

# LBX SERIES BIAXIAL GEOGRID (PP)

Design and build with confidence; we empower you to achieve cost-effective, proven, engineered solutions. Fueled by an innovative spirit, our industry-leading technology solves the toughest soil stabilization, earth reinforcement, and site development challenges.

The reinforcing action of LBX Geogrid products lies mainly in increasing the shearing resistance within a soil by the process of interlocking between the square ribs and the soil.

| April 2023                                 |             | LBX Series Biaxial Geogrid (PP) |                       |                       |                       |                       |
|--|-------------|---------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Rev  | Test Method | LBX 1616 <sup>1</sup>           | LBX 2020 <sup>1</sup> | LBX 2525 <sup>1</sup> | LBX 3030 <sup>1</sup> | LBX 4040 <sup>1</sup> |
| Aperture Size Typical <sup>2</sup>         |             | 39 mm x 39 mm                   | 39 mm x 39 mm         | 39 mm x 39 mm         | 39 mm x 39 mm         | 39 mm x 39 mm         |
| Wide Width Tensile <sup>3,4</sup><br>MD/CD | ASTM D6637  | 16 kN/m /<br>16 kN/m            | 20 kN/m /<br>20 kN/m  | 25 kN/m /<br>25 kN/m  | 30 kN/m /<br>30 kN/m  | 40 kN/m /<br>40 kN/m  |
| Strength @ 2% Strain <sup>2</sup><br>MD/CD | ASTM D6637  | 7.5 kN/m /<br>7.5 kN/m          | 9 kN/m /<br>9 kN/m    | 10 kN/m /<br>10 kN/m  | 12 kN/m /<br>12 kN/m  | 18 kN/m /<br>18 kN/m  |
| Strength @ 5% Strain <sup>2</sup><br>MD/CD | ASTM D6637  | 14 kN/m /<br>14 kN/m            | 16 kN/m /<br>16 kN/m  | 18 kN/m /<br>18 kN/m  | 23 kN/m /<br>23 kN/m  | 32 kN/m /<br>32 kN/m  |
| Junction Efficiency                        | GRI GG2     | > 95 %                          | > 95 %                | > 95 %                | > 95 %                | > 95 %                |
| Flexural Rigidity <sup>10</sup>            | ASTM D7748  | 800,000 mg-cm                   | 1,090,000 mg-cm       | 1,600,000 mg-cm       | 2,000,000 mg-cm       | 4,800,000 mg-cm       |
| Aperture Stability <sup>7</sup>            |             | 0.35 m-N/deg                    | 0.50 m-N/deg          | 0.62 m-N/deg          | 0.75 m-N/deg          | 0.85 m-N/deg          |
| Roll Size                                  |             | 3.95 m x 100 m                  | 3.95 m x 50 m         | 3.95 m x 50 m         | 3.95 m x 50 m         | 3.95 m x 50 m         |
| Roll Weight Typical                        |             | 79 kg                           | 46 kg                 | 57 kg                 | 68 kg                 | 98 kg                 |

- Carbon black content is 2% for high UV Resistance
- Geometric Properties are nominal values and may vary
- Mechanical Properties are based on Manufacturers Laboratory testing @ 21 +/- 1 Degree C
- Unless indicated otherwise, values shown are typical roll values
- Resistance to in plane rotational movement of 20 kg-cm
- 500 Hours of Exposure
- Expressed as a percentage of Ultimate Tensile Strength
- Using specimens 2 ribs wide with ribs transverse to specimen cut flush with the exterior edges of the ribs in the direction of the specimen.

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## INSTALLATION

The subgrade should be cleared of all vegetation and proof rolled. However, on very soft ground or muskeg, cut vegetation flush with the ground and remove all woody bushes, shrubs and large rocks. The surface of the subgrade should be levelled, and depressions or humps greater than 15 cm (6 in) should be graded out. The biaxial geogrid shall be placed directly on the prepared subgrade. It should be rolled out flat and tight with no folds. Adjacent rolls should be overlapped as a function of subgrade strength and to allow for product continuity once backfilled. For CBR 3.0 and above 20 cm (8 in) to 30 cm (12 in); for CBR 1.0 to 3.0 45 cm (18 in) to 90 cm (36 in) for CBR 1.0 or lower, please contact one of our technical specialists for installation and application recommendations. Care should be taken to ensure that the overlaps are maintained during fill placement. Should a mechanical joint be required then please consult the manufacturer for further details or refer to and follow project specific requirements in the plans, specifications and tender documents.

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