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

# Filter Sand and Gravel



Clack 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.

For over 80 years Clack 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.

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

Clack 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**

- Clack 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**

- 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

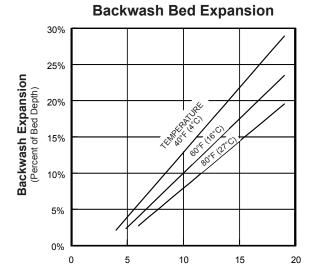
# **CONDITIONS FOR OPERATION**

- 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 1.5 **Pressure Drop** (Pounds per Square Inch/Foot of Bed Depth) 1.0 0.8 0.6 0.5 0.4 0.3 0.2 0.1 .05 5 6 7 8 9 10 15 20 25 Flow Rate



Flow Rate
(Gallons per Minute/Square Foot of Bed Area)

Red Flint Gravel and Filter Sand are manufactured by Red Flint Sand and Gravel LLC is classified by

Underwriters Laboratories Inc.® in Accordance with

Standard NSF/ANSI 61

(Gallons per Minute/Square Foot of Bed Area)

Distributed By:
Roanoke Water Treatment, Inc.
1948 Franklin Road SW
Roanoke, VA 24014
(540) 982-2324

# ORDER INFORMATION

Part No.	Description	Cu. Ft./Bag	Wt./Cu. Ft.*	Bags/Pallet	Weight/Pallet	Pallet Dimensions
A8071	Filter Sand (0.44-0.55 mm)	1	100 lbs.	30	3050 lbs.	42" x 40" x 45"
A8072	#20 Flint (1.65-2.0 mm)	1	100 lbs.	30	3050 lbs.	45" x 41" x 40"
A8072-01	#20 Flint (1.65-2.0 mm)	0.5 (50 lbs.)	100 lbs.	40	2050 lbs.	42" x 40" x 30"
A8073	1/4 x 1/8 Flint	1	100 lbs.	30	3050 lbs.	42" x 40" x 44"
A8073-02	1/4 x 1/8 Flint	0.5 (50 lbs.)	100 lbs.	40	2050 lbs.	42" x 40" x 30"
A8074	1/2 x 1/4 Flint	1	100 lbs.	20	2050 lbs.	42" x 40" x 28"
A8075	3/4 x 1/2 Flint	1	100 lbs.	20	2050 lbs.	42" x 40" x 28"
A8076	1 x 3/4 Flint	1	100 lbs.	20	2050 lbs.	42" x 40" x 28"

<sup>\*</sup>Weight per cubic foot is approximate.

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The information and recommendations given in this publication should not be understood as recommending the use of our products in violation of any patent or as a license to use any patents of the Clack Corporation.

The filter medias listed in this brochure do not remove or kill bacteria. Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

Clack will not be liable under any circumstance for consequential or incidental damages, including but not limited to, lost profits resulting from the use of our products.

CALIFORNIA PROPOSITION 65 WARNING: This product contains crystalline silica which is known to the State of California to cause cancer and other substances which are known to the State of California to cause cancer, birth defects and reproductive harm.

