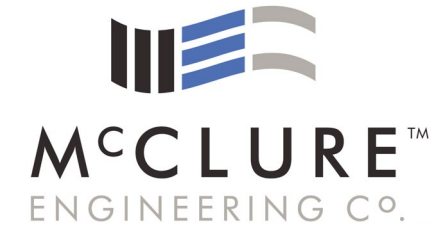


# 3D PRINTED HOUSING TECHNOLOGY

PRESENTED BY STEPHEN BASTIEN II



Better Housing  
COALITION



# THE PRINTER



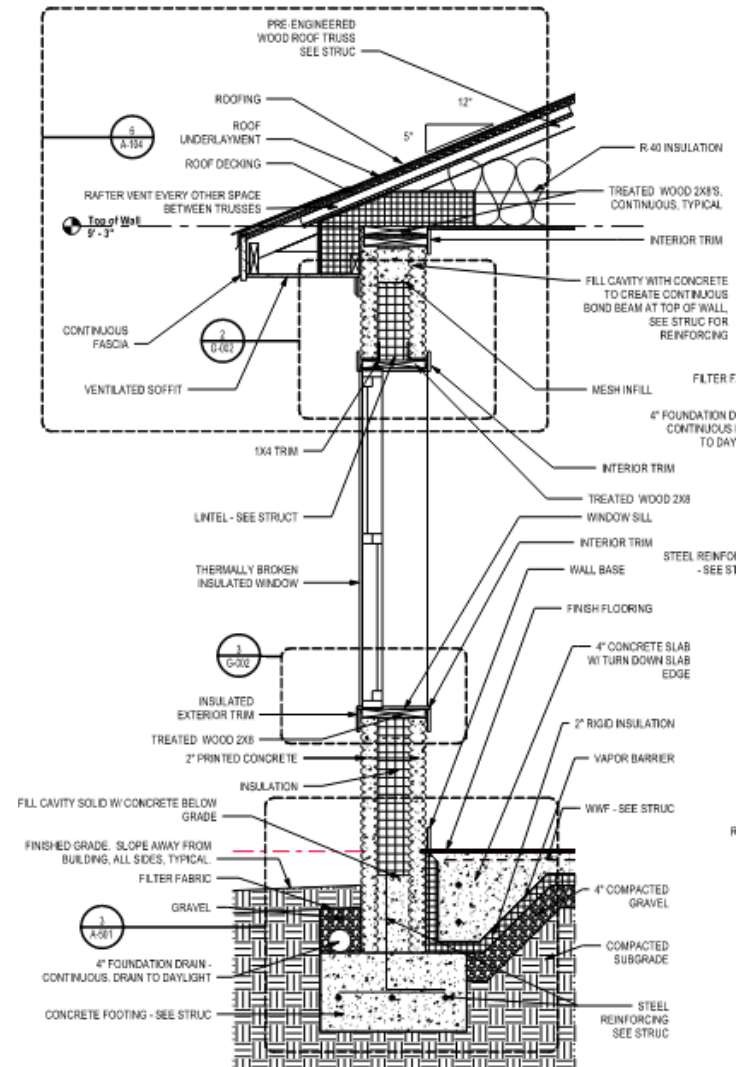
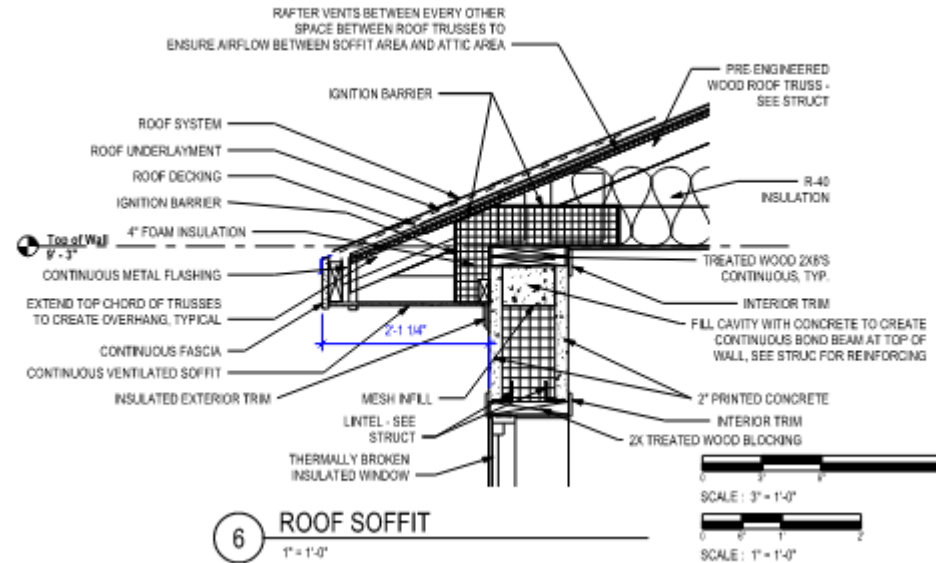
Simple yet complex adaptation of what we think of when we hear 3D printed.

- Keeps the same structural design
- Runs on similar principals and theory's
- Complexity starts at the printer head and continues with the technology

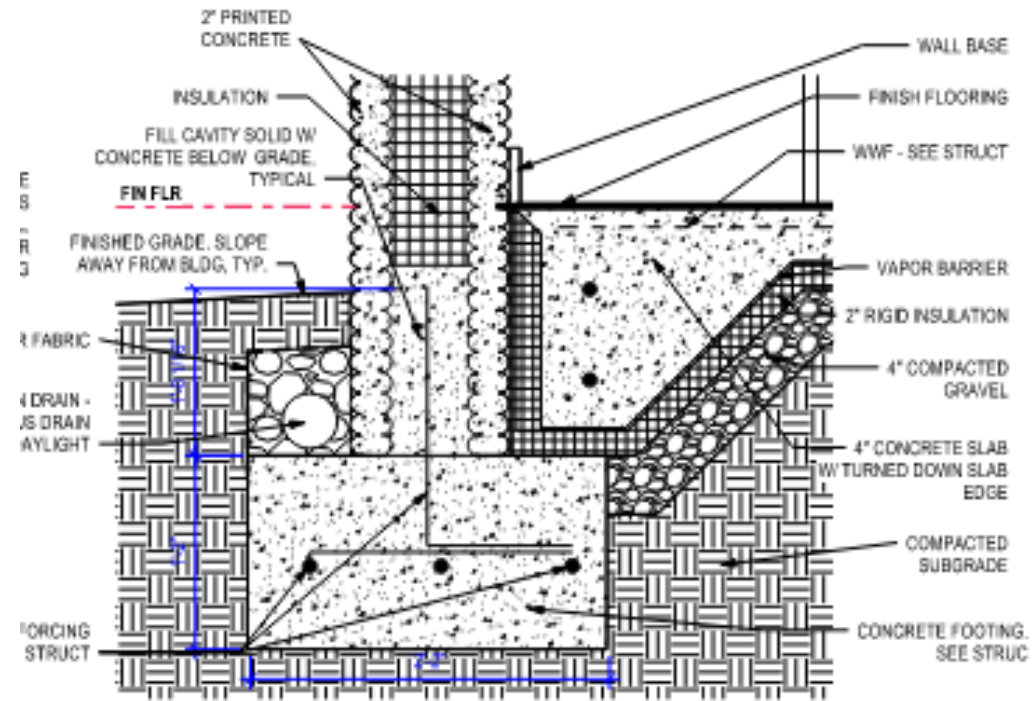




# ENGINEERING FEATURES



# ENERGY CONSIDERATIONS



3 CONTINUOUS FOOTING DETAIL  
1 1/2" = 1'-0"

# ENERGY CONSIDERATIONS

## HEAT PUMP SCHEDULE

INDOOR UNIT DATA			OUTDOOR UNIT DATA			RATED COOLING CAPACITY (BTU/HR)	RATED HEATING CAPACITY @ 47F (BTU/HR)
MARK	MAKE	MODEL NO.	MARK	MODEL NO.	VOLTAGE		
AHU-1	MITSUBISHI	SVZ-KP18NA	HP-1	SUZ-KA18NAR1	208/230V, 1-PHASE, 60Hz	18,000	22,800

## IN-WALL DEHUMIDIFIER SCHEDULE

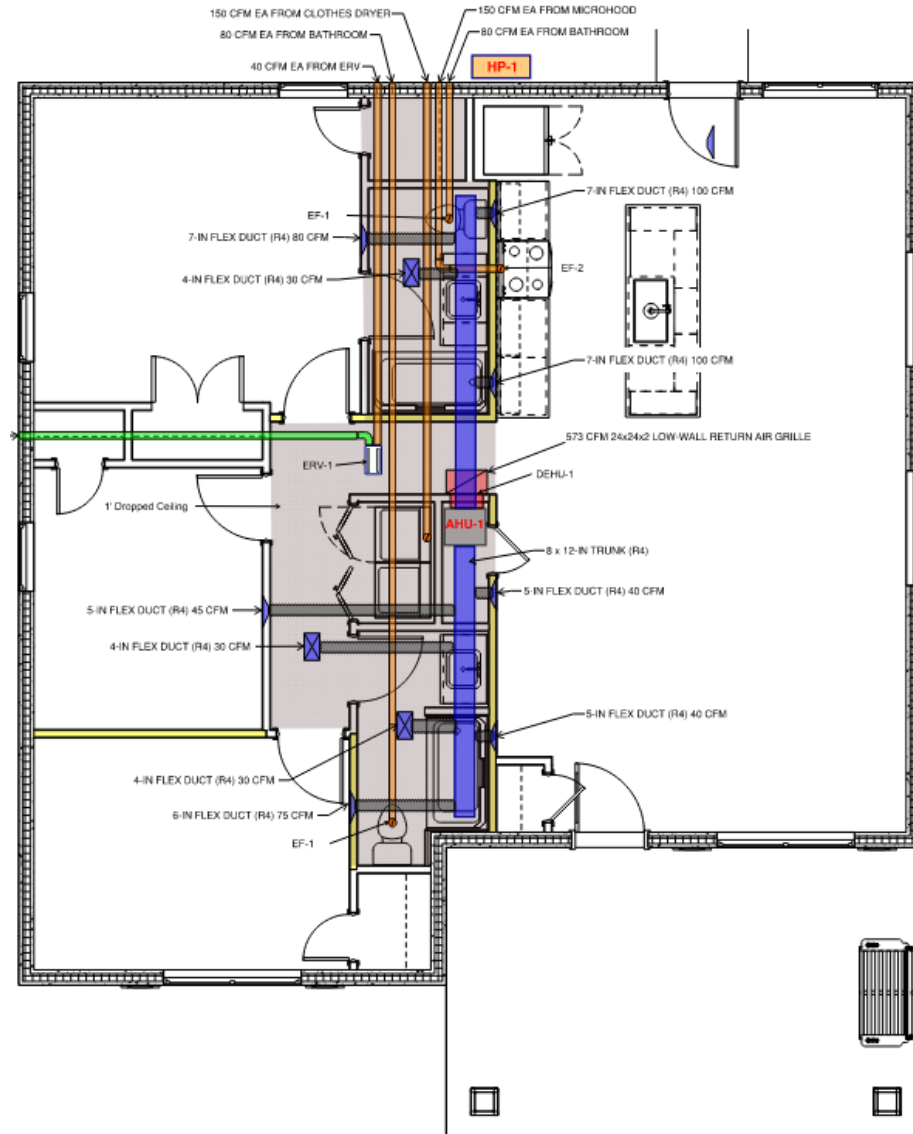
MARK	MAKE	MODEL NO.	FLA	VOLTAGE
DEHU-1	ULTRA-AIRE	MD-33	2.8	120V, 60Hz

## VENTILATION SCHEDULE

LOCATION	MARK	DESIGN AIRFLOW	MAKE	MODEL NO.	DUCT SIZE (IN)
HALL	ERV-1	40	PANASONIC	FV-04EV1	4
BATHROOM	EF-1	80	PANASONIC	FV-0510VSB1	4
KITCHEN	EF-2	150	N/A	OWNER SELECTED	6
CLOTHES DRYER	EF-3	150	N/A	OWNER SELECTED	4

## HEAT PUMP AIRFLOW SCHEDULE

BRANCH	DESIGN AIRFLOW (CFM)	DUCT SIZE (IN)	DIFFUSER	NOTES
LIVING ROOM	40	5	8X4 HART & COOLEY #A6180B	FLEX (R-4), PROVIDE MANUAL VOLUME DAMPER
LIVING ROOM	40	5	8X4 HART & COOLEY #A6180B	FLEX (R-4) PROVIDE MANUAL VOLUME DAMPER
KITCHEN	100	7	8X4 HART & COOLEY #A6180B	FLEX (R-4) PROVIDE MANUAL VOLUME DAMPER
KITCHEN	100	7	8X4 HART & COOLEY #A6180B	FLEX (R-4) PROVIDE MANUAL VOLUME DAMPER
MASTER BATHROOM	30	4	8X4 HART & COOLEY #A6180B	FLEX (R-4) PROVIDE MANUAL VOLUME DAMPER
MASTER BEDROOM	80	7	8X4 HART & COOLEY #A6180B	FLEX (R-4) PROVIDE MANUAL VOLUME DAMPER
BEDROOM 1	45	5	8X4 HART & COOLEY #A6180B	FLEX (R-4) PROVIDE MANUAL VOLUME DAMPER
BEDROOM 2	75	6	8X4 HART & COOLEY #A6180B	FLEX (R-4) PROVIDE MANUAL VOLUME DAMPER
HALL BATHROOM	30	4	8X4 HART & COOLEY #A6180B	FLEX (R-4) PROVIDE MANUAL VOLUME DAMPER
HALL	30	4	8X4 HART & COOLEY #A6180B	FLEX (R-4) PROVIDE MANUAL VOLUME DAMPER
RETURN	573	24 x 12	24 x 24 x 2 REMOTE FILTER GRILLE	METAL (R-4), PROVIDE 24 x 24 x 2 MERV 13 FILTER



FIRST FLOOR MECH PLAN

3/8" = 1'-0"