

A COMPARISON OF CALCULATED AND MEASURED PRESSURES IN BUILDING WATER DISTRIBUTION SYSTEMS

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ABSTRACT

Common methods of pipe selection and pressure loss (hence, remaining pressure) calculations were utilized on two existing water distribution systems. Also, physical pressure measurements were taken at selected points in the distribution systems for comparison with the calculated values. Results of scatter plots and correlation analysis show good agreement between the calculated and measured pressures. The results, thus, validate the calculation procedures.

Keywords: Hazen-Williams Formula, D'Arcy-type Equation, Pipe Sizing Chart, Pressure Guage Readings.