



Eco- Ductile Iron

Manhole Cover and Frame

Double seal & Double Trianguar

CHF : MAWA0550-100A&B

MABW600/800A&B MAWE675-150A&B



祥興鑄鐵有限公司

CHEUNG HING FOUNDRY (HK) LIMITED



Double Seal Ductile Iron Manhole Cover and Frame

雙止口球鐵沙井蓋板

BSEN124
Class C--E

Standard: BS EN 124-1:2015

Class	Test load (kN)	Place of installation
C	250	Suitable for gully tops installed in the area of kerb side channels of roads which when measured from the kerb edge, extend a maximum of 0.5m into the carriageway and a maximum of 0.2m into the footway.
D	400	Suitable for carriageways of roads (including pedestrian streets), hard shoulders (figure 9b) and parking areas, for all types of road vehicles.
E	600	Suitable for gully tops installed in the areas imposing particularly high wheel loads, e.g. Docks, aircraft pavements.

Standard:

“General Specification for Civil Engineering Works” published by the Civil Engineering and Development Department, The Government of the HKSAR.

Grade	Test load (t)	Bearing block
Heavy duty (H)	20	300 mm

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)



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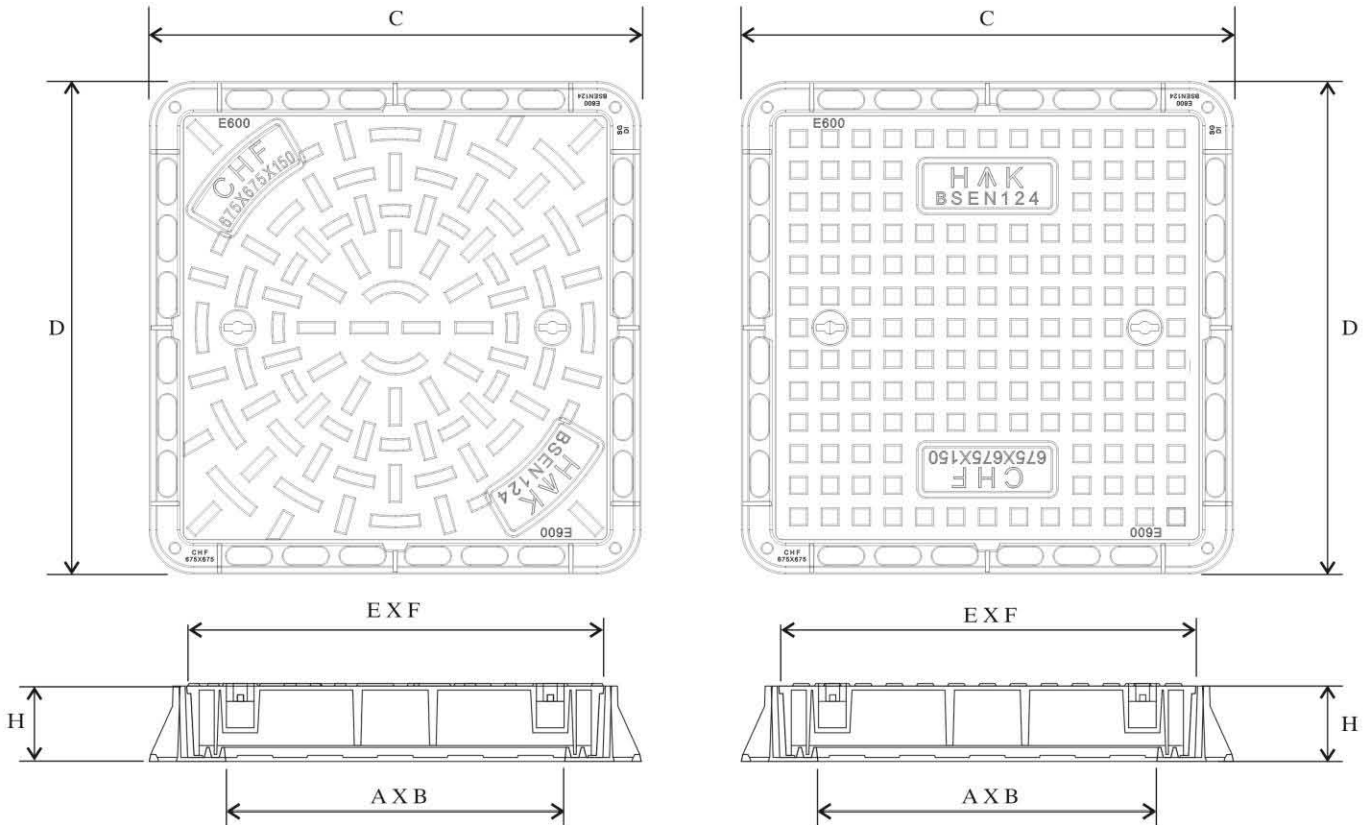
Double Seal Ductile Iron Manhole Cover and Frame

雙止口球鐵沙井蓋板

BSEN124 Class C--E

STORM WATER 清水

FOUL WATER 污水



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		Class 等級 BSEN 124-1:2015	Test Load (KN)
						清水 Storm Water/ Foul Water	污水		
1	MAWA0550-100A	550 X 550	786 X 786	660 X 660	100	SW		C	H
2	MAWA0550-100B	550 X 550	786 X 786	660 X 660	100	FW		C	H
3	MAWE675-150A	675 X 675	980 X 980	830 X 830	150	SW		E	600
4	MAWE675-150B	675 X 675	980 X 980	830 X 830	150	FW		E	600

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



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Double Seal Ductile Iron Manhole Cover and Frame

雙止口球鐵沙井蓋板

BSEN124 Class C--E



HOKLAS Endorsed Test Certificates

550X550X100
C250



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Report no. : 200511MA-1P

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
Site Code : -

Sample Information Provided by Customer :

Sample Description : 550 x 550 clear opening x 100(H) Double Seal Ductile Iron Manhole Cover & Frame
Classification : C250
Clear Opening : 550 mm

Test Results:

Lab. Sample No.	200511MA-1P/1
Customer Sample No.	-
Size of Test Block	mm 250
Permanent Set	
Applied Load (2/3 of Applied Test Load)	kN 167.8
Measured Permanent Set	mm 0.27
Loading Test	
Applied Test Load (maintained for 30 sec.)	kN 252.2
Observation	NCF
Cracks Width	mm -
Compliance#	Passed
Measured Mass#	kg Cover : 66.0 Frame : 40.0

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



Double Seal Ductile Iron Manhole Cover and Frame

雙止口球鐵沙井蓋板

BSEN124 Class C--E



HOKLAS Endorsed Test Certificates

675X675X150
E600



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Report no. : 200511MA-3P

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 150(H) Double Seal Ductile Iron Manhole Cover & Frame
Classification : E600
Clear Opening : 675 mm

Test Results:

Lab. Sample No.	200511MA-3P/1
Customer Sample No.	-
Size of Test Block	mm 250
Permanent Set	
Applied Load (2/3 of Applied Test Load)	kN 400.9
Measured Permanent Set	mm 0.41
Loading Test	
Applied Test Load (maintained for 30 sec.)	kN 602.1
Observation	NCF
Cracks Width	mm -
Compliance#	Passed
Measured Mass#	kg Cover : 140.6 Frame : 89.7

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
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



Double Seal Ductile Iron Manhole Cover and Frame

600mmX800mm內孔100mm高雙止口球鐵沙井蓋板

600mmX800mmClear Opening100mmHeight Double Seal Ductile Iron Manhole Cover and Frame

BSEN124
Class D400

Standard: BS EN 124-1:2015

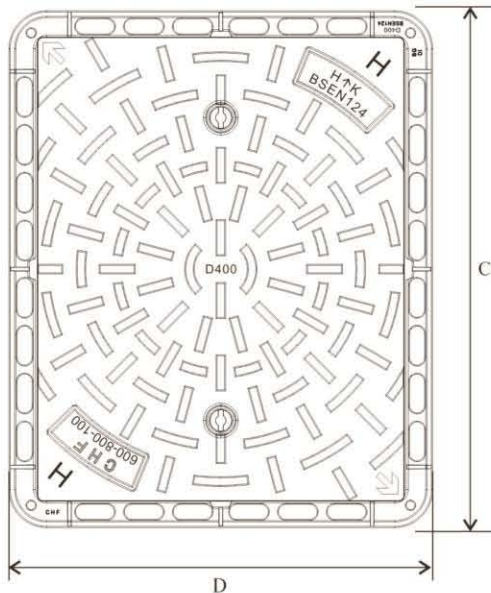
Class	Diameter of Test Block	Test load (kN)
D	250mm	400

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

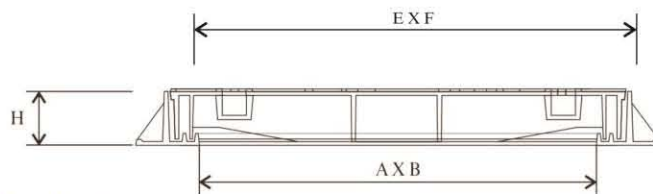
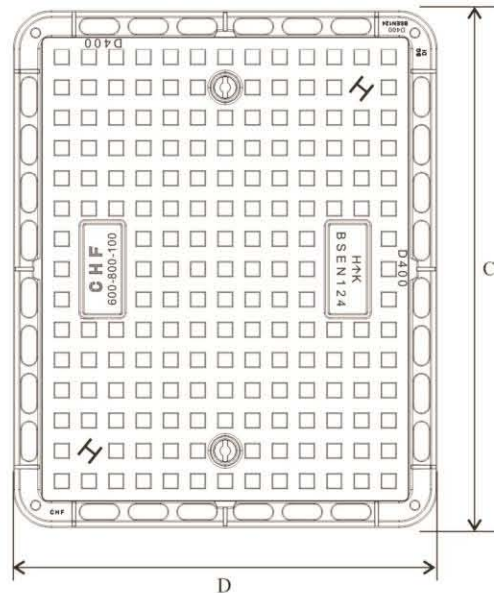
Type: SW for storm water (with circumscribed raised stubs on the cover)

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

STORM WATER 清水



FOUL WATER 污水



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		Class 等級 BSEN 124-1:2015	Test Load (KN)
						清水 Storm Water/ 污水 Foul Water			
1	MABW600/800-100A	600 X 800	830 X 1036	705 X 905	100	SW		D	400
2	MABW600/800-100B	600 X 800	830 X 1036	705 X 905	100	FW		D	400

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 Seal Ductile Iron Manhole Cover and Frame

600mmX800mm內孔100mm高雙止口球鐵沙井蓋板

600mmX800mmClear Opening 100mm Height Double Seal Ductile Iron Manhole Cover and Frame

BSEN124
Class D400





HOKLAS Endorsed Test Certificates

600X800X100
D400

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Report no. : 200527MA-6P

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 : 27-May-2020
 Date Tested : 3-Jun-2020
 Customer Code : C120
 Site Code : -

Sample Information Provided by Customer:

Sample Description : 600 x 800 clear opening x 100(H) Double Seal Ductile Iron Manhole Cover & Frame
 Classification : D400
 Clear Opening : 600 x 800 mm

Test Results:

Lab. Sample No.	200527MA-6P/1	
Customer Sample No.	-	
Size of Test Block	mm	250
Permanent Set		
Applied Load (2/3 of Applied Test Load)	kN	267.0
Measured Permanent Set	mm	0.32
Loading Test		
Applied Test Load (maintained for 30 sec.)	kN	401.0
Observation	NCF	
Cracks Width	mm	
Compliance#	Passed	
Measured Mass#	kg	Cover : 110.8 Frame : 51.6

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 c) 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
 Date issued : 4-Jun-2020

Approved By: 
 CHAN Leung Chor, Dennis
 Laboratory Manager

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