



Green Roofs & Green Walls

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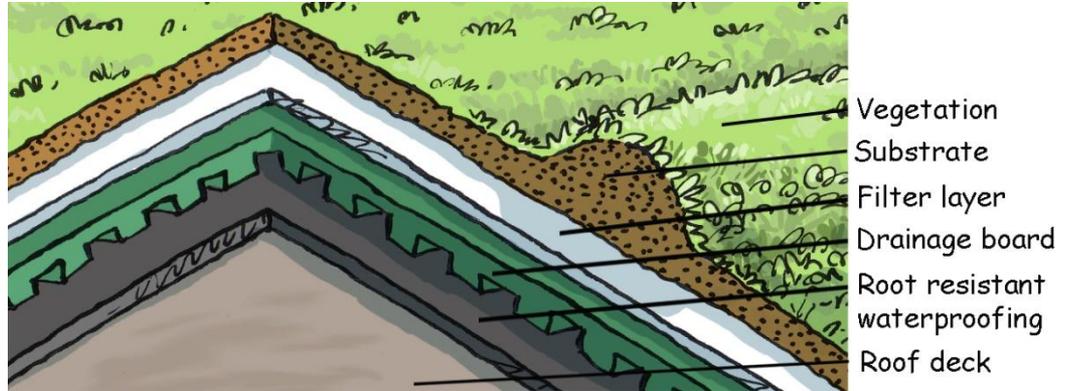
Green Urban Infrastructure

- Green Roofs
- Green Walls
- Rain Gardens



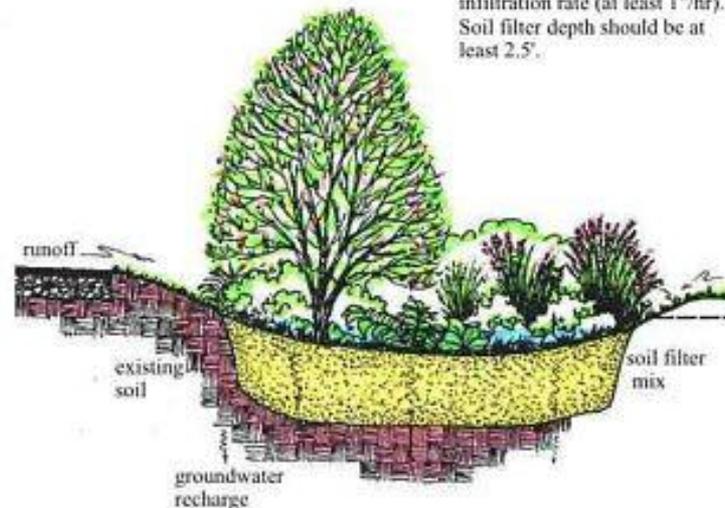
Sustainable Urban Drainage Systems

The main water control function is provided by the substrate (growing medium), some is also regulated through evapo-transpiration.



GROUNDWATER RECHARGE FACILITY

In-situ soils should have a high infiltration rate (at least 1"/hr).
Soil filter depth should be at least 2.5'.





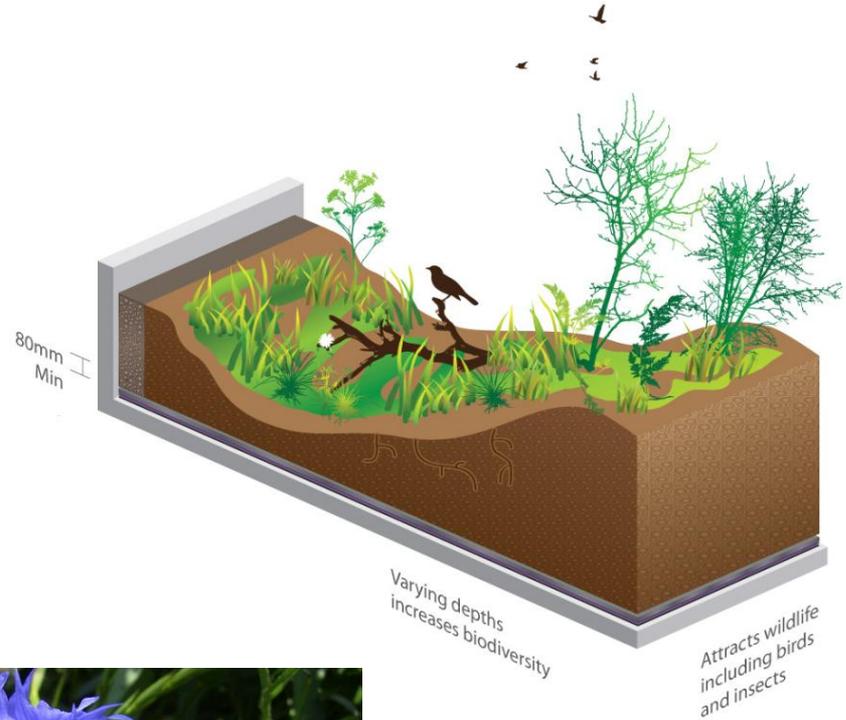
Which tool?

	Absorb CO2 and pollutants	Reduce runoff	Cool atmosphere	Insulation (heat and sound)	Wildlife support	Building protection
Green Roofs	Yes	Yes	Yes	Yes	Yes	Yes
Green Walls	Yes	Not really	Yes	Yes	Yes	Negligible
Rain Gardens	Yes	Yes	Yes	No	Yes	Yes (due to reducing water runoff)

Know your aim and you are more likely to achieve it!



Types of Green Roof- Wildlife





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Sedum Roofs & Water Management





Aesthetic roofs and amenity space





types of green wall



Modules:
engineered walls,
very water intensive



Climbers: natural green
walls, sustainable and
easy to manage



Modular green walls



Westfield Shopping Centre



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Musée du Quai Branly





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Climbers





Climbers under control





Habitat walls & roofs



Putting GUI into practice

- Mapping your area according to flood risk, air pollution, access to green space
- What do you currently spend on: flood clean up, air conditioning, roof repairs
- Take advantage of necessary scheduled repairs to introduce improvement measures
- What does the community feel? Look for opportunities to promote education, social activities, skills training etc.