

Technical Sheet: Citygreen® Drenopav Cassia - Engineered Porous Pavement

Cassia Drenopav is an innovative permeable paving solution offering 100% water permeability. This sustainable system features porous composition, uniform finish, and versatile applications from pedestrian areas to light traffic zones, while supporting natural groundwater maintenance and urban environmental balance.

SKU
SPDCA60

Urban Development Solution

As cities continue to expand and natural permeable surfaces decrease, Cassia Drenopav offers a practical solution that balances urban development needs with environmental responsibility. The system's ability to maintain natural water cycles while providing durable, functional surfaces makes it an ideal choice for modern urban planning projects.

The integration of Cassia Drenopav into urban infrastructure helps cities maintain their ecological balance while meeting the practical demands of contemporary urban life. Its proven performance in managing rainwater and preventing surface water accumulation makes it a valuable tool in sustainable urban development strategies.

Key Features

- Porous and permeable mixture composition
- Continuous and uniform surface finish
- Complete water permeability (100% certified)
- Suitable for commercial spaces
- Designed for both pedestrian and cycle areas
- Capable of handling vehicular traffic

Environmental Benefits

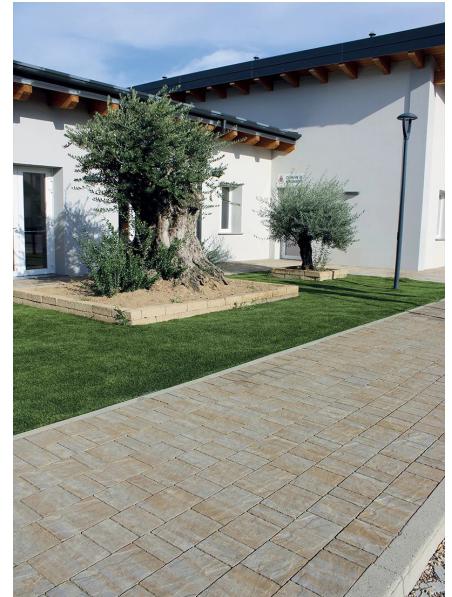
The Cassia Drenopav system delivers several crucial environmental advantages:

- **Groundwater Maintenance:** Facilitates natural water circulation and replenishment of groundwater tables
- **Puddle Prevention:** Effectively eliminates water accumulation on surfaces
- **Environmental Sustainability:** Contributes to urban environmental balance
- **Rainwater Management:** Provides natural drainage solutions for stormwater

Technical Performance

Laboratory testing has confirmed the exceptional performance of the Cassia Drenopav system:

- Complete drainage of simulated rainfall
- Verified 100% permeability rate
- Robust load-bearing capacity
- Durable surface integrity



Applications

The versatility of Cassia Drenopav makes it ideal for various applications:

- Commercial spaces and plazas
- Pedestrian walkways
- Cycle paths
- Light traffic areas
- Urban landscaping projects

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Technical Data

PRODUCT OVERVIEW

- Premium permeable paving system
- Designed for sustainable stormwater management
- Suitable for vehicular and pedestrian applications

TECHNICAL SPECIFICATIONS

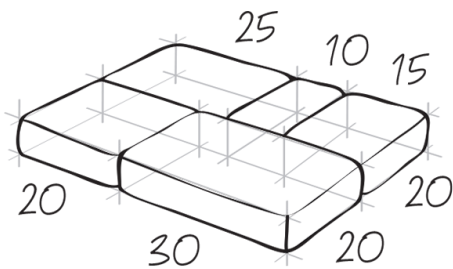
- Material: High-performance permeable concrete with specialized aggregate mix
- Applications: Driveways, parking areas, walkways, public spaces
- Load Rating: Suitable for light-medium vehicle traffic
- Permeability Rate: $>800 \text{ L/min/m}^2$ (13.3 L/s/m^2)
- Breaking Strength: $\geq 2.6 \text{ MPa}$ (EN 1338 compliant)
- Breaking Load: $\geq 180 \text{ N/mm}$
- Water Absorption: $\leq 6\%$ by mass
- Frost Resistant

DIMENSIONS & WEIGHTS

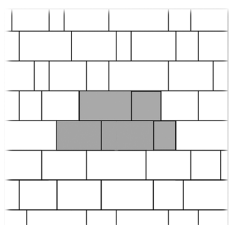
Ratio of Sizes:

- 300x200mm: 4 units per mold
- 250x200mm: 4 units per mold
- 100x200mm: 6 units per mold
- 200x200mm: 8 units per mold
- 150x200mm: 9 units per mold
- Thickness: 60mm ($\pm 3\text{mm}$ tolerance)
- Weight: 130 kg/m²

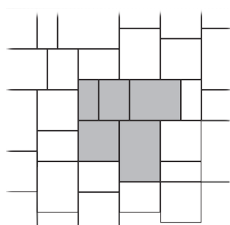
TECHNICAL DRAWING



INSTALLATION SCHEME



Running Bond



Random Bond

Citygreen is the exclusive partner and supplier of Bagattini® engineered porous pavements in Australia. Citygreen© 2025 Worldwide Patents and Designs registered and pending.

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INSTALLATION REQUIREMENTS

1. Subgrade Preparation

- Minimum CBR rating: $>5\%$
- Compaction: 95% Modified Proctor
- Geotextile fabric: minimum Class A, 140 g/m²
- Cross fall gradient: minimum 1%

2. Base Course

- Material: 20-63mm clean crushed rock
- Minimum depth: 150mm for pedestrian, 300mm for vehicular
- Compaction layers: maximum 150mm per layer
- Density requirement: 98% Modified Proctor

3. Bedding Layer

- Material: 2-5mm clean crushed aggregate
- Layer thickness: 30-40mm (uncompacted)
- Moisture content: 4-8%
- Surface tolerance: $\pm 5\text{mm}$ over 3m straight edge

4. Paver Installation

- Joint width: 2-5mm
- Pattern: Herringbone for vehicular areas
- Edge restraint: concrete beam minimum 200mm deep
- Cutting tolerance: maximum 10% of paver size

5. Joint Filling & Compaction

- Material: 1-3mm clean crushed aggregate
- Initial compaction: minimum 3 passes
- Final compaction: after joint filling
- Surface cleaning: high-pressure air recommended

QUALITY ASSURANCE

- Permeability testing: minimum yearly
- Load bearing: test every 500m²
- Surface evenness: $\pm 8\text{mm}$ under 3m straight edge
- Joint filling: 100% full after 28 days
- Documentation: maintain installation records

MAINTENANCE

- Cleaning frequency: bi-annual minimum
- Permitted cleaning methods: vacuum sweeping, pressure washing
- Joint material replenishment: as needed
- Structural inspection: annual
- Permeability testing: every 2-3 years