## Worksheet 5 House Heat Load Calculation

Using appendix 5, enter the monthly degree days for your house location.

Monthly Heat Load (in Btus) = Total House Loss (in Btus/ $^{\circ}$ F • day) × degree days + lower sidehill concrete wall loss or LCWL (from Worksheet 3, line 7) \_\_\_\_\_\_\_, Btus per hour × 24 hours × days per month

If this is a sidehill design, first calculate the monthly heat loss through the lower concrete wall (MCWL) as follows:

| Монтн<br>Sep | LCWL<br>(in Btus) | Hours per day |          |          | Days per month | MCWL<br>(millions of Btus |   |
|--------------|-------------------|---------------|----------|----------|----------------|---------------------------|---|
|              |                   | ×             | 24 hours | ×        | 30 Days        | =                         |   |
| Oct          |                   | ×             | 24 hours | ×        | 31 Days        | =                         |   |
| Nov          |                   | ×             | 24 hours | ×        | 30 Days        | ===                       | - |
| Dec          |                   | ×             | 24 hours | ×        | 31 Days        | =                         |   |
| Jan          |                   | ×             | 24 hours | $\times$ | 31 Days        | ==                        |   |
| Feb          | -                 | ×             | 24 hours | ×        | 28 Days        | =                         | - |
| Mar          |                   | ×             | 24 hours | ×        | 31 Days        | =                         |   |
| Apr          |                   | ×             | 24 hours | ×        | 30 Days        | ==                        |   |
| May          |                   | ×             | 24 hours | ×        | 31 Days        | =                         |   |
|              |                   |               |          |          |                |                           |   |

| Монтн | Total House Heat Loss<br>(in Btus) |          | DEGREE DAYS |   | MCWL  |      | NONTHLY HEAT LOA<br>(millions of Btus) |
|-------|------------------------------------|----------|-------------|---|-------|------|--|
| Sep   |                                    | ×        |             | + |       | ==   |  |
| Oct   |                                    | ×        |             | + |       | =    |  |
| Nov   |                                    | ×        |             | + |       | =    |  |
| Dec   |                                    | ×        |             | + |       | =    |  |
| Jan   |                                    | ×        |             | + |       | ==   | -                                      |
| Feb   |                                    | $\times$ |             | + |       | =    |  |
| Mar   |                                    | ×        |             | + |       | == : |  |
| Apr   |                                    | ×        |             | + |       | = .  | -                                      |
| May   |                                    | ×        |             | + |       | ***  |  |
|       |                                    |          |             |   | Total | =    | -                                      |