

Macawber Installation Case Study: **Vermiculite - Arkansas, USA**

IN BRIEF

A company specializing in the manufacture of gypsum boards reached out to Macawber Engineering needing a better solution to convey vermiculite. Vermiculite can be challenging to convey due to particle sizes being irregular and its abrasive nature. The customer previously had a dilute phase (high velocity) system in place that was quickly wearing out their elbows. They chose Macawber due to our extensive knowledge and experience with dense phase pneumatic conveying systems. A 4/8-4 Denseveyor® was selected for this project.

MATERIAL CHARACTERISTICS

Material	Vermiculite
Bulk Density	67 lbs./ft ³
Temperature	≤ 212°F (100°C)
Moisture Content	< 6.5%
Condition	Free Flowing, Abrasive

SYSTEM OBJECTIVES

1. Reduce wear
2. Create operational savings
3. Minimize downtime

SYSTEM PERFORMANCE

Transfer Capacity	4.3 T/hr.
Conveying Distance	193 ft
Reception Points	1

IMPROVEMENTS ACHIEVED

1. Wear reduced significantly
2. Cost savings generated
3. Decreased downtime

