



## PLAIN STEEL EXPANSION TANKS

### Sizing for Hydronic Heating/Cooling Systems

Job Name: \_\_\_\_\_ Date: \_\_\_\_\_

Job Location \_\_\_\_\_ Salesman: \_\_\_\_\_

Contact Name: \_\_\_\_\_ Model #: \_\_\_\_\_

#### Information Required:

1. Total system water content. \_\_\_\_\_ gallons
2. Temperature of water when system is filled \_\_\_\_\_ °F
3. Average maximum operating temperature \_\_\_\_\_ °F
4. Minimum operating pressure \_\_\_\_\_ psig
5. Maximum operating pressure (10% below relief valve) \_\_\_\_\_ psig

#### Model Selection:

6. Enter total system water content. (from line 1. above) \_\_\_\_\_ gallons
7. Using the expansion factor table, find and enter the expansion factor \_\_\_\_\_
8. Multiply line 6 by line 7. Enter expanded water volume. \_\_\_\_\_ gallons
9. Determine the acceptance factor by  $(P_a \div P_f) - (P_a \div P_o)$   
where  $P_a$  = Pressure (atmospheric)  
 $P_f$  = Pressure at fill (atmospheric)  
 $P_o$  = Pressure at operation (atmospheric) and enter \_\_\_\_\_
10. Divide line 8 by line 9 and enter tank size. \_\_\_\_\_ gallons
11. Select Plain Steel Tank from table on Page 8 Model \_\_\_\_\_ NA \_\_\_\_\_

**CAUTION:** This chart is for water only. For expansion factors for glycol solutions contact the Wessels factory or your local Wessels dealer.