

# Why Terraflex?

Terraflex by Softline Solutions is a proven, resilient permeable paving system engineered to move water quickly through the wearing surface while delivering the safety, finish and durability landscape projects require. It's ideal for plazas, pedestrian zones, trails, play areas and green-infrastructure installations where rapid infiltration, ADA performance and low maintenance are priorities.

### Measured Performance (Independent Laboratory)

- Coefficient of permeability (k): 1.45 cm/s (0.0145 m/s)
- Flow through 1  $m^2$ : 0.0145  $m^3/s = 14.5 L/s = 0.871 m^3/min$
- Equivalent:≈ 21.4 gal/min/ft²

(Permeability testing performed by Parkland Geo-Environmental Ltd., Terraflex Permeable Paving System — Permeability Testing Results, April 28, 2017.)

#### Softline Terraflex Permeability

Why this matters: Terraflex's high infiltration rate enables designers to confidently manage intense short-duration runoff, reduce peak discharge, and reduce reliance on oversized buried storage when paired with appropriate subbase design.

## **Design & Engineering Benefits**

- Rapid infiltration: High k-value supports effective on-surface infiltration and rapid throughflow to designed base/soakaway systems.
- Stormwater management: Reduces surface runoff and contributes to on-site retention / low-impact development strategies.
- Durability & safety: Engineered for pedestrian loads with finishes suitable for accessible routes and play surfaces.
- Aesthetic flexibility: Available in a range of textures and colors to meet design intent without sacrificing hydraulic performance.
- Low maintenance: Simple cleaning regimes (sweeping, periodic pressure wash) restore permeability and appearance.



#### **Practical Design Guidance**

- Hydraulic design: Use measured k = 0.0145 m/s as a conservative design value for surface throughflow. Verify final design infiltration with site-specific testing and safety factors for clogging and compaction.
- Base & subbase: Design an open, well-graded base and underdrain (when needed) sized for site runoff and local soil percolation characteristics. Include geotextile separation where appropriate.
- Accessibility & slopes: Detail transitions and slopes per ADA guidelines; Terraflex can be specified for accessible plazas and routes when installed per manufacturer recommendations.
- Maintenance allowance: Design access for routine sweeping and periodic washing; build inspection points for underdrain systems.

### Typical Applications

- Urban plazas & courtyards
- Pedestrian promenades & trails
- Playgrounds and school yards
- Green infrastructure: swales, bio-outlets, permeable parking (pedestrian zones)
- Retrofit projects where stormwater footprint must be reduced

#### Spec & Next Steps

- Specify: Terraflex permeable surfacing; include k = 1.45 cm/s in hydraulic schedules and reference manufacturer installation details.
- Request: Full test report, typical details, CAD/spec packages and samples.
- Consult: For project-specific infiltration modeling, base design, or construction tolerances, contact Softline Solutions' technical team for complete specification language and on-site support.

Prepared for design professionals by Softline Solutions.

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