

## TECHNICAL DATA SHEET / LOW-STRAIN POLYPROPYLENE ROAD WOVEN

# BaseWoven BW-LS

Road reinforcement plus separation for soft subgrades and working platforms

## DESIGN PURPOSE

A closed PP woven with reported tensile response at 2% strain, installation-damage retention and pull-out interaction. Use where road-scale deformation control and separation are both required. It is not an extruded interlock geogrid.

### PRIMARY APPLICATIONS

Soft-subgrade access roads; haul roads; crane and working platforms; granular road formation requiring a low-strain tensile reference.

### MECHANISM

Stress transfer through interface friction and sheet tension; membrane action increases with deformation. No aggregate interlock through apertures.

### STANDARD SUPPLY

4.6 m or 5.2 m wide x 100 m or 200 m long. Project-specific manufacture available.

## STANDARD GRADE SCHEDULE

| Grade   | 2% tensile<br>MD / CD<br>kN/m | Ultimate<br>MD / CD<br>kN/m | CBR<br>N | Grab<br>N | Tear<br>N | Flow<br>L/min/m <sup>2</sup> | Perm.<br>s-1 | AOS / O90<br>mm | Install retained<br>% | Pull-out<br>coefficient |
|---------|-------------------------------|-----------------------------|----------|-----------|-----------|------------------------------|--------------|-----------------|-----------------------|-------------------------|
| BW-LS70 | 10 / 20                       | 70 / 90                     | 6,650    | 1,520     | 610       | 3,059                        | 0.90         | 0.40 / 0.35     | 90                    | 0.89                    |
| BW-LS85 | 10 / 27                       | 85 / 90                     | 9,500    | 2,120     | 700       | 3,056                        | 1.00         | 0.40 / 0.32     | 90                    | 0.90                    |

Test basis: tensile ASTM D4595; CBR ASTM D6241; grab ASTM D4632; tear ASTM D4533; flow and permittivity ASTM D4491; AOS ASTM D4751; O90 ISO 12956; installation damage ASTM D5818; pull-out ASTM D6706; UV retention after 500 h ASTM D4355: 90%. Methods and values must be matched to the project specification.

## BASEWOVEN BW-LS / DESIGN USE

# Low-strain data is a design input - not a generic pavement benefit

## WORKING-STRAIN RESPONSE

Reported 2% strength indicates tensile capacity available at relatively low strain. This is a stiffness reference, not simply a robustness value. Compare both principal directions with the project strain limit.

## INSTALLATION DAMAGE

Third-party ASTM D5818 testing on the representative low-strain woven returned RF\_ID 1.03 to 1.18 across silty sand, concrete sand and graded aggregate base.

## INTERFACE INTERACTION

Published pull-out interaction coefficients are 0.89 and 0.90. Direct shear and project soil interaction remain project checks where critical.

## AUSTRALIAN SPECIFICATION BOUNDARY

No Australian G-rating is published and a class must not be inferred from ASTM CBR, grab or tear strength. Where an authority specifies 2% tensile thresholds, G-rating, installation-damage currency or a nominated opening-size method, assess each clause directly.

The BW-LS machine-direction value at 2% strain is 10 kN/m. Do not state automatic compliance with a specification requiring a higher value.

## INSTALLATION PRINCIPLES

Use a project overlap schedule based on subgrade support. Place fill forward without trafficking the exposed sheet. Establish minimum cover before tracked plant. Inspect seams, folds and damage before burial, and retain roll and location records.

Installation factors are fill, grading, lift and compaction dependent. Representative test results do not automatically transfer to different project conditions.

Values are manufacturer-published unless otherwise stated. This data sheet supports product selection but does not replace project design, authority acceptance, conformance testing or installation specifications. Kontain can manufacture project-specific roll dimensions, strength and opening size subject to order quantity and production review.