



# **Construction Materials Testing-Green Building**

### 014-LB-TEST

### **Construction Material Laboratory Section**

#### **Dubai Central Laboratory Department**

**Dubai Municipality** 

## Za'beel Street, Al Karamah, Dubai- United Arab Emirates

Issue no.: 05

Date: 29-05-2019

Type of Activity	Test Materials/Products	Test Name	Test Method
Physical/ Mechanical	Construction Materials	Standard Test Method	ASTM D143
		for Small Clear	Clause 8
		Specimens of Timber.	
		Static Bending.	
Physical/ Mechanical	Construction Materials	Standard Specification	ASTM C534/C534M
		for Preformed Flexible	Clause 11.4 (Oven
		Elastomeric Cellular	Method)
		Thermal Insulation in	
		Sheet and Tubular Form.	
		Linear Shrinkage.	





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Issue no.: 05

Date: 29-05-2019

Type of Activity	Test	Test Name	Test Method
	Materials/Products	rest Name	
Physical/ Mechanical	Construction Materials	Thermal performance of	BS EN 12667
		building materials and	
		products -Determination	
		of thermal resistance by	
		means of guarded hot	
		plate and heat flow meter	
		methods - Products of	
		high and medium thermal	
		resistance.	
		(Heat Flow Meter	
		Method)	





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Issue no.: 05

Date: 29-05-2019

Type of Activity	Test Materials/Products	Test Name	Test Method
			100.0004
		Thermal insulation -	ISO 8301
		Determination of steady-	Amd 1:2010 (E)
		state thermal resistance	
		and related properties -	
		Heat flow meter	
		apparatus.	
Physical/ Mechanical	Construction Materials	Fire classification of	BS EN 13501 Part
		construction products	1+A1
		and building elements	
		Part 1 : Classification	
		using test data from	
		reaction to fire tests	
Physical/ Mechanical	Construction Materials	Light reflectance value	BS 8493 + A1
		(LRV) of a surface.	
		Method of test	





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Issue no.: 05

Date: 29-05-2019

Type of Activity	Test Test Name	Test Name	Test Method
Type of Activity	Materials/Products		rest method
Physical/ Mechanical	Construction Materials	Standard Practice for	ASTM E1980
		Calculating Solar	
		Reflectance Index of	
		Horizontal and Low-	
		Sloped Opaque Surfaces	
Physical/ Mechanical	Construction Materials	Standard Test Method	ASTM C518
		for Steady-State Thermal	
		Transmission Properties	
		by Means of the Heat	
		Flow Meter Apparatus	
Physical/ Mechanical	Construction Materials	Standard Test Methods	ASTM E96/E96M
		for Water Vapor	
		Transmission of	
		Materials	





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Issue no.: 05

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Type of Activity	Test Materials/Products	Test Name	Test Method
Physical/ Mechanical	Construction Materials	Thermal insulating	BS EN 1603
		products for building	
		applications	
		Determination of	
		dimensional stability	
		under constant normal	
		laboratory conditions	
		(23°C/50% relative	
		humidity)	
Physical/ Mechanical	Construction Materials	Standard Test Method	ASTM C272/C272M
		for Water Absorption of	
		Core Materials for	
		Sandwich Constructions	





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Type of Activity	Test Materials/Products	Test Name	Test Method
Physical/ Mechanical	Construction Materials	Standard Test Method	ASTM E136
		for Behavior of Materials	
		in a Vertical Tube	
		Furnace at 750°C	
Physical/ Mechanical	Construction Materials	Thermal insulating	BS EN 12089
		products for building	Method B
		applications.	
		Determination of bending	
		behaviour	
Physical/ Mechanical	Construction Materials	Standard Test Method	ASTM C1104/C1104M
		for Determining the	
		Water Vapour Sorption	
		of Un faced Mineral Fiber	
		Insulation	





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Issue no.: 05

Date: 29-05-2019

Type of Activity	Test	Test Name	Test Method
Type of Activity	Materials/Products		i est Methou
Physical/ Mechanical	Construction Materials	Standard Test Method	ASTM C303
		for Dimensions and	
		Density of Preformed	
		Block and Board-Type	
		Thermal Insulation	
Physical/ Mechanical	Construction Materials	Standard Test Method	ASTM C165
		for Measuring	Procedure A/B
		Compressive Properties	
		of Thermal Insulations	
Physical/ Mechanical	Construction Materials	Standard Test Methods	ASTM C240 Clause 5.3
		of Testing Cellular Glass	
		Insulation Block	





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Issue no.: 05

Date: 29-05-2019

Type of Activity	Test	Test Name	Test Method
	Materials/Products		
Physical/ Mechanical	Construction Materials	Standard Specification	ASTM C1139
		for Fibrous Glass	Clause 11.4
		Thermal Insulation and	
		Sound Absorbing Blanket	
		and Board for Military	
		Applications	
		Clause 11.4: Binder	
		Content	
Physical/ Mechanical	Construction Materials	Methods of test for	BS 2972
		inorganic thermal	Section 3
		insulating materials	
		Section 3: Bulk Density	
		Preformed flat material	





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Issue no.: 05

Date: 29-05-2019

Type of Activity	Test Materials/Products	Test Name	Test Method
Physical/ Mechanical	Construction Materials	Methods of test for	BS 2972
		thermal insulating	Section 14
		materials	
		Section 14: Coarse Shot	
		Content	
Physical/ Mechanical	Construction Materials	Thermal insulating	BS EN 824
		products for building	
		applications.	
		Determination of	
		squareness	
Physical/ Mechanical	Construction Materials	Thermal insulating	BS EN 825
		products for building	
		applications.	
		Determination of flatness	





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Type of Activity	Test Materials/Products	Test Name	Test Method
Physical/ Mechanical	Construction Materials	Methods of test for	BS 2972
		thermal insulating	Section 18
		materials	
		Section 18: Flexural	
		Strength	
Physical/ Mechanical	Construction Materials	Standard Test Method	ASTM C1616
		for Determining the	
		Moisture Content of	
		Organic and Inorganic	
		Insulation Materials by	
		Weight	
Physical/ Mechanical	Construction Materials	Methods of test for	BS 2972
		thermal insulating	Section 11
		materials	
		Section 11: Moisture	
		content as received	





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Issue no.: 05

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Type of Activity	Test Materials/Products	Test Name	Test Method
Physical/ Mechanical	Construction Materials	Standard Test Method	ASTM C1335
		for Measuring Non-	
		Fibrous Content of Man-	
		Made Rock and Slag	
		Mineral Fiber Insulation	
Physical/ Mechanical	Construction Materials	Standard Test Method	ASTM C1304
		for Assessing the Odor	
		Emission of Thermal	
		Insulation Materials	
Physical/ Mechanical	Construction Materials	Thermal insulating	BS EN 1608
		products for building	
		applications.	
		Determination of tensile	
		strength parallel to faces	





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Type of Activity	Test Materials/Products	Test Name	Test Method
Physical/ Mechanical	Construction Materials	Standard Test Method for Measuring Trueness and Squareness of Rigid	ASTM C550
		Block and Board Thermal Insulation	
Physical/ Mechanical	Construction Materials	Methods of test for thermal insulating materials Section 12: Water Absorption; Total Immersion	BS 2972 Section 12





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Issue no.: 05

Date: 29-05-2019

Valid to: 28-05-2022

	Test	Test Name	Test Method
Type of Activity	Materials/Products		
Physical/ Mechanical	Construction Materials	Standard Specification	ASTM C578
		for Rigid, Cellular	Clause 9
		Polystyrene Thermal	
		Insulation	
		Clause 9: Workmanship,	
		Finish & Appearance	
Physical/ Mechanical	Construction Materials	Standard Test Method	ASTM D1622
		for Apparent Density of	
		Rigid Cellular Plastics	
Physical/ Mechanical	Construction Materials	Standard Test Method	ASTM D1621
		for Compressive	
		Properties of Rigid	
		Cellular Plastics (Forces	
		greater than 20kN)	
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Type of Activity	Test Materials/Products	Test Name	Test Method
Physical/ Mechanical	Construction Materials	Thermal insulating	BS EN 1602
		products for building	55 EIV 1002
		applications.	
		Determination of the	
		apparent density	
Physical/ Mechanical	Construction Materials	Thermal insulating	BS EN 823
		products for building	
		applications.	
		Determination of	
		thickness	
Physical/ Mechanical	Construction Materials	Thermal insulating	BS EN 822
		products for building	
		applications.	
		Determination of length	
		and width	





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Type of Activity	Test	Test Name	Test Method
Type of Activity	Materials/Products		Test Method
Physical/ Mechanical	Construction Materials	Thermal insulating	BS EN 12087
		products for building	Method 1A & Method 2A
		applications.	
		Determination of long	
		term water absorption by	
		immersion	
		Method 1A: Long term	
		water absorption by	
		partial immersion	
		(drainage);	
		Method 2A: Long term	
		water absorption by total	
		immersion (drainage)	





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Issue no.: 05

Date: 29-05-2019

Type of Activity	Test Materials/Products	Test Name	Test Method
Physical/ Mechanical	Construction Materials	Thermal insulating	BS EN 1609
		products for building	Method A
		applications.	
		Determination of short	
		term water absorption by	
		partial immersion	
		Method A: Drainage	
Physical/ Mechanical	Construction Materials	Thermal insulating	BS EN 1604
		products for building	
		applications.	
		Determination of	
		dimensional stability	
		under specified	
		temperature and	
		humidity conditions	





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Issue no.: 05

Date: 29-05-2019

Type of Activity	Test	Test Name	Test Method
Type of Activity	Materials/Products		rest Method
Physical/ Mechanical	Construction Materials	Standard Test Methods	ASTM C209
		for Cellulosic Fiber	Clause: 14
		Insulating Board	
		Clause 14: Water	
		Absorption	
Physical/ Mechanical	Construction Materials	Standard Test Method	ASTM C302
		for Density and	Procedure A
		Dimensions of Preformed	
		Pipe-Covering-Type	
		Thermal Insulation	
		Procedure A: One piece	
		pipe section	





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Issue no.: 05

Date: 29-05-2019

Valid to: 28-05-2022

Type of Activity	Test	Test Name	Test Method
	Materials/Products		
Physical/ Mechanical	Construction Materials	Standard Test Methods	ASTM C167
		for Thickness and	
		Density of Blanket or	
		Batt Thermal Insulations	
Dhusical / Mashanisal	Construction Materials	Thermal insulating	BS EN 826
Physical/ Mechanical			D3 EN 020
		products for building	
		applications.	
		Determination of	
		compression behaviour	
Physical/ Mechanical	Construction Materials	Reaction to fire tests.	BS EN ISO 11925 Part
		Ignitability of building	2
		products subjected to	
		direct impingement of	
		flame.	
		Part 2: Single-flame	
nfo@eiac.gov.ae		source test	

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Issue no.: 05

Date: 29-05-2019

Type of Activity	Test	Test Name	Test Method
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Materials/Products		
Physical/ Mechanical	Construction Materials	Standard Test Method	ASTM D2863
		for Measuring the	Cllause 11.1.7
		Minimum Oxygen	
		Concentration to Support	
		Candle-Like Combustion	
		of Plastics (Oxygen	
		Index)	
Physical/ Mechanical	Construction Materials	Standard Test Method	ASTM D2126
		for Response of Rigid	
		Cellular Plastics to	
		Thermal and Humid	
		Aging	





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Issue no.: 05

Date: 29-05-2019

Type of Activity	Test Materials/Products	Test Name	Test Method
Physical/ Mechanical	Construction Materials	Standard Test Methods for Breaking Load and	ASTM C203
		Flexural Properties of	
		Block-Type Thermal	
		Insulation	
Physical/ Mechanical	Construction Materials	Methods of test for	BS 2972
		Inorganic thermal	Section 16, Method 1
		insulating materials.	
		Section 16:	
		Determination of organic	
		matter.	





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Type of Activity	Test Materials/Products	Test Name	Test Method
Physical/ Mechanical	Construction Materials	Methods of test for	BS 2972
		Inorganic thermal	Section 3
		insulating materials.	
		Section 3: Bulk density	
		(preformed materials -	
		pipe section)	
Physical/ Mechanical	Aluminium composite	Standard Test Method	DMS 030
	cladding panels	for Determination of	
		Thickness of Aluminum	
		Composite Panel (ACP)	
Physical/ Mechanical	Aluminium composite	Standard Test Method	DMS 028
	cladding panels	for Determination of	
		Length and Width of	
		Aluminum Composite	
		Panel (ACP)	





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Issue no.: 05

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Type of Activity	Test Materials/Products	Test Name	Test Method
Physical/ Mechanical	Aluminium composite	Standard Test Method	DMS 029
	cladding panels	for Determination of	
		Mass Per Unit Area of	
		Aluminum Composite	
		Panel (ACP)	
Chemical	Paints & Sealants	Determination of Volatile	DMS 0033
		Organic Compounds	
		(VOC) content in various	
		materials or coatings by	
		difference method"	
Chemical	Paints & Sealants	Paints and varnishes	BS EN ISO 11890 Part
		Part 1: Determination of	1
		volatile organic	
		compound (VOC)	
		content. Difference	
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Issue no.: 05

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Type of Activity	Test	Test Name	Test Method
	Materials/Products		
Chemical	Paints & Sealants	Paints and varnishes	BS EN ISO 11890 Part
		Part 2: Determination of	2
		volatile organic	
		compound (VOC)	
		content. Gas-	
		chromatographic method	
Chemical	Paints & Sealants	Standard Test Method	ASTM D6191
		for Measurement of	
		Evolved Formaldehyde	
		from Water Reducible Air-	
		Dry Coatings	





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Issue no.: 05

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Type of Activity	Test	Test Name	Test Method
Type of Activity	Materials/Products	rest Name	rest Method
Chemical	Paints & Sealants	Standard Test Method for	ASTM E1613
		Determination of Lead by	ADDM 14(2016)
		Inductively Coupled Plasma	
		Atomic Emission	
		Spectrometry (ICP-AES),	
		Flame Atomic Absorption	
		Spectrometry (FAAS), or	
		Graphite Furnace Atomic	
		Absorption Spectrometry	
		(GFAAS) Techniques; The	
		witnessed test includes the	
		following elements (Arsenic,	
		Cadmium & Mercury) in	
		addition to Lead	





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Issue no.: 05

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Type of Activity	Test Materials/Products	Test Name	Test Method
Chemical	Paints	ISO 3856: Paints and	ISO 3856 Part 5
		varnishes-Determination	
		of "soluble" metal	
		content	
		Part 5: Determination of	
		hexavalent chromium	
		content of the pigment	
		portion of the liquid paint	
		or the paint in powder	
		form	
		Diphenylcarbazide	
		spectrophotometric	
		method	





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Type of Activity	Test Materials/Products	Test Name	Test Method
Chemical	Paints	Methods of test for	BS 3900 Part B10
		paints. Tests involving	
		chemical examination of	
		liquid paints and dried	
		paint films	
		Part B10: Determination	
		of hexavalent chromium	
		content of solid matter	
Chemical	Paints	Standard Test Method	ASTM D5910
		for Determination of Free	
		Formaldehyde in	
		Emulsion Polymers by	
		Liquid Chromatography	





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Issue no.: 05

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Type of Activity	Test Materials/Products	Test Name	Test Method
Thermal	Construction Materials	Standard Test Method for Steady-State Heat	ASTM C177
		Flux Measurements and	
		Thermal Transmission	
		Properties by Means of	
		the Guarded-Hot-Plate	
		Apparatus	
Thermal	Construction Materials	Thermal insulation.	ISO 8302
		Determination of steady-	
		state thermal resistance	
		and related properties.	
		Guarded hot plate	
		apparatus	

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Issue no.: 05

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Type of Activity	Test Materials/Products	Test Name	Test Method
Physical	Construction Materials	Standard Test Methods	ASTM D1037
		for Evaluating Properties	Clause 23
		of Wood-Base Fiber and	Method B
		Particle Panel Materials.	
		Water Absorption and	
		Thickness Swelling	
Physical	Construction Materials	Wood- Based Panels -	BS EN 322
		Determination of	
		Moisture Content	





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Type of Activity	Test	Test Name	Test Method
	Materials/Products		
Physical	Construction Materials	Standard Test Method	ASTM C1101/C1101M
		for Classifying the	
		Flexibility or Rigidity of	
		Mineral Fiber Blanket	
		and Board Insulation	

Accreditation History			
lssue no.	Details	Date	
	Extention in scope, renewal of accreditation and first issuance under the name of EIAC (which was formerly known as DAC)	29-05-2019	