

SAB Construction  
Solaia II

Air Combustion Calculation			
Per IRC 2018 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
<b>Total Btu/h</b>		<b>150000</b>	<b>Btu/h</b>
Area of useable space		455	sq.ft
Ceiling height in useable space (no sheetrock)		9	ft
Volumne of space		4095	
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?		<b>BAD</b>	
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			

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