



Eco- Ductile Iron

Manhole Cover and Frame

Double seal & Double Trianguar

DSD : DS 1077A DS 1088 & DS 1089

WSD : WSD 7.47C WSD 7.48C



祥興鑄鐵有限公司
CHEUNG HING FOUNDRY (HK) LIMITED



Standard 675 Square Double Triangular Ductile Iron Manhole Cover and Frame



675mm 方內孔高雙三角球鐵沙井蓋板 DS 1077A

BSEN124
Class E600

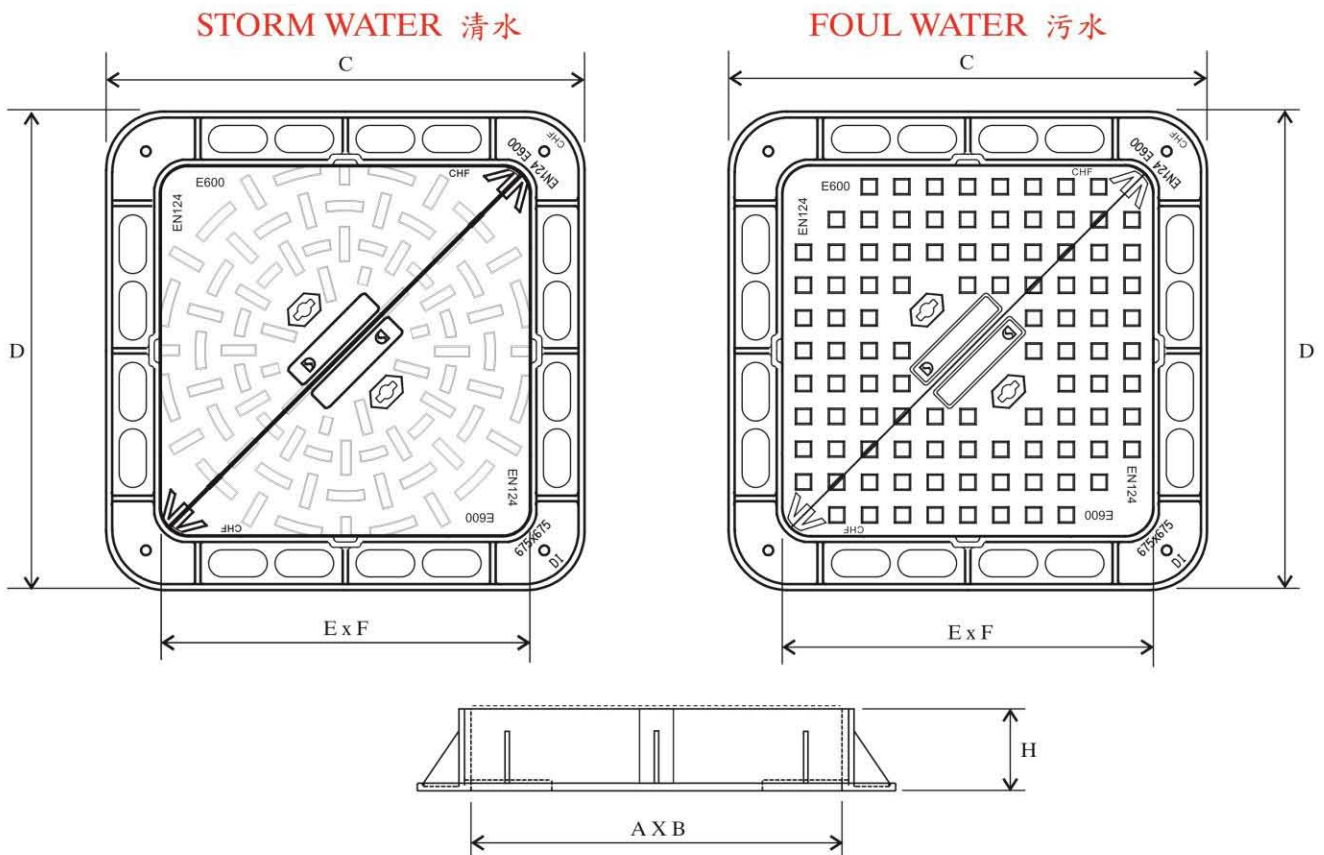
Standard: BS EN 124-1:2015

Class	Diameter of Test Block	Test load (kN)
E	250mm	600

Functions: Designated to be used in Government roadway drainage projects.

Type: SW for storm water (with circumscribed raised stubs on the cover)

FW for foul water (with rectangular raised stubs on the cover)



Technical Specification:

Item 序號	Code Number 貨號	Clear Opening 內孔 A x B mm x mm	Over Base Size 底框外皮 C x D mm x mm	Cover Size 蓋面尺寸 E x F mm x mm	Height 高度 H mm	Type 款式 清水 Storm Water/ 污水 Foul Water	Class 等級 BSEN 124-1:2015	Test Load (KN)
1	MCW675-150A	675 X 675	875 X 875	675 X 675	150	SW	E	600
2	MCW675-150B	675 X 675	875 X 875	675 X 675	150	FW	E	600

Note :The above dimensions are for reference only. Please refer to the actual products.



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Standard 675 Square Double Triangular Ductile Iron Manhole Cover and Frame



675mm 方內孔高雙三角球鐵沙井蓋板 DS 1077A

BSEN124
Class E600





HOKLAS Endorsed Test Certificates

675X675X150
E600

AQuality

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Report no. : 200511MA-5P

TEST REPORT OF PERMANENT SET & LOADING TEST OF GULLY TOPS, MANHOLE TOPS
BS EN 124-1 : 2015

Customer : Cheung Hing Foundry (HK) Limited	Date Received : 11-May-2020
Address : 299 Pak Sha Tsuen, Kung Um Road, Yuen Long, N.T.	Date Tested : 21-May-2020
Project : -	Customer Code : C120
	Site Code : -

Sample Information Provided by Customer :

Sample Description : 675 x 675 clear opening x 150 (H) Double Traingular Ductile Iron Manhole Cover & Frame

Classification : E600

Clear Opening : 675 mm

Test Results:

Lab. Sample No.	200511MA-5P/1
Customer Sample No.	-
Size of Test Block	mm 250
Permanent Set	
Applied Load (2/3 of Applied Test Load)	kN 401.1
Measured Permanent Set	mm 0.31
Loading Test	
Applied Test Load (maintained for 30 sec.)	kN 603.0
Observation	NCF
Cracks Width	mm -
Compliance#	Passed
Measured Mass#	kg Cover : 119.0 Frame : 62.0

Legend : FAC -- Fracture at cover / grating
FAF -- Fracture at frame
NCF -- No Visible Fracture

Specific Requirement :

Permissible permanent set specific in BS EN 124-1 : 2015 table 5


a) For class A15 & B125	: CO /100 or CO/50 (when CO<450mm)
b) For class C250 to F900 (secured according to 6.6a or 6.6c)	: CO/300 or 1mm max. (when CO<300mm)
c) For class C250 to F900 (secured according to 6.6b)	: CO/500 or 1mm max. (when CO<500mm)

Observation & test load specific in BS EN 124-1 : 2015 table 4

For units made of materials a) to e) of cl. 7, shall not show cracks in the cause of the test.
For units made of reinforced concrete, no crack wider than 0.2mm appear in the cause of the test.

Remarks :

- The results apply to the sample as received.
- The results relate only to the items tested.
- # Compliance of the test results to the specification is an opinion of the laboratory and is not covered under the HOKLAS accreditation.
- The test load and Size of loading block were provided by customer.
- Manufacturer: Cheung Hing Foundry (HK) Limited ; Country of Origin: China ; Brand: CHF

Tested by : K.C. Yeung	Approved By: 
Date issued : 22-May-2020	CHAN Leung Chor, Dennis Laboratory Manager

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祥興鑄鐵有限公司
CHEUNG HING FOUNDRY (HK) LIMITED



**Standard 675 Square One-Piece
Ductile Iron Double Seal
Terminal Manhole Cover and Frame (DSD)**

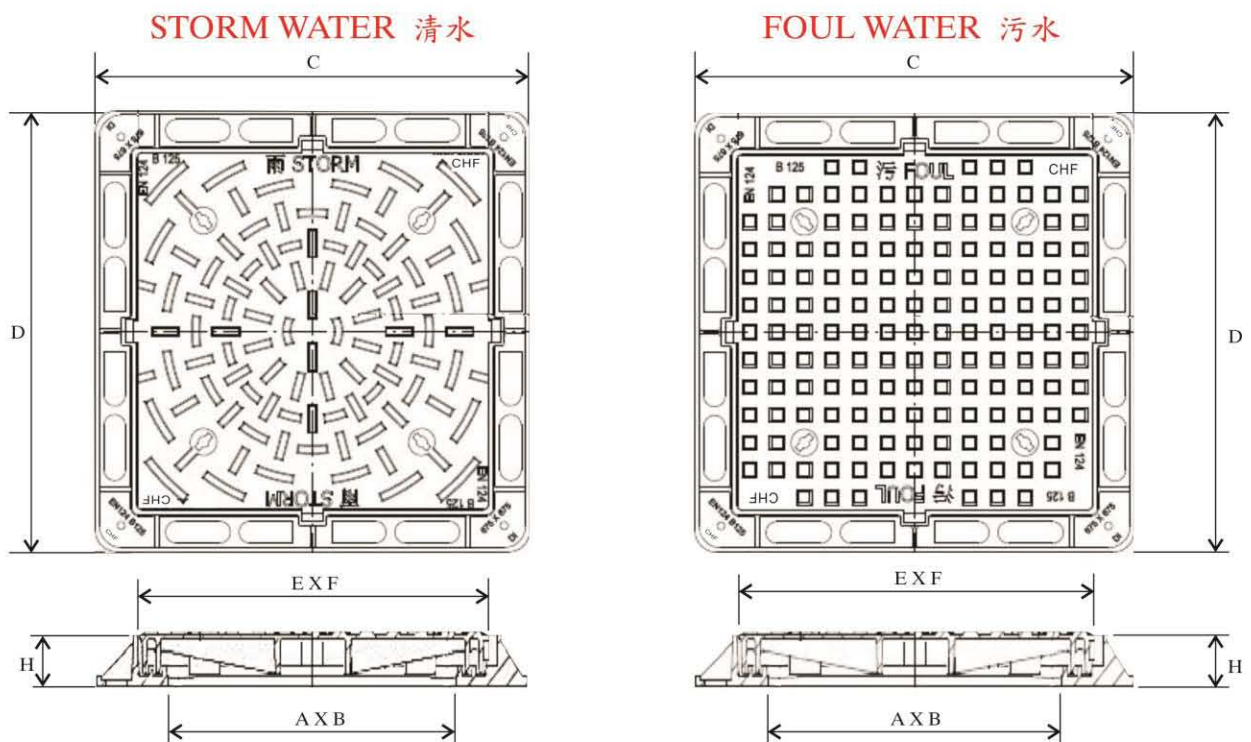


675mm 方內孔雙止口球鐵沙井蓋板 (DS 1088 & DS 1089) BSEN124

Standard: BS EN 124-1:2015 Test load : Class: B125, C250 used Diameter of Test Block 250

Functions: The double-seal feature of the manhole covers and frames prevents foreign materials from entering into the underground sewage system and also prevents the pungent smell and/or methane from getting out of the underground sewage system.

Type: SW for storm water (with circumscribed raised stubs on the cover)
FW for foul water (with rectangular raised stubs on the cover)



Technical Specification:

Item 序號	Code Number 貨號	Clear Opening 內孔 A x B mm x mm	Over Base Size 底框外皮 C x D mm x mm	Cover Size 蓋面尺寸 E x F mm x mm	Height 高度 H mm	Type 款式 清水 Storm Water/ 污水 Foul Water	Class 等級 BSEN 124-1:015	Test Load (kN)
1	MAWB675-088A	675 X 675	1005 X 1005	810 X 810	88	雨 Storm	B	125
2	MAWB675-088B	675 X 675	1005 X 1005	810 X 810	88	污 Foul	B	125
3	MAWA675-102A	675 X 675	1035 X 1035	840 X 840	102	雨 Storm	C	250
4	MAWA675-102B	675 X 675	1035 X 1035	840 X 840	102	污 Foul	C	250

Note :The above dimensions are for reference only. Please refer to the actual products.



祥興鑄鐵有限公司
CHEUNG HING FOUNDRY (HK) LIMITED



Standard 675 Square One-Piece Ductile Iron Double Seal Terminal Manhole Cover and Frame (DSD)



675mm 方內孔雙止口球鐵沙井蓋板 (DS 1088 & DS 1089) **BSEN124**



HOKLAS Endorsed Test Certificates

675X675X88
B125



東恒測試顧問有限公司

AQUALITY TESTCONSULT LIMITED

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Report no. : 200511MA-4P

TEST REPORT OF PERMANENT SET & LOADING TEST OF GULLY TOPS, MANHOLE TOPS
BS EN 124-1 : 2015

Customer : Cheung Hing Foundry (HK) Limited
Address : 299 Pak Sha Tsuen, Kung Um Road, Yuen Long, N.T.

Date Received : 11-May-2020
Date Tested : 14-May-2020

Customer Code : C120

Project : -

Site Code : -

Sample Information Provided by Customer :

Sample Description : 675 x 675 clear opening x 88(H) Double Seal Ductile Iron Manhole Cover & Frame
Classification : B125
Clear Opening : 675 mm

Test Results:

Lab. Sample No.	200511MA-4P/1
Customer Sample No.	-
Size of Test Block	mm 250
Permanent Set	
Applied Load (2/3 of Applied Test Load)	kN 84.0
Measured Permanent Set	mm 0.14
Loading Test	
Applied Test Load (maintained for 30 sec.)	kN 128.8
Observation	NCF
Cracks Width	mm -
Compliance#	Passed
Measured Mass#	kg Cover : 104.0 Frame : 78.0

Legend : FAC -- Fracture at cover / grating
FAF -- Fracture at frame
NCF -- No Visible Fracture

Specific Requirement :

Permissible permanent set specific in BS EN 124-1 : 2015 table 5

- a) For class A15 & B125 : CO/100 or CO/50 (when CO<450mm)
- b) For class C250 to F900 (secured according to 6.6a or 6.6c) : CO/300 or 1mm max. (when CO<300mm)
- c) For class C250 to F900 (secured according to 6.6b) : CO/500 or 1mm max. (when CO<500mm)

Observation & test load specific in BS EN 124-1 : 2015 table 4

For units made of materials a) to e) of cl. 7, shall not show cracks in the cause of the test.

For units made of reinforced concrete, no crack wider than 0.2mm appear in the cause of the test.

Remarks :

- 1) The results apply to the sample as received.
- 2) The results relate only to the items tested.
- 3) # Compliance of the test results to the specification is an opinion of the laboratory and is not covered under the HOKLAS accreditation.
- 4) The test load and Size of loading block were provided by customer.
- 5) Manufacturer: Cheung Hing Foundry (HK) Limited ; Country of Origin: China ; Brand: CHF

Tested by : K.C. Yeung
Date issued : 15-May-2020

Approved By:

CHAN Leung Chor, Dennis
Laboratory Manager

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祥興鑄鐵有限公司
CHEUNG HING FOUNDRY (HK) LIMITED



Standard 675 Square One-Piece Ductile Iron Double Seal Terminal Manhole Cover and Frame (DSD)



675mm 方內孔雙止口球鐵沙井蓋板 (DS 1088 & DS 1089) **BSEN124**





HOKLAS Endorsed Test Certificates

675X675X102
C250

AQuality

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Report no. : 200511MA-2P

TEST REPORT OF PERMANENT SET & LOADING TEST OF GULLY TOPS, MANHOLE TOPS
 BS EN 124-1 : 2015

Customer : Cheung Hing Foundry (HK) Limited
Address : 299 Pak Sha Tsuen, Kung Um Road, Yuen Long, N.T.
Project : -

Date Received : 11-May-2020
Date Tested : 14-May-2020
Customer Code : C120
Site Code : -

Sample Information Provided by Customer :
 Sample Description : 675 x 675 clear opening x 102(H) Double Seal Ductile Iron Manhole Cover & Frame
 Classification : C250
 Clear Opening : 675 mm

Test Results:

Lab. Sample No.	200511MA-2P/1	
Customer Sample No.	-	
Size of Test Block	mm	250
Permanent Set		
Applied Load (2/3 of Applied Test Load)	kN	168.1
Measured Permanent Set	mm	0.31
Loading Test		
Applied Test Load (maintained for 30 sec.)	kN	254.2
Observation	NCF	
Cracks Width	mm	-
Compliance#	Passed	
Measured Mass#	kg	Cover : 116.7 Frame : 97.0

Legend : FAC -- Fracture at cover / grating
 FAF -- Fracture at frame
 NCF -- No Visible Fracture

Specific Requirement :
 Permissible permanent set specific in BS EN 124-1 : 2015 table 5


a) For class A15 & B125	: CO /100 or CO/50 (when CO<450mm)
b) For class C250 to F900 (secured according to 6.6a or 6.6c)	: CO/300 or 1mm max. (when CO<300mm)
c) For class C250 to F900 (secured according to 6.6b)	: CO/500 or 1mm max. (when CO<500mm)

Observation & test load specific in BS EN 124-1 : 2015 table 4.
 For units made of materials a) to e) of cl. 7, shall not show cracks in the cause of the test.
 For units made of reinforced concrete, no crack wider than 0.2mm appear in the cause of the test.

Remarks :

- 1) The results apply to the sample as received.
- 2) The results relate only to the items tested.
- 3) # Compliance of the test results to the specification is an opinion of the laboratory and is not covered under the HOKLAS accreditation.
- 4) The test load and Size of loading block were provided by customer.
- 5) Manufacturer: Cheung Hing Foundry (HK) Limited ; Country of Origin: China ; Brand : CHF

Tested by : K.C. Yeung
Date issued : 15-May-2020

Approved By: 
 CHAN Leung Chor, Dennis
 Laboratory Manager

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CHEUNG HING FOUNDRY (HK) LIMITED



Double Triangular Ductile Iron Manhole Cover and Surface Box for Water Supplies Department (WSD)

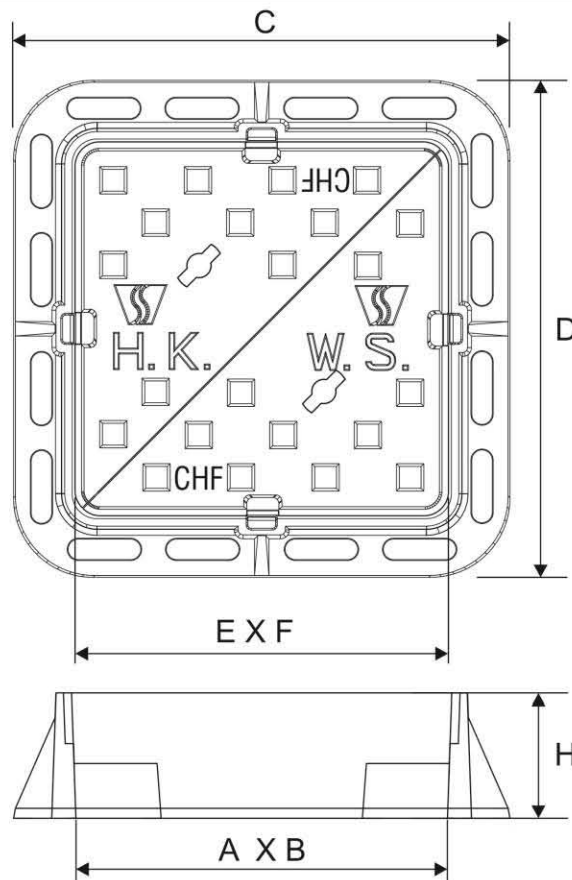


300 Square Ductile Iron Surface Box

WSD 7.47C

General notes for ductile iron (D . I .) manhole covers / surface boxes

Tested according to	Designation	Diameter of test block	Test load
BS 5834 : PART 2	D. I. Surface box Grade A, 300mm x 300mm	300 mm	233 kN



Technical Specification:

Item 序號	Code Number 貨號	Clear Opening 內孔 A x B mm x mm	Over Base Size 底框外皮 C x D mm x mm	Cover Size 蓋面尺寸 E x F mm x mm	Height 高度 H mm	Grade 等級	Test Load (KN)
1	MAW300-100	300 X 300	400 X 400	300 X 300	100 (Type 1)	A	233
* 2	MAW300-150	300 X 300	400 X 400	300 X 300	150 (Type 2)	A	233

* Custom-Made

Note :The above dimensions are for reference only. Please refer to the actual products.



祥興鑄鐵有限公司
CHEUNG HING FOUNDRY (HK) LIMITED



Double Triangular Ductile Iron Manhole Cover and Surface Box for Water Supplies Department (WSD)



300 Square Ductile Iron Surface Box

WSD 7.47C



HOKLAS Endorsed Test Certificates

300X300X100
Grade A

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	Report no. : 200511MMA-1P	
TEST REPORT		
Loading Test to Cast / Ductile Iron Surface Box (Tested to BS5834 : Part 2 : 1983 Appendix A)		
Customer : Cheung Hing Foundry (HK) Limited	Date Received : 11-May-2020	
Address : 299 Pak Sha Tsuen, Kung Um Road, Yuen Long, N.T.	Date Tested : 14-May-2020	
Project : -	Customer Code : C120	Site Code : -
Sample Information Provided by Customer :		
Sample Description : 300 Square Ductile Iron Surface Box		
Grade : Grade A		
Clear Opening : 300 mm		
Test Results		
Lab. Sample No.	200511MMA-1P/1	
Customer Sample No.	-	
Size of Test Block (diameter) mm	300	
Loading Test		
Applied Test Load (maintained for 30 sec.) kN	233.1	
Observation	NCF	
Compliance#	Passed	
Mass kg	Cover : 13.3 Frame : 13.0	
Legend :	FAC -- Fracture at cover / grating FAF -- Fracture at frame NCF -- No Visible Fracture	
Remarks :	1) Test result related to the sample tested only. 2) Manufacturer: Cheung Hing Foundry (HK) Limited ; Country of Origin: China ; Brand : CHF 3) Frame Type : Type 1 & Type 2.	
Tested by : K.C.Yeung	Approved Signatory:	
Date issued : 22-May-2020	CHAN Leung Chor, Dennis Laboratory Manager	
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CHEUNG HING FOUNDRY (HK) LIMITED



Double Triangular Ductile Iron Manhole Cover and Surface Box for Water Supplies Department (WSD)



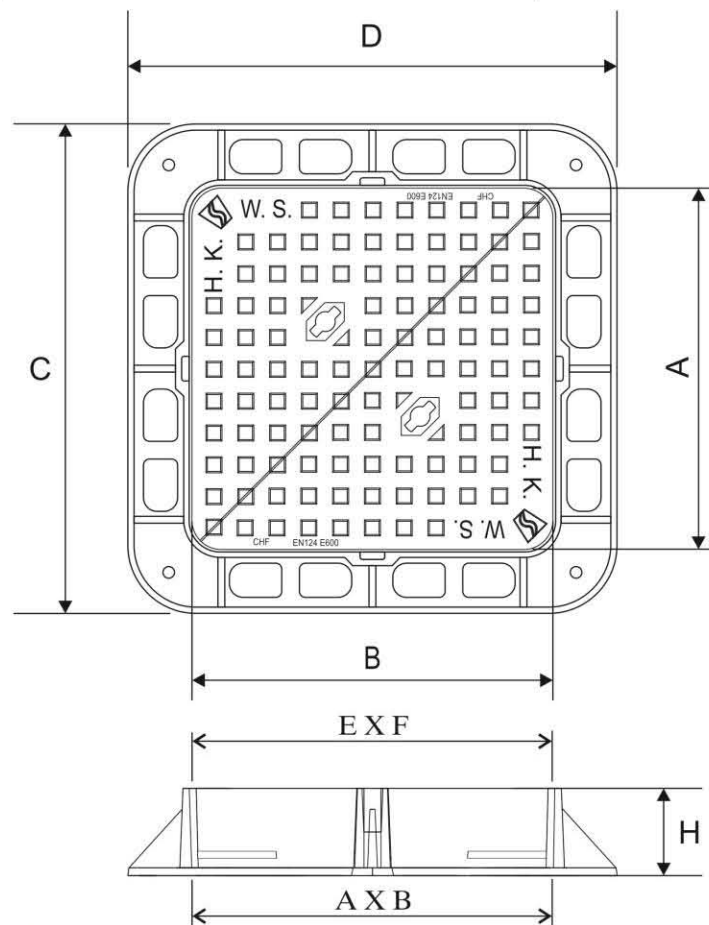
600 Square Ductile Iron Manhole Cover

WSD 7.48C

E600

General notes for ductile iron (D . I .) manhole covers / surface boxes

Tested according to	Designation	Diameter of test block	Test load
BS EN 124	D . I . Manhole coer Class E600, 600mmx600mm	250 mm	600 kN



Technical Specification:

Item 序號	Code Number 貨號	Clear Opening 內孔 A x B mm x mm	Over Base Size 底框外皮 C x D mm x mm	Cover Size 蓋面尺寸 E x F mm x mm	Height 高度 H mm	Class 等級 BSEN 124-1:2015	Test Load (KN)
1	MAW600-150	600 X 600	800 X 800	600 X 600	150	E	600

Note :The above dimensions are for reference only. Please refer to the actual products.



祥興鑄鐵有限公司
CHEUNG HING FOUNDRY (HK) LIMITED



Double Triangular Ductile Iron Manhole Cover and Surface Box for Water Supplies Department (WSD)



600 Square Ductile Iron Manhole Cover

WSD 7.48C

E600





HOKLAS Endorsed Test Certificates

600X600X150
E600

AQuality

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Report no. : 200511MA-7P

TEST REPORT OF PERMANENT SET & LOADING TEST OF GULLY TOPS, MANHOLE TOPS
BS EN 124-1 : 2015

Customer : Cheung Hing Foundry (HK) Limited	Date Received : 11-May-2020
Address : 299 Pak Sha Tsuen, Kung Um Road, Yuen Long, N.T.	Date Tested : 14-May-2020
Project : -	Customer Code : C120
	Site Code : -

Sample Information Provided by Customer :

Sample Description : 600 Square x 150(H) Ductile Iron Manhole Cover & Frame
 Classification : E600
 Clear Opening : 600 mm

Test Results:

Lab. Sample No.	200511MA-7P/1
Customer Sample No.	-
Size of Test Block mm	250
Permanent Set	
Applied Load (2/3 of Applied Test Load) kN	401.3
Measured Permanent Set mm	0.63
Loading Test	
Applied Test Load (maintained for 30 sec.) kN	608.1
Observation	NCF
Cracks Width mm	-
Compliance#	Passed
Measured Mass# kg	Cover : 83.9 Frame : 69.5

Legend : FAC -- Fracture at cover / grating
 FAF -- Fracture at frame
 NCF -- No Visible Fracture

Specific Requirement :


Permissible permanent set specific in BS EN 124-1 : 2015 table 5

a) For class A15 & B125	: CO /100 or CO/50 (when CO<450mm)
b) For class C250 to F900 (secured according to 6.6a or 6.6c)	: CO/300 or 1mm max. (when CO<300mm)
c) For class C250 to F900 (secured according to 6.6b)	: CO/500 or 1mm max. (when CO<500mm)

Observation & test load specific in BS EN 124-1 : 2015 table 4
 For units made of materials a) to e) of cl. 7, shall not show cracks in the cause of the test.
 For units made of reinforced concrete, no crack wider than 0.2mm appear in the cause of the test.

Remarks :

- The results apply to the sample as received.
- The results relate only to the items tested.
- # Compliance of the test results to the specification is an opinion of the laboratory and is not covered under the HOKLAS accreditation.
- The test load and Size of loading block were provided by customer.
- Manufacturer: Cheung Hing Foundry (HK) Limited ; Country of Origin: China ; Brand : CHF

Tested by : K.C.Yeung	Approved By: 
Date issued : 15-May-2020	CHAN Leung Chor, Dennis Laboratory Manager

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