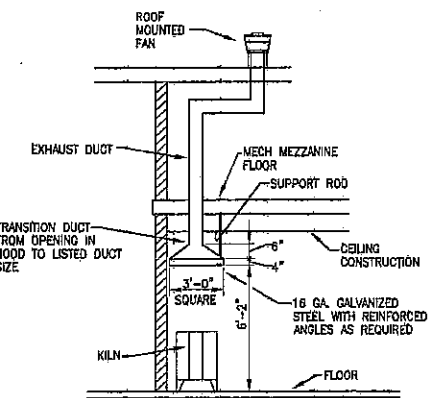
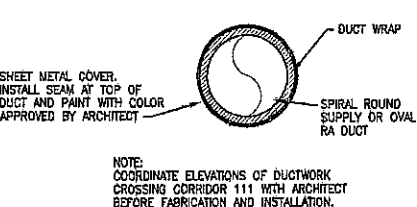


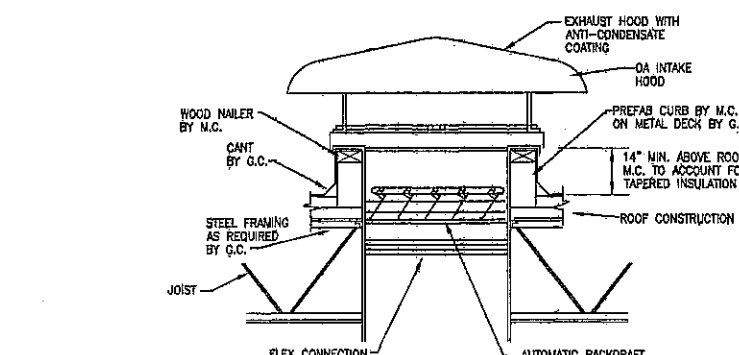
**SEQUENCE OF CONTROL
CABINET HEATER**
NOT TO SCALE



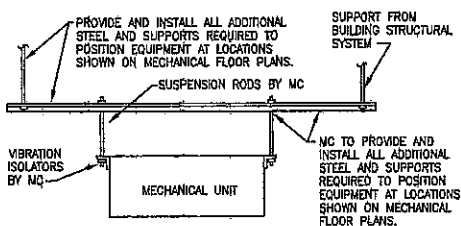
KILN HOOD DETAIL
NOT TO SCALE



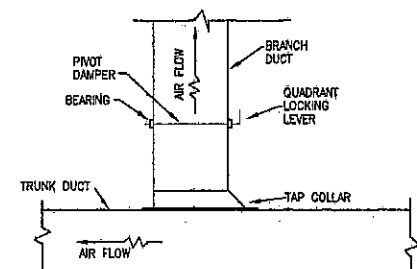
DUCT WRAP DETAIL CORRIDOR 111
NOT TO SCALE



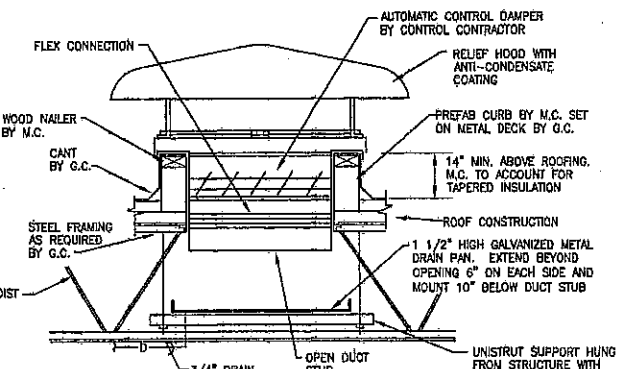
EXHAUST HOOD DETAIL
NOT TO SCALE



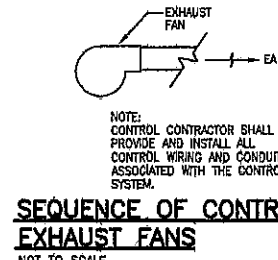
**TYPICAL SUSPENDED MECHANICAL
EQUIPMENT SUPPORT DETAIL**
NOT TO SCALE



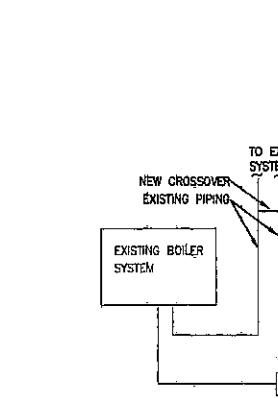
SUPPLY AIR DUCT BRANCH DETAIL
NOT TO SCALE



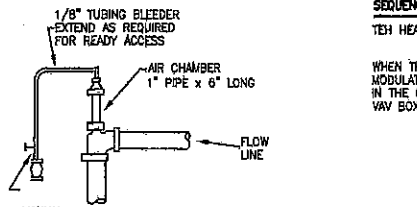
RELIEF HOOD DETAIL
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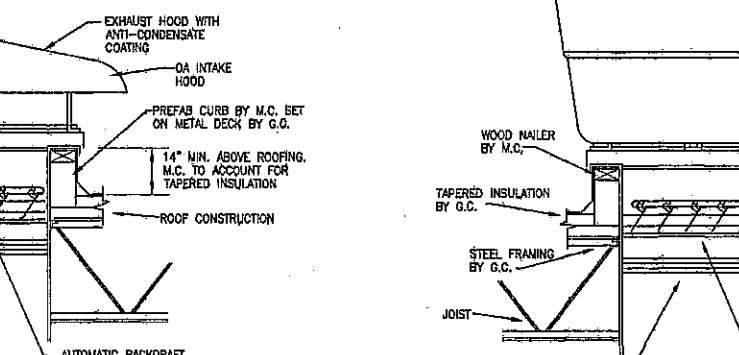
**SEQUENCE OF CONTROL
EXHAUST FANS**
NOT TO SCALE



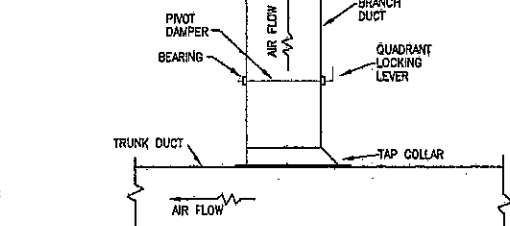
KILN HOOD DETAIL
NOT TO SCALE



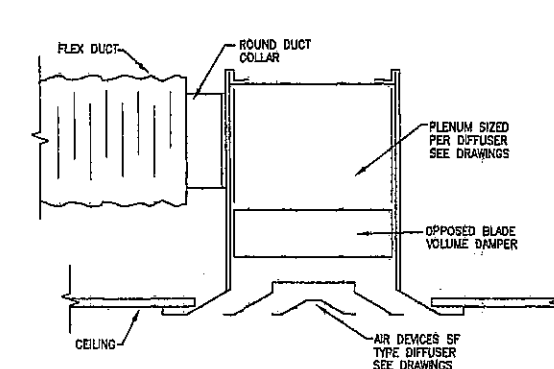
DUCT WRAP DETAIL CORRIDOR 111
NOT TO SCALE



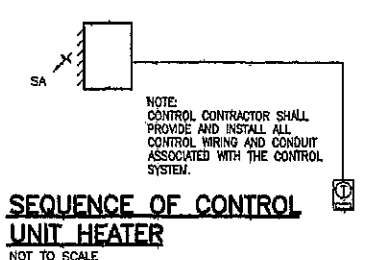
ROOF EXHAUSTER DETAIL
NOT TO SCALE



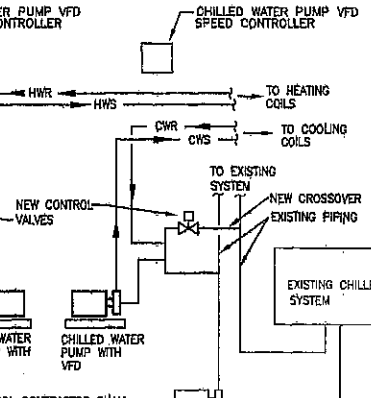
SUPPLY AIR DUCT BRANCH DETAIL
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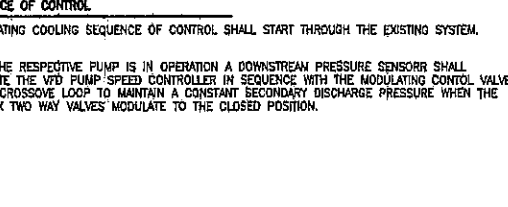
DIFFUSER DETAIL
NOT TO SCALE



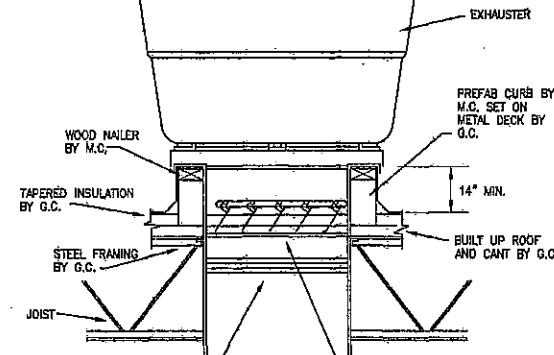
**SEQUENCE OF CONTROL
UNIT HEATER**
NOT TO SCALE



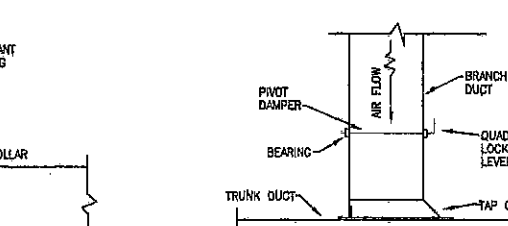
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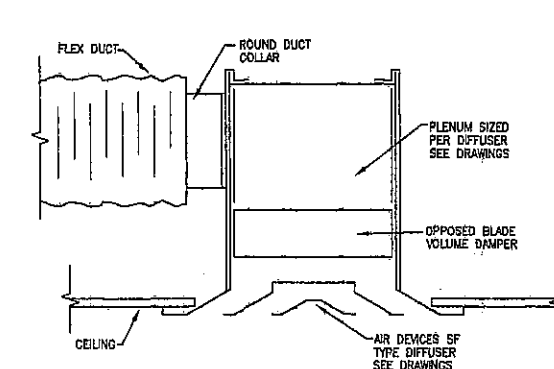
DUCT WRAP DETAIL CORRIDOR 111
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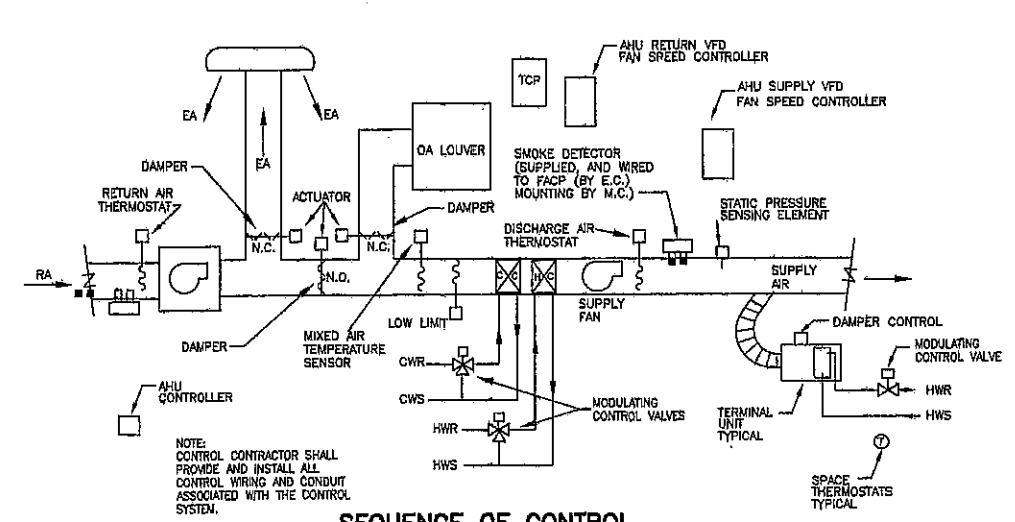
ROOF EXHAUSTER DETAIL
NOT TO SCALE



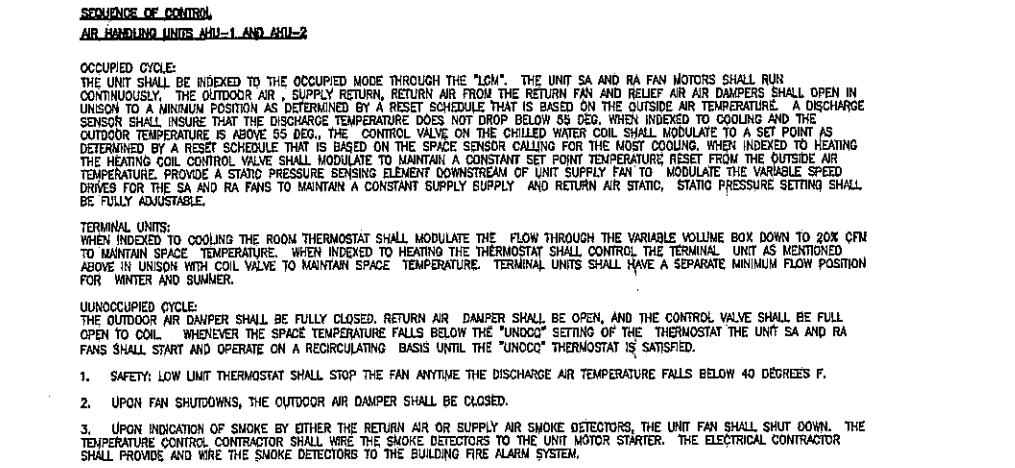
SUPPLY AIR DUCT BRANCH DETAIL
NOT TO SCALE



DIFFUSER DETAIL
NOT TO SCALE



**SEQUENCE OF CONTROL
AIR HANDLING UNIT**
NOT TO SCALE



MARK NO.	SERVICE	TYPE	CFM	STATIC PRESSURE	RPM	HP	V	P	HZ	DRIVE	REMARKS
EF 1	CLASS 108, BOYS 110, STAFF 111, 112	ROOF MTD.	835	0.5"wg	1140	1/8	120	1	60	BELT	LOREN COOK CO. MODEL ACROD 120R110
EF 2	KILN 107	ROOF MTD.	300	0.25"wg	1710	1/8	120	1	60	BELT	LOREN COOK CO. MODEL ACROD 300R101
EF 3	KINDERGARTEN TOILETS	ROOF MTD.	300	0.5"wg	1850	1/8	120	1	60	BELT	LOREN COOK CO. MODEL ACROD 300R101
EF 4	FIRST GRADE TOILETS	ROOF MTD.	150	0.25"wg	1550	1/20	120	1	60	BELT	LOREN COOK CO. MODEL ACROD 70R150H
EF 5	FIRST GRADE COAT ROOMS	ROOF MTD.	750	0.5"wg	1300	1/4	120	1	60	BELT	LOREN COOK CO. MODEL ACROD 120R130
EF 6	KINDERGARTEN COAT ROOMS - SOUTH	ROOF MTD.	450	0.5"wg	1550	1/8	120	1	60	BELT	LOREN COOK CO. MODEL ACROD 100R150H
EF 7	KINDERGARTEN COAT ROOMS - NORTH	ROOF MTD.	300	0.5"wg	1710	1/8	120	1	60	BELT	LOREN COOK CO. MODEL ACROD 300R101
EF 8	KINDERGARTEN TOILETS	ROOF MTD.	150	0.25"wg	1550	1/20	120	1	60	BELT	LOREN COOK CO. MODEL ACROD 70R150H

CABINET HEATER & UNIT HEATER SCHEDULE														
MARK NO.	LOCATION	CFM	M.B.H.	E.A.T.	L.A.T.	COIL				FAN MOTOR				REMARKS
						G.P.M.	E.W.T.	L.W.T.	MAX P.D.	H.P.	V	P	HZ	
CH 1	VEST. 118	275	23.3	60	138	1.2	180	140	3.2	40 WATS	120	1	60	BASED ON TRANE FFE 030, VERTICAL, SLOPED TOP UNIT.
CH 2	CORR. 101	500	45.4	70	154	2.3	180	140	3.8	80 WATS	120	1	60	BASED ON TRANE FFE 030, VERTICAL, SLOPED TOP UNIT.
UNIT 1	HVAC 114	1500	41.0	60	85	2.7	180	30	0.23	1/8	120	1	60	BASED ON TRANE LHS 100 SERIES

MARK NO.	CFM	EXT. STATIC PRESSURE	OUTLET VELOCITY	RPM FAN	H.P.	V	P	HZ	UNIT SERVED	REMARKS
EF 1	24000	0.5	1200	420	10	480	3	60	AHU-1	BASED ON LOREN COOK CO. MODEL 445 G.M. COMPLETE 1/4" ALUMINUM WHEEL.

MARK	CFM	HP	V	P	HZ	REMARKS
EF 1	1200	2 MOTORS @ 1/2 HP EACH	480	3	60	VERTICAL

MARK NO.	AREAS SERVED	CFM	MINIMUM OA IN COOLING	EXT.	TOTAL	H.P.	V	P	HZ	EDB	EWB	LDB	LWB	SENSIBLE COOLING (MBH)	TOTAL COOLING (MBH)	ENT	LWT	GPM	H ₂ O ΔP F.T.	EAT	LAT	GPM	MBH	ENT	LWT	H ₂ O ΔP F.T.	REMARKS
AHU 1	NEW ADDITION	24000	12%	2.0	3.83	25	460	3	60	78.0	65.0	54.0	53.4	674.5	889.1	45	85	177.2	3.54	60.0	74.44	20	400.0	180	140	0.15	BASED ON TRANE MCCB-1 SIZE 50 UNIT WITH AHU-1 FAN.
AHU 2	MULTI-PURPOSE	4200	30%	4	2.1	3	460	3	60	77.0	65.0	54.1	53.6	105.9	143.3	45	85	28.6	4.38	60.0	84.2	5.5	110.0	180	140	3.42	BASED ON TRANE MCCB-1 SIZE 10 WITH AHU-2 FAN.

MARK NO.	LOCATION AREA	COOLING CFM	HEATING CFM	INLET SIZE	FULL OPEN MAXIMUM PRESSURE DROP	EAT	LAT	GPM	MBH	E.W.T.	L.W.T.	MAX FT. H ₂ O ΔP
AHU 1	CLASSROOM 127 Kb	1945	1500	14	.60	55	91.4	3.0	59.0	180	140	1.5
AHU 2	CLASSROOM 128 Kb	1800	1250	12	.80	55	90.4	2.4	47.8	180	140	2.7
AHU 3	CLASSROOM 129 Kb	1650	1250	12	.80	55	91.4	2.5	48.1	180	140	2.7
AHU 4	CLASSROOM 133 Kb	1950	1250	14	.60	55	94.6	2.7	53.4	180	140	2.8
AHU 5	CLASSROOM 134	2050	1250	14	.54	55	94.0	2.6	52.7	180	140	2.8
AHU 6	CLASSROOM 136	1800	1250	12	.80	55	90.8	2.4	48.3	180	140	2.7
AHU 7	TEACHER WORK 142	950	750	9	.30	55	60.3	1.4	28.6	180	140	1.2
AHU 8	TEACHER WORK 143	950	750	9	.30	55	60.3	1.4	28.6	180	140	1.2
AHU 9	CORRIDOR 103	600	600	9	.54	55	80.3	1.1	22.8	160	140	1.5
AHU 10	CLASSROOM 152 Lc	1640	1250	12	.90	55	91.1	2.4	48.7	180	140	2.7
AHU 11	COMMING 151	1800	1000	12	.80	55	92.3	2.0	40.3	180	140	1.5
AHU 12	CLASSROOM 146 Lc	1700	1000	12	.85	55	90.1	1.9	37.9	180	140	1.5
AHU 13	CLASSROOM 153 Lc	1640	1250	12	1.0	55	91.1	2.4	48.7	180	140	2.7
AHU 14	CLASSROOM 154 Lc	1520	1000	12	.78	55	90.1	1.9	37.9	180	140	1.5
AHU 15	CLASSROOM 155 Lc	1520	1000	12	.78	55	90.1	1.9	37.9	180	140	1.5
AHU 16	ART ROOM 106	1150	1000	10	.58	55	93.5	2.6	41.6	180	140	1.5
AHU 17	COMPUTER LAB 104	2380	1500	14	1.1	55	95.0	3.0	61.5	180	140	1.5
AHU 18	FULL-OUT 139	160	150	4	.18	55	98.7	.5	7.1	180	140	1.0
AHU 19	CORRIDOR 117	980	980	9	.54	55	80.3	1.8	37.0	180	140	1.5

M/E DESIGN SERVICES
MECHANICAL/ELECTRICAL CONSULTING ENGINEERS
120 South Hill Street
Indianapolis, Indiana 46204
(317) 258-1914
JOB NO. 0348

MECHANICAL DETAILS AND SCHEDULES

LIBERTY ELEMENTARY SCHOOL
EARLY LEARNING CENTER ADDITION & REMODEL
50-1 W. COUNTY ROAD 900 N.
CHESTERTON, INDIANA
gerometta & kinel architects, inc.

DATE: 9-24-09
SCALE:
DRAWN:
JOB: 2014
SHEET: **M3.0**