Declaration of Performance





DoP Number: GR-2027-004

1 Unique identification code of the product-type:

MW-EN 13162-T4-WS-WL(P)

 $2\ \ Identification\ of\ the\ construction\ product\ as\ required\ under\ Article\ 11(4)\ of\ the\ regulation\ n^{\circ}\ 305/2011/EU:$

FIBRANgeo B-570-AX

3 Intended use or uses of the construction product, in accordance with the applicable harmonised technical specification, as foreseen by the manufacturer:

Thermal Insulation of Building (ThIB)

 $4\ Name, registered\ trade\ name\ or\ registered\ trade\ mark\ and\ contact\ address\ of\ the\ manufacturer\ as\ required\ under\ Article\ 11(5)\ of\ the\ regulation\ n^{\circ}$ 305/2011/EU:

FIBRAN S.A., Terpni, 62200, Serres, Greece

 $5\ Name \ and \ contact \ address \ of \ the \ authorised \ representative \ whose \ mandate \ covers \ the \ tasks \ specified \ in \ Article \ 12(2) \ of \ the \ regulation \ n^{\circ}$ 305/2011/EU:

Not applicable

6 System or systems of assessment and verification of constancy of performance of the construction product as set out in Annex V of the Regulation n° 305/2011/EU:

AVCP - System 1 - System 3

7 Notified Certification bodies FIW (Forschunginstitut für Wärmeschutz e.v München) N° 0751 and MPA (Materialprüfanstalt fün das Bauwesen $Hannover) \ N^{\circ} \ O764 \ performed, carried out the determination of the product type, the initial inspection of the manufacturing plant and of factory and the product type in the initial inspection of the manufacturing plant and of factory and the product type in the initial inspection of the manufacturing plant and of factory and the product type in the initial inspection of the manufacturing plant and of factory and the product type in the initial inspection of the manufacturing plant and of factory and the product type in the initial inspection of the manufacturing plant and of factory and the product type in the initial inspection of the manufacturing plant and of factory and the product type in the product$ $production\ control\ and\ the\ continuous\ surveillance,\ assessment\ and\ evaluation\ of\ factory\ production\ control\ and\ issued\ the\ certificate\ of\ constancy\ of\ factory\ production\ control\ and\ issued\ the\ certificate\ of\ constancy\ of\ factory\ production\ control\ and\ issued\ the\ certificate\ of\ constancy\ of\ factory\ production\ control\ and\ issued\ the\ certificate\ of\ constancy\ of\ factory\ production\ control\ and\ issued\ the\ certificate\ of\ constancy\ of\ factory\ production\ control\ and\ issued\ the\ certificate\ of\ constancy\ of\ factory\ production\ control\ and\ issued\ the\ certificate\ of\ constancy\ of\ factory\ production\ control\ and\ issued\ the\ certificate\ of\ constancy\ of\ factory\ production\ control\ and\ issued\ the\ certificate\ of\ constancy\ of\ constancy\ of\ certificate\ of\ constancy\ of\ certificate\ of\ constancy\ of\ certificate\ of$ performance for reaction to fire.

0751-CPR-223.0-01

8 Declared performance according to harmonized standard:

EN 13162:2012+A1:2015

Reaction to fire Rest Euroclass C Realease of dangerous substances Realease of dangerous substances NPD Acoustic absorption index Sound absorption AW NPD Dynamic stiffness SD MN/m³ NPD Impact noise transmission index Compressibility CP mm NPD Impact noise transmission index Air flow resistivity AFr kPa.s/m³ NPD Direct airborne sound insulation index Air flow resistivity AFr kPa.s/m³ NPD Continous glowing combustion Thermal resistance Rp m³ K/W see below table Thermal resistance Rp m³ K/W see below table Thermal resistance Rp m³ K/W see below table Thermal conductivity λ_0 W/m K 0.033 Thickness α_0 mm 30-300 Thickness α_0 mm 30-300 Thickness class T Class T4 Water permeability Water water absorption WL(P) <td< th=""><th>Essential characteristics</th><th colspan="2">ristics Performance</th><th>Unit</th><th>Declared performance</th></td<>	Essential characteristics	ristics Performance		Unit	Declared performance	
Acoustic absorption index $ Sound absorption AW - NPD Dynamic striftness SD MN/m³ NPD $	Reaction to fire	Reaction to fire	RtF	Euroclass	С	
Dynamic stiffness SD MM/m² NPD		Realease of dangerous substances				
$Impact noise transmission index \\ Impact noise transmission index \\ In flow resistivity \\ In flow resist$	Acoustic absorption index	Sound absorption	AW	-		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		•	SD	MN/m³	NPD	
Air flow resistivity		Thickness		mm	NPD	
Direct airborne sound insulation index	Impact noise transmission index	Compressibility	СР	mm	NPD	
Continous glowing combustion		Air flow resistivity	AFr	kPa.s/m²	NPD	
Thermal resistance $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Direct airborne sound insulation index	Air flow resistivity	AFr	kPa.s/m²	NPD	
Thermal resistance $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Continous glowing combustion	Continous glowing combustion			NPD	
$\frac{1}{\text{Thickness}} = \frac{d_N}{d_N} = \frac{30-300}{\text{Thickness}} = \frac{d_N}{T} = \frac{30-300}{\text{Class}} = \frac{74}{\text{Class}} = \frac{74}$		Thermal resistance	R _D	m² K/W	see below table	
$\frac{\text{Thickness}}{\text{Thickness class}} & \frac{d_N}{T} & \text{mm} & \frac{30-300}{T} \\ \hline \text{Thickness class} & T & \text{Class} & T4 \\ \hline \text{Short term water absorption} & WS & kg/m^2 & <1 \\ \hline \text{Long term water absorption} & WL(P) & kg/m^2 & <3 \\ \hline \text{Water vapour permeability} & \frac{MU}{Z} & \frac{-1}{Z} & \frac{NPD}{MU} \\ \hline \text{Compressive strength} & \frac{MU}{Z} & \frac{-1}{MU} & \frac{-1}{Z} & \frac{NPD}{MU} \\ \hline \text{Compressive strength} & \frac{CS(10)}{P} & kPa & \frac{NPD}{MU} & \frac{-1}{Z} & \frac{NPD}{MU} \\ \hline \text{Point Load} & PL(S) & N & \frac{NPD}{MU} & \frac{-1}{Z} & \frac{NPD}{MU} \\ \hline \text{Point Load} & PL(S) & N & \frac{NPD}{MU} & \frac{-1}{Z} & \frac{NPD}{MU} \\ \hline \text{Point Load} & PL(S) & N & \frac{NPD}{MU} & \frac{-1}{Z} & \frac{NPD}{MU} \\ \hline \text{Point Load} & PL(S) & N & \frac{NPD}{MU} & \frac{-1}{Z} & \frac{NPD}{MU} \\ \hline \text{Point Load} & PL(S) & N & \frac{NPD}{MU} & \frac{-1}{Z} & \frac{NPD}{MU} \\ \hline \text{Point Load} & PL(S) & N & \frac{NPD}{MU} & \frac{-1}{Z} & \frac{NPD}{MU} \\ \hline \text{Point Load} & PL(S) & N & \frac{NPD}{MU} & \frac{-1}{Z} & \frac{NPD}{MU} \\ \hline \text{Point Load} & \frac{NPD}{MU} & \frac{-1}{Z} & \frac{NPD}{MU} & \frac{-1}{Z} & \frac{NPD}{MU} \\ \hline \text{Point Load} & \frac{NPD}{MU} & \frac{NPD}{MU} & \frac{NPD}{MU} \\ \hline \text{Termal resistance against heat, weathering, ageing/degradation} & \frac{NPD}{MU} & \frac{NPD}{MU} \\ \hline \text{Termile/Flexural strength} & \frac{NPD}{MU} & \frac{NPD}{MU} \\ \hline \text{Tensile strength perpendicular to faces} & TR & \frac{NPD}{MU} & \frac{NPD}{MU} \\ \hline \text{Point Load} & \frac{NPD}{MU} & \frac{NPD}{MU} \\ \hline \text{Tensile gaing/degradation} & \frac{NPD}{MU} & \frac{NPD}{MU} \\ \hline \text{Tensile gaing/degradation} & \frac{NPD}{MU} & \frac{NPD}{MU} \\ \hline \text{Tensile gradation} & N$	Thermal resistance	Thermal conductivity	λ _D	W/m K	0,033	
$Water permeability \begin{tabular}{ll} Short term water absorption & WS & kg/m^2 & <1 \\ Long term water absorption & WL(P) & kg/m^2 & <3 \\ Water vapour permeability & Water vapour transmission & Z & m2hPa/mg & >10 \\ \hline Z & m2hPa/mg & >10 \\ Z & m2hPa/mg & >10 $		Thickness	d _N	mm	30-300	
Water permeability Long term water absorption WL(P) kg/m² <3 Water vapour permeability Water vapour transmission MU - NPD Compressive strength Compressive stress CS(10) kPa NPD Compressive strength Point Load PL(5) N NPD Durability of reaction to fire against heat, weathering, ageing/degradation Reaction to fire RtF Euroclass C Durability of thermal resistance against heat, weathering, ageing/degradation Thermal resistance Ro m² K/W see below table Thermal conductivity λo W/m K 0,033 Durability of compressive strength Tensile strength perpendicular to faces TR kPa NPD Durability of compressive strength against heat, weathering, ageing/degradation Compressive creep CC(t ₁ /t ₂ /y) σ _c mm NPD		Thickness class	T	Class	T4	
		Short term water absorption	WS	kg/m²	<1	
$\frac{Z}{Z} \frac{m2hPa/mg}{m2hPa/mg} > 10$ $\frac{R}{Z} \frac$	Water permeability	Long term water absorption	WL(P)	kg/m²	<3	
$\frac{Z}{COMPressive strength} = \frac{Z}{CS(10)} \times \frac{Z}{KPa} = \frac{NPD}{NPD}$ $\frac{Compressive strength}{Point Load} \times \frac{PL(5)}{Point Load} \times \frac{PL(5)}{PL(5)} \times \frac{N}{N} \times \frac{NPD}{NPD}$ $\frac{Durability of reaction to fire against heat, weathering, ageing/degradation}{PL(5)} \times \frac{RtF}{RtF} \times \frac{Euroclass}{RtF} \times \frac{C}{RtF} \times \frac{RtF}{RtF} \times \frac{Euroclass}{RtF} \times \frac{C}{RtF} \times \frac{RtF}{RtF} \times \frac{RtF}{RtF}$	Water vapour permeability	Water vapour transmission	MU	-	NPD	
Compressive strength P_{0} Point Load P_{0} PL(5) P_{0} N P_{0} NPD P_{0} Durability of reaction to fire against heat, weathering, ageing/degradation P_{0} Reaction to fire P_{0} Reaction to fire P_{0} RtF P_{0} Euroclass P_{0} Purability of thermal resistance against heat, weathering, ageing/degradation P_{0} Purability of thermal resistance against heat, weathering, ageing/degradation P_{0} Purability of the strength P_{0} Purability of the strength perpendicular to faces P_{0} Purability of the strength against heat, weathering, ageing/degradation P_{0} Purability of compressive strength against heat, weathering, ageing/degradation P_{0} Purability of compressive strength against heat, weathering, ageing/degradation P_{0} Purability of compressive strength against heat, weathering, ageing/degradation P_{0} Purability of compressive strength against heat, weathering, ageing/degradation P_{0} Purability of compressive strength against heat, weathering, ageing/degradation P_{0} Purability of compressive strength against heat, weathering, ageing/degradation P_{0} Purability of compressive strength against heat, weathering, ageing/degradation P_{0} Purability of compressive strength against heat, weathering, ageing/degradation P_{0} Purability of compressive strength against heat, weathering, ageing P_{0} Purability of compressive strength against heat, weathering, ageing P_{0} Purability of compressive strength against heat, weathering, ageing P_{0} Purability of compressive strength against heat, weathering, ageing P_{0} Purability of compressive strength against heat, weathering, ageing P_{0} Purability of compressive strength against heat, weathering, ageing P_{0} Purability of compressive strength against heat, weathering P_{0} Purability of compre	water vapour permeability	water vapour transmission	Z	m2hPa/mg	>10	
Durability of reaction to fire against heat, weathering, ageing/degradation Reaction to fire Reacti	Compressive strength	Compressive stress	CS(10)	kPa	NPD	
ageing/degradation Reaction to fire RtF Eurociass C Durability of thermal resistance against heat, weathering, ageing/degradation Thermal resistance R_D	Compressive suringui	Point Load	PL(5)	N	NPD	
Durability of thermal resistance against heat, weathering, ageing/degradation		Reaction to fire	RtF	Euroclass	С	
ageing/degradation $\frac{1}{D}$ $\frac{1}{$	Durability of thermal recistance against heat weath arise	Thermal resistance	R _D	m² K/W	see below table	
Tensile/Flexural strength Tensile strength perpendicular to faces TR kPa NPD Durability of compressive strength against heat, weathering, ageing/degradation CCC(i ₁ /i ₂ /y) σ _c mm NPD		Thermal conductivity	λ _D	W/m K	0,033	
Durability of compressive strength against heat, weathering, ageing/degradation $CC(i_1/i_2/y) \sigma_c$ mm NPD	ageing/degradation	Durability characteristics	DS (70,90)	%	NPD	
ageing/degradation Compressive creep CC(I ₁ /I ₂ /y) σ _c mm	Tensile/Flexural strength	Tensile strength perpendicular to faces	TR	kPa	NPD	
NPD: No Performance Determined		Compressive creep	CC(i ₁ /i ₂ /y) σ _c	mm	NPD	
	NPD: No Performance Determined					

9 The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 8.

Thickness	d _N (mm)	30	40	50	60	70	80	90	100	110	120	130	140	150	160	180	200
Thermal resistance	R _D (m ² K/W)	0,90	1,20	1,50	1,80	2,10	2,40	2,70	3,00	3,30	3,60	3,90	4,20	4,50	4,80	5,45	6,05

This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

Name: Dr. Chadiarakou Stella Function: Quality Assurance Manager

Place: Thessaloniki 1/3/2021 Date: Signature: