

MODEL

SA

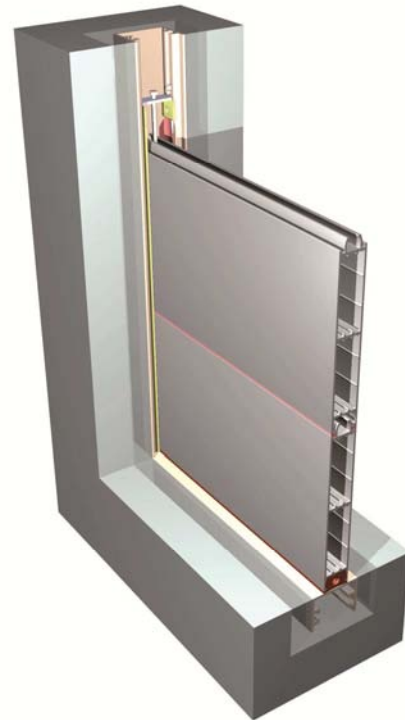


GENERAL DESCRIPTION

The ORBINOX 3-side sealing model SA Aluminum Stop Log is designed for open channel installations for temporary isolation and flow control. Stop Logs are ideal for maintenance and repair works or flood control and diversion.

The logs are made of extruded aluminum and are very easy to handle due to their light weight. The logs are stacked on top of each other in the frame guides. The water level is controlled by adding or removing logs. The sealing system is bidirectional (suitable for flows in either direction) and allows to achieve very low leakage rates.

The frame can be made of aluminum or stainless steel and it can be designed to be embedded in concrete, wall mount or face mounted in a existing channel.



Reserves the right to change specifications without notice

ORBINOX CANADA, ORBINOX USA, ORBINOX BRAZIL, ORBINOX CHILE, ORBINOX SPAIN, ORBINOX UK, ORBINOX FRANCE, ORBINOX GERMANY, ORBINOX INDIA, ORBINOX CHINA, ORBINOX S.E.A.

www.orbinox.com

OBX 01/16

Rev.2

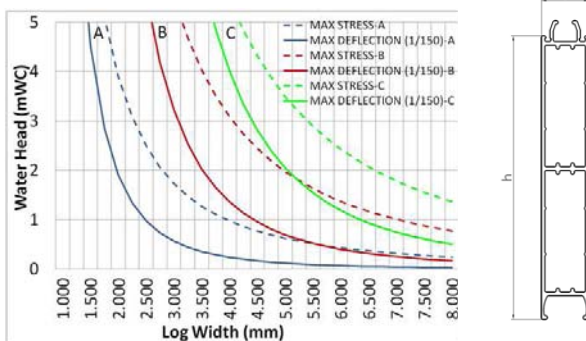
SA_1

DESIGN FEATURES

Log Design:

- Extruded aluminum logs (EN-AW 6063 T6) for easy handling.
- Stackable logs: water level can be controlled by adding or removing logs.
- Three different log sizes available to always find a solution to the specific channel width and flow control requirements.
- Various logs can be connected together to manipulate them simultaneously. For instance, two "B" type logs can be connected, achieving a single log of 300mm height.

Log Type	A	B	C
Log Height, h (mm)	300	150	225
Log Depth, c (mm)	50	90	150
Log Weight (kg/m)	7,9	7,3	11,2



Frame Design:

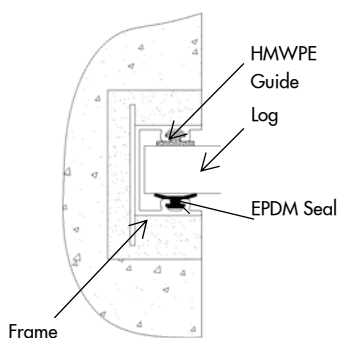
- Stainless steel or aluminum frame guides.
- Mounting options: embedded in concrete, wall mount or face mounted in existing channel.

Sealing system:

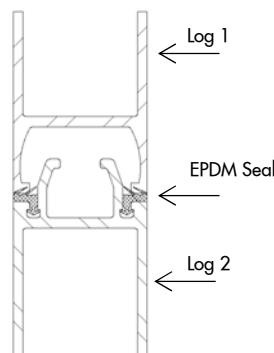
- Bidirectional self adjusting seal to control flow in either direction.
- Excellent tightness
- Vertical seals are placed on the frame guides. Horizontal seals are placed at the top of each log to prevent leak between logs.
- HMWPE guides are placed on the frame guides to assure no metal-to-metal contact between the frame and the logs, which reduces friction during operation and extends seal life.

SEAL DESIGN

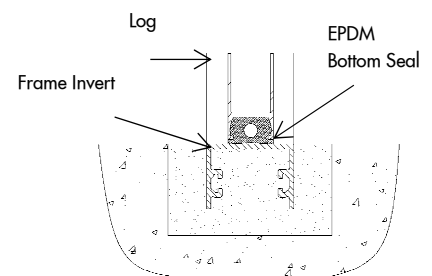
SIDE SEAL



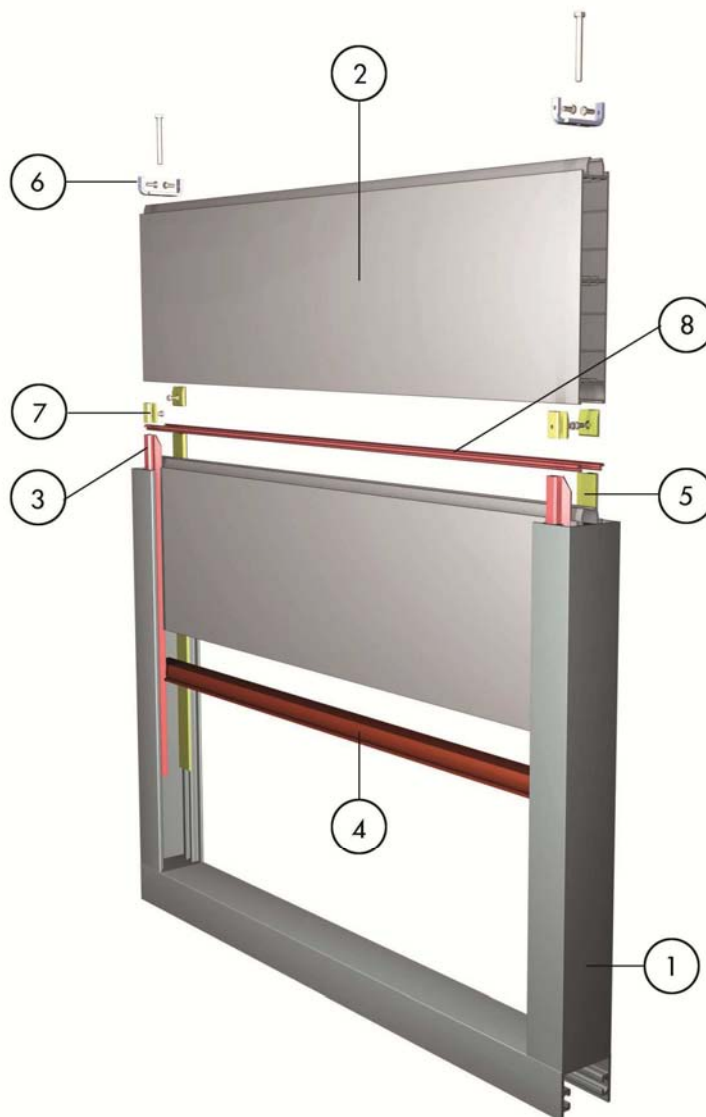
INTERMEDIATE SEAL



BOTTOM SEAL



STANDARD CONSTRUCTION MATERIALS



ITEM	DESCRIPTION	MATERIAL
1	Frame	Stainless steel 304L (EN 1.4306) / 316L (EN 1.4404) / Aluminum EN-AW 6063-T6
2	Logs	Aluminum EN-AW 6063-T6
3	Side seal	EPDM
4	Bottom seal	EPDM
5	Slider	HMWPE
6	Log locking system	Stainless steel 304L (EN 1.4306) / 316L (EN 1.4404)
7	Seal and slides locks	HMWPE
8	Intermediate seal	EPDM

MODEL

SA

MOUNTING OPTIONS

The following drawings show the most common mounting options. For other mounting options please contact an ORBINOX representative.

EMBEDDED IN CONCRETE (EC)



WALL MOUNTED (WM)



IN EXISTING CHANNEL (FM)



LIFTING EQUIPMENT

ORBINOX offers different lifting solutions to safely and effectively handle the logs. When the weight of the log is lower than 25kg, it can be handled with a lifting pole. The lifting pole fits in the frame guide and it is guided to easily hook the log.

For heavier logs, or when access is difficult, ORBINOX offers a lifting device. The lifting device, which is connected to a crane, fits into both lateral frame guides and hooks and releases the logs (via lifting pins) remotely and semi-automatically.

Logs can be connected together to lift them simultaneously. There is also available a locking device. It is used to lock the logs in position once the proper log arrangement has been achieved.

Lifting Device:



Hand Pole:



INSTALLATION, OPERATION AND MAINTENANCE (IOM)

This section briefly describes the installation, operation and maintenance of SA Aluminum Stop Logs. For more detailed information please refer to the IOM Manual.

Installation:

A) Embedded in Concrete (EC): the stop log shall be perfectly centered in the concrete recess prior to embedding in concrete.

B) Wall Mount: the SA Aluminum Stop Log is installed by means of mechanical anchor bolts and construction sealant (Sikaflex 11FC or equivalent).

C) Face Mounted in Existing Channel: the SA Aluminum Stop Log is installed by means of mechanical anchor bolts. All the gaps shall be grout filled afterwards and shaped in order to assure a smooth transition.

The minimum concrete strength shall be 20.7Mpa. The tolerance of the concrete construction (flatness, levelness, and plumbness) shall be in accordance to Din 18202.

For detailed information about the type, size and quantity of the required anchor bolts or other installation materials, please refer to the "General Arrangement Drawing".

Maintenance and Operations:

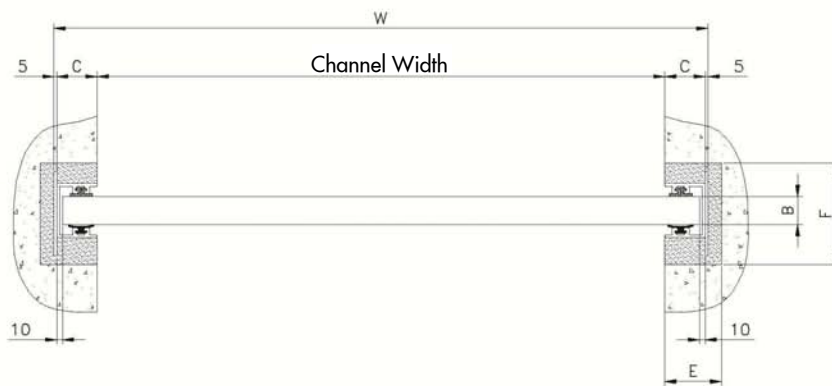
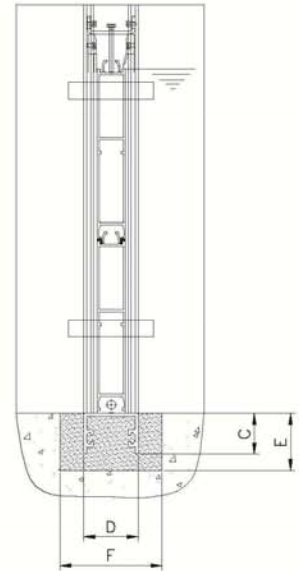
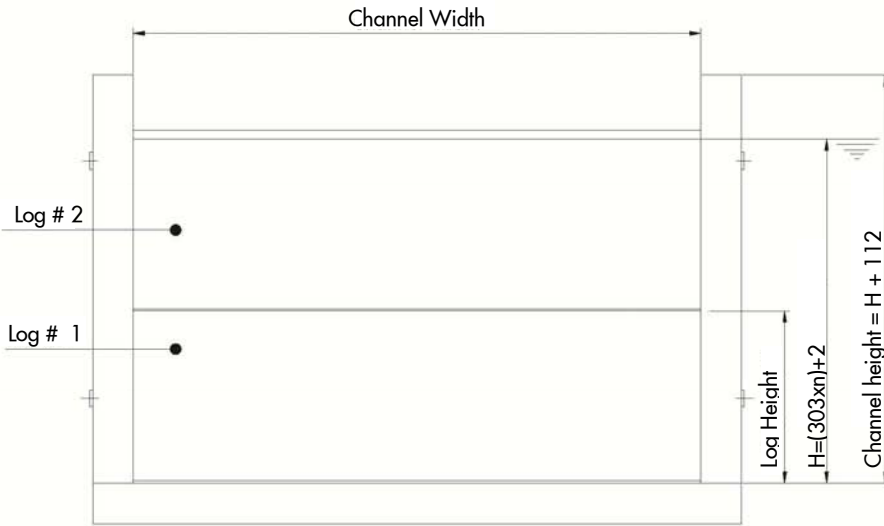
ORBINOX SA Aluminum Stop Logs need practically no maintenance. Seals shall be replaced in case of damage.

ORBINOX recommends the use of a lifting device for pullout- forces over 50kg (25kg each person). The pull-out-force depends on the weight of the log and the water head at which we are operating.

MODEL

SA

EMBEDDED IN CONCRETE . DIMENSIONS

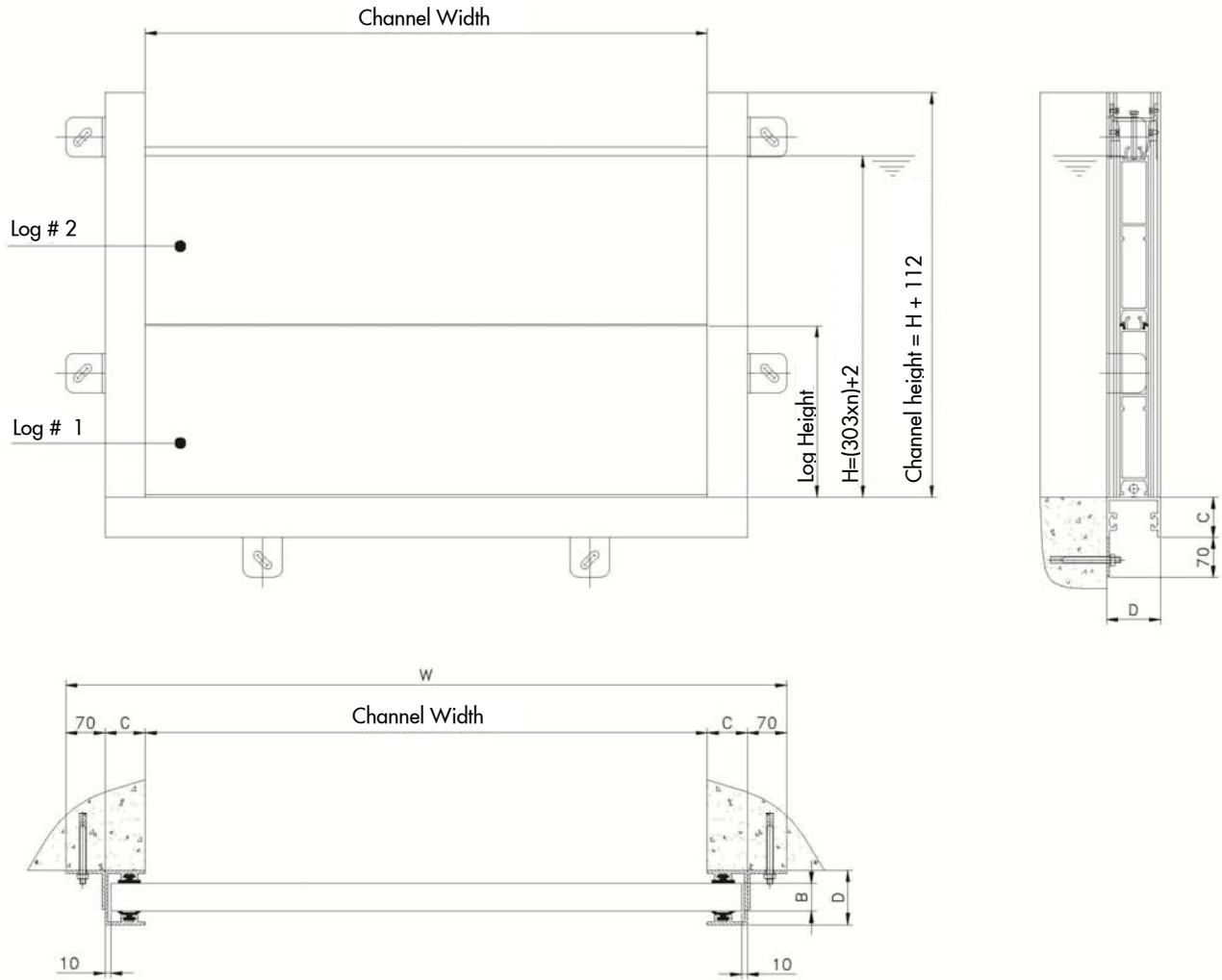


LOG TYPE	B	Log Height	C	D	E	F
A	50	303	71	96	100	180
B	90	303	75	136	100	220
C	150	303	75	196	100	280

MODEL

SA

WALL MOUNTED . DIMENSIONS

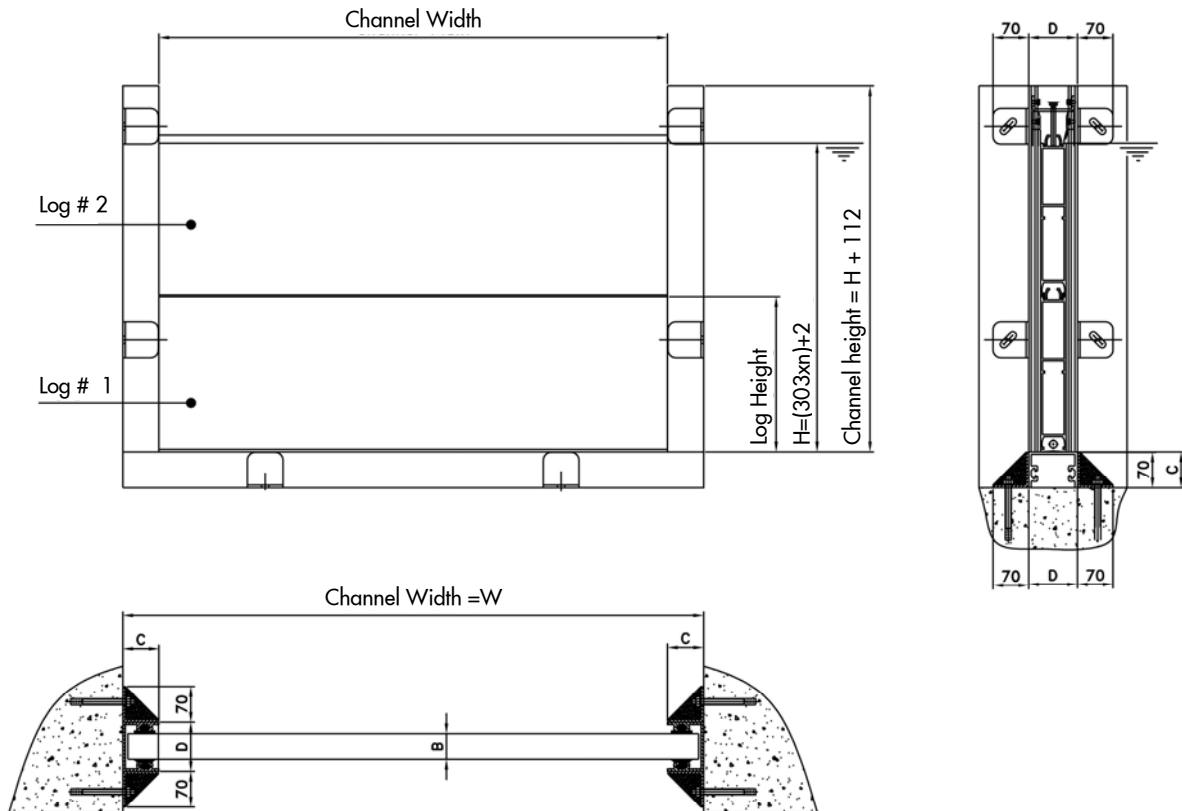


LOG TYPE	B	Log Height	C	D	E	F
A	50	303	71	96	100	180
B	90	303	75	136	100	220
C	150	303	75	196	100	280

MODEL

SA

FACE MOUNTED IN EXISTING CHANNEL . DIMENSIONS



LOG TYPE	B	Log Height	C	D	E	F
A	50	303	71	96	100	180
B	90	303	75	136	100	220
C	150	303	75	196	100	280

SA ALUMINUM STOP LOG SELECTION FORM

Customer: _____ Tag No.: _____ Date: _____
 Order Number: _____ Qty.: _____

ALUMINUM STOP LOG DESIGN
(Size = Channel Width x Logs Height)

Units: mm inch
 Channel Width: _____ Channel Height: _____

Number of Logs: _____

Log Type A B C

(Log Height A=300mm B=150mm C=225mm)

For detailed information about the design limitation of each log type, refer to the graph on page 2 of the catalogue. Also note that, for the same sealing area, log "A" is the most cost-effective solution, followed by logs type "B" and "C".

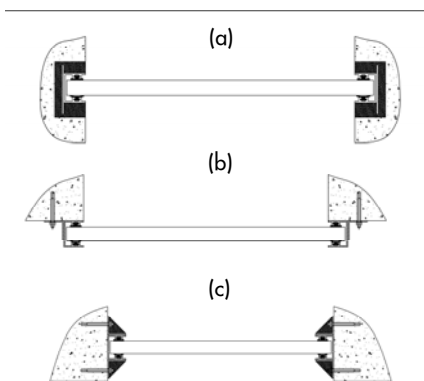
Number of connected Logs: _____

Max. Seating Water Head (mWC): _____

Max. Unseating Water Head (mWC): _____

ALUMINUM STOP LOG MOUNTING

- Embedded in Concrete (a)
- Wall Mounted (b)
- Face Mounted In Existing Channel (c)

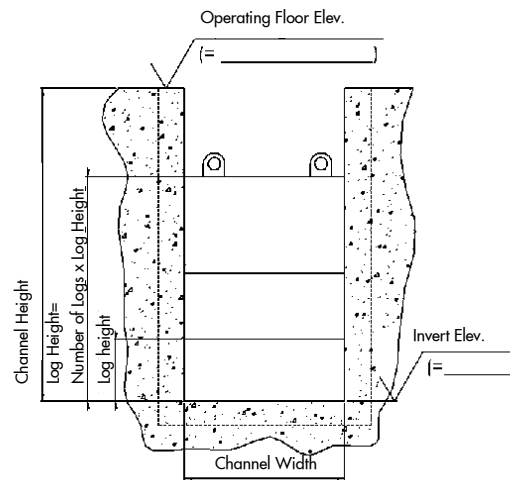


Frame Invert Mounting:

- Embedded in Concrete
- Wall Mounted
- Face Mounted In Existing Channel

LIFTING MECHANISM

- Hand pole
- Lifting device



MATERIALS

- Frame Aluminum 6063-T6
 304 SS
 316 SS
- Log Aluminum 6063-T6
- Seal EPDM Other: _____

REMARKS

Name: _____ Signature: _____