PLANS & ENGINEER AT SUBMIT PHASE)
- PROVIDE DEVICE w/INTEGRAL MANUAL OPPOSED BLADE VOLUME DAMPERS FOR REGULATION OF AIR DEVICE CAPACITY CONTROL.
 - PROVIDE DEVICE w/REQUIRED COLOR TO BE OFF-WHITE POWDER COAT FINISH.
 - PROVIDE DEVICE OF ALL STEEL OR ALUMINUM AS NOTED; EQUAL MODEL SPECIFIED AS THE MIN. BASIS OF DESIGN & QUALITY.
 - PROVIDE DEVICE FOR LAY-IN CEILING APPLICATION.
 - PROVIDE DEVICE FOR MOUNTING ON HARD SURFACE CEILING APPLICATIONS AND/OR DUCT MOUNTED APPLICATIONS.

<p>REVISIONS</p> <table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> <th>BY</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>DEC. 16, 2019</td> <td>ISSUED FOR OWNER BIDDING.</td> <td>JJC</td> </tr> </tbody> </table>	NO.	DATE	DESCRIPTION	BY	1	DEC. 16, 2019	ISSUED FOR OWNER BIDDING.	JJC		<p>DESIGNED BY: S.BRAUNBECK & J.CAPITAN DRAWN BY: CAPITAN CHECKED BY: CAPITAN DATE: DECEMBER-16-2019 SCALE: AS NOTED JOB NO.: DEI JOB NO. 19005 DECEMBER 16, 2019</p>	<p>DESIGN & ENGINEERING ENERGY SYSTEMS INFRASTRUCTURE UTILITIES SYSTEMS ANALYSIS COMMISSIONING REVIEW</p>	<p>DELTA ENGINEERING, INC. • CONSULTING ENGINEERS 315 EAST BROAD STREET, GREENVILLE, SC 29601 GREENVILLE, SC TEL. NO. (864) 505-5355 3106 RIVERVIEW VIEW, CHARLESTON, SC 29414 CHARLESTON, SC TEL. NO. (864) 505-2976 Em: jcapitan@gmail.com</p>	<p>THIS DRAWING IS THE PROPERTY AND COPYRIGHT OF DELTA ENGINEERING, INC. AND SHALL NOT BE USED OR COPIED WITHOUT WRITTEN PERMISSION. COPYRIGHT ©</p>	<p>PROJECT: 2019 - 2020 HVAC UPGRADES TO FLAT ROCK & RUGBY MIDDLE SCHOOLS</p> <p align="center">HENDERSON COUNTY PUBLIC SCHOOLS 414 - 4TH STREET, HENDERSONVILLE, HENDERSON COUNTY, NORTH CAROLINA 29621</p>	<p>DRAWING: RG-M-4</p> <p>SHEET: 14 OF 14 REV. NO.: IF0B</p>
NO.	DATE	DESCRIPTION	BY												
1	DEC. 16, 2019	ISSUED FOR OWNER BIDDING.	JJC												