

13504 Stevens Street, Suite D Omaha, NE 68137 Phone: 402-333-9009

Fax: 402-991-5383

Date:	9/14/2017	Addendum No:	1
Project:	Sorenson Senior Living	Project No:	111-17-07
To:	Bob Engel	Firm:	RWE Architects

NOTICE

THIS ADDENDUM IS ISSUED BY THE ENGINEER TO ALL KNOWN PARTIES WHO HAVE RECEIVED BIDDING DOCUMENTS FOR THE ABOVE LISTED PROJECT. THIS ADDENDUM SHALL BECOME PART OF THE CONTRACT DOCUMENTS AS A REVISION TO THE ORIGINAL DOCUMENTS.

CONSTRUCTION DOCUMENTS

SHEET M3.0

1. Mechanical Details & Schedules: L-2 size is to be 18" x 18" to match drawing M2.0.

END OF ADDENDUM NO. 1

Attachments:

111-17-07, M3.0, Mechanical Details & Schedules

By: Ricky D. Hiatt, P.E., CEM, LEED AP

Engineer

ROUTE CONDENSATE WASTE FROM BOTH <u>EWH-1</u> AND <u>F-1</u> TO FLOOR DRAIN

1. A VERTICAL DAMPER 1S SHOWN. HORIZONTAL DAMPER INSTALLATION, 1S SIMILAR. FOLLOW DAMPER MANUFACTURER'S INSTRUCTIONS, INCLUDING FASTENER OPTIONS AND GAGES FOR SLEEVE AND PERIMETER ANGLES. FIRE DAMPERS MUST BE INSTALLED IN THE PARTITION OR

2. GALVANIZED SLEEVE: GAGE NOT LESS THAN CONNECTING DUCT. FASTEN SLEEVE TO DAMPER

3. PERIMETER ANGELS: GALVANIZED STEEL, NOT LESS THAN 1 1/2x1 1/2, 14 GAGE, TO PROVIDE 1"

4. BREAKAWAY DUCT CONNECTION: CONTRACTOR'S OPTION OF TYPES SHOWN IN SMACNA LPDS,

6. PROVIDE 1/4" TO 1/2" CLEARANCE ON HEIGHT AND WIDTH. FILL OPEN SPACE WITH ROCK WOOL

5. ACCESS DOOR: SIZE AND LOCATION TO PERMIT SERVICING THE FUSIBLE LINK OR LINKS.

7. ALL DUCT WORK RISERS WHICH ARE RUN EXPOSED, SUCH AS THRU ATTIC FLOORS AND MECHANICAL ROOM FLOORS, SHALL BE PROVIDED WITH 3 INCH HIGH CONCRETE CURB

TYPICAL APARTMENT MECHANICAL CLOSET

FLOOR AND NOT OUTSIDE THE PENETRATION.

MINIMUM OVERLAP OF OPENING ON ALL 4 SIDES.

FRAME AND TO PERIMETER ANGLES.

FIG. 2-13, SEAL JOINTS.

FIRE BARRIER ----PARTITION OR CHASE

TYPICAL DUCT

INSULATION

AROUND OPENING FOR DUCT.

WWW WW Ferranda

ACCESS DOOR NOTE 5

PERIMETER ANGLE, NOTE 3 -

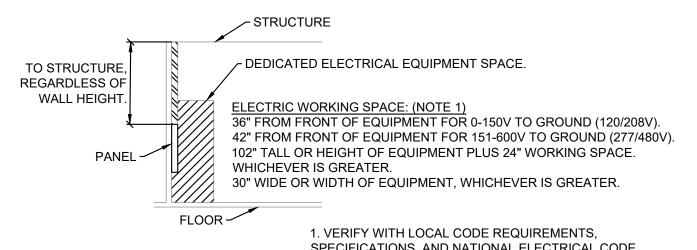
(NOTE FASTENED TO PARTITION)

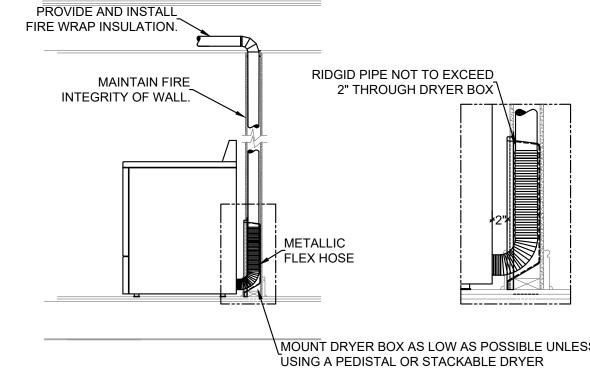
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DOORWAY~ ELECTRIC WATER HEATER

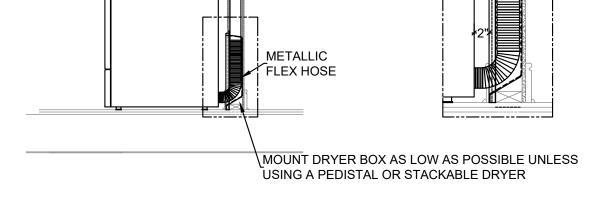
M3.0 SCALE: NONE

CEILING

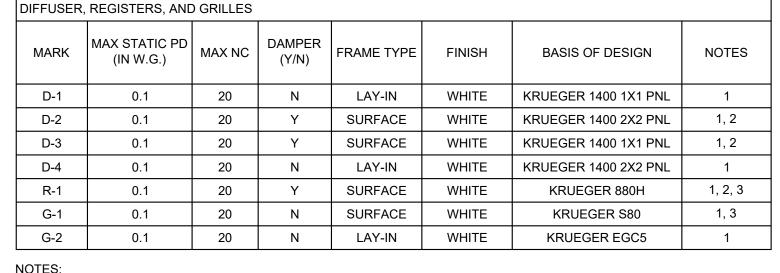




M3.0 SCALE: NONE



TYPICAL DRYER BOX DETAIL



. CONTRACTOR SHALL COORDINATE WITH GENERAL CONTRACTOR ON FINAL CEILING PLAN AND FRAME TYPE 2. PROVIDE WITH VOLUME DAMPER. 3. PROVIDE WITH FIRE DAMPER.

			MAX PD		SIZE (IN)		
MARK	TYPE	CFM	(IN H ₂ 0)	W	Н	D	BASIS OF DESIGN	NOTES
L-1	INTAKE	50-120	0.03	12	12	2	RUSKIN ELF211D	1
L-2	INTAKE	420	0.03	18	18	2	RUSKIN ELF211D	1
L-3	INTAKE	450	0.04	30	18	8	GREENHECK FSG-801	1

NOTES: 1. PROVIDE WITH INSECT SCREEN

R SHALL EQUAL

OR BE GREATER

THAN 1/6 W.

R SHALL EQUAL OR BE GREATER

R SHALL EQUAL W.

SHORT RADIUS

ELBOW WITH TWO

SHORT RADIUS

STANDARD RADIUS

SHEET METAL FITTING DETAIL

ELBOW

ELBOW WITH ONE

W1 x D1

SQUARE THROAT 90

ELBOW WHEN DUCT

SIZE EQUAL

W1 x D1

REDUCING

TRANSITION

FITTING

W1 x D1

REDUCING

TRANSITION

FITTING

ONE-SIDE

EXPANSION

TWO-SIDE

EXPANSION

COIL - DX										
	MATCHING	FAN COIL		E	ΑT	NU. OF	DEED	TOTAL	SENS	
MARK	HP	SERVES	CFM	DB (°F)	WB (°F)	CIRCUITS	REFR TYPE	CAPACITY (MBH)	CAPACITY (MBH)	NOTES
CC-1	HP-1	FC-1	620	55	54	1	R-410	18	13.2	1
CC-2	HP-2	FC-2	1630	55	54	1	R-410	47	34.6	1
CC-3	HP-3	FC-3	710	55	54	1	R-410	18	13.2	1
CC-4	HP-4	FC-4	1000	55	54	1	R-410	29	21.5	1

NOTES: 1. PROVIDE DX COOLING COIL IN FAN COIL UNIT.

UNIT HEATE	R - ELECTRIC							
MARK	LOCATION	CFM	ELE	ECTRIC (OIL DAT	A	BASIS OF DESIGN	NOTES
IVIARK	LOCATION	CFIVI	KW	V	PH	AMPS	DASIS OF DESIGN	NOTES
EUH-1	STAIRS	100	3.6	208	1	17.3	QMARK AWH4504F	1, 2
EUH-2	VEST 136	150	3.0	208	1	14.4	QMARK EFF4004	2, 3, 4
EUH-3	RR 138	65	1.5	120	1	12.5	QMARK CWH1151DS	2, 5

PROVIDE WITH RECESSED MOUTING FRAME AND INTEGRAL THERMOSTAT 2. PROVIDE WITH INTEGRAL DISCONNECT.

PROVIDE WITH SINGLE POLE THERMOSTAT SIMILAR TO EFFT1 4. PROVIDE WITH SURFACE MOUNTING FRAME SIMILAR TO EFFSM

5. PROVIDE WITH SURFANCE MOUNTING FRAME NAD INTEGRAL THERMOSTAT

FIRE RATED

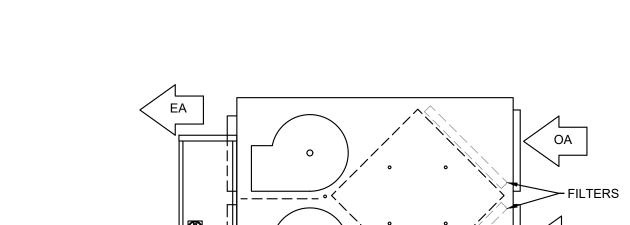
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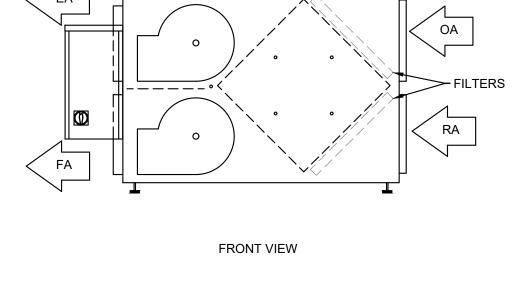
G-2 RETURN

GRILLE

OFFICE

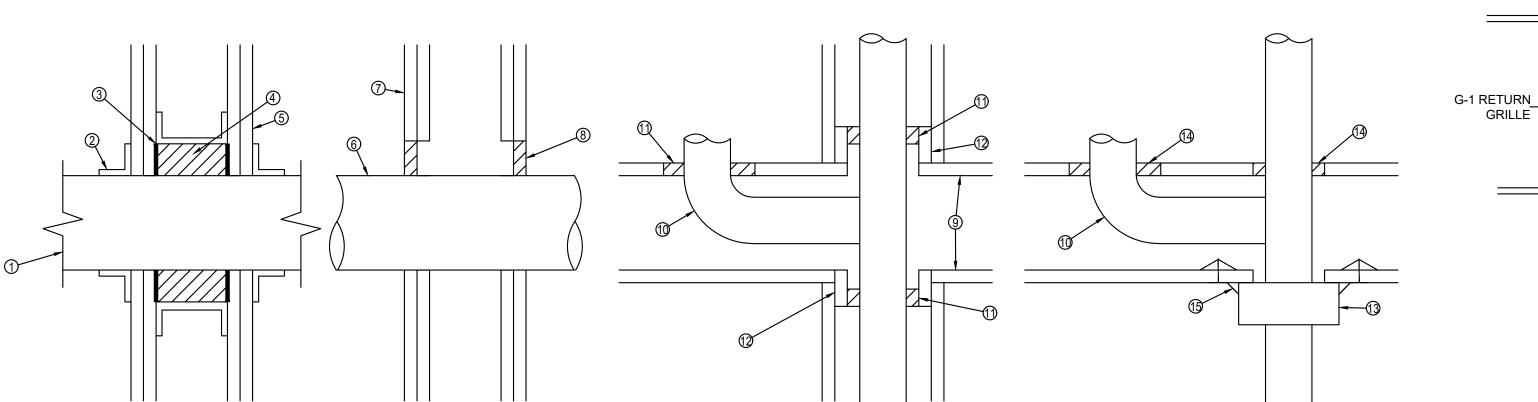
ELECTRIC WORKING SPACE M3.0 | SCALE: NONE







6 EXHAUST FAN DETAIL
M3.0 SCALE: NONE





- STEEL DUCT MAX 100" X 100" INSTALLED IN FRAMED OPENING. 2. STEEL MINIMUM #16 GAUGE GALVANIZED STEEL ANGLES SIZED TO LAP STEEL DUCT A MINIMUM 1" AND WALL A MINIMUM OF 2". ANGLES ATTACHED TO TO STEEL DUCT ON BOTH SIDES OF WALL WITH MINIMUM #10 STEEL SHEET METAL SCREWS SPACED A MAX OF 1" FROM EACH END OF STEEL DUCT AND SPACED A MAXIMUM OF 6" ON CENTER.
- 3. 3M FB-3000 WT MINIMUM OF 5/8" THICKNESS APPLIED WITHIN ANNULUS, FLUSH WITH BOTH SURFACES OF WALL. 4. MINIMUM 4-7/8" THICKNESS OF MINIMUM 4PCF MINERAL WOOD BATT INSULATION FIRMLY PACKED IN TO OPENING AS A PERMANENT FORM. PACKING MATERIAL TO BE RECESSED FROM BOTH SURFACES OF WALL TO ACCOMMODATE THE REQUIRED THICKNESS OF FILL MATERIAL
- 5. RATED WALL ASSEMBLY. 6. 2" MAX SDR 9 CROSSLINK POLYETHYLENE TUBING.
- 7. RATED WALL ASSEMBLY. 8. 3M FB-3000 WT MINIMUM OF 5/8" THICKNESS APPLIED WITHIN ANNULUS, FLUSH WITH BOTH SURFACES OF WALL. AN ADDITIONAL 1/2" BEAD OF FILL MATERIAL APPLIED AT THE TUBING / GYPSUM BOARD INTERFACE AT POINT OF CONTACT LOCATION ON BOTH SURFACES OF WALL ASSEMBLY.
- RATED ASSEMBLY.
- 10. MAXIMUM 3" PVC PIPING. 11. 3M FB-3000 WT MINIMUM OF 3/4" THICKNESS APPLIED WITHIN ANNULUS, FLUSH WITH TOP SURFACE OF FLOOR OR SOLE PLATE AND FLUSH WITH BOTTOM SURFACE OF OF TOP PLATE. 3M FB-3000 WT MINIMUM OF 3/4" THICKNESS APPLIED AROUND PERIMETER OF BRANCH PIPING FLUSH WITH TOP SURFACE OF FLOOR. 3M FB-3000 WT MINIMUM OF 1/2" THICKNESS APPLIED AT THE PIPE/FLOOR
- INTERFACE AND THE PIPE/PLATE INTERFACE. 2. NOMINAL 2 BY 4 OR 2 BY 6 LUMBER PLATES. DIAMETER OR OPENING OR LENGTH OF NOTCH OUT IN
- PLATE TO BE 1/2" TO 1" LARGER THAN OUTSIDE PIPE DIAMETER. 13. NOMINAL 1/8" THICK INTUMESCENT MATERIAL SUPPLIED IN 2" WIDE STRIPS. WRAP STRIP TIGHTLY AROUND NONMETALLIC PIPE WITH CONTINUOUS LAYERS AND BUTTED TIGHTLY AGAINST THE BOTTOM SURFACE OF THE THE GYPSUM WALLBOARD CEILING OR TOP PLATE. THE MINIMUM NUMBER
- OF STRIPS IS DEPENDENT UPON THE NOMINAL SIZE OF THE PIPE. 14. 3M FB-3000 WT MINIMUM OF 3/4" THICKNESS APPLIED WITHIN ANNULUS, FLUSH WITH TOP SURFACE OF FLOOR. 3M FB-3000 WT MINIMUM OF 1/2" THICKNESS APPLIED AT THE PIPE/FLOOR INTERFACE AND THE PIPE/PLATE OR WALLBOARD INTERFACE AND AT THE SEAMS OF THE WALLBOARD PLATE. 15. NOMINAL 2" DEEP COLLAR WITH 1-1/4" WIDE BY 2" LONG ANCHOR TABS AND MINIMUM 3/4" LONG TABS

LINED TRANSFER DUCT M3.0 | SCALE: NONE

LINED RETURN DUCTWORK

INSTALLATION DETAIL M3.0 | SCALE: NONE EXHAUST FANS FAN DATA NOTES FAN TYPE CFM TSP/ ESP FAN RPM DRIVE WATTS AMPS V PH SONES BASIS OF DESIGN BROAN ZB110 1, 2, 3, 4

BROAN L150

1, 2, 3, 4

— SLEEVE, NOTE 2

DAMPER COLLAR

EXTENSION INTEGRAL PART OF SLEEVE - DAMPER, NOTE 1

- DUCT CONNECTION

SLEEVE, NOTE 2

NOTE 4

	ENERGY	RECOVE	RY VENTIL	_ATOR																								
							COOLIN	IG SEASC	N						HEA	ATING S	EASON				ELE	CTRIC	CAL DA	AΤΑ				
			E A OEM	SUMI AMBI		SUM RET		VENTII L		TOTAL CAP.	SENS. CAP.		ITER IENT		TER URN	VENTI L	LATOR AT		SENS. CAP.	V	ВΠ	ПВ	ΕIΛ	MOB	MCA	BASIS OF DESIGN	WEIGHT (LBS)	NOTES
<u> </u>	MARK	O.A CFM	E.A. CFM	DB (°F)	WB (°F)	DB (°F)	HUM	DB (°F)	WB (°F)	(MBH)	(MBH)	DB (°F)	WB (°F)	DB (°F)	HUM	DB (°F)	WB (°F)	(MBH)	(MBH)	V			FLA	IVIOP	IVICA		(== -)	
$oldsymbol{ol}ol{ol}}}}}}}}}}}}}}}}} $	ERV-1	420	420	95	75	75	50%	80.5	68.1	7.9	2.5	-7	-9	70	35%	48.9	39.8	14.5	9.6	208	1	1/2	4.8	15	6.0	RENEWAIRE EV450IN	140	1,2,3,4,5,6

PROVIDE WITH 10" ROUND TRANSITIONS. (QTY 4)

PROVIDE WITH HANGING BRACKETS TO MOUNT TO STRUCTURE. 3. PROVIDE WITH VIBRATION ISOLATION KIT.

4. MOUNT SO ACCESS DOOR SWINGS OUT.

5. MOUNT IN ACCORDANCE WITH MANUFACTURER'S CLEARANCE SPECIFICATIONS. 6. PROVIDE WITH A 7-DAY PROGRAMMABLE TIMECLOCK SIMILAR TO TC7D-W.

AIR 7	ΓΟ AIR H															FAN CO	IL UNIT																		
		VILLEACTURER	MODELNO	MATCHE	HP HEATING	INDOOR AIR	AMB AIR TEMP	AMB AIR TEMP	INDOOR EAT		ELEC1	TRICAL		ICDE MIN	DEE	OPER.	NOTES	MADIC	MANUEACTURER	MODELNIO	MATCHE)	E.S.P.	FAN	RIVE -	HE	ATER ELEC		MOTOR EL	LEC	NACA	TOTAL	MOCD	WEIGHT	NOTES
I IVIAI	KK IVIA	NUFACTURER	MODEL NO.	AHU	CAPACITY (MBH)	(°F)	HTG (°F)	COOLING (°F)	(DB/WB)(°F)	VOLTS	PH	MCA	MOP	HSPF SEER	REF.	WT.(LBS)	NOTES	MARK	MANUFACTURER	MODEL NO.	· HP UNIT	CFM	(IN.WG)	HP	RIVE	kW STA	AGES VOLT	PH '	VOLT PH	AMPS	MCA	AMPS	MOCP	(LBS)	NOTES
HP	-1 .	ALLIED AIR	4HP14L18P-8A	FC-1	17	65	37	95	80/67	208	1	12.2	20	8.2 14	R410A	180	1, 2, 3, 4, 5	FC-1	ADP	SK791910	HP-1	620	0.3	1/3 DI	RECT	10	1 208	1	208 1	0.9	46.3	-	60	80	1,2,3,4,5,7
HP	-2	ALLIED AIR	4SHP14LE148	FC-2	48	65	37	95	80/67	208	1	29	50	8.2 14.5	R410A	280	1, 2, 3, 4, 5	FC-2	ALLIED	BCS2M60S	HP-2	1630	0.5	3/4 DI	RECT	15	2 208	1	208 1	3.8	-	76	60, 60	200	1,2,3,4,5,
HP	-3	ALLIED AIR	4SHP14LE118	FC-3	18	65	37	95	80/67	208	1	12.2	20	8.2 14	R410A	180	1, 2, 3, 4, 5	FC-3	ALLIED	BCS2M24S	HP-3	710	0.5	3/4 DI	RECT	5.6	1 208	1	208 1	2.0	-	29.1	45	200	1,2,3,4,5,
HP	-4	ALLIED AIR	4SHP14LE130	FC-4	26	65	37	95	80/67	208	1	17.1	25	8.2 14	R410A	180	1, 2, 3, 4, 5	FC-4	ALLIED	BCS2M36S	HP-4	1000	0.5	3/4 DI	RECT	11.3	1 208		208 1	2.5	- '	56.7	60, 30	150	1,2,3,4,5,
NOTE	.0																•	NOTEO															•		
NOTE	<u>:5:</u>																	NOTES:																	

	ELEVA	ATOR HO	OOD					
OTES	MARK	CFM	MAX P.D	HOOD OVERALL (L x W x H)	THROAT SIZE (W x L)	CURB HT	BASIS OF DESIGN	NOTES
3,4,5,7,8	EH-1	1700	.01	30 X 42 X 12.25	16 X 28	14"	GREENHECK WRH	1,2,3,4
.,5,4,5,0								

1. PROVIDE WITH BIRD SCREEN. 2. PROVIDE WITH SMOKE DAMPER.

3. PROVIDE WITH MOTORIZED DAMPER. INTERLOCK DAMPER WITH SMOKE DETECTOR. DAMPER TO FAIL OPEN AT DETECTION OF SMOKE.

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4. INSULATE DUCT FROM HOOD TO TOP OF HOISTWAY.

			IIFE			(114 440)		ITE		
	EF-1	BATHROOMS	FC WHEEL	EXHAUST	110	.125	940	DIRECT	8.4	0.3
	EF-2	RR 142	FC WHEEL	EXHAUST	160	.125	750	DIRECT	100	1.3
•		ERLOCK WITH						R.		

FIRE DAMPER

4. PROVIDE WITH WALL LOUVER SIMILART TO XVENT BOX 6SEB.

4. PROVIDE 2" X 2" X 2" PRE-CUT NEOPRENE PADS, 4 PER HEAT PUMP UNIT.

5. PROVIDE WITH PUMP UP AS REQUIRED BY MANUFACTURER.

. PROVIDE WITH THINLINE RADIATION DAMPER.

PROVIDE REFRIGERANT LINE SET SIZED PER MANUFACTURERS RECOMMENDATIONS. 2. UNIT SHALL BE CERTIFIED IN ACCORDANCE TO AHRI 210-240. PROVIDE CRANK CASE HEATER.

PROVIDE SINGLE CIRCUIT FOR ELECTRIC HEAT.

FACTORY INSTALLED HEATER PACKAGE.

PROVIDE WITH SECONDARY OVERFLOW SWITCH. PROVIDE WITH 7-DAY PROGRAMMABLE THERMOSTAT. PROVIDE WITH HIGH EFFICIENCY ECM MOTOR.

PROVIDE WITH INTEGRAL CIRCUIT BREAKER(S). PROVIDE WITH WALL PANEL OVER RETURN THROUGH WALL. 8. PROVIDE WITH PULL-OUT DISCONNECT.

Issue Date: August 22, 2017

Revisions to the drawing set

Description

Date

Project Number: 2516 Checked by:

MECHANICAL SCHEDULES & DETAILS

Sheet Name: