

**LBNL STANDARDS
MECHANICAL STANDARD DETAILS**

Detail # _____ Title _____

HVAC DETAILS

H101	2-WAY HEATING /COOLING COIL PIPING DIAGRAM
H102	AHU SUPPORT ON ROOF
H103	AUTOMATIC AIR VENT DETAIL
H104	BOILER FLOW DIAGRAM
H105	CEILING ACOUSTICAL AIR BOOT DETAIL
H106	CEILING DIFFUSER FLEXIBLE CONNECTION DETAIL
H107	CEILING MOUNTED EXHAUST FAN INSTALL DETAIL
H108	CEILING FIRE DAMPER
H109	CEILING OUTLET
H110	CEILING MOUTED LINEAR DIFFUSER
H111	CHILLED WATER COIL PIPING WITH 3-WAY VALVE
H112	CHWS & HWS BOOSTER PUMP PIPING CONNECTION
H113	CONDENSATE DRAIN TRAP PIPING DETAIL
H114	CONDENSATE TRAPS COOLING COILS
H115	CURB PENETRATION DETAIL
H116	DUCT CONNECTION TO SUPPOR STEEL
H117	DUCT, PIPE SUPPORT ON ROOF DETAIL
H118	DUCT SUPPORT DETAIL
H119	DUCT SUPPORT TO CORRIDOR WALL
H120	DUCT SUPPORT DETAIL
H121	DUCT THRU ROOF
H122	DUCT THRU ROOF
H123	EXHAUST FAN SUPPORT ON ROOF
H124	FAN MOUNTING DETAIL
H125	FIRE & SMOKEDAMPER COMBINATION INSTALLATION DETAIL
H126	FLUE DETAIL
H127	FUME HOOD CONNECTIONS
H128	FUME HOOD SCHEDULE
H129	FUME HOOD SPRINKLER DETAIL
H130	WALL GRILLE FIRE DAMPER DETAIL
H131	HEAT COIL CONNECTION DIAGRAM
H132	HEAT COIL PIPING DIAGRAM
H133	HOT WATER COIL PIPING WITH 2-WAY VALVE
H134	DUCT CONNECTION TO SUPPORT STEEL
H135	OUTSIDE LOUVER WITH FIRE DAMPER
H136	MULTIPLE COIL PIPING – HOT WATER
H137	MULTIZONE TEMPERATURE CONTROL DIAGRAM
H138	BEAM PENETATION DETAIL
H139	RECTANGULAR DUCT SUPPORT
H140	REFRIGERATION PIPING DIAGRAM
H141	ROOF CURB DETAIL
H142	ROOF EXHAUST FAN
H143	SLEEPER DETAIL
H144	SUPPORT DETAIL FOR OUTDOOR UNIT
H145	UTILITY FAN ROOF MOUNT

**LBNL STANDARDS
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<u>Detail #</u>	<u>Title</u>
H146	VAV BOX INSTALLATION DETAIL
H147	VAV BOX WITH REHEAT COIL
H148	PIPE HANGER DETAIL
H149	TYPICAL PIPE HANGER DETAIL
H150	PIPE HANGER DETAIL
H151	TYPICAL PIPE SUPORT DETAIL
H152	TYPICAL RISER SEIMIC BRACE DETAIL
H153	PIPE HANGER DETAIL
H154	PIPE SUPPORT
H155	PIPE SUPPORT – EXPANSION TYPE/WALL MOUT
H156	PIPE SUPPORT/FLOOR MOUNTED
H157	PIPE SUPPORT TRAPEZE
H158	PIPE SUPPORT (SEISMIC BRACING)
H159	PLATE SUPPORT MOUNTING
H160	PUMP SUPPORT

PIPING

P101	DI WATER PURIFICATION STATION
P102C	EMERGENSY EYE/FACE WASH AND SHOWER STATION
P103A	HEATING HOT WATER PUMP ARRANGEMENT
P104	DI/LCW FULL RECIRCULATION LOOP
P105	INSTANT FLOW WATER HEATER
P106	ISLAND WASTE AND VENT PIPING DIAGRAM
P107	LCW BY PASS DIAGRAM
P108	DEIONIZED & REVERSE OSMOSIS WATER SYSTEM PIPING DIAGRAM
P109	DI/LCW MAIN LOOPWITH SIDE DROPS DIAGRAM
P110A	EMERGENCY EYE/FACE WASH & SHOWER INTALLATION DETAIL
P111	TYPICAL ROOF PIPE SUPPORT DETAIL
P112	SWING-AWAY-EEWS-INSTALL-DETAIL
P113	VACUUM PUMP DETAIL
P114	PIPE SUPPORT SEISMIC BRACING

FIRE PROTECTIONS

FP101	FIRE SPRINKLER DETAIL
FP102	SPRINKLER INSTALLATION DETAIL
FP103	FIRE SPRINKLER DETAIL
FP104	SPRINKLER CONNECTION DETAIL
FP105	SPRINKLER CONNECTION DETAIL
FP106	SPRINKLER INSTALLATION DETAIL
FP107	SPRINKLER CONNECTION DETAIL
FP108	PIPE PENETRATION DETAIL-1HR WALL

**LBNL STANDARDS
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STANDARD SCHEDULES

SCH101	AIR HANDLING SCHEDULE
SCH102	DIFFUSER & GRILLE SCHEDULE
SCH103	DUCT FREE MULTI SPLIT SCHEDULE
SCH104	EQUIPMENT AND MATERIAL LIST
SCH105	RETURN, EXHAUST BLOWER SCHEDULE
SCH106	STEAM HEATING COIL SCHEDULE

CONTROL SYSTEM

J101	MICROSTAR STANDARD DETAIL
J102	NC/BA INSTALLATION