



## Why choose enviRO™

### LIGHTER, YET STRONGER, THEN STEEL

Being lighter makes easier to transport and saves related labour costs for installation. Being stronger than steel also means less reinforcement bars needed to provide the same strength as steel.

### CORROSION RESISTANT & NON-CONDUCTIVE

FRP withstands exposure to corrosive environments, making it ideal in chemically reactive environments. FRP is also non-conductive, and is widely used in sites with high voltage or magnetic fields, and is transparent to radio frequency.

### ENVIRONMENTALLY-FRIENDLY

A durable material with long design life, EnviRO™ allows for longer lifespan of the structure compared to steel. The reduced carbon emissions associated with production, transportation, and construction further makes this an earth-friendlier choice.



## PACKING

Rebar				Mesh		Bent	
Dia. Sizes	Ø4~12	Dia Sizes	Ø14~30	Dia Sizes	Ø2~6	Dia Sizes	Ø4~16
Packing	Coil Form	Packing	Bundle	Packing	Coil Form	Packing	Customize
Coil Length	50 Meters	Straight Length	Up to 10mtrs	Coil Length	Up to 50mtrs	Boxes	Customize

## Comparison enviRO™ vs Conventional

Comparison Snapshot	Basalt FRP	Steel	Stainless Steel	enviRO™
<b>Strength</b>	+2.5x	Traditional	Traditional	+2.0X
<b>Weight</b>	1/4 x	Heavy	Heavy	1/4 x
<b>Carbon Footprint</b>	Low	Bad	Bad	Low
<b>Conductivity</b>	No	Yes	Yes	No
<b>Saltwater Deterioration</b>	No	1 Day	2-5 Years	No
<b>Easy to Transport</b>	Bar or Coil	Heavy, Long & Bends	Heavy, Long & Bends	Bar or Coil

		enviRO™ 45	enviRO™ 60
<b>Tensile Strength</b>	Mpa	>900	>1100
<b>Modulus</b>	GPA	45	60
<b>Transverse Shear capacity</b>	Mpa	160	180
<b>Bond Strength</b>	Mpa	>10	>15

\*lower dia <25mm

EnviREO™ FRP reinforcing bars are manufactured in long and continuous production runs. The glass rovings are pulled, impregnated with resin and go through a heat and cooling process, producing strong, resilient and durable deformed bar. The bars are created with surface deformations for optimal bonding with concrete. Treadwell FRP reinforcing bars are available in EnviREO™ 45 & 60, and has been specially crafted to offer a corrosion resistant, lightweight and long service life reinforcement solution.

### **EnviREO™ 45**

With a modulus of elasticity of 45, this is best used as reinforcement for concrete flooring.

### **EnviREO™ 60**

With a modulus of elasticity of 60, this is best used as reinforcement for vertical pillars and support beams.

### **Bars or Mesh**

***Straight Bars***- Coiled form or stock length for diameter over 8mm.

***Mesh***- Treadwell offers a machine-made automatic mesh for reinforcement for concrete slabs such as pavements, flooring, pre-cast panels, warehouse and industrial application. These come in diameter 2-6mm and mesh from 50-200mm. The automated mesh only comes in 6mm diameter currently. These can replace steel mesh product offering such as SL62.

***Ancillary***- L shaped (-14mm), U shaped Stirrups and anchors are also available.