



CITY OF COEUR D'ALENE Residential HVAC System Design Form

Building Permit No. _____

Please COMPLETE "ALL" Fields Below
(For new dwellings submitted for building permits
after 01-01-2010)

DESIGNATED CONTACT PERSON

Name: _____
Phone: _____ Cell: _____
E-mail: _____

Mechanical Contractor: _____

License Number: _____

Phone Number: _____

E-mail: _____

Job Address: _____

REQUIRED ATTACHMENTS

ATTACHED

- | | | |
|---|-----|--------------------------|
| 1. Manufacturer's Performance Data Sheets | Yes | <input type="checkbox"/> |
| 2. Manual D Worksheets | Yes | <input type="checkbox"/> |
| 3. Duct Distribution Line Drawing | Yes | <input type="checkbox"/> |
| 4. Choose one (1) of the following: | | |
| a) Manual J1 Form & Worksheets | Yes | <input type="checkbox"/> |
| b) MJ1AE Form & Worksheets* | Yes | <input type="checkbox"/> |
| c) Other Approved Form & Worksheets | Yes | <input type="checkbox"/> |

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 _____
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 _____

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 _____
Cooling Capacity _____

Blower Data:

Heating cfm _____
Cooling cfm _____
Static Pressure _____

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

Design Airflow _____	Longest Supply Run _____	Trunk Type (circle 1):	Branch Type (circle 1):
External Static Pressure _____	Longest Return Run _____	duct board, flex,	duct board, flex,
Pressure Losses _____	Total Effective Length _____	sheet metal, other:	sheet metal, other:
Available Static Pressure _____	Friction Rate _____		
(Available Static Pressure = ESP-CP)		(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 system will be installed in the field per the approved equipment and duct design.

CONTRACTOR (Please Print) _____

Contractor Signature: _____ Date _____

* If Home qualifies for MJ1AE form base on Abridged Edition Checklist