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DUCT SOUND ATTENUATOR SCHEDULE																									
TAG	SERVING	SILENCER DIMENSIONS WxH (mm)	LENGTH (mm)	FACE VELOCITY (ms)	APD (Pa)	MAX AIRFLOW (L/s)	DYNAMIC INSERTION LOSS RATING (dB)								SELF NOISE POWER LEVELS, Db RE:10 ⁻¹² W								BASIS OF DESIGN		NOTES
							OCTAVE BAND								OCTAVE BAND								MANUF	MODEL	
							1 63 HZ	2 125 HZ	3 250 HZ	4 500 HZ	5 1K HZ	6 2K HZ	7 4K HZ	8 8K HZ	1 63 HZ	2 125 HZ	3 250 HZ	4 500 HZ	5 1K HZ	6 2K HZ	7 4K HZ	8 8K HZ			
CT-1	AHU-1 SUPPLY		915			—																			
CT-2	AHU-1 RETURN		915																						
CT-3	AHU-1 RETURN		915																						

AIR HANDLING UNIT SCHEDULE																												
TAG	LOCATION	FILTERS (NOTE 2)	SUPPLY FAN CHARACTERISTICS								COOLING DATA								HEATING DATA							REMARKS		
			(L/s)	MIN./MAX. OA (L/s)	NEG. ETP	ESP (kPa)	MOTOR DATA (NOTE 1)				ROWS	LAT (°C)				MAX. FACE VEL (m/s)	MAX. AIR PD (Pa)	TOTAL CAP (kW)	SENSIBLE (kW)	EAT DB (°C)		LAT DB (°C)		TOTAL CAP (kW)	ELECTRIC HEATING COIL			
							HP	VOLT	PH	HZ		DB	WB	DB	WB					EAT DB (°C)	LAT DB (°C)	KW	VOLT		PH		HZ	
AHU-1	LEVEL ONE	F1 F2 F3 F4	—	—	—	—	—	—	50	—	24.8	17.1	9.4	8.9	2.54	—	—	—	—	24.8	35	—	—	—	—	50		

NOTES:

1. ELECTRICAL CHARACTERISTICS SHALL BE MODIFIED, AS NEEDED TO ENSURE FULLY AND PROPERLY FUNCTIONING SYSTEMS AND COMPONENTS, TO MATCH HOST COUNTRY'S STANDARD ELECTRICAL CURRENT TYPE, FREQUENCY, NUMBER OF PHASES, AND NOMINAL VOLTAGE.
2. F-4 FILTERS ARE REQUIRED TO MEET USEPA NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQS).
3. COIL ENTERING AND LEAVING AIR TEMPERATURES ARE SITE SPECIFIC AND ARE PROVIDED FOR GUIDANCE PURPOSES ONLY. THE DATA SHOULD NOT BE USED FOR DETERMINING EQUIPMENT CAPACITY.

FILTER SCHEDULE								
TAG	TYPE	SIZE LxWxD(mm)	MAX. AIR FLOW (L/s)	CLEAN MAX. STATIC PRESSURE DROP (Pa)	DIRTY MAX. STATIC PRESSURE DROP (Pa)	EFFICIENCY (%) OR MERV RATING	RESIDENCE TIME (sec)	REMARKS
F-1	EXTENDED SURFACE, DISPOSABLE PANEL FILTER	609x609x300	806	54	311	MERV 13	—	
F-2	HEPA FILTER	609x609x292	806	180	360	99.97	—	
F-3	AS2M—TEDA CARBON ADSORBER HEGA	609x609x483	806	489	489	99.9	0.1	
F-4	EXTENDED SURFACE, DISPOSABLE PANEL FILTER	609x609x100	806	55	0	MERV 8	—	
F-5	ACTIVATED CARBON ADSORBER HEGA	610x610x305	944	94	94	99.9	.033	WHERE REQUIRED BY LOCAL ENVIRON.

NOTES FOR DESIGNER:

1. THE NUMBER OF FILTERS SHALL BE SELECTED BASED UPON A LIFE CYCLE COST ANALYSIS ASSUMING 5YR HEPA AND 10YR ADSORPTION FILTER REPLACEMENT INTERVALS AND THE FAN ENERGY COSTS ASSOCIATED WITH ADDITIONAL PRESSURE DROP OF A LOWER NUMBER OF FILTERS (WITH A HIGHER FACE VELOCITY). THE BASIS OF THE LIFE CYCLE COST SHALL BE AS SHOWN: 12 ADSORPTION FILTERS PER 10,000 L/S OF AHU CAPACITY. PRESSURE DROPS TO REFLECT ACTUAL AIRFLOW PER FILTER.
2. ADDITIONAL PROPERTIES OF FILTERS DEFINED IN 080 FILTER SPECIFICATION.

AIR COOLED CONDENSING UNIT SCHEDULE									
TAG	LOCATION	SERVICE	OUTDOOR DESIGN TEMPERATURE DB (°C)	SENSIBLE CAP (kW)	MOTOR DATA (NOTE 1)				REMARKS
					KW	VOLT	PH	HZ	
ACC-1	SITE	AHU-1	-	-	-	-	3	50	(SEE NOTE 2)

NOTES:

1. ELECTRICAL CHARACTERISTICS SHALL BE MODIFIED, AS NEEDED TO ENSURE FULLY AND PROPERLY FUNCTIONING SYSTEMS AND COMPONENTS, TO MATCH HOST COUNTRY'S STANDARD ELECTRICAL CURRENT TYPE, FREQUENCY, NUMBER OF PHASES, AND NOMINAL VOLTAGE.
2. CONDENSING UNIT CAPACITY TO MATCH AIR HANDLING UNIT CAPACITY.

FAN SCHEDULE												
TAG	SERVICE	AREA SERVED	FAN TYPE	DRIVE TYPE	MAX AIRFLOW (L/s)	EXTERNAL STATIC PRESSURE (PA)	MOTOR DATA			BASIS OF DESIGN		NOTES
							W	RPM	VOLTS/ PHASE/ HERTZ	MANUF.	MODEL	
DF-1	EXHAUST	LEVEL 1/ RESTROOM	INLINE CEILING CABINET FAN	DIRECT	50	62	100	—	240/1/50	GREEHECK		2
DF-2	EXHAUST	LEVEL 1/ BREAKROOM	CEILING CABINET FAN	DIRECT	25	62	30	—	240/1/50	1.2	GREEHECK	2
DF-3	EXHAUST	LEVEL 2/ RESTROOM	CEILING CABINET FAN	DIRECT	25	62	30		240/1/50	1.2	GREEHECK	1
DF-4	EXHAUST	LEVEL 2/ BATHROOM	CEILING CABINET FAN	DIRECT	25	62	30		240/1/50	1.2	GREEHECK	1
DF-5	EXHAUST	LEVEL 2/ BATHROOM	CEILING CABINET FAN	DIRECT	25	62	30		240/1/50	1.2	GREEHECK	1
DF-6	EXHAUST	LEVEL 2/ BATHROOM	CEILING CABINET FAN	DIRECT	25	62	30		240/1/50	1.2	GREEHECK	1
DF-7	EXHAUST	LEVEL 2/ BATHROOM	CEILING CABINET FAN	DIRECT	25	62	30		240/1/50	1.2	GREEHECK	1
DF-8	EXHAUST	LEVEL 2/ BATHROOM	CEILING CABINET FAN	DIRECT	25	62	30		240/1/50	1.2	GREEHECK	1
DF-9	EXHAUST	LEVEL 2/ BATHROOM	CEILING CABINET FAN	DIRECT	25	62	30		240/1/50	1.2	GREEHECK	1
RF-2	EXHAUST	MQ112 KITCHEN	INLINE CENTRIFUGAL	DIRECT	236	75	660		240/1/50	VIKING	VINV600	4
SP-01	POST-FIRE SMOKE PURGE	FIRST & SECOND FLOORS	UPBLAST CENTRIFUGAL ROOF EXHAUSTER	DIRECT	3190	125	223		415/3/50	GREEHECK		3
RC-01	RELIEF	FIRST FLOORS	DOWNBLAST CENTRIFUGAL ROOF EXHAUSTER	DIRECT	472	62	186		240/1/50	GREEHECK		2

NOTES:

1. INTERLOCK FAN OPERATION WITH SPACE LIGHTING CONTROLS.
2. DDC SYSTEM SHALL OPERATE FAN CONTINUOUSLY; INTERLOCK WITH OPERATION OF AHU-1.
3. FAN TO OPERATE A PART OF THE POST FIRE SMOKE PURGE SYSTEM.
4. FANS ARE PART OF KITCHEN HOOD EQUIPMENT, OPERATED FROM HOOD PER MANUFACTURER ON-OFF, VARIABLE FLOW.

GRAVITY INTAKE HOOD SCHEDULE						
TAG	THROAT SIZE L x W (mm)	MAX. AIR FLOW (L/S)	DUCTED STATIC PRESSURE (Pa)	MFR	MODEL No.	REMARKS
OAI-1	450 x 450		25			

TAG	L/S MAXIMUM	SERVICE	TYPE	SIZE (mm)		MOUNT	MAX NC	BASIS OF DESIGN		NOTES
				FACE	NECK			MANUF	MODEL	
A	50	SUPPLY	DIFFUSER	610x610	155	LAY-IN				1
B	150	SUPPLY	DIFFUSER	610x610	205	SURFACE/LAY-IN	23			1
C	35	SUPPLY	GRILLE	205x205	155x155	SURFACE				1.3
D	70	SUPPLY	—	—	—	—	34			1.2
E	70	SUPPLY	—	—	—	—	23			1.2
F	65	RETURN	FLOOR GRILLE	380x170	350x150	FLOOR MTD				1
G	—	RETURN	GRILLE	610x610	560x560	SURFACE/LAY-IN				1.3
H		RETURN	SIDEWALL GRILLE							

NOTES:

1. REFER TO DRAWINGS FOR ACTUAL AIR BALANCE QUANTITIES IN SPECIFIC LOCATIONS.
2. PROVIDE LINEAR SLOT DIFFUSER WITH BORDER TYPE 4.
3. MOUNTING STYLE VARIES FOR THIS GRILLE TAG; PROVIDE SURFACE MOUNTING FRAME WHERE USED IN HARD CEILING AND WALL MOUNTING APPLICATIONS; WHERE MOUNTED ON A LAY-IN CEILING, PROVIDE THE APPROPRIATE MOUNTING FRAME.

VARIABLE AIR VOLUME BOX SCHEDULE												
TAG	SERVES ROOM	INLET SIZE (mm)	MAXIMUM AIR FLOW (L/s)	MINIMUM AIR FLOW (L/s)	MAXIMUM STATIC PRESSURE DROP (Pa)	MAXIMUM NC LEVEL FOR RATED L/s		ELECTRIC HEATING COIL				REMARKS
						DISCHARGE	RADIATED	KW	VOLT	PH	HZ	
VAV-1	200, 201	100	—	—	—	25	25	—	—	—	—	
VAV-2	202	100	—	—	—	—	—	—	—	—	—	
VAV-3	205	100	—	—	—	—	—	—	—	—	—	
VAV-4	208	100	—	—	—	—	—	—	—	—	—	
VAV-5	211	100	—	—	—	—	—	—	—	—	—	
VAV-6	214	100	—	—	—	—	—	—	—	—	—	
VAV-7	217	100	—	—	—	—	—	—	—	—	—	
VAV-8	220	100	—	—	—	—	—	—	—	—	—	
VAV-9	221	100	—	—	—	—	—	—	—	—	—	
VAV-10	101	200	—	—	—	—	—	—	—	—	—	
VAV-11	121, 123	150	—	—	—	—	—	—	—	—	—	
VAV-12	119, 118	300	—	—	—	—	—	—	—	—	—	
VAV-13	104, 110	200	—	—	—	—	—	—	—	—	—	
VAV-14	108	150	—	—	—	—	—	—	—	—	—	
VAV-15	112	200	—	—	—	—	—	—	—	—	—	
VAV-16	112	200	—	—	—	—	—	—	—	—	—	INTERLOCK W/KITCHEN HOOD
VAV-17	111, 114, 113	150	—	—	—	—	—	—	—	—	—	
VAV-18		100	—	—	—	—	—	—	—	—	—	

NOTES:

1. PROVIDE THERMOSTAT AND CONTROL WIRING FOR VAV BOX. EXACT THERMOSTAT LOCATION TO BE COORDINATED WITH WALL-MOUNTED EQUIPMENT.

National Institute of Building Sciences
building Smart Alliance
Washington, DC

Barracks 101

Building Information Model
Common File

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National Institute of Building Sciences
buildingSMARTalliance
Washington, DC 20005

GENERAL NOTES:

1. DESIGN MECHANICAL SYSTEMS PER THE LATEST VERSION OF THE INTERNATIONAL MECHANICAL CODE (IMC) AND OWNER'S DESIGN REQUIREMENTS AND SPECIFICATIONS.

2. EQUIPMENT, DUCTWORK, AND PIPING SIZES AND LOCATIONS ARE SCHEMATIC IN NATURE. ACTUAL SIZES AND LOCATIONS ARE TO BE BASED ON SITE-SPECIFIC CONDITIONS AND OWNER'S DESIGN STANDARDS AND SPECIFICATIONS.

Release For Construction:

NIBS/Asa

Revisions

Rev. Number

Description

Date

080 Project Number

Drawing Scale

Phase

AS NOTED

DDPP

CAO File Name

CAO Plot Scale

1:1

CBMM601.DWG

Date

NOV--2012

Drawn By

NIBS

Checked By

NIBS

Project Number

Classification

UNCLASSIFIED

Barracks

M601