## FEICHENG LIANYI ENGINEERING PLASTICS CO.,LTD

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## Biaxial Geogrid

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#### **Product Introduction**

Biaxial Geogrid is made of high molecular polymer through extrusion, forming and punching before longitudinal and lateral stretching. This material has considerable tensile strength in longitudinal and lateral directions. This chain structure can effectively bear and diffuse forces on soil and is applicable to large area permanent load bearing foundation as a reinforce.

#### **Product Features**

- 1. Increase the bearing capacity of the roadbed and foundation and prolong their service life.
- 2. Prevent road surface and foundation from sinking or flawing, keep clean and beautiful ground surface.
- 3. Convenient construction saves time and labor, reduce mounting time and decrease maintenance expense.
- 4. Prevent culverts from flawing.
- 5. Enhance earth slope and prevent water loss and soil erosion.
- 6. Decrease underlayer thickness and save manufacturing cost.
- 7. Enhance the stability of side slope turf net patch to improve greening.
- 8. Replace wire netting used in mine as intermediate ceiling netting.

#### **Product Function**

- 1. It can be applied in all kinds of roads, railways, airports to enhance the roadbed.
- 2. It can be applied in a large car park and terminal freight yard, etc. to strengthen the foundations of a permanent load;
- 3.It can be applied in rail, road slope's protection;
- 4. It can be applied to enhance the culvert;
- 5.It can be applied as a secondary enhancement after the uniaxial geogrid soil enhancement, further enhancement to the soil; prevent soil erosion;
- 6.It can be applied in mining, tunnel reinforcement.

### **Specification & index:**

| Specification                       | Test<br>Method |                 | BX1515            |     | BX2020          |     | BX2525          |     | BX3030          |     | BX4040    |     | BX1100          |      | BX1200          |      | BX3030L         |     |  |
|-------------------------------------|----------------|-----------------|-------------------|-----|-----------------|-----|-----------------|-----|-----------------|-----|-----------|-----|-----------------|------|-----------------|------|-----------------|-----|--|
| Index                               |                | Unit            | MD                | XMD | MD              | XMD | MD              | XMD | MD              | XMD | MD        | XMD | MD              | XMD  | MD              | XMD  | MD              | XMD |  |
| Ultimate Tensile strenth            | D6637          | KN/m            | 15                | 15  | 20              | 20  | 25              | 25  | 30              | 30  | 40        | 40  | 12.4            | 19.0 | 19.2            | 28.8 | 30              | 30  |  |
| Aperture Size                       |                |                 | 39                | 39  | 39              | 39  | 39              | 39  | 39              | 39  | 39        | 39  | 25              | 33   | 25              | 33   | 65              | 65  |  |
|                                     |                | mm              | 36                | 36  | 36              | 36  | 36              | 36  | 36              | 36  | 36        | 36  |                 |      |                 |      |                 |     |  |
|                                     |                |                 | 33                | 33  | 33              | 33  | 33              | 33  | 33              | 33  | 33        | 33  |                 |      |                 |      |                 |     |  |
|                                     |                |                 | 31                | 31  | 31              | 31  | 31              | 31  | 31              | 31  | 31        | 31  |                 |      |                 |      |                 |     |  |
| Minimum Rib Thickness               |                | mm              | 1.0               | 0.8 | 1.5             | 1.1 | 1.8             | 1.4 | 2.2             | 1.7 | 2.5       | 2.0 | 1.0             | 0.8  | 1.4             | 1.27 | 1.7             | 1.5 |  |
| Tensile Strength @2% Strain         | D6637          | KN/m            | 6                 | 6   | 7               | 7   | 9               | 9   | 11              | 11  | 15        | 15  | 4.1             | 6.6  | 6               | 9    | 11              | 11  |  |
| Tensile Strength @5% Strain         | D6637          | KN/m            | 11                | 11  | 13              | 13  | 17              | 17  | 21              | 21  | 27        | 27  | 8.5             | 13.4 | 11.8            | 19.6 | 21              | 21  |  |
| Junction Efficiency                 |                | %               | 95                |     | 95              |     | 95              |     | 95              |     | 95        |     | 95              |      | 95              |      | 95              |     |  |
| Flexural Stiffness                  | D7748          | mg-cm           | 690,000           |     | 780,000         |     | 860,000         |     | 960,000         |     | 1,000,000 |     | 250,000         |      | 750,000         |      | 960,000         |     |  |
| Aperture Stability                  |                | m-N/deg         | 0.30              |     | 0.50            |     | 0.62            |     | 0.75            |     | 0.85      |     | 0.32            |      | 0.65            |      | 0.75            |     |  |
| Resistance to Installation Damage   |                | %SC/%S<br>W/%GP | 95/93/90          |     | 95/93/90        |     | 95/93/90        |     | 95/93/90        |     | 95/93/90  |     | 95/93/90        |      | 95/93/90        |      | 95/93/90        |     |  |
| Resistance to Long Term Degradation |                | %               | 100               |     | 100             |     | 100             |     | 100             |     | 100       |     | 100             |      | 100             |      | 100             |     |  |
| Resistance to UV                    | D4355          | 0/              | 100               | 100 |                 | 100 |                 | 100 |                 | 100 |           | 100 |                 | 100  |                 | 100  |                 | 100 |  |
| Degradation                         |                | %               | 100               |     |                 |     |                 |     |                 |     |           |     |                 |      |                 |      |                 |     |  |
| Minimum Cabon Black                 |                | %               | 2                 |     | 2               |     | 2               |     | 2               |     | 2         |     | 2               |      | 2               |      | 2               |     |  |
| Unit Weight                         |                | g/m2            | 175-210           |     | 220-250         |     | 260-300         |     | 300-340         |     | 450-500   |     | 180-210         |      | 280-310         |      | 320-360         |     |  |
| Rolls Dimensions<br>(Length, Width) | m              |                 | 100*3.95<br>100*5 |     | 50*3.95<br>50*5 |     | 50*3.95<br>50*5 |     | 50*3.95<br>50*5 |     | 50*3.95   |     | 75*3.95<br>75*5 |      | 50*3.95<br>50*5 |      | 50*3.95<br>50*5 |     |  |
|                                     |                |                 | 100*5             | .95 | 50*5.9          | 5   | 50*5.9          | )5  | 50*5.9          | 5   |           |     | 75*5.9          | 5    | 50*5.9          | )5   | 50*5.9          | 95  |  |

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