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Vivaldi Amsterdam,  
The Netherlands  
**Client:** ING Real Estate  
**Landscape architect  
and water design:**  
Atelier Dreiseitl  
**Architect:** Norman Foster  
and Partners  
**Planning and design:**  
2003–2005  
**Construction:** 2005–2007

**Site area:** 1,760 m<sup>2</sup>  
**Water surface:** 1,230 m<sup>2</sup>  
**Annual rainfall:** 819 mm  
**Rainfall intensity:**  
For overflow 300 l/s/ha  
**Drainage method:**  
Green roof (extensive,  
intensive), fluctuating water  
level of 5 cm, 100 m<sup>3</sup> cistern,  
overflow to the Spoorslag-  
sloot Canal  
**Circulation rate:** 11 l/s  
**Water treatment:**  
Cleansing biotope cleansing  
2.5 l/s, skimmer, coarse filter  
**Stormwater event:**  
Less than 1 year



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Residential development  
'Im Park', Bern-Ittigen,  
Switzerland  
**Client:** Berner Lebens-  
versicherungs-Gesellschaft  
**Water design:**  
Herbert Dreiseitl  
**Landscape design:**  
Atelier Dreiseitl  
**Architect:** René Burkhalter  
AG, Architectur Design  
**Planning and design:**  
1988–1989  
**Construction:** 1989–1990

**Size:** 6,000 m<sup>2</sup>  
**Watercourse length:** 60 m  
**Water surface:** 200 m<sup>2</sup>  
**Total water volume:** 15 m<sup>3</sup>  
**Flow rate:** 500 l/min  
**Maximum water depth:**  
40 cm  
**Cistern volume:** 10 m<sup>3</sup>  
**Water treatment:**  
Technical filter  
**Pump power:** 4 kW  
**Total area:** 800 m<sup>2</sup> roof  
**Residents:** 700  
**Impermeable surface:** 60 %  
**Annual rainfall:** 900 mm  
**Drainage method:** Open  
surface drains, retention  
pond



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Potsdamer Platz, Berlin  
**Client:** Stadt Berlin/  
Debis Immobilien  
**Water design:**  
Atelier Dreiseitl  
**Architects:** Renzo Piano,  
Christoph Kohlbecker  
**Project management:**  
Atelier Dreiseitl + Peter  
Hausdorf  
**Planning and design:**  
1994–1998  
**Construction:** 1997–1998

**Water surface:** approx.  
12,000 m<sup>2</sup>  
**Shoreline and edges:**  
1,700 m  
**Overflow edge:** 44 m  
**Total water volume:**  
approx. 12,000 m<sup>3</sup>  
**Flow rate:** 500 m<sup>3</sup>/h  
**Turnover:** 3 days  
**Minimum water depth:**  
30 cm  
**Maximum water depth:**  
185 cm  
**Cistern volume:** 2,000 m<sup>3</sup>  
**Water treatment:**  
Purification biotope  
1,900 m<sup>2</sup> surface area  
**Pump power:** 100 kW  
**Connected roof area:**  
Paved roof 32,000 m<sup>2</sup>  
Green roof 12,000 m<sup>2</sup>  
**Annual rainfall:** 530 mm  
**Drainage method:**  
Evaporation approx.  
11,570 m<sup>3</sup>/ annum,  
toilet flushing approx.  
10,800 m<sup>3</sup>/ annum,  
irrigation approx.  
1,114 m<sup>3</sup>/ annum,  
overflow in Landwehrkanal  
max. 3 l/s/ha  
**Emergency overflow in  
canal:** 0,2 %  
**Retention volume:** Water  
basin 3,100 m<sup>3</sup>



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Prisma Nuremberg  
**Client:** Karlsruher Lebens-  
versicherung AG  
**Water design, glass design:**  
Herbert Dreiseitl  
**Landscape design:**  
Atelier Dreiseitl  
**Architect:** Joachim Eble  
Architektur  
**Climate simulation:**  
Dr. Wilhelm Stahl  
**Metalworks:**  
Metallatelier Fuchs  
**Glassworks:** Glasgestaltung  
Dierig  
**Planning and design:**  
1992–1994  
**Construction:** 1993–1997

**Size:** Glass house volume  
15,000 m<sup>3</sup>, glass house  
area 1,400 m<sup>2</sup>, external  
planting 870 m<sup>2</sup>  
**Length:** 110 m watercourse  
**Water surface:** 240 m<sup>2</sup>  
**Total water volume:** 60 m<sup>3</sup>  
**Flow rate:** 1,200 l/min  
**Maximum water depth:**  
35 cm  
**Minimum water depth:** 5 cm  
**Cistern volume:**  
240 m<sup>3</sup> rainwater storage  
**Water treatment:**  
190 m<sup>2</sup> planters,  
filters, sedimentation in  
cistern, purification biotope  
50 m<sup>2</sup> surface area  
**Pump power:**  
14 kW (2 x 5.5/1 x 3)  
**Site area:** 6,000 m<sup>2</sup>  
catchment area  
**Residents:** 160  
**Impermeable surface:**  
100 %  
**Annual rainfall:** 675 mm  
**Rainfall intensity:** r<sub>15(1)</sub>  
117.8 l/s/ha

#### Drainage method:

Evaporation, infiltration  
underneath building, re-use  
(irrigation)

#### Soil permeability

**factor:** 1 x 10<sup>-4</sup> m/s sand  
subsoil, distance to ground-  
water table ≥ 3 m

#### Infiltration and retention area:

474 m<sup>2</sup> under underground  
parking,  
105 m<sup>2</sup> pond

#### Stormwater event:

10 years