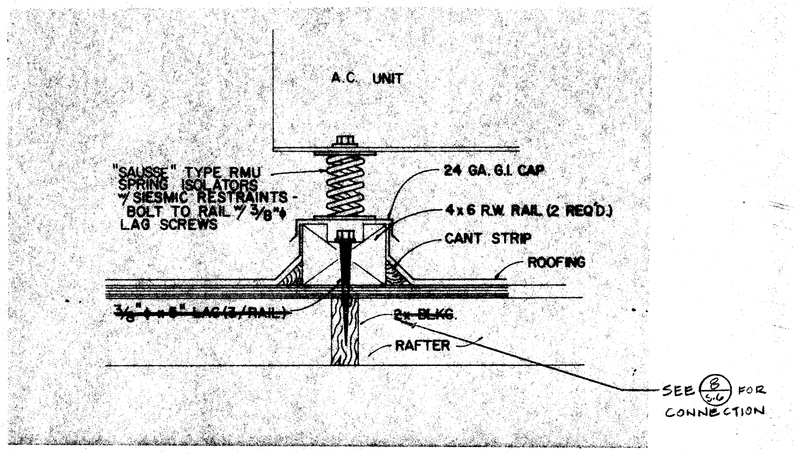
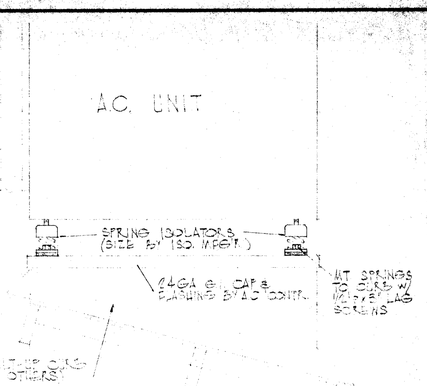
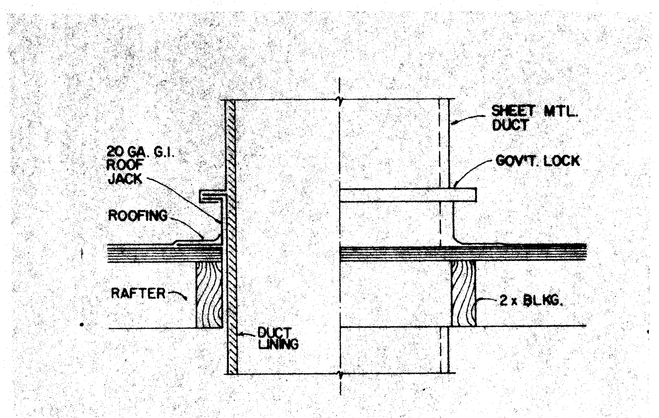
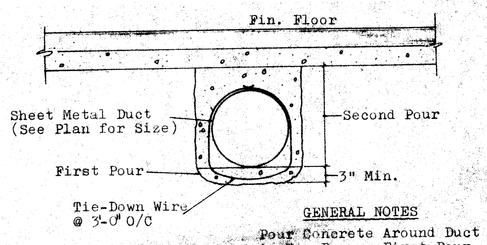




A.C. UNIT MOUNTING DETAIL (EXIST. BLDG.) N.T.S. 1

A.C. UNIT MT'G (NEW BLDG'S N.T.S. 5





All Supply & Return Air Sheet Metal Duct Conc. Floor Shall Be.

Up to 12"ø Shall Be 24 GA.
13"ø to 20"ø " " 22 GA.
21"ø to 30"ø " " 20 GA.
31"ø Above " " 18 GA.

NOTE!
IF USING CONCRETE DUCTWORK-USE ONE SIZE LARGER THAN SHOWN ON PLAN

GENERAL NOTES

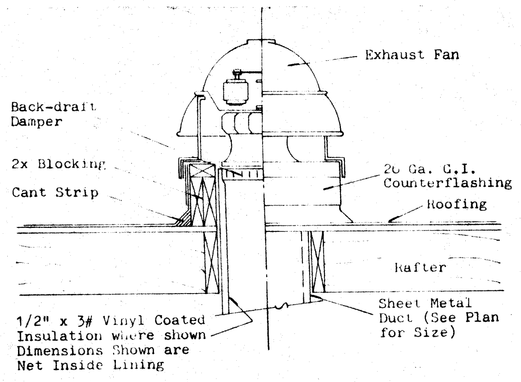
Pour Concrete Around Duct in Two Pours. First Pour Shall be Min. 3" Deep in Bottom of Trench; Allow to Set Before Second Pour.

Bead and Crimp all Joints

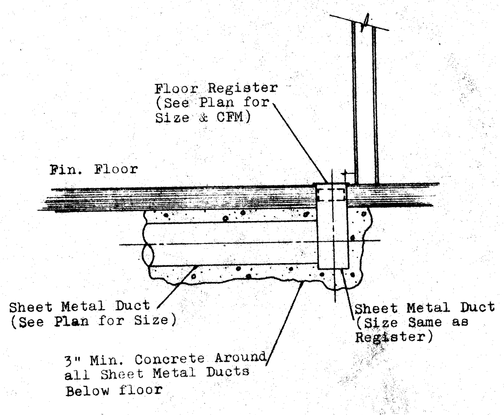
No Joint Over 3'-0" Long

3" of Concrete Minimum Around all Sheet Metal Ducts Below Floor

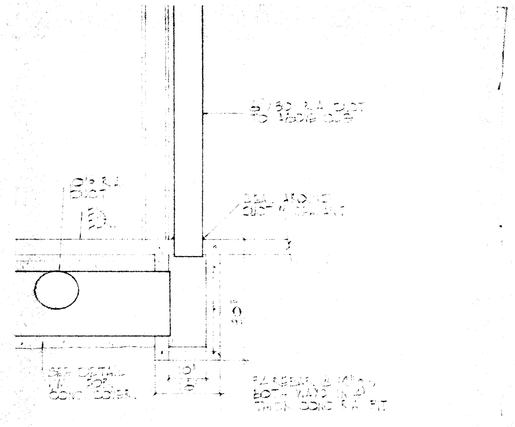
DUCT THRU ROOF DETAIL N.T.S. 2



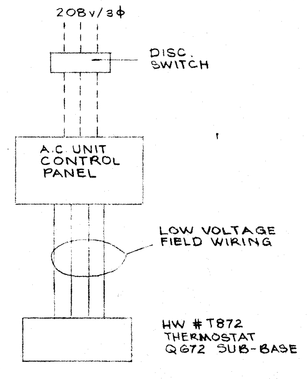
DUCT BELOW FLOOR DETAIL N.T.S. 6



EXHAUST FAN MOUNTING DETAIL N.T.S. 3



FLOOR REGISTER DETAIL N.T.S. 7



DUCT BELOW FLOOR DETAIL N.T.S. 4

A.C. UNIT WIRING DIAGRAM N.T.S. 8

AIR CONDITIONING LEGEND

SYMBOL	ABBREVIATION	DESCRIPTION	SYMBOL	ABBREVIATION	DESCRIPTION
	A.A.V.	AUTOMATIC AIR VENT		HHWR	HEATING HOT WATER RETURN
	A.C.	AIR CONDITIONING		HHWS	HEATING HOT WATER SUPPLY
	A.P.	ACCESS PANEL		H&V	HEATING AND VENTILATING
	B.D.	BALANCING DAMPER		INT.	INTERNAL
	B.T.	BYPASS TIMER			
	B.V.	BUTTERFLY VALVE		KO	KEY OPERATED
	C.E.	CEILING EXHAUST REGISTER		L.P.G.	LIQUIPIED PETROLEUM GAS
	C.R.	CEILING RETURN REGISTER			
	C.S.	CEILING SUPPLY REGISTER		N.C.	NORMALLY CLOSED
	CFM	CUBIC FEET PER MINUTE		N.I.C.	NOT IN CONTRACT
	CH. W.R.	CHILLED WATER RETURN		N.O.	NORMALLY OPEN
	CH. W.S.	CHILLED WATER SUPPLY			
	COND.	CONDENSATE		OSA	OUTSIDE AIR
	CONN.	CONNECT		OBD	OPPOSED BLADE DAMPER
	CONT.	CONTINUATION			
	CV	CONTROL VALVE		POC	POINT OF CONNECTION
	C-C	CENTER TO CENTER		PG	PRESSURE GAUGE WITH GAUGE COCK
	D.L.	DOOR LOUVER			
	DN.	DOWN		R.A.	RETURN AIR
		BALANCING VALVE		RG	RELIEF GRILLE
	D.P.D.T.	DOUBLE POLE DOUBLE THROW			
				S.A.	SUPPLY AIR
	E.F.	EXHAUST FAN		S.M.	SHEET METAL
				S.O.V.	SHUT OFF VALVE
	F	FURNACE		S.P.S.T.	SINGLE POLE SINGLE THROW
	F.D.	FIRE DAMPER		STAT	THERMOSTAT
	F.E.	FLOOR EXHAUST REGISTER			
	F.T.R.	FLUE THRU ROOF		T.C.V.	TEMPERATURE CONTROL VALVE
	FLEX. CONN.	FLEXIBLE CONNECTION			
	F.R.	FLOOR RETURN REGISTER			THERMOMETER
	GA.	GAUGE		V.D.	VOLUME DAMPER
	GAL.	GALLON		VAC	VACUUM
	G.P.M.	GALLONS PER MINUTE			
	G.V.	GATE VALVE		W.E.	WALL EXHAUST REGISTER
				W.S.	WALL SUPPLY REGISTER
				W.R.	WALL RETURN REGISTER

EQUIPMENT SCHEDULE

AC 1 — Lennox #GCS3-953-125 Htg./Clg. Roof Mounted Unit - 3000 CFM @ .5" E.S.P. - 2 H.P. - 88.0 MBH Total & 84.48 MBH Sens. @ 105° Ambient & 63° E.W.B. - 125,000 BTUH Input & 93,750 BTUH Output - 44.0 F.L.A. @ 208V/60/3ø 1640 lbs.

AC 2 — Lennox #GCS3-463-80 Htg./Clg. Roof Mounted Unit - 1590 CFM @ .4" E.S.P. - 76.1 MBH Total & 73.0 MBH Sens. @ 1050 Ambient & 63° E.W.B. - 80,000 BTUH Input & 60,000 BTUH Output - 23.2 F.L.A. @ 208V/60/3ø - 770 lbs.

AC 3 — Lennox #GCS3-413-80b Htg./Clg. Roof Mounted Unit - 1350 CFM @ .5" E.S.P. - 31.0 MBH Total & 30.07 MBH Sens. @ 105° Ambient & 63° E.W.B. - 80,000 BTUH Input & 60,000 BTUH Output - 21.3 F.L.A. @ 208V/60/3ø - 640 lbs.

AC 4 — Same as AC/1

AC 5 — Lennox #GCS3-913-120 Htg./Clg. Roof Mounted Unit - 1885 CFM @ .5" E.W.P. - 44.8 MBH Total & 43.0 MBH Sens. @ 105° Ambient & 63° E.W.B. - 120,000 BTUH Input & 90,000 BTUH Output - 25.4 F.L.A. @ 208V/60/3ø - 850 lbs.

AC 6 — Same as AC/3 except 1555 CFM @ .4" E.S.P.

AC 7 — Same as AC/8 except 2250 CFM @ .4" E.S.P.

AC 8 — Lennox #GCS3-653-120 Htg./Clg. Roof Mounted Unit - 2000 CFM @ .4" E.S.P. - 52.0 MBH Total & 48.0 MBH Sens. @ 105° Ambient & 63° E.W.B. - 120,000 BTUH Input & 90,000 BTUH Output - 25.4 F.L.A. @ 208V/60/3ø - 900 lbs.

EF 1 — Trade Wind #VQT90 Clg. Mounted Exhaust Fan - 90 CFM @ .1" S.P. .40 Amps - 120V/60/1ø - Interlock w/light switch

EF 2 — Exit Aire #CX-1518 Size 15 Exhaust Fan - 1850 CFM @ 1/4" S.P. - 1/4 H.P. Belt Drive - 120V/60/1ø

EF 3 — Exit Aire #CX-1516 Size 15 Exhaust Fan - 1040 CFM @ 1/4" S.P. - 1/6 H.P. Belt Drive - 120V/60/1ø

EF 4 — Exit Aire #CX-1033 Size 10 Exhaust Fan - 440 CFM @ 1/4" S.P. - 1/6 H.P. Direct Drive - 120V/60/1ø (Interlock w/ AC/3a)

EF 5 — SQD-6-D Greenheck - In-Line Exhaust Fan 150 CFM @ 1/8" S.P. - 1/40 H.P. 115V-1 ph. with Roof Cap, 8x8 Duct Thru Roof - Interlock w/ AC/7

REGISTER SCHEDULE

CS-1	Anemostat #RMD-FP	24"x24" Panel
CS-2	Anemostat #RMD-S	
CR-1	Anemostat #GC50L	24"x24" Panel
CR-2	Anemostat #GC50	
CE-1	Anemostat #GC50L	24"x24" Panel
CE-2	Anemostat #GC50	
DL-1	Anemostat NSA-X	

NOTE: See plan for sizes.

ALL MECHANICAL AND ELECTRICAL EQUIPMENT SHALL BE BRACED OR ANCHORED TO RESIST A HORIZONTAL FORCE OF 20% OF ITS OPERATING WEIGHT ACTING IN ANY DIRECTION. WHERE ANCHORAGE DETAILS ARE NOT SHOWN ON THE DRAWINGS THE FIELD INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE MECHANICAL ENGINEER AND THE FIELD REPRESENTATIVE OF THE OFFICE OF THE STATE ARCHITECT.

THE ABOVE DRAWINGS AND SPECIFICATIONS AND IDEAS, DESIGNS AND ARRANGEMENTS REPRESENTED THEREBY ARE AND SHALL REMAIN THE PROPERTY OF THE ARCHITECT AND NO PART THEREOF SHALL BE COPIED, DISCLOSED TO OTHERS OR USED IN CONNECTION WITH ANY WORK OR PROJECT OTHER THAN THE SPECIFIC PROJECT FOR WHICH THEY HAVE BEEN PREPARED AND DEVELOPED WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT. VISUAL CONTACT WITH THESE DRAWINGS OR SPECIFICATIONS SHALL CONSTITUTE CONCLUSIVE EVIDENCE OF ACCEPTANCE OF THESE RESTRICTIONS.
WRITTEN DIMENSIONS ON THESE DRAWINGS SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS ON THE JOB AND THIS OFFICE MUST BE NOTIFIED OF ANY VARIATIONS FROM THE DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DRAWINGS MUST BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.

APPROVED
DIVISION OF THE STATE ARCHITECT
STRUCTURAL SAFETY SECTION
DATE 4-7-79
A41306 APPROVED 4-7-79

R. H. WILLIAMSON - Mechanical Engr. and ASSOCIATES
12 Inverness St. 327-2566
Bakersfield, California 93305
R. H. Williamson ME 5376

DATE	PRINTS ISSUED FOR:	MARK	DATE	REVISIONS
		1		
		2		
		3		
		4		
		5		

DRAWN L.M.
DATE 4-12-79
JOB NO. 77-91-1
CHECK'D E.W.H.

ROBERT N. EDDY C-895
WILLIAM H. PAYNTER C-1654
RONALD W. RENFRO C-13283

A.C. DETAILS, SCHEDULES & LEGEND

ADDITIONS & ALTERATIONS, HORACE MANN SCHOOL
BAKERSFIELD CITY SCHOOL DISTRICT
BAKERSFIELD, CALIFORNIA

M3 — 3 OF 3 SHEETS

EDDY · PAYNTER · RENFRO & ASSOCIATES
A.I.A. ARCHITECTS - 5405 STOCKDALE HWY. BAKERSFIELD, CALIFORNIA 93309 - (805) 832-1105

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