













1 MECHANICAL OVERALL ROOF EQUIPMENT PLAN  
M2.05 3/32" = 1'-0"

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SENIOR LIVING  
 AT PURCHASE COLLEGE

BROADVIEW - SENIOR LIVING AT  
 PURCHASE COLLEGE - COMMONS  
 BUILDING

hord | coplan | macht

ARCHITECTURE  
 LANDSCAPE ARCHITECTURE  
 PLANNING  
 INTERIOR DESIGN



LAN ASSOCIATES  
 Engineering, Planning, Architecture, Surveying, LLP  
 LAN 208 #130811  
 PROFESSIONAL CERTIFICATION: I CERTIFY THAT THESE DOCUMENTS WERE  
 PREPARED OR SUPERVISED BY ME, AND THAT I AM A FULLY LICENSED ENGINEER  
 UNDER THE LAWS OF THE STATE OF NEW YORK.  
 LICENSE NUMBER: 090385  
 LICENSE EXPIRES: 12/31/21  
 EXPIRATION DATE: 12/31/21

no.	date	revision

Project Name  
 BROADVIEW - SENIOR LIVING AT PURCHASE  
 COLLEGE - COMMONS BUILDING  
 Project Number  
 1308.01  
 Date  
 4/30/2021  
 Scale  
 3/32" = 1'-0"  
 Drawing  
 COMMONS ROOF MECHANICAL  
 EQUIPMENT PLAN

M2.05

PERMIT / GMP SET





VENTILATION INDEX									
ROOM NUMBER	ROOM NAME	FLOOR AREA (SQ. FT.)	REQUIRED O.A. PER SQ. FT.	REQUIRED O.A. FOR SPACE	NO. OF PEOPLE	REQUIRED O.A. PER PERSON	REQUIRED O.A. FOR OCCUPANTS	DESIGN O.A. (CFM)	REMARKS
100	VEST.	114	0.06	6.84	0	5	0	10	--
101	LOBBY	172	0.06	70.32	13	5	65	140	--
102	CORRIDOR	846	0.06	50.76	0	5	0	60	--
103	CONF. ROOM	303	0.06	18.18	16	5	80	100	--
104	ADMIN SUITE	356	0.06	21.36	0	5	0	30	--
105	ACCT OFFICE	204	0.06	12.24	3	5	15	30	--
106	REC. STORAGE	303	0.06	18.18	0	5	0	20	--
107	WORK ROOM	146	0.06	8.76	1	5	5	20	--
108	OFFICE MAN.	112	0.06	6.72	1	5	5	20	--
109	ACCT. DIRECTOR	116	0.06	6.96	1	5	5	20	--
110	ADMIN ASSISTANT	104	0.06	6.24	1	5	5	20	--
111	EXEC. DIRECTOR	182	0.06	10.92	1	5	5	20	--
112	MEN'S ROOM	172	0.12	20.64	0	5	0	30	--
113	WOMEN'S ROOM	172	0.12	20.64	0	5	0	30	--
114	MAIL	391	0.06	23.46	0	5	0	30	--
115	CORRIDOR	747	0.06	44.82	0	5	0	50	--
116	CORRIDOR	405	0.06	24.3	0	5	0	30	--
117	MECHANICAL ELECT.	678	0.06	40.68	14	10	140	190	--
118	CENTRAL LAUNDRY DIRTY	311	0.06	18.66	5	25	125	150	--
119	CENTRAL LAUNDRY CLEAN MAINTENANCE STORAGE	404	0.06	24.24	3	25	75	100	--
120	MAINT. AREA	242	0.06	14.52	0	5	0	20	--
121	MAINT. AREA	493	0.06	29.58	10	10	100	130	--
122	MAINT. AREA	243	0.06	14.58	5	5	25	40	--
123	RECEIVING ROOM	100	0.12	12	0	5	0	20	--
124	CORRIDOR	157	0.06	9.42	0	5	0	10	--
125	EMPLOYEE APP.	101	0.06	6.06	1	5	5	20	--
126	PERSON ASSISTANT	97	0.06	5.82	1	5	5	20	--
127	PERSON DIRECTOR	90	0.06	5.4	1	5	5	20	--
128	MAINT. OFFICE	93	0.06	5.58	1	5	5	20	--
129	SEC. ROOM	92	0.06	5.52	1	5	5	20	--
130	TRASH/RECYCLE	1325	0.06	79.5	0	5	0	80	--
131	CORRIDOR	778	0.06	46.68	5	5	25	80	--
132	WOODWORKING	372	0.06	22.32	8	10	80	110	--
133	HOUSEKEEPING SUPPLY	261	0.12	31.32	0	5	0	40	--
134	EMPLOYEE LOUNGE	406	0.06	24.36	10	5	50	80	--
135	EMPLOYEE WOMEN'S LOCKER	230	0.25	57.5	0	5	0	60	--
136	EMPLOYEE MEN'S LOCKER	220	0.25	55	0	5	0	60	--
137	CORRIDOR	107	0.06	6.42	5	5	25	40	--
139	BUSINESS CENTER	311	0.06	18.66	2	5	10	30	--
140	CONVENIENCE STORE/COFFEE	961	0.12	115.32	15	7.5	112.5	230	--
141	LIBRARY	604	0.12	72.48	6	5	30	110	--
142	CORRIDOR	859	0.06	51.54	0	5	0	60	--
143	GAME ROOM	650	0.06	117	14	7.5	105	230	--
144	CLASSROOM	751	0.12	90.12	27	10	270	370	--
145	PREP KITCHEN	500	0.12	60	10	7.5	75	140	--
146	DRY STORAGE	138	0.06	8.28	0	5	0	10	--
147	CORRIDOR	529	0.06	31.74	0	5	0	40	--
148	SCREENING	105	0.06	6.3	1	5	5	20	--
149	SOC. DIRECTOR	105	0.06	6.3	1	5	5	20	--
150	WOMEN'S LOCKER	516	0.25	129	0	5	0	130	--
152	NATATORIUM	2586	0.48	1241.28	50	5	250	1500	--
155	POOL STORAGE	159	0.06	9.54	0	5	0	10	--
156	MEN'S LOCKER	516	0.25	129	0	5	0	130	--
158	CORRIDOR	723	0.06	43.38	0	5	0	50	--
159	CARDIO/STRENGTH	1094	0.06	65.64	11	20	220	290	--
161	SALON	674	0.12	80.88	17	20	340	430	--
162	MIXING	71	0.06	4.26	5	5	25	30	--
163	SPA	143	0.06	8.58	5	5	25	40	--
164	ADMIN SUITE	550	0.06	33	3	5	15	50	--
165	CLOSING ROOM	251	0.06	15.06	2	5	10	30	--
166	WORK ROOM	81	0.06	4.86	1	5	5	10	--
167	DISPLAY	291	0.06	17.46	2	5	10	30	--
168	MARKETING ASST.	132	0.06	7.92	1	5	5	20	--
169	RES. COUNS.	134	0.06	8.04	1	5	5	20	--
170	RES. COUNS.	149	0.06	8.94	1	5	5	20	--
171	MARKETING DIR.	205	0.06	12.3	1	5	5	20	--
172	PACKAGE STORAGE	168	0.06	10.08	0	5	0	20	--
173	STORAGE	95	0.06	5.7	0	5	0	10	--
174	REC. DESK	274	0.06	16.44	6	5	30	50	--
175	CORRIDOR	560	0.06	33.6	0	5	0	40	--
177	CORRIDOR	577	0.06	34.62	0	5	0	40	--
178	LENS	586	0.06	35.16	3	5	15	60	--

VENTILATION INDEX									
ROOM NUMBER	ROOM NAME	FLOOR AREA (SQ. FT.)	REQUIRED O.A. PER SQ. FT.	REQUIRED O.A. FOR SPACE	NO. OF PEOPLE	REQUIRED O.A. PER PERSON	REQUIRED O.A. FOR OCCUPANTS	DESIGN O.A. (CFM)	REMARKS
180	STORAGE	79	0.06	4.74	0	5	0	10	--
181	FOOD	625	0.18	112.5	8	7.5	60	180	--
182	PERFORMANCE	2183	0.06	130.98	100	5	500	640	--
185	MAKER/ART	847	0.18	152.46	17	10	170	330	--
188	CORRIDOR	245	0.06	14.7	0	5	50	135	--
189	ACTIVE LEARNING	805	0.12	96.6	29	10	0	20	--
192	MOVEMENT	1125	0.06	67.5	45	20	290	390	--
200	CORRIDOR	1391	0.06	83.46	0	5	0	90	--
201	CORRIDOR	490	0.06	29.4	0	5	0	30	--
207	MULTI-PURPOSE SPACE	960	0.06	57.6	50	5	250	310	--
210	HOST	82	0.06	4.92	1	5	5	10	--
211	DINING	2608	0.18	469.44	50	7.5	375	850	--
212	COCKTAIL LOUNGE	1220	0.18	219.6	10	7.5	75	300	--
213	DESTINATION DINING	827	0.18	148.86	25	7.5	375	850	--
214	CENTRAL KITCHEN	2075	0.12	249	42	7.5	315	570	--
215	LEARNING KITCHEN	896	0.12	107.52	18	7.5	135	250	--
216	PRIVATE DINING	400	0.18	72	30	7.5	225	300	--
217	CORRIDOR	1393	0.06	83.58	0	5	0	90	--

INDOOR VRF AC DUCTED / HEAT PUMP TERMINAL UNIT SCHEDULE																				
(MITSUBISHI AS STANDARD)																				
TAG	ROOM SERVED	QTY	LOW-HIGH (CFM)	COOLING				HEATING	REFRIG TYPE	PIPE CONNECTIONS (In.)			ELECTRICAL DATA			DIMENSIONS (L x W x H) (In.)	APPROX. WEIGHT (Lbs)	MODEL	MANUFACTURER	NOTES
				TMBH	EADB	EADB	EAWB			RS	RL	COND.	V - Ph - Hz	MCA	MOP					
AC-D-08	REFER TO PLANS	2	194 - 317	8	95	80	67	9	R-410A	1/2"	1/4"	1"	208 - 1 - 60	0.62	15	27-9/16 x 31-1/8 x 7-7/8	42	PEFY-P08NMSU-E	mitsubishi	SEE NOTES BELOW
AC-D-12	REFER TO PLANS	3	211 - 370	12	95	80	67	13.5	R-410A	1/2"	1/4"	1"	208 - 1 - 60	0.67	15	27-9/16 x 31-1/8 x 7-7/8	46	PEFY-P12NMSU-E	mitsubishi	SEE NOTES BELOW
AC-D-18	REFER TO PLANS	1	353 - 529	18	95	80	67	20	R-410A	1/2"	1/4"	1"	208 - 1 - 60	0.88	15	27-9/16 x 39 x 7-7/8	54	PEFY-P18NMSU-E	mitsubishi	SEE NOTES BELOW
AC-D-24	REFER TO PLANS	2	423 - 706	24	95	80	67	27	R-410A	5/8"	3/8"	1"	208 - 1 - 60	1.17	15	27-9/16 x 46-7/8 x 7-7/8	62	PEFY-P24NMSU-E	mitsubishi	SEE NOTES BELOW
AC-D-30	REFER TO PLANS	1	618 - 883	30	95	80	67	34	R-410A	5/8"	3/8"	1 1/4"	208 - 1 - 60	2.73	15	28-7/8 x 43-5/16 x 9-7/8	67	PEFY-P30NMAU-E	mitsubishi	SEE NOTES BELOW
AC-D-36	REFER TO PLANS	5	936 - 1342	36	95	80	67	40	R-410A	5/8"	3/8"	1 1/4"	208 - 1 - 60	4.23	15	28-7/8 x 55-1/8 x 9-7/8	86	PEFY-P36NMAU-E	mitsubishi	SEE NOTES BELOW
AC-D-48	REFER TO PLANS	4	980 - 1400	48	95	80	67	54	R-410A	5/8"	3/8"	1 1/4"	208 - 1 - 60	3.41	15	28-7/8 x 55-1/8 x 9-7/8	86	PEFY-P48NMAU-E	mitsubishi	SEE NOTES BELOW
AC-D-54	REFER TO PLANS	1	989 - 1412	54	95	80	67	60	R-410A	5/8"	3/8"	1 1/4"	208 - 1 - 60	4.18	15	35-7/16 x 47-1/16 x 15	157	PEFY-P54NMHU-E	mitsubishi	SEE NOTES BELOW

NOTES:  
1. ALL INDOOR UNITS DUCTED UNITS SHALL BE PROVIDED A CONDENSATE LIFT PUMP FROM THE UNIT MANUFACTURER AND FIELD INSTALLED.  
2. EACH CEILING-MOUNTED CASSETTE UNIT SHALL HAVE VARIABLE SPEED DC MOTOR, 4-WAY AIRFLOW GRILLE.  
3. PROVIDE W/ WALL-MOUNTED REMOTE CONTROLLERS W/ OCCUPANCY SENSORS FOR AC UNITS IN ALL ROOMS.  
4. PROVIDE W/ PROPER REFRIGERANT CHARGE FOR ALL UNITS.  
5. REFER TO DWG. FOR VRF SYSTEM & ASSOCIATED ACCU. REFER TO SPEC. SECTION FOR ADDITIONAL INFORMATION.  
6. INTERNAL AUTOMATIC TEMPERATURE CONTROLS SHALL BE PROVIDED BY ATC CONTRACTOR. THE ATC CONTRACTOR SHALL SHIP THE DDC CONTROLS FOR ALL UNITS TO THE UNIT MANUFACTURER FOR FACTORY MOUNTING. THE ATC CONTRACTOR SHALL PROVIDE, MOUNT AND WIRE ALL EXTERNAL COMPONENTS. ALL UNITS SHALL BE TIED INTO THE NEW BUILDING MANAGEMENT SYSTEM (BMS). REFER TO ATC DIAGRAMS AND SPECIFICATIONS.

INDOOR VRF AC CASSETTES/ HEAT PUMP TERMINAL UNIT SCHEDULE																				
(MITSUBISHI AS STANDARD)																				
TAG	ROOM SERVED	QTY	LOW-HIGH (CFM)	COOLING				HEATING	REFRIG TYPE	PIPE CONNECTIONS (In.)			ELECTRICAL DATA			DIMENSIONS (L x W x H) (In.)	APPROX. WEIGHT (Lbs)	MODEL	MANUFACTURER	NOTES
				TMBH	EADB	EADB	EAWB			RS	RL	COND.	V - Ph - Hz	MCA	MOP					
AC-5	REFER TO PLANS	5	280 - 350	5	95	80	67	6	R-410A	1/2"	1/4"	1"	208 - 1 - 60	0.29	15	22-7/16 x 22-7/16 x 8-3/16	34	PLFY-P05NCMU-E	mitsubishi	SEE NOTES BELOW
AC-8	REFER TO PLANS	4	280 - 350	8	95	80	67	9	R-410A	1/2"	1/4"	1"	208 - 1 - 60	0.29	15	22-7/16 x 22-7/16 x 8-3/16	34	PLFY-P08NCMU-E	mitsubishi	SEE NOTES BELOW
AC-12	REFER TO PLANS	7	320 - 390	12	95	80	67	13.5	R-410A	1/2"	1/4"	1"	208 - 1 - 60	0.35	15	22-7/16 x 22-7/16 x 8-3/16	37	PLFY-P12NCMU-E	mitsubishi	SEE NOTES BELOW
AC-15	REFER TO PLANS	3	320 - 390	15	95	80	67	17	R-410A	1/2"	1/4"	1"	208 - 1 - 60	0.35	15	22-7/16 x 22-7/16 x 8-3/16	37	PLFY-P15NCMU-E	mitsubishi	SEE NOTES BELOW
AC-18	REFER TO PLANS	2	315 - 460	18	95	80	67	20	R-410A	1/2"	1/4"	1-1/4"	208 - 1 - 60	0.5	15	22-7/16 x 22-7/16 x 8-3/16	40	PLFY-P18NFMU-E	mitsubishi	SEE NOTES BELOW
AC-18	REFER TO PLANS	2	494 - 777	24	95	80	67	27	R-410A	3/8"	5/8"	1-1/4"	208 - 1 - 60	0.51	15	33-3/32 x 33-3/32 x 10-3/16	46	PLFY-P24NEMU-E	mitsubishi	SEE NOTES BELOW

NOTES:  
1. ALL INDOOR UNITS CEILING CASSETTES SHALL BE PROVIDED A CONDENSATE LIFT PUMP FROM THE UNIT MANUFACTURER AND FIELD INSTALLED.  
2. EACH CEILING-MOUNTED CASSETTE UNIT SHALL HAVE VARIABLE SPEED DC MOTOR, 4-WAY AIRFLOW GRILLE.  
3. PROVIDE W/ WALL-MOUNTED REMOTE CONTROLLERS W/ OCCUPANCY SENSORS FOR AC UNITS IN ALL ROOMS.  
4. PROVIDE W/ PROPER REFRIGERANT CHARGE FOR ALL UNITS.  
5. REFER TO DWG. FOR VRF SYSTEM & ASSOCIATED ACCU. REFER TO SPEC. SECTION FOR ADDITIONAL INFORMATION.  
6. INTERNAL AUTOMATIC TEMPERATURE CONTROLS SHALL BE PROVIDED BY ATC CONTRACTOR. THE ATC CONTRACTOR SHALL SHIP THE DDC CONTROLS FOR ALL UNITS TO THE UNIT MANUFACTURER FOR FACTORY MOUNTING. THE ATC CONTRACTOR SHALL PROVIDE, MOUNT AND WIRE ALL EXTERNAL COMPONENTS. ALL UNITS SHALL BE TIED INTO THE NEW BUILDING MANAGEMENT SYSTEM (BMS). REFER TO ATC DIAGRAMS AND SPECIFICATIONS.

OUTDOOR AIR-COOLED CONDENSING UNIT SCHEDULE																
(MITSUBISHI AS STANDARD)																
TAG	LOCATION	AREAS SERVED	UNITS SERVED	COOLING (TMBH)	AMBIENT TEMP (°F)	SUCTION TEMP (°F)	ELECTRICAL DATA			DIMENSIONS (L x W x H) (In.)	APPROX. WEIGHT (Lbs)	MODEL	MANUFACTURER	NOTES		
							V	Ph	Hz							
VRF-W-1	WEST ROOF	LEVEL 1 WEST	REFER TO PIPING DIAGRAMS	216	95	75	460 - 3 - 60	19	30	12.2	98-15/16 x 29-3/16 x 71-5/8	1306	PURY-P216YSNU-A	mitsubishi	SEE NOTES BELOW	
VRF-W-2	WEST ROOF	LEVEL 1 WEST	REFER TO PIPING DIAGRAMS	216	95	75	460 - 3 - 60	19	30	12.2	98-15/16 x 29-3/16 x 71-5/8	1306	PURY-P216YSNU-A	mitsubishi		



FAN OPTIONS

FAN UNIT NO	TAG	QTY	DESCRIPTION	FAN UNIT NO	TAG	QTY	DESCRIPTION
1	KX-1 (K114)	1	GREASE BOX.			1	HEATED DRAIN KIT FOR RTU. REQUIRED FOR WINTER DESIGN TEMP OF 0 DEGREES F AND LOWER.
		1	FAN BASE CERAMIC SEAL - INSTALLED AT PLANT - FOR GREASE DUCTS.			1	COMMERCIAL SMOKE DETECTOR/ALARM INTERLOCK (SUPPLIED BY OTHERS).
		1	LOAD REACTOR MOUNTED IN FAN.			1	OCCUPIED SCHEDULING.
		1	2 YEAR PARTS WARRANTY.			1	RTU SIZE 2 SIDE DISCHARGE.
2	KX-2A (K141)	1	GREASE BOX.			1	SIZE 2 RTU CURB DUCT HANGER.
		1	FAN BASE CERAMIC SEAL - INSTALLED AT PLANT - FOR GREASE DUCTS.			1	10 TON MODULATING COOLING OPTION WITH HEAT PUMP, 460/480V. R410A REFRIGERANT, VARIABLE SPEED COMPRESSOR, ECM CONDENSING FAN(S).
		1	LOAD REACTOR MOUNTED IN FAN.			1	10 TON MODULATING REHEAT OPTION WITH HEAT PUMP. DISCHARGE DEWPOINT CONTROL.
		1	2 YEAR PARTS WARRANTY.			1	CASLINK BUILDING MONITORING SYSTEM - INTERNET OR CELLULAR CONNECTION REQUIRED.
3	KX-2B (K157.1)	1	1 19-BDD DAMPER.			1	VFD FACTORY MOUNTED AND WIRED IN COMMERCIAL CONTROL VESTIBULE FOR RTU.
		1	ECM WIRING PACKAGE - PWM SIGNAL FROM ECPM03 PREWIRE (TELCO MOTOR), CCW ROTATION.			1	VAV PACKAGE W/ 0-10VDC INPUT CONTROL (571 VFD INCLUDED).
		1	2 YEAR PARTS WARRANTY.			1	LOAD REACTOR MOUNTED IN FAN.
4	KX-3 (K191)	1	GREASE BOX.			1	5 YEAR ENTIRE UNIT PARTS WARRANTY, 10 YEAR ENTIRE UNIT PARTS WARRANTY WITH REMOTE MONITORING AND CAPTIVEAIRE SERVICE CONTRACT, 25 YEAR STAINLESS STEEL FURNACE PARTS WARRANTY (SEE ADDITIONAL DETAILS).
		1	FAN BASE CERAMIC SEAL - INSTALLED AT PLANT - FOR GREASE DUCTS.			1	INLET PRESSURE GAUGE, 0-35".
		1	LOAD REACTOR MOUNTED IN FAN.			1	MANIFOLD PRESSURE GAUGE, -5 TO 15" WC.
		1	2 YEAR PARTS WARRANTY.			1	LOW FIRE START.
5	KX-4 (P134)	1	GREASE BOX.	9	KMUA-4 (P134)	1	MOTORIZED BACKDRAFT DAMPER FOR A1-D HOUSING. MEETS AMCA CLASS 1A RATING.
		1	FAN BASE CERAMIC SEAL - INSTALLED AT PLANT - FOR GREASE DUCTS.			1	CASLINK BUILDING MONITORING SYSTEM - INTERNET OR CELLULAR CONNECTION REQUIRED.
		1	LOAD REACTOR MOUNTED IN FAN.			1	3 TON SINGLE CIRCUIT MODULAR PACKAGED COOLING OPTION FOR SIZE 1 DF/EH MUA (1,100 TO 1,800 CFM), 460V, 3 PHASE. COOLING THERMOSTAT OR PROGRAMMABLE STAT REQUIRED FOR PROPER OPERATION.
		1	2 YEAR PARTS WARRANTY.			1	DOWNTURN PLENUM FOR SIZE 1 DX COIL MODULE.
6	KMUA-1 (K114)	1	SIZE 2 DIRECT FIRED HEATER LOW CFM PROFILE PACKAGE. USED ON HEATERS UNDER 2500 CFM.			1	SEPARATE 120V WIRING PACKAGE (REQUIRED AND USED ONLY FOR DCV OR PREWIRE WITH VFD) - THREE PHASE ONLY.
		1	INLET PRESSURE GAUGE, 0-35".			1	LOAD REACTOR MOUNTED IN FAN.
		1	MANIFOLD PRESSURE GAUGE, -5 TO 15" WC.			1	2 YEAR PARTS WARRANTY.
		1	CASLINK BUILDING MONITORING SYSTEM - INTERNET OR CELLULAR CONNECTION REQUIRED.			1	MANIFOLD PRESSURE GAUGE, 0 TO 10" WC, 1 FURNACE.
		1	MOTORIZED BACKDRAFT DAMPER FOR A2-D HOUSING. MEETS AMCA CLASS 1A RATING.			1	INLET PRESSURE GAUGE, 0-35".
		1	TOTAL CFM MONITORING FOR MUA UNITS.			1	TOTAL CFM MONITORING FOR DOAS.
		1	5 TON SINGLE CIRCUIT MODULAR PACKAGED COOLING OPTION FOR SIZE 2 DF/EH MUA (2,000 TO 3,000 CFM), 460V, 3 PHASE. COOLING THERMOSTAT OR PROGRAMMABLE STAT REQUIRED FOR PROPER OPERATION.			1	SINGLE POINT ELECTRICAL CONNECTION FOR RTU. QNTY 1 750VA TRANSFORMER USED. IF A NON-DCV PREWIRE CONTROLS THIS UNIT, THE #28, #47, "MA", OR "E2" OPTION PREWIRE MUST BE SELECTED. DO NOT PROVIDE SUPPLY STARTER IN PREWIRE.
		1	SEPARATE 120V WIRING PACKAGE (REQUIRED AND USED ONLY FOR DCV OR PREWIRE WITH VFD) - THREE PHASE ONLY.			1	CASLINK BUILDING MONITORING SYSTEM - INTERNET OR CELLULAR CONNECTION REQUIRED.
		1	LOAD REACTOR MOUNTED IN FAN.			1	OVERHEAT STAT.
		1	2 YEAR PARTS WARRANTY.			1	VFD FACTORY MOUNTED AND WIRED IN COMMERCIAL CONTROL VESTIBULE FOR RTU.
7	KMUA-2 (K141/157.1)	1	INLET PRESSURE GAUGE, 0-35".			1	30 TON MODULATING COOLING OPTION, 460/480V. R410A REFRIGERANT, VARIABLE SPEED COMPRESSOR, ECM CONDENSING FAN(S).
		1	MANIFOLD PRESSURE GAUGE, -5 TO 15" WC.			1	DDC IP BACNET REMOTE UNIT MONITORING. ALLOWS FOR REMOTE DDC OCCUPIED OVERRIDE AND SET POINT CHANGES.
		1	LOW FIRE START.			1	CONTROL PANEL ENCLOSURE HEATER. RECOMMENDED FOR WINTER DESIGN TEMPERATURE LESS THAN 0°F. PCB CONTROLS.
		1	MOTORIZED BACKDRAFT DAMPER FOR A4-D HOUSING. MEETS AMCA CLASS 1A RATING.			1	HEATED DRAIN KIT FOR RTU. REQUIRED FOR WINTER DESIGN TEMP OF 0 DEGREES F AND LOWER.
		1	10 TON 2 CIRCUIT (5/5) MODULAR PACKAGED COOLING OPTION FOR SIZE 4 DF/EH MUA (6,000 TO 9,000 CFM), 460V, 3 PHASE. COOLING THERMOSTAT OR PROGRAMMABLE STAT REQUIRED FOR PROPER OPERATION.			1	4" MERV 15 FILTERS FOR SIZE 4 RTU. QTY 12.
		1	CASLINK BUILDING MONITORING SYSTEM - INTERNET OR CELLULAR CONNECTION REQUIRED.			1	RTU ANALOG 0-10V BAS INTAKE/RETURN DAMPER CONTROL TO ACTUATOR.
		1	SEPARATE 120V WIRING PACKAGE (REQUIRED AND USED ONLY FOR DCV OR PREWIRE WITH VFD) - THREE PHASE ONLY.			1	CLOGGED FILTER SWITCH WITH NOTIFICATION ON HMI.
		1	LOAD REACTOR MOUNTED IN FAN.			1	SIZE 4 RTU CONVENIENCE OUTLET (GFCI), 15 AMP - REQUIRES SEPARATE 120V CONNECTION. INCLUDES RECEPTACLE, COVER AND J BOX.
		1	2 YEAR PARTS WARRANTY.			1	RTU SIZE 4 SIDE RETURN.
		1	INLET PRESSURE GAUGE, 0-35".			1	RTU SIZE 4 SIDE DISCHARGE.
8	KMUA-3 (K191)	1	MANIFOLD PRESSURE GAUGE, 0 TO 10" WC, 1 FURNACE.			1	SIZE 4 RTU CURB DUCT HANGER.
		1	TOTAL CFM MONITORING FOR DOAS.			1	COMMERCIAL SMOKE DETECTOR/ALARM INTERLOCK (SUPPLIED BY OTHERS).
		1	OVERHEAT STAT.			1	OCCUPIED SCHEDULING.
		1	RTU FIXED 100% OA INTAKE CONTROL.			1	30 TON MODULATING REHEAT OPTION. DISCHARGE DEWPOINT CONTROL.
		1	RTU SIZE 2 NO RETURN.			1	VAV PACKAGE W/ BUILDING STATIC PRESSURE CONTROL- MUA -0.25" TO +0.25" OF WC. (571 VFD INCLUDED).
		1	CLOGGED FILTER SWITCH WITH NOTIFICATION ON HMI.			1	LOAD REACTOR MOUNTED IN FAN.
		1	4" MERV 15 FILTERS SIZE 2 RTU. QTY 4.			1	5 YEAR ENTIRE UNIT PARTS WARRANTY, 10 YEAR ENTIRE UNIT PARTS WARRANTY WITH REMOTE MONITORING AND CAPTIVEAIRE SERVICE CONTRACT, 25 YEAR STAINLESS STEEL FURNACE PARTS WARRANTY (SEE ADDITIONAL DETAILS).
		1	CONTROL PANEL ENCLOSURE HEATER. RECOMMENDED FOR WINTER DESIGN TEMPERATURE LESS THAN 0°F. PCB CONTROLS.				

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**BROADVIEW - SENIOR LIVING AT PURCHASE COLLEGE - COMMONS BUILDING**

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ARCHITECTURE  
 LANDSCAPE ARCHITECTURE  
 PLANNING  
 INTERIOR DESIGN



LAN ASSOCIATES  
 Engineering, Planning, Architecture, Surveying, LLP  
 LAN 208 #130811  
 PROFESSIONAL CERTIFICATION I CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF NEW YORK.  
 LICENSE NUMBER: 090385  
 EXPIRATION DATE: 10/31/23

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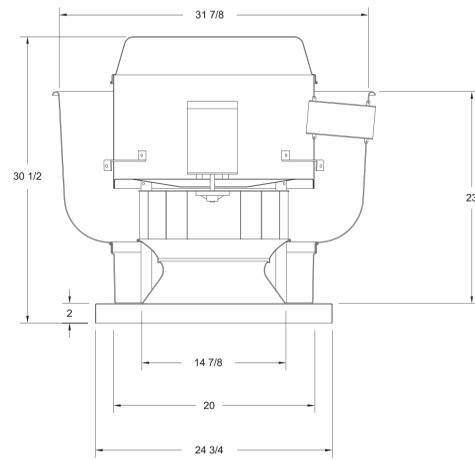
Project Name  
**BROADVIEW - SENIOR LIVING AT PURCHASE COLLEGE - COMMONS BUILDING**  
 Project Number  
**1308.01**  
 Date  
**4/30/2021**  
 Scale  
**1/8" = 1'-0"**  
 Drawing  
**MECHANICAL KITCHEN EQUIPMENT**

**M6.04**

PERMIT / GMP SET



FAN #3 DU88HFA - EXHAUST FAN (KX-2B (K157-1))

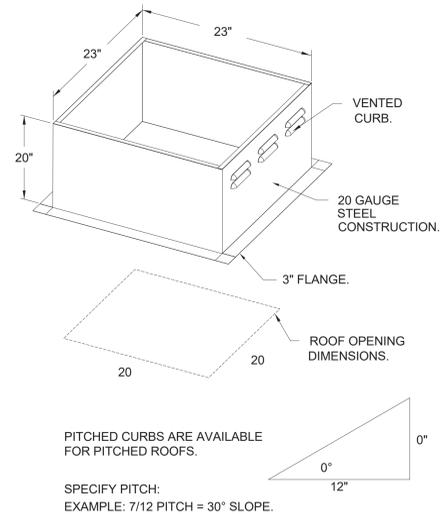


**FEATURES:**

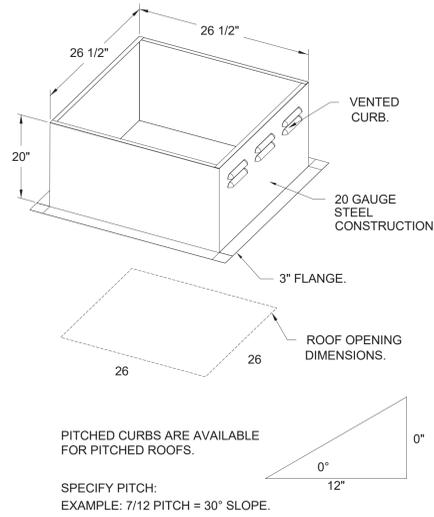
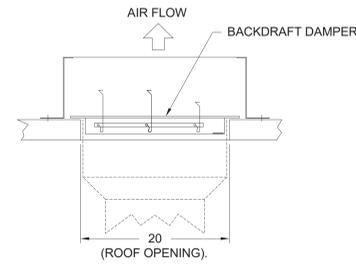
- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS).
- ROOF MOUNTED FANS.
- UL705.
- VARIABLE SPEED CONTROL.
- INTERNAL WIRING.
- THERMAL OVERLOAD PROTECTION (SINGLE PHASE).
- NEMA 3R SAFETY DISCONNECT SWITCH.

**OPTIONS**

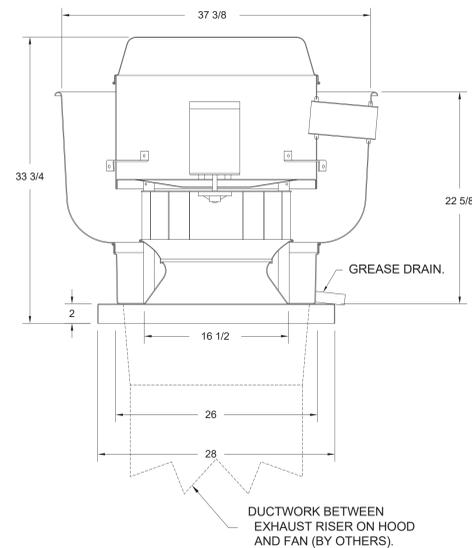
- 1 19-800 DAMPER.
- ECM WIRING PACKAGE - PWM SIGNAL FROM ECPM03 PREWIRE (TELCO MOTOR), CCW ROTATION.
- 2 YEAR PARTS WARRANTY.



**BACKDRAFT DAMPER INSTALLATION**



FAN #4 DU180HFA - EXHAUST FAN (KX-3 (K191))



**FEATURES:**

- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS).
- ROOF MOUNTED FANS.
- RESTAURANT MODEL.
- UL705 AND UL762 AND ULC-S645
- VARIABLE SPEED CONTROL.
- INTERNAL WIRING.
- THERMAL OVERLOAD PROTECTION (SINGLE PHASE).
- HIGH HEAT OPERATION 300°F (149°C).
- GREASE CLASSIFICATION TESTING.
- NEMA 3R SAFETY DISCONNECT SWITCH.

**NORMAL TEMPERATURE TEST**  
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING AIR AT 300°F (149°C) UNTIL ALL FAN PARTS HAVE REACHED THERMAL EQUILIBRIUM, AND WITHOUT ANY DETERIORATING EFFECTS TO THE FAN WHICH WOULD CAUSE UNSAFE OPERATION.

**ABNORMAL FLARE-UP TEST**  
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING BURNING GREASE VAPORS AT 600°F (316°C) FOR A PERIOD OF 15 MINUTES WITHOUT THE FAN BECOMING DAMAGED TO ANY EXTENT THAT COULD CAUSE AN UNSAFE CONDITION.

**OPTIONS**

- GREASE BOX.
- FAN BASE CERAMIC SEAL - INSTALLED AT PLANT - FOR GREASE DUCTS.
- LOAD REACTOR MOUNTED IN FAN.
- 2 YEAR PARTS WARRANTY.

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