

HỒ SƠ TRÌNH DUYỆT VẬT TƯ

MATERIAL SUBMITTAL DOSSIER

Keshun AQUACOAT KS-929C

Single-Component Polyurethane Waterproof Coating



Ready-to-use
single-component PU



Seamless elastic
waterproofing film



For roof, basement,
kitchen, bathroom,
car park, bridge and
bridge deck works



Product name:
Aquacoat KS-929C



Test reports:
KS-929C



DOCUMENT ORDER

- 01 Technical Data Sheet (TDS)
- 02 Test Report - KQTN KS-929C
- 03 Other Test Results
- 04 Dự án tham khảo / Project References



Project / Dự án:



Work item / Hạng mục:

Waterproofing material submittal



Manufacturer / Nhà sản xuất:

Keshun Waterproof Technology Co., Ltd.



Submitted by / Đơn vị trình:

Công ty TNHH Vật Liệu và Giải Pháp VNA



Date / Ngày:

05/01/2026



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PROFESSIONAL WATERPROOFING
TOTAL SOLUTION



COMPLIANCE
& TESTED

01

TECHNICAL DATA SHEET (TDS)

TÀI LIỆU KỸ THUẬT SẢN PHẨM



Keshun AQUACOAT KS-929C – Single-Component Polyurethane Waterproof Coating



Included documents / Tài liệu gồm:

- English TDS
- Vietnamese TDS
- Product specification and application information



This section contains the product data sheets used for material approval.
Phần này bao gồm TDS phục vụ trình duyệt vật tư.



Aquacoat KS-929C

Single-component Polyurethane Waterproof Coating



Product Description

Aquacoat KS-929C is suitable for complex projects due to its distinctive ability to react with atmospheric moisture and the NCO end group of the PUP, resulting in the formation of a seamless, robust, elastic and flexible waterproof film.

Recommend Usage

1.6~1.8kg/m² for 1mm-thickness film

Note: The data belongs to the calculation of standard experimental environment and is for reference only. The actual amount should be calculated according to the site base surface.

Technical Data Based For Reference

No.	Item	Index	Test Standard
1	Tension Strength	2.0 Mpa	ASTM D412 modified
2	Elongation at break	500%	ASTM D412 modified
3	Adhesive strength to Concrete	≥ 1.0 N/mm ²	ASTM D7234
4	Water impermeability under 3 bar	No penetration	BS EN 14891
5	Crack-bridging ability	≥ 2.0 mm	BS EN 14891
6	Tear resistance	≥ 15 N/mm	ASTM D624

Mark: Test values shown in above are subjected to testing done in the lab.

Where To Use

- Roof, underground waterproofing projects, kitchen & bathroom;
- Not for food-grade water project;
- Car park, bridge and bridge surface.

Product Features

- Ready to use: it is pre-packaged, eliminating the need for complex mixing that can lead to quality issues.
- Durable: It offers stable performance with resistance to aging, acids, alkalis, fatigue, and extreme temperatures.
- Eco-friendly
- Easy installation: excellent leveling properties. Upon application, it reacts with moisture in the air to create a seamless, tough, and highly elastic waterproof film.
- Versatile: It can be combined with high-polymer membranes and self-adhesive modified bitumen waterproof membranes to create a comprehensive waterproofing system.

Packaging

25kg/bucket

Construction Procedures

Surface Preparation

The smooth(light steel-trowel to be used) substrate to be treated must be fully cured and sound,which shall mean that it is free of oil, excess mortar,grease,lean and other contaminants.Any defects such as cracks &honeycomb shall be repaired with suitable repair methods.

Ensure surface moisture is $\leq 5\%$.

Mixing

Stir Aquacoat KS-929C thoroughly and gently with an electrical mixer to minimize air entrapment.Use within 30 minutes.

Application

- Coat Apply the well mixed Aquacoat KS-929C in one direction.(allow to cure approximately 6-12 hours).
- After the first coat full dried, Coat Apply the well mixed Aquacoat KS-929C in a crosswise direction as a second coat application (allow to cure for 24hours).

Storage And Transportation

- Products of different categories should be separated from each other during storage and transportation.
- The storage temperature should be maintained between 5°C~ 40°C. Do not approach the fire, avoiding exposure to direct sunlight and rain, preventing collision. Adequate ventilation should be ensured during storage.
- Shelf life is 6 months from the date of production under appropriate storage conditions.

Aquacoat KS-929C

Lớp phủ chống thấm Polyurethane một thành phần



Mô Tả Sản Phẩm

Aquacoat KS-929C phù hợp cho các hạng mục có điều kiện và hình dạng phức tạp nhờ khả năng phản ứng với độ ẩm trong không khí thông qua nhóm NCO ở đầu mạch Polyurethane, tạo thành màng chống thấm liền mạch, bền chắc, đàn hồi và linh hoạt.

Định mức thi công

1.6~1.8kg/m² cho màng dày 1mm-thickness film

Lưu ý: Định mức trên được tính trong điều kiện tiêu chuẩn và chỉ mang tính tham khảo. Lượng tiêu thụ thực tế phụ thuộc vào điều kiện bề mặt tại công trường.

Thông số kỹ thuật

Stt.	Thông tin	Chỉ số	Tiêu chuẩn thí nghiệm
1	Cường độ kéo	2.0 Mpa	ASTM D412 modified
2	Độ giãn dài đến đứt	500%	ASTM D412 modified
3	Cường độ bám dính với bê tông	≥ 1.0 N/mm ²	ASTM D7234
4	Khả năng kháng áp lực thủy tĩnh tại 3 bar	No penetration	BS EN 14891
5	Khả năng tạo cầu vết nứt	≥ 2.0 mm	BS EN 14891
6	Cường độ kháng xé	≥ 15 N/mm	ASTM D624

Lưu ý: Các giá trị thử nghiệm được thực hiện trong phòng thí nghiệm.

Phạm vi ứng dụng

- Ứng dụng cho mái, công trình ngầm, khu vực bể & nhà vệ sinh;
- Không sử dụng cho các hạng mục chứa nước sinh hoạt/thực phẩm;

Đặc tính sản phẩm

- Sẵn sàng sử dụng:** Được đóng gói sẵn, không cần pha trộn phức tạp, hạn chế rủi ro ảnh hưởng đến chất lượng.
- Độ bền cao:** Khả năng kháng lão hóa, axit, kiềm, môi và chịu được biên độ nhiệt lớn.
- Thân thiện môi trường.
- Dễ thi công:** Khả năng tự san phẳng tốt. Khi thi công, sản phẩm phản ứng với độ ẩm trong không khí tạo thành màng chống thấm liền mạch, dai và đàn hồi cao.
- Linh hoạt:** Có thể kết hợp với màng polymer cao phân tử và màng bitum biến tính tự dính để tạo thành hệ chống thấm hoàn chỉnh.

Quy cách đóng gói:

25kg/thùng

Quy trình thi công

Chuẩn bị bề mặt:

Bề mặt nền phải phẳng, đã đóng rắn hoàn toàn, không dính dầu mỡ, vữa thừa hay tạp chất. Các khuyết tật như nứt, rỗ tổ ong cần được sửa chữa phù hợp.

Đảm bảo độ ẩm bề mặt thi công $\leq 5\%$.

Khuấy trộn:

Khuấy đều Aquacoat KS-929C bằng máy khuấy điện với tốc độ thấp để hạn chế cuốn khí. Sử dụng trong vòng 30 phút.

Thi công:

- Thi công lớp thứ nhất theo một hướng, để khô khoảng 6–12 giờ.
- Sau khi khô hoàn toàn, thi công lớp thứ hai theo hướng vuông góc và để khô khoảng 24 giờ.

Bảo quản và vận chuyển

- Các sản phẩm thuộc nhóm khác nhau cần được lưu trữ và vận chuyển riêng biệt.
- Nhiệt độ bảo quản: từ 5°C đến 40°C. Tránh xa nguồn lửa, tránh ánh nắng trực tiếp, mưa và va đập mạnh. Đảm bảo thông gió đầy đủ trong quá trình lưu kho.
- Thời hạn sử dụng: 6 tháng kể từ ngày sản xuất trong điều kiện bảo quản phù hợp.

02



TEST REPORT - KQTN KS-929C

KẾT QUẢ THỬ NGHIỆM



Keshun AQUACOAT KS-929C – Single-Component Polyurethane Waterproof Coating



Included documents / Tài liệu gồm:

- KQTN KS-929C
- Laboratory report pages
- Approved test evidence for material submission



Use the original KQTN KS-929C report pages directly after this divider.

Sử dụng trực tiếp các trang KQTN KS-929C gốc ngay sau trang phân mục này.



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COMPLIANCE
& TESTED

KẾT QUẢ THỬ NGHIỆM

Số: 48
09/2025KN-TTVL

I. THÔNG TIN DO KHÁCH HÀNG CUNG CẤP:

Đơn vị yêu cầu:	Công ty TNHH Vật Liệu và Giải Pháp VNA
Dự án:	Dự án xây dựng khu chung cư cho người có thu nhập thấp tại khu dân cư An Đồng, huyện An Dương
Địa điểm:	Lô CC2 khu nhà ở PG An Đồng, xã An Đồng, huyện An Dương - thành phố Hải Phòng
Chủ đầu tư:	Công ty Cổ phần Đầu tư và Xây dựng PG
Nhà thầu phụ thi công:	Tổng công ty xây dựng Hà Nội - CTCP
Vật liệu thử:	Vật liệu chống thấm Keshun, Aquacoat KS-929C
Chi tiêu thử nghiệm:	Cường độ kéo, độ giãn dài khi đứt, độ cứng Shore A, cường độ bám dính; độ bền xé rách, khả năng tạo cầu vết nứt ở điều kiện thường, Chiều sâu thấm nước.
Phương pháp thử:	ASTM D412-16(2021) ; ASTM D2240-15(2021) ; ASTM D7234-22 ; ASTM D624-00(2020); BS EN 14891:2017 BS EN 12390-8:2019
Yêu cầu kỹ thuật:	Tổng công ty xây dựng Hà Nội - CTCP

II. KẾT QUẢ THỬ NGHIỆM:

Ngày nhận vật liệu thử: 25/11/2025

Thời gian thử nghiệm: từ 25/11/2025 đến 31/12/2025

1. Cường độ kéo: Phương pháp thử theo ASTM D412-16 (2021)

Mẫu thử nghiệm	Kích thước tiết diện, mm		Lực kéo N	Cường độ kéo, N/mm ²		
	Chiều dày	Chiều rộng		Từng mẫu	Trung bình	YCKT Nhà sản xuất
Mẫu thử 1	1,25	5,03	22,55	3,59	3,56	≥ 2,0
Mẫu thử 2	1,29	5,09	22,51	3,43		
Mẫu thử 3	1,25	5,03	22,32	3,55		
Mẫu thử 4	1,22	5,09	21,93	3,53		
Mẫu thử 5	1,28	5,03	23,82	3,70		

2. Độ giãn dài khi đứt: Phương pháp thử theo ASTM D412-16(2021)

Mẫu thử nghiệm	Khoảng cách giữa hai ngàm kẹp, mm		Độ giãn dài khi đứt, %		
	Ban đầu	Tại điểm đứt	Từng mẫu	Trung bình	YCKT Nhà sản xuất
Mẫu thử 1	25,0	210,0	740,0	741,6	≥ 500
Mẫu thử 2	25,0	209,0	736,0		
Mẫu thử 3	25,0	210,0	740,0		
Mẫu thử 4	25,0	208,0	732,0		
Mẫu thử 5	25,0	215,0	760,0		

3. Độ cứng Shore A: Phương pháp thử theo ASTM D2240-15 (2021)

Mẫu thử nghiệm	Độ cứng Shore A		
	Từng mẫu	Trung bình	YCKT Nhà sản xuất
Mẫu thử 1	60	60	≥ 40
Mẫu thử 2	60		
Mẫu thử 3	61		
Mẫu thử 4	60		
Mẫu thử 5	61		

4. Cường độ bám dính: Phương pháp thử theo ASTM D7234-22

Mẫu thử nghiệm	Đường kính tấm đầu kéo, mm	Lực kéo, N	Cường độ bám dính, N/mm^2		
			Từng mẫu	Trung bình	YCKT Nhà sản xuất
Mẫu thử 1	49,8	2.664,49	1,37	1,44	$\geq 1,0$
Mẫu thử 2	49,8	2.823,19	1,45		
Mẫu thử 3	49,8	2.924,67	1,50		

Ghi chú: Tất cả các mẫu đã thí nghiệm trên bong tách trong lớp vật liệu phủ

5. Độ bền xé rách: Phương pháp thử theo ASTM D624-00(2020)

Mẫu thử nghiệm	Chiều dày mm	Lực kéo N	Độ bền xé rách, kN/m		
			Từng mẫu	Trung bình	YCKT Nhà sản xuất
Mẫu thử 1	1,21	28,27	23,4	24,2	$\geq 15,0$
Mẫu thử 2	1,24	28,74	23,2		
Mẫu thử 3	1,35	37,45	27,7		
Mẫu thử 4	1,24	28,21	22,8		
Mẫu thử 5	1,25	30,01	24,0		

6. Khả năng tạo cầu vết nứt ở điều kiện thường: Phương pháp thử theo BS EN 14891:2017

Mẫu thử nghiệm	Khả năng tạo cầu vết nứt ở điều kiện thường, mm		
	Từng mẫu	Trung bình	YCKT Nhà sản xuất
Mẫu thử 1	2,8	3,0	$\geq 2,0$
Mẫu thử 2	3,4		
Mẫu thử 3	2,9		

7. Chiều sâu thấm nước: Phương pháp thử dựa theo BS EN 12390-8:2019

Mẫu thử nghiệm	Chiều sâu thấm nước ở 500 kPa trong 72h
Mẫu thử 1	Không thấm
Mẫu thử 2	Không thấm
Mẫu thử 3	Không thấm

Ghi chú: Vật liệu thử do khách hàng mang đến.

Phòng TNVL và HPXD

Người thí nghiệm

Trưởng phòng

KS. Nguyễn Thế Tú

KS. Lưu Văn Nam

Giám sát thí nghiệm

Chủ đầu tư

Tư vấn giám sát

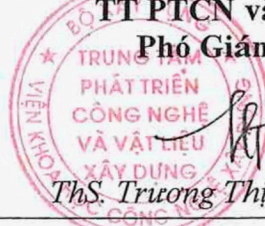
Nhà thầu

Đơn vị yêu cầu

Hà Nội, ngày 5 tháng 1 năm 2026

TT PTCN và VLXD

Phó Giám đốc



ThS. Trương Thị Hồng Thúy

03



OTHER TEST RESULTS

CÁC KẾT QUẢ THỬ NGHIỆM KHÁC



Keshun AQUACOAT KS-929C –
Single-Component Polyurethane Waterproof Coating



Included documents / Tài liệu gồm:



- Supplementary laboratory reports



- Root resistance or other performance reports



- Additional supporting technical evidence



This section compiles other relevant test results and supporting technical documents.

/ Phần này tổng hợp các kết quả thử nghiệm và tài liệu kỹ thuật hỗ trợ khác có liên quan.

Test Report

**Determination of Tensile Strength and Elongation at break of Vulcanized Rubber
and Thermoplastic Elastomers**
[ASTM D 412 - 16 (Method A)]Date of issue : 14-01-2022
Page 1 of 1 page(s)

Castco LRN : 220125-2654

Details as supplied by customer

Customer : Keshun International Limited

Customer's Ref. No. : --

Address : Unit 509A, 5/F, Harbour Crystal Centre, No.100 Granville Road, Tsim Sha Tsui, Kowloon, Hong Kong

Job Title : Material Testing

Contract No : --

Sample Description : KS-929C Single Component, Moisture Cured, Polyurethane Waterproof Coating

Manufacturer : Keshun Waterproof Technology Co., Ltd

Brand name : CKS KESHUN

Normal size : --

Type : --

Supplier : Keshun Waterproof Technology Co., Ltd

Laboratory test results

Date of sample received : 03-01-2022

Date of test started : 03-01-2022

Date of test completed : 04-01-2022

A. Preparation of sheet specimen (By Customer)

Date of applying 1st and 2nd coat : --

Method of application : By customer

Dimensions / thickness : 300 x 300 mm / 1.5 mm

Type of specimen : Die C

B. Determination of tensile strength and elongation at break

Date of test : 04-01-2022

Speed of testing : 500 mm / min

Ambient Temperature : 22.5 °C

Specimen I.D.	1	2	3		
Thickness of reduced section (mm)	1.24	1.25	1.25		
Width of restricted section (mm)	5.99	5.98	5.99		
Original distance between bench marks (mm)	25.0	25.0	25.0		
Distance between bench marks at break (mm)	221.0	212.0	230.6		
Maximum force at rupture (N)	20.8	20.0	21.4		
Elongation at break (%)	784	748	822		
Median	784				
Tensile strength (MPa)	2.8	2.7	2.9		
Median	2.8				

Remark(s) :

1. Test results relate only to the sample tested.

Checked by : _____

WONG CHUN KIT
Laboratory Supervisor

Certified by : _____

WONG KA MAN
Senior Manager

End of Report

Form No. : R&D_TS&E_ASTMD412(16)_T dd 22/02/2021

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 香港粉嶺安居街30號新寧中心1樓 • 1/F, Sun Ling Plaza, 30, On Kui Street, Fanling, Hong Kong.
 香港粉嶺安全街29A號 • 29A, On Chuen Street, Fanling, Hong Kong.
 Tel: 2597 8333 Fax: 2597 8399 E-mail: info@castco.com.hk Website: www.castco.com.hk

Test Report
Determination of Tensile Set of Vulcanized Rubber and Thermoplastic Elastomers
[ASTM D 412 - 16 (Method A)]

Date of issue : 14-01-2022

Page 1 of 1 page(s)

Castco LRN : 211130-2003-2

Details as supplied by customer

Customer : Keshun International Limited

Customer's Ref. No. : --

Address : Unit 509A, 5/F, Harbour Crystal Centre, No.100 Granville Road, Tsim Sha Tsui, Kowloon, Hong Kong

Job Title : Material Testing

Contract No : --

Sample Description : KS-929C Single Component, Moisture Cured, Polyurethane Waterproof Coating

Manufacturer : Keshun Waterproof Technology Co., Ltd

Brand name : CKS KESHUN

Normal size : --

Type : --

Supplier : Keshun Waterproof Technology Co., Ltd

Laboratory test results

Date of sample received : 06-11-2021

Date of test started : 19-11-2021

Date of test completed : 28-11-2021

A. Preparation of sheet specimen (By Castco)

Date of applying : 1st : 19-11-2021, 2nd : 20-11-2021, 3rd : 21-11-2021

Method of application : By brushing

Dimensions / thickness : 250 x 250 mm / 2 mm

Type of specimen : Die C

B. Determination of Tensile set

Date of test : 28-11-2021

Speed of testing : 350 mm / min

Ambient Temperature : 23.3 °C

Specimen I.D.	1	2	3		
Thickness of reduced section (mm)	1.99	1.87	1.98		
Width of restricted section (mm)	6.01	6.03	6.02		
Original distance between bench marks (mm)	24.99	24.98	25.00		
Distance between bench marks after the 10 min retraction period (mm)	28.26	28.85	28.70		
Tensile set (%)	13	15	15		
	Median		15		

Remark(s) :

- Test results relate only to the sample tested.
- As request by customer, when specimens reach the specified elongation, not hold the specimens at the specified elongation for 10 min.

Checked by :

WONG CHUN KIT
Laboratory Supervisor

Certified by :

WONG KA MAN
Senior Manager**End of Report**

Form No. : R&D_TSet_ASTMD412(06)_T dd 22/10/2019

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香港粉嶺安全街29A號 • 29A, On Chuen Street, Fanling, Hong Kong.
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CASTCO

香港粉嶺安居街33號
香港粉嶺安全街29A號
E-mail: info@castco.com.hk

佳力高試驗中心有限公司
CASTCO TESTING CENTRE LIMITED

33, On Kui Street, Fanling, Hong Kong. Tel : 2597 8333
29A, On Chuen Street, Fanling, Hong Kong. Fax: 2597 8399
Website: www.castco.com.hk



Test Report
Coating - Pull-off Test of Coating
(ASTM D 4541-02 Test Method E)

Date of issue : 14-01-2022

Page 1 of 2 page(s)

Castco LRN : 211130-2003-3

Details as supplied by customer

Customer : Keshun International Limited

Customer's ref. no. : --

Address : Unit 509A, 5/F, Harbour Crystal Centre, No.100 Granville Road, Tsim Sha Tsui, Kowloon, Hong Kong

Title : Material Testing

Contract no. : --

Test type : Laboratory

Substrate type : Concrete panel

Sample description : KS-929C Single Component, Moisture Cured, Polyurethane Waterproof Coating

Type of coating : --

Substrate thickness : 50 mm

Age of Coating at the time of testing : 28 days

Thickness of coating layer : 1.5mm

Brand name : CKS KESHUN

Manufacturer : Keshun Waterproof Technology Co., Ltd

Required adhesion strength of coating : --

Batch no. : --

Equipment used for test

1. Test method : E

2. Model : Pos:Test AT-A

Working range : 1 to 20 MPa; Castco I.D. No. : BUDG-PAT-001

3. Metallic dolly, 20 mm diameter, Castco I.D. No. : BUDG-PDL-007, 008, 009

4. Adhesive, two-component epoxy; Brand name : Araldite

5. Stopwatch, Castco I.D. No. : RNDT-STW-01

Laboratory test / site test results :-

Date of applying the dolly : 20-12-2021

Date of pull-off test : 21-12-2021

Temperature : 23.5 °C

Relative humidity : 53 %

1. Test area / Test location : Laboratory

Scoring of test sample : No

CASTCO

香港粉嶺安居街33號
香港粉嶺安全街29A號
E-mail: info@castco.com.hk

佳力高試驗中心有限公司 CASTCO TESTING CENTRE LIMITED

33, On Kui Street, Fanling, Hong Kong. Tel : 2597 8333
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Website: www.castco.com.hk



Test Report Coating - Pull-off Test of Coating (ASTM D 4541-02 Test Method E)

Date of issue : 14-01-2022

Page 2 of 2 page(s)

Castco LRN : 211130-2003-3

Laboratory test / site test results :- (Cont'd)**2. Pull-off strength test result**

Test Area / Test Location	Sample no.	Pull-off strength (MPa)	The testing period (nearest to 0.1 sec)	Mode of failure and estimate percentage of failure	PW : Pass with pull-off strength > value obtained P : Pass F : Fail	Loading rate < 1 MPa/s Yes / No
Laboratory	1-1	2.19	3.2	(5) 100%	--	Yes
	1-2	2.24	3.4	(5) 100%	--	Yes
	1-3	2.16	3.2	(5) 100%	--	Yes

Legend :

Dolly	Z	
Glue	Y	(1) Adhesive failure at inter face Y/Z
		(2) Cohesive failure at Y
Coating	B	(3) Adhesive failure at inter face B/Y
		(4) Cohesive failure at B
Substrate	A	(5) Adhesive failure at inter face B/A
		(6) Cohesive failure at A

Remark(s) :

1. If there is a mix of the above modes of failure, make a visual assessment of the rupture face to estimate the surface area percentage per type of failure.
2. The test results relate only to the specimen tested.
3. Disregard any test where glue failure represents more than 50% of the area.

Checked by :

KONG KA LAI
Technical Officer

Approved Signatory :

LAI PETER SHU HUNG
B.Sc, MSc, PhD, PEng, CEng.
MHKIE, MICE, RPE, (CVL, MAT)
Deputy General Manager

End of Report

Form No. BD PULL_ST_COAT(ASTM4541)_Ta dd 18/12/2019

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Test Report
Determination of Tear Strength of Conventional Vulcanized Rubber
[ASTM D 624 - 2000]

Date of issue : 14-01-2022

Page 1 of 1 page(s)

Castco LRN : 211130-2003-4

Details as supplied by customer

Customer : Keshun International Limited

Customer's Ref. No. : --

Address : Unit 509A, 5/F, Harbour Crystal Centre, No.100 Granville Road, Tsim Sha Tsui, Kowloon, Hong Kong

Job Title : Material Testing

Contract No : --

Sample Description : KS-929C Single Component, Moisture Cured, Polyurethane Waterproof Coating

Manufacturer : Keshun Waterproof Technology Co., Ltd

Brand name : CKS KESHUN

Supplier : Keshun Waterproof Technology Co., Ltd

Type : --

Normal size : --

Laboratory test results

Date of sample received : 06-11-2021

Date of test started : 19-11-2021

Date of test completed : 28-11-2021

Type of specimens : Type C

Speed of testing: 500 mm / min

Ambient Temperature : 23.4 °C

Specimen I.D.	1	2	3		
Length of specimen (mm)	100.2	100.3	100.1		
Thickness of specimen (mm)	1.77	1.97	1.94		
Maximum force (N)	37.2	42.4	41.2		
Tear strength (kN/m)	21.0	21.5	21.2		
	Median 21.2				
Deviation from median (%)	-1	+1	0		

Remark(s) :

1. Test results relate only to the sample tested.

Checked by : _____

WONG CHUN KIT
Laboratory Supervisor

Certified by : _____

WONG KA MAN
Senior Manager

End of Report

Form No. : R&D_Tear(C)_T dd 21/07/2019

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 Tel: 2597 8333 Fax: 2597 8399 E-mail: info@castco.com.hk Website: www.castco.com.hk

Test Report
Determination of Water Permeability of Hardened Concrete
[DIN 1048 Part 5 Clause 7.6]

Date of issue : 14-01-2022

Page 1 of 1 page(s)

Castco LRN : 211130-2003-5

Details as supplied by customer

Customer : Keshun International Limited

Customer's Ref No. : --

Address : Unit 509A, 5/F, Harbour Crystal Centre, No.100 Granville Road, Tsim Sha Tsui, Kowloon, Hong Kong

Job Title : Material Testing

Contract No. : --

Sample Description : KS-929C Single Component, Moisture Cured, Polyurethane Waterproof Coating

Concrete mix I.D. : --

Mix proportion : --

Concrete grade : --

Date cast : 19-11-2021 (1st layer), 20-11-2021 (2nd layer), 21-11-2021 (3rd layer)

Concrete plant : --

Nominal size of specimen : 150 × 150 × 2 mm (Length × Width × Thickness)

Age at which the test was started : 3 days

Condition of storage until testing : Curing in normal laboratory temperature

Brand name : CKS KESHUN

Manufacturer : Keshun Waterproof Technology Co., Ltd

Supplier : Keshun Waterproof Technology Co., Ltd

Direction of application of water pressure with respect to the casting direction : Horizontal

Laboratory test results

Date of sample received : 06-11-2021

Date of test started : 19-12-2021

Date of test completed : 22-12-2021

Specimen I.D.	1	2	3
Diameter of area under water pressure (mm)	100	100	100
Water pressure applied (kPa)	500	500	500
Test duration (hrs)	72	72	72
Observed appearance of surfaces not exposed to water pressure and leakage	Yes	Yes	Yes
Maximum depth of penetration of water under pressure (mm)	0	0	0

Remark(s) : -

1. Test results relate only to the specimen(s) tested.

Checked by :

WONG CHUN KIT
Laboratory Supervisor

Certified by :

WONG KA MAN
Senior Manager

End of Report

Form No. : R&D WP (DIN1048)_T dd 25/05/2020

/04

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Tel: 2597 8333 Fax: 2597 8399 E-mail: info@castco.com.hk Website: www.castco.com.hk

Test Report
Determination of Peel or Stripping Strength of Adhesive Bonds

Date of issue : 14-01-2022

Page 1 of 1 page(s)

Castco LRN : 211130-2003-6

Details as supplied by customer

Customer : Keshun International Limited

Customer's Ref. No. : --

Address : Unit 509A, 5/F, Harbour Crystal Centre, No.100 Granville Road, Tsim Sha Tsui, Kowloon, Hong Kong

Job Title : Material Testing

Contract No : --

Sample Description : KS-929C Single Component, Moisture Cured, Polyurethane Waterproof Coating

Manufacturer : Keshun Waterproof Technology Co., Ltd

Type : --

Supplier : Keshun Waterproof Technology Co., Ltd

Brand name : CKS KESHUN

Nominal size : --

Sample I.D. : --

Laboratory Information

Date of sample received : 06-11-2021

Date of test started : 21-11-2021

Date of test completed : 30-11-2021

Test method : ASTM D 903-98 (2004) with modification

Test modified : The bonded panels had changed to concrete panel, use maximum peel load to calculate the peel strength.

The peel strength expressed in N/mm.

Preparation of specimenConditioning of specimens before test : In Laboratory : Cure at 23 ± 1 °C, 50 ± 2 % relative humidity for 7 days.Test result

Date of test : 30-11-2021

Speed of testing : 152.4 mm / min

Ambient Temperature : 23.5 °C

Specimen I.D.	1	2	3	4	5	6	7	8	9	10
Width of specimen (mm)	24.50	25.00	25.00	25.00	25.00	25.00	24.50	25.00	25.00	24.50
Maximun peeling force (N)	56.50	43.00	43.20	63.70	53.70	72.10	61.70	63.30	61.30	52.50
Peel strength (N/mm)	2.31	1.72	1.73	2.55	2.15	2.88	2.52	2.53	2.45	2.14
	Average 2.30									
Maximun peeling strength (N/mm)	2.88									
Minimun peeling strength (N/mm)	1.72									
Type of failure	A	A	A	A	A	A	A	A	A	A

Legend: A. Peeling of the joint

B. Break outside of the joint

C. Delamination of sheet

Remark(s) :

1. Test results relate only to the sample tested.

Checked by :

WONG CHUN KIT
Laboratory Supervisor

Certified by :

WONG KA MAN
Senior Manager

End of Report

Form No. : R&D_Peel(ASTM D903mod)_T dd 02/03/2021

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CASTCO

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E-mail: info@castco.com.hk

佳力高試驗中心有限公司 CASTCO TESTING CENTRE LIMITED

33, On Kui Street, Fanling, Hong Kong. Tel : 2597 8333
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Website: www.castco.com.hk

**Test Report****Rubber, Vulcanized or Thermoplastic - Hardness**

[BS 903 : Part A26 : 1995 / ISO 48 : 1994 (Method N)]

Date of issue : 14-01-2022

Page 1 of 1 page(s)

Castco LRN : 211130-2003-7

Details as supplied by customer

Customer : Keshun International Limited

Customer's Ref. No. : --

Address : Unit 509A, 5/F, Harbour Crystal Centre, No.100 Granville Road, Tsim Sha Tsui, Kowloon, Hong Kong

Job Title : Material Testing

Contract No. : --

Sample Description : KS-929C Single Component, Moisture Cured, Polyurethane Waterproof Coating

Brand name : CKS KESHUN

Date of manufacture : --

Manufacturer : Keshun Waterproof Technology Co., Ltd

Date of receipt by the purchaser : --

Nominal size : --

Type : --

No. of layer : --

Laboratory test results

Date of sample received : 06-11-2021

Date of test started : 19-11-2021

Date of test completed : 28-11-2021

A. Vulcanization and Conditioning of specimen

Time between vulcanization and testing : 7 days

Conditioning of specimens before test : Condition at 27 ± 2 °C for 4 hours.**B. Determination of hardness**

Form of test piece : Standard test piece

Test method : Method N

Checking of test piece surface (See Legend) : S, F, P

Type of surface tested : moulded

Thickness of different layer of test piece : 1st : 5 mm, 2nd : 4mm

Method of mounting : Unclamp

Dimension of the thinnest layer : 150mm x 50mm

Method of applying the test force: Manual

Ambient temperature at test: 27.2 / 26.8 °C (Max/min)

Specimen I.D.	1		
Hardness	51°, SN	52°, SN	50°, SN
	Median 51°, SN		

Legend: S : Smooth

R: rough

F: Flat

UF: Unflat

P: parallel to one another

UP: unparallel to one another

Remark(s) :

1. Test results relate only to the sample tested.
2. Test specimens were prepared by Castco.

Checked by :

WONG CHUN KIT
Laboratory Supervisor

Approved Signatory :

WONG KA MAN
Senior Manager

End of Report

Form No. : R&D_RUB_HARD(BS903ISO48)_ T dd 29/10/2021

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Test Report

Determination of Low Temperature Bendability for Waterproofing Coating

(GB/T 16777 - 2008 Clause 14 in conjunction with the following specification(s): GB/T 19250 - 2013 Clause 6.11)

Date of issue : 14-01-2022

Page 1 of 1 page(s)

Castco LRN : 211130-2003-8

Details as supplied by customer

Customer : Keshun International Limited

Customer's Ref. No. : --

Address : Unit 509A, 5/F, Harbour Crystal Centre, No.100 Granville Road, Tsim Sha Tsui, Kowloon, Hong Kong

Job Title : Material Testing

Contract No : --

Sample Description : KS-929C Single Component, Moisture Cured, Polyurethane Waterproof Coat Type : --

Manufacturer : Keshun Waterproof Technology Co., Ltd

Brand name : CKS KESHUN

Supplier : Keshun Waterproof Technology Co., Ltd

Laboratory test results

Date of sample received : 06-11-2021

Date of test started : 19-11-2021

Date of test completed : 28-11-2021

Specimen I.D.	1	2	3
Length of waterproofing coating (mm)	100	100	100
Width of waterproofing coating (mm)	25.2	25.1	25.2
Thickness of waterproofing coating (mm)	2.0	2.0	2.0
Testing temperature (C°)	-20	-20	-20
Testing period (hr)	1.0	1.0	1.0
Observed any crack or fracture of the waterproofing coating	NIL	NIL	NIL

Remark(s) :

1. Test results relate only to the sample tested.

Checked by : _____

WONG CHUN KIT
Laboratory Supervisor

Certified by : _____

WONG KA MAN
Senior Manager

End of Report

Form No.R&D_WP(16777)_LTbend_T dd 17/02/2017

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Tel: 2597 8333 Fax: 2597 8399 E-mail: info@castco.com.hk Website: www.castco.com.hk

Test Report

Determination of Crack Bridging Ability of Liquid-Applied Waterproofing Membrane

Date of issue : 14-01-2022

Page 1 of 1 page(s)

Castco LRN : 211130-2003-9

Details as supplied by customer

Customer : Keshun International Limited

Customer's Ref. No. : --

Address : Unit 509A, 5/F, Harbour Crystal Centre, No.100 Granville Road, Tsim Sha Tsui, Kowloon, Hong Kong

Job Title : Material Testing

Contract No. : --

Sample Description : KS-929C Single Component, Moisture Cured, Polyurethane Waterproof Coating

Manufacturer : Keshun Waterproof Technology Co., Ltd

Type : --

Supplier : Keshun Waterproof Technology Co., Ltd

Brand name : CKS KESHUN

Laboratory Information

Date sample received : 06-11-2021

Date of test started : 21-11-2021

Date of test completed : 20-12-2021

Test method : ASTM C 1305 - 06 with modification

- Test modified :
1. Pre-condition temperature of specimens changed to -20 °C.
 2. Test temperature had changed to ambient temperature.
 3. Test rate of each cycles changed to 0.16 mm / min.

Preparation of specimen

Conditioning of specimens before test : In Laboratory : Cure at room temperature for 14 days followed by 7 days at 70 ± 2 °C.

Test result

- Test process of each cycle :
1. Pulling the blocks apart at the rate of 0.16 mm / min until the space between them is 3.2 mm.
 2. Closing the space of the block at the the rate of 0.16 mm / min.

Ambient Temperature : 20.6 °C

Specimen I.D.	1	2	3	4	5
	Examine the membrane for cracking, splitting, pinholes in the area of the joint in the substrates				
Cycles 1	NIL	NIL	NIL	NIL	NIL
Cycles 2	NIL	NIL	NIL	NIL	NIL
Cycles 3	NIL	NIL	NIL	NIL	NIL
Cycles 4	NIL	NIL	NIL	NIL	NIL
Cycles 5	NIL	NIL	NIL	NIL	NIL
Cycles 6	NIL	NIL	NIL	NIL	NIL
Cycles 7	NIL	NIL	NIL	NIL	NIL
Cycles 8	NIL	NIL	NIL	NIL	NIL
Cycles 9	NIL	NIL	NIL	NIL	NIL
Cycles 10	NIL	NIL	NIL	NIL	NIL
Extend the membrane to 3.2 mm after completion 10 cycles	NIL	NIL	NIL	NIL	NIL

Remark(s) :

1. Test results relate only to the sample tested.

Checked by :

WONG CHUN KIT
Laboratory Supervisor

Certified by :

WONG KA MAN
Senior Manager

End of Report

Form No. : R&D_CBA(ASTM C1305mod) T dd 02/03/2021

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 Tel: 2597 8333 Fax: 2597 8399 E-mail: info@castco.com.hk Website: www.castco.com.hk



Inspection and Test Report

Report No.: URTC-C200511

Name of

KS-929C Graphene Polyurethane Waterproof Coating
(Root Puncture Resistant)

Engineering/Product

Client

Keshun Waterproof Technology Co., Ltd.

Test Category

Commissioned Inspection

Jiangsu Research Institute of Building Science Co, Ltd.
National Center for Quality Test of Urban Rail Transit Construction Engineering Product

Jiangsu Research Institute of Building Science Co, Ltd.
National Center for Quality Test of Urban Rail Transit Construction Engineering Product

Test Report

Report No. : URTC-C200511

Page 1 of 9

Commissioned by	Keshun Waterproof Technology Co., Ltd.	Commissioning Number	C200511
Construction Unit	/	Sample Number	C2010140005
Project Name	/	Construction Company	/
Supervision Unit	/	Witness/Witness Number	/
Product Name	KS-929C Graphene Polyurethane Waterproof Coating (Root Puncture Resistant)	Trademark	CKS Keshun
Specifications and Model	SINA	Batch Number	/
Manufacturer/ Place of Origin	Keshun Waterproof Technology Co., Ltd.//		
Test Category	Commissioned Inspection	Sample Condition	Detectable
Production Date/ Factory Date	/	Sample Quantity/ Representative Quantity	200kg//
Sampling Quantity/ Sampling Base	/	Sampling Date/ Sampling Location	/
Sampling Date	2020-12-14	Testing location	No. 8 Yuanhua Road; No. 6 Xianyin South Road
Commission Date	2020-12-14	Testing Date	2020-12-15~2023-01-16
Testing Basis	GB/T19250-2013 Polyurethane Waterproof Coating Q/WDTC080-2020 "Test Method for Root Penetration Resistance of Waterproof Coatings for Green Roofs"		
Judgment Basis	GB/T19250-2013 Polyurethane Waterproof Coating Q/WDTC080-2020 "Test Method for Root Penetration Resistance of Waterproof Coatings for Green Roofs"		
Testing Conclusion	The sample has been tested and found to meet the technical requirements of items 1-16 in the "Polyurethane Waterproof Coating" GB/T 19250-2013 standard, as specified by SI. The puncture resistance performance for root penetration has passed the requirements of the "Test Method for Puncture Resistance of Waterproof Coatings for Green Roofs" Q/WDTC080-2020. Special seal for inspection and testing Date of Issue: January 16, 2023		
Remarks:	/		

Approved by:

Reviewed by:

Prepared by:

Jiangsu Research Institute of Building Science Co, Ltd.
National Center for Quality Test of Urban Rail Transit Construction Engineering Product

Test Report

Report No. : URTC-C200511

Page 2 of 9

1. Basic Performance						
No.	Test Item		Unit of Measurement	Standard Requirement	Test Result	Single Item Evaluation
1	Appearance		/	The product is a uniformly viscous substance, without gels or lumps.	The Sample is a uniformly viscous substance, without gels or lumps.	Qualified
2	Solid content		%	≥85.0	90.4	Qualified
3	Time of Surface Drying		h	≤12	5	Qualified
4	Time of Actual Drying		h	≤24	13	Qualified
5	Tensile strength		MPa	≥2.00	2.47	Qualified
6	Elongation at break		%	≥500	684	Qualified
7	Tear strength		N/mm	≥15	18	Qualified
8	Low temperature bending		/	-35℃, no crack	Three pieces are all free of cracks	Qualified
9	Impermeability		/	0.3MPa,120min impermeable	Three pieces are all impermeable	Qualified
10	Heating expansion rate		%	-4.0~+1.0	-0.2	Qualified
11	Bonding strength		MPa	≥1.0	1.19	Qualified
12	Water absorption		%	≤5.0	1.4	Qualified
13	Aging at constant extension	Heat aging	/	No cracks and deformation.	Three pieces are all free of cracks and deformation.	Qualified
14	Heat treatment (80℃,168h)	Tensile strength retention	%	80~150	95	Qualified
		Elongation at break	%	≥450	684	Qualified
		Low temperature bending	/	-30℃, no cracks	Three pieces are all free of cracks	Qualified

Jiangsu Research Institute of Building Science Co, Ltd.
National Center for Quality Test of Urban Rail Transit Construction Engineering Product

Test Report

Report No. : URTC-C200511

Page 3 of 9

No.	Test Item		Unit of Measurement	Standard Requirement	Test Result	Single Item Evaluation
15	Alkali Treatment [0.1% NaOH + saturated Ca(OH) ₂ solution, 168h]	Tensile strength retention	%	80~150	88	Qualified
		Elongation at break	%	≥450	627	Qualified
		Low temperature bending	/	-30°C, no cracks	Three pieces are all free of cracks	Qualified
16	Acid treatment [2% H ₂ SO ₄ solution, 168h]	Tensile strength retention	%	80~150	98	Qualified
		Elongation at break	%	≥450	702	Qualified
		Low temperature bending	/	-30°C, no cracks	Three pieces are all free of cracks	Qualified
17	Artificial weathering aging(1000h)	Tensile strength retention	%	/	102	/
		Elongation at break	%	/	551	/
		Low temperature bending	/	/	Three pieces are all free of cracks	/

2. Application Properties

No.	Test Item		Unit of Measurement	Standard Requirement	Test Result	Single Item Evaluation
1	Resistance to Fungal Corrosion	Anti-mouldy grade	/	/	Grade 0	/
2	Shear Strength between Coatings	Shear strength between untreated coatings	MPa	/	0.16	/
		Shear strength retention between the heat aging treated coatings	%	/	94	/
		Shear strength retention between salt-treated coatings.	%	/	94	/
3	Peel Strength between Coatings	Peel strength between untreated coatings	N/mm	/	2.90	/
		Peel strength between heat aging untreated coatings	%	/	97	/
		The peel strength retention between salt-treated coatings.	%	/	91	/

Test Report

Report No. : URTC-C200511

Page 4 of 9

3. Puncture Resistance Performance

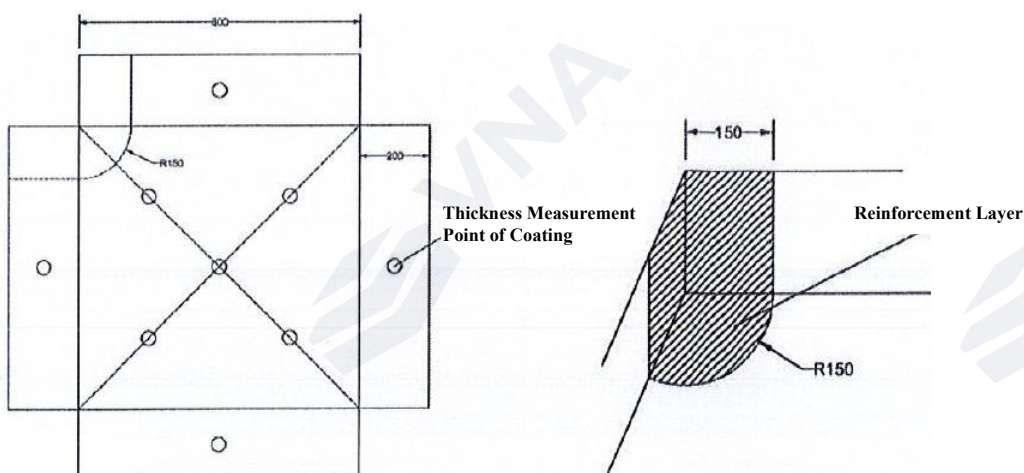
1. Sample Information

Product Structure		Polyurethane waterproof coating					
Material Layer that Reflects Puncture Resistance Function		Material itself					
Type of Root Barrier Agent, Root Barrier Agent Manufacturer and Dosage		Polymer root barrier agent B2; Langsheng Chemical (China) Co., Ltd.; Dosage of 1‰ (mass ratio)					
Application Method		Scrapping					
Specified Coating Thickness (mm)		1.5					
Coating Density (g/cm³)		1.674					
Maximum Allowed Coating Mass (kg)		3.99					
Coating Thickness	Inner Lining Box Number	1	2	3	4	5	6
	Average Value (mm)	1.35	1.37	1.35	1.43	1.46	1.50
	Minimum Value (mm)	1.25	1.28	1.25	1.38	1.37	1.43
Coating Mass (kg)		3.57	3.66	3.54	3.54	3.88	3.95
Moisture Layer Material		Perlite					
Treatment of internal corners		1.5mm polyurethane waterproof coating					
Presence of Protective Layer above the Coating		No					
Remarks		This information is provided and confirmed by the coating manufacturer. Our company does not assume responsibility for verifying the accuracy, suitability, and completeness of the information provided by the manufacturing unit.					

2. Installation of Puncture Resistant Material

Apply the waterproof coating on a flat cardboard in multiple coats until the specified thickness is achieved, and cure it for the required time according to the product standards. Assemble the four sides of the cardboard into an inner lining box, with a distance of 150mm from the vertical corners and a radius of 150mm at the bottom corner, and apply a 1.5mm thick polyurethane waterproof coating reinforcement layer (see picture).

Unit: mm



Jiangsu Research Institute of Building Science Co, Ltd.
National Center for Quality Test of Urban Rail Transit Construction Engineering Product

Test Report

Report No. : URTC-C200511

Page 5 of 9

3. Experimental plant growth status								
Box No.	Plant No.	Initial height (mm)	Initial stem diameter (mm)	Growth status at 3 months	Height at 1 year (mm)	Stem diameter at 1 year (mm)	Height at 2 years (mm)	Stem diameter at 2 years (mm)
1	1	722	3.59	Good	1851	9.15	3266	14.47
	2	680	3.04	Good	1719	8.60	3130	14.07
	3	734	2.97	Good	1892	7.92	3162	13.41
	4	759	4.40	Good	1784	9.18	3105	14.65
2	1	630	3.93	Good	1778	8.13	3277	15.12
	2	737	4.34	Good	1724	8.83	3100	13.44
	3	721	3.24	Good	1884	8.23	3013	14.11
	4	748	3.92	Good	1872	8.07	3147	13.87
3	1	621	3.75	Good	1705	8.69	3298	14.02
	2	647	3.15	Good	1721	8.40	3128	13.21
	3	659	4.02	Good	1787	9.25	3194	14.63
	4	632	2.90	Good	1738	9.32	3211	14.65
4	1	766	4.00	Good	1798	9.57	3029	14.18
	2	615	2.98	Good	1785	8.45	3177	13.00
	3	664	2.67	Good	1892	8.06	3220	13.98
	4	706	4.05	Good	1782	9.63	3283	12.63
5	1	790	3.26	Good	1740	9.61	3107	12.99
	2	760	3.09	Good	1798	8.56	3292	13.94
	3	603	3.88	Good	1717	9.04	3101	14.40
	4	606	4.42	Good	1773	8.65	3225	14.18
6	1	604	4.07	Good	1890	8.65	3050	12.56
	2	725	2.76	Good	1874	8.18	3203	12.84
	3	677	4.35	Good	1856	9.32	3005	12.65
	4	711	4.34	Good	1754	8.35	3221	13.22
Control Box 1	1	751	4.31	Good	1891	8.78	3331	13.66
	2	644	4.17	Good	1871	9.01	3164	14.38
	3	710	3.19	Good	1852	9.11	3516	14.61
	4	723	4.10	Good	1833	9.12	3239	14.06
Control Box 2	1	737	3.84	Good	1875	9.05	3403	13.70
	2	778	2.76	Good	1796	8.76	3398	15.41
	3	735	2.86	Good	1815	9.12	3339	14.44
	4	610	4.12	Good	1833	8.74	3231	14.21
The plant growth in the test box is at least 80% of the plant growth in the control box, indicating the effectiveness of the experimental process.								

Jiangsu Research Institute of Building Science Co, Ltd.
National Center for Quality Test of Urban Rail Transit Construction Engineering Product

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4. Penetration of Roots in the Test Samples

Mid-term inspections were conducted on July 12, 2021, January 12, 2022, and July 12, 2022. No obvious root penetration was observed in any of the test boxes. A final unboxing inspection was carried out on January 12, 2023, and no root penetration was found in any of the test boxes. Please refer to the table below and the attached documents for details.

Test Box No.	Number of Roots Penetrating the Coating Surface		Number of Roots Penetrating the Coating Corners	
	Coating Surface	Coating Corners	Coating Surface	Coating Corners
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0

Test Report

Report No. : URTC-C200511

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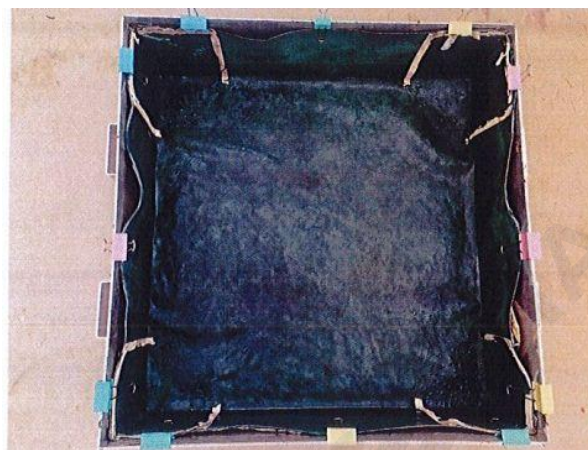
Attachments:



Photos of Coating Surface and Corners for Test Box No. 1



Photos of Coating Surface and Corners for Test Box No. 2

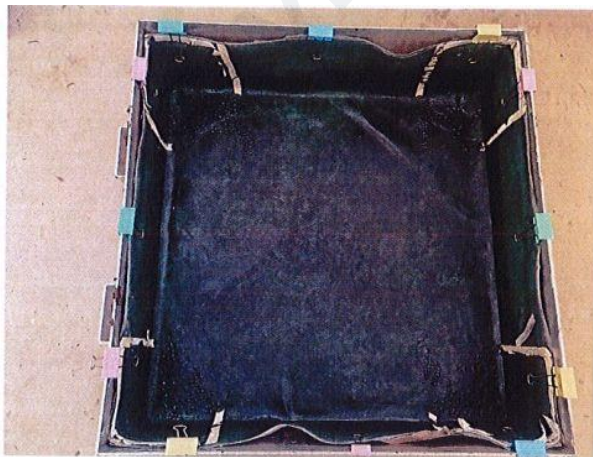


Photos of Coating Surface and Corners for Test Box No. 3

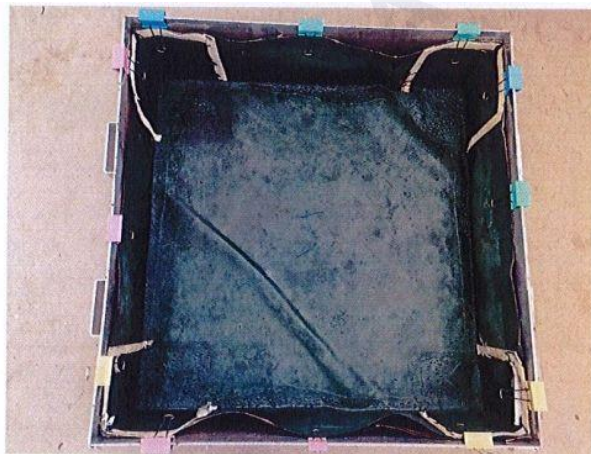
Test Report

Report No. : URTC-C200511

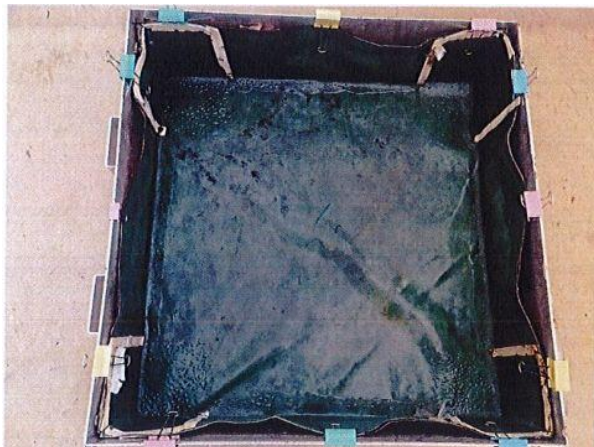
Page 8 of 9



Photos of Coating Surface and Corners for Test Box No. 4



Photos of Coating Surface and Corners for Test Box No. 5

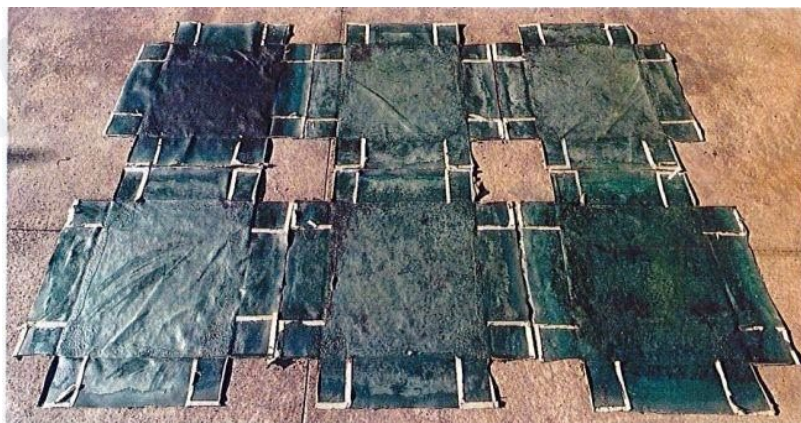


Photos of Coating Surface and Corners for Test Box No. 6

Test Report

Report No. : URTC-C200511

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Photos of Cut Open Coating Corners after Inspection

Blank below

04

PROJECT REFERENCES

DỰ ÁN THAM CHIẾU TẠI VIỆT NAM

PROJECT REFERENCES • VIETNAM



Aquacoat KS-929C – Polyurethane Waterproof Coating

08



Dự án có ghi nhận mã KS-929 trong hồ sơ tại Việt Nam

TRANG 1/2

01



Khách sạn Dân Tộc

📍 Hà Nội

Phạm vi ghi nhận:

Hầm, logia, nhà vệ sinh, sân mái

Mã hồ sơ: KS-929

02



Bệnh viện K

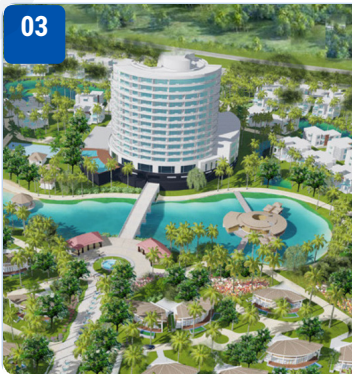
📍 Hà Nội

Phạm vi ghi nhận:

Toàn bộ công trình

Mã hồ sơ: KS-929

03



SeaHorse – Cam Ranh

📍 Cam Ranh, Việt Nam

Phạm vi ghi nhận:

Toàn bộ công trình

Mã hồ sơ: KS-929

04



The Jade Orchid

📍 Hà Nội

Phạm vi ghi nhận:

Toàn bộ công trình

Mã hồ sơ: KS-929

05



Trường mầm non Nghĩa Đô

📍 Hà Nội

Phạm vi ghi nhận:

Toàn bộ công trình

Mã hồ sơ: KS 929

06



Nhà máy Meiko Thạch Thất

📍 Hà Nội

Phạm vi ghi nhận:

Toàn bộ công trình

Mã hồ sơ: KS-929



Tham chiếu dòng Polyurethane Aquacoat • Mã dự án giữ theo hồ sơ nguồn.

Nguồn: Project reference Công trình Vietnam_CKS, slide 1-3 và 11.

04

PROJECT REFERENCES

DỰ ÁN THAM CHIẾU TẠI VIỆT NAM

PROJECT REFERENCES • VIETNAM



Aquacoat KS-929C – Polyurethane Waterproof Coating

08



Dự án có ghi nhận mã KS-929 trong hồ sơ tại Việt Nam

TRANG 2/2

07



Tòa nhà 136 Hồ Tùng Mậu

Việt Nam

Phạm vi ghi nhận:

Toàn bộ công trình

Mã hồ sơ: KS929

08



Sửa chữa tòa nhà Công ty PingChuan

Việt Nam

Phạm vi ghi nhận:

Mái

Mã hồ sơ: KS-929



Tham chiếu đồng Polyurethane Aquacoat • Công trình dân dụng và sửa chữa.

Nguồn: Project reference Công trình Vietnam_CKS, slide 10 và 13.

04

PROJECT REFERENCES

DỰ ÁN THAM CHIẾU TẠI TRUNG QUỐC

KESHUN LANDMARK PROJECT REFERENCES • CHINA



KESHUN – Danh mục công trình trọng điểm

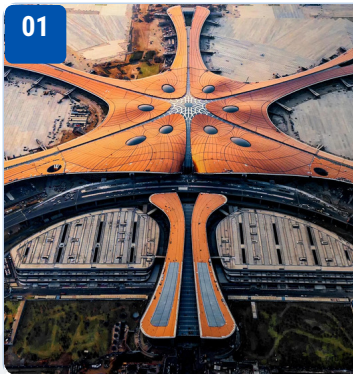
12



Công trình trọng điểm trong danh mục năng lực Keshun

TRANG 1/2

01



Beijing Daxing International Airport

📍 Bắc Kinh, Trung Quốc

Loại công trình:
Cảng hàng không

02



CCTV Headquarters

📍 Trung Quốc

Loại công trình:
Trụ sở, văn phòng

03



National Aquatics Center – Water Cube

📍 Trung Quốc

Loại công trình:
Trung tâm thể thao dưới nước

04



National Stadium

📍 Trung Quốc

Loại công trình:
Công trình thể thao

05



National Convention Center – Phase II

📍 Trung Quốc

Loại công trình:
Trung tâm hội nghị

06



National Speed Skating Oval – Ice Ribbon

📍 Trung Quốc

Loại công trình:
Nhà thi đấu trượt băng



Phạm vi tham chiếu: Danh mục năng lực Keshun.

Nguồn: Keshun Profile_2026, tr.28–30, 35; CKS Catalog (Comprehensive), tr.58–59.

04

PROJECT REFERENCES

DỰ ÁN THAM CHIẾU TẠI TRUNG QUỐC

KESHUN LANDMARK PROJECT REFERENCES • CHINA



KESHUN – Danh mục công trình trọng điểm

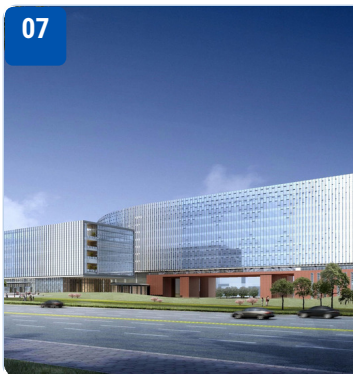
12



Công trình trọng điểm trong danh mục năng lực Keshun

TRANG 2/2

07



CAS Center for Quantum Information & Physics

📍 Trung Quốc

Loại công trình:
Trung tâm nghiên cứu

08



Canton Tower

📍 Quảng Châu, Trung Quốc

Loại công trình:
Tháp đô thị

09



Three Gorges Project

📍 Trung Quốc

Loại công trình:
Công trình thủy điện

10



South-to-North Water Diversion – Central Route

📍 Trung Quốc

Loại công trình:
Công trình chuyển nước

11



Dunhuang Railway

📍 Trung Quốc

Loại công trình:
Hạ tầng đường sắt

12



Wenchang Space Launch Site

📍 Trung Quốc

Loại công trình:
Công trình hàng không vũ trụ



Phạm vi tham chiếu: Danh mục năng lực Keshun.
Nguồn: Keshun Profile_2026, tr.31, 34; CKS Catalog (Comprehensive), tr.58–59.

04

PROJECT REFERENCES

DỰ ÁN THAM CHIẾU VEN BIỂN

COASTAL PROJECT REFERENCES



KESHUN – Dự án đô thị và hạ tầng ven biển

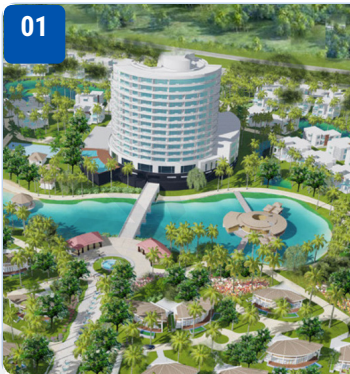
06



Dự án tham chiếu tại khu vực ven biển

TRANG 1/1

01



SeaHorse – Cam Ranh

📍 Cam Ranh, Việt Nam

Phạm vi ghi nhận:
Toàn bộ công trình

Mã hồ sơ: KS-929

02



Forest City

📍 Johor, Malaysia

Loại công trình:
Khu đô thị ven biển

Mã hồ sơ: KS-929

03



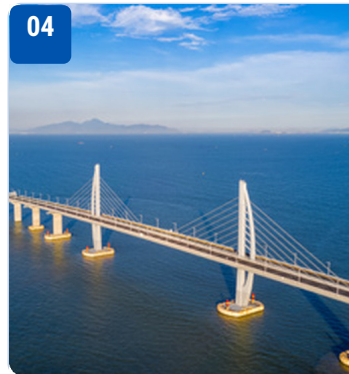
Danga Bay

📍 Malaysia

Loại công trình:
Khu đô thị ven vịnh

Mã hồ sơ: KS-929

04



Hong Kong–Zhuhai–Macao Bridge

📍 Trung Quốc

Loại công trình:
Cầu vượt biển

05



Shenzhen–Zhongshan Link

📍 Trung Quốc

Loại công trình:
Hạ tầng giao thông vượt biển

06



Wenchang Space Launch Site

📍 Trung Quốc

Loại công trình:
Công trình hàng không vũ trụ



Tham chiếu Keshun • Mã KS-929 được nêu riêng tại các dự án có ghi nhận.

Nguồn: Hồ sơ Việt Nam; Keshun Profile/Catalog; CKS Overseas Project References.