



RESIDENTIAL HVAC SYSTEM DESIGN FORM

KOOTENAI COUNTY COMMUNITY DEVELOPMENT
451 Government Way, Coeur d'Alene, ID 83814 (208) 446-1070

AGENCY USE ONLY

MECHANICAL PERMIT #: _____
BUILDING PERMIT #: _____
ELECTRONIC SUBMITTAL: YES: _____ NO: _____

PLEASE **COMPLETE ALL** APPLICABLE FIELDS BELOW

DESIGNATED CONTACT PERSON

NAME: _____
PHONE: _____ CELL: _____
EMAIL: _____

MECHANICAL CONTRACTOR

CONTRACTOR NAME: _____
LICENSE NUMBER: _____ PHONE: _____ EMAIL: _____

ATTACHMENTS

REQUIRED ATTACHMENTS

_____ MANUFACTURER'S PERFORMANCE DATA
_____ SHEET MANUAL D & J WORKSHEETS
_____ DUCT DISTRIBUTION LINE DRAWINGS

CHOOSE ONE (1) OF THE FOLLOWING:

_____ MANUAL J1 FORM & WORKSHEET:
OR _____ MJ1AE FORM & WORKSHEET:
OR _____ OTHER APPROVED FORM & WORKSHEETS:

HVAC LOAD CALCULATIONS (FROM WORKSHEET; PER 2018 IRC M1401.3)

DESIGN CONDITIONS:

WINTER DESIGN CONDITIONS:

OUTDOOR TEMPERATURE: _____
INDOOR TEMPERATURE: _____
TOTAL HEAT LOSS: _____ BTU

SUMMER DESIGN CONDITIONS:

OUTDOOR TEMPERATURE: _____
INDOOR TEMPERATURE: _____
LATENT HEAT GAIN: _____ BTU
TOTAL HEAT GAIN: _____ BTU

BUILDING CONSTRUCTION INFORMATION:

BUILDING:

NUMBER OF BEDROOMS: _____
CONDITIONED FLOOR AREA: _____ SQ. FT.
NUMBER OF OCCUPANTS: _____ BEDROOMS + 1

WINDOWS:

EAVE OVERHANG DEPTH: _____ FT
U-FACTOR: _____
OF SKYLIGHTS: _____
DIRECTION ORIENTATION OF FRONT DOOR: _____

HVAC EQUIPMENT SELECTION (PER 2018 IRC M1401.3)

HEATING EQUIPMENT DATA:

EQUIPMENT TYPE: _____
MANUFACTURER: _____
MODEL NUMBER: _____
HEATING CAPACITY: _____

COOLING EQUIPMENT DATA:

EQUIPMENT TYPE: _____
MANUFACTURER: _____
MODEL NUMBER: _____
TOTAL COOLING CAPACITY: _____

BLOWER DATA:

HEATING CFM: _____
COOLING CFM: _____
STATIC PRESSURE: _____

HVAC DUCT DISTRIBUTION DESIGN (PER 2018 IRC M1601.1)

DESIGN AIRFLOW: _____ LONGEST SUPPLY RUN: _____
EXTERNAL STATIC PRESSURE: _____ LONGEST RETURN RUN: _____
COMPONENT PRESSURE LOSSES: _____ TOTAL EFFECTIVE LENGTH: _____
AVAILABLE STATIC PRESSURE: _____ FRICTION RATE: _____
TRUNK TYPE (SELECT 1) DUCT BOARD: _____ SHEET METAL: _____ FLEX: _____ OTHER: _____
BRANCH TYPE (SELECT 1) DUCT BOARD: _____ SHEET METAL: _____ FLEX: _____ OTHER: _____

(AVAILABLE STATIC PRESSURE = ESP-CPL) (FRICTION RATE= ASP x 100/TEL)

THE LOAD CALCULATIONS, EQUIPMENT SELECTION AND DUCT SYSTEM DESIGN WERE PERFORMED BASED ON THE PLANS AS SUBMITTED FOR A BUILDING PERMIT. THE EQUIPMENT AND DUCT DESIGN AS APPROVED WILL BE INSTALLED IN THE FIELD

OWNER OR AUTHORIZED AGENT SIGNATURE _____ DATE _____

(PRINT NAME)

- IF HOME QUALIFIES FOR MJ1AE FORM BASE ON ABRIDGE EDITION CHECKLIST