

## **Declaration of Performance**

## G4222JPCPR

1. <u>Unique Identification code of the product-type:</u>

CLASSIC 037, CLASSIC 040-V, ECOBATT 037, ECOBATT MUR ISOLERING 037, ECOBLANKET, ECOBLANKET 037, FactPlus IPB 037, FactPlus FCB 037, FactPlus LBB 037, FactPlus LBB 037, NATURBOARD 037, NATUROLL 037, MINERAL PLUS IPB 037, TM100,TI116, TI137U, TI140W, TI416,TP115,TP116, TP416,TPM100, ULTRACOUSTIC P, UNIFIT 037, EKOBOARD 037, CLIMOWOOL DF 37, CLIMOWOOL TW1, CLIMOWOOL TW1-E, CLIMOWOOL FD1/V, CLIMOWOOL KF1, CLIMOWOOL KD1/V, AKUSTIK BOARD.

2. Type, Batch or serial number or any other element allowing identification of the construction product as required under article 11(4) of the CPR:

See Product Label.

3. <u>Intended use or uses of the construction product</u>, in accordance with the applicable harmonised technical specification foreseen by the manufacturer:

Thermal Insulation for Buildings (ThIB) - EN 13162:2012

4. Name, registered trade name or registered trade mark and contact address of the manufacturer as required under Article 11(5):

**Knauf Insulation** 

Am Bahnhof 7, 97346 Iphofen,

Deutschland

www.knaufinsulation.com

Contact: <a href="mailto:dop@knaufinsulation.com">dop@knaufinsulation.com</a>

- Where applicable, name and contact address of the authorised representative whose mandate covers the tasks specified in Article 12(2): Not applicable.
- 6. <u>System or systems of assessment and verification of constancy of performance of the construction product as set out in Annex V:</u>
  - AVCP System 1 for Reaction to Fire
  - AVCP System 3 for the other characteristics
- 7. <u>In case of the declaration of performance concerning a construction product covered by a harmonised standard:</u>

MPA Hannover (Notified certification body  $N^{\circ}$  0764) performed the initial inspection of the manufacturing plant and of factory production control and the continuous surveillance, assessment and evaluation of factory production control; and issued the certificate of constancy of performance for reaction to fire under system 1

MPA Hannover (Notified testing laboratory N°0764) performed the test reports for the other declared characteristics under system 3.

8. In case of the declaration of performance concerning a construction product for which a European Technical Assessment has been issued:

Not applicable.



## 9. <u>Declared Performances:</u>

Essential Characteristics	Performance	CLASSIC 037	CLASSIC 040-V	ECOBATT 037	ECOBATT MUR ISOLERING 037	Harmonised Technical Specification	
	Thermal conductivity (W/mK)	0.037	0.037	0.037	0.037		
<b>T</b>	Thermal Resistance See product label						
Thermal Resistance	Thickness range (mm)	40-260	30-220	40-260	40-260		
	Thickness tolerance	T2	T2	T4	T4		
Reaction to Fire	Reaction to fire	A1	A1	A1	A1		
Continuous glowing combustion	Continuous glowing combustion e	NPD	NPD	NPD	NPD		
Tensile/Flexural strength	Tensile strength perpendicular faces	NPD	NPD	NPD	NPD		
Compressive Strength	Compressive Stress/Compressive Strength	NPD	NPD	NPD	NPD		
Compressive Strength	Point Load	NPD	NPD	NPD	NPD		
Durability of compressive Strength against ageing / degradation	Compressive creep	NPD	NPD	NPD	NPD		
Durability of reaction to fire against heat, weathering, ageing / degradation	Durability Characteristics <sup>a</sup>	NPD	NPD	NPD	NPD		
	Thermal Resistance b	NPD	NPD	NPD	NPD	EN 13162:2012	
Durability of thermal resistance against heat, weathering, ageing / degradation	Thermal conductivity <sup>b</sup>	NPD	NPD	NPD	NPD		
acgradation	Durability characteristics <sup>c</sup>	NPD	NPD	NPD	NPD		
Matan Barra ability	Short term water absorption	WS	NPD	NPD	WS		
Water Permeability	Long term water absorption	WL(P)	NPD	NPD	NPD		
Water vapour permeability	Water vapour transmission, water vapour diffusion resistance factor	NPD	NPD	NPD	NPD		
	Dynamic stiffness	NPD	NPD	NPD	NPD		
Impact noise transmissions index	ThicknessdL	NPD	NPD	NPD	NPD		
(for floors)	Compressibility <sup>c</sup>	NPD	NPD	NPD	NPD		
	Air flow resistivity	AFr5	AFr5	AFr5	AFr5		
Acoustic absorptions index	Sound absorption	NPD	NPD	NPD	NPD		
Direct airborne sound insulation index	Air flow resistivity	AFr5	AFr5	AFr5	AFr5		
Release of dangerous substances to the indoor environment	Release of dangerous substances®	NPD	NPD	NPD	NPD		
NPD – No performance determined	•				•		



		Harmonised				
Essential Characteristics	Performance	ECOBLANKET	ECOBLANKET 037	FactPlus IPB 037	FactPlus FCB 037	Technical Specification
	Thermal conductivity (W/mK)	0.037	0.037	0.037	0.037	
T. 15	Thermal Resistance		See product la	bel		
Thermal Resistance	Thickness range (mm)	40-260	40-260	40-260	40-260	
	Thickness tolerance	T2	T2	T2	T2	
Reaction to Fire	Reaction to fire	A1	A1	A1	A1	
Continuous glowing combustion	Continuous glowing combustion e	NPD	NPD	NPD	NPD	
Tensile/Flexural strength	Tensile strength perpendicular faces	NPD	NPD	NPD	NPD	
Compressive Strength	Compressive Strength	NPD	NPD	NPD	NPD	
3.	Point Load	NPD	NPD	NPD	NPD	
Durability of compressive Strength against ageing / degradation	Compressive creep	NPD	NPD	NPD	NPD	
Durability of reaction to fire against heat, weathering, ageing / degradation	Durability Characteristics <sup>a</sup>	NPD	NPD	NPD	NPD	
Durability of thermal	Thermal Resistance <sup>b</sup>	NPD	NPD	NPD	NPD	EN 13162:2012
resistance against heat, weathering, ageing /	Thermal conductivity <sup>b</sup>	NPD	NPD	NPD	NPD	
degradation	Durability characteristics °	NPD	NPD	NPD	NPD	
Water Permeability	Short term water absorption	NPD	NPD	WS	WS	
water r enneability	Long term water absorption	NPD	NPD	WL(P)	WL(P)	
Water vapour permeability	Water vapour transmission, water vapour diffusion resistance factor	NPD	NPD	MU1	MU1	
	Dynamic stiffness	NPD	NPD	NPD	NPD	
Impact noise transmissions	ThicknessdL	NPD	NPD	NPD	NPD	
index (for floors)	Compressibility <sup>c</sup>	NPD	NPD	NPD	NPD	
	Air flow resistivity	AFr5	AFr5	AFr5	AFr5	
Acoustic absorptions index	Sound absorption	NPD	NPD	NPD	NPD	
Direct airborne sound insulation index	Air flow resistivity	AFr5	AFr5	AFr5	AFr5	
Release of dangerous substances to the indoor environment	Release of dangerous substances e	NPD	NPD	NPD	NPD	
substances to the indoor	substancese	NPD	NPD	NPD	NPD	



Essential	G4222JPCPR							
Essential Characteristics	Performance	FactPlus LBB 037	FactPlus LRB 037	NATURBOARD 037	NATUROLL 037	Technical Specification		
	Thermal conductivity (W/mK)	0.037	0.037	0.037	0.037			
T. 15	Thermal Resistance		See p	roduct label				
Thermal Resistance	Thickness range (mm)	40-260	40-260	40-260	40-260			
	Thickness tolerance	T2	T2	T2	T2			
Reaction to Fire	Reaction to fire	A1	A1	A1	A1			
Continuous glowing combustion	Continuous glowing combustion e	NPD	NPD	NPD	NPD			
Tensile/Flexural strength	Tensile strength perpendicular faces	NPD	NPD	NPD	NPD			
Compressive Strength	Compressive Stress / Compressive Strength	NPD	NPD	NPD	NPD			
	Point Load	NPD	NPD	NPD	NPD			
Durability of compressive Strength against ageing / degradation	Compressive creep	NPD	NPD	NPD	NPD			
Durability of reaction to fire against heat, weathering, ageing / degradation	Durability Characteristics <sup>a</sup>	NPD	NPD	NPD	NPD			
Durability of thermal	Thermal Resistance <sup>b</sup>	NPD	NPD	NPD	NPD	EN 13162:2012		
resistance against heat, weathering, ageing /	Thermal conductivity <sup>b</sup>	NPD	NPD	NPD	NPD			
degradation	Durability characteristics <sup>c</sup>	NPD	NPD	NPD	NPD			
Water Permeability	Short term water absorption	WS	WS	ws	WS			
water Fernieability	Long term water absorption	WL(P)	WL(P)	WL(P)	WL(P)			
Water vapour permeability	Water vapour transmission, water vapour diffusion resistance factor	MU1	MU1	MU1	MU1			
	Dynamic stiffness	NPD	NPD	NPD	NPD			
Impact noise transmissions	Thickness <sup>d</sup> L	NPD	NPD	NPD	NPD			
index (for floors)	Compressibility <sup>c</sup>	NPD	NPD	NPD	NPD			
	Air flow resistivity	AFr5	AFr5	AFr5	AFr5			
Acoustic absorptions index	Sound absorption	NPD	NPD	NPD	NPD			
Direct airborne sound insulation index	Air flow resistivity	AFr5	AFr5	AFr5	AFr5			
Release of dangerous substances to the indoor environment	Release of dangerous substancese	NPD	NPD	NPD	NPD			



		Harmonised				
Essential Characteristics	Performance	MINERAL PLUS IPB 037	TM100	TI116	TI137U	Technical Specification
	Thermal conductivity (W/mK)	0.037	0.037	0.037	0.037	
The second Desciotes	Thermal Resistance					
Thermal Resistance	Thickness range (mm)	30-260	30-260	30-200	50-260	
	Thickness tolerance	T2	T2	T4	T2	
Reaction to Fire	Reaction to fire	A1	A1	A1	A1	
Continuous glowing combustion	Continuous glowing combustion e	NPD	NPD	NPD	NPD	
Tensile/Flexural strength	Tensile strength perpendicular faces	NPD	NPD	NPD	NPD	
Compressive Strength	Compressive Stress/Compressive Strength	NPD	NPD	NPD	NPD	
Compressive Strength	Point Load	NPD	NPD	NPD	NPD	
Durability of compressive Strength against ageing / degradation	Compressive creep	NPD	NPD	NPD	NPD	
Durability of reaction to fire against heat, weathering, ageing / degradation	Durability Characteristics <sup>a</sup>	NPD	NPD	NPD	NPD	
	Thermal Resistance <sup>b</sup>	NPD	NPD	NPD	NPD	EN 13162:2012
Durability of thermal resistance against heat, weathering, ageing / degradation	Thermal conductivity <sup>b</sup>	NPD	NPD	NPD	NPD	
aogradation	Durability characteristics <sup>c</sup>	NPD	NPD	NPD	NPD	
Water Dame oak ilitu	Short term water absorption	NPD	WS	WS	NPD	
Water Permeability	Long term water absorption	NPD	WL(P)	WL(P)	NPD	
Water vapour permeability	Water vapour transmission, water vapour diffusion resistance factor	MU1	NPD	NPD	NPD	
	Dynamic stiffness	NPD	NPD	NPD	NPD	
Impact noise transmissions index	Thickness d <sub>L</sub>	NPD	NPD	NPD	NPD	
(for floors)	Compressibility <sup>c</sup>	NPD	NPD	NPD	NPD	
	Air flow resistivity	AFr5	AFr5	AFr5	AFr5	
Acoustic absorptions index	Sound absorption	NPD	NPD	NPD	NPD	
Direct airborne sound insulation index	Air flow resistivity	AFr5	AFr5	AFr5	AFr5	
Release of dangerous substances to the indoor environment	Release of dangerous substances®	NPD	NPD	NPD	NPD	
NPD – No performance determined		1		L	1	



Ecceptial Characteristics		Harmonised Technical				
Essential Characteristics	Performance	TI140W	TI416	TP115	TP116	Specification
	Thermal conductivity (W/mK)	0.037	0.037	0.037	0.037	
	Thermal Resistance		See prod	duct label		
Thermal Resistance	Thickness range (mm)	25-260	30-200	40-260	30-260	<del>-</del>
	Thickness tolerance	T2	T4	T2	T4	
Reaction to Fire	Reaction to fire	A1	A1	A1	A1	
Continuous glowing combustion	Continuous glowing combustion e	NPD	NPD	NPD	NPD	
Tensile/Flexural strength	Tensile strength perpendicular faces	NPD	NPD	NPD	NPD	
Compressive Strength	Compressive Stress/Compressive Strength	NPD	NPD	NPD	NPD	
	Point Load	NPD	NPD	NPD	NPD	
Durability of compressive Strength against ageing / degradation	Compressive creep	NPD	NPD	NPD	NPD	
Durability of reaction to fire against heat, weathering, ageing / degradation	Durability Characteristics <sup>a</sup>	NPD	NPD	NPD	NPD	
	Thermal Resistance <sup>b</sup>	NPD	NPD	NPD	NPD	EN 13162:2012
Durability of thermal resistance against heat, weathering, ageing / degradation	Thermal conductivity <sup>b</sup>	NPD	NPD	NPD	NPD	
aogradation	Durability characteristics <sup>c</sup>	NPD	NPD	NPD	NPD	
Mater Dames askility	Short term water absorption	WS	WS	NPD	WS	
Water Permeability	Long term water absorption	WL(P)	WL(P)	NPD	WL(P)	]
Water vapour permeability	Water vapour transmission, water vapour diffusion resistance factor	NPD	NPD	NPD	NPD	
	Dynamic stiffness	NPD	NPD	NPD	NPD	=
Impact noise transmissions index	Thickness d <sub>L</sub>	NPD	NPD	NPD	NPD	
(for floors)	Compressibility <sup>c</sup>	NPD	NPD	NPD	NPD	-
	Air flow resistivity	AFr5	AFr5	AFr5	AFr5	
Acoustic absorptions index	Sound absorption	NPD	NPD	NPD	NPD	
Direct airborne sound insulation index	Air flow resistivity	AFr5	AFr5	AFr5	AFr5	1
Release of dangerous substances to the indoor environment	Release of dangerous substances e	NPD	NPD	NPD	NPD	]
NPD – No performance determined						



Thermal Resistance Th	Performance hermal conductivity (W/mK) hermal Resistance hickness range (mm)	<b>TP416</b> 0.037	<b>TPM100</b>	ULTRA- COUSTIC P	UNIFIT 037	Technical Specification
Thermal Resistance Th	hermal Resistance hickness range (mm)	0.037	0.037		001	Technical Specification
Thermal Resistance Th	hickness range (mm)		0.007	0.037	0.037	
Th	<b>5</b> \ ,		See prod	uct label		
	h. Calana a an da la mana a a	30-200	40-220	30-220	50-260	
	hickness tolerance	T4	T4	T4	T2	
Reaction to Fire Re	eaction to fire	A1	A1	A1	A1	
0 0	ontinuous glowing ombustion <sup>e</sup>	NPD	NPD	NPD	NPD	
Tensile/Flexural strength Te	ensile strength perpendicular ices	NPD	NPD	NPD	NPD	
	ompressive Stress / ompressive Strength	NPD	NPD	NPD	NPD	
	oint Load	NPD	NPD	NPD	NPD	
Durability of compressive Strength against ageing / degradation	ompressive creep	NPD	NPD	NPD	NPD	
Durability of reaction to fire against heat, weathering, ageing / degradation	urability Characteristics <sup>a</sup>	NPD	NPD	NPD	NPD	
Durability of thermal	hermal Resistance <sup>b</sup>	NPD	NPD	NPD	NPD	EN 13162:2012
resistance against heat, weathering, ageing /	hermal conductivity <sup>b</sup>	NPD	NPD	NPD	NPD	
degradation Du	urability characteristics <sup>c</sup>	NPD	NPD	NPD	NPD	
	hort term water absorption	WS	ws	NPD	NPD	-
Water Permeability Lo	ong term water absorption	WL(P)	WL(P)	NPD	NPD	
Water vapour permeability wa	/ater vapour transmission, ater vapour diffusion esistance factor	NPD	NPD	NPD	NPD	
Dy	ynamic stiffness	NPD	NPD	NPD	NPD	
impact noise transmissions	hickness <sup>d</sup> L	NPD	NPD	NPD	NPD	
index (for floors)	ompressibility <sup>c</sup>	NPD	NPD	NPD	NPD	
Ai	ir flow resistivity	AFr5	AFr5	AFr5	AFr5	
Acoustic absorptions index Sc	ound absorption	NPD	NPD	NPD	NPD	
Direct airborne sound insulation index	ir flow resistivity	AFr5	AFr5	AFr5	AFr5	
sunstances to the indoor	elease of dangerous ubstances e	NPD	NPD	NPD	NPD	



Essential Characteristics		G4222JPCPR					
<b>Essential Characteristics</b>	Performance	EKOBOARD	AKUSTIK	CLIMOWOOL		<ul><li>Harmonised</li><li>Technical</li><li>Specification</li></ul>	
	Performance	037	BOARD	KF1	KD1/V	Specification	
	Thermal conductivity (W/mK)	0.037	0.037	0.037	0.037		
	Thermal Resistance		See produ	uct label			
Thermal Resistance	Thickness range (mm)	40-260	40-260	40-240	30-220		
	Thickness tolerance	T2	T2	T2	T4		
Reaction to Fire	Reaction to fire	A1	A1	A1	A1		
Continuous glowing combustion	Continuous glowing combustion e	NPD	NPD	NPD	NPD		
Tensile/Flexural strength	Tensile strength perpendicular faces <sup>d</sup>	NPD	NPD	NPD	NPD		
Compressive Strength	Compressive Stress / Compressive Strength	NPD	NPD	NPD	NPD		
Sompressive Guerigan	Point Load	NPD	NPD	NPD	NPD		
Durability of compressive Strength against ageing / degradation	Compressive creep	NPD	NPD	NPD	NPD		
Durability of reaction to fire against heat, weathering, ageing / degradation	Durability Characteristics <sup>a</sup>	NPD	NPD	NPD	NPD		
	Thermal Resistance <sup>b</sup>	NPD	NPD	NPD	NPD	EN 13162:2012	
Durability of thermal resistance against heat, weathering, ageing / degradation	Thermal conductivity b	NPD	NPD	NPD	NPD		
agoing / dogradation	Durability characteristics <sup>c</sup>	NPD	NPD	NPD	NPD		
Mater Democratists	Short term water absorption	NPD	NPD	NPD	NPD		
Water Permeability	Long term water absorption	NPD	NPD	NPD	NPD		
Water vapour permeability	Water vapour transmission, water vapour diffusion resistance factor	NPD	NPD	NPD	NPD		
	Dynamic stiffness	NPD	NPD	NPD	NPD		
Impact noise transmissions	Thickness d L	NPD	NPD	NPD	NPD	_	
index (for floors)	Compressibility <sup>c</sup>	NPD	NPD	NPD	NPD		
	Air flow resistivity	AFr5	AFr5	AFr5	AFr5	-	
Acoustic absorptions index	Sound absorption	NPD	NPD	NPD	NPD		
Direct airborne sound insulation index	Air flow resistivity	AFr5	AFr5	AFr5	AFr5		
Release of dangerous substances to the indoor environment	Release of dangerous substancese	NPD	NPD	NPD	NPD		



		G4222JPCPR					
Essential Characteristics			CLIMO	WOOL		- Harmonised Technical - Specification	
	Performance	DF37	TW1	TW1-e	FD1/V		
	Thermal conductivity (W/mK)	0.037	0.037	0.037	0.037		
	Thermal Resistance		See prod	uct label			
Thermal Resistance	Thickness range (mm)	50 – 260	40 – 260	40 – 260	30 - 200		
	Thickness tolerance	T2	T2	T2	T4		
Reaction to Fire	Reaction to fire	A1	A1	A1	A1		
Continuous glowing combustion	Continuous glowing combustion e	NPD	NPD	NPD	NPD		
Tensile/Flexural strength	Tensile strength perpendicular faces <sup>d</sup>	NPD	NPD	NPD	NPD		
Compressive Strength	Compressive Stress / Compressive Strength	NPD	NPD	NPD	NPD		
Compressive Changan	Point Load	NPD	NPD	NPD	NPD		
Durability of compressive Strength against ageing / degradation	Compressive creep	NPD	NPD	NPD	NPD		
Durability of reaction to fire against heat, weathering, ageing / degradation	Durability Characteristics <sup>a</sup>	NPD	NPD	NPD	NPD		
D 135 (4)	Thermal Resistance <sup>b</sup>	NPD	NPD	NPD	NPD	EN 13162:2012	
Durability of thermal resistance against heat, weathering, ageing /	Thermal conductivity <sup>b</sup>	NPD	NPD	NPD	NPD		
degradation	Durability characteristics <sup>c</sup>	NPD	NPD	NPD	NPD		
W . B . 135	Short term water absorption	NPD	NPD	NPD	NPD		
Water Permeability	Long term water absorption	NPD	NPD	NPD	NPD		
Water vapour permeability	Water vapour transmission, water vapour diffusion resistance factor	NPD	NPD	NPD	NPD		
	Dynamic stiffness	NPD	NPD	NPD	NPD		
Impact noise transmissions	Thickness d <sub>L</sub>	NPD	NPD	NPD	NPD		
index (for floors)	Compressibility <sup>c</sup>	NPD	NPD	NPD	NPD	_	
	Air flow resistivity	AFr5	AFr5	AFr5	AFr5	•	
Acoustic absorptions index	Sound absorption	NPD	NPD	NPD	NPD		
Direct airborne sound insulation index	Air flow resistivity	AFr5	AFr5	AFr5	AFr5		
Release of dangerous substances to the indoor environment	Release of dangerous substances e	NPD	NPD	NPD	NPD		



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

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

## Signed for and on behalf of the manufacturer by:

Dominique Bossan – Managing Director (Name and function)

Krupka – 12/12/2014 (Place and date of issue)

(Signature)

a No change in reaction to fire properties for MW Products

The fire performance of MW does not deteriorate with time. The Euroclass classification of the product is related to the organic content, which cannot increase with time

b Thermal conductivity of MW products does not change with time, experience has shown the fibre structure to be stable and the porosity contains no other gases than atmospheric air

c For dimensional stability thickness only

d This characteristic also covers handling and installation

e European test methods are under development

f Also valid and applicable for multilayers