

G10XL TECHNICAL DATA SHEET

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E-GLASS FIBRE	RESIN SYSTEM	
Type: biaxial +/- 45°	Fast curing structural epoxy resin	
Width: 21cm Long: 95cm	Under water cure capable system	
Weight: 600 g/m ²	Glass transition TG (DMA): 70 ° C	
-45 -30 -15 -15 -0	* ✓ ≈ ✓	

APLTec[™] composite patch is permanent epoxy structural repair system that bond to virtually any surface.

It is an all-weather, error-proof, fast curing, composite repair system.

It is the world's lightest carry-on & ready-touse repair solution

PRODUCT DESCRIPTION

The G10XL glass fiber composite patch is packaged in a easy to carry poster-format 30 cm long tube. It enables permanent structural repairs and is best used for complex shapes & angles repairs.

The glass fiber, the blue epoxy resin and the yellow hardener are precisely metered and contained in a waterproof pouch – all separated by clips that are also used to mix and spread the resin onto the fiber. The resin mix is green when ready to use. Once the resin is mixed and spread onto the fiber, the plastic pouch is cut open and the G10XL patch is applied similarly to a sticker.



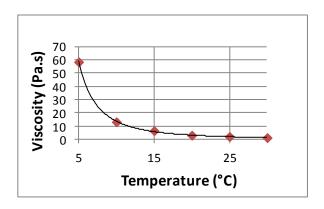
APPLICATIONS

Composite Patch is ideal to repair a wide range of materials: composite, metal, wood, etc. Composite Patch resin properties makes possible everyday repairs but also repairs in extreme weather conditions such as very low temperatures or even underwater. Repairs carried on with Composite Patch are structural and definitive.

HOW TO USE

It is recommended to keep the patch above 14° C for easier mixing.

Viscosity vs. temperature:



The table below shows how long the user has to apply the patch once the resin and hardener are mixed:

Temperature (° C)	Working time (hh:mm)
5° C	1h 20min
10° C	50min
22° C	35min
30° C	15min

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When is the repair ready?

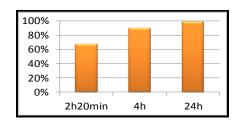
Hardemimg time depends on the temperature:

Temperature (° C)	Hardening time
5° C	15h
25° C	4h
50° C	40min
100° C	5min

If you work at 25° C 90% of the mechanical properties are obtained after 4h.

Evolution of mechanical properties (hardening) versus time at 25° C:

Mechanical properties evolution vs Time on a 1 mm sample composed of 2 layers of G10



REINFORCEMENT FIBRE DATA

Nominal area weight	600 g/m ²
Composition	Biaxial +/- 45°
Fibre type	E-glass
Nominal fibre density	2,55 g/cm ³

RESIN PROPERTIES

Glass transition temperature	70 ° C
Nominal resin density	1,12 g/cm ³

AplTec composite patch DATA

Nominal area weight	1200 g/m ²
Nominal resin content	50% (weight)
Final thickness	0.7mm

MECHANICAL PROPERTIES

Mechanical properties are measured after curing 24h @ 25°C

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Properties	Value	Standar	
Lam. Compression Modulus	13,38 GPa	UNE-EN ISO 14126	
Lam. Compression Strength	175,03 MPa	UNE-EN ISO 14126	
Laminate ILSS	23,80 MPa	UNE-EN ISO 14130	
Tensile strength	147,00 MPa	UNE-EN ISO 527	
Tensile Modulus	12,34 GPa	UNE-EN ISO 527	

PACKAGING

G10XL APLTecTM is packaged in a easy-to-find emergency orange poster tube containing:

- The G10XL patch
- Latex Gloves
- Instructions

TRANSPORT & STORAGE

Shelf life is at least one year in sealed containers as provided. Keep containers sealed and away from heat and cold preferably between 10°C and 30°C in a well ventilated.

HEALTH & SAFETY

It is advised to follow basic rules such as avoiding skin contact and wear masks when producing dust. Skin contact must be avoided by wearing protective gloves. ApITec Composite patch recommends the use of disposable gloves for most applications. Ensure adequate ventilation in work areas. Respiratory protection should be worn if there is insufficient ventilation. If the skin becomes contaminated, then the area must be immediately cleansed. The use of resin removing cleansers is recommended. To finish, wash with soap and warm water. The use of solvents on the skin to remove resins etc must be avoided. In case of eye contamination, wash with water and seek medical advice.

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