

SAB Construction  
Redbud II

| Air Combustion Calculation                                                                                                                         |         |            |        |
|----------------------------------------------------------------------------------------------------------------------------------------------------|---------|------------|--------|
| Per IRC 2006 G2407.5.1                                                                                                                             |         |            |        |
| Fuel Burning Appliance #1                                                                                                                          | Furnace | 100000     | Btu/h  |
| Fuel Burning Appliance #2                                                                                                                          |         | 50000      | Btu/h  |
| Fuel Burning Appliance #3                                                                                                                          |         | NA         | Btu/h  |
|                                                                                                                                                    |         |            |        |
| Total Btu/h                                                                                                                                        |         | 150000     | Btu/h  |
|                                                                                                                                                    |         |            |        |
| Area of useable space                                                                                                                              |         | 1108       | sq.ft  |
| Ceiling height in useable space (no sheetrock)                                                                                                     |         | 9          | ft     |
| Volumne of space                                                                                                                                   |         | 9972       |        |
|                                                                                                                                                    |         |            |        |
| Required Volume of Air = total Btu/h * (50 cu.ft/1000 Btu/h)                                                                                       |         | 7500       | cu.ft. |
|                                                                                                                                                    |         |            |        |
| Required Area of Usable Space                                                                                                                      |         | 834        | sq.ft. |
| Standard Method of Work?                                                                                                                           |         | BAD        |        |
| Combustion Air Transfer Grille                                                                                                                     |         |            |        |
| Per IRC G2407.5.3.1                                                                                                                                |         |            |        |
| Required Opening Free Space = 1 sq.in./1000 Btu/h                                                                                                  |         |            |        |
|                                                                                                                                                    | =       | 160        | sq.in. |
| Size of grille to be used                                                                                                                          | =       | (2) 14"x8" |        |
| Note: If fuel burning appliances are enclosed, (1) opening is required within 12" of floor and (1) opening is required within 12" of top enclosure |         |            |        |

SAB Construction