

TAB4BUILDING NEWS

TRAINING FOR ARCHITECTS AND BUILDERS IN THE USE OF
COMPOSITES FOR THE BUILDING SECTOR



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SHORTLY ABOUT THE PROJECT CONTEXT

Fiber reinforced plastics (FRP) are advanced materials that combine different kinds of polymers with various fibers such as glass, carbon, aramid, etc., resulting in stronger and more flexible properties.

Construction is the main consumer of FRP and its use is increasing. The advantages of FRP over traditional building materials are: lighter weight, excellent resistance to corrosion and rot resistance, higher durability, lower life cycle costs, lower CO2 emissions and design freedom. The need to achieve the most durable and lightweight structures possible has increased the commitment in the construction industry. Few professionals and companies have the necessary knowledge about FRP. In Europe, there is a shortage of specialized construction professionals with the appropriate knowledge of FRP. There is a need for the whole value chain to know the usability and workability of FRP.

Project duration : 1.10.2021 - 30.9.2022
Project number: 2020-1-PL01-KA202-082224

OBJECTIVES

The main objective of TAB4BUILDING is to increase the competences of the target groups in terms of knowledge and application of FRP in the construction sector and to make them professionals who can use FRP in the whole value chain.

OUTCOMES

Professional profile Map. Identifying skills gaps in the use of composites and in particular FRP. Autumn 2021

Develop training tools and methods on FRP materials for the construction sector. Content for work-based sessions, face-to-face sessions and online sessions. Winter 2022

Training content development. Theoretical

materials and video to gain complete knowledge of FRP materials for the construction sector. Spring 2022

AIM

The TAB4BUILDING project aims to develop a common training for architects/civil engineers and construction workers, enabling them to increase their skills in the knowledge and application of FRP in the construction sector.

TARGET GROUPS

- **Architects – civil engineers.** Use FRP to design construction and repair work and their need general and technical knowledge to incorporate into their designs.
- **Construction Workers.** Need general and application knowledge to use FRP materials in their construction work.

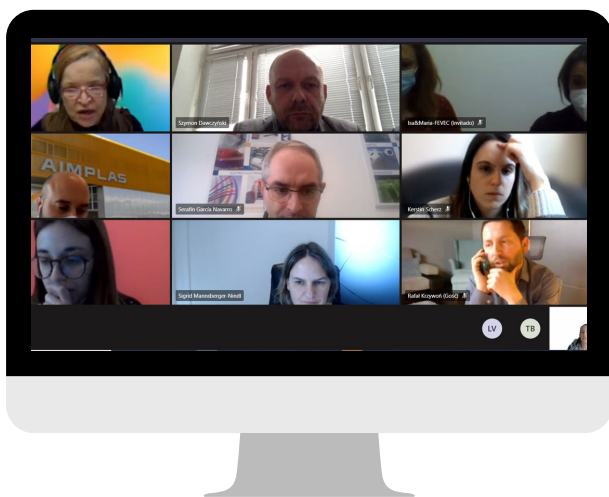


FIBER-REINFORCED PLASTICS (FRP) ARE ADVANCED MATERIALS THAT COMBINE VARIOUS INDIVIDUAL MATERIALS SUCH AS FIBERGLASS, CARBON FIBER, ETC., RESULTING IN STRONGER AND MORE FLEXIBLE PROPERTIES.

LATEST NEWS FROM US

Kick Off Meeting on December 14, 2020.

The kick off meeting of the TAB4BUILDING project took place on 14 December 2020 via video conference. Representatives of the 6 partner organizations from 5 European countries came together to celebrate the official launch of this 24-month project. TAB4BUILDING is an Erasmus+ project funded by the Erasmus National Agency in Poland. TAB4BUILDING addresses the benefits of bringing fiber reinforced plastic (FRP) into the construction sector. Fiber-reinforced plastics (FRP), or composites, are advanced materials that combine different individual materials to achieve stronger and more flexible properties. Architects, civil engineers and construction workers therefore need to acquire a deeper knowledge of these materials and address the dangers of improper use. The project, in fact, aims to reconceive and transform the understanding of this relative new construction products and structures made of FRP.



More about us



SHORT QUIZ ON COMPOSITES

1. Which of the following is not a composite substance/material?

- A) Reinforced concrete
- B) Fibre-reinforced polymers
- C) Glass

2. Fibre-reinforced polymers are composite materials.

- A) True
- B) Not true

3. Which of the following abbreviations refers to the term "glass fibre reinforced polymers"?

- A) FRC
- B) FRP
- C) GFRP
- D) GFRC

4. In glass fibre-reinforced polymers, glass fibres are known as...

- A) The Matrix
- B) Reinforcement
- C) Filler
- D) Structural element

5. What role does the matrix play in the composite material?

- A) It gives it strength and rigidity
- B) It is the binder that binds the fibres together
- C) It acts as a mould into which the composite is poured
- D) It gives the composite its volume

6. Which of the following is not used as a matrix material?

- A) Epoxy resins
- B) Pine resin
- C) Phenolic resins
- D) Polyester resins

7. An important property of polymer-reinforced composite materials is?

- A) Hardness
- B) Compressive strength
- C) Strength to weight ratio
- D) Conductivity

8. One of the advantages of using composite materials in manufacturing is that

- A) they look good
- B) have good electrical conductivity
- C) they are inexpensive
- D) can be easily moulded into complex shapes

9. The composite material shall consist of

- A) of each material
- B) two or more separate materials
- C) two or more chemically combined materials
- D) None of the following

10. Glass fibre reinforced polymers are stronger than steel in tensile strength.

- A) True
- B) Not true

11. Composite materials are easy to recycle.

- A) True
- B) Not true

12. Which statement about composite material is true?

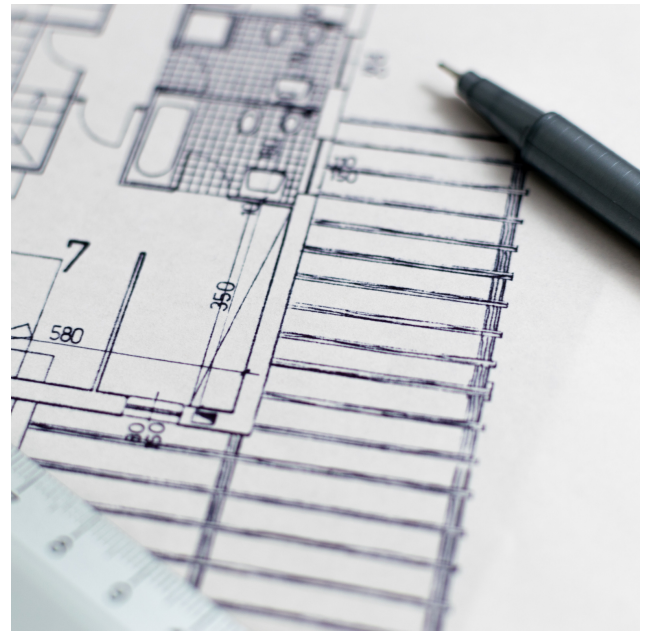
- A) It contains only one chemical compound
- B) A binder is not necessary for these types of materials
- C) It has better properties than the materials of which it is composed
- D) It is composed of two and only two materials

13. ... is the ability of a material to return to almost its original shape after a load has been applied and removed.

- A) Ductility
- B) Fragility
- C) Elasticity
- D) Rigidity

14. When and where was the world's first fibre-reinforced polymer road bridge built?

- A) In 1975, Tel Aviv, Israel
- B) In 1980, Ljubljana, Slovenia
- C) In 1995, in Stonehouse (Surrey), UK
- D) In 2000, in Los Angeles, United States of America



Correct answers: 1-C , 2-A , 3-C, 4-B , 5-B , 6-B , 7-C , 8-D , 9-B, 10-A, 11-B, 12-C, 13-C, 14-C.

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