

GENERAL NOTES:  1. EXTERNAL STATIC PRESSURE INCLUDES LOSSES DUE TO DUCTWORK, AIR DEVICES, DAMPERS, AND UNIT MOUNTED ELECTRIC HEATERS WHERE APPLICABLE. DIRTY FILTER AND UNIT CASING MUST BE ADDED TO EXTERNAL STATIC PRESSURE TO OBTAIN TOTAL PRESSURE LOSS. INCREASE HORSEPOWER AS REQUIRED TO MEET THE TOTAL PRESSURE LOSS. COORDINATE WITH ELECTRICAL CONTRACTOR.  2. MAXIMUM FACE VELOCITY OF CHILLED WATER COIL SHALL BE 500 FPM.	AHU-2 5000 2260	AHU-1 3000 1750	MARK SUPPLY OUTSIDE EXT. AIR CFM AIR CFM PRE	AIR HANDLING UNIT - CHILLED W
Includes losses due to delectric heaters where added to external static i horsepower as required ictrical contractor. Chilled water coil shall	1.0 5 460/3/60	1.0 2 460/3/60	EXT. STATIC HORSE CURRENT PRESSURE POWER CHARAC. (IN. W.C.)	NDLING UNIT
DUCTWORK, AIR DEVICES, E APPLICABLE. DIRTY FILTE PRESSURE TO OBTAIN TOTA TO MEET THE TOTAL PRESS	80 67 55 54	80 67 55 54	AIR TEMP (*F) MI ENTERING LEAVING C DB/WB DB/WB	CHILL
REMAI 1. 2. JRE 3. 4.	224,900 151,200	161,000 98,200	AL MIN. SENSIBLE Y CAPACITY (BTUH)	
MARKS:  1. PROVIDE WITH 7-DAY PROGRAMMABLE THERMOSTAT.  2. UNIT SHALL BE CARRIER 39LB08 OR APPROVED EQUAL.  3. UNIT SHALL BE CARRIER 40RMS006 OR APPROVED EQUAL.  4. UNITS SHALL BE SUSPENDED HORIZONTAL DRAW-THRU WITH FLAT FILTER SECTION DX OR CHILLED WATER COOLING COIL AS SCHEDULED, AND ELECTRICAL HEATING COIL IN THE REHEAT POSITION. ELECTRIC HEATING COILS IN AHU-1 & 2 SHALL HAVE SCR CONTROL.	6/8 42	6/DX 42	MIN. CHW ENT. COIL CHW TEMP ROWS/FINS (* F)	ATER COIL WITH ELECTRIC HEAT
RAMMABLE THERMOSTALBOS OR APPROVED E RMSOO6 OR APPROVEI D HORIZONTAL DRAW-I TER COOLING COIL AS I THE REHEAT POSITIO	37.5 12	DX -	CHW CHW M FLOW DELTA C. (GPM) TEMP (* F)	WITH EL
IT.  IQUAL.  ITHRU WITH FLAT FILTE  SCHEDULED, AND  N. ELECTRIC HEATING	45.0 NOTE 460	15.0 NOTE 460	MINIMUM NUMBER CUE CAPACITY OF CH (KW) STAGES	ECTRIC
Σ <b>i</b>	460/3/60 85 1,3,4,5	460/3/60 85 1,2,4,5	CURRENT LVG REMARKS CHARAC. AIR	HEAT

DUCTWORK SYMBOLS

**LEGEND** 

CONDENSING UNIT	NG		SCHEDULE	<b>  Fi</b>	REMARKS		
UNIT NO. CAPACITY  AMB. AIR SST V P HZ MC	MCA MOCP	MANUFACTURE	MODEL NO.		REMARKS		
ACCU-1 161.0 MBH 100°F 39.2°F 480/3 3 60	40	CARRIER	38AUD016 W/2-STAGE COOLING	3. CONVENIENCE OUTLET 4. LOW AMBIENT CONTROL	OUTLET ONTROL		
FAN /	AND OU	OUTSIDE	AIR IN	INTAKE			
MARK LOCATION CFM RPM EXT. STATIC PRESSURE (IN. W.C.)	HORSE CURRENT POWER CHARAC.	LOCALLY SWITCHED BY	INTERLOCKED WITH	FAN TYPE	MANUFACTURER	MODEL NUMBER	REMARKS
EF-1 EXHAUST 6725 952 2.25"	480/3/60	0 HOOD SWITCH	1	ROOF MOUNTED	CAPTIVEAIRE	1	1,3,4
EF-2 EXHAUST 525 1169 .5"	120/1/60	0 HOOD SWITCH	-	ROOF MOUNTED	CAPTIVEAIRE	1	1,2,4
EF-3 EXHAUST 1050 1341 1.0"	120/1/60	0 HOOD SWITCH	-	ROOF MOUNTED	CAPTIVEAIRE	1	1,2,4
EF-4 TOILET 1100 1200 .5"	120/1/60	0 TIME CLOCK	-	ROOF MOUNTED	ACME	PV120E5	1,2,5
SF-1 MAKE-UP AIR 5380 876 1.25"	480/3/60	0	EF-1	ROOF MOUNTED	CAPTIVEAIRE	1	1,2,4
GENERAL NOTES:	CFC CFC CFC	≥	לבי אלוויוובט לביובס 5:				
<ol> <li>EXTERNAL STATIC PRESSURE INCLUDES LOSSES DUE TO DUCTWORK, AIR DEVICES, AND DAMPERS WHERE APPLICABLE.</li> <li>FAN SHALL BE CENTRIFUGAL WITH PREFABRICATED ROOF CURB.</li> </ol>	ices,	. 3. 2. 1. I TARR	ROOF MOUNTED CENTRIFUGAL FAN. PROVIDE WITH MOTORIZED DAMPER. FAN SHALL BE RATED FOR HIGH TE	ROOF MOUNTED CENTRIFUGAL FAN. PROVIDE WITH MOTORIZED DAMPER. FAN SHALL BE RATED FOR HIGH TEMPERATURE KITCHEN HOOD EXHAUST.	JRE KITCHEN HOOD	EXHAUST.	

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MARK	LOCATION	СЕМ	MAXIMUM RPM	EXT. STATIC PRESSURE (IN. W.C.)	HORSE POWER	CURRENT CHARAC.	LOCALLY SWITCHED BY	INTERLOCKED WITH	FAN TYPE	MANUFACTURER	MODEL NUMBER	REMARKS
EF-1	EXHAUST HOODS#1 & #2	6725	952	2.25"	5	480/3/60	HOOD SWITCH	1	ROOF MOUNTED	CAPTIVEAIRE	I	1,3,4
EF-2	EXHAUST HOOD#4	525	1169	.5"	1/3	120/1/60	HOOD SWITCH	+	ROOF MOUNTED	CAPTIVEAIRE	-	1,2,4
EF-3	EXHAUST HOOD#3	1050	1341	1.0"	3/4	120/1/60	HOOD SWITCH	-	ROOF MOUNTED	CAPTIVEAIRE	1	1,2,4
EF-4	TOILET EXHAUST	1100	1200	.5"	1/4	120/1/60	TIME CLOCK	-	ROOF MOUNTED	ACME	PV120E5	1,2,5
SF-1	MAKE-UP AIR HOODS#1	5380	876	1.25"	5	480/3/60	ı	EF-1	ROOF MOUNTED	CAPTIVEAIRE	I	1,2,4
GENERAL NOTES:  1. EXTERNAL: AND DAMPE 2. FAN SHALL 3. EF-1,2,3, \(\) INSTALLED MECHANIC.	RAL NOTES: EXTERNAL STATIC PRESSURE INCLUDES LOSSES DUE TO DUCTWORK, AIR DEVICES, AND DAMPERS WHERE APPLICABLE. AND SHALL BE CENTRIFUGAL WITH PREFABRICATED ROOF CURB. FAN SHALL BE CENTRIFUGAL WITH PREFABRICATED ROOF CURB. EF-1,2,3, AND SF-1 SHALL BE FURNISHED BY FOOD SERVICE CONTRACTOR AND INSTALLED BY MECHANICAL CONTRACTOR. EF-4 SHALL BE FURNISHED BY THE MECHANICAL CONTRACTOR.	LUDES LOS LE. H PREFABR URNISHED NTRACTOR	SSES DUE TO RICATED ROOI BY FOOD SE	DUCTWORK, CURB. RVICE CONTR	AIR DEVICI	H K S,	REMARKS: 1. ROO 2. PRO 3. FAN 4. FAN 5. FAN	RKS:  ROOF MOUNTED CENTRIFUGAL FAN. PROVIDE WITH MOTORIZED DAMPER FAN SHALL BE RATED FOR HIGH TE FAN AND CURB PROVIDED BY KITCI FAN AND CURB INSTALLED BY MEC	RKS: ROOF MOUNTED CENTRIFUGAL FAN. PROVIDE WITH MOTORIZED DAMPER. FAN SHALL BE RATED FOR HIGH TEMPERATURE KITCHEN HOOD EXHAUST. FAN AND CURB PROVIDED BY KITCHEN HOOD SUPPLIER. FAN AND CURB INSTALLED BY MECHANICAL CONTRACTOR.	re Kitchen Hood ) Supplier. Contractor.	EXHAUST.	

					AIR	DEVICE	CE	SCHEDULE	LE			
MARK	SERVICE	TYPE	DAMPER	CONSTRUCTION MATERIAL	FINISH COLOR	NECK SIZE	FACE SIZE	MANUFACTURER	MODEL NUMBER	AIR PATTERN	MOUNTING	REMARKS
( <u>P</u> )	SUPPLY AIR	DIFFUSER	OBD	STEEL	OFF-WHITE	6"x6"	24"x24"	METALAIRE	SERIES 5000	SEE PLAN	LAY-IN	LOUVER FACE DIFFUSER
®	SUPPLY AIR	DIFFUSER	OBD	STEEL	OFF-WHITE	8"x8"	24"x24"	METALAIRE	SERIES 5000	SEE PLAN	LAY-IN	LOUVER FACE DIFFUSER
(n)	SUPPLY AIR	DIFFUSER	OBD	STEEL	OFF-WHITE	10"x10"	24"x24"	METALAIRE	SERIES 5000	SEE PLAN	LAY-IN	LOUVER FACE DIFFUSER
$\bigcirc$	SUPPLY AIR	DIFFUSER	OBD	STEEL	OFF-WHITE	12"x12"	24"x24"	METALAIRE	SERIES 5000	SEE PLAN	LAY-IN	LOUVER FACE DIFFUSER
(m)	SUPPLY AIR	DIFFUSER	OBD	STEEL	OFF-WHITE	8"x8"	18"x18"	METALAIRE	SERIES 5000	SEE PLAN	SURFACE	LOUVERED FACE DIFFUSER
(T)	SUPPLY AIR	DIFFUSER	OBD	STEEL	OFF-WHITE	10"x10"	18"x18"	METALAIRE	SERIES 5000	SEE PLAN	SURFACE	LOUVERED FACE DIFFUSER
(o)	SUPPLY AIR	DIFFUSER	OBD	STEEL	OFF-WHITE	12"x12"	18"x18"	METALAIRE	SERIES 5000	SEE PLAN	SURFACE	LOUVERED FACE DIFFUSER
$\Xi$	RETURN OR EXHAUST AIR	GRILLE	OBD	STEEL	OFF-WHITE	12"x12"	N/A	METALAIRE	ヱ	SEE PLAN	SURFACE	45' DEFLECTION PARALLEL BLADE
ک	RETURN AIR	GRILLE	N/A	STEEL	OFF-WHITE	20"×20"	N/A	METALAIRE	ヱ	SEE PLAN	LAY-IN	45° DEFLECTION PARALLEL BLADE
$\langle \overline{x} \rangle$	RETURN AIR	GRILLE	N/A	STEEL	OFF-WHITE	SEE PLAN	N/A	METALAIRE	RH	SEE PLAN	SURFACE	45° DEFLECTION PARALLEL BLADE
$\langle \Box \rangle$	SUPPLY AIR	REGISTER	OBD	STEEL	STANDARD	SEE PLAN	N/A	METALAIRE	VHD	SEE PLAN	SURFACE	DOUBLE DEFLECTION
⋖	SUPPLY AIR	SLOT	OBD	ALUMINUM	STANDARD	48"x2 1/2"	8"ø	METALAIRE	6650 (2)1/2" SLOTS	N/A	SURFACE	ADJUST FOR HORIZONTAL AIR FLOW
(Z)	SUPPLY AIR	DIFFUSER	OBD	ALUMINUM	PER ARCH	10"	14"ø	METALAIRE	300-2	N/A	SURFACE	ADJUST FOR AIR PATTERN
GENERA 1. D/ CE	GENERAL NOTES:  1. DAMPERS NOTED CEILING RADIATIO	) AS U.L. S ON DAMPER	HALL BE A "U WITH THERM	RAL NOTES:  DAMPERS NOTED AS U.L. SHALL BE A "U.L." CLASSIFIED  CEILING RADIATION DAMPER WITH THERMAL BLANKET.								

				DAMPER		
MARK	ACTUATOR	אדער	BLADE ACTION	MANUFACTURER	MODEL NUMBER	REMARKS
D-1	MANUAL BALANCING	UNDER 9" WIDE	N/A	N/A	N/A	SEE SMACNA CONSTRUCTION DETAILS REFERENCED "TYPIC CONSTRUCTION DETAILS FOR LOW VELOCITY DUCTS."
D-2	MANUAL BALANCING	OVER 9" WIDE	OPPOSED	RUSKIN	MD-35	MANUAL DAMPER WITH STANDARD CONSTRUCTION FEATURES AND VENTLOCK #637 LOCKING REGULATOR.
D-3	MOTORIZED	OVER 9" WIDE	OPPOSED	RUSKIN	CD-60	LOW LEAKAGE DAMPER WITH BLADE SEALS
NOTES: N/A – NOT APPLICABLE	APPLICABLE					

	SYMBOL LEGEND	GEND
SYMBOL	DESCRIPTION (DISREGARD ITEMS NOT SHOWN ON PLANS)	WN ON PLANS)
GENERAL		
#	KEY NOTE TAG	
<b>+</b>	NOTE SPECIFIC TO DETAIL TAG	
*	REVISION TAG	
	NEW EQUIPMENT	
DUCTWORK		
	SUPPLY AIR DUCTWORK	
	RETURN AIR AND OUTSIDE AIR DUCTWORK	
	EXHAUST AIR DUCTWORK	
>	FLEXIBLE DUCTWORK	
X	SUPPLY AIR DUCTWORK THROUGH HORIZONTAL PARTITION	ITAL PARTITION
	RETURN AIR AND OUTSIDE AIR DUCTWORK THROUGH HORIZONTAL PARTITION	HROUGH HORIZONTAL PARTITION
	EXHAUST AIR DUCTWORK THROUGH HORIZONTAL PARTITION	NTAL PARTITION
(FD)	FIRE DAMPER	
	MANUAL BALANCING DAMPER (SEE DAMPER SCHEDULE)	SCHEDULE)
	MOTORIZED DAMPER (SEE DAMPER SCHEDULE)	ILE)
SENSORS .	SENSORS AND DAMPERS	
$\bigcirc$	THERMOSTAT AND TEMPERATURE SENSOR	VD MANUAL VOLUME DAMPER
$\oplus$	HUMIDISTAT	MD MOTORIZED DAMPER
S	SMOKE DETECTOR	CO2 CARBON DIOXIDE DETECTOR
AIR DEVICES	<u>:</u> S	
$\bigoplus$	AIR DEVICE TAG (REFER TO AIR DEVICE SCHEDULE)	IEDULE)
$\boxtimes$	SUPPLY AIR GRILLE WITH FOUR-WAY THROW	
4	RETURN AIR GRILLE WITH SOUND BOOT	
	EXHAUST AIR GRILLE	
PIPING		
—D—	CONDENSATE DRAIN LINE	

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TOTAL	KITCHEN	DINING	AREA	AIR BALAN	SERVING THE [	BALANCE OF	SUB-TOTAL	EF-2	SF-1	EF-1	AHU-1	UNIT NO.	KITCHEN	SUB-TOTAL	EF-3	EF-4	AHU-2	UNIT NO.	DINING	AIR
8000	3000	5000	SUPPLY	AIR BALANCE SUMMARY - BUILDING	THE DINING ROOM AREAS.	OF MAKEUP AIR WILL BE PROVIDED FROM	L 3000	1	1	ı	3000	SUPPLY CFM		5000	ı	ı	5000	SUPPLY CFM		BALANCE
9400	7140	2260	0.A.	BUILDING	M AREAS.	WILL BE	7130	ı	5380	ı	1750	0.A.		2280	ı	ı	2280	0.A.		CE
9400 (-0-)	7250	2150	EXHAUST			PROVIDED	7250	525	1	6725	ı	EXHAUST		2150	1050	1100	ı	EXHAUST		ANA
(-0-)						FROM														ANALYSIS
																				<u> </u>

CONSULTANTS

HOLSTE & ASSOCIATES MEP Engineers

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TOTAL	EF-3	UNIT NO.	TORTILLA I	TOTAL	EF-2	UNIT NO.	DISHWASH	TOTAL	SF-2	EF-2	UNIT NO.	KITCHEN H	TOTAL	SF-1	EF-1	UNIT NO.	KITCHEN H	_	
ı	ı	MAKEUP	TORTILLA HOOD #3 (CFM)	1		MAKEUP	ER CONDENS	2500	2500	ı	MAKEUP	KITCHEN HOOD NO.2	2880	2880	ı	MAKEUP	KITCHEN HOOD NO.1	HOOD	
%0	1	% MAKEUP	FM)	%0	ı	% MAKEUP	DISHWASHER CONDENSATE HOOD #4 (CFM)	80%	1	1	% MAKEUP		80%	ı	ı	% MAKEUP			
1050	1050	EXHAUST		525	525	EXHAUST	#4 (CFM)	3125	1	3125	EXHAUST		3600	1	3600	EXHAUST		ANALYSIS	
																		S	5

BALANCE OF MAKEUP AIR WILL BE SUPPLIED THRU AIR HANDLING UNITS



GUADALUPANA RESTAURANT GUADALUPAN

PROJECT NAME

PROJECT ADDRESS 20 WATERWAY THE WOODLANDS, TEXAS

MECHANICAL SCHEDULES SHEET NAME PROJECT NUMBER