

GRC

Fittings and Connectors Material used Specs Previous Tests Samples

with compliance to





APPLICATION DATA SHEET

Cem-FIL® Fibers

Glass fiber Reinforced Concrete (GRC)

PRODUCT DESCRIPTION

Cem-FIL® Alkali Resistant Glass fibers were first developed by the Building Research Establishment in the UK 40 years ago, and were later manufactured under license in Japan and the USA. They have the longest service history, and have been used in more than 100 countries worldwide to create some of the world's most stunning architecture.

Following the development of Cem-FIL® fibers we also partnered the development of:

- Equipment and processes used in the manufacture of GRC
- Advanced matrix development
- Design and performance guidelines
- Application development

As a part of OCV Reinforcements (the world leader in glass fibre reinforcements) we have developed a wide range of Cem-FIL® products to satisfy the needs of the developing markets and the diverse processes used.

We have amassed a wealth of experience both in the manufacture of Cem-FIL® fibers, and GRC products, which we use to jointly develop the industry with our customers.

PRODUCT APPLICATION

Cem-FIL® GRC products can be produced by one of many manufacturing processes. The most common are the spray and vibration-cast premix, but products may also be spun, filament-wound, laminated on a moving conveyor, pressed, vacuum-formed, extruded, etc.

As the manufacturing processes have evolved, so have the fibers. A large range of fibers has been developed to satisfy the needs of the markets, and to provide optimum processing efficiency and performance in the chosen manufacturing methods.

In addition to the manufacturing processes, guidelines and techniques for moulding, achieving different surface finishes, and enhanced mechanical properties have also been developed.

Our plan is always to enhance the usability, desirability and understanding of GRC, so that GRC products can satisfy the needs of an ever-expanding market.

IMPORTANT CHARACTERISTICS

CEM-FIL® FIBERS:

- 40 years in-service use worldwide
- Proven durability and performance
- Comprehensive product range
- Excellent processing characteristics
- High tensile strength and elastic modulus
- Manufactured under ISO 9001 approved Quality Management System

GRC:

- Lightweight and thin section
- Strong and durable
- Excellent mouldability
- Attractive and versatile

CEM-FIL® FIBERS: Typical Properties

Strand Tensile Strength
Elastic Modulus
Specific Gravity
Strain to Failure
Softening Point
Fire Performance

1.0 - 1.7 GPa
72 GPa
2.68 g/cm3
2.4 %
860 °C
Incombustible







CEM-FIL® PRODUCTS

The following represents only part of the Cem-FIL® standard product range: For enquiries about products not shown, please contact our representatives.

Assembled Roving

Product	Roving	Strand	Filament Ø (µm)	No. of
Code:	Tex	Tex		Strands
61	2500	82	14	30

Typical Applications:

61 – a dual-purpose roving most widely used roving for all spray-up applications, but can also be used as a chopping roving (chopped by the customer and used to produce vibration-cast premix GRC)

Chopped Strands

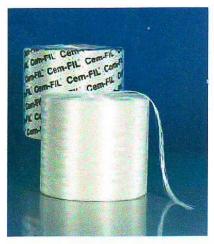
Type:	Product Code:	Strand Tex	Filament Ø (µm)	Lengths (mm)
High Integrity:				
- High Tex	60	135	18	6, 9, 12, 18
- Medium Tex	60	82	14	6, 12, 18
- Low Tex	62	45	14	6, 12
Water Dispersible				
 Low Humidity 	70	n/a	20	3, 6, 9, 12

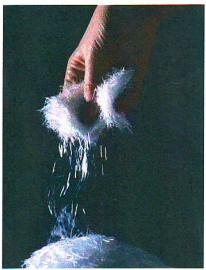
Typical Applications:

Cem-FIL® 60 - general vibration-cast or sprayed premix applications

Cem-FIL® 62 – vibration cast or sprayed premix applications requiring greater reinforcing effect at low fibre addition rates

Cem-FIL® 70 - reinforcement of architectural face-mixes of GRC products







Cem-FIL® Fibers

Glass fibre Reinforced Concrete (GRC)

FINISHES

GRC may be painted, stained, or may be produced with tiles, granite or other stone veneer finishes.

To achieve integral coloured finishes, Cem-FIL® GRC can use white cement and pigments. Textures can be achieved from the mould, or by acid etching or sand-blasting to expose the texture and colour of the aggregate.

ADDITIONAL CHARACTERISTICS OF CEM-FIL® GRC

Property:		Unit	Simultaneous Spray	Premix Spray	Vibration-Cast Premix
Fibre Content		Weight %	5	2.5 – 4.2	3
Bending Strength	MOR	MPa	22 – 32	12 - 14	10 – 12
	LOP	MPa	7 – 13	7-10	6-9
Tensile Strength	UTS	MPa	8-12	5-9	4-7
	ВОР	MPa	5-7	4-6	4-6
Compressive Strengtl	h	MPa	50 - 80	40 - 60	40 – 60
Shear Strength	Inter-laminar	MPa	3-5	N/A	N/A
	In-Plane	MPa	8-12	4-7	4-7
Impact Strength		kj/m²	10 – 25	10 – 15	10 – 15
Elastic Modulus		GPa	10 - 20	10 – 20	10 – 20
Strain to Failure		%	0.6 - 1.2	0.2 - 0.3	0.1 - 0.2
Dry Density		t/m³	1.9 – 2.1	1.8 - 2.0	1.8 - 2.0

www.cem-fil.com

DELIVERING SOLUTIONS - TRANSFORMING MARKETS - ENHANCING LIVES

NORTH AMERICA James PATTERSON TEL: +1 623.566.0260 FAX: +1 208.730.4581 Cem-fil@owenscorning.com EUROPE Holger ZORN TEL: +32.2.674.8318 FAX: +32.2.674.0815 Cem-fil@owenscorning.com ASIA PACIFIC & MIDDLE EAST AND AFRICA Peter RIDD TEL: +44 1275 390 968 FAX: +44 117 370 1075 Cem-fil@owenscorning.com



OWENS CORNING COMPOSITE MATERIALS, LLC ONE OWENS CORNING PARKWAY TOLEDO, OHIO 43659 1.800.GET.PINK™ www.owenscorning.com

www.ocvreinforcements.com

EUROPEAN OWENS CORNING FIBERGLAS, SPRL. 166. CHAUSSÉE DE LA HULPE B-1170 BRUSSELS BELGIUM

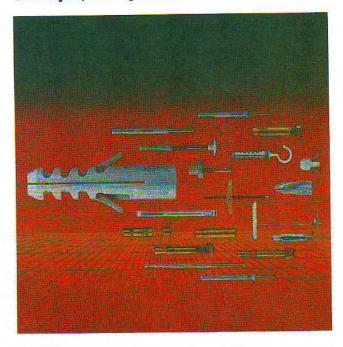
OWENS CORNING - OCV ASIA PACIFIC SHANGHAI REGIONAL HEADQUARTERS. 2F OLIVE LVO. MANSION 620 HUA SHAN ROAD SHANGHAI 200040 CHINA 86,21,62489922

This information and data contained herein is offered solely as a guide in the selection of a reinforcement. The information contained in this publication is based on actual laboratory data and field test experience. We believe this information to be reliable, but do not guarantee its applicability to the user's process or assume any responsibility or liability arising out of its use or performance. The user agrees to be responsible for thoroughly testing any application to determine its suitability before committing to production. It is important for the user to determine the properties of its own commercial compounds when using this or any other reinforcement. Because of numerous factors affecting results, we make no warranty of any kind, express or implied, including those of merchantability and fitness for a particular purpose. Statements in this publication shall not be construed as representations or warranties or as inducements to infringe any patent or violate any law safety code or insurance regulation.

Pub. No. 10010974. Owens Corning reserves the right to modify this document without prior notice. ©2010 Owens Corning

fischer fixing S

Often copied, never equalled!



Suitable for:

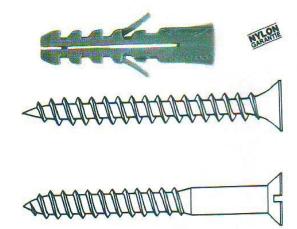
All concrete and masonry building materials, from perforated bricks through aircrete to light building boards.

For fixing:

All objects which can be fastened with wood screws or chipboard screws.

The grey fischer fixing the fixing where everything started...

The ingenious idea of providing a nylon shaft with two detached locking tongues and deeply shaped retention teeth marked a turning point in fixing technology over 30 years ago. Today, the fischer fixings used in countless different ways, with the fish as a trademark and the typical grey colour, are taken as a symbol of safety and reliability throughout the world.



High-quality polyamide (nylon) ensures resistance to weathering and ageing, rust and rotting. It withstands temperatures from -40° to $+80^{\circ}$ C without damage. The tough and elastic material has the effect of damping vibration and absorbing noise. It has good electrical insulation properties, possesses high tensile and compressive strength, and is very largely resistant to chemical influences.

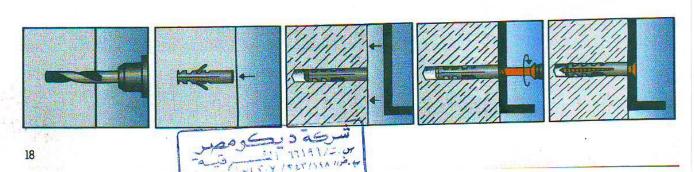
The locking tongues prevent the fixing from co-rotating in the drill-hole, and the deeply shaped teeth are anchored by friction grip in solid building materials or by positive form locking in soft and coarse building materials. The front half of the fixing possesses a full cross-section so that the expansion pressure is further increased when the screw is turned in the depth of the drill-hole. The wide plane internal surfaces offer the screw a good deal of purchase for secure holding when it is turned. The fixing is suitable for wood screws and chipboard screws. The wide neck is free of expansion pressure and prevents surface damage to plaster articles.

This is the legendary hold of fischer fixings.

As a result of its pioneering function, the fischer fixing S has become the starting point of many new and further developments in the present-day complete fischer fixing range.

First of all, just a few tips:

- Always follow the mounting instructions on the fischer fixing packs.
- The maximum load-bearing capacity of nylon expansion fixings can only be achieved with the largest possible screw diameters and with screws which project beyond the fixing tip by the equivalent of the screw diameter.
- In the case of fastenings in perforated or hollow blocks, make sure that the front half of the fixing expansion area is fully anchored in at least one brick web.
- The maximum load-bearing capacity of the fixing can only be achieved if the drill-hole is cleared by blowing or suctionextraction.



fischer bolt FB

The inexpensive through-anchor.



Suitable for: Concrete ≥ B 15, dense natural stone.

For fixing:

Metal fabrications, metal profiles, base plates, consoles, railings, facades, windows, gratings, machines, timber constructions, beams, purlins, supports etc.

The fischer bolt is used as a push-through anchor as the standard element for fitters, metal constructors, sanitary equipment installers, heating and ventilating engineers, electricians, facade constructors, carpenters, joiners, and window installers.

The FB is available in three forms of construction:

- electroplated with lfBt approval
- stainless steel A4, with lfBt approval
- hot dip galvanised (40 μ)

Mounting directions:

 Before the fitting is tapped in, the nut should be moved to the optimum assembly position (bolt projecting approx. 2-3 mm).
 This reduces bolt projection of the finished installation.



Material: Steel electroplated, hot dipped galvanised and stainless steel A4.





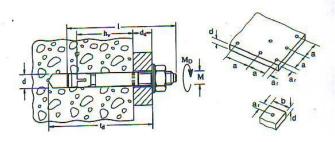
Advantages:

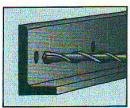
- Economic anchoring
- Torque controlled expansion
- Assembly reliability through controlled tightening torque and check ring
- Small drill-hole, drill-hole diameter = bolt diameter

Permissible loads¹⁾ of individual fixings in compression zones for tension, shear and oblique tension at any angle, plus respective fixing characteristics and component dimensions. These values apply to the hot-dipped galvanised bolts as a recommendation.

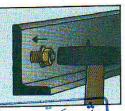
Fixing type/thread					
ıg ≥ B 25	1.5	2.8	4.0	5.7	8.4
Max. perm. load perm. F of a fixing ≥ B 25 (kN) in the proven compression zone ²⁾ ≥ B 35 (fixing pairs, see appr., Appendix 4)			4.8	6,5	9.5
	4.7	9.0	17.8	34.2	86.9
(Nm)	3.0	7.3	14.5	25.4	64.7
a/b≧(cm)	16	18	26	34	46
	8	9	13	17	23
	15	15	20	22	25
	40	40	50	60	80
Anchoring depth h. 2 (mm) Through-hole in component for connection, bending not applicable max. (mm)			10.5 11	13.0 13.5	17.0 17.5
$M_D = (Nm)$	7.5	15	45	65	110
	A ≥ B 35 ated (Nm) (Nm) a/b ≥ (cm) a _r ≥ (cm) min. d = (cm) h _r ≥ (mm) min. (mm) max. (mm)	A ≥ B 35 1.8 ated (Nm) 4.7 (Nm) 3.0 a/b ≥ (cm) 16 a, ≥ (cm) 8 min. d = (cm) 15 h, ≥ (mm) 40 min. (mm) 6.5 max. (mm) 6.6	28 28 28 1.5 2.8	S S S S S S S S S S	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

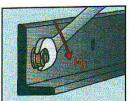
1) See page 12.
2) See Section 3.1 of the building inspectorate approval

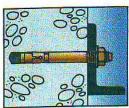












11191/- or 11191/- or



EA - steel electroplated

Туре	Art. No.	d Drill ø	t Min. drill- hole depth mm	hy Min. anchor- age depth mm	Fixing length mm	M	Screv min. mm	r-in depth max. mm	Quantity per box
EAM 6	60811	8	25	28	25	M 6	6	11	100
EAM8	60812	10	30	30	30	M 8	8	13	100
EAM8x40	60821	10	40	40	40	M 8	8	13	80
EAM 10	60813	12	40	40	40	M 10	10	15	50
EAM 12	60814	18	50	50	80	M 12	12	18	25
EA M 16	60816	20	65	68	65	M 16	16	21	10
EAM 20	60818	25	80	80	80	M 20	20	30	8



EE - stainless steel A4 (material: 1.4871 or 1.4401)

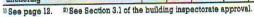
		Marketon and the last				100000000000000000000000000000000000000	and desired	
EAM 6 A4 60825	8	25	25	25	M 6	6	11	100
EAM 8 A4 60826	10	30	30	30	M 8	8	13	100
EAM 10 A4 60827	12	40	40	40	M 10	10	15	50
EAM 12 A4 60828	15	50	50	50	M 12	12	18	25
EAM 16 A4 60829	20	65	68	68	M 16	16	21	10

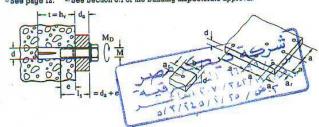


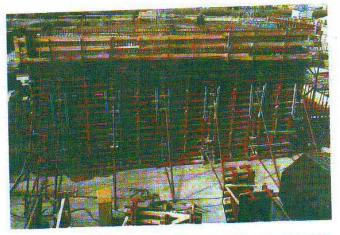
Ugimmarger of	1018		Name and Address of the Owner, where the Owner, which the Owner, which the Owner, where the Owner, which the
EAW H 8	60836	Fits EA M 6	1
EAW H 8	60837	Fits EA M 8	1
EAW H8x40	60846	Fits EA M 8x40	1
EAW H 10	60838	Fits EA M 10	1
EAW H 12	60839	Fits EA M 12	1
EAW H 16	60841	Fits EA M 16	11
EAW H 20	60843	Fits EA M 20	1

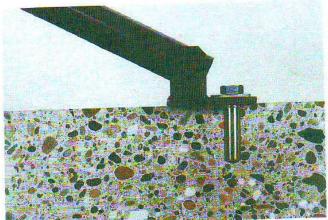
Maximum permissible loads¹⁾ of a fixing for axial tension, shear and oblique tension at any angle, plus respective fixing characteristics and component dimensions.

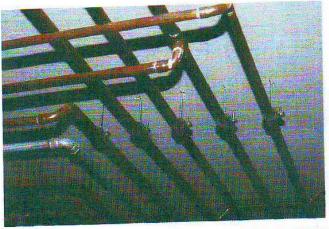
Fixing type/thread		EA M6	EA M8	EA M8x40	EA M10	EA M12	EA M16	EA M 20	
Permissible load permiss. F of a fixing			1,8						
(kN) in the proven compression zone ¹⁾	n shearing	n) shearing 1,	1,7	3,0	3,0	4,8	6,6	8,7	13,4
downta seron zowe.	oblique tens.	1,0	1,8	11.74.76					
Axial spacing/comp. w	ridth a/b ≥ (cm)	20	24	24	32	40	52	84	
Edge spac./corner sp		10	12	12	16	20	26	32	
Min. comp. thickness	min. d = (cm)	18	16	16	20	20	24	32	
Permiss. load permiss. F of a fixing in kN for fasten- ing light celling coverings and under-ceilings		0	,B		8,0		• 1		
Axial spacing	a ≥ (cm)			40			-	-	
Edge spacing	a, ≥ (cm)		18			20		-	
Min. comp. thickness	min. d = (cm)			10	e college of		-		
Anchoring depth	h _v ≥ (mm)	25	30	40	40	50	65	80	
Drill diameter	(mm)	8	10	10	12	15	20	26	
Permissible s	crews 5.6	2,8	6,2	6,2	12,8	21,8	88,5	108,	
bending moment	crews 8.8	8,1	12,5	12,5	17,8	36,8	74,3	140,	
(Nm)	crews A 4-70	3,8	9,4	9,4	16,3	32,7	78,3	90,1	
Through-hole in com for connection, if ber demonstr, is dispens	ding \leq (mm)	8,8	9	9	11	13,5	17,8	22	
Max. torque when anchoring	M _D (Nm)	4 .	8	8	18	35	60	120	

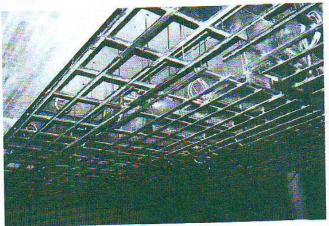












Cixi Huaxu Scale Industrial Co., Ltd

Heavy Duty Shields Anchors Fix Bolts

MODEL NO; YZ-CO

SIZE:M6,M8,M10,M12,M16,M20

Ideal for general purpose application in wide range of materials including concrete, brickwork and block work (over 7N/mm 2)

Typical Applications:

- Installing heavy equipment where deep setting is required (using spacers).
- Allows easy removal of fixture for maintenance and decoration.

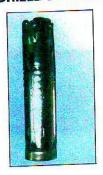
FIX BOLT (FB)



Brickwork, Concrete & Stone



SHIELD ANCHOR



Product Specification

DESC.	BOLT DIA.	BOLF	SHIELD LENGTH	MAX. FIXTURE	HOLE DL	HOLE DIA. (mm) MII HOLE DIA. (mm) DEP		FIXIN	IGS PER I	PACK	BOX PRODUCT CODE
(mm) (mm)	mm etchines	IN FIXTURE	(mm)	RETAIL	TRADE	вох					
1			45	10	12	6.5	50	2	5	50	44-015
VI6 10L	6	- 55	45	10	12	6.5	50	-	5	50	44-020
M6 25L	6	70	45	25	12	6.5	50	-	5	50	44-025
M6 40L	6	85	45	40	The same of the same of	9.0	55	2	5	50	44-055
M8 10L	8	65	50	10	14	9.0	55	100	5	50	44-060
M8 25L	8	80	50	25	14	9.0	55		5	50	44-065
M8 40L	8	95	50	40	14	9.0	65		5	50	44-105
M10 10L	10	75	60	10	16	1200	65	2	5	50	44-110
M10 25L	10	90	60	25	16	11	65		5	50	44-115
M10 50L	10	115	60	50	16	11	65		5	50	44-120
M10 75L	10	140	60	75	16	11		e Builde	5	25	44-155
M12 10L	12	90	75	10	20	13	85		5	25	44-160
M12 25L	12	105	75	25	20	13	85		5	25	44-165
M12 40L	12	120	75	40	20	13	85	1 -		25	44-170
M12 60L	12	140	75	60	20	13	85		5	10	44-20
M16 15L	16	135	115	15	25	17	125			10	44-21
M16 30L	16	150	115	30	25	17	125	-			44-21
M16 60L	16	180	115	60	25	17	125		A CISA MAD	10	44-21
was with the first the same	20	195	130	60	32	22	140	-	-	10	
M20 60L M20 100L	20	235	130	100	32	22	140			10	44-26

Address: Rm. B, A-18/F, 166 - 168 Baizhang Road, Nin Province. China

Zip: 315010

Telephone: 86-574-87711759 Fax: 86-574-87707406 vince. China



Hangzhou Huachao Fastener Co.,

[Zhejiang, China (Mainland)]









self drilling



Detailed Product Description self drillling screw DIN7504

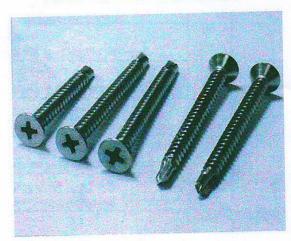
Material: SS304 SS316 SS410 Standard: DIN ASTM JIS BS

Size:ST3.5- ST6.3

Finished: self color, coating

Packing: exportcarto

SS304 flat head self drilling screw



Features:

1)Standard: DIN7504 2)Size: M4-M64, 1/4"-2"

3)Material: alloy steel, carbon steel 35#,

4)Grade: 8.8,10.9,12.9,SAE J429 GR.5/GR.8

5)Surface: Black, Zinc Cr+3, Yellow Zinc Cr+6, H.D.G., Dacromet.

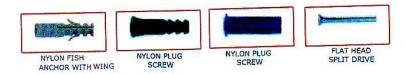
Packing: bulk, box packing, polybag





NYLON FISH ANCHOR

NYLON EXPANSION



NYLON FISH ANCHOR WITH ONE WING



NYLON FISH ANCHOR WITH ONE WING

Detailed Product Description

nylon fish anchor

Spare parts for mobile phone etc.

Available material: silicon, tpu, tpe, sbr, nr, nbr, epdm,

sbr, nr, nbr, epdm,



AMO® III SCREW 7.5 MM DIA.

Type 1 with AW30

Head dia. 12.0 mm Type 2 with AW25

Head dia. 7.5 mm

Type 2 with AW30

Head dia, 8.0 mm

Type 3 with AW30

Head dia, 12.5 mm



551

Steel, yellow galvanised

Galvanised steel blue passivated

Proof of perform	nance		Guidelines for mounting/ RAL Quality Association	DIN 18056
Test reports			The attachment must safely transfer all planned forces affecting the window to the structure. The	This standard applies for window walls with an area of at least 9 m2
Fire protection Test Report No. 3174/0649-2 from 12th January, 2000	Testing of sultability for attaching a flood-proof window in accordance with the directive FE-07/1 by the it Resembelm in Germany. Test Report No. 202 31790 from 17th May, 2006	Testing of a fostening elementh brokution of the test results for proadled use in window mounting by the iff Rosenheim in Germany- Test Report No. 2531 124 175 from 13th February, 1990	loads, i.e. the load of the window, the wind load and the working load, must be determined (see DIN 1055). In accordance with the respective valid building regulation, buildings and their components must be planned in such a way that the life and health of people are not endangered and public safely in oil impaired. Attachment of the windows must also comply with the criterion. We recommend anchors \$1,52,53,55,1 and \$5.2 for this application.	and a side length of at least 200 cm, coastising of a support frame (frame, poets, bar) with fills (e.g., glazing). This is and/ard does not apply to walls and glass blocks. We recommend anchors with a construction permit for this application.

1. Applications

- Tension-free spaced mounting for wooden, plastic and aluminium window frames
- Frame coupling
- Mounting of window shackles, rotary anchors and knock-in claws (short version of Type 3)

2. Advantages

- Saves time no anchor required
- Short installation times, as no setting tools are required
- Thanks to AW® drive, longer bit service life, improved force transmission and no ejection forces
- Through-bolt mounting
- Can be loaded immediately no wait time after setting
- High loadability through positive locking
- Removable
- Virtually no spreading forces during setting

- Spreading-pressure-free, positive locking and removable anchoring
- Function of load pick-up is retained even under thermal loading
- Tested fire-resistance duration of 120 minutes

Information: The correct installation of components musst be checked under consideration of the respective building situation (e.g. casementweight, surface properties, hole pattern of the stone).

- Good to know:

 Drill perforated and hollow blocks in rotating gear
 (without impact mechanism).

 Align window frames with alignment clamps or Amo Bag.

 Set as length = frame width + distance + screw-in depth
 (also see under 55.2 Amo \$ III 1.5 mm).

Setting instructions



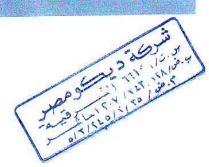








01 0275



MWF .04/11 -07164 -C

Sikaflex® - 1 A

سيكافلكس®- ١ أيه

مالىء للفواصل من البولى يوريثان من مركب واحد متعدد الاغراض

وصف المادة

مادة ملىء للفواصل ، مركب أحادي من البولي يوريثان يتصلد تحت تأثير رطوبة الهواء.

الاستعمالات

سيكافلكس®- ١ أيه يتمتع بخاصية قوة الإلتصاق على معظم المواد لذا فهو يستعمل عامة في مليء الفواصل بالمنشآت الخرسانية والمباني مثل:

- الحوائط الساندة والدراوى والأسوار.
- بين العناصر سابقة التجهيز.

- في الأسقف .
- آمن عند استخدامه ملاصقا لمياه الشراب.

التطبيق والإستخدام

- أكبر عرض للفاصل ٤٠ مم
- حتى ١٠مم = ١:١.
- أكبر من ١٠مم = ١: ٢.

■ حـــول النوافـــذ. ■ على الأسطح والتراسات.

- خزانات مياة السشرب.

المميزات

- له نظام ممتاز بدون برايمبر لمعظم المواد .
- معمر ممتاز وله خواص مقاومة للظروف
- مقاومــة جيــدة للميكروبــات والمـــاء المـــالح .
- لا يسسيل فسى الفواصل الرأسية والأفقية
- مقاوم لتاثير مياه الصرف الصحى.

بيانات التطبيق

- أقل عمق للفاصل ٨ مم
- نــسبة العمــق: العـرض للفواصــل
- نــسبة العمــق: العــرض للفواصــل
 - الإستخدام:
- إستعمل سيكافلكس® ١ أيه مباشرة من الخرطوشة أوالعبوة بمسدس سيكافليكس المناسب.

البيانات القنية رمادی فاتح ، أبيض و ان ١,٢ – ١,٣ كجــــم / لتـــــر الكثاف (طبق ال _ون) ١ - ١,٥ م م ٢٤ ساعة (تبعاً لدرجة الحرارة زمن الجفاف خرطوشـــة عبــوة ٢٠٠ مــل التعبئ ١٢ شهر من تاريخ الانتاج حسلاحية في العبوات الأصلية يخزن في الظل في درجات التخ ـزين الحرارة الطبيعية في جو جاف

الحشو الخلفي:

■ الحشو الخلفي عبارة عن بولي إيثلين المضغوط (سيكاباكررود أو سيكاباكينج فيللر).

تحضير السطح

■ يجب أن يكون السطح نظيف وجاف وخالي من أى بقايا زيوت أو أى جزينات سائبة ملتصقة .

تعليمات الأمان

البيئ __ ة : لا تتخلص من المادة في مجاري المياة أو التربة ، وإنما تخلص منها طبقاً للقوانين المحلية.

النقل: لاخط ورة في نقله.

احتياطات

الأمين: إذا حدث تلامس بالجلد فيجب الغسل فورأ بالماء والصابون وإذا حدث تلامس مع العين أو الأغشية المخاطية فيجب الشطف بالماء الدافىء وإستشارة الطبيب

دون تأخير . غير سام طبقاً لقواعد الصحة والأمان الـسمية:

■ لمزيد من المعلومات يرجى الرجوع إلى النشرة الإنجليزية المفصلة و المكتب الفني

القاهــرة: ت: ١٤٦١٠٠٧١٤ / ١٠ فاكس: ٥٥/١٢٠٤ / ٢٠ الإسكندرية: ت: ٢٤٤٦٠١ / ٣٠ فاكس: ٢٤٤٤٦٠١ / ٣٠

الموقع الإلكتروني: www.Sika.com.eg





المركز القوميي ليعوث الإسكان والبناء معهد بحوث مواد البناء وضبط الجودة

نتائج اختبارات الكثافه والامتصاص على عينات GRC

تاريخ التوريد: ٢٠١٣/٤/٧

رقم الوارد: ٢٣٣

كود العينة: MTL\Ct\2013\019

الجهة الموردة: شركه ديكو مصر للإنشاءات

المشروع: مسجد رويال سيتى - بمدينه ١ أكتوبر

بيانات اضافية:

دود مقم *							
	0		*	1 7 1	1	A.	
**	770,5.	71.77	YA£,V.	777,7.	۲۷۰,۰۰		الوزن الجاف
	۳.۸,٥.	144,4.	۳۳۱,۲۰	٣.0,0.	٣١٤,٨٠	ج	الوزن المبلل
	170, £	1 £ 9,0.	177,7.	177,7.	174,74	4	الوزن العطق
4 <u>.</u> .	1105,70	100,00	1848,7.	1857,5.	1/27,	kg/m3	Dry Bulk Density
	Y100,11	7107,77	110.,70	T1 £ A, WA	Y1 £ A , A 1	kg/m3	Wet Bulk Density
	17,75	17, . £	17,77	17,79	17,09	%	نسبة المتصاص

ملاحظات :

*تم إجراء الاختبار طبقا للكود البريطاني BS 6432/1984.

kg/m3 1849.76 = Dry Bulk Density متوسط قيمه kg/m3 = Wet Bulk Density متوسط قيمه

متوسط قيمه نسبه الامتصاص = 16.30 %

- النتافج الموضحة بعالية تسرى فقط على العينات الموردة من الجهة طالبة الاختبار .

_ البيانات عاليه طبقا لما ورد بخطاب الجهة طالبة الاختبار.

المشرف حد الهلماللومي

إعداد التقريد ح/عصاً إلىسير

مدير المعهد المع



المركز القومي لبحوث الإسكان والبناء معهد بحوث مواد البناء وضبط الجودة

نتائج اختبار الانحناء على عينات GRC

شركة ديكو مصر للإشاءات الجهة الموردة:

المشروع: مشروع مسجد رويال سيتي – بمدينة ٦ اكتوبر

شرائع الخرسانة المسلحة بالالياف الزجاجية GRC نوع العينة:

> بيانات اضافية: العينات مقاس × ۲۰ × ۱٬۵۰۰ سم

تاريخ التوريد: ٢٠١٣/٣/٣

رقم الوارد:

MTL\Ct\2013\01

كود العينة:

· 建二基	في إنجام الألياف	رقم العينه	في عكس اتجاد الإثبات			- dåt -	
			1 直集				
TO,07	70,01	70,0Y	70,t9	70,1Y .	الطول	مقلبات العلية	
,YY	۰,۱۸	٥,٢٢	0,77	0;71	الون ا	للطعه الاغتبار	
1,1,	1,71	1,71	1,17	1,17	4.3		
۲۰,۰۰	۲۰,۰۰	۳٠,٠٠	۳٠,٠٠	T.,		حرر التحميل	
11,	£1,	۲۷,۰۰	Y£,	14,.,	کیم 🙀	(р1) العبل	
14,44	1.7,74	VY,VY	£A,11	٣٨,٤٣	کجا/سم آ	ناوته الإنضاء	
Yo,	٧٧,	0.,	¥1,××	Y £ ,	کم ک	المل الأقمي	

Load at the limit of proportionality عند حد التناسب عند عد التناسب

Load at the limit of proportionality (in kg) قيمه (P1) هي:

کجم / عدم ٔ £T,TV متوسط مقاومة الإنحناء للعينات في إتجاه عكس الألياف=

11,17 کچم / سم متوسط مقاومة الإنحناء للعينات في إتجاه الألياف

تم إجراء الإختبار طبقا للمواصفة البريطانية BS 6432/1984 طبقا لطلب الجهة طالبة الإختبار.

النتائج الموضحة بعاليه تسرى فقط على العينات الموردة من الجهة طالبة الإختبار.

تم تصنيع العينات بتاريخ ٢٠١٣/٢/١٦ طبقا لما جاء بخطاب العميل .

البيانات عالية طبقا لما ورد بخطاب الجهة طالبة الاختبار .

87 El-Tahrir St., Dokki, Giz