



Acme Sanitary Ware Co. Ltd.

1/F, Acme Building, 22-28 Nanking Street, Kowloon, Hong Kong
Tel: 2388 7171 Fax: 2710 8012
Email: acme@acmesanitary.com.hk
Website: www.acmesanitary.com.hk

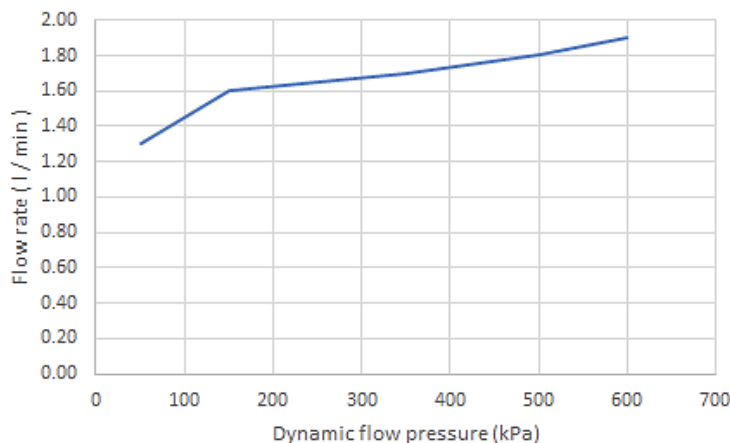
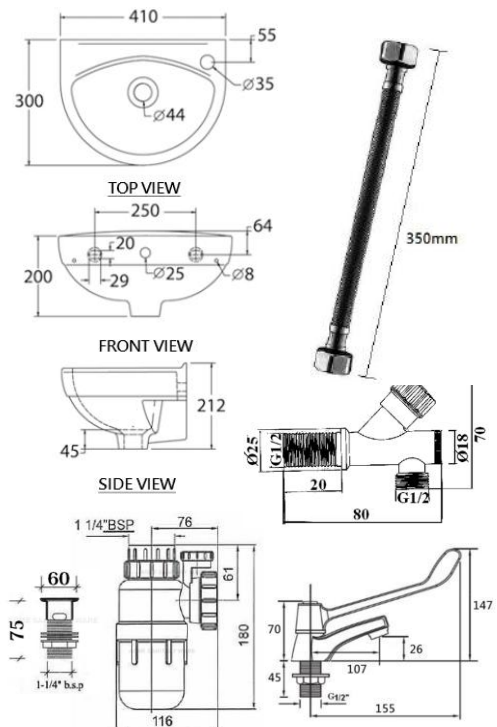


PROJECT		REF		REV	ITEM CODE	
LOCATION		DATE			PAGE	

SANITARY WARE SPECIFICATION SHEET

Item Descriptions	Star (Thailand) "Kitty" Wall hung washbasin with right hand side corner hole & overflow; with 1-1/4 inch plastic anti-syphon bottle trap; chrome plated brass 1-1/4 inch. waste slotted and elbow action tap for disabled; 1/2" x 1/2" flexible hose with 350mm long; EMCA (PRC) angle valve with washable filter; Nominal flow rate 1.7 l/min in WELS Grade 1 ; Registration No. TN 22-0076; tested on operating force of handler control less than 22N; capable of carrying a static load of 150kg; BS1188:1974 & BS3402:1969; BSEN 14688:2006; BS EN 248:2002 & ISO 9227:2002; BS EN 274-1:2002; BS EN 274-2:2002; BS EN 274-3; 2002; test report J27503C & J27439 & J26110 & J28340B & J28340A; complied with Barrier Free Access 2008
Dimensions	L410 x W300 x H212 mm
Model	S-4507 (Basin) EM3505.100 (Elbow Action Tap) 1010 (Bottle Trap) EM9010.010 (Basin Waste) HL-SS-02-02-006-35 (Flexible Hose) EM4001.505 (Filtered Angle Valve)
Material/Colour	Vitreous China / White
Manufacturer	Star (Thailand) / Diethelm (PRC) / EMCA (PRC)
Source	Acme Sanitary Ware Co. Ltd Mr. Eric Wong/ Mr. Don Yuen
Contact Tel/Fax	(852) 2388-7171 / (852) 2710-8012
E-mail	acme@acmesanitary.com.hk
Website	www.acmesanitary.com.hk

Illustration/ Drawing



Dynamic flow pressure (kPa)	50	150	250	350	500	600
Flow rate (l/min)	1.30	1.60	1.65	1.70	1.80	1.90



Note: 40.1059.000 aerator is pre-installed in the disabled tap.

* All information of the above is for the reference only. No prior notice is made if any changes.

註冊號碼 (Registration No.): TN 22-0076



自願參與用水效益標籤計劃 - 水龍頭
Voluntary Water Efficiency Labelling Scheme - Water Taps



茲證明

This is to certify that

Acme Sanitary Ware Company Limited

將下列水龍頭在本計劃內註冊：
has registered the following water tap under this scheme:

牌子 / Brand	:	EMCA + Neoperl
型號 / Model	:	EM3505.100 + 40.1059.000
種類 / Type	:	Non-mixing
原產地 / Country or Region Origin	:	China (Tap) Germany (Flow Controller)

在用水效益標籤上展示的標誌

Symbolic Presentation on the Water Efficiency Label :



滴水點

Water droplet(s)

用水效益級別

Water Efficiency Grade :

1

耗水量

Water Consumption :

1.7

公升/分鐘

litres/minute

簽發日期:

5 August 2022

Date of Issue:



水務署

Water Supplies Department



水務署署長(林麗恒代行)
for Director of Water Supplies



水務署
Water Supplies Department

總部 Headquarters

香港灣仔告士打道七號入境事務大樓 48 樓

Immigration Tower, 7 Gloucester Road, Wan Chai, Hong Kong



3321/2022 T/J(424/2022)

電話

Tel.

傳真

Fax.

: 2824 0578

21 June 2022

Acme Sanitary Ware Co Ltd
1/F, Acme Building,
22-28 Nanking Street,
Kowloon, Hong Kong

(Attn.: Mr Perry CHOW)

Dear Sir,



**Approval of "EMCA" Pillar Tap
(General Acceptance No. C20220545)**

Your letters ref. L001/2022 and L002/2022 dated 22 April 2022 and 25 May 2022 respectively refer.

Having considered the test report ref. J27503A issued on 13 April 2022 by Nutek Systems (HK) Limited, this Authority accepts that the fitting described below complies with, and its use when correctly installed does not contravene, the Waterworks Ordinance and Regulations.

Name of Manufacturer: Kaiping City Doyei Sanitary Ware Corporation Ltd

Country of Origin: the Mainland of China

Brand: EMCA

Details of Fitting: 1/2" Deck mounted pillar tap

Model: EM3505.100

Body Markings: EMCA

Expiry Date: 21 March 2027



This Authority hereby permits the use of the above fitting in fresh water plumbing systems subject to full adherence to Waterworks installation requirements.

A condition of this acceptance is that the fitting to be installed shall be replicas of the sample as certified by the testing agent mentioned above and without modifications. This acceptance may be withdrawn at any time if the standard of the fitting installed fails to meet that of the approved sample or if the fitting is found to be unsuitable for use in fresh water plumbing systems.

This acceptance is only applicable to the main body of the fitting, unless otherwise specified.

For the use of the fitting in any project, the General Acceptance Number of this letter must be quoted as a means of identification of acceptance of the fitting by this Authority.

Should you have any enquiries, please contact our Engineer Ms Winnie LO at tel. no. 3583 4086.

Yours faithfully,



(YAU Hau Yin)
for Director of Water Supplies

Encl.

c.c. WSD 3321/1/82] - without catalogue
 ME/MC] - with soft copy only



Acme Sanitary Ware Co. Ltd.

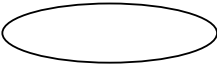
1/F, Acme Building, 22-28 Nanking Street, Kowloon, Hong Kong

Tel: 2388 7171 Fax: 2710 8012


Email: acme@acmesanitary.com.hk

Website: www.acmesanitary.com.hk

Since 1949

PROJECT		REF		REV	ITEM CODE	
LOCATION		DATE			PAGE	

SANITARY WARE SPECIFICATION SHEET

Item Descriptions	F1/2" x F1/2"x 350mm Stainless steel flexible hose, 350mm length	Illustration/ Drawing
Model	HL-SS-02-02-006-035	
Finish	Stainless Steel	
Source	Acme Sanitary Ware Co. Ltd Mr. Eric Wong/ Mr. Don Yuen	
Contact Tel/Fax	(852) 2388-7171 / (852) 2710-8012	
E-mail	acme@acmesanitary.com.hk	
Website	www.acmesanitary.com.hk	

Note:

* All information of the above is for the reference only. No prior notice is made if any changes.



水務署
Water Supplies Department



Headquarters

士打道七號入境事務大樓 48 樓

ation Tower, 7 Gloucester Road, Wan Chai, Hong Kong

本署:

Our ref.

來函檔號

Your ref.

D 3321/19 T/J(1002/2019)

電話

Tel.

傳真

Fax.

: 2824 0578

8 November 2019



Dear Sir,

**Approval of "HL" Flexible Hoses
(General Acceptance No. B20190064)**

Your letters ref. TFWC-2019-010, TFWC-2019-010R1 and TFWC-2019-010R dated 27 September 2019, 23 October 2019 and 25 October 2019 respectively refer.

It is noted that the fittings described below have been accepted by the United Kingdom Water Regulations Advisory Scheme (WRAS) to have complied with the requirements of the United Kingdom Water Supply (Water Fittings) Regulations / Scottish Water Byelaws when correctly installed. This Authority accepts that the fittings described below based on the WRAS certificate comply with, and their use when correctly installed does not contravene, the Waterworks Ordinance and Regulations.

Name of Manufacturer: Kaiping City Hualing Hoses Co Ltd

Country of Origin: the Mainland of China

Brand: HL

Details of Fitting: Nylon and stainless steel braided flexible hose assemblies with EPDM inner hose and brass end connectors which incorporate EPDM washers and 'O'-rings. Maximum



working pressure 10.0 bar. Maximum working temperature 85°C

Model and Size:

HL-SS-XX-XX-XXX-XXX
HL-N-XX-XX-XXX-XXX

SS=Stainless Steel Braided Hose
N=Nylon Pull out Hose

1st & 2nd XX = Connection sizes:

01=F3/8

02=F1/2

03=F3/4 (only available on SS models)

04=F15*1 (only available on SS models)

05=M3/8 (only available on SS models)

06=M1/2 (only available on SS models)

07=M3/4 (only available on SS models)

08=M15

09=M12

10=M10

12=Pushfit (M) 11mm ID or (F) 11mm OD

1st XXX:

Hose size:

Nylon and stainless steel braided hoses:

006= DN6, 008= DN8

Stainless steel braided hoses only:

010= DN10, 014= DN14

2nd XXX:

Hose length:

15CM - 200CM

Body Markings:

Hualing, WRAS and date of manufacture (yyyy) on ferrule

WRAS Approval Number: 1909363

Installation Requirements: R001

Expiry Date: 30 September 2024

In view of the acceptance by WRAS, this Authority has no objection to the use of the said fittings in fresh water plumbing systems subject to full adherence to Waterworks installation requirements. In particular, you are required to draw your customers' attention to the following installation requirements –

"Installation shall comply with the 'Installation Requirements & Notes' of the WRAS's approval letter concerned." AND

"The inlet flexible hose is applied for the water tap or mixer connection only and installed in the fresh water plumbing systems."

A condition of this acceptance is that the fittings to be installed should be replicas of the samples certified by WRAS and no modification should be made to the fittings. This acceptance may be withdrawn at any time if the standard of the fittings installed fails to meet that of the approved samples or if the fittings are found to be unsuitable for use in fresh water plumbing systems.

For the use of the fittings in any project, the General Acceptance Number of this letter must be quoted as a means of identification of acceptance of the fittings by this Authority.

Should you have any enquiries, please contact our Engineer Mr. Terry KUNG at tel. no. 3583 4086.

Yours faithfully,



(CHAN Chung-kun)

for Director of Water Supplies

Encl.

c.c. WSD 3321/1/82] - without catalogue
 ME/MC] - with soft copy only



Acme Sanitary Ware Co. Ltd.

1/F, Acme Building, 22-28 Nanking Street, Kowloon, Hong Kong

Tel: 2388 7171 Fax: 2710 8012


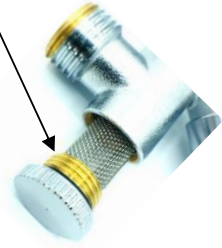
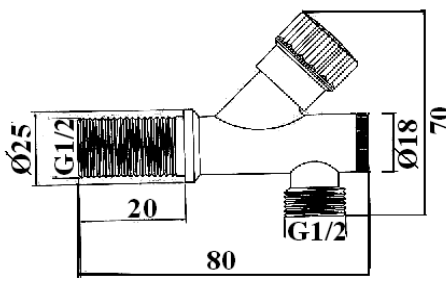
Email: acme@acmesanitary.com.hk

Website: www.acmesanitary.com.hk

EMCA

PROJECT		REF		REV	ITEM CODE	
LOCATION		DATE			PAGE	

SANITARY WARE SPECIFICATION SHEET

Item Descriptions	EMCA (PRC) Chrome plated angle valve 1/2" x 1/2" with filter	Illustration/ Drawing
Model	EM4001.505	  <p>Filter</p>
Material/ Finish	Brass / Chrome Plated	
Manufacturer	EMCA (PRC)	
Supplier	Acme Sanitary Ware Co. Ltd Mr. Eric Wong/ Mr. Don Yuen	
Contact Tel/Fax	(852) 2388-7171 / (852) 2710-8012	
E-mail	acme@acmesanitary.com.hk	
Website	www.acmesanitary.com.hk	
Inlet : 1/2" BSP Male Outlet : 1/2" BSP Male Construction : Chrome Plated Brass		

Note:

* All information of the above is for the reference only. No prior notice is made if any changes.



水務署
Water Supplies Department

總部 Headquarters

香港灣仔告士打道七號入境事務大樓 48 樓

Registration Tower, 7 Gloucester Road, Wan Chai, Hong Kong



本署檔

Our ref.

來函檔號

Your ref.

21/2023 T/J(351/2023)

電話

Tel.

傳真

Fax.

:

:

2824 0578

29 May 2023

Acme Sanitary Ware Co. Ltd.

1/F, Acme Building,
22-28 Nanking Street,
Kowloon, Hong Kong

(Attn.: Mr Perry CHOW)

Dear Sir,



**Approval of "EMCA" Angle Valve
(General Acceptance No. C20230359)**

Your letters ref. L005/2023 and L007/2023 dated 30 March 2023 and 27 April 2023 respectively refer.

Having considered the test report ref. J28568 issued on 24 March 2023 by Nutek Systems (HK) Ltd., this Authority accepts that the fitting described below complies with, and its use when correctly installed does not contravene, the Waterworks Ordinance and Regulations.

Name of Manufacturer: Kaiping City Doyei Sanitary Ware Corporation Limited

Country of Origin: the Mainland of China

Brand: EMCA

Details of Fitting: 1/2" x 1/2" Copper alloy angle valve

Model: EM4001.505

Body Markings: EMCA

Expiry Date: 19 January 2028



This Authority hereby permits the use of the above fitting in fresh water plumbing systems subject to full adherence to Waterworks installation requirements.

A condition of this acceptance is that the fitting to be installed shall be replicas of the sample as certified by the testing agent mentioned above and without modifications. This acceptance may be withdrawn at any time if the standard of the fitting installed fails to meet that of the approved sample or if the fitting is found to be unsuitable for use in the water supply systems mentioned above.

For the use of the fitting in any project, the General Acceptance Number of this letter must be quoted as a means of identification of acceptance of the fitting by this Authority.

Should you have any enquiries, please contact our Engineer Ms Winnie LO at tel. no. 3583 4086.

Yours faithfully,



(YAU Hau Yin)
for Director of Water Supplies

Encl.

c.c. WSD 3321/1/82] - without catalogue
 ME/MC] - with soft copy only

Test Report



TITLE : Testing of Handler
 REPORT NO. : J 27503C
 DESCRIPTION OF SAMPLE¹ : 1/2" Elbow Action Pillar Tap
 SAMPLE SUBMITTED BY¹ : ACME Sanitary Ware Co. Ltd.
 1/F, Acme Building,
 22-28 Nanking Street,
 Kowloon, Hong Kong
 MANUFACTURER¹ : Kaiping City DOYEI Sanitary Ware Corporation Ltd.
 BRAND¹ : EMCA
 COUNTRY OF ORIGIN¹ : China
 MODEL¹ : EM3505.100
 BODY MARKINGS : **EMCA**
 PERIOD OF TESTS : 21 Mar., 2022 to 23 Mar., 2022

¹ – Information above provided by client

1. OPERATING FORCE OF HANDLER CONTROL BFA 2008

Direction	Operating Force (N)		Required (N)	Remarks
	Measured	Average		
From close position to open position	1st	2.0	≤ 22	C
	2nd	2.0		
	3rd	2.0		
From open position to close position	1st	2.5	≤ 22	C
	2nd	2.5		
	3rd	2.5		

Date: 13 Apr., 2022

Authorized Signature:

H. H. Hing

Nutek Systems is a testing agency,
 accepted by the Water Supplies
 Department, for testing water supply
 fittings.

Hing Kah Kuin
 (Engineer)

REPORT NO.: J 27503C

Figure 1 – Sample



General Note(s)

Definitions:

C – conformance
 NC – non-conformance
 R – remainder

Organizations:

WSD - Water Supplies Department (of Hong Kong)
 WHO - World Health Organization

- End of report -



S-4507

Test Report

Test

Title: Testing of Wash Basin
Method: BS 1188: 1974 & BS 3402: 1969
Report No.: J 27439
Completion: 15 Dec., 2021 to 28 Dec., 2021

Applicant (Information provided by client)

Name: Acme Sanitary Ware Co Ltd
Address: 1/F, Acme Building, 22-28 Nanking Street, Kowloon, Hong Kong

Sample (Information provided by client)

Description: Wall Hung Washbasin
Brand: Star
Model: S-4507 Right corner tap
S-4507L Left corner tap

Body Marking:



Manufacturer: Star Sanitaryware (Thailand) Co., Ltd.
Origin: Thailand

Approved Signatory

Signature:

Hing Kah Kuin

Name (title): Hing Kah Kuin (Engineer)

Date: 21 Jan., 2022

Nutek Systems is a testing agency, accepted by the Water Supplies Department, for testing water supply fittings.

Report No.: J 27439

Summary

Test	Remark
1 Dimensions of Wash Basin	As Measured
2 Visual Examination	C
3 Water Absorption	C
4 Cracking	C
5 Chemical Resistance Test	C
6 Resistance to Staining and Burning	C

Results (apply only to samples tested)

1 Dimensions of Wash Basin

BS 1188: 1974 Cl. 3.4, 3.7, 4 Table 1 & 2

Variable	Unit	Measured	BS Requirement
Length	mm	300	/
Width	mm	412	/
Total surface area of overflow opening	mm ²	452	800 min.
Depth from top edge of rim to inside base of bowl at centre of outlet	mm	165	165 ± 2%
Distance of centre of outlet from extreme back	mm	133	180 ± 2%
Diameter of tap hole	mm	35	30 ± 2
Waste	Diameter of recess for waste flange	mm	76
	Depth of recess	mm	8.6
	Diameter of waste hole	mm	44.4

Note (*):

The dimensional requirement stated in BS 1188: 1974 are only for two sizes of wash basin:

- 1) Length: 620 – 650 mm, Width: 445 – 465 mm or
- 2) Length: 548 – 572 mm, Width: 396 – 414 mm

and do not apply to the tested sample which did not belong to either of these two sizes.

Report No.: J 27439

2 Visual Examination

BS 3402: 1969 Cl. 5.3, 5.4 & Table 3

Location	Blemish or defect	Maximum permitted	Remark
General	Wavy finish	None on all visible surfaces	C
	Warpage	Warpage of slab out of horizontal plane not to exceed 6 mm on all sizes (warpage of backs of wash basins which are attached to the wall not to exceed 3 mm)	C
	Discoloration	None on all visible surfaces	C
Service space, top of slab, inside of bowl, front of fascia	Spots, blister and pinholes	A total of not over two; no grouping; for coloured appliances, blister and pinhole limited to one.	C
	Bubbles and specks	A total of not over four; no grouping	C
	Polishing marks	One only; none permitted for coloured fixtures	C
Visible surfaces other than above	Spots, blisters and pinholes	One only on back or on either side; a total of not over three.	C
	Bubbles and specks	A total of not over four; no grouping.	C
Overall result			C

3 Water Absorption

BS 3402: 1969 Cl. 6

ID	Weight (g)		Absorption (%)	Required	Remark
	Before Test	After Test			
Sample 1	105.33	105.51	0.17	0.75% max.	C
Sample 2	111.38	111.59	0.19		C
Sample 3	98.48	98.70	0.22		C
Average			0.19	0.50% max.	C
Overall result					C

4 Cracking

BS 3402: 1969 Cl. 7

ID	Variable	Unit	Measured	Required	Remark
1	Saturated steam	MN/m ²	0.34	0.33 - 0.35	C
	Duration	h	10	10	C
	Sample 1	---	No	No	C
	Sample 2	---	No		C
	Sample 3	---	No		C
Overall result					C

Report No.: J 27439

5 Chemical Resistance Test

BS 3402: 1969 Cl. 8

Table 4 - Chemical solutions			
Name of Chemical	Strength of solution	Time	Temperature
	%	hours	°C
Acetic acid	10	16	100
Citric acid	10	16	100
Detergent (Note 1)	(Note 1)	48	60
Hydrochloric acid	(Note 2)	48	15 to 21
Sodium hydroxide	8	0.5	60
Sodium stearate	0.15	48	60
Sulphuric acid	3	16	100

NOTE 1 This consists of an aqueous solution containing 0.04 % (w/v) of a condensation product of nonylphenol with 8-10 molecules of ethylene oxide. A suitable solution which contains 0.15% (w/v) of the product is obtainable commercially under the trade name "Lisogen N".

NOTE 2 This solution consists of equal volumes of water and of hydrochloric acid of specific gravity 1.19.

ID	Solution	Time (h)	Temperature (°C)	Measured	Required	Remark
1	Acetic acid	16	100	No Loss	No loss of reflectivity on glaze	C
	Citric acid	16	100	No Loss		C
	Detergent	48	60	No Loss		C
	Hydrochloric acid	48	20	No Loss		C
	Sodium hydroxide	0.5	60	No Loss		C
	Sodium stearate	48	60	No Loss		C
	Sulphuric acid	16	100	No Loss		C
Overall result						C

6 Resistance to Staining and Burning

BS 3402: 1969 Cl. 9

ID	Variable	Unit	Measured	Required	Remark
1	Methylene blue	---	No Stain	No stain remains	C
	Sodium hypochlorite	---	No Stain		C
	Hydrogen peroxide	---	No Stain		C
	Amyl acetate	---	No Stain		C
	Iodine in ethanol	---	No Stain		C
2	Lighted cigarette	---	No Stain		C
Overall result					C



S-4507

Test Report

TITLE : Testing of Wash Basin
 REPORT NO : J 26110
 DESCRIPTION OF SAMPLE¹ : "Kitty" Vitreous china wall hung washbasin
 SAMPLE SUBMITTED BY¹ : Acme Sanitary Ware Co., Ltd.
 1/F, Acme Building,
 22-28 Nanking Street
 Yau Ma Tei, Kowloon
 Hong Kong
 BODY MARKINGS : /
 BRAND¹ : Star (Thailand)
 MODEL¹ : S-4507
 MANUFACTURER¹ : Star Sanitarywares (Thailand) Co., Ltd.
 COUNTRY OF ORIGIN¹ : Thailand
 METHOD OF TESTS : BS EN 14688: 2006 & BFA 2008
 PERIOD OF TESTS : 17 Mar., 2021

¹ – Information provided by client

RESULTS: (apply only to the sample tested)

SUMMARY OF RESULTS

Test	Remark
I Load resistance	C

REPORT NO.: J 26110

I. LOAD RESISTANCE BS EN 14688: 2006 Cl. 5.2

Variable	Unit	Sample	Requirement	Remark
Test load	kN	1.50	1.50 ± 0.01	C
Duration	h	1	1	C
Crack / Broken / Permanent distortion	/	No	No	C
Overall result				C

Remark :

The sample also complies with BFA 2008 Cl. 53

Date: 01 Apr., 2021

Authorized signature:

Terry Lam

Nutek Systems is a testing agency,
 accepted by the Water Supplies
 Department, for testing water supply
 fittings.

Lam Kwai Wah, Terry
 (Operations Manager)



Test Report

TITLE : Testing of Exposed Surface Coating (Corrosion Resistance Test)
 REPORT NO. : J 28340B
 DESCRIPTION OF SAMPLE¹ : Chrome plated brass 1-1/4" basin waste slotted
 SAMPLE SUBMITTED BY¹ : Acme Sanitary Ware Co., Ltd.
 1/F, Acme Building, 22-28 Nanking Street,
 Yau Ma Tei, Kowloon, Hong Kong
 MANUFACTURER¹ : EMCA (PRC)
 BRAND¹ : EMCA
 COUNTRY OF ORIGIN¹ : PRC
 MODEL¹ : EM9010.010
 BODY MARKINGS : /
 METHOD OF TESTS : BS EN 248: 2002 & ISO 9227: 2012
 PERIOD OF TESTS : 16 May, 2022 to 01 Jun, 2023

¹ - Information provided by client

RESULTS: (apply only to the sample tested)

SUMMARY OF RESULTS

Test	Remark
1 Exposed Surface Coatings - Test conditions	C
2 Exposed Surface Coatings - Corrosion Resistance Test -Neutral Saline Spray	C
3 Exposed Surface Coatings - Examination of affected area	C

1. Exposed Surface Coatings - Test Conditions BS EN 248: 2002 Clause 5.1.2 & ISO 9227: 2012

	Reading	Requirement	Remark
Light Intensity for inspection before test (Lux)	860	700 - 1000	C
Light Intensity for inspection after test (Lux)	880	700 - 1000	C
Spray (pH)	7.0	6.5 - 7.2	C
Spray temperature (°C)	48	48 at 98kPa	C
Rest period (hr)	48	48 ± 1	C
Spray time (hr)	200	≥ 200	C
Overall results			C

REPORT NO.: J 28340B

2. Exposed Surface Coatings - Corrosion Resistance Test -Neutral Saline Spray BS EN 248: 2002 Clause 4.2, 4.3, 4.4 & 5.1.2

Defects	-Cause of defects	Before test	After test	Requirement	Remark
Yellow colour	Little or no chrome over the nickel	No	No	No	C
Stains	Faults under the nickel plating	No	No		C
Pitting or porosity	Surface faults in the base metal or emission of gas in treatment baths	No	No		C
Blisters	Bubbles or raised spots on the plated surface	No	No		C
Wheel marks	Fine or sharp lines that remain after polishing or buffing	No	No		C
Cracks	Usually caused by "hot spots" in casting or plated surface flakiness	No	No		C
Splashes	Lack of "flow" in casting or plastic injection	No	No		C
Dullness	Lack of full shine	No	No		C
Cuts and scratches	Scratches due to handling or knocks during transport	No	No		C
Burns	Roughness and grey appearance of surface	No	No		C
Scaliness	Lack of "consistent cover" and flakiness of plating	No	No		C
Orange-peel" effect	Defect in smoothness (similar to peel of an orange)	No	No		C
Roughness - grain	Metallic impurities in nickel baths	No	No		C
Overall results					C

REPORT NO.: J 28340B

3. Exposed Surface Coatings - Examination of affected area
BS EN 248: 2002 Clause 5.1.3

	Unit	Measured	Requirement	Remark
Affected area for appearance, A	mm	0	< 0.3	C
	%	0	≤ 0.1	C
Overall results				C

Date: 06 Jun., 2023

Authorized signature:

Terry Lam

Nutek Systems is a testing agency,
accepted by the Water Supplies
Department, for testing water supply
fittings.

Lam Kwai Wah, Terry
(Operations Manager)



Figure 1 – Sample before test

General Note(s)

Definitions:

C – conformance
NC – non-conformance

- End of report -

Page 3 of 3



Test Report

TITLE : Testing of Waste Fitting
REPORT NO. : J28340A
DESCRIPTION OF SAMPLE¹ : Chrome plated brass 1-1/4" basin waste slotted
SAMPLE SUBMITTED BY¹ : Acme Sanitary Ware Co., Ltd.
1/F, Acme Building, 22-28 Nanking Street,
Yau Ma Tei, Kowloon, Hong Kong
MANUFACTURER¹ : EMCA (PRC)
BRAND¹ : EMCA
COUNTRY OF ORIGIN¹ : PRC
MODEL¹ : EM9010.010
BODY MARKINGS : /
METHOD OF TESTS : BS EN 274-1: 2002; BS EN 274-2: 2002; BS EN 274-3: 2002
In-house method
PERIOD OF TESTS : 09 May, 2023 to 12 May, 2023

¹ – Information below provided by client

RESULTS:- (apply only to the sample tested)

SUMMARY OF RESULTS

Test	Remark
1 Appearance of surfaces	C
2 Hydraulic requirements	C
3 Leaktightness	C
4 Materials and temperature cycling	C
5 Leaktightness after temperature cycling	C

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1. APPEARANCE OF SURFACES
BS EN 274-1: 2002 Cl. 4.2

Variable	Requirement	Visual Inspection (Yes/No)	Remark
Sample	The internal and external surfaces of the waste fittings shall be smooth, free from grooving, blistering or any other surface defects likely to impair their functioning.	Yes	C

2. HYDRAULIC REQUIREMENTS
BS EN 274-1: 2002 Cl. 4.6, table 3 & BS EN 274-2: 2002 Cl. 5.1 & 5.4

Variable	Unit	Measured	Requirement	Remark
Minimum Flow Rate	l/s	0.76	≥ 0.60 for wash basin, bidet for trap alone	C

3. LEAKTIGHTNESS TEST
BS EN 274-1: 2002 Cl. 4.7.2 & BS EN 274-2: 2002 Cl. 6.2

Variable	Water pressure (bar)	Duration (min)	Leakage	Remark
Sample	0.1	5	No	C
Waste fitting (traps) requirement	0.1	5	No	/

4. MATERIALS AND TEMPERATURE CYCLING TEST
BS EN 274-1: 2002 Cl. 4.3 & BS EN 274-2: 2002 Cl. 3

Variable	5 cycles	Requirement	Visual Inspection	Remark
Sample	93 ± 95 °C for 15 mins at 0.5 l/s, then 20 ± 5 °C for 10 mins at 0.5 l/s	No defect	No defect	C

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5. LEAKTIGHTNESS TEST AFTER TEMPERATURE CYCLING TEST
BS EN 274-1: 2002 Cl. 4.7.2 & BS EN 274-2: 2002 Cl. 6.2

Variable	Water pressure (bar)	Duration (min)	Leakage	Remark
Sample	0.1	5	No	C
Waste fitting (traps) requirement	0.1	5	No	/

Date: 19 May, 2023 Authorized Signature:

Nutek Systems is a testing agency, accepted by the Water Supplies Department, for testing water supply fittings.

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Figure 1 – Sample



General Note(s)

Definitions:

C – conformance
N – none
NC – non-conformance
R – remainder

Organizations:

WSD - Water Supplies Department (of Hong Kong)
WHO - World Health Organization

- End of report -