

# COMPACTION PROCESS FOR A SUCCESSFUL INSTALL

To properly compact gravel it must be completed in lifts, lay the material in thin layers, typically 2-3 inches with small compactors, 3 to 4 inches thick for larger machines, and compact each "lift" thoroughly before adding the next one. Use a mechanical compactor, moisten the gravel lightly to improve binding (but not to saturation), and ensure each lift is level. This process creates a dense, stable base and prevents settling or soft spots over time.

## Steps for Proper Gravel Compaction

- 1. Prepare the Site:** Clear the area of any debris and ensure proper edge support is in place using edging materials like timber or steel / aluminum before the first layer is applied.
- 2. Add the First Lift:** Spread the gravel in a layer no thicker than 3 to 4 inches to allow for effective compaction. (Adjust depending on machine capability)
- 3. Compact the Lift:** Use a vibratory plate compactor or a jumping jack tamper to compact the entire layer.
- 4. Check Moisture Content:** Lightly dampen the gravel with a hose or water tank if it's too dry, but be careful not to oversaturate it, as too much water can prevent proper compaction.
- 5. Add Subsequent Lifts:** Add the next layer of gravel, ensuring it's spread evenly to maintain a level surface.
- 6. Repeat Compaction:** Compact this new layer as thoroughly as the first before adding another.
- 7. Finish Compacting:** Continue this process of adding and compacting gravel lifts until the desired total depth is reached, then compact the entire surface one last time to ensure all loose material is settled.

## Why Layered Compaction Matters

- **Even Density:** Compacting in thinner layers ensures that the entire depth of the gravel base becomes as solid and dense as the top layer
- **Prevent Settling:** Properly compacted layers prevent soft spots that can develop and cause settling or shifting over time under weight and stress.
- **Structural Integrity:** This method creates a strong, stable base that can effectively support concrete, pavers, vehicles or other structures.