



Town of Basalt 101 Midland Ave.
 Basalt, CO 81621
 (970) 927-4701

MANUAL J and S REQUIREMENTS

Type I Construction subject to the IRC, Type II Construction subject to IECC Residential

- Software used must be ACCA Approved; list of software can be found here:

<https://www.acca.org/standards/approved-software>

- Design Criteria:

- o Elevation: 6,611
- o Heating, dry bulb: -2
- o Cooling, dry bulb: 85
- o Cooling, wet bulb: 57
- o Inside Temp, Winter: 68
- o Inside Temp, Summer: 75
- o Heating Degree Days: 7850
- o Cooling Degree Days: 182

- Load Short Form, Entire House

- Component Construction (Building Assemblies), Entire House

- o Wall, roof and floor assemblies & window u-factors, needs to match current design.

- Project Summary, Entire House

- [Manual S Compliance Spreadsheet](#)

o **Table 1. Manual S equipment selection sizing limitations.**

Equipment	Sizing Limitations	Reference (section)
Furnaces	100–140% of total heating load	2-2
boilers	100–140% of total heating load	2-2
air conditioners	115% of total cooling load*	3-4
heat pumps	115% ¹ or 125% ² of total cooling load*	4-4
supplemental heat (heat pumps)		
electric	based on equipment balance point	4-8
dual fuel	100–140% of total heating load	6-8
emergency heat (heat pumps)	based on local codes	4-9

1. Heat pumps in a cooling dominant climate are allowed to be 115% of the cooling level.

2. Heat pumps in a heating dominant climate are allowed to be 125% of the cooling level.

*The size of the cooling equipment must be based on the same temperature and humidity conditions that were used to calculate the Manual J loads.

- Note that Basalt’s Altitude Correction Factor is 0.787.

- Plan Sketch with North Arrow