

Project El-Bethel Pentecostal Church HVAC Calculations

Fri Jan 5 14:53:24 CST 2007

There is no calculation for North & Shaded Glass

There is no calculation for NorthEast and NorthWest Glass

The Btuh Gain for 54 SqFt of East and West Double Pane Glass = 5130

There is no calculation for SouthEast and SouthWest Glass

The Btuh Gain for 198 SqFt of South Double Pane Glass = 13860

There is no calculation for SkyLights

There is no calculation for Windows in Doors

The Btuh Gain for 2400 SqFt of Wood R-11 & 1/2" Gypsum Wall Number 1 = 6240

The Btuh Gain for 2400 SqFt of Wood R-11 & 1/2" Gypsum Wall Number 2 = 6240

The Btuh Gain for 1440 SqFt of Wood R-11 & 1/2" Gypsum Wall Number 3 = 3744

The Btuh Gain for 1440 SqFt of Wood R-11 & 1/2" Gypsum Wall Number 4 = 3744

The Btuh Gain for 6000 SqFt of Roof Only 5.25" - 6.5" R-19; Ceiling Number 1 = 31200

There is no calculation for Ceiling Number 2

There is no calculation for Floor Number 1

There is no calculation for Floor Number 2

The Btuh Gain for 600 People = 6000

There is no calculation for Motor HP

There is no calculation for Ducts Out of Conditioned Spaces

The Btuh Gain for 9000 SqFt of Area Lighting in an Office = 27000

There is no calculation for Coffee Machines

There is no calculation for Electric Food Warmers

There is no calculation for Gas Food Warmers

There is no calculation for Electric Fry Kettle

There is no calculation for Gas Fry Kettle

There is no calculation for Electric Griddle

There is no calculation for Gas Griddle

There is no calculation for Hair Dryer Helmets

There is no calculation for 4-Slice Toaster

There is no calculation for other appliances of known wattages

There is no calculation for Outside Fresh Air #1

There is no calculation for Outside Fresh Air #2

There is no calculation for Outside Fresh Air #3

There is no calculation for Outside Fresh Air #4

There is no calculation for Outside Fresh Air #5

There is no calculation for Outside Fresh Air #6

*The Total Outside Fresh Air CFM = 0
This is in accordance with International Mechanical Code 2003*

The Total BTUh Gain = 103158

The Total Tons of HVAC needed = 8.5965