FRÄNKISCHE

Case study

STEWES hagebaumarkt in Wesel

Infiltration system for roof, open space and parking area drainage

┌─── **Products** ───────────────────┐
│   │
│ ■ 5 SediPipe level 600/12   │
│   │
│ ■ 1 SediPipe level 600/6   │
│   │
│ ■ 4 SediPipe level 500/12   │
│   │
│ ■ 1 SediPipe level 400/6   │
│   │
│ ■ 1,574 Rigofill inspect   │
│   (corresponds to approx. 630 m³   │
│   retention volume)   │
│   │
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Drainage Systems
www.fraenkische.com

Infiltration system for 32,700 m² area drainage

System description:

New building of hagebaumarkt in Wesel by STEWES with infiltration system for roof, open space and parking area drainage.

The total area of the hardware store is 55,000 m². For 32,700 m² of it, integrated stormwater management was elaborated.

These areas include the hagebaumarkt hardware store, the garden centre, a construction material drive-thru and a parking lot.

Contribution to environmental protection with SediPipe:

In this case, the stormwater management system comprises two steps: treatment and infiltration.

Treatment of the accruing stormwater from the roof, free space and parking areas is effected in 11 SediPipe systems.

The stretched shape of the sedimentation pipe significantly shortens the distance until a particle settles and thus even settles the smallest particles.

The flow separator prevents the washing-out of any particles in case of heavy rainfall. Large shares of the pollutants are therefore retained. The storage space of the connected storage/infiltration system is built from Rigofill inspect plastic blocks. These can be combined to form 3D systems of any size. This enlarges the storage space of the infiltration system.

Each of these storage/infiltration tanks has a void ratio of 95 % with only little excavation work and stores 404 litres of water with a life span of at least 50 years.