

GENERAL NOTES

1. DO NOT SCALE DRAWINGS.

2. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT PLUMBING FIXTURE LOCATIONS AND MOUNTING HEIGHTS.

3. V.T.R.'S & EXH. FANS SHALL BE MIN. 10'-0" FROM O.A. INTAKE. COORDINATE WITH AC. SECTION PRIOR TO BEGINNING WORK.

4. PROVIDE ACCESS DOORS IN GYP. BD. CEILINGS AND INACCESSIBLE WALLS FOR VALVES, CLEANOUTS AND MECHANICAL EQUIPMENT. ACCESS DOORS AND EQUIPMENT PLACEMENT REQUIRING ACCESS SHALL BE COORDINATED WITH INTERIORS SECTION AND ARCH. PRIOR TO BEGINNING WORK.

5. PROVIDE CHROME PLATED ESCUTCHEONS AT PIPE SLEEVES FOR EXPOSED BARE PIPE.

6. PROVIDE LINED INLET PLENUMS FOR DIFFUSERS AND REGISTERS HAVING SQUARE NECK WHERE ROUND OR FLEXIBLE DUCT ATTACHMENT IS INDICATED.

7. UNLESS OTHERWISE NOTED, DUCTS TO DIFFUSERS/REGISTERS SHALL BE SAME SIZE AS DIFFUSER/REGISTER NECK SCHEDULED.

8. PROVIDE MINIMUM 24"x24" ACCESS DOORS IN INACCESSIBLE CEILINGS AND WALLS FOR EQUIPMENT REQUIRING ACCESS OR ADJUSTMENT.

9. MECHANICAL EQUIPMENT SHALL BE SECURED & INSTALLED PER MANUFACTURERS RECOMMENDATIONS.

10. ELECTRICAL CHARACTERISTICS OF MECHANICAL EQUIPMENT SHALL BE VERIFIED WITH ELECTRICAL DRAWINGS PRIOR TO EQUIPMENT ORDER RELEASE. ADDITIONAL ELECTRICAL WORK RESULTING FROM EQUIPMENT SUBSTITUTION IS THE RESPONSIBILITY OF THIS CONTRACTOR.

11. LENGTH OF FLEXIBLE DUCTWORK SHALL BE LIMITED TO 6'-0" MAX. HORIZONTAL RUN WITH ONLY ONE 90° ELL. PERMITTED. SECURE DUCTWORK WITH SCREWS & DRAPEBANDS. FINISH WITH METALLIC FOIL. DUCT TAPE FOR NEAT APPEARANCE. NO FLEXIBLE DUCTWORK ALLOWED OVER GYP. BD. CLGS.

12. DRAIN PIPING FROM A.C. EQUIPMENT SHALL BE SECURED TO ROOF SYSTEM. COORDINATE ACTUAL SECURING METHOD WITH GENERAL CONTRACTOR.

13. COORDINATE ALL CHASE, SLEEVE AND SLAB BLOCKOUT REQUIREMENTS PRIOR TO BEGINNING WORK.

14. PROVIDE 1" DUCT LINER FOR SOUND ATTENUATION WHERE INDICATED ON THE DRAWINGS.

15. DUCT SIZES INDICATED ARE NET INSIDE CLEAR DIMENSIONS.

16. PROVIDE CEILING OPERATORS FOR INACCESSIBLE M.V.D.'S.

17. PROVIDE EQUIPMENT SCHEDULED OR INDICATED ON THE DRAWINGS BUT NOT INCLUDED WITHIN THE SPECIFICATIONS. INSTALLATION SHALL CONFORM TO MANUFACTURERS RECOMMENDATIONS AND APPLICABLE CODES. PROVIDE SUBMITTALS.

18. VERIFY CEILING DIFFUSER FRAME REQUIREMENTS W/ REFLECTED CEILING PLAN PRIOR TO ORDERING.

19. REFER TO ARCH. PLANS FOR DUCT PENETRATIONS THRU ROOF.

DIFFUSER & REGISTER SCHEDULE

SUPPLY AIR				RETURN or EXHAUST AIR			
ITEM	NECK SIZE	CFM RANGE	TYPE	ITEM	NECK SIZE	CFM RANGE	TYPE
(1)	6/8 - 6"*	0 - 125	A	(1)	6/8 - 6"*	0 - 125	D
(2)	8/8 - 8"*	126 - 200		(2)	8/8 - 8"*	126 - 225	
(3)	10/10 - 10"*	201 - 280		(3)	10/10 - 10"*	226 - 340	
(4)	12/12 - 12"*	281 - 375		(4)	12/12 - 12"*	341 - 500	
(5)	14/14 - 14"*	376 - 500		(5)	15/15 - 15"*	501 - 675	
(6)	16/16 - 16"*	501 - 675		(6)	18/18 - 18"*	676 - 900	
(7)	18/18 - 18"*	676 - 850		(7)	20/20 - 20"*	901 - 1150	
(8)	6/6	0 - 125	B	(8)	6/6	0 - 125	E
(9)	8/8	126 - 225		(9)	8/8	126 - 225	
(10)	10/10	226 - 350		(10)	10/10	226 - 350	
(11)	12/12	351 - 500		(11)	12/12	351 - 550	
(12)	24/24	1600 - 1750		(12)	14/14	551 - 750	
(13)	36/36	0-1000	C	(13)	16/16	751 - 950	
(14)	48/48	0-1000		(14)	46/22	0 - 2000	F
				(15)	46/22	0 - 2000	
				(16)	48/6	0 - 1000	G

DIFFUSER & REGISTER TYPES

SUPPLY

TYPE A: METALAIR SERIES 1900 CEILING DIFFUSER W/ O.B.D. FOR T-BAR CEILING.

TYPE B: METALAIR SERIES 3000 MODULAR CORE CEILING DIFFUSER W/ O.B.D. FOR GYP. BD. CEILINGS.

TYPE C: METALAIR SERIES 2000 LINEAR BAR GRILLES

RETURN & EXHAUST

TYPE D: METALAIR SERIES 1000 PERFORATED FACE GRILLE FOR T-BAR CEILINGS.

TYPE E: METALAIR SERIES RH LOUVERED FACE GRILLE FOR GYP. BD. CLGS.

TYPE F: METALAIR SERIES CC-1TB, W/ OFF WHITE FINISH FOR T-BAR CEILING.

TYPE G: METALAIR SERIES 2000 LINEAR BAR GRILLES.

MECHANICAL EQUIPMENT SCHEDULE

ITEM	DESCRIPTION
HP 1	TRADE WCC060-50-200-4 T-CARRIER 500/2000 SINGLE PACKAGE ROOFTOP HEAT PUMP FOR 58.8 MBH SENSIBLE COOLING CAPACITY • 86" FDB/62" RUB ENT. AIR 110° F AMBIENT. REVERSE CYCLE HEATING CAPACITY FOR 35.2 MBH • 10° F ENT. AIR 11° F AMBIENT. INDOOR FAN FOR 2000 CFM • 0.5" E.S.P., 1054 RPM, 10 BHP. FURN. W/ 4.9 KW ELEC. STRIP HEAT, W/ FACTORY SINGLE POINT POWER CONNECTION. ELEC. FOR 208V/3•, 4T2 MCA, 60A M.O.C.P. FURN. W/ FACTORY ROOF CURB FOR DOWN DISCHARGE, MANUAL O.A. DAMPER, FILTER RACK W/ 2" • 30% EFFICIENT DISPOSABLE FILTERS, ELECTRONIC PROGRAMMABLE T-STAT. 635 LB. MAX. OPER. WT.
HP 2	TRADE WCC060-50-200-4 T-CARRIER 500/2000 SINGLE PACKAGE ROOFTOP HEAT PUMP FOR 45.8 MBH SENSIBLE COOLING CAPACITY • 86" FDB/62" RUB ENT. AIR 110° F AMBIENT. REVERSE CYCLE HEATING CAPACITY FOR 31.2 MBH • 10° F ENT. AIR 11° F AMBIENT. INDOOR FAN FOR 1600 CFM • 0.6" E.S.P., 938 RPM, 0.68 BHP. FURN. W/ 4.9 KW ELEC. STRIP HEAT, W/ FACTORY SINGLE POINT POWER CONNECTION. ELEC. FOR 208V/3•, 4T2 MCA, 45A M.O.C.P. FURN. W/ SAME AS HP-1.
HP 3	TRADE WCC060-50-200-4 T-CARRIER 387KB024/FB4ANA024 MATCHED SPLIT SYSTEM HEAT PUMP FOR 19.5 MBH SENSIBLE COOLING CAPACITY • 80" FDB/62" RUB ENT. AIR 110° F AMBIENT. REVERSE CYCLE HEATING CAPACITY FOR ENT. AIR 110° F AMBIENT. REVERSE CYCLE HEATING CAPACITY FOR 13.9 MBH • 10° F ENT. AIR 11° F AMBIENT. INDOOR FAN FOR 850 CFM • 0.4" E.S.P., W/ 4 HP, 208V/1 FAN. FURN. W/ 6 KW STRIP HEAT W/ RELAY PACKAGE & XTRM. OUTDOOR UNIT ELEC. FOR 208V/1•, 15.3 A MCA, 142 LB. OPER. WT. FURN. W/ LOW AMBIENT CONTROLLER, ELECTRONIC PROGRAMMABLE T-STAT. 1" THRU-AWAY FILTERS.
EF 1	GREENHECK GB-80-5 BELT DRIVE CENTRIFUGAL EXHAUST FAN FOR 2200 CFM • 0.25" E.S.P., W/ 1/2 HP, 115V/1 1750 RPM MOTOR. FURN. W/ ROOF CURB, B.D.D., DISC. SWITCH & BIRDSCREEN.
VH 1	GREENHECK RC-60 ALUMINUM VENTILATOR CAP. FURN. W/ BIRDSCREEN & FLASHING.

PLUMBING EQUIPMENT SCHEDULE

A. WATER CLOSET (WC-1): KOHLER K4330-ET WHITE WALL HUNG WATER CLOSET, K4600-C SEAT, SLOAN III FLUSH VALVE 15" HIGH, JR. SMITH CARRIER 18" HIGH FOR HANDICAPPED, 15 GPM FLUSH.

B. URINAL (U): KOHLER K-5014T WASHOUT, WHITE VITREOUS CHINA, SLOAN 180-1 FLUSH VALVE.

C. LAVATORY (L): KOHLER K-2195 WHITE VITREOUS CHINA, 1/4"x1 1/2" C.P. P-TRAP, SYMMONS 5-60-H METERING/TEMPERING FAUCET, BRASSCRAFT SCRIBSA STOPS AND FLEXIBLE RISERS, KOHLER K-13885 HCP GRID DRAIN W/ 1/4" TAILPIECE.

D. SERVICE SINK (S.S.): CREATIVE INDUSTRIES MCN424-612, 24" x 24" x 12" HIGH PRECAST TERRAZZO TOP SINK, 3" STRAINER & DRAIN, CHICAGO FAUCET, 90° FAUCET, W/ BRACE & VACUUM BREAKER.

E. BAR SINK (S-1): ELKAY MODEL BLR-15, STAINLESS STEEL 15" x 15", LK-36 BASKET STRAINER, ELKAY LK-2088-8 GOOSENECK FAUCET, BRASSCRAFT SCRIBSA STOPS AND FLEXIBLE RISERS.

F. ART ROOM SINK (S-2): ELKAY DLR-3322-10, STAINLESS STEEL, 32" x 22" LK-35 DRAINSTRainer, ELKAY LK-230-BH-5 FAUCET, BRASSCRAFT SCRIBSA STOPS AND FLEXIBLE RISERS, JR. SMITH 8114 SOLIDS INTERCEPTOR W/ 2" WASTE CONN.

G. CLEANOUT (C.O.): JR. SMITH FIG. 44T2 (WALL) FIGURE 4043 (FLR. INSIDE), FIG. 4880 (EXTERIOR).

H. FLOOR DRAIN (FD): JR. SMITH FIG. 3020 CAST IRON DRAIN, FLASHING COLLAR WITH 8 1/2" NICKLE-BRONZE TOP, (FIG. 2010 A CAST IRON DRAIN WITH 5" GRATE IN TOILET ROOMS).

I. ROOF DRAIN (RD): SMITH NO. 1010 CAST IRON BODY AND DOME WITH FLASHING COLLAR AND DOUBLE UNDERDECK CLAMP.

J. OVERFLOW ROOF DRAIN (ORD): SMITH NO. 1080 CAST IRON BODY AND FLASHING COLLAR AND DOUBLE UNDERDECK CLAMP.

K. ELECTRIC WATER COOLER (EWC): HAUW MODEL HWD50 ELECTRIC WATER COOLER FOR 80 GPM CAPACITY W/ 1/5 HP, 115V/1 COMPRESSOR MOTOR TRAP & STOP, NO. 4 STAINLESS STEEL FINISH.

L. DRINKING FOUNTAIN (DF): HAUW MODEL 3316 HFP FREEZE-PROOF DRINKING FOUNTAIN, 1/4" C.P. DRAIN, 1/2" CW, ARCHITECT TO SPECIFY PEDESTAL COLOR.

M. HOSE BIBB (HB): WOODFORD MODEL B24 WALL FAUCET W/ VACUUM BREAKER - BACKFLOW PREVENTOR, LOCKING COVER.

MECHANICAL LEGEND

ABBR.	SYMBOL	DESCRIPTION
S OR W	---	SOIL, WASTE OR SEWER BELOW GRADE
S OR U	---	SOIL, WASTE OR SEWER ABOVE GRADE
SD	---	STORM DRAIN ABOVE GRADE
OSD	---	OVERFLOW STORM DRAIN ABOVE GRADE
CO	---	CLEANOUT
WCO	---	WALL CLEANOUT
V	---	VENT
CW	---	COLD WATER
HW	---	HOT WATER
D	---	DRAIN
SOV	---	SHUT-OFF VALVE
U	---	UNION
REL V	---	RELIEF VALVE
RED	---	REDUCER
FD	---	FLOOR DRAIN
RD/ORD	---	ROOF DRAIN / OVER FLOW ROOF DRAIN
VTR	---	VENT THRU ROOF
T-STAT	---	THERMOSTAT
FLFD	---	FUSIBLE LINK FIRE DAMPER
MVD	---	MANUAL VOLUME DAMPER
BDD	---	BACKDRIFT DAMPER
DIFF	---	DIFFUSER
REG	---	REGISTER
GR	---	GRILLE
CD	---	CEILING DIFFUSER
SA	---	SUPPLY AIR
RA	---	RETURN AIR
EA	---	EXHAUST AIR
OA	---	OUTSIDE AIR
LD	---	LINED DUCTWORK
D	---	CONDENSATE DRAIN
HB	---	HOSE BIBB
CV	---	CHECK VALVE
STR	---	STRAINER

PLUMBING FIXTURE SCHEDULE

ABBR.	FIXTURE	ROUGH-IN SIZES (INCHES)					REMARKS
		H.W.	C.W.	V	TRAP	S or W	
WC-1	WATER CLOSET	---	1	2	---	4	WALL HUNG FLUSH VALVE
U	URINAL	---	1	1 1/2	---	2	FLUSH VALVE, WALL MTD.
L	LAVATORY	1/2	1/2	1 1/4	1 1/4	1 1/2	OVAL COUNTER MOUNTED
S.S.	SERVICE SINK	1/2	1/2	2	3	3	PRECAST TERRAZZO
S-1	BAR SINK	1/2	1/2	1 1/2	2	2	
S-2	ART ROOM SINK	1/2	1/2	1 1/2	1 1/2	1 1/2	10" DEEP BOWL W/SOLIDS INTERCE.
HB	RECESSED HOSE BIBB	---	1/2	---	---	---	
FD	FLOOR DRAIN	---	---	---	---	---	VARIES, SEE PLANS
HCP	HOT WATER RECIRC. PUMP						GRUNDOS UPB-180F FOR 5 GPM • 5' TDH, W/ 115V/1 1/25 HP MOTOR, ALL STAINLESS CONSTR.
WH-1	WATER HEATER						STATE TCL-30-2LRT ELECTRIC STORAGE WATER HEATER FOR 18 GPM RECOVERY • 120° F RISE W/ INTERLOCKING 4.5 KW UPPER & LOWER ELEMENTS, ASME T & PRY.

CLEANOUT TO GRADE

NO SCALE

2

M-1

EXHAUST FAN DETAIL

NO SCALE

3

M-1

UNIT MOUNTING DETAIL

NO SCALE

4

M-1

WEST LAS VEGAS ARTS CENTER

DOOLITTLE PARK - LAS VEGAS, NEVADA

MECH. LEGEND, SCHEDULES, GEN. NOTES

AS-BUILT'S

Project: 8-12-93

Drawn By: D.C.

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Scale: NONE

Sheet No: M-1

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