

Highly spherical shape and uniform grading provide  
Filter Sand and Gravel with reliable performance.  
Low soluble impurities limits undesirable mineral leaching  
into the process stream.

# Filter Sand and Gravel



Filter Sand and Gravel are naturally occurring, river washed, glacial deposit products. Their excellent chemical properties - high silica content and low soluble calcium, magnesium and iron compounds - meet AWWA-B100-96 specifications. Precision sizing and uniform grading to close limits meet the rigid specifications of professional engineers throughout the world.

Filter Sand and Gravel have been satisfying the requirements of industrial, municipal and residential users. These products have been specified and used nationally and internationally because of their high quality, desirable chemical properties, color, and wide range of precision sizing.

Processing and regular analysis of production are supervised by registered professional engineers.

**Filter Sand** is graded specifically for water filtration plants. It can be used in municipal, industrial or residential applications for sediment filtration.

**Uncrushed Gravel** has a highly spherical shape that promotes good flow and even distribution in support beds. Gravel is low in soluble impurities and it will maintain the quality of the treated water, especially in softeners. Three inch layers are recommended in graded support beds.

## ADVANTAGES

- Filter Sand is graded specifically for water filtration plants
- Filter Sand can be used in municipal, industrial or residential applications
- The spherical shape of uncrushed gravel promotes good flow and even distribution

## PHYSICAL PROPERTIES

### Filter Sand

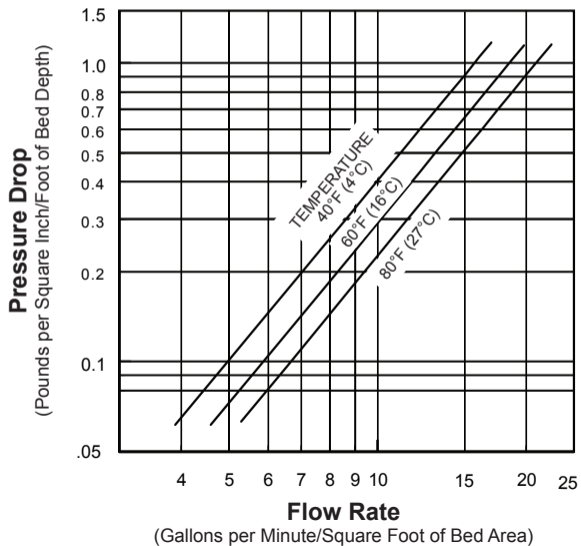
- Color: Light tan to reddish brown
- Density: 100 lbs./cu. ft.
- Mesh Size: 18x35\*
- Effective Size: 0.45-0.55 mm\*
- Uniformity Coefficient: 1.6 or less\*
- Acid Solubility: 0.3-1.6%
- Specific Gravity: 2.65-2.75

## CONDITIONS FOR OPERATION

- Bed depth: 18-30 in.
- Freeboard: 20% of bed depth (min.)
- Backwash flow rate: 15-20 gpm/sq. ft.
- Backwash bed expansion: 20% of bed depth
- Service flow rate:
  - Municipal: 1.5-2 gpm/sq. ft.
  - Industrial: 3 gpm/sq. ft.
  - Domestic: 5 gpm/sq. ft.

\*All physical properties and conditions for operation are the same for gravel with the exception of mesh size, effective size and uniformity coefficient.

## Service Flow Pressure Drop



## Backwash Bed Expansion

