AH Series Air Handling Units Model Drawings

UNITS AT A GLANCE

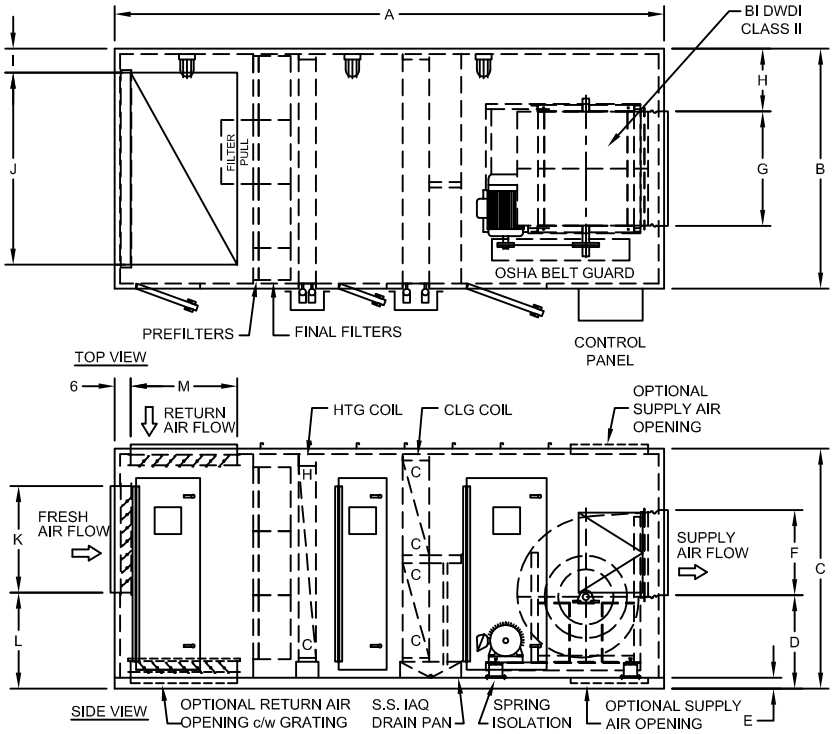
UNIT MODEL NO.	NOMINAL CFM	NOMINAL OV FPM	CFM RANGE	STANDARD SIZE FANS				HEATING/COOLING COILS	
				MAX. PRESSURE				LARGE FACE AREA COIL	
				NO.	LOW 2"	MED. 5"	8"	SQ. FT.	H" X W"
AH-20-BI	2000	1290	1550-4650	1	DIA. BI	DIA. BI	DIA. BI	5.6	25X32
							12		
AH-60-BI	6000	2575	4100-9780	1			15	13.3	40X48
AH-80-BI	8000	2319	5520-14490	1			18	20.0	48X60
AH-120-BI	12000	2899	7500-17300	1			20	24.0	48X72
AH-150-BI	15000	2930	9000-21500	1			22	30.0	60X72
AH-180-BI	18000	2387	13000-31500	1			27	36.0	72X72
AH-210-BI	21000	2256	16000-35000	1			30	42.0	72X84
AH-240-BI	24000	2130	18000-43000	1			33	48.0	72X96
AH-320-BI	32000	2321	20000-55000	1			36	72.0	96X108
AH-400-BI	40000	2385	30000-65000	1			40	88.0	96X132
AH-480-BI	48000	2343	36000-85000	1			44	104.0	96X156
AH-600-BI	60000	2414	45000-104000	1			49	130.0	120X156
AH-700-BI	70000	2298	55000-120000	1			54	138.3	120X166

UNIT MODEL NO.	NOMINAL CFM	NOMINAL OV FPM	CFM RANGE	STANDARD SIZE FANS				HEATING/COOLING COILS	
				MAX. PRESSURE				LARGE FACE AREA COIL	
				NO.	LOW 2"	MED. 5"	MED. 6"	SQ. FT.	H" X W"
AH-20-FC	2000	1429	1600-3400	1	DIA. FC	DIA. FC	DIA. FC	5.6	25X32
					12				
AH-60-FC	6000	2691	4000-10000	1		15		13.3	40X48
AH-80-FC	8000	2667	6000-13000	1			18	20.0	48X60
AH-120-FC	12000	2804	8000-20000	1			21	24.0	48X72
AH-150-FC	15000	2727	9000-25000	1			24	30.0	60X72
AH-180-FC	18000	2590	14000-30000	1			27	36.0	72X72
AH-210-FC	21000	2471	16000-34000	1			30	42.0	72X84
AH-240-FC	24000	2299	18000-40000	1			33	48.0	72X96
AH-320-FC	32000	2522	24000-52000	1			36	72.0	96X108
AH-400-FC	40000	2633	30000-60000	1			39	88.0	96X132
AH-480-FC	48000	2622	36000-72000	1			42	104.0	96X156
AH-600-FC	60000	2673	48000-104000	1			48	130.0	120X156
AH-700-FC	70000	Consult factory.							

UNITS AT A GLANCE

UNIT MODEL NO.	NOMINAL CFM	CFM RANGE	STANDARD SIZE FANS				HEATING/COOLING COILS	
			MAX. PRESSURE				LARGE FACE AREA COIL	
			NO.	LOW 2"	MED. 5"	8"-9"	SQ. FT.	H" X W"
AH-20-DD	2000	1600-4600	1	DIA. DD	DIA. DD	DIA. DD	5.6	25X32
						14		
AH-60-DD	6000	4000-8200	1			18	13.3	40X48
AH-80-DD	8000	5000-14600	1			24	20.0	48X60
AH-120-DD	12000	8000-25000	1			30	24.0	48X72
AH-150-DD	15000	9000-27000	1			33	30.0	60X72
AH-180-DD	18000	14000-33200	1			36	36.0	72X72
AH-210-DD	21000	16000-40000	1			40	42.0	72X84
AH-240-DD	24000	17400-49800	1			44	48.0	72X96
AH-320-DD	32000	20000-60000	1			49	72.0	96X108
AH-400-DD	40000	30000-65000	1			54	88.0	96X132
AH-480-DD	48000	37000-91000	1			60	104.0	96X156
AH-600-DD	60000	45000-109000	1			66	130.0	120X156
AH-700-DD	70000	55000-130000	1			73	138.3	120X166

UNIT MODEL NO.	NOMINAL CFM	CFM RANGE	STANDARD SIZE FANS				HEATING/COOLING COILS	
			MAX. PRESSURE				LARGE FACE AREA COIL	
			NO.	LOW 2"	MED. 5"	8"-9"	SQ. FT.	H" X W"
AH-20-PF	2000	1600-4600	1	DIA. PF	DIA. PF	DIA. PF	5.6	25X32
						14		
AH-60-PF	6000	4000-8200	1			18	13.3	40X48
AH-80-PF	8000	5000-14600	1			24	20.0	48X60
AH-120-PF	12000	8000-25000	1			30	24.0	48X72
AH-150-PF	15000	9000-27000	1			33	30.0	60X72
AH-180-PF	18000	14000-33200	1			36	36.0	72X72
AH-210-PF	21000	16000-40000	1			40	42.0	72X84
AH-240-PF	24000	17400-49800	1			44	48.0	72X96
AH-320-PF	32000	20000-60000	1			49	72.0	96X108
AH-400-PF	40000	30000-65000	1			54	88.0	96X132
AH-480-PF	48000	37000-91000	1			60	104.0	96X156
AH-600-PF	60000	45000-109000	1			66	130.0	120X156
AH-700-PF	70000	55000-130000	1			73	138.3	120X166



NOTES:

1. 1 1/2 INLET AND DISCHARGE DUCT FLANGES.
2. SERVICE ACCESS PANELS MUST NOT BE OBSTRUCTED RECOMMENDED CLEARANCE 24 INCHES.
3. DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES. FOR REFERENCE USE ONLY, SUBJECT TO CHANGE WITHOUT NOTICE.

MODEL	A	B	C	D	E	F	G	H	I	J	K	L	M	HTG COIL QTY/SIZE	CLG COIL QTY/SIZE	S/A MOTOR (HP)	S/A FAN (inch)	PREFILTER QTY/SIZEX2"	FINAL FILTER QTY/SIZEX12"	CONTROL PANEL SIZE
AH-20-BI	174	38	38	19.5	4	14	18	10	7	24	20	11	20	1-25x32	1-25x32	2	12	2-16x25	2-16x25	12x12
AH-60-BI	180	54	49	22	4	16	22	16	7	40	25	14	25	1-40x48	1-36x48	5	15	2-24x24,2-24x12	2-24x24,2-24x12	24x24
AH-80-BI	186	66	61	25	4	19	26	20	12	42	30	20	30	1-48x60	1-48x60	10	18	4-24x24	4-24x24	24x24
AH-120-BI	186	78	61	26	4	22	28.5	24.75	9	60	30	20	30	1-48x72	1-48x72	15	20	6-24x24	6-24x24	24x30
AH-150-BI	190	78	79	28	4	24	32	23	9	60	30	20	30	1-60x72	2-30x72	20	22	6-24x24,3-24x12	6-24x24,3-24x12	24x30
AH-180-BI	204	78	90	32	4	29	38.5	19.75	9	60	40	36	40	1-72x72	2-35.5x72	20	27	9-24x24	9-24x24	24x30
AH-210-BI	206	90	90	35	4	32	43	23.5	9	72	40	36	40	1-72x84	2-35.5x84	30	30	9-24x24,3-24x12	9-24x24,3-24x12	24x30
AH-240-BI	216	102	92	38	6	36	48	27	15	72	40	38	40	1-72x96	2-35.5x96	25	33	12-24x24	12-24x24	24x30
AH-320-BI	252	114	107	41	6	39	52	31	12	90	55	32	55	1-96x108	2-43x108	30	36	16-24x24	16-24x24	24x30
AH-400-BI	258	138	109	44.5	6	43	57	40.5	15	108	55	32	55	1-96x132	2-44x132	40	40	20-24x24	20-24x24	24x30
AH-480-BI	264	162	112	48.5	8	48	63	49.5	14	134	55	32	55	1-96x156	2-44.5x156	50	44	24-24x24	24-24x24	24x30
AH-600-BI	276	162	133	53	8	52	69	46.5	14	134	55	47.5	55	1-120x156	2-55x156	60	48	30-24x24	30-24x24	24x30
AH-700-BI	336	180	135	59	10	58	77	51.5	23	134	65	44	65	1-120x166	2-55x166	75	54	35-24x24	35-24x24	24x30

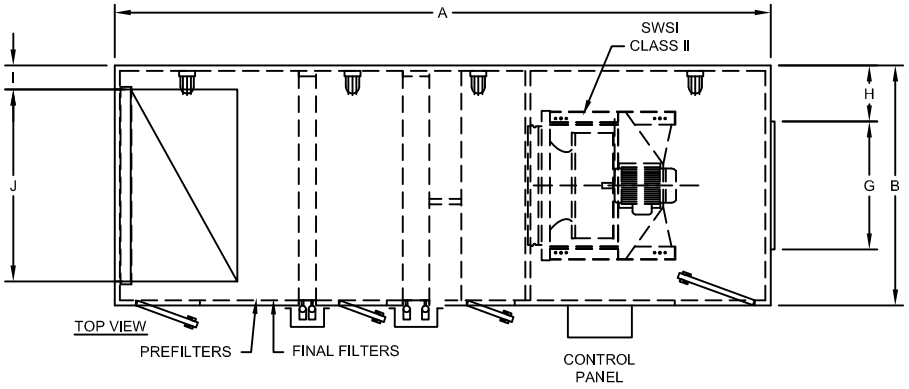
Rev	By	Revision Description	Date

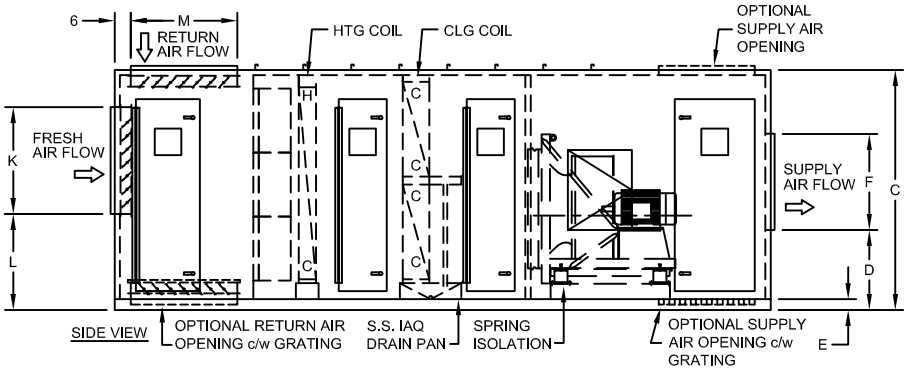
WESTERN SALES

TITLE
CONVERTIBLE WET AIR HANDLING UNIT

MIXING SECTION, HEATING/COOLING WATER COILS
SUPPLY AIR BLOWER/MOTOR

DRAWN BY	ISSUED BY	SCALE	DRW. NO.
		1/6"=1'	
CHK. BY	DATE	JOB NO.	PAGE
			C-3





NOTES:

1. 1 1/2 INLET AND DISCHARGE DUCT FLANGES.
2. SERVICE ACCESS PANELS MUST NOT BE OBSTRUCTED RECOMMENDED CLEARANCE 24 INCHES.
3. DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES. FOR REFERENCE USE ONLY, SUBJECT TO CHANGE WITHOUT NOTICE.

MODEL	A	B	C	D	E	F	G	H	I	J	K	L	M	HTG COIL QTY/SIZE	CLG COIL QTY/SIZE	S/A MOTOR (HP)	S/A FAN (inch)	PREFILTER QTY/SIZEX2"	FINAL FILTER QTY/SIZEX12"	CONTROL PANEL SIZE
AH-20-DD	207	38	38	14	4	16	30	4	7	24	20	11	20	1-25x32	1-25x32	2	14	2-16x25	2-16x25	24x24
AH-60-DD	204	54	49	24	4	20	36	9	7	40	25	14	25	1-40x48	1-36x48	5	18	2-24x24,2-24x12	2-24x24,2-24x12	24x24
AH-80-DD	216	66	61	24	4	24	42	12	12	42	30	20	30	1-48x60	1-48x60	10	24	4-24x24	4-24x24	24x24
AH-120-DD	228	78	61	26	4	24	54	12	9	60	30	20	30	1-48x72	1-48x72	15	30	6-24x24	6-24x24	24x30
AH-150-DD	228	78	79	26	4	24	54	12	9	60	30	20	30	1-60x72	2-30x72	20	33	6-24x24,3-24x12	6-24x24,3-24x12	24x30
AH-180-DD	246	78	90	30	4	36	48	15	9	60	40	36	40	1-72x72	2-35.5x72	20	36	9-24x24	9-24x24	24x30
AH-210-DD	246	90	90	30	4	36	48	21	9	72	40	36	40	1-72x84	2-35.5x84	30	40	9-24x24,3-24x12	9-24x24,3-24x12	24x30
AH-240-DD	264	102	92	32	6	36	60	21	15	72	40	38	40	1-72x96	2-35.5x96	25	44	12-24x24	12-24x24	24x30
AH-320-DD	300	114	107	44	6	40	72	21	12	90	55	32	55	1-96x108	2-43x108	30	49	16-24x24	16-24x24	24x30
AH-400-DD	300	138	109	44	6	40	84	27	15	108	55	32	55	1-96x132	2-44x132	40	54	20-24x24	20-24x24	24x30
AH-480-DD	318	162	112	42	8	44	96	33	14	134	55	32	55	1-96x156	2-44.5x156	50	60	24-24x24	24-24x24	24x30
AH-600-DD	300	162	133	50	8	60	72	45	14	134	55	47.5	55	1-120x156	2-55x156	60	66	30-24x24	30-24x24	24x30
AH-700-DD	336	180	135	44	10	60	84	48	23	134	65	44	65	1-120x166	2-55x166	75	73	35-24x24	35-24x24	24x30

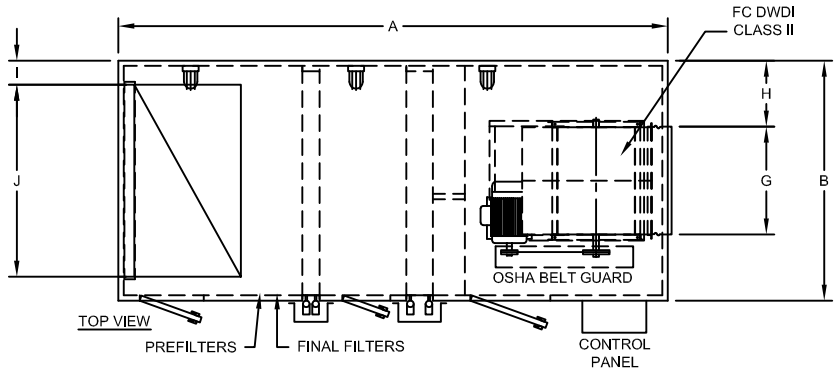
Rev	By	Revision Description	Date

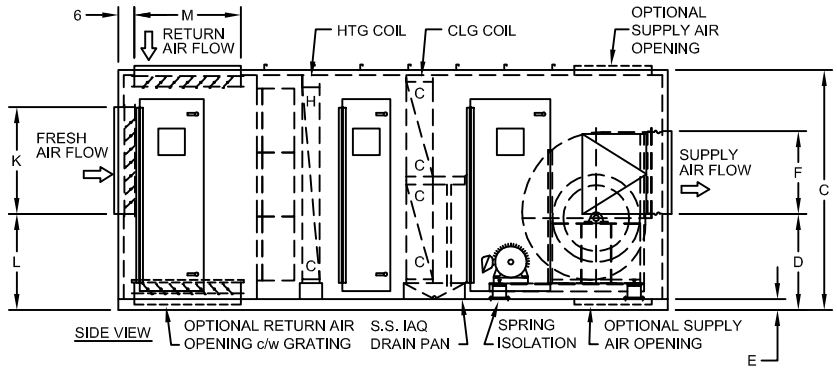
WESTERN SALES

TITLE
CONVERTIBLE WET AIR HANDLING UNIT

MIXING SECTION, HEATING/COOLING WATER COILS
SWSI DIRECT DRIVE PLENUM FAN (S/A) c/w MOTOR

DRAWN BY	ISSUED BY	SCALE	DRW. NO.
		1/6"=1'	
CHK. BY	DATE	JOB NO.	PAGE
			C-4





NOTES:

1. 1 1/2 INLET AND DISCHARGE DUCT FLANGES.
2. SERVICE ACCESS PANELS MUST NOT BE OBSTRUCTED RECOMMENDED CLEARANCE 24 INCHES.
3. DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES. FOR REFERENCE USE ONLY, SUBJECT TO CHANGE WITHOUT NOTICE.

MODEL	A	B	C	D	E	F	G	H	I	J	K	L	M	HTG COIL QTY/SIZE	CLG COIL QTY/SIZE	S/A MOTOR (HP)	S/A FAN (inch)	PREFILTER QTY/SIZEX2"	FINAL FILTER QTY/SIZEX12"	CONTROL PANEL SIZE
AH-20-FC	174	38	38	19.5	4	14	18	10	7	24	20	11	20	1-25x32	1-25x32	2	12	2-16x25	2-16x25	12x12
AH-60-FC	180	54	49	22.5	4	16	20	17	7	40	25	14	25	1-40x48	1-36x48	5	15	2-24x24,2-24x12	2-24x24,2-24x12	24x24
AH-80-FC	186	66	61	26	4	19	24	21	12	42	30	20	30	1-48x60	1-48x60	10	18	4-24x24	4-24x24	24x24
AH-120-FC	186	78	61	27.5	4	22	28.5	24.75	9	60	30	20	30	1-48x72	1-48x72	15	20	6-24x24	6-24x24	24x30
AH-150-FC	190	78	79	31	4	25	32	23	9	60	30	20	30	1-60x72	2-30x72	20	22	6-24x24,3-24x12	6-24x24,3-24x12	24x30
AH-180-FC	204	78	90	32.75	4	29	35	21.5	9	60	40	36	40	1-72x72	2-35.5x72	20	27	9-24x24	9-24x24	24x30
AH-210-FC	206	90	90	36	4	31	40.5	24.75	9	72	40	36	40	1-72x84	2-35.5x84	30	30	9-24x24,3-24x12	9-24x24,3-24x12	24x30
AH-240-FC	216	102	92	38	6	36	48	27	15	72	40	38	40	1-72x96	2-35.5x96	25	33	12-24x24	12-24x24	24x30
AH-320-FC	252	114	107	41	6	39	48	33	12	90	55	32	55	1-96x108	2-43x108	30	36	16-24x24	16-24x24	24x30
AH-400-FC	258	138	109	44	6	41	54	42	15	108	55	32	55	1-96x132	2-44x132	40	40	20-24x24	20-24x24	24x30
AH-480-FC	264	162	112	50	8	44	60	51	14	134	55	32	55	1-96x156	2-44.5x156	50	44	24-24x24	24-24x24	24x30
AH-600-FC	276	162	133	56	8	50	65	48.5	14	134	55	47.5	55	1-120x156	2-55x156	60	48	30-24x24	30-24x24	24x30
AH-700-FC	336	180	135	59	10	58	77	51.5	23	134	65	44	65	1-120x166	2-55x166	75	54	35-24x24	35-24x24	24x30

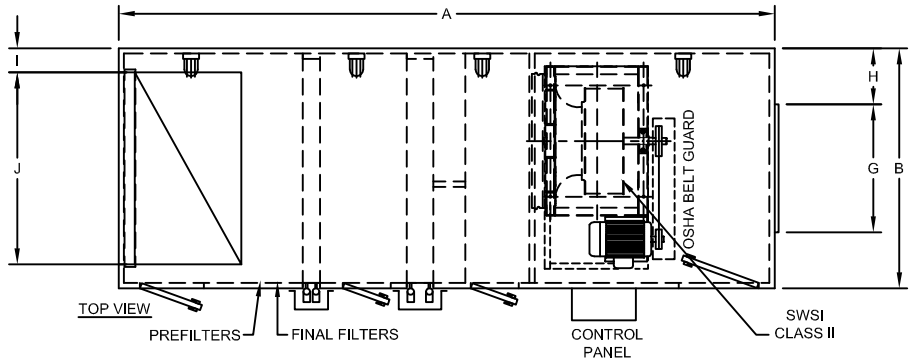
Rev	By	Revision Description	Date

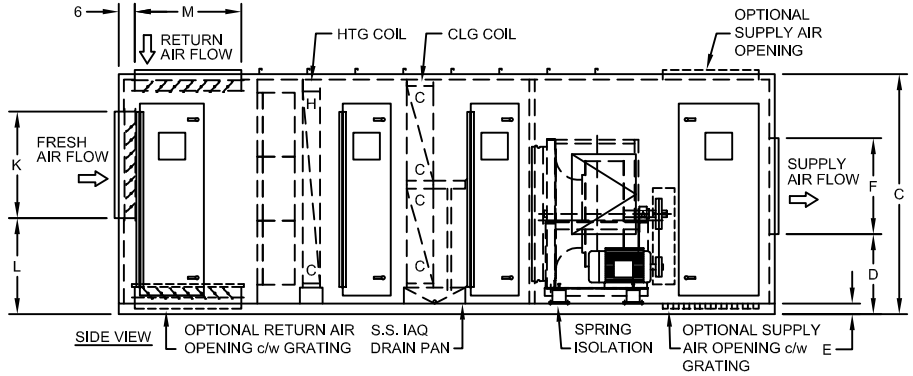
WESTERN SALES

TITLE
CONVERTIBLE WET AIR HANDLING UNIT

MIXING SECTION, HEATING/COOLING WATER COILS
SUPPLY AIR BLOWER / MOTOR

DRAWN BY	ISSUED BY	SCALE	DRW. NO.
		1/6"=1'	
CHK. BY	DATE	JOB NO.	PAGE
			C-5





NOTES:

1. 1 1/2 INLET AND DISCHARGE DUCT FLANGES.
2. SERVICE ACCESS PANELS MUST NOT BE OBSTRUCTED RECOMMENDED CLEARANCE 24 INCHES.
3. DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES. FOR REFERENCE USE ONLY, SUBJECT TO CHANGE WITHOUT NOTICE.

MODEL	A	B	C	D	E	F	G	H	I	J	K	L	M	HTG COIL QTY/SIZE	CLG COIL QTY/SIZE	S/A MOTOR (HP)	S/A FAN (inch)	PREFILTER QTY/SIZEX2"	FINAL FILTER QTY/SIZEX12"	CONTROL PANEL SIZE
AH-20-PF	204	38	38	14	4	16	30	4	7	24	20	11	20	1-25x32	1-25x32	2	14	2-16x25	2-16x25	24x24
AH-60-PF	204	54	49	24	4	20	36	9	7	40	25	14	25	1-40x48	1-36x48	5	18	2-24x24,2-24x12	2-24x24,2-24x12	24x24
AH-80-PF	216	66	61	24	4	24	42	12	12	42	30	20	30	1-48x60	1-48x60	10	24	4-24x24	4-24x24	24x24
AH-120-PF	228	78	61	26	4	24	54	12	9	60	30	20	30	1-48x72	1-48x72	15	30	6-24x24	6-24x24	24x30
AH-150-PF	228	78	79	26	4	24	54	12	9	60	30	20	30	1-60x72	2-30x72	20	33	6-24x24,3-24x12	6-24x24,3-24x12	24x30
AH-180-PF	246	78	90	30	4	36	48	15	9	60	40	36	40	1-72x72	2-35.5x72	20	36	9-24x24	9-24x24	24x30
AH-210-PF	246	90	90	30	4	36	48	21	9	72	40	36	40	1-72x84	2-35.5x84	30	40	9-24x24,3-24x12	9-24x24,3-24x12	24x30
AH-240-PF	264	102	92	32	6	36	60	21	15	72	40	38	40	1-72x96	2-35.5x96	25	44	12-24x24	12-24x24	24x30
AH-320-PF	300	114	107	44	6	40	72	21	12	90	55	32	55	1-96x108	2-43x108	30	49	16-24x24	16-24x24	24x30
AH-400-PF	300	138	109	44	6	40	84	27	15	108	55	32	55	1-96x132	2-44x132	40	54	20-24x24	20-24x24	24x30
AH-480-PF	312	162	112	42	8	44	96	33	14	134	55	32	55	1-96x156	2-44.5x156	50	60	24-24x24	24-24x24	24x30
AH-600-PF	300	162	133	50	8	60	72	45	14	134	55	47.5	55	1-120x156	2-55x156	60	66	30-24x24	30-24x24	24x30
AH-700-PF	336	180	135	44	10	60	84	48	23	134	65	44	65	1-120x166	2-55x166	75	73	35-24x24	35-24x24	24x30

Rev	By	Revision Description	Date

WESTERN SALES

TITLE
CONVERTIBLE WET AIR HANDLING UNIT

MIXING SECTION, HEATING/COOLING WATER COILS
SWSI BELT DRIVE PLENUM FAN (S/A) c/w MOTOR

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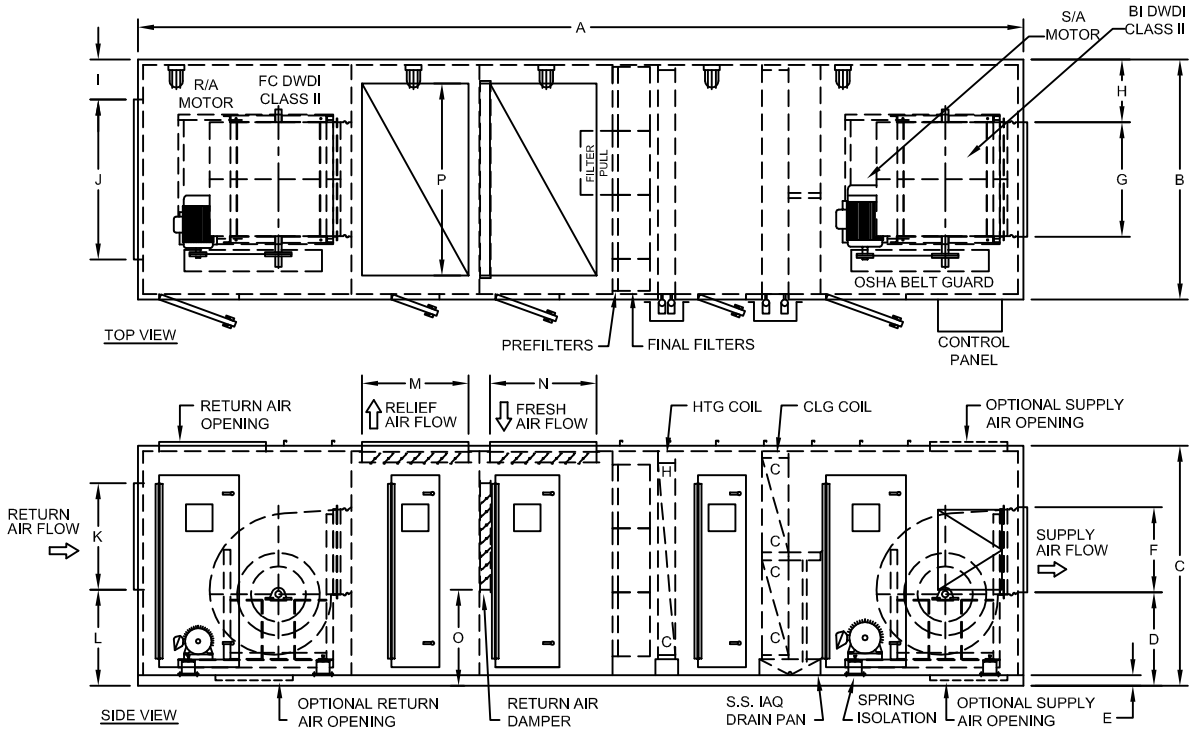
		1/6"=1'	
CHK. BY	DATE	JOB NO.	PAGE
			C-6



NOTES:

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2. SERVICE ACCESS PANELS MUST NOT BE OBSTRUCTED RECOMMENDED CLEARANCE 24 INCHES.
3. DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES. FOR REFERENCE USE ONLY, SUBJECT TO CHANGE WITHOUT NOTICE.

MODEL	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	HTG COIL QTY/SIZE	CLG COIL QTY/SIZE	S/A MOTOR (HP)	S/A FAN (inch)	R/A MOTOR (HP)	R/A FAN (inch)	R/A DAMPER HEIGHTx WIDTH	PREFILTER QTY/SIZEX2"	FINAL FILTER QTY/SIZEX12"	CONTROL PANEL SIZE
AH-20-BI-RA	244	38	38	19.5	4	14	18	10	9	20	14	17	20	20	11	24	1-25x32	1-25x32	2	12	1	12	20x24	2-16x25	2-16x25	12x12
AH-60-BI-RA	260	54	49	22	4	16	22	16	12	30	20	16	25	25	14	40	1-40x48	1-36x48	5	15	3	15	25x40	2-24x24,2-24x12	2-24x24,2-24x12	24x24
AH-80-BI-RA	280	66	61	25	4	19	26	20	15	36	25	20	30	30	20	42	1-48x60	1-48x60	10	18	5	18	30x42	4-24x24	4-24x24	24x24
AH-120-BI-RA	288	78	61	26	4	22	28.5	24.75	14	50	30	20	30	30	20	60	1-48x72	1-48x72	15	20	7.5	20	30x60	6-24x24	6-24x24	24x30
AH-150-BI-RA	296	78	79	28	4	24	32	23	14	50	30	20	30	30	20	60	1-60x72	2-30x72	20	22	10	22	30x60	6-24x24,3-24x12	6-24x24,3-24x12	24x30
AH-180-BI-RA	328	78	90	32	4	29	38.5	19.75	14	50	30	36	40	40	36	60	1-72x72	2-35.5x72	20	27	10	27	40x60	9-24x24	9-24x24	24x30
AH-210-BI-RA	332	90	90	35	4	32	43	23.5	15	60	40	36	40	40	36	72	1-72x84	2-35.5x84	30	30	15	30	40x72	9-24x24,3-24x12	9-24x24,3-24x12	24x30
AH-240-BI-RA	352	102	92	38	6	36	48	27	21	60	36	38	40	40	38	72	1-72x96	2-35.5x96	25	33	15	33	40x72	12-24x24	12-24x24	24x30
AH-320-BI-RA	411	114	107	41	6	39	52	31	20	74	40	37	55	55	32	90	1-96x108	2-43x108	30	36	15	36	55x90	16-24x24	16-24x24	24x30
AH-400-BI-RA	421	138	109	44.5	6	43	57	40.5	29	80	43	36	55	55	32	108	1-96x132	2-44x132	40	40	20	40	55x108	20-24x24	20-24x24	24x30
AH-480-BI-RA	438	162	112	48.5	8	48	63	49.5	31	100	48	32	55	55	32	134	1-96x156	2-44.5x156	50	44	25	44	55x134	24-24x24	24-24x24	24x30
AH-600-BI-RA	460	162	133	53	8	52	69	46.5	31	100	52	45	55	55	47.5	134	1-120x156	2-55x156	60	48	30	48	55x134	30-24x24	30-24x24	24x30
AH-700-BI-RA	540	180	135	59	10	58	77	51.5	35	110	58	50	65	65	44	134	1-120x166	2-55x166	75	54	40	54	65x134	35-24x24	35-24x24	24x30

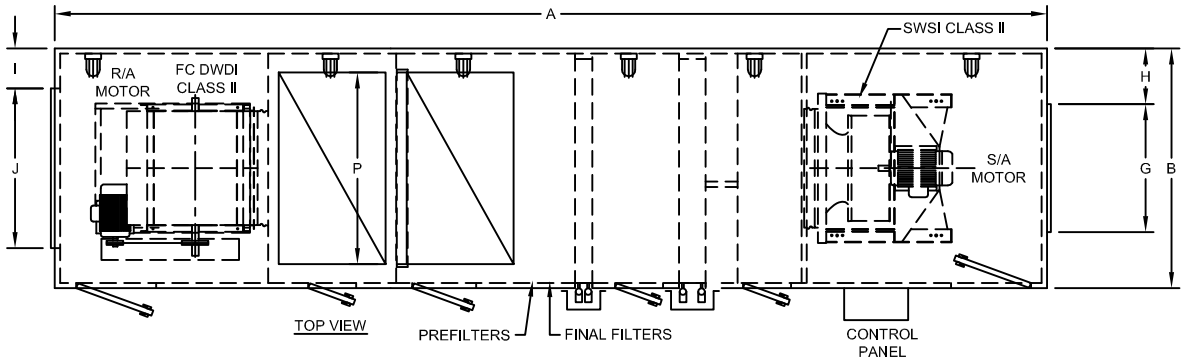
Rev	By	Revision Description	Date

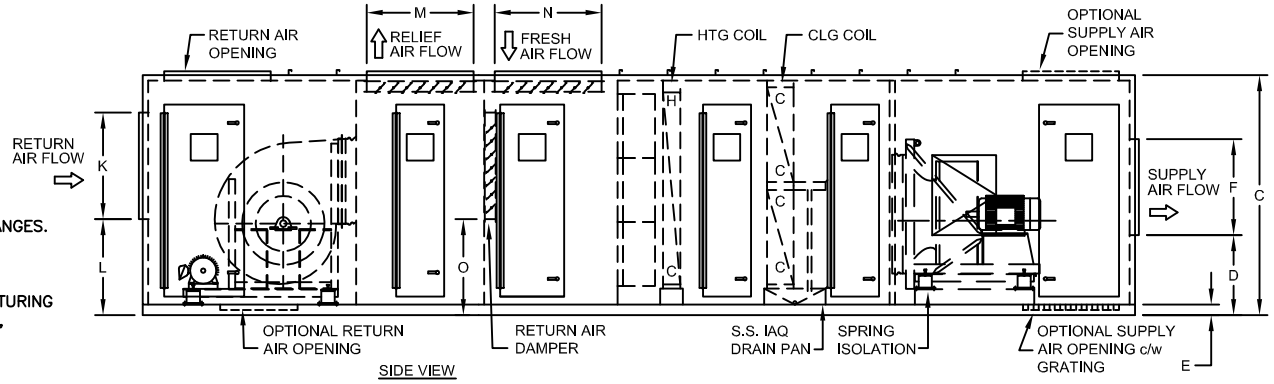
WESTERN SALES

TITLE
CONVERTIBLE WET AIR HANDLING UNIT

MIXING SECTION, HEATING/COOLING WATER COILS
SUPPLY AIR BLOWER/MOTOR, RETURN AIR BLOWER/MOTOR

DRAWN BY	ISSUED BY	SCALE	DRW. NO.
		1/6"=1'	
CHK. BY	DATE	JOB NO.	PAGE
			C-7





NOTES:

1. 1 1/2 INLET AND DISCHARGE DUCT FLANGES.
2. SERVICE ACCESS PANELS MUST NOT BE OBSTRUCTED RECOMMENDED CLEARANCE 24 INCHES.
3. DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES. FOR REFERENCE USE ONLY, SUBJECT TO CHANGE WITHOUT NOTICE.

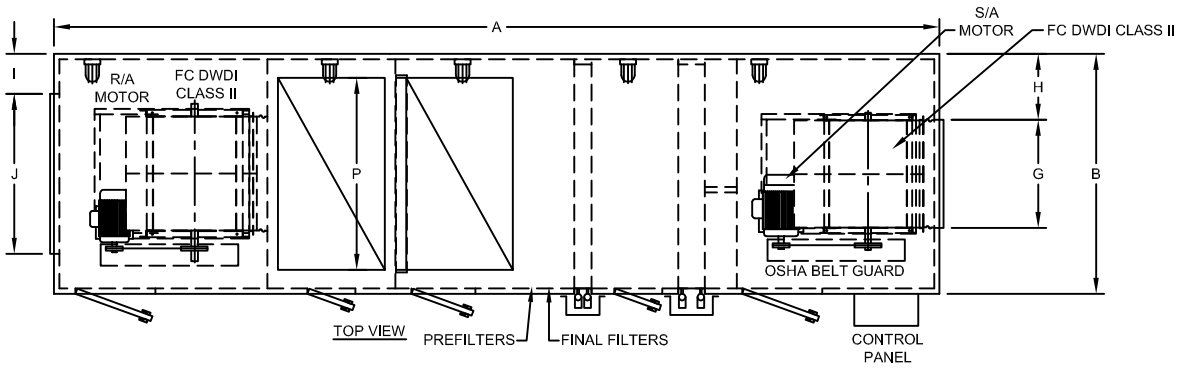
MODEL	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	HTG COIL QTY/SIZE	CLG COIL QTY/SIZE	S/A MOTOR (HP)	S/A FAN (inch)	R/A MOTOR (HP)	R/A FAN (inch)	R/A DAMPER HEIGHTx WIDTH	PREFILTER QTY/SIZEX2"	FINAL FILTER QTY/SIZEX12"	CONTROL PANEL SIZE
AH-20-DD-RA	277	38	38	14	4	16	30	4	9	20	14	17	20	20	11	24	1-25x32	1-25x32	2	14	1	12	20x24	2-16x25	2-16x25	24x24
AH-60-DD-RA	284	54	49	24	4	20	36	9	12	30	20	16	25	25	14	40	1-40x48	1-36x48	5	18	3	15	25x40	2-24x24,2-24x12	2-24x24,2-24x12	24x24
AH-80-DD-RA	310	66	61	24	4	24	42	12	15	36	25	20	30	30	20	42	1-48x60	1-48x60	10	24	5	18	30x42	4-24x24	4-24x24	24x24
AH-120-DD-RA	330	78	61	26	4	24	54	12	14	50	30	20	30	30	20	60	1-48x72	1-48x72	15	30	7.5	20	30x60	6-24x24	6-24x24	24x30
AH-150-DD-RA	334	78	79	26	4	24	54	12	14	50	30	20	30	30	20	60	1-60x72	2-30x72	20	33	10	22	30x60	6-24x24,3-24x12	6-24x24,3-24x12	24x30
AH-180-DD-RA	370	78	90	30	4	36	48	15	14	50	30	36	40	40	36	60	1-72x72	2-35.5x72	20	36	10	27	40x60	9-24x24	9-24x24	24x30
AH-210-DD-RA	372	90	90	30	4	36	48	21	15	60	40	36	40	40	36	72	1-72x84	2-35.5x84	30	40	15	30	40x72	9-24x24,3-24x12	9-24x24,3-24x12	24x30
AH-240-DD-RA	400	102	92	32	6	36	60	21	21	60	36	38	40	40	38	72	1-72x96	2-35.5x96	25	44	15	33	40x72	12-24x24	12-24x24	24x30
AH-320-DD-RA	459	114	107	44	6	40	72	21	20	74	40	37	55	55	32	90	1-96x108	2-43x108	30	49	15	36	55x90	16-24x24	16-24x24	24x30
AH-400-DD-RA	463	138	109	44	6	40	84	27	29	80	43	36	55	55	32	108	1-96x132	2-44x132	40	54	20	40	55x108	20-24x24	20-24x24	24x30
AH-480-DD-RA	492	162	112	42	8	44	96	33	31	100	48	32	55	55	32	134	1-96x156	2-44.5x156	50	60	25	44	55x134	24-24x24	24-24x24	24x30
AH-600-DD-RA	484	162	133	50	8	60	72	45	31	100	52	45	55	55	47.5	134	1-120x156	2-55x156	60	66	30	48	55x134	30-24x24	30-24x24	24x30
AH-700-DD-RA	540	180	135	44	10	60	84	48	35	110	58	50	65	65	44	134	1-120x166	2-55x166	75	73	40	54	65x134	35-24x24	35-24x24	24x30

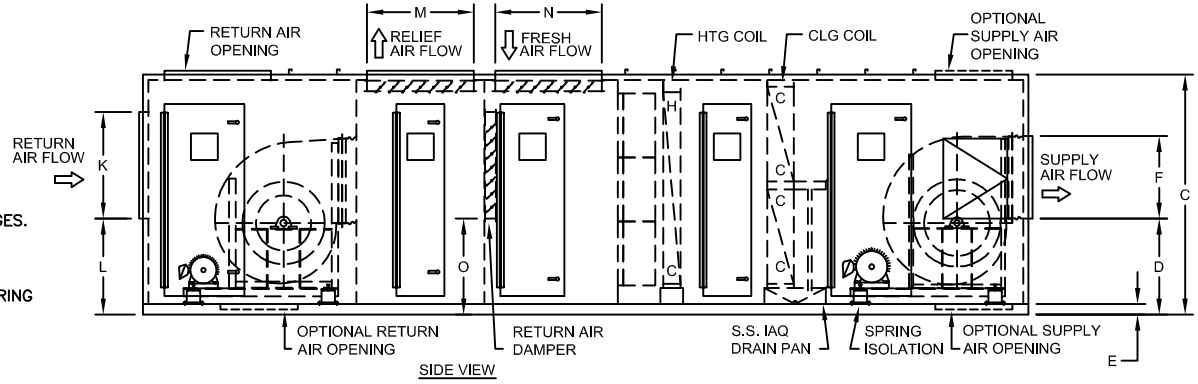
Rev	By	Revision Description	Date

WESTERN SALES

TITLE
CONVERTIBLE WET AIR HANDLING UNIT
MIXING SECTION, HEATING/COOLING WATER COILS
SUPPLY AIR BLOWER (DIRECT DRIVE PLENUM FAN) /MOTOR
RETURN AIR BLOWER/MOTOR

DRAWN BY	ISSUED BY	SCALE	DRW. NO.	
		1/6"=1'		
CHK. BY	DATE		JOB NO.	PAGE C-8





NOTES:

1. 1 1/2 INLET AND DISCHARGE DUCT FLANGES.
2. SERVICE ACCESS PANELS MUST NOT BE OBSTRUCTED RECOMMENDED CLEARANCE 24 INCHES.
3. DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES. FOR REFERENCE USE ONLY, SUBJECT TO CHANGE WITHOUT NOTICE.

MODEL	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	HTG COIL QTY/SIZE	CLG COIL QTY/SIZE	S/A MOTOR (HP)	S/A FAN (Inch)	R/A MOTOR (HP)	R/A FAN (Inch)	R/A DAMPER HEIGHTx WIDTH	PREFILTER QTY/SIZEX2"	FINAL FILTER QTY/SIZEX12"	CONTROL PANEL SIZE
AH-20-FC-RA	244	38	38	19.5	4	14	18	10	9	20	14	17	20	20	11	24	1-25x32	1-25x32	2	12	1	12	20x24	2-16x25	2-16x25	12x12
AH-60-FC-RA	260	54	49	22.5	4	16	20	17	12	30	20	16	25	25	14	40	1-40x48	1-36x48	5	15	3	15	25x40	2-24x24,2-24x12	2-24x24,2-24x12	24x24
AH-80-FC-RA	280	66	61	26	4	19	24	21	15	36	25	20	30	30	20	42	1-48x60	1-48x60	10	18	5	18	30x42	4-24x24	4-24x24	24x24
AH-120-FC-RA	288	78	61	27.5	4	22	28.5	24.75	14	50	30	20	30	30	20	60	1-48x72	1-48x72	15	20	7.5	20	30x60	6-24x24	6-24x24	24x30
AH-150-FC-RA	296	78	79	31	4	25	32	23	14	50	30	20	30	30	20	60	1-60x72	2-30x72	20	22	10	22	30x60	6-24x24,3-24x12	6-24x24,3-24x12	24x30
AH-180-FC-RA	328	78	90	32.75	4	29	35	21.5	14	50	30	36	40	40	36	60	1-72x72	2-35.5x72	20	27	10	27	40x60	9-24x24	9-24x24	24x30
AH-210-FC-RA	332	90	90	35	4	32	40.5	24.75	15	60	40	36	40	40	36	72	1-72x84	2-35.5x84	30	30	15	30	40x72	9-24x24,3-24x12	9-24x24,3-24x12	24x30
AH-240-FC-RA	352	102	92	38	6	36	48	27	21	60	36	38	40	40	38	72	1-72x96	2-35.5x96	25	33	15	33	40x72	12-24x24	12-24x24	24x30
AH-320-FC-RA	411	114	107	41	6	39	48	33	20	74	40	37	55	55	32	90	1-96x108	2-43x108	30	36	15	36	55x90	16-24x24	16-24x24	24x30
AH-400-FC-RA	421	138	109	44	6	41	54	42	29	80	43	36	55	55	32	108	1-96x132	2-44x132	40	40	20	40	55x108	20-24x24	20-24x24	24x30
AH-480-FC-RA	438	162	112	50	8	44	60	51	31	100	48	32	55	55	32	134	1-96x156	2-44.5x156	50	44	25	44	55x134	24-24x24	24-24x24	24x30
AH-600-FC-RA	460	162	133	56	8	50	65	48.5	31	100	52	45	55	55	47.5	134	1-120x156	2-55x156	60	48	30	48	55x134	30-24x24	30-24x24	24x30
AH-700-FC-RA	540	180	135	59	10	58	77	51.5	35	110	58	50	65	65	44	134	1-120x166	2-55x166	75	54	40	54	65x134	35-24x24	35-24x24	24x30

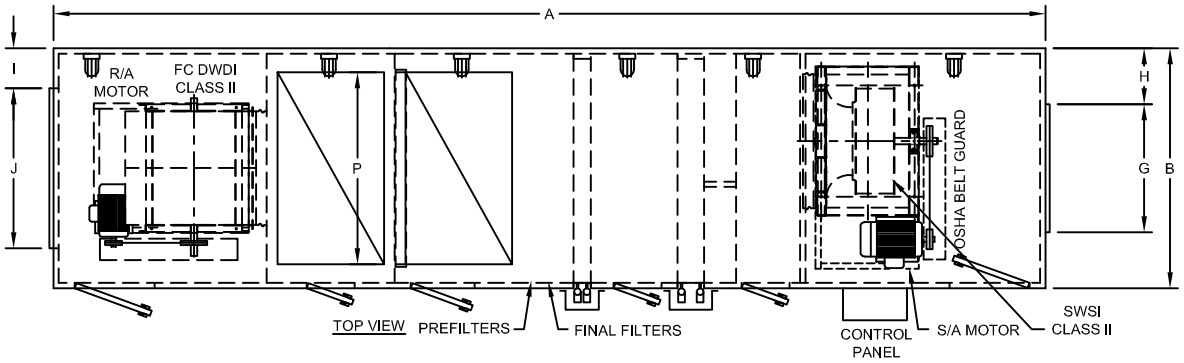
Rev	By	Revision Description	Date

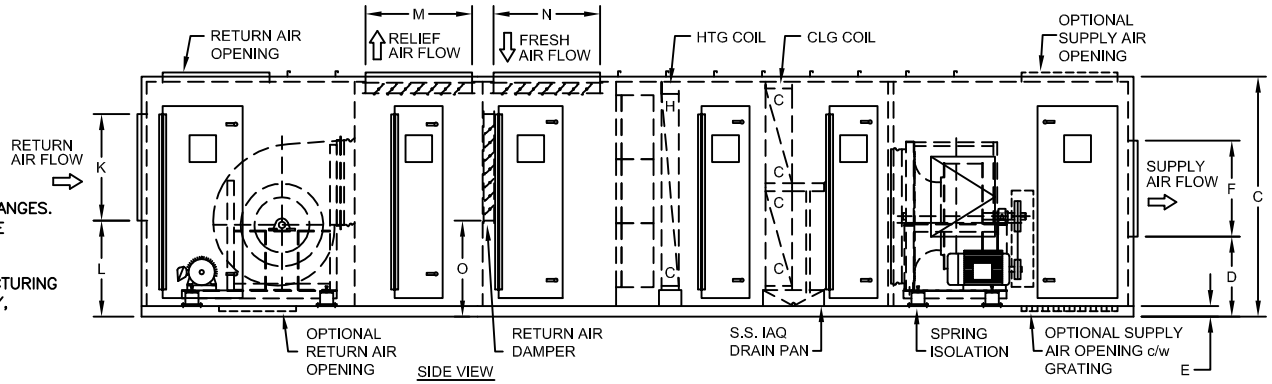
WESTERN SALES

TITLE
CONVERTIBLE WET AIR HANDLING UNIT

MIXING SECTION, HEATING/COOLING WATER COILS
SUPPLY AIR BLOWER/MOTOR, RETURN AIR BLOWER/MOTOR

DRAWN BY	ISSUED BY	SCALE	DRW. NO.
		1/6"=1'	
CHK. BY	DATE	JOB NO.	PAGE
			C-9





NOTES:

1. 1 1/2 INLET AND DISCHARGE DUCT FLANGES.
2. SERVICE ACCESS PANELS MUST NOT BE OBSTRUCTED RECOMMENDED CLEARANCE 24 INCHES.
3. DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES. FOR REFERENCE USE ONLY, SUBJECT TO CHANGE WITHOUT NOTICE.

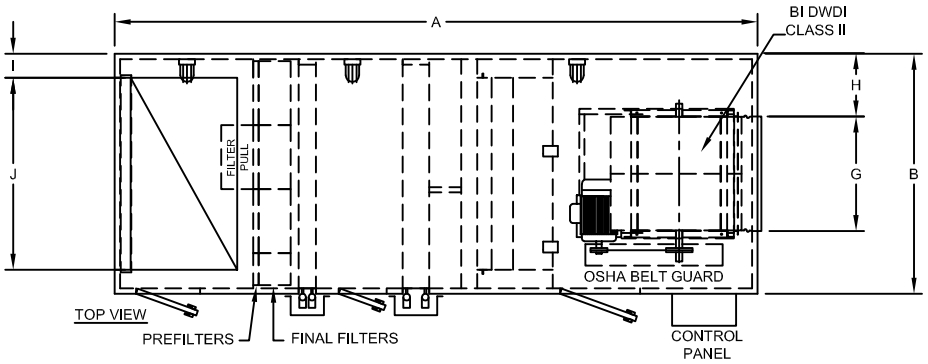
MODEL	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	HTG COIL QTY/SIZE	CLG COIL QTY/SIZE	S/A MOTOR (HP)	S/A FAN (inch)	R/A MOTOR (HP)	R/A FAN (inch)	R/A DAMPER HEIGHTx WIDTH	PREFILTER QTY/SIZEX2"	FINAL FILTER QTY/SIZEX12"	CONTROL PANEL SIZE
AH-20-PF-RA	274	38	38	14	4	16	30	4	9	20	14	17	20	20	11	24	1-25x32	1-25x32	2	14	1	12	20x24	2-16x25	2-16x25	24x24
AH-60-PF-RA	284	54	49	24	4	20	36	9	12	30	20	16	25	25	14	40	1-40x48	1-36x48	5	18	3	15	25x40	2-24x24,2-24x12	2-24x24,2-24x12	24x24
AH-80-PF-RA	310	66	61	24	4	24	42	12	15	36	25	20	30	30	20	42	1-48x60	1-48x60	10	24	5	18	30x42	4-24x24	4-24x24	24x24
AH-120-PF-RA	330	78	61	26	4	24	54	12	14	50	30	20	30	30	20	60	1-48x72	1-48x72	15	30	7.5	20	30x60	6-24x24	6-24x24	24x30
AH-150-PF-RA	334	78	79	26	4	24	54	12	14	50	30	20	30	30	20	60	1-60x72	2-30x72	20	33	10	22	30x60	6-24x24,3-24x12	6-24x24,3-24x12	24x30
AH-180-PF-RA	370	78	90	30	4	36	48	15	14	50	30	36	40	40	36	60	1-72x72	2-35.5x72	20	36	10	27	40x60	9-24x24	9-24x24	24x30
AH-210-PF-RA	372	90	90	30	4	36	48	21	15	60	40	36	40	40	36	72	1-72x84	2-35.5x84	30	40	15	30	40x72	9-24x24,3-24x12	9-24x24,3-24x12	24x30
AH-240-PF-RA	400	102	92	32	6	36	60	21	21	60	36	38	40	40	38	72	1-72x96	2-35.5x96	25	44	15	33	40x72	12-24x24	12-24x24	24x30
AH-320-PF-RA	459	114	107	44	6	40	72	21	20	74	40	37	55	55	32	90	1-96x108	2-43x108	30	49	15	36	55x90	16-24x24	16-24x24	24x30
AH-400-PF-RA	463	138	109	44	6	40	84	27	29	80	43	36	55	55	32	108	1-96x132	2-44x132	40	54	20	40	55x108	20-24x24	20-24x24	24x30
AH-480-PF-RA	486	162	112	42	8	44	96	33	31	100	48	32	55	55	32	134	1-96x156	2-44.5x156	50	60	25	44	55x134	24-24x24	24-24x24	24x30
AH-600-PF-RA	484	162	133	50	8	60	72	45	31	100	52	45	55	55	47.5	134	1-120x156	2-55x156	60	66	30	48	55x134	30-24x24	30-24x24	24x30
AH-700-PF-RA	540	180	135	44	10	60	84	48	35	110	58	50	65	65	44	134	1-120x166	2-55x166	75	73	40	54	65x134	35-24x24	35-24x24	24x30

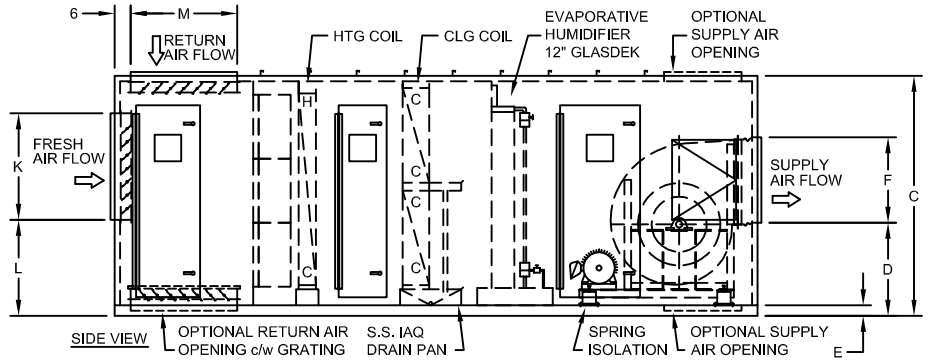
Rev	By	Revision Description	Date

WESTERN SALES

TITLE
CONVERTIBLE WET AIR HANDLING UNIT
MIXING SECTION, HEATING/COOLING WATER COILS
SUPPLY AIR BLOWER (BELT DRIVE PLENUM FAN) /MOTOR
RETURN AIR BLOWER / MOTOR

DRAWN BY	ISSUED BY	SCALE	DRW. NO.
		1/6"=1'	
CHK. BY	DATE	JOB NO.	PAGE
			C-10





NOTES:

1. 1 1/2 INLET AND DISCHARGE DUCT FLANGES.
2. SERVICE ACCESS PANELS MUST NOT BE OBSTRUCTED RECOMMENDED CLEARANCE 24 INCHES.
3. DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES. FOR REFERENCE USE ONLY, SUBJECT TO CHANGE WITHOUT NOTICE.

MODEL	A	B	C	D	E	F	G	H	I	J	K	L	M	HTG COIL QTY/SIZE	CLG COIL QTY/SIZE	S/A MOTOR (HP)	S/A FAN (inch)	PREFILTER QTY/SIZEX2"	FINAL FILTER QTY/SIZEX12"	CONTROL PANEL SIZE
AH-20-BI-EH	209	38	38	19.5	4	14	18	10	7	24	20	11	20	1-25x32	1-25x32	2	12	2-16x25	2-16x25	12x12
AH-60-BI-EH	215	54	49	22	4	16	22	16	7	40	25	14	25	1-40x48	1-36x48	5	15	2-24x24,2-24x12	2-24x24,2-24x12	24x24
AH-80-BI-EH	221	66	61	25	4	19	26	20	12	42	30	20	30	1-48x60	1-48x60	10	18	4-24x24	4-24x24	24x24
AH-120-BI-EH	221	78	61	26	4	22	28.5	24.75	9	60	30	20	30	1-48x72	1-48x72	15	20	6-24x24	6-24x24	24x30
AH-150-BI-EH	225	78	79	28	4	24	32	23	9	60	30	20	30	1-60x72	2-30x72	20	22	6-24x24,3-24x12	6-24x24,3-24x12	24x30
AH-180-BI-EH	239	78	90	32	4	29	38.5	19.75	9	60	40	36	40	1-72x72	2-35.5x72	20	27	9-24x24	9-24x24	24x30
AH-210-BI-EH	241	90	90	35	4	32	43	23.5	9	72	40	36	40	1-72x84	2-35.5x84	30	30	9-24x24,3-24x12	9-24x24,3-24x12	24x30
AH-240-BI-EH	251	102	92	38	6	36	48	27	15	72	40	38	40	1-72x96	2-35.5x96	25	33	12-24x24	12-24x24	24x30
AH-320-BI-EH	287	114	107	41	6	39	52	31	12	90	55	32	55	1-96x108	2-43x108	30	36	16-24x24	16-24x24	24x30
AH-400-BI-EH	293	138	109	44.5	6	43	57	40.5	15	108	55	32	55	1-96x132	2-44x132	40	40	20-24x24	20-24x24	24x30
AH-480-BI-EH	299	162	112	48.5	8	48	63	49.5	14	134	55	32	55	1-96x156	2-44.5x156	50	44	24-24x24	24-24x24	24x30
AH-600-BI-EH	311	162	133	53	8	52	69	46.5	14	134	55	47.5	55	1-120x156	2-55x156	60	48	30-24x24	30-24x24	24x30
AH-700-BI-EH	371	180	135	59	10	58	77	51.5	23	134	65	44	65	1-120x166	2-55x166	75	54	35-24x24	35-24x24	24x30

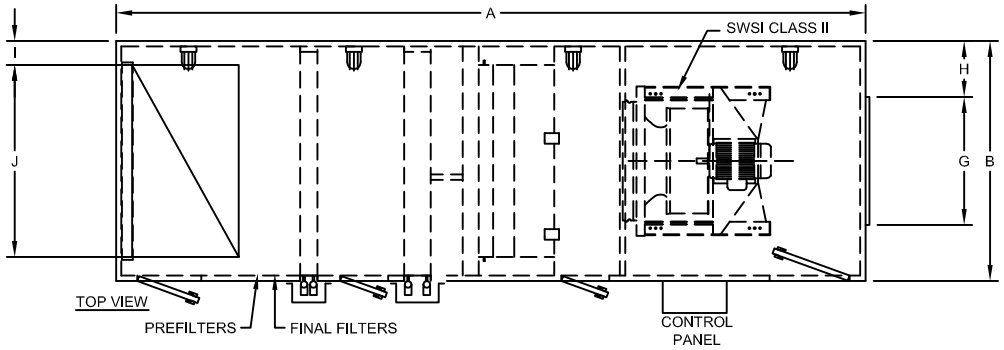
Rev	By	Revision Description	Date

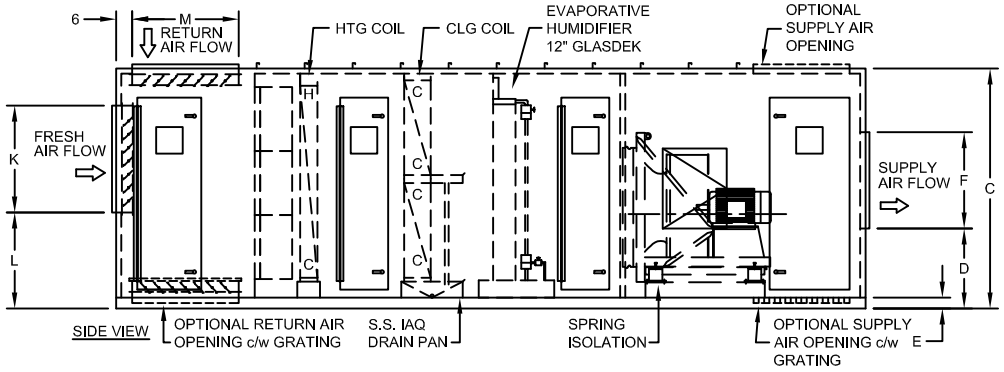
WESTERN SALES

TITLE
AIR HANDLING UNIT

MIXING SECTION, HEATING/COOLING WATER COILS
EVAPORATIVE HUMIDIFIER, SUPPLY BLOWER / MOTOR

DRAWN BY	ISSUED BY	SCALE	DRW. NO.	
		1/6"=1'		
CHK. BY	DATE		JOB NO.	PAGE
				C-11





NOTES:

1. 1 1/2 INLET AND DISCHARGE DUCT FLANGES.
2. SERVICE ACCESS PANELS MUST NOT BE OBSTRUCTED RECOMMENDED CLEARANCE 24 INCHES.
3. DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES. FOR REFERENCE USE ONLY, SUBJECT TO CHANGE WITHOUT NOTICE.

MODEL	A	B	C	D	E	F	G	H	I	J	K	L	M	HTG COIL QTY/SIZE	CLG COIL QTY/SIZE	S/A MOTOR (HP)	S/A FAN (inch)	PREFILTER QTY/SIZEX2"	FINAL FILTER QTY/SIZEX12"	CONTROL PANEL SIZE
AH-20-DD-EH	242	38	38	14	4	16	30	4	7	24	20	11	20	1-25x32	1-25x32	2	14	2-16x25	2-16x25	24x24
AH-60-DD-EH	239	54	49	24	4	20	36	9	7	40	25	14	25	1-40x48	1-36x48	5	18	2-24x24,2-24x12	2-24x24,2-24x12	24x24
AH-80-DD-EH	251	66	61	24	4	24	42	12	12	42	30	20	30	1-48x60	1-48x60	10	24	4-24x24	4-24x24	24x24
AH-120-DD-EH	263	78	61	26	4	24	54	12	9	60	30	20	30	1-48x72	1-48x72	15	30	6-24x24	6-24x24	24x30
AH-150-DD-EH	263	78	79	26	4	24	54	12	9	60	30	20	30	1-60x72	2-30x72	20	33	6-24x24,3-24x12	6-24x24,3-24x12	24x30
AH-180-DD-EH	281	78	90	30	4	36	48	15	9	60	40	36	40	1-72x72	2-35.5x72	20	36	9-24x24	9-24x24	24x30
AH-210-DD-EH	281	90	90	30	4	36	48	21	9	72	40	36	40	1-72x84	2-35.5x84	30	40	9-24x24,3-24x12	9-24x24,3-24x12	24x30
AH-240-DD-EH	299	102	92	32	6	36	60	21	15	72	40	38	40	1-72x96	2-35.5x96	25	44	12-24x24	12-24x24	24x30
AH-320-DD-EH	335	114	107	44	6	40	72	21	12	90	55	32	55	1-96x108	2-43x108	30	49	16-24x24	16-24x24	24x30
AH-400-DD-EH	335	138	109	44	6	40	84	27	15	108	55	32	55	1-96x132	2-44x132	40	54	20-24x24	20-24x24	24x30
AH-480-DD-EH	353	162	112	42	8	44	96	33	14	134	55	32	55	1-96x156	2-44.5x156	50	60	24-24x24	24-24x24	24x30
AH-600-DD-EH	335	162	133	50	8	60	72	45	14	134	55	47.5	55	1-120x156	2-55x156	60	66	30-24x24	30-24x24	24x30
AH-700-DD-EH	371	180	135	44	10	60	84	48	23	134	65	44	65	1-120x166	2-55x166	75	73	35-24x24	35-24x24	24x30

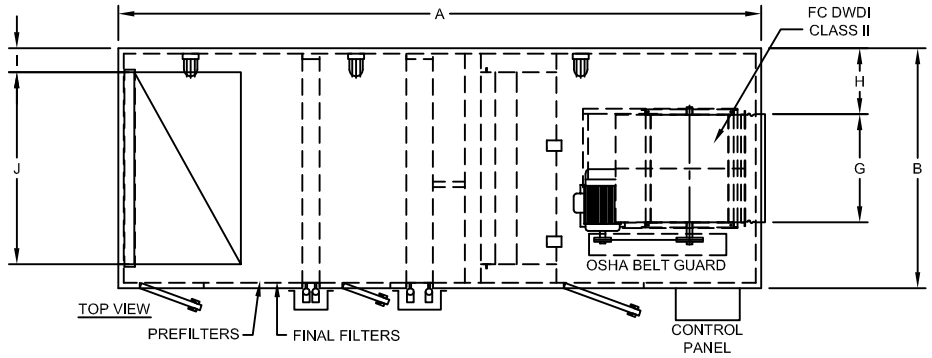
Rev	By	Revision Description	Date

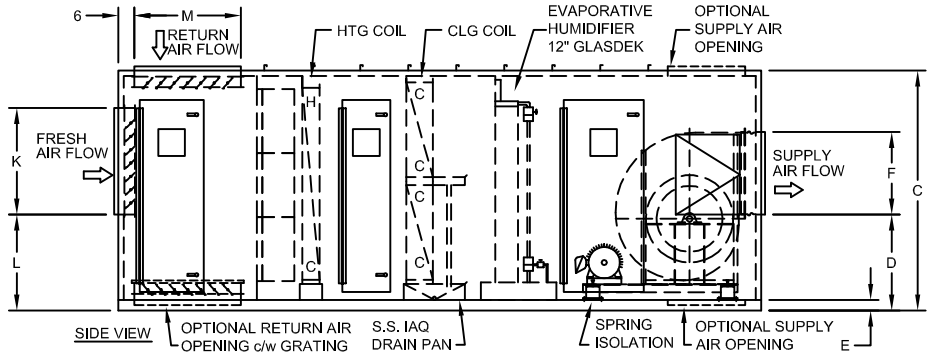
WESTERN SALES

TITLE
AIR HANDLING UNIT

MIXING SECTION, HEATING/COOLING WATER COILS
EVAPORATIVE HUMIDIFIER, SUPPLY BLOWER / MOTOR

DRAWN BY	ISSUED BY	SCALE	DRW. NO.	
		1/6"=1'		
CHK. BY	DATE		JOB NO.	PAGE C-12





NOTES:

1. 1 1/2 INLET AND DISCHARGE DUCT FLANGES.
2. SERVICE ACCESS PANELS MUST NOT BE OBSTRUCTED RECOMMENDED CLEARANCE 24 INCHES.
3. DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES. FOR REFERENCE USE ONLY, SUBJECT TO CHANGE WITHOUT NOTICE.

MODEL	A	B	C	D	E	F	G	H	I	J	K	L	M	HTG COIL QTY/SIZE	CLG COIL QTY/SIZE	S/A MOTOR (HP)	S/A FAN (inch)	PREFILTER QTY/SIZEX2"	FINAL FILTER QTY/SIZEX12"	CONTROL PANEL SIZE
AH-20-FC-EH	174	38	38	19.5	4	14	18	10	7	24	20	11	20	1-25x32	1-25x32	2	12	2-16x25	2-16x25	12x12
AH-60-FC-EH	180	54	49	22.5	4	16	20	17	7	40	25	14	25	1-40x48	1-36x48	5	15	2-24x24,2-24x12	2-24x24,2-24x12	24x24
AH-80-FC-EH	186	66	61	26	4	19	24	21	12	42	30	20	30	1-48x60	1-48x60	10	18	4-24x24	4-24x24	24x24
AH-120-FC-EH	186	78	61	27.5	4	22	28.5	24.75	9	60	30	20	30	1-48x72	1-48x72	15	20	6-24x24	6-24x24	24x30
AH-150-FC-EH	190	78	79	31	4	25	32	23	9	60	30	20	30	1-60x72	2-30x72	20	22	6-24x24,3-24x12	6-24x24,3-24x12	24x30
AH-180-FC-EH	204	78	90	32.75	4	29	35	21.5	9	60	40	36	40	1-72x72	2-35.5x72	20	27	9-24x24	9-24x24	24x30
AH-210-FC-EH	206	90	90	36	4	31	40.5	24.75	9	72	40	36	40	1-72x84	2-35.5x84	30	30	9-24x24,3-24x12	9-24x24,3-24x12	24x30
AH-240-FC-EH	216	102	92	38	6	36	48	27	15	72	40	38	40	1-72x96	2-35.5x96	25	33	12-24x24	12-24x24	24x30
AH-320-FC-EH	252	114	107	41	6	39	48	33	12	90	55	32	55	1-96x108	2-43x108	30	36	16-24x24	16-24x24	24x30
AH-400-FC-EH	258	138	109	44	6	41	54	42	15	108	55	32	55	1-96x132	2-44x132	40	40	20-24x24	20-24x24	24x30
AH-480-FC-EH	264	162	112	50	8	44	60	51	14	134	55	32	55	1-96x156	2-44.5x156	50	44	24-24x24	24-24x24	24x30
AH-600-FC-EH	276	162	133	56	8	50	65	48.5	14	134	55	47.5	55	1-120x156	2-55x156	60	48	30-24x24	30-24x24	24x30
AH-700-FC-EH	336	180	135	59	10	58	77	51.5	23	134	65	44	65	1-120x166	2-55x166	75	54	35-24x24	35-24x24	24x30

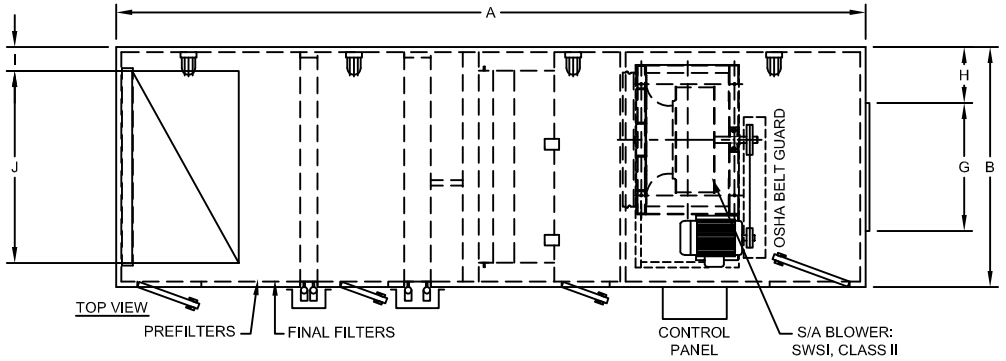
Rev	By	Revision Description	Date

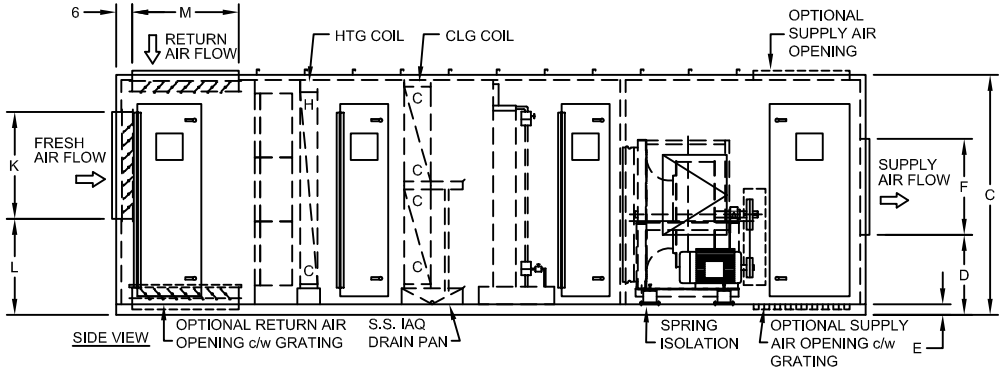
WESTERN SALES

TITLE
AIR HANDLING UNIT

MIXING SECTION, HEATING/COOLING WATER COILS
EVAPORATIVE HUMIDIFIER, SUPPLY BLOWER / MOTOR

DRAWN BY	ISSUED BY	SCALE	DRW. NO.	
		1/6"=1'		
CHK. BY	DATE		JOB NO.	PAGE
				C-13





NOTES:

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2. SERVICE ACCESS PANELS MUST NOT BE OBSTRUCTED RECOMMENDED CLEARANCE 24 INCHES.
3. DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES. FOR REFERENCE USE ONLY, SUBJECT TO CHANGE WITHOUT NOTICE.

MODEL	A	B	C	D	E	F	G	H	I	J	K	L	M	HTG COIL QTY/SIZE	CLG COIL QTY/SIZE	S/A MOTOR (HP)	S/A FAN (inch)	PREFILTER QTY/SIZEX2"	FINAL FILTER QTY/SIZEX12"	CONTROL PANEL SIZE
AH-20-PF-EH	242	38	38	14	4	16	30	4	7	24	20	11	20	1-25x32	1-25x32	2	14	2-16x25	2-16x25	24x24
AH-60-PF-EH	239	54	49	24	4	20	36	9	7	40	25	14	25	1-40x48	1-36x48	5	18	2-24x24,2-24x12	2-24x24,2-24x12	24x24
AH-80-PF-EH	251	66	61	24	4	24	42	12	12	42	30	20	30	1-48x60	1-48x60	10	24	4-24x24	4-24x24	24x24
AH-120-PF-EH	263	78	61	26	4	24	54	12	9	60	30	20	30	1-48x72	1-48x72	15	30	6-24x24	6-24x24	24x30
AH-150-PF-EH	263	78	79	26	4	24	54	12	9	60	30	20	30	1-60x72	2-30x72	20	33	6-24x24,3-24x12	6-24x24,3-24x12	24x30
AH-180-PF-EH	281	78	90	30	4	36	48	15	9	60	40	36	40	1-72x72	2-35.5x72	20	36	9-24x24	9-24x24	24x30
AH-210-PF-EH	281	90	90	30	4	36	48	21	9	72	40	36	40	1-72x84	2-35.5x84	30	40	9-24x24,3-24x12	9-24x24,3-24x12	24x30
AH-240-PF-EH	299	102	92	32	6	36	60	21	15	72	40	38	40	1-72x96	2-35.5x96	25	44	12-24x24	12-24x24	24x30
AH-320-PF-EH	335	114	107	44	6	40	72	21	12	90	55	32	55	1-96x108	2-43x108	30	49	16-24x24	16-24x24	24x30
AH-400-PF-EH	335	138	109	44	6	40	84	27	15	108	55	32	55	1-96x132	2-44x132	40	54	20-24x24	20-24x24	24x30
AH-480-PF-EH	353	162	112	42	8	44	96	33	14	134	55	32	55	1-96x156	2-44.5x156	50	60	24-24x24	24-24x24	24x30
AH-600-PF-EH	335	162	133	50	8	60	72	45	14	134	55	47.5	55	1-120x156	2-55x156	60	66	30-24x24	30-24x24	24x30
AH-700-PF-EH	371	180	135	44	10	60	84	48	23	134	65	44	65	1-120x166	2-55x166	75	73	35-24x24	35-24x24	24x30

Rev	By	Revision Description	Date

WESTERN SALES

TITLE
AIR HANDLING UNIT

MIXING SECTION, HEATING/COOLING WATER COILS
EVAPORATIVE HUMIDIFIER, SUPPLY BLOWER / MOTOR

DRAWN BY	ISSUED BY	SCALE	DRW. NO.
		1/6"=1'	
CHK. BY	DATE	JOB NO.	PAGE
			C-14

NOTES:

1. 1 1/2 INLET AND DISCHARGE DUCT FLANGES.
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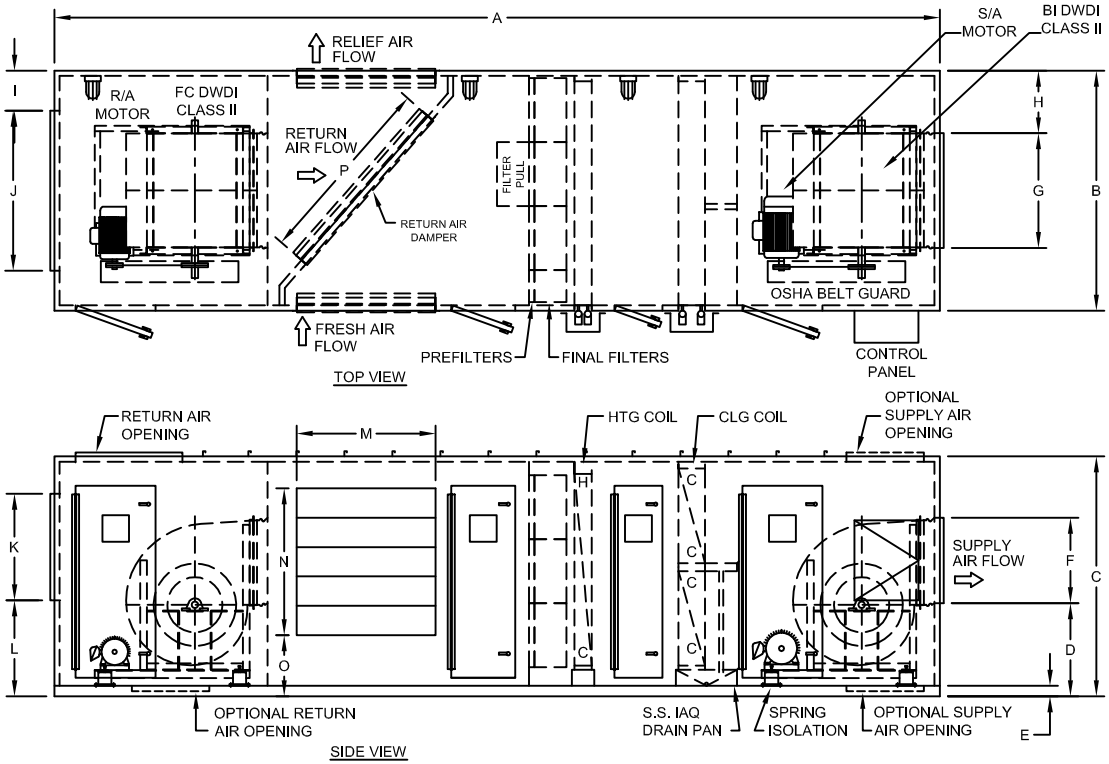


MODEL	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	HTG COIL QTY/SIZE	CLG COIL QTY/SIZE	S/A MOTOR (HP)	S/A FAN (inch)	R/A MOTOR (HP)	R/A FAN (inch)	R/A DAMPER HEIGHTx WIDTH	PREFILTER QTY/SIZEX2"	FINAL FILTER QTY/SIZEX12"	CONTROL PANEL SIZE
AH-20-BI-RA-O	244	38	38	19.5	4	14	18	10	9	20	14	17	24	20	11	24	1-25x32	1-25x32	2	12	1	12	20x24	2-16x25	2-16x25	12x12
AH-60-BI-RA-O	260	54	49	22	4	16	22	16	12	30	20	16	35	30	12	40	1-40x48	1-36x48	5	15	3	15	25x40	2-24x24,2-24x12	2-24x24,2-24x12	24x24
AH-80-BI-RA-O	280	66	61	25	4	19	26	20	15	36	25	20	36	35	16	42	1-48x60	1-48x60	10	18	5	18	30x42	4-24x24	4-24x24	24x24
AH-120-BI-RA-O	288	78	61	26	4	22	28.5	24.75	14	50	30	20	40	45	9	60	1-48x72	1-48x72	15	20	7.5	20	30x60	6-24x24	6-24x24	24x30
AH-150-BI-RA-O	296	78	79	28	4	24	32	23	14	50	30	20	40	45	17	60	1-60x72	2-30x72	20	22	10	22	30x60	6-24x24,3-24x12	6-24x24,3-24x12	24x30
AH-180-BI-RA-O	328	78	90	32	4	29	38.5	19.75	14	50	30	36	55	45	25	60	1-72x72	2-35.5x72	20	27	10	27	40x60	9-24x24	9-24x24	24x30
AH-210-BI-RA-O	332	90	90	35	4	32	43	23.5	15	60	40	36	52	55	23	72	1-72x84	2-35.5x84	30	30	15	30	40x72	9-24x24,3-24x12	9-24x24,3-24x12	24x30
AH-240-BI-RA-O	352	102	92	38	6	36	48	27	21	60	36	38	52	55	24	72	1-72x96	2-35.5x96	25	33	15	33	40x72	12-24x24	12-24x24	24x30
AH-320-BI-RA-O	411	114	107	41	6	39	52	31	20	74	40	37	90	55	34	90	1-96x108	2-43x108	30	36	15	36	55x90	16-24x24	16-24x24	24x30
AH-400-BI-RA-O	421	138	109	44.5	6	43	57	40.5	29	80	43	36	90	66	25	108	1-96x132	2-44x132	40	40	20	40	55x108	20-24x24	20-24x24	24x30
AH-480-BI-RA-O	438	162	112	48.5	8	48	63	49.5	31	100	48	32	90	82	18	134	1-96x156	2-44.5x156	50	44	25	44	55x134	24-24x24	24-24x24	24x30
AH-600-BI-RA-O	460	162	133	53	8	52	69	46.5	31	100	52	45	90	82	32	134	1-120x156	2-55x156	60	48	30	48	55x134	30-24x24	30-24x24	24x30
AH-700-BI-RA-O	540	180	135	59	10	58	77	51.5	35	110	58	50	112	78	35	134	1-120x166	2-55x166	75	54	40	54	65x134	35-24x24	35-24x24	24x30

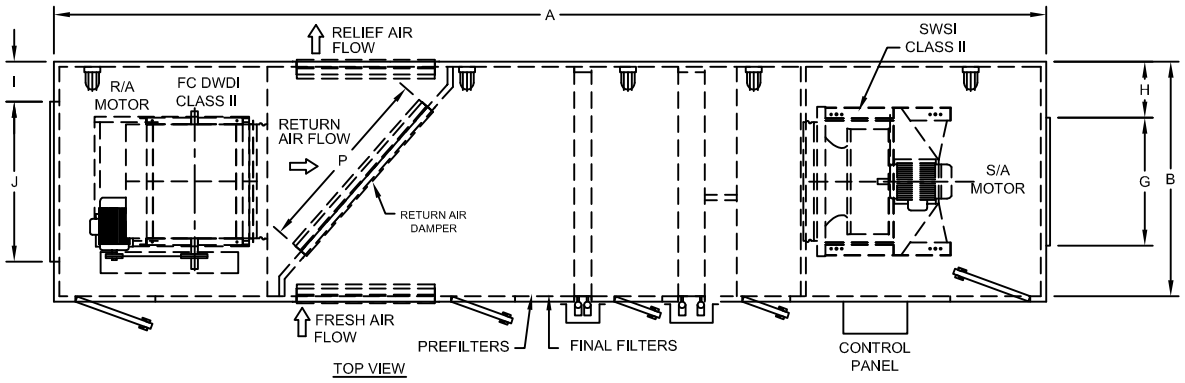
Rev	By	Revision Description	Date

WESTERN SALES

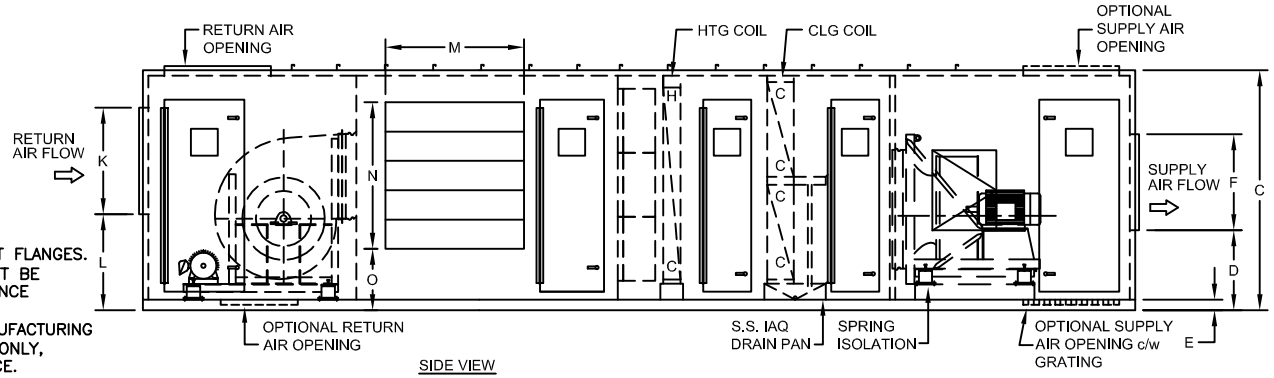
TITLE
OUTDOOR AIR HANDLING UNIT

MIXING BOX c/w RELIEF, HEATING/COOLING WATER COILS
RETURN AIR BLOWER, SUPPLY AIR BLOWER

DRAWN BY	ISSUED BY	SCALE	DRW. NO.
		1/6"=1'	
CHK. BY	DATE	JOB NO.	PAGE
			C-15



TOP VIEW



SIDE VIEW

NOTES:

1. 1 1/2 INLET AND DISCHARGE DUCT FLANGES.
2. SERVICE ACCESS PANELS MUST NOT BE OBSTRUCTED RECOMMENDED CLEARANCE 24 INCHES.
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MODEL	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	HTG COIL QTY/SIZE	CLG COIL QTY/SIZE	S/A MOTOR (HP)	S/A FAN (inch)	R/A MOTOR (HP)	R/A FAN (inch)	R/A DAMPER HEIGHTx WIDTH	PREFILTER QTY/SIZEX2"	FINAL FILTER QTY/SIZEX12"	CONTROL PANEL SIZE
AH-20-DD-RA-O	277	38	38	14	4	16	30	4	9	20	14	17	24	20	11	24	1-25x32	1-25x32	2	14	1	12	20x24	2-16x25	2-16x25	24x24
AH-60-DD-RA-O	284	54	49	24	4	20	36	9	12	30	20	16	35	30	12	40	1-40x48	1-36x48	5	18	3	15	25x40	2-24x24,2-24x12	2-24x24,2-24x12	24x24
AH-80-DD-RA-O	310	66	61	24	4	24	42	12	15	36	25	20	36	35	16	42	1-48x60	1-48x60	10	24	5	18	30x42	4-24x24	4-24x24	24x24
AH-120-DD-RA-O	330	78	61	26	4	24	54	12	14	50	30	20	40	45	9	60	1-48x72	1-48x72	15	30	7.5	20	30x60	6-24x24	6-24x24	24x30
AH-150-DD-RA-O	334	78	79	26	4	24	54	12	14	50	30	20	40	45	17	60	1-60x72	2-30x72	20	33	10	22	30x60	6-24x24,3-24x12	6-24x24,3-24x12	24x30
AH-180-DD-RA-O	370	78	90	30	4	36	48	15	14	50	30	36	55	45	25	60	1-72x72	2-35.5x72	20	36	10	27	40x60	9-24x24	9-24x24	24x30
AH-210-DD-RA-O	372	90	90	30	4	36	48	21	15	60	40	36	52	55	23	72	1-72x84	2-35.5x84	30	40	15	30	40x72	9-24x24,3-24x12	9-24x24,3-24x12	24x30
AH-240-DD-RA-O	400	102	92	32	6	36	60	21	21	60	36	38	52	55	24	72	1-72x96	2-35.5x96	25	44	15	33	40x72	12-24x24	12-24x24	24x30
AH-320-DD-RA-O	459	114	107	44	6	40	72	21	20	74	40	37	90	55	34	90	1-96x108	2-43x108	30	49	15	36	55x90	16-24x24	16-24x24	24x30
AH-400-DD-RA-O	463	138	109	44	6	40	84	27	29	80	43	36	90	66	25	108	1-96x132	2-44x132	40	54	20	40	55x108	20-24x24	20-24x24	24x30
AH-480-DD-RA-O	492	162	112	42	8	44	96	33	31	100	48	32	90	82	18	134	1-96x156	2-44.5x156	50	60	25	44	55x134	24-24x24	24-24x24	24x30
AH-600-DD-RA-O	484	162	133	50	8	60	72	45	31	100	52	45	90	82	32	134	1-120x156	2-55x156	60	66	30	48	55x134	30-24x24	30-24x24	24x30
AH-700-DD-RA-O	540	180	135	44	10	60	84	48	35	110	58	50	112	78	35	134	1-120x166	2-55x166	75	73	40	54	65x134	35-24x24	35-24x24	24x30

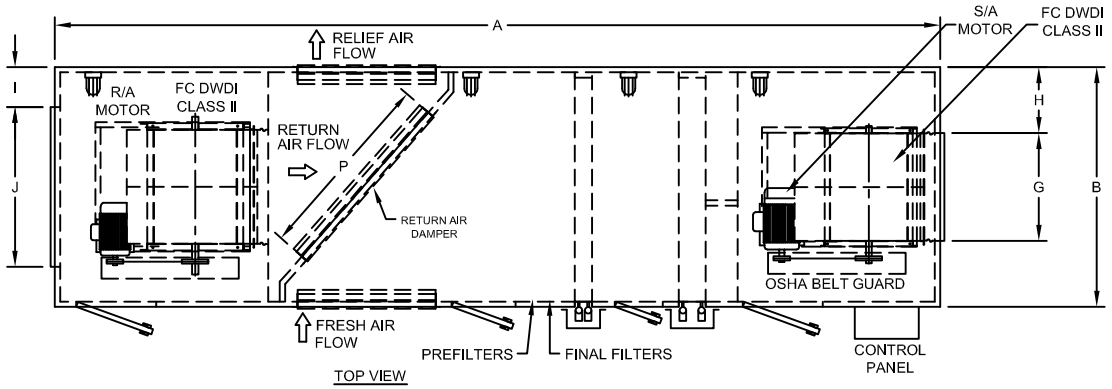
Rev	By	Revision Description	Date

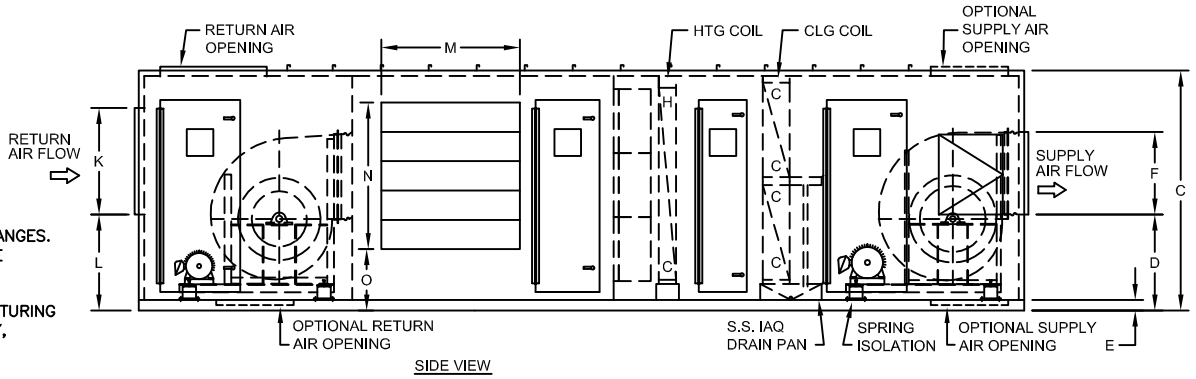
WESTERN SALES

TITLE
OUTDOOR AIR HANDLING UNIT

MIXING BOX c/w RELIEF, HEATING/COOLING WATER COILS
RETURN AIR BLOWER, SUPPLY AIR BLOWER

DRAWN BY	ISSUED BY	SCALE	DRW. NO.
		1/6"=1'	
CHK. BY	DATE	JOB NO.	PAGE
			C-16





NOTES:

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2. SERVICE ACCESS PANELS MUST NOT BE OBSTRUCTED RECOMMENDED CLEARANCE 24 INCHES.
3. DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES. FOR REFERENCE USE ONLY, SUBJECT TO CHANGE WITHOUT NOTICE.

MODEL	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	HTG COIL QTY/SIZE	CLG COIL QTY/SIZE	S/A MOTOR (HP)	S/A FAN (inch)	R/A MOTOR (HP)	R/A FAN (inch)	R/A DAMPER HEIGHTx WIDTH	PREFILTER QTY/SIZEX2"	FINAL FILTER QTY/SIZEX12"	CONTROL PANEL SIZE
AH-20-FC-RA-O	244	38	38	19.5	4	14	18	10	9	20	14	17	24	20	11	24	1-25x32	1-25x32	2	12	1	12	20x24	2-16x25	2-16x25	12x12
AH-60-FC-RA-O	260	54	49	22.5	4	16	20	17	12	30	20	16	35	30	12	40	1-40x48	1-36x48	5	15	3	15	25x40	2-24x24,2-24x12	2-24x24,2-24x12	24x24
AH-80-FC-RA-O	280	66	61	26	4	19	24	21	15	36	25	20	36	35	16	42	1-48x60	1-48x60	10	18	5	18	30x42	4-24x24	4-24x24	24x24
AH-120-FC-RA-O	288	78	61	27.5	4	22	28.5	24.75	14	50	30	20	40	45	9	60	1-48x72	1-48x72	15	20	7.5	20	30x60	6-24x24	6-24x24	24x30
AH-150-FC-RA-O	296	78	79	31	4	25	32	23	14	50	30	20	40	45	17	60	1-60x72	2-30x72	20	22	10	22	30x60	6-24x24,3-24x12	6-24x24,3-24x12	24x30
AH-180-FC-RA-O	328	78	90	32.75	4	29	35	21.5	14	50	30	36	55	45	25	60	1-72x72	2-35.5x72	20	27	10	27	40x60	9-24x24	9-24x24	24x30
AH-210-FC-RA-O	332	90	90	35	4	32	40.5	24.75	15	60	40	36	52	55	23	72	1-72x84	2-35.5x84	30	30	15	30	40x72	9-24x24,3-24x12	9-24x24,3-24x12	24x30
AH-240-FC-RA-O	352	102	92	38	6	36	48	27	21	60	36	38	52	55	24	72	1-72x96	2-35.5x96	25	33	15	33	40x72	12-24x24	12-24x24	24x30
AH-320-FC-RA-O	411	114	107	41	6	39	48	33	20	74	40	37	90	55	34	90	1-96x108	2-43x108	30	36	15	36	55x90	16-24x24	16-24x24	24x30
AH-400-FC-RA-O	421	138	109	44	6	41	54	42	29	80	43	36	90	66	25	108	1-96x132	2-44x132	40	40	20	40	55x108	20-24x24	20-24x24	24x30
AH-480-FC-RA-O	438	162	112	50	8	44	60	51	31	100	48	32	90	82	18	134	1-96x156	2-44.5x156	50	44	25	44	55x134	24-24x24	24-24x24	24x30
AH-600-FC-RA-O	460	162	133	56	8	50	65	48.5	31	100	52	45	90	82	32	134	1-120x156	2-55x156	60	48	30	48	55x134	30-24x24	30-24x24	24x30
AH-700-FC-RA-O	540	180	135	59	10	58	77	51.5	35	110	58	50	112	78	35	134	1-120x166	2-55x166	75	54	40	54	65x134	35-24x24	35-24x24	24x30

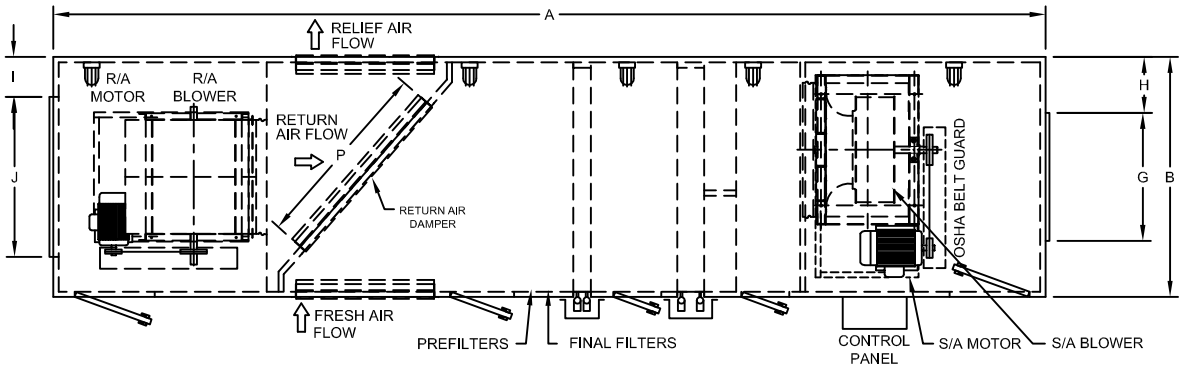
Rev	By	Revision Description	Date

ICG WESTERN SALES

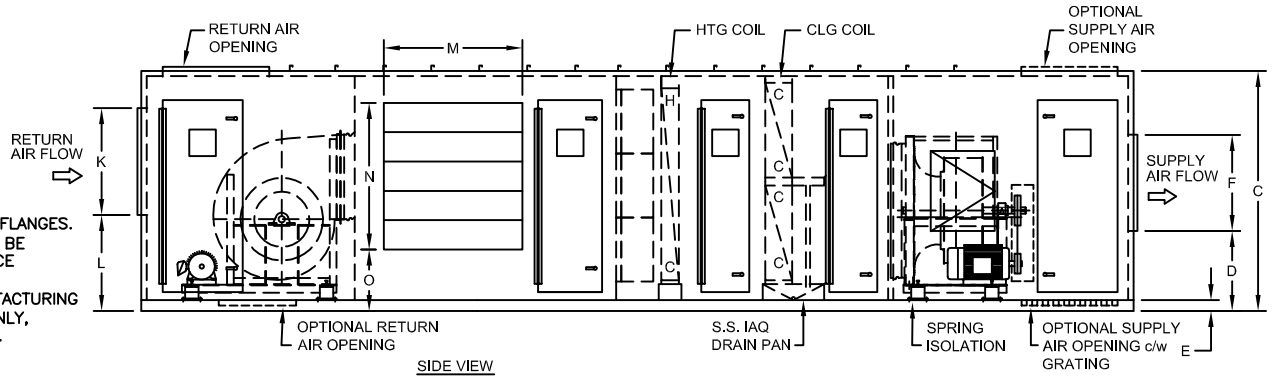
TITLE
OUTDOOR AIR HANDLING UNIT

MIXING BOX c/w RELIEF, HEATING/COOLING WATER COILS
RETURN AIR BLOWER, SUPPLY AIR BLOWER

DRAWN BY	ISSUED BY	SCALE	DRW. NO.
		1/6"=1'	
CHK. BY	DATE	JOB NO.	PAGE
			C-17



TOP VIEW



SIDE VIEW

NOTES:

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2. SERVICE ACCESS PANELS MUST NOT BE OBSTRUCTED RECOMMENDED CLEARANCE 24 INCHES.
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MODEL	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	HTG COIL QTY/SIZE	CLG COIL QTY/SIZE	S/A MOTOR (HP)	S/A FAN (inch)	R/A MOTOR (HP)	R/A FAN (inch)	R/A DAMPER HEIGHTx WIDTH	PREFILTER QTY/SIZEX2"	FINAL FILTER QTY/SIZEX12"	CONTROL PANEL SIZE
AH-20-PF-RA-O	274	38	38	14	4	16	30	4	9	20	14	17	24	20	11	24	1-25x32	1-25x32	2	14	1	12	20x24	2-16x25	2-16x25	24x24
AH-60-PF-RA-O	284	54	49	24	4	20	36	9	12	30	20	16	35	30	12	40	1-40x48	1-36x48	5	18	3	15	25x40	2-24x24,2-24x12	2-24x24,2-24x12	24x24
AH-80-PF-RA-O	310	66	61	24	4	24	42	12	15	36	25	20	36	35	16	42	1-48x60	1-48x60	10	24	5	18	30x42	4-24x24	4-24x24	24x24
AH-120-PF-RA-O	330	78	61	26	4	24	54	12	14	50	30	20	40	45	9	60	1-48x72	1-48x72	15	30	7.5	20	30x60	6-24x24	6-24x24	24x30
AH-150-PF-RA-O	334	78	79	26	4	24	54	12	14	50	30	20	40	45	17	60	1-60x72	2-30x72	20	33	10	22	30x60	6-24x24,3-24x12	6-24x24,3-24x12	24x30
AH-180-PF-RA-O	370	78	90	30	4	36	48	15	14	50	30	36	55	45	25	60	1-72x72	2-35.5x72	20	36	10	27	40x60	9-24x24	9-24x24	24x30
AH-210-PF-RA-O	372	90	90	30	4	36	48	21	15	60	40	36	52	55	23	72	1-72x84	2-35.5x84	30	40	15	30	40x72	9-24x24,3-24x12	9-24x24,3-24x12	24x30
AH-240-PF-RA-O	400	102	92	32	6	36	60	21	21	60	36	38	52	55	24	72	1-72x96	2-35.5x96	25	44	15	33	40x72	12-24x24	12-24x24	24x30
AH-320-PF-RA-O	459	114	107	44	6	40	72	21	20	74	40	37	90	55	34	90	1-96x108	2-43x108	30	49	15	36	55x90	16-24x24	16-24x24	24x30
AH-400-PF-RA-O	463	138	109	44	6	40	84	27	29	80	43	36	90	66	25	108	1-96x132	2-44x132	40	54	20	40	55x108	20-24x24	20-24x24	24x30
AH-480-PF-RA-O	486	162	112	42	8	44	96	33	31	100	48	32	90	82	18	134	1-96x156	2-44.5x156	50	60	25	44	55x134	24-24x24	24-24x24	24x30
AH-600-PF-RA-O	484	162	133	50	8	60	72	45	31	100	52	45	90	82	32	134	1-120x156	2-55x156	60	66	30	48	55x134	30-24x24	30-24x24	24x30
AH-700-PF-RA-O	540	180	135	44	10	60	84	48	35	110	58	50	112	78	35	134	1-120x166	2-55x166	75	73	40	54	65x134	35-24x24	35-24x24	24x30

Rev	By	Revision Description	Date

WESTERN SALES

TITLE
OUTDOOR AIR HANDLING UNIT
MIXING BOX c/w RELIEF, HEATING/COOLING WATER COILS
RETURN AIR BLOWER (FC, DWDI, CLASS II)
SUPPLY AIR BLOWER (SWSI, CLASS II)

DRAWN BY	ISSUED BY	SCALE 1/6"=1'	DRW. NO.	
CHK. BY	DATE		JOB NO.	PAGE C-18

MH Series™

Evaporative Humidifers

Most cost-effective humidifier/cooler available today.

data centers
laboratories
manufacturing
institutional
research facilities
commercial
automotive

Productivity and quality of life are directly affected by the indoor environment. People work better and feel better in favorable surroundings. So do products and machines! They all respond in various ways to changes in air quality, temperature and humidity. All three elements must be just right to maximize performance and reliability, both in humans and equipment. Correct humidity is critical, since too much humidity can be as destructive as too little.

Walter Meier is a world leader in state-of-the-art humidification technology. Our focus is concentrated exclusively on designing and building better humidification systems. Every MH model has been engineered to meet the highest standards of cost-effective efficient performance. They are designed for ease of installation, adaptability, simplicity of operation, ease of maintenance and servicing, energy efficiency, cleanliness and long-term reliability.

MH evaporative humidifiers offer complete application flexibility to systems engineers, contractors and customers. They can be integrated into central air handling units or ventilation ducts.

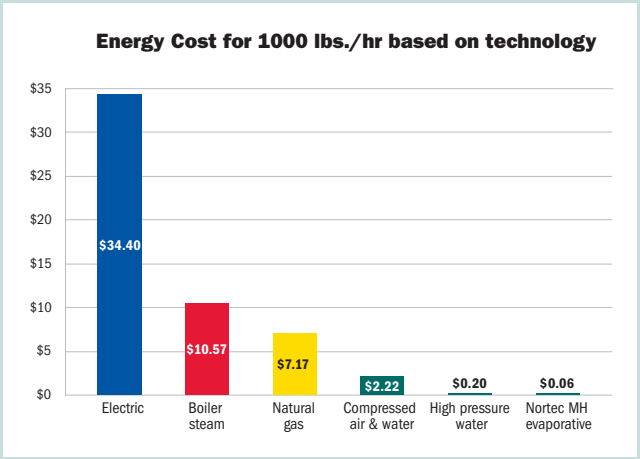
With its stingy energy consumption the MH Series is a perfect compliment towards Green/LEED building design.

- High humidification efficiency
- Hygiene friendly
- Free evaporative cooling
- Safe polyester media
- Complete packaged system

Economy

The V-Profile polyester media intensifies the evaporation process providing exceptionally high performance and efficiency. The large surface of the evaporation media results in a high evaporation rate with low energy consumption. The MH Series offers humidification efficiencies of up to 85 and 95%. The MH Series is suitable for high duty applications and when applying the Reflow model, the system captures the non-evaporated water and returns it to the water circulation system for reuse. The increased water efficiency has a very quick payback for building owners.

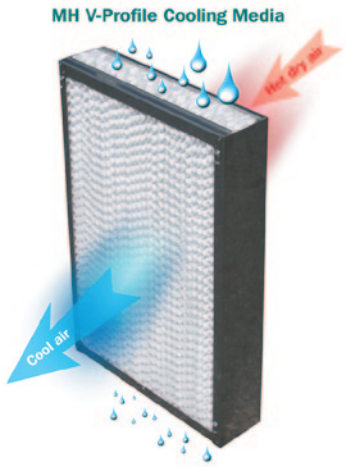
Saving water and energy as well as reducing operating costs is an important challenge in today's world. The MH Series not only humidifies but can cool the air by up to 22°F (12.5°C) at high humidification efficiency and at a low cost.



V-profile Media

The core element of the MH unit is the patented humidifier box located in the air duct. Dry air flows through the box, water flows over the hygroscopic media and the extremely large wet surface releases humidity to the air. This method enables air humidifying or cooling with limited electrical energy. The V-profile humidifier box consists of synthetic media with an impressed V-profile which enables a more intensive exchange of air and water.

- Hygroscopic Coating
- High Velocity Performance
- Low Pressure Losses
- UL 900 Class 1 Rating
- Suitable for DI/RO
- No Droplets, Free of Aerosols



MH Series™

Evaporative Humidifiers

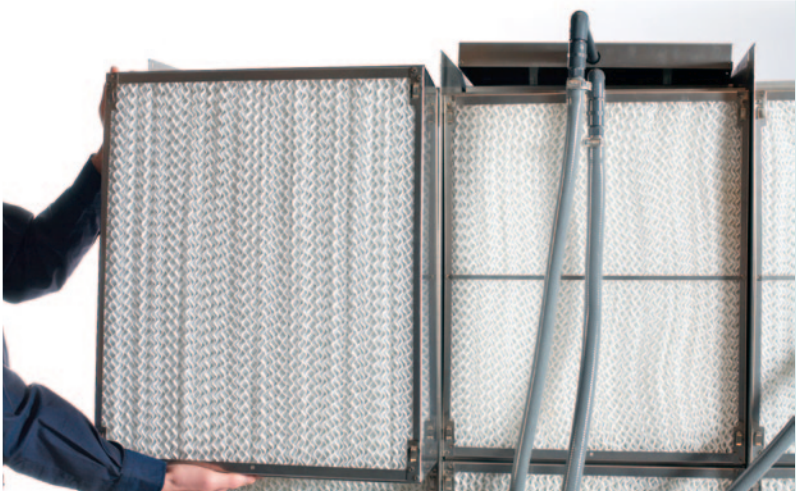
Total Control (TC) System

The TC system offers the most complete control of any evaporative humidifier / cooler on the market today! The integrated processor with real-time clock controls the air humidity, smart water management featuring UV treatment and conductivity monitoring, plus advanced hygiene cycles and staging operations.

- Smart Water Management
- Advanced Hygiene Control
- Internet Monitoring & Control
- BMS Interoperability
- Full Function Operating Panel
- NRTL-C Approved

Models

The MH Series is available in two basic versions. The **FLOW** model with direct water drainage and the **REflow** model for water recirculation. Whether to use a flow or REflow system depends considerably on the primary application of humidifying or cooling and the supplied water quality.



The **REflow** model contains a circulation pump that conveys the water via EPDM plastic hose to the spray beam located above the humidifier box. The water then trickles vertically through the boxes. The water not needed for humidifying flows back into the water basin where it is collected and recuirculated for optimal water efficiency.

In the **FLOW** model, the water is not collected in the water basin, but is discarded and flows directly into the drain.

Features Comparison	MHB Flow	MHTC Flow	MHB REflow	MHTC REflow
Operates on DI/RO, Potable, Soften Water	●	●	●	●
Circulation Water System			●	●
Direct Water System	●	●		
Total Control (TC) System with Full Backlit Display		●		●
On/Off control system	●		●	
Smart Water Management System		●		●
Adjustable Flush Cycles		●		●
Pre-cleaning Sequence		●		●
Smart Media Box Drying		●		●
Modbus BMS host protocol		●		●
Programmable Maintenance Settings		●		●
Step-Control 1, 2 or 3 Stage		●		●
Multi-Unit Networking		●		●
Display and Control of RH		●		●
Multiple Control Signal Acceptance		●		●
Operation History Log		●		●
Real Time Information		●		●
Adjustable Capacity of Nominal Output		●		●
Remote Fault Indication	●	●	●	●
Stainless Steel Reservoir	●	●	●	●
Stainless Side frames	●	●	●	●
V-Profile Polyester Media	●	●	●	●
Mist Eliminator V-Profile Polyester Media (above 750 fpm)	●	●	●	●
2 Year Limited Warranty *Excluding Media	●	●	●	●
Conductivity Smart Monitoring				o
Ultra Violet Water Treatment	o	o	o	o
Nortec LINKS BMS Interoperability - BACnet, Lon Talk, Modbus		o		o
OnLine - Internet Monitoring and Control		o		o

● = standard o = optional

Ultra Violet Sterilization

For applications where higher hygienic requirements must be met an optional UV package is available. The ultra violet radiation from the discharge lamp sterilizes the water and controls potential microbial build up. Both Flow and REflow models can be fully equipped.

Conductivity Monitoring

Conductivity monitoring will continuously check the Total Dissolved Solid (TDS) content inside the water tank. The adjustable conductivity sensor then initiates drains accordingly. This feature is available for the REflow models only.

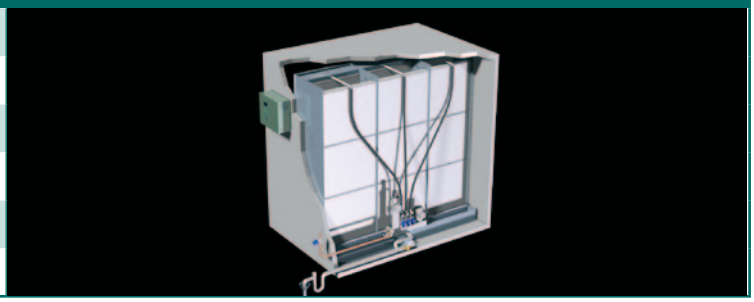
Controls

We offers a wide range of digital controls when selecting the MH product. The total controller allows easy integration into any local building management system with it's host protocol modbus. See Nortec LINKS2 and Online for other communication options.

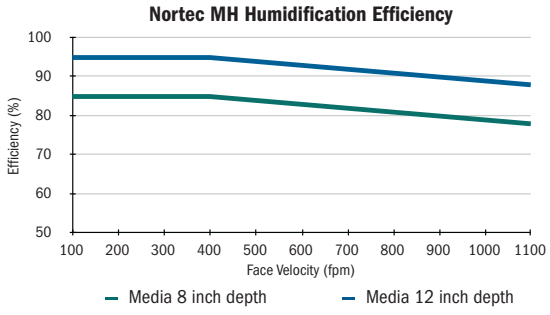
Specification	
Media Box Efficiency max.	85% and 95%
Maximum Face Velocity over Media	750 fpm (3.8 m/s)
Maximum Face Velocity with Integral Mist Eliminator	1080 fpm (5.5 m/s)
Pressure Drop at 500 fpm	0.25 IWC (62 Pa)
Fire Protection Rating	UL 900 Class I
Power supply pump (REflow, REflow C, REflow SC)	120 VAC/1, 50 and 60 Hz
Power consumption	0.2 - 0.6 kw
Water supply pressure	30 - 145 psi
Unit Height	26" (650mm) - 130" (3300mm)
Unit Width	24" (610mm) - 130" (3300mm)
Unit Depth	30" (575mm)
Standards and guidelines	UL 900 Class 1 and NRTL Approval

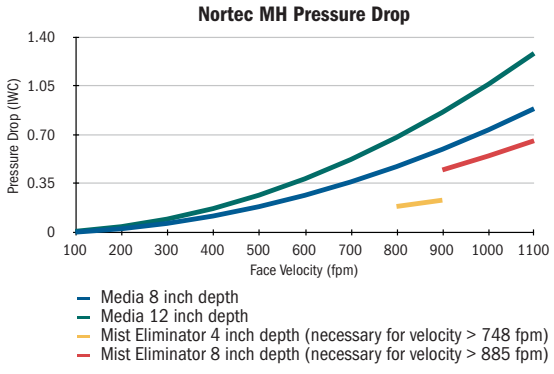
INSTALLATION FEATURES & REQUIREMENTS

- Pre-assembled hydraulic package for quick installation
- Only three connections to be made- water, drain and electrical
- REflow pump model powered by a 120 V 1phase 60Hz connection
- Stainless steel water tank and lateral supports
- Media boxes can be installed in seconds
- Footprint not to exceed 3" top and 2" side clearance from AHU/duct wall



PERFORMANCE





AH SERIES SPECIFICATIONS

CASING

The unit exterior casing shall be heavy gauge G90 rated bonderized steel. Unit roof shall feature standing seam construction. The entire unit casing shall be insulated with 1-in. thick 1.5-lb. (2-in. thick 1.5-lb.) fiberglass insulation with hard neoprene backing in a sandwich wall fashion (22-gauge solid liner). The unit exterior shall be finished with industrial enamel (catalyzed epoxy) paint. An integral welded iron channel frame shall support the unit casing. The structural iron frame shall be sandblasted, primed and finished with industrial enamel (catalyzed epoxy) paint.

BLOWER/MOTOR SECTION

The fan section and motor assembly shall be constructed in accordance with the requirements of the Air Moving and Conditioning Association (AMCA). The assembly shall be designed to house the fan(s), bearings, motor, and v-belts, which shall be selected for at least 50% above the rated motor capacity. The fan(s) and motor shall be mounted on a welded unitary base made of angle iron frame. The frame shall be sandblasted, primed and finished with industrial enamel (catalyzed epoxy) paint. The unitary base shall be provided with seismic spring vibration isolation. The blower section shall have a hinged access door with Ventlock handles to allow easy maintenance of filters and belts. The NEMA T-Frame motor shall be mounted on an adjustable base located within the fan section. The blower wheel shall be statically and dynamically balanced, and mounted on a turned, ground and polished shaft with rigid bearing supports. The shaft shall be designed with a maximum operating speed not exceeding 75% of the first critical speed. The bearings shall be split taper lock ball bearing type L20 minimum life of 100,000 hours (L10 200 kHr).

Fan performance shall be based on tests conducted in accordance with AMCA Standard Test Code for Air moving Devices. (All fans shall have sharply rising pressure characteristic extending throughout the operating range and continuing to rise well beyond the efficiency peak to assure quiet and stable operation under all conditions. Horsepower characteristics shall be truly non-overloading and shall reach a peak in the normal selection area.) Fan manufacturer shall provide sound power ratings in the eight octave bands, which shall be based on AMCA Standard 300-67, test, setup number one. Sound power ratings shall be referenced 10-12 watts. A factory dynamic balance shall be made on all fans after their assembly. An IRD or PMC analyzer shall be used to measure velocity, and the final reading shall not exceed 0.1 inches per second. The exact level of vibration shall be recorded on the fan as proof of the final dynamic balance at the factory.

COOLING CONTROLS

Cooling control shall be achieved via a Honeywell T775 multi-stage sequencer. The sequencer shall be controlled with an analog signal provided by the discharge air thermostat. As the discharge air thermostat requires cooling the signal shall increase, thereby turning on the stages at specific set points. The set points shall be set with appropriate offset and differential to ensure accurate discharge temperature is maintained. The stages are to be sequenced without turning on and off of compressors to minimize unnecessary wear on the compressors. Upon sensing a call for cooling from the space, the compressors shall provide full cooling until the space sensor is satisfied, upon which time the cooling shall revert to discharge air control. A low discharge temperature set point with a large differential shall

be set to prevent the compressor from cycling on and off. The compressor will remain on low setting until cooling is disabled manually or the ambient temperature falls below the minimum set point.

ELECTRICAL CONTROL EQUIPMENT

Electrical assembly and components shall be in strict accordance with the latest provisions and requirements of the National Electric Code. Control cabinet shall be designed and constructed to ETL specifications. A safety disconnect switch shall be mounted on the unit. The controls shall be located in a weatherproof cabinet. Provisions for service padlocking shall be provided. The following items shall be located within the cabinet: fuses, starters, control relays, timing and holding relays, resistors and numbered terminal strips. All components shall be labeled and cross-referenced to control and field wiring diagrams. The control circuit shall be 24V, single phase. Wiring shall be neatly run in "PANDUIT" wiring duct. Low and/or line voltage thermostats shall be furnished shipped loose for installation by others. Unit shall be equipped with automatic low limit freeze protection with bypass timer.

DAMPERS & FILTER SECTION

The dampers are to be galvanized steel (aluminum airfoil low leak) type (with seals). The dampers shall be equipped with 2-position (modulating) actuators. The filters shall be 2" pleated throwaway type with minimum of 85% arrestance and 30% efficiency. Filter access shall be through a latched and gasketed access doors located on both sides of the unit. (Final filters shall be 4 or 12 inch high efficiency cartridge filters.)

REMOTE CONTROL PANELS

Remote NEMA 1(12) locking control panel shall be equipped with summer/off/winter switch and blower on, burner on, flame failure and loaded filter lights. (A remote adjustment potentiometer shall control damper positioning.) (An LCD display shall provide system temperature and set points.)

FLUID COILS

Fluid coils are intended for use with water, glycol, or other appropriate heat transfer fluids. Coils are to be designed to maximize performance under specified conditions with minimal air-side pressure drop.
All water coils designed with 1/2” or 5/8” tubes are to be ARI performance certified and shall bear the ARI symbol.
Tubes and return bends shall be constructed from seamless UNS C12200 copper conforming to ASTM B224 and ASTM E527. Properties shall be O50 light annealed with a maximum grain size of 0.040 mm.
Tubes are to mechanically expanded into fins (secondary surface) for maximum heat transfer. Materials are to be 3/8” diameter x (0.014, 0.022) wall thickness, 1/2” diameter x (0.016, 0.025) wall thickness, or 5/8” diameter x (0.020, 0.025, 0.035, 0.049) wall thickness.
Secondary surface (fins) shall be of the plate-fin design using aluminum or copper, with die-formed collars. Fin design to be flat, waffle, or sine-wave in a staggered tube pattern to meet performance requirements.
Collars will hold fin spacing at specified density, and cover the entire tube surface. Aluminum properties are to be Alloy 1100 per ASTM B209, with O (soft) temper; copper is to be Alloy 11000 per ASTM B152-06 with soft (anneal) temper. Fins are to be free of oils and oxidation.

Headers are to be constructed of seamless UNS C12200, Type L (drawn) copper material sized to match specified connection size. Type K (drawn) copper headers and Schedule 40 steel headers shall be offered as optional materials.
Die-formed copper end caps are brazed on the inside of the headers, unless spun-closed (for sizes up to 1-3/8”). 1/4” vents and drains are to be provided for all fluid coils.
Connection material shall be copper, or Schedule 40 steel or red brass pipe. The type of connection is to be sweat type, MPT or FPT, grooved, or flanged as required.
Coil casing material shall be of G90 galvanized steel, 16 gauge minimum. Heavier material, stainless steel, copper, or aluminum casing are to be provided as required.
Intermediate tube supports are to be provided on all coils 48” and longer fin length. Coil casing on top and bottom of coils are to have double-flange construction, allowing for vertical stacking of coils.
All coils are to be brazed with minimum 5% silver content (BCup-3) filler material to insure joint integrity. Low-fuming, flux-coated bronze braze-weld material is to be used for ferrous to non-ferrous joints.
Coils shall be tested at 550 psig using dry nitrogen, submerged under water. Dual-operator verification shall determine that all coils are leak-free.
Fluid coils shall be designed to withstand 300ºF maximum operating fluid temperature, and 250 psig maximum operating pressure.