CMGT 235 – Mechanical and Electrical Systems

Homework #6 – Heating and Cooling Equipment and Air Distribution

Due: 9/13 [20 points]

**Name**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**From HW #5**

Cooling Load = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ BTUH

Calculate the Tonnage of AC Required

Heating Load = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ BTUH (90% furnace efficiency loss)

**Homeowner System Requirements**

Central Heating and Air Conditioning

Home Location – Chico, CA

**Equipment Selection**

A close up of a sign

Description automatically generated

https://www.ecomfort.com/

1. Using the Web site given above, select a central air conditioner that meets the homes cooling requirement. Complete the table below:

|  |  |
| --- | --- |
| Make |  |
| Model |  |
| Tonnage |  |
| SEER |  |
| Refrigerant |  |
| Price |  |

1. Using the Web site given above, select a central gas heater that meets the homes heating requirement. Complete the table below:

|  |  |
| --- | --- |
| Make |  |
| Model |  |
| BTU |  |
| Fuel |  |
| AFUE |  |
| Price |  |