

REV	DATE	DESCRIPTION

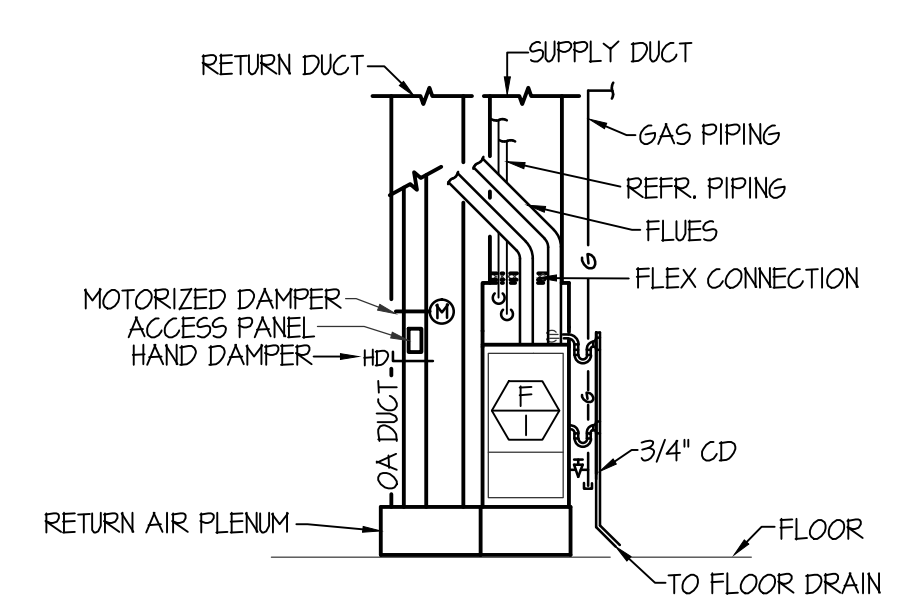
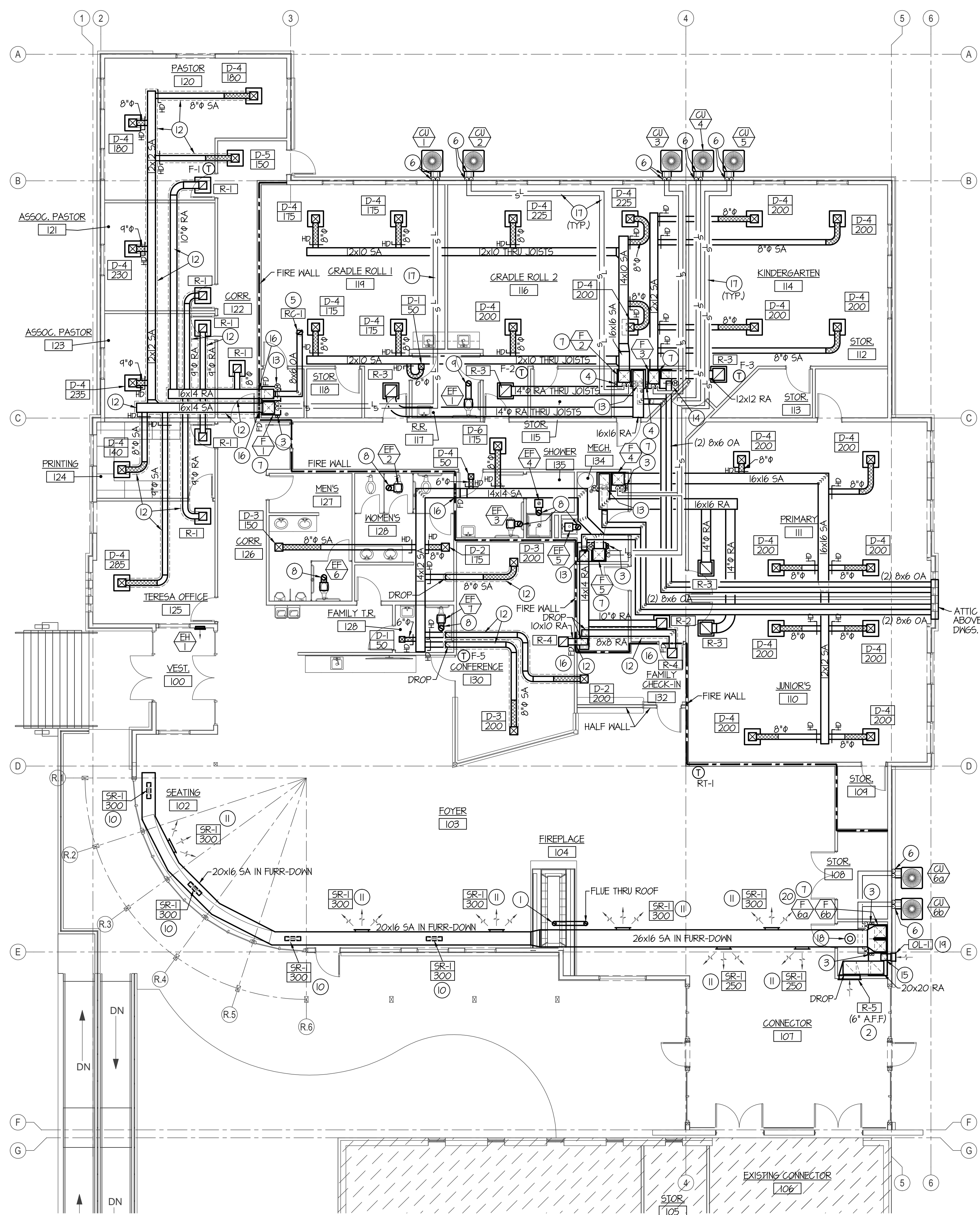
New Building Addition For:
CAMPION SEVENTH-DAY ADVENTIST CHURCH
 300 42nd St. SW
 Loveland, CO 80537-7520
 MOUNTAIN WEST ARCHITECTS | 543 25th St. - COBLEN, UT 84401 | PH: 801-388-6052 | www.mountainwestarchitects.com

PROJECT:
MECHANICAL FLOOR PLAN
 SHEET TITLE:

SHEET NUMBER:
M100
 DO NOT SCALE DRAWING

PLAN NOTES:

- 1 INSTALL GAS FIREPLACE FLUE(S) FROM FIREPLACE THRU ROOF. SIZE AND MATERIAL AS PER MANUFACTURER'S INSTRUCTIONS. SEAL ROOF PENETRATION WEATHERTIGHT. OFFSET FLUE THRU ROOF 50 AS TO SCREEN BEHIND PARAPET WALL. SEE ARCH'L. ROOF PLAN.
- 2 INSTALL RETURN GRILLE AT 6" A.F.F. TO BOTTOM OF GRILLE.
- 3 RISE (2) 3"Ø FURNACE FLUES UP THRU SHINGLED ROOF AREA AND TERMINATE WITH VERTICAL VENT TERMINAL ASSEMBLY. PAINT ASSEMBLY WITH HIGH TEMP. PAINT TO MATCH ROOF COLOR. SEE DETAIL ON SHEET M200.
- 4 RISE (2) 3"Ø FURNACE FLUES UP THRU SINGLE PLY MEMBRANE ROOF AREA AND TERMINATE WITH VERTICAL VENT TERMINAL ASSEMBLY. SEE DETAIL ON SHEET M200.
- 5 INSTALL ROOF CAP FOR OUTSIDE AIR A MINIMUM OF 10'-0" FROM ANY FLUES OR PLUMBING VENTS THRU ROOF.
- 6 DROP REFRIGERANT PIPING IN STUD SPACE OF EXTERIOR WALL AND OUT THRU WALL AND CONNECT TO CONDENSING UNIT AS SHOWN. COVER EXPOSED PIPING WITH REFRIGERANT PIPING COVER. SEE DETAIL ON SHEET M200.
- 7 INSTALL FURNACE ON 12" HIGH RETURN AIR PLENUM. SEE DETAIL ON SHEET M200.
- 8 RISE EXHAUST DUCT UP THRU ROOF TO ROOF CAP LOCATED IN SHINGLED ROOF AREA. SEE DETAIL ON SHEET M200.
- 9 RISE EXHAUST DUCT UP THRU ROOF TO ROOF CAP LOCATED IN SINGLE PLY MEMBRANE ROOF AREA. SEE DETAIL ON SHEET M200.
- 10 INSTALL SUPPLY REGISTER ON BOTTOM OF FURR-DOWN AND ADJUST BLADES AT 45° ANGLE DOWN AND TOWARDS WINDOWS.
- 11 INSTALL SUPPLY REGISTER ON SIDE OF FURR-DOWN AND ADJUST BLADES AT 45° ANGLE DOWN TOWARDS THE FLOOR.
- 12 DUCTWORK TO BE INSTALLED IN COLD ATTIC SPACE AND WRAPPED EXTERNALLY WITH 1-1/2" THICK THERMAL DUCTWRAP.
- 13 DROP 8x6 OUTSIDE AIR DUCT DOWN IN MECHANICAL ROOM AND CONNECT TO FURNACE PLENUM. INSTALL HAND DAMPER, ACCESS PANEL AND MOTORIZED DAMPER IN VERTICAL PORTION OF 8x6 OA DUCT. INTERLOCK MOTORIZED DAMPER WITH FURNACE OPERATION AND BALANCE HAND DAMPER TO PROVIDE 160 CFM. SEE UPFLOW FURNACE ELEVATION ON THIS SHEET.
- 14 DROP 8x6 OUTSIDE AIR DUCT DOWN IN MECHANICAL ROOM AND CONNECT TO FURNACE PLENUM. INSTALL HAND DAMPER, ACCESS PANEL AND MOTORIZED DAMPER IN VERTICAL PORTION OF 8x6 OA DUCT. INTERLOCK MOTORIZED DAMPER WITH FURNACE OPERATION AND BALANCE HAND DAMPER TO PROVIDE 100 CFM. SEE UPFLOW FURNACE ELEVATION ON THIS SHEET.
- 15 DROP 10x8 OUTSIDE AIR DUCT DOWN IN MECHANICAL ROOM AND CONNECT TO FURNACE PLENUM. INSTALL HAND DAMPER, ACCESS PANEL AND MOTORIZED DAMPER IN VERTICAL PORTION OF 10x8 OA DUCT. INTERLOCK MOTORIZED DAMPER WITH FURNACE OPERATION AND BALANCE HAND DAMPER TO PROVIDE 300 CFM. SEE UPFLOW FURNACE ELEVATION ON THIS SHEET.
- 16 INSTALL FIRE DAMPER IN DUCT PENETRATING 1 HR FIRE WALL ASSEMBLY.
- 17 RUN REFRIGERANT PIPING AS HIGH AS POSSIBLE IN CEILING SPACE.
- 18 INSTALL UL RATED SMOKE DETECTOR IN RETURN AIR DUCTWORK FOR EMERGENCY FAN SHUT-DOWN. INTERLOCK WITH THINNED FURNACES F-6a & F-6b.
- 19 INSTALL LOUVER ON WALL AS HIGH AS POSSIBLE.
- 20 PROVIDE THINNING KIT FOR FURNACES F-6a AND F-6b.



TYPICAL UPFLOW FURNACE ELEVATION
NO SCALE

MECHANICAL LEGEND	
SYMBOL	DESCRIPTION
	HAND DAMPER
	RECTANGULAR SUPPLY AND RETURN AIR DUCT TAKE-OFF
	TURNING VANES
	DUCT TRANSITION
	INSULATED FLEXIBLE DUCT
	SIDEWALL REGISTER (SUPPLY AIR)
	SIDEWALL GRILLE (RETURN AIR)
	CEILING DIFFUSER
	CEILING MOUNTED EXHAUST FAN
	FURNACE OR FAN COIL UNIT
	EQUIPMENT SYMBOL
	ELECTRONIC THERMOSTAT

MECHANICAL FLOOR PLAN
SCALE: 1/8" = 1'-0"

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