

Krit Sonic
210 Allendale Circle

Pressure Manifold Design

1. 4 Number of Taps = Number of trenches
2. 4" Manifold Diameter (in) (obtain from table 1)
3. 1" Tap Size (in) (obtain from table 1)
4. 12" Tap Length (in)
5. 60" Manifold Length (in) = # of Taps 4 X Tap Spacing 12 (in)
   + Tap Spacing 12 (in)
6. 7.11 Flow per Tap (gpm) (obtain from table 2)
7. 28.44 Total Flow of Taps (gpm) = Flow per Tap 7.11 X # of Taps
8. 2" Supply Line Size (in)
9. 650' Supply Line Length (ft)
10. 1.78 (1.98) Friction Loss per 100 ft of Supply Line (ft / 100 ft) (from table 3)
11. 1.4 Friction Head (ft) = Friction Loss (ft/ 100 ft) X Supply Length (ft) x1.2
12. 12 Elevation Head (ft)
13. 2 Pressure Head (ft)
14. 16 Total Head (ft) = Friction head + Elevation Head + Pressure Head
15. _____ Pump required to supply total flow of 30 gpm
    against a total head of 15 ft

    (obtain from pump curve)