

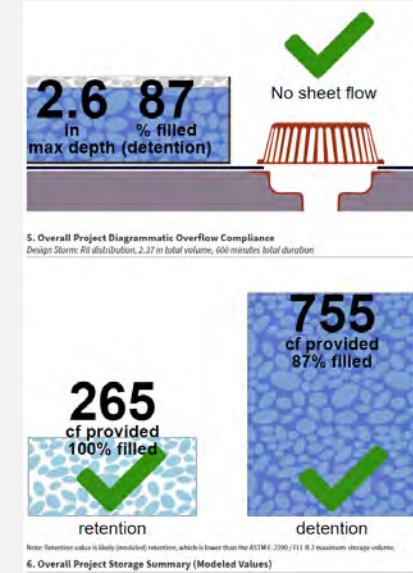
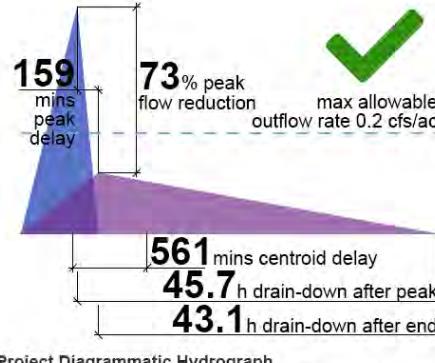
CASE STUDY- THE STEPSTONE Amsterdam NL

The 'Stepstone' is located in the heart of Kenniskwartier Zuidas in Amsterdam, NL, and provides rental units for young adults. Featuring 216 social housing apartments for individuals aged 28 and under, this unique residential building emphasizes smart apartment layouts, ranging from 25 to 60 square meters (269 to 646 square feet). The adaptable construction design allows for potential future apartment expansion and maximum efficiency of space.

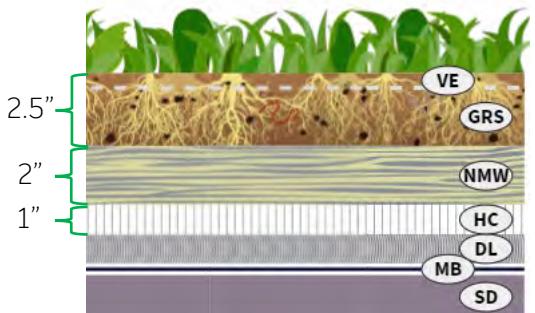
The rooftop area was also maximized with the integration of a Purple-Roof system, effectively managing the building's stormwater Retention, Detention, and Peak Outflow Reduction needs. This eliminated the need for a conventional stormwater tank, consequently freeing up additional ground-level space. Moreover, the installation of the Purple-Roof system underneath a rooftop basketball court served a dual purpose, promoting both recreational activities and eco-friendly initiatives. This strategic use of the rooftop not only enhanced the building's functionality but also showcased a commitment to sustainability and efficient space utilization.



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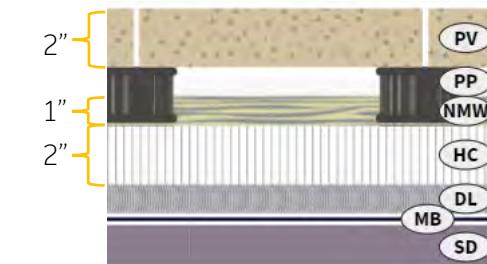


VEGETATED “2.5+2+1” PROFILE



property	value	standard
total thickness	6 inches	
dry weight	13.64 lbs/sf	FLL B.2 & ASTM E-2399
max dead load (wet)	29.82 lbs/sf	FLL B.2 & ASTM E-2399
max live load ***	7.92 lbs/sf	FLL B.2 & ASTM E-2399
max combined dead and live load ***	37.74 lbs/sf	FLL B.2 & ASTM E-2399
max retention storage volume	1.9 gals/sf	FLL B.2 & ASTM E2399
max detention storage volume	3.05 inches	
anticipated max flow rate**	0.22 cfs/acre	ASTM D4716++
typical plant palette	sedums	

HARDSCAPE “PAVER+1+2” PROFILE



property	value	standard
total thickness	6 inches	
dry weight	24.04 lbs/sf	FLL B.2 & ASTM E-2399
max dead load (wet)	28.8 lbs/sf	FLL B.2 & ASTM E-2399
max live load ***	10.33 lbs/sf	FLL B.2 & ASTM E-2399
max combined dead and live load ***	39.13 lbs/sf	FLL B.2 & ASTM E-2399
max retention storage volume	0.6 gals/sf	FLL B.2 & ASTM E2399
max detention storage volume	0.96 inches	
anticipated max flow rate**	0.2 cfs/acre	ASTM D4716++



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Project Information:

Client: Woonstichting Lieven De Key

Design team: Adriaan Mout, Jurriaan van Stigt, Marianne Loof, Christiaan Schuit, Surya Steijlen

Project team: Ingeborg van Lent, Natalia Yakovleva, Marijn Luijmes, Jasper Koopman, Maikel Blouw

Contractor: VORM Bouw, completed in 2023

