BaseCore Geocell vs. Asphalt vs. Concrete



The Smarter Choice for Parking Lots, RV Parks and Commercial Lots

Comparison Overview:





Asphalt

- Environmental Impact: Impermeable surface leads to significant stormwater runoff.
- Heat Absorption: Contributes to urban heat islands, with high surface temperatures.
- **High Maintenance:** Requires frequent resealing, patching, and resurfacing over time.
- Extensive Subbase Needs: Requires 8–12" of compacted aggregate for stability.

Concrete

- Environmental Impact: Impermeable, contributing to runoff, but some designs can incorporate permeable additives.
- Heat Absorption: Retains heat, adding to urban heat islands, though less than asphalt.
- **High Durability:** More resistant to wear and tear but prone to cracking under extreme conditions.
- Extensive Subbase Needs: Typically requires 10–12" of compacted aggregate for stability and longevity.
- **Maintenance Requirements:** Needs periodic joint sealing and repairs for cracks and spalling.

BaseCore Geocell

- **Eco-Friendly Design:** Permeable system allows natural water infiltration, reducing stormwater runoff.
- **Temperature Regulation:** Aggregate infill remains cooler, mitigating heat buildup.
- **Minimal Maintenance:** Long-lasting and resistant to cracking or shifting.
- Efficient Installation: Requires only 4–8" of aggregate, reducing material and labor costs.

Material & Cost Breakdown (50,000 sq. ft. Example)



| Category | Asphalt | Concrete | BaseCore Geocell |
|------------------------|----------------------------------------------|--------------------------------------------------------|----------------------------------------------|
| outogoly | Aupran | | |
| Material Cost | \$3–\$7 per sq. ft. (\$150,000–\$350,000 | \$4-\$10 per sq. ft. (\$200,000-\$500,000) | ~\$1.75 per sq. ft. (\$87,500) |
| Subbase (#57 Stone) | 8" depth (~800 tons, \$33,600) | 10" depth (~1,000 tons, \$42,000) | 4" depth (~350 tons, \$14,700) |
| Total Material Cost | \$183,600-\$383,600 | \$242,000-\$542,000 | \$102,200 |
| Installation Time | Long (labor-intensive prep and paving) | Moderate (requires curing time) | Faster (modular system, minimal prep) |
| Maintenance (10 Years) | \$\$\$ (resealing, patching, resurfacing) | \$\$ (crack repairs, joint sealing, spalling fixes) | Minimal (occasional infill replenishment) |

Why BaseCore Geocell Outperforms Asphalt and Concrete

- **1. Lower Material Costs:** Significantly reduced aggregate and installation costs compared to both asphalt and concrete.
- **2.** Sustainability: A permeable system reduces stormwater runoff and recharges groundwater, an advantage over both impermeable asphalt and concrete.
- **3. Temperature Benefits:** Cooler surface temperatures compared to asphalt and concrete, reducing heat island effects.
- **4. Durability:** Resistant to cracking, potholes, and shifting, unlike asphalt and concrete, which are prone to wear and tear.
- **5. Minimal Maintenance:** Avoid recurring costs like resealing, resurfacing, or joint sealing needed for asphalt and concrete.

Faster Installation: Requires less aggregate and minimal preparation, reducing labor and installation time.

Ready to Build Smarter?

Schedule a site evaluation to see if BaseCore is right for you. Request a tailored cost comparison for your project.

Visit <u>www.basecore.co</u> Today!