TAB4BUILDING Cross-national Professional Profile Map on the use of FRP in the Construction Sector (for Construction Workers and Architects/Civil Engineers)

Work Area	Target group	Sub-Work-Area	Competence Steps								Covered by the following module/s in the training:					
	C (construction worker) A (architect/ civil engineer)		1	2	3	4	5	6	1 Mater	2 Process es	3 Calculu s & Design	4 Manu- facturi ng				
1 Understand and specify FRP materials	C+A	1.1. General understanding of FRP in the construction sector	1.1.a Have basic knowledge about FRP products in the construction sector (e.g.,general overview of products in construction sector)	1.1.b Have good knowledge about FRP products in the construction sector (e.g., these products are made with)	1.1.c Have special knowlede about FRP products in the construction sector(e.g., criteria for the selection)				x	x		X				
	C+A	1.2 Knowledge of different manufacturing processes of FRP products for the construction sector	1.2.a Have basic knowledge of manufacturing processes of FRP products (e.g. knowing general processes, hand lay up, infusion, pultrusion, RTM, Vacuum bag etc)	1.2.b Have good knowledge of manufacturing processes of FRP products (e.g. basic steps of the general process of FRP products)	1.2.c Have special knowledge of manufacturing processes of FRP products (e.g. aplying and made infusión, hand lay up and vacuum bag)					x		х				
	C + A	1.3. Specification of FRP types and materials	1.3.a Have basic knowledge about different FRP materials (e.g., basic limitations, constraints and use conditions)	1.3.b Have good knowledge about different kinds of FRP materials (e.g., good knowledge about limitations, constraints and use condition, different kinds of resins, fibres and fungibles needed for obtaining composites)	1.3.c Have special knowlede about different kinds of FRP materials ((e.g., expert knowledge about limitations, constraints and use condition)				x							

	Α	1.4. Search for and acquisition of FRP products	1.4.a Search for and order FRP materials/elements under supervision (e.g. basic search criteria with the main material search engines)	order FRP materials/elements (e.g. first steps to select materials or products by properties etc.)	1.4.c Supervise the searching and ordering of FRP materials/elements (e.g. supervising, and purchase knowledge to selection of the best options for products and materials)		×			
2.Apply FRP materials	A	2.1 Read and understand technical FRP sheets	2.1.a Understand technical drawings on the use of FRP materials/elements	2.1.b Compare technical data sheets	·		x		x	
	C + A	2.2 Apply FRP materials/elements in the daily work process (e.g., facades, bridges, floors)	2.2.a Apply FRP materials/elements and work tools for basic products (pipes, anchors)	2.2.b Apply FRP materials/elements and work tools for medium level products (pools, pultrusion products)	2.2.c Apply FRP materials/elements and work tools for high level (structures, beams, columns, bridges)		x	x		
3. Plan and design the application of FRP materials/ elements	A	3.1 Design construction elements with FRP	3.1.a Design construction elements with FRP under supervision (e.g., by using computer software	3.1.b Design construction elements with FRP	3.1.c Supervise the design of construction elements with FRP (e.g				x	
	A	3.2 Plan and calculate the use of FRP materials/elements	3.2.a Plan and calculate the application of FRP materials/elements under supervision (e.g., 	3.2.b Plan and calculate the application of FRP materials/elements.	3.2.c Supervise the planning and calculation of the application of FRP materials/elements.				x	
4. Handling of used FRP materials/ elements	C+A?	4.1 Assemble FRP materials/elements	4.1.a Basic skills for assembling FRP materials/elements	4.1.b. Intermediate and supervision skills for assembling	4.1.c. Select and design for assembling			х		Х

5. Quality Assurance	C+A	4.2 Repair of damaged FRP materials/elements and structural damage 5.1 Control FRP materials/elements	4.2.a. Execute steps of repairing damaged FRP materials/elements5.1.a Basic check of received materials in a building process	4.2.b. Supervising of repairing damaged FRP materials/elements 5.1.b Supervise the inspection of the qualitiy of FRP materials/elements and taking decisions	4.2.c. Design and select criteria for repairing damaged FRP materials/elements		х	x		x
6. Work Safety and (legal) requirements	C + A	6.1 Application of all safety regulations/require ments when working with FRP	6.1.a Apply and follow all safety regulations/requiremen ts when working with FRP	6.1.b Supervise the application of all safety regulations/requiremen ts when working with FRP					x	X
7.Environmental factors and the circular economy	C + A	7.1 Application of environmental requirements/regula tions when using and designing FRP materials/elements	7.1.a Apply all environmental requirements/regulations when using FRP materials/elements under supervision	7.1.b Design and Supervise the application of all environmental requirements/regulatio ns when using FRP materials/elements			x			х
	Α	7.2 Application of environmental requirements/regula tions for the design of concstruction elements with FRP	7.2.a. Apply all environmental requirements/regulations for the design of construction elements with FRP under supervision.	7.2.c Supervise the application of all environmental requirements/regulations for the design of construction elements with FRP			x	x		х
8. Documentation of data and work processes	C+A	8.1 Documentation of data and work processes	8.1.a Document all data and work processes under supervision	8.1.b Supervision all data and work processes.	8.1.c Define the documentation of all data and work processes			x		