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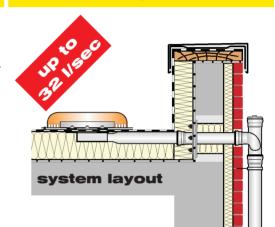
LORO-X ATTIKASTAR® high performance siphonic parapet drainage system

main drainage weir O mm emergency drainage weir 60 mm

siphonic drainage height of Water level 55 mm silent power silent power

Complete LORO-X **ATTIKASTAR** ® systems for siphonic drainage, to be used as main or emergency drainage systems, will achieve the enormous drainage performance of up to 32 l/sec. Thanks to the large hood belonging to the design, noise and vibration will be minimized, so that the LORO-X ATTIKASTAR® will "gulp down" the water insatiably especially under conditions, where noise protection and a safe pressure flow with a high discharge potential are of the essentially

Considering the conditions at the construction site, the DN 70 double-pipe connection of the LORO-X ATTIKASTAR® requires only a low depth of penetration into the heat insulation.



The **standard systems** for siphonic drainage consist of a DN 70 double pipe drain either for the main or the emergency drainage, a Y-shaped joint and a 4.2 m long downpipe DN 100 (including the sealing elements and pipe clamps). Optionally, the system can be delivered with weir heights ranging between 25 mm and 60 mm (25, 30, 35, 40, 45, 50, 55, 60 mm). The system layout with a weir height of 60 mm will achieve a drainage performance of up to 32 l/sec.



Advantages:

- Power siphonic drainage of up to 32 l/sec
- large cover ensures quiet operation
- · modular weir height
- low penetration of the heat insulation
- fast of the siphonic drainage



LORO-X ATTIKASTAR®:

High performance and optimal operations quietness

The system principle:

The parapetsystem's voluminous cover and the horizontal DN 70 double piping, brought to-gether on the outside by a Y-shaped joint, are the outstanding features of the LORO-X ATTIKASTAR®. The parts of the system combined in this way will allow a drainage performance of up to 32 l/sec. Merging the double piping in a single downpipe will support the process of "priming" the system. The large cover will minimize the development of noise and vibration both on the roof and in the system.

As already known from LORO-DRAINJET® emergency drains, the ATTIKASTAR®, too, will suck off the water thru the installed weir up to the slot height, thus leaving the height of water level low (i.e. between 40 mm and 60 mm) over almost the entire load spectrum, if the weir has a height of, say, 60 mm.



The development of the quiet ATTIKASTAR® high-performance drainage began, when it was realized that the large cover can clearly prevent the system's vibration.

This was the moment, when the new LORO suction cover with its large circumference was born. The large circumference made it also possible to absorb more water under the cover and thus to increase the catchment area of the siphonic drainage system. This, in turn, has a positive effect on both the drainage performance and the height of the water level.

- low height of the water level
- · high drainage performance
- · low noise emissions
- · ittle penetration into the roof

Module 2: The weir

The ATTIKASTAR® can either be used as main or as emergency drainage system. When used entirely without the weir, ATTIKASTAR® works as main drainage. When used as emergency drainage, the weir height may range between 25 mm and 60 mm, depending on the individual case and the conditions in the building.

• Variable weir heights: 25, 30, 35, 40, 45, 50, 55, 60 mm

Module 3: The bend

The directional change from the horizontal DN 70 double piping either into a DN 70 or DN 100 downpipe will be caused by a Y-shaped joint that has been specifically optimized for the ATTIKASTAR $^{\$}$. Merging the double piping in this way will cause the early and controlled priming of the siphonic drainage with up to 32 l/sec in a DN 100 down pipe.

- flow optimization
- 1 downpipe only

Module 4: The spout

If the ATTIKASTAR $^{\circledR}$ is used as main drainage without the weir, a LORO stand pipe with an outlet (drainage) into the sewer will be installed. If, on the other hand, an emergency drainage system is intended, the water will be discharged into the open area.

• stand pipe or outlet bend













Series 93 ATTIKASTAR®

	Emergency drainage	Main drainage	Emergency drainage
Тур	Gravity flow	Siphonic flow	Siphonic flow
	Silent	Silent Power	Silent Power
	as spout O1394X	as double pipe drain	as double pipe drain
DN	100	70/70	70/70
Roof penetration depth	106 mm	55 mm	55 mm
Water height (mm)	75	75	75
Weir height (mm)	40	O	60
LX-Nr.	LX859	LX803	LX766
36 32 32 30 38 28 24 20 16 12		32,0 l/sec	32,0 l/sec
16 12 8 4	9,1 l/s **		

 $^{^{\}star}$ Discharge capacity in keeping with test specification according to DIN EN 1253, downpipe length 4,2 m

^{**} LORO measurement with fully ventilated downpipe, corresponds ot spout capacity





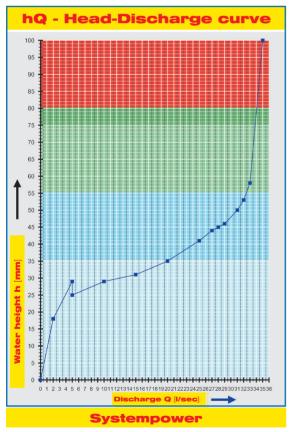
Specification sheet LX 803

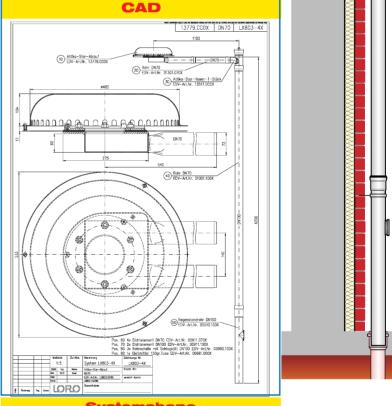
Parapet drainage system Series 93 ATTIKASTAR®

Main drainage													
Siphonic flow													
Silent	Power												
Discharge rate:	32,0 I/sec												
Water height:	55 mm												
Roof penetration:	55 mm												
Diameter:	DN 100												
LX-Number:	LX 803												
Weir height:	O mm												
Drain:	not ventilated												
Downpipe:	not ventilated												
Downpipe height:	min 4,2 m												
Drainage:	in sewer												



- 1 x Art.-No. 13779.CC0X, ATTIKASTAR® Parapet drain
- 2 x Art.-No. 01301.070X, LORO-X pipe with one socket
- 1 x Art.-No. 13228.070X, LORO-sliding flange
- 1 x Art.-No. 13517.DCCX, LORO-ATTIKASTAR® Y-shaped joint 1 x Art.-No. 00981.000X, LORO-X lubricant
- 1 x Art.-No. 01001.100X, LORO-X pipe with one socket
- 1 x Art.-No. 05510.100X, LORO-X standpipe
- 4 x Art.-No. 00911.070X, LORO-X sealing elements
- 2 x Art.-No. 00911.100X, LORO-X sealing elements
- 1 x Art.-No. 00975.100X, LORO-X pipe clamps
- 4 x Art.-No. 00806.070X, LORO-X anchor clips
- 2 x Art.-No. 09604.200X, LORO-X threaded rods





Systemshape

Discharge	l/sec	2,5 4 Silent				12,5 20 24 28 31 32 Silent Power						33 33,3 33,5 34				
Water height	mm	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75

Specification sheet LX 803

LORO-ATTIKASTAR® parapet drainage systems, DN 100

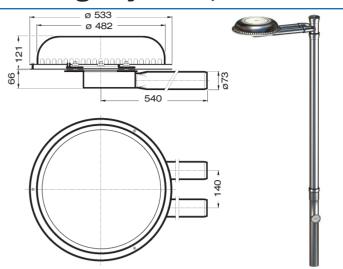
LX803-4X

drain article No. 13779.CC0X Weight: 14,8 kg

with clamping flange

for bituminous and plastic roofing sheets



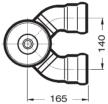


Y-shaped joint, with end plug, for LORO-ATTIKASTAR[®] siphonic parapet drainage systems

DN 100/70/70, made of hot-dip galvanised steel, additionally coated on the inside, article No. 13517.DCCX Weight 2,9 kg





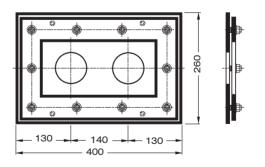


sliding flange for LORO-ATTIKASTAR® siphonic parapet drainage systems

with pre-assembled connecting sleeve for bituminous vapor barriers or plastic roofing sheets, made of hot-dip galvanised steel, including fastening screws, article No. 13228.070X

Weight: 5,1 kg





Please remember: For siphonic roof-drainage systems it is necessary to use only original LORO-X pipes and fittings to get the mentioned discharge power! Mixing or changing components of the system may lower the discharge rate! The minimum downpipe lenght is 4,2m to get the full siphonic power. If the Drain and downpipe is installed by different people (f.e. roofer and plumber) make sure that the system is built as described in data-sheet.

Heat tracing: Lorowerk recommends to check all drains and pipes with regard to their frost-sensibility. Where necessary, these parts should be upgraded with heat tracing.



Specification sheet LX 766

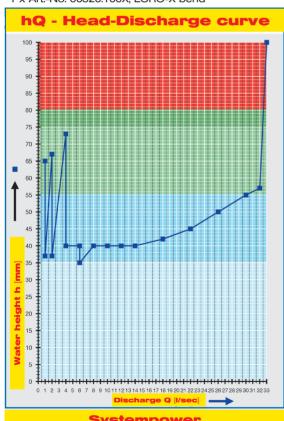
Parapet drainage system Series 93 ATTIKASTAR®

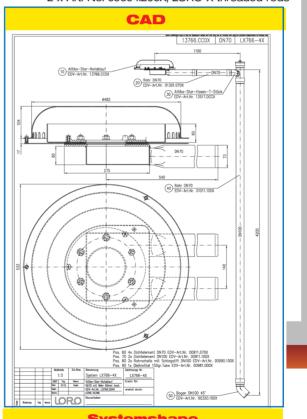
	- -											
Emergency drainage												
Siphonic flow												
Silent Power												
Discharge rate:	32,0 l/sec											
Water height:	75 mm											
Roof penetration:	55 mm											
Diameter:	DN 100											
LX-Number:	LX 766											
Weir height:	60 mm											
Drain:	not ventilated											
Downpipe:	not ventilated											
Downpipe height:	min 4,2 m											
Drainage:	on floor											

LX 766 Piece list

- 1 x Art-No. 13766.CC0X, ATTIKASTAR $^{\circledR}$ parapet emergency drain 2 x Art-No. 00911.100X, LORO-X sealing elements
- 2 x Art.-No. 01301.070X, LORO-X pipe with one socket
- 1 x Art.-No. 13228.070X, LORO-sliding flange
- 1 x Art.-No. 13517.DCCX, LORO-ATTIKASTAR® Y-shaped joint
- 1 x Art.-No. 01011.100X, LORO-X pipe with one socket
- 1 x Art.-No. 00320.100X, LORO-X bend

- 2 x Art.-No. 00975.100X, LORO-X pipe clamps
- 1 x Art.-No. 00981.000X, LORO-X lubricant
- 4 x Art.-No. 00806.070X, LORO-X anchor clips
- 1 x Art.-No. 00806.100X, LORO-X anchor clip
- 2 x Art.-No. 09604.200X, LORO-X threaded rods





Systempower

Water height	mm	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75
Discharge	l/sec								14	22	26	30	32	32	32	32
									Silent Power							



LORO-ATTIKASTAR® Parapet emergency drainage

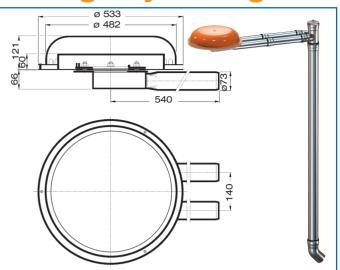
LX766-4X

drain article No. 13766.CC0X Weight: 15,4 kg

with clamping flange

for bituminous and plastic roofing sheets

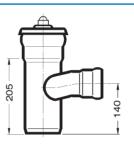


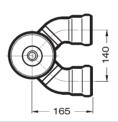


Y-shaped joint, with end plug, for LORO-ATTIKASTAR® siphonic parapet drainage systems

DN 100/70/70, made of hot-dip galvanised steel, additionally coated on the inside, article No. 13517.DCCX Weight: 2,9 kg





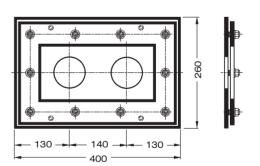


sliding flange for LORO-ATTIKASTAR® siphonic parapet drainages systems

with pre-assembled connecting sleeve for bituminous vapor barriers or plastic roofing sheets, made of hot-dip galvanised steel, including fastening screws, article No. 13228.070X

Weight: 5,1 kg





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LOROWERK

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