



GREEN SLEEPER

HIGH-STRENGTH, SUSTAINABLE CONCRETE SLEEPERS

THE GREEN SLEEPER IS MADE FROM SUSTAINABLE SULPHUR CONCRETE WITHOUT COMPROMISING QUALITY AND IS FULLY RECYCLABLE

Sulphur concrete is the most prominent new circular material for infrastructure construction with minimal impact on the environment.

Sulphur concrete is similar to cement concrete with cement and water being replaced by sulphur.

The production of sulphur concrete is a physical process of melting and solidifying that can be repeated infinitely. As a result, sulphur concrete is **100% circular** and can be recycled endlessly in identical applications. We guarantee this **100% circularity** by using only primary and high-quality raw materials.

Due to low energy production processes and replacing cement with sulphur, the CO₂ emissions are significantly lower compared to traditional concrete.

MECHANICAL CHARACTERISTICS EQUIVALENT TO CONCRETE

| Characteristic | Cement concrete | Sulphur concrete | Assessment |
|----------------------------------|------------------------------|-------------------------|------------|
| Density | 2,400 kg/m ³ | 2,450 kg/m ³ | + |
| Compressive strength | ± 35-150 MPa | ± 60-80 MPa | ≈ |
| Flexural/tensile strength | ± 8 MPa | ± 12 MPa | + |
| Elastic modulus | ± 30 GPa | ± 30 GPa | ≈ |
| Creep | ± 0.50 ‰ | ± 0.15 ‰ | + |
| Coefficient of thermal expansion | ± 1.25E(-5) 1/k | ± 1.43E(-5) 1/k | ≈ |
| Thermal conductivity | ± 2.4 W/mK | ± 3.3 W/mK | + |
| Electrical resistance | ±1-25 x 10 ¹² μΩm | ∞ | ++ |
| Water absorption | ± 3.5% | ± 0.3% | ++ |



100% CIRCULAR



LOWER CO₂ FOOTPRINT THAN TRADITIONAL CONCRETE



REDUCES INDUSTRY WASTE AND NO WATER USED IN PRODUCTION



NO LEACHING



DURABLE CONCRETE HIGHLY RESISTANT TO CHEMICALS AND WATER ABSORPTION



HIGH MECHANICAL STRENGTH



50 YEAR DESIGN LIFE



APPLICATION RANGES UP TO 80 DEGREES



For more information, email us on: sales@salixproducts.com.au