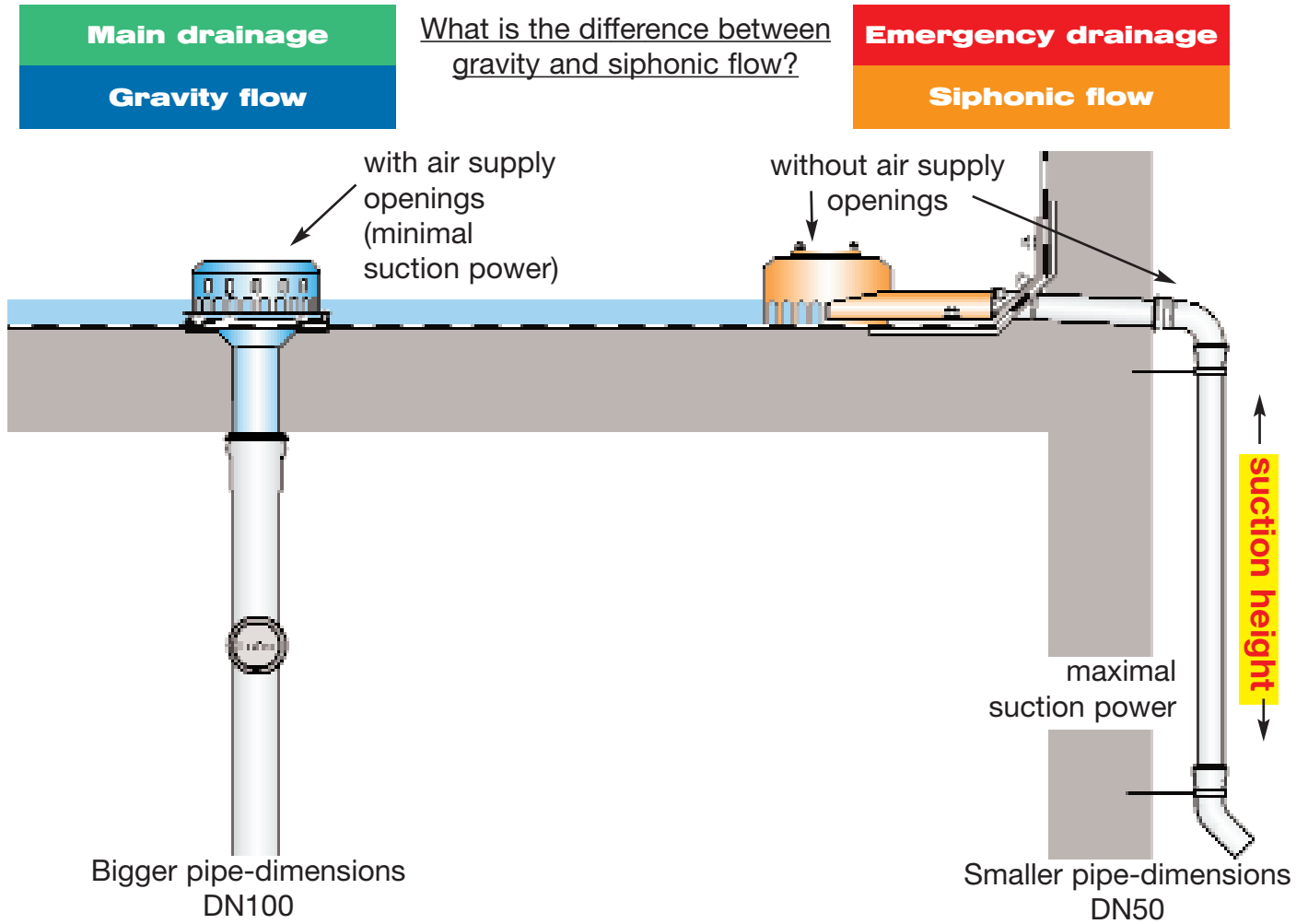


# LORO-X roof drainage systems with siphonic flow

speed and safety of LORO-X Roof drainage systems



Gravity Flow		
Pipe-dimension	EN-Standard Min.	LORO-X Max.
DN50	0,9 l/s	7,6 l/s (LX494)
DN70	1,7 l/s	9,0 l/s (LX848)
DN100	4,5 l/s	9,0 l/s (LX875)
DN125	7,0 l/s	9,8 l/s (LX874)
DN150	8,1 l/s	-

Siphonic Flow		
Pipe-dimension	EN-Standard Min.	LORO-X Max.
DN50	6,0 l/s	9,0 l/s (LX790)
DN70	12,0 l/s	19,4 l/s (LX847)
DN100	-	38,0 l/s (LX542)
DN125	-	-
DN150	-	100 l/s (LX834)

\*Based on "DIN EN 1253-1:2003 Teil 1: Anforderungen"

## LORO-X Proprietary roof drainage systems

LORO's philosophy is the development of proprietary roof drainage systems emphasizing the complete system from the drain to the sewer connection. Therefore, our research, development, manufacturing and distribution work hand in hand to give you the best products and the best service.

The family-owned company "LORO" stands for reliability, quality and technical know-how for more than 50 years and 3 generations and is a professional partner for engineers, architects and contractors involved in construction.

Roof drainage can be handled on the basis of two different principles, either by gravity or siphonic drainage, which are distinguished by the amount of air transported in the system.

### Gravity roof drainage

The gravity drainage system is only partially filled with water; in fact, there is more air than water in the system. The air will enter the drainage system at the drain body or at special aerator pieces connected to the downpipe. The gravity flow is quiet and relatively slow and appropriate in noise-sensitive areas.

- silent flow
- no calculation of the system needed
- less planning and training



### Siphonic roof drainage

Siphonic drainage uses up to 100% of the pipe capacity for water by preventing the admission of air into the system. The siphonic system itself is optimized by hydraulic calculations ensuring the proper function and minimal pipe sizes. The drainage power of the siphonic system is created by the height difference between the roof top and the surface level and is transferred through the whole system. Therefore the water is "pulled" from the roof instead of just "flowing"!

The result is a much higher discharge rate with the same or even smaller diameters. With this power you can reduce the amount of drains on the roof as well as the amount of downpipes. With a siphonic system you do not need a slope for the collecting pipe anymore.

In siphonic systems the pipe routing is done without gradient. This can save a lot of construction height.

- higher discharge rate - smaller pipe sizes
- lower material cost and less labor cost due to:
  1. fewer vertical pipes,
  2. less roof penetrations
  3. less excavations
- horizontal piping without slope

