

Dahlsens SINCE 1877
For the Builder.



**THE #1 GFRP SOLUTION FOR
CONCRETE REINFORCEMENT**

GFRP



**LESS THAN
1KG PER BAR**



**A GREENER
SOLUTION**

 **MADE IN CANADA**

100%
**CORROSION
RESISTANCE**



10mm Horizontal Bar™ (Slab On Ground)

10mm Horizontal Bar is the best in class GFRP (Glass Fibre Reinforced Polymer) rebar. Engineered for concrete slab on ground, 10mm Horizontal Bar is manufactured with long-lasting resin and corrosion-resistant glass to reinforce your concrete with a superior grade, reinforcement.

Where you can use GFRP*

- **RESIDENTIAL DRIVEWAYS**
- **FOOTPATHS & WALKWAYS**
- **ALTERNATIVE FOR STAINLESS
& GALVANISED APPLICATIONS**
- **CONCRETE SLABS**
- **PAVING • DIY**

**Not for vertical installation.*



Available from Dahlsens

THE #1 GFRP SOLUTION FOR CONCRETE REINFORCEMENT

- Quick & Simple Installation
- 200+ Years Service Life
- Reduced Environmental Impact
- Corrosion Resistant
- Nonconductive & Nonferrous



GFRP Slab On Ground design for shrinkage.

This design uses the following assumptions:

- Soil to have a good compaction
- Bars to be placed properly
- Control joint to be cut properly
- Expansion joint to be considered properly
- Spacing between bars to be accurate

Handling & Installation



Always wear gloves when handling 10mm Horizontal Bar™. Direct contact to skin can cause irritation.



Use a diamond blade when site-cutting 10mm Horizontal Bar™. Do not shear the bars. If lap-splicing is necessary, use contact lap splices. Lap length should be no less than 400mm.



Tie and chair 10mm Horizontal Bar™ as you would steel rebar. Tie wire, rebar clips, and plastic zipties are acceptable methods of securing the bar. Beware of settlement of floating when using 10mm Horizontal Bar™ with high slump concrete or when vibrating.



Safety glasses and Dust masks recommended when cutting.

Design Aid for Mesh with GFRP

SL62	Spacing 500mm C/C	SL82	Spacing 350mm C/C
SL72	Spacing 400mm C/C	SL92	Spacing 300mm C/C

Slab Thickness	Temperature Zone	GFRP Required in each Direction	NOTES:
100mm	Subzero to +100° C	Mid-strip: 10mm Horizontal Bar @300mm Edge-strip: 10mm Horizontal Bar @400mm	<ul style="list-style-type: none"> • Sawcut control joints at 4m to 5m spacing maximum, depth of sawcut shall be 25% of slab thickness. • If you wish to use 10mm GFRP bars, you can increase the spacing accordingly based on tensile capacity of the GFRP rebar, capacity between the two is 26%, therefore spacing can be increased by 26%. • Expansion joints shall be at maximum spacing of 15 metres. • Mid-strip is 50% of width of panel between joints • Edge-strip is 25% of width of panel along all joints • All 10mm Horizontal Bar rebars are placed at mid-depth of slab unless otherwise noted • Cover to additional top rebars shall be 30mm to 40mm minimum
150mm	Subzero to +100° C	Mid-strip: 10mm Horizontal Bar @300mm Edge-strip: 10mm Horizontal Bar @400mm	
150mm (12 kPa loads)	Subzero to +100° C	Mid-strip: 10mm Horizontal Bar @200mm Edge-strip: 10mm Horizontal Bar @400mm -Plus 2-Bar @400 Top all along exposed joints	
200mm	Subzero to +100° C	Mid-strip: 10mm Horizontal Bar @300mm -Plus 3-Bar @300 Top all along exposed joints	