

CHILLER SCHEDULE

I.D. NUMBER	LOCATION	SERVICE	MANUFACTURER	MODEL	TYPE	CAPACITY (TON)	EVAPORATOR					CONDENSER					ELECTRICAL DATA							PRIMARY EFFICIENCY KW/TON	REFRIGERANT		SOUND LEVEL (DBA)	HEAT PROJECT (MBH)	OPERATING WEIGHT (LBS)	ANCHOR DETAIL	SPECIAL SEISMIC CERTIFICATION CAN 2-1708A.5	REMARKS	
							FLOW (GPM)	E.W.T. F°	L.W.T. F°	FOULING FACTOR	P.D. (FT.)	FLOW (GPM)	E.W.T. F°	L.W.T. F°	FOULING FACTOR	P.D. (FT.)	UNIT FLA	MCA (AMP)	EMERGENCY POWER	MOC (AMP)	VOLT	PHASE	HERTZ		CONTROLS	TYPE							CHARGE (LB)
CH-1,2,3	ROOF TOWER II	CHILLED WATER SYSTEM	TRANE	CVHF-1300	CENTRIFUGAL	1300	2217	56	42	0.00010	19.98	2588	78	92	0.00025	22.41	725.7	1218	1	2000	460	3	60	115/1/60	0.558	R-123	1700	90	12.39	43,000	2/M10-02	YES	
① CHILLER COMPLETE WITH VARIABLE SPEED DRIVE AND DISCONNECT MEANS																																	

① CHILLER COMPLETE WITH VARIABLE SPEED DRIVE AND DISCONNECT MEANS









COOLING TOWER SCHEDULE

I.D. NUMBER	LOCATION	MANUFACTURER	MODEL	EWT F°	LWT F°	EAT F°-WB	GPM	PRESS. DROP FT.-WG	FAN				TOWER WEIGHT (LBS)			LADDER WEIGHT (LBS)			HANDRAIL WEIGHT (LBS)			PLATFORM WEIGHT (LBS)			INTERNAL WALKWAY WEIGHT (LBS)			SERVICE PLATFORM WEIGHT (LBS)			MAX OPERATION WEIGHT (LBS)		EMERGENCY POWER	ANCHORAGE DETAIL	SPECIAL SEISMIC CERTIFICATION CAN 2-1708A.5	REMARKS
									HP	VOLT	PHASE	HZ	QTY	EA	TOTAL	QTY	EA	TOTAL	QTY	EA	TOTAL	QTY	EA	TOTAL	QTY	EA	TOTAL	QTY	EA	TOTAL	PER CELL	TOTAL				
CT 1,2,3	COOLING TOWER	BAC	31301C	92	78	72.27	2,600	—	100	460	3	60	3	46,590	139,770	2	240	480	3	210	630	2	200	400	3	120	360	3	570	1710	48,000	144,000	YES	1/M10-02	YES	

REMARKS:

1. COMPLETE WITH VFD, LADDER AND HANDRAIL, SIDE ACCESS LADDER WITH ANTI-SKID SURFACE
CT1 CERTIFIED, TEFC PREMIUM EFFICIENCY MOTOR
2. VFD SHALL BE PROVIDED WITH PUMPING PACKAGE.
4. STAINLESS STEEL COLD WATER BASIN AND HOT WATER BASIN.

HEPA FILTER FOR ISOLATION EF SCHEDULE

I.D. NUMBER	LOCATION	SERVING	CONTAINMENT HOUSING				PRE-FILTER 30% EFFICIENCY								HEPA-FILTER 99.97% EFFICIENCY								MAX TOTAL OPERATION WEIGHT	ANCHOR DETAIL	REMARKS
			MFG	MODEL	NOMINAL SIZE HxWxD (IN)	WEIGHT (LBS)	MFG	MODEL	MERV-7	NOMINAL SIZE HxWxD	QTY	CFM	PD	WEIGHT EA. (LBS)	MFG	MODEL	NOMINAL SIZE HxWxD	QTY	CFM	PD	WEIGHT EA. (Lbs)				
	PENTHOUSE LEVEL 3		FLANDER	BF1-3H3W 4GGF-304-D3	90X51X38	480	FLANDERS	PRE-PLEATED 40	24X24X4	9	500	2000	0.25	3	FLANDERS	SUPERFLOW 2K SF2K-B FI-YY	24X24X12	9	500	2000	1.00	40	1000	7/M10.07	STATIC PRESSURE TAPS, MAGNEHELIC GAGES, SWIVEL DOOR LATCH, DUCT TRANSITION, HEAVY DUTY GAS TIGHT OPPOSED BLADE, ISOLATION DAMPER & LIFTING LUGS.
	TOWER II ROOF		FLANDER	BF1-2H1W 4GGF-304-D3	60X27X25	150	FLANDERS	PRE-PLEATED 40	24X24X4	2	375	1500	0.25	3	FLANDERS	SUPERFLOW 2K SF2K-B FI-YY	24X24X12	2	375	1500	1.00	40	700	7/M10.07	STATIC PRESSURE TAPS, MAGNEHELIC GAGES, SWIVEL DOOR LATCH, DUCT TRANSITION, HEAVY DUTY GAS TIGHT OPPOSED BLADE, ISOLATION DAMPER & LIFTING LUGS.
	PANCAKE ROOF		FLANDER	BF1-2H2W 4GGF-304-D3	60X51X38	280	FLANDERS	PRE-PLEATED 40	24X24X4	4	375	1500	0.25	3	FLANDERS	SUPERFLOW 2K SF2K-B FI-YY	24X24X12	4	375	1500	1.00	40	700	7/M10.07	STATIC PRESSURE TAPS, MAGNEHELIC GAGES, SWIVEL DOOR LATCH, DUCT TRANSITION, HEAVY DUTY GAS TIGHT OPPOSED BLADE, ISOLATION DAMPER & LIFTING LUGS.
	PANCAKE ROOF		FLANDER	BF1-2H1W 4GGF-304-D3	60X27X38	150	FLANDERS	PRE-PLEATED 40	24X24X4	2	375	1500	0.25	3	FLANDERS	SUPERFLOW 2K SF2K-B FI-YY	24X24X12	4	375	1500	1.00	40	700	7/M10.07	STATIC PRESSURE TAPS, MAGNEHELIC GAGES, SWIVEL DOOR LATCH, DUCT TRANSITION, HEAVY DUTY GAS TIGHT OPPOSED BLADE, ISOLATION DAMPER & LIFTING LUGS.

PACKAGED CENTRAL PLANT CHILLED WATER PUMP SCHEDULE

TAG NO.	LOCATION	SERVICE	CATALOG DATA		CENTRIFUGAL CHILLERS CHILLED WATER VARIABLE PRIMARY PUMPS							CONDENSER WATER CONSTANT PRIMARY PUMPS							AIR SEPARATOR			EXPANSION TANK		RATED OPERATING PRESSURE (PSIG)	COOLING TOWER FAN VFD'S					SYSTEM VOLTAGE VOLT/PH/HZ	PUMPS FLA	PUMPS MCA	PUMPS MOC	TOTAL PACKAGE OPERATING WEIGHT (LBS.)	ANCHORAGE DETAIL			
			COMPANY NAME	MODEL TYPE	TYPE	QTY	GPM PER PUMP	TOTAL HEAD (FT. WG.)	MOTOR (HP)	RPM	EFF (%)	VFD	TYPE	QTY	GPM PER PUMP	TOTAL HEAD (FT. WG.)	MOTOR (HP)	RPM	EFF (%)	VFD	TYPE	CAPACITY (GPM)	SIZE DIA. x H (IN)		TYPE	CAPACITY (GAL)	SIZE DIA. x H (IN)	HP	QTY							VOLTAGE VOLT/PH/HZ	CT VFD SSPC (FLA)	CT VFD SSPC (FLA)
CHWP 1	CENTRAL PLANT CHILLER ROOM	CHILLED WATER	SYSTECON	SIVCH7200V104P18X1	VERTICAL IN-LINE	3	2,400	180	200	1800	77	YES								CENT	9600	54X124	BLADDER	528	48X84	125							460-3-60	728	786	900	63,000	3/M10.02
CWP 2	CENTRAL PLANT CHILLER ROOM	CONDENSER WATER	SYSTECON	SIPCO07800V10N18X1	VERTICAL IN-LINE																				125	100	3	460-3-60	378	409	500	460-3-60	378	409	500	53,100	4/M10.02	

REMARKS:

1. CHWP-1 SHALL BE EQUIPPED WITH SINGLE POINT POWER CONNECTION, ETL LISTING AS A COMPLETE PACKAGE, COMPLETE DDC CONTROL SYSTEM WITH GRAPHIC USER INTERFACE PANEL AND BAS INTERFACE.
2. CWP-1 SHALL BE EQUIPPED WITH A SINGLE POINT POWER CONNECTION FOR CDW PUMP SYSTEM AND ANOTHER SINGLE POINT CONNECTION FOR COOLING TOWER FAN VFD'S, ETL LISTING AS A COMPLETE PACKAGE, COMPLETE DDC CONTROL SYSTEM WITH GRAPHIC USER INTERFACE AND BAS INTERFACE.
3. BOTH PUMP PACKAGES SHALL INCLUDE PROVISION FOR THE INSTALLATION OF A FUTURE 4TH PUMP. THE 4TH PUMP SHALL BE FOR STANDBY.
4. SYSTEM SHALL BE FLOW TESTED AS A COMPLETE PACKAGE AT FACTORY AND IN NECESSARY, SPLIT FOR SHIPPING. INSTALLING CONTRACTOR SHALL REASSEMBLE SYSTEM AT JOB SITE PER MANUFACTURER'S INSTRUCTION AND TECHNICIAN OBSERVATION.
5. CONTROL WIRING TO AND FROM ALL CHILLER SHALL BE INSTALL BY BUILDING AUTOMATION SYSTEM CONTROL CONTRACTOR UNDER PUMP PACKAGE MANUFACTURE'S INSTRUCTION.
6. COORDINATE WITH COOLING TOWER MANUFACTURER FOR COMPATIBILITY.

SPECIAL SEISMIC CERTIFICATION CAN 2-1708A.5

YES

CONTROL VALVE SCHEDULE

I.D. NUMBER	LOCATION	SERVICE	LINE SIZE (IN)	FLOW RATE (GPM)	VALVE CONTROL	BODY STYLE	FAIL POSITION	ΔP (PSI)	CV		ELECTRICAL V/P/HZ	REMARKS
									90°	60°		
V 1	CHILLER ROOM	CHILLED WATER SYSTEM	12	2217	MODULATE	2-WAY	IN PLACE	4	4428	2319	120/1/60	
V 2	CHILLER ROOM	BYPASS	8	1000	MODULATE	2-WAY	IN PLACE	4	1911	1001	120/1/60	
V 3	CHILLER ROOM	CONDENSER WATER SYSTEM	12	2588	ON-OFF	2-WAY	IN PLACE	4	4428	2319	120/1/60	



NOTE:

PROVIDED BY SYSTECON INSTALLED BY CONTRACTOR

SPLIT-TYPE HEAT PUMP OUTDOOR PUMP UNIT SCHEDULE

I. D. NUMBER	LOCATION	CATALOG DATA			COOLING DATA				ELECTRICAL DATA			OPERATING WEIGHT (LB.)	REFRIG. PIPE LIQUID-VAPOR (IN.)	ANCHORAGE DETAIL REFERENCE	SPECIAL SEISMIC REQ'D (SSC)	REMARKS
		COMPANY NAME	MODEL TYPE	NOMINAL TONS	TOTAL (MBH)	SENS. (MBH)	L.A.T. DB/WB (F)	AMBIENT AIR TEMP. (F)	SEER	MCA (AMP)	VOLT/PH/HZ					
DX 1&2	OUTDOOR	CARRIER	38QRF-036	3	30.3	28.2	53.8/49.8	105	13	8.3	460/3/60	250	3/8 & 3/4	—	PRE-APPROVAL #OSP-125-10	WIRED CONTROL REQUIRED FOR DUCT FREE SYSTEM
DX 3	OUTDOOR	CARRIER	38QRF-036	3	30.3	28.2	53.8/49.8	105	13	8.3	460/3/60	250	3/8 & 3/4	—	PRE-APPROVAL #OSP-125-10	WIRED CONTROL REQUIRED FOR DUCT FREE SYSTEM

SPLIT-TYPE HEAT PUMP INDOOR UNIT SCHEDULE






I. D. NUMBER	LOCATION	SERVICE	CATALOG DATA		MAX S.A. (CFM)	HEATING		COOLING				LAT		IFM				O.A. (CFM)	OPER. WT. (L.B.)	ANCHORAGE DETAIL REFERENCE	SPECIAL SEISMIC REQ'D (SSC)	REMARKS
			COMPANY NAME	MODEL TYPE		ENTERING AIR TEMP	MBH	EAT WB	TOTAL COOLING (MBH)	SENSIBLE COOLING (MBH)	DB	WB	QTY	WATTS	MCA (AMP)	MCCP (AMP)	VOLT./PH @ 60 HZ					
	INDOOR	FIRE PUMP ROOM	CARRIER	40QNQ-36	900	62	35.5	62	30.3	28.2	53.8	49.8	1	74	0.55	15	208/230 -1-60	0	60	-	PRE-APPROVAL #OSP-125-10	WIRED CONTROL REQUIRED FOR DUCT FREE SYSTEM
	INDOOR	RADIO ROOM	CARRIER	40QNQ-36	900	62	35.5	62	30.3	28.2	53.8	49.8	1	74	0.55	15	208/230 -1-60	0	60	-	PRE-APPROVAL #OSP-125-10	WIRED CONTROL REQUIRED FOR DUCT FREE SYSTEM

FAN COIL UNIT SCHEDULE (FOR CATHLAB EQUIPMENT ROOM)

ID NUMBER	LOCATION	AREA SERVED	MFG	MODEL NUMBER	TYPE	SUPPLY FAN				COOLING COIL										ELECTRICAL DATA		OPERATING WEIGHT LBS	ANCHORAGE REFERENCE DETAIL	SPECIAL SEISMIC CERTIFICATION CAN 2-1708A.5		
						BLOWER CFM	EXT S.P. WG	FAN HP	CAPACITY MBH TOTAL	CAPACITY MBH SENSIBLE	EAT		LAT		ROWS	FINS /IN.	ENT. WATER F°	LEAV. WATER F°	FLOW RATE (GPM)	PD						
FCU 1-W	LEVEL 3 AREA A	ELECTRONIC EQUIPMENT ROOM	TRANE	BCHC07262	CHILLED WATER	2,000	1.5	1-1/2	91	59	80	67	53	52	6	11	42.0	56	13.5	0.6	8.0	460/3/60	YES	400	D4/S5.2	YES
FCU 2-W	LEVEL 3 AREA E	CATH LAB #2 EQUIPMENT ROOM	TRANE	BCHC07262	CHILLED WATER	2,000	1.5	1-1/2	91	59	80	67	53	52	6	11	42.0	56	13.5	0.6	8.0	460/3/60	YES	400	D4/S5.2	YES
REMARKS:																										

REMARKS:

HEATING COIL SCHEDULE

ID NUMBER	LOCATION	SERVICE	MANUFACTURE	MODEL TYPE	COIL CAPACITY								MINIMUM COIL		MAX PD		COIL WORK PRESS PSI	OPERATING WEIGHT (LB)	
					FLOW CFM	ENT DB	AIR WB	F DB	AIR WB	WATER ENT	LV LV	F GPM	TOTAL LOAD MBH	ROW NO	FIN /IN	WTR FT			AIR IN
HC-FCU-B9	LOWER LEVEL		MCQUAY	BUILT-IN	3500	60	—	90	—	140	180	10	120	2	8	2.5	0.1	125	
HC-FCU-N1	BOILER ROOM		MCQUAY	BUILT-IN	3000	60	—	92.68	—	140	180	7.0	138	2	12	3.59	0.22	125	
 INCLUDED WITH AIR HANDLER UNIT																			

① INCLUDED WITH AIR HANDLER UNIT



FKP Architects

ARCHITECT OF RECORD

"Architect of Record signature line only; this drawing was not prepared under the direct supervision of the Architect of Record. The direct responsibility for preparation of this sheet lies with its corresponding professional stamp and signature. The signature of the Architect of Record in general responsible design of the project is provided as required by Title 24, Part 1, Section 7-115 (a)"

ARCHITECT - PAUL C. GLORIOD

CONSULTANT

T M A D
TAYLOR
& GAINES

• STRUCTURAL
• MECHANICAL
• ELECTRICAL
• CIVIL

100 South Anaheim Boulevard, Suite 150
Anaheim, California 92805
Phone: 714.490.5555 Fax: 714.490.5560
Project No. 2305-163-07



Changes on these drawings do not consist of materially altered changes to approved drawings and don't require a change order.
OSHPD review FLSO
OSHPD review DSE

REVISIONS

08/04/2010	ASI #11
09/02/2010	CHANGE ORDER #81
10/01/2010	CHANGE ORDER #86
02/24/2011	CHANGE ORDER #141
08/22/2011	CHANGE ORDER #256
11/02/2011	CHANGE ORDER #271

APPROVAL

Office of Statewide Health Planning & Development
INSTRUCTION BUILDING
OFFICIAL APPROVAL
OSHPD

PROJECT NAME

CHILDREN'S HOSPITAL
OF ORANGE COUNTY

455 S. Main St.
Orange, CA 92668-3874

TOWER II

CHOC
HOSPITAL

PROJECT NUMBER

12011.00
Increment #7

OSHPD - PROJECT NUMBER

IL 072072-30

ISSUE

OSHPD PERMIT

DATE

01/27/2010

SCALE

NONE

DRAWING TITLE

EQUIPMENT SCHEDULES

DRAWING NUMBER

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