“GREAT IMPERIAL” LLC

USA, 1618 NW 34 TERRACE Lauderhill, FL 33311. Manufacturing

Fiberglass reinforcement;

Basalt-plastic reinforcement;

Fiberglass mesh;

Decking (Terrace deck);

Fiberglass reinforcement:

Equal strength replacement of steel and fiberglass reinforcement

Steel reinforcement class A-III (A400C)			Fiberglass reinforcement		
Diameter, mm	Weight, linear meters in kg	Number of meters per ton	Diameter, mm	Weight, linear meters in kg	Number of meters per ton
6	0,22	4 505	4	0,027	37 037
8	0,40	2 532	6	0,042	23 810
10	0,62	1 621	8	0,084	11 905
12	0,89	1 126	8	0,084	11 905
14	1,21	826	10	0,138	7 246
16	1,58	633	12	0,190	5 263
18	2,00	500	14	0,260	3 846
20	2,47	405	16	0,360	2 778
22	2,98	336	18	0,474	2 110
25	3,85	260	20	0,600	1 667

3 TIMES STRONGER THAN METAL! 1200 MPa on a gap

APPLICATION AREAS

- Floors
- Construction
- Foundation
- Facades
- Road construction
- Concrete structures
- Wallss
- Manufacturing facilities

ADVANTAGES OF COMPOSITE REINFORCEMENT

Durable
The service life of composite reinforcement is from 80 years, which is 2-3 times longer than that of metal
Light
Reduces shipping and installation costs. Also does not load a structure
Economical
Profit up to 50% with equal strength replacement of metal reinforcement
Warm
Does not create cold bridges in winter
Does not rust
Fiberglass does not rust and does not change properties in any climatic conditions

Fiberglass mesh

Advantages of the composite mesh. High-quality composite mesh based on fiberglass or basalt-plastic rods manufactured by the company, has high resistance to corrosion and has high durability indicators. Composite mesh is an affordable and one of the most effective options for replacing a metal mesh when reinforcing structures. The mesh is manufactured by weaving mutually perpendicular composite rods. The strength of the joints, coated with a polymer binder, is technologically determined by its polymerization and the formation of a single rigid structure. Advantages of the composite mesh:

- durability;
- low specific weight;
- does not conduct heat;
- immunity to chlorine ions and acids;
- tensile strength is 4 times higher than steel;
- high indicators of adhesion to concrete;
- transparency to magnetic and radio fields;
- dielectric (does not conduct electric current).

Save up to 50% when replacing steel mesh with the composite. 3-4 times in transportation. Composite mesh is 9 times lighter than metal. It is transported in cards and rolls. 2 times at unloading, to unload the steel mesh, additional equipment and labor is needed. It is easy to unload the composite mesh, to move it. Up to 100% on additives by itself. The composite mesh is 100% anti-corrosion. You can use any additives with it in concrete, up to 40% on the price. Large resources are spent on the production of a steel mesh: ore mining, huge furnaces, electricity, etc. Composite mesh manufacturing is up to 40% more economical. Up to 30% on trimmings. Steel mesh is from 4 to 6 mm. When choosing a different size, you pay for trimmings. Composite mesh is manufactured of any length.

Decking (Terrace deck);

Terrace decks (Wood-Plastic Composite decking) are made of durable wood and are specially treated. In result, a material that is neutral to almost any external environment is made. This feature allows you to use decking during setting up of:

- Flooring of gazebos and terraces
- Garden paths
- Balconies and loggias
- Baths and saunas
- Ship docks and piers
- Decks of sea and river vessels

The versatility of the application is due to a diverse texture and a wide size range.

Due to such diversity, the consumer can choose the best finish option depending on individual requirements, scope and financial capabilities.

Characteristics of the WPC decking

Decking can be referred to a high-quality and durable material, for which such technical characteristics are relevant:

- Nominal density - 1.2 g / cm2.
- Moisture absorption - 5%.
- Mechanical wear - 0.1 g / cm2.
- Range of working temperatures - from -45 to +70 degrees.
- Specific weight - about 2.5 kg.
- Fire safety - class G4 (poorly flammable and does not support burning).

It must be clarified that the reduced weight of the product, is not a reference value and may vary depending on the length and thickness of the board.