

Low Impact Development

STIHL®

Outdoor Powered Equipment

- Major manufacturer of outdoor equipment.
 - Chain saws
 - Trimmers
 - Blowers
 - Construction and Yard Equipment
- Environmental improvements.
 - Biodegradable chain oil.
 - ISO 14001 certification.
 - Energy management system.
 - Daylight harvesting.
 - Green roof.



Types of Green Roofs



■ Intensive

- Large plant material
- Thick “soil” layer
- Substantial weight and cost.
- Possible park like area



■ Extensive

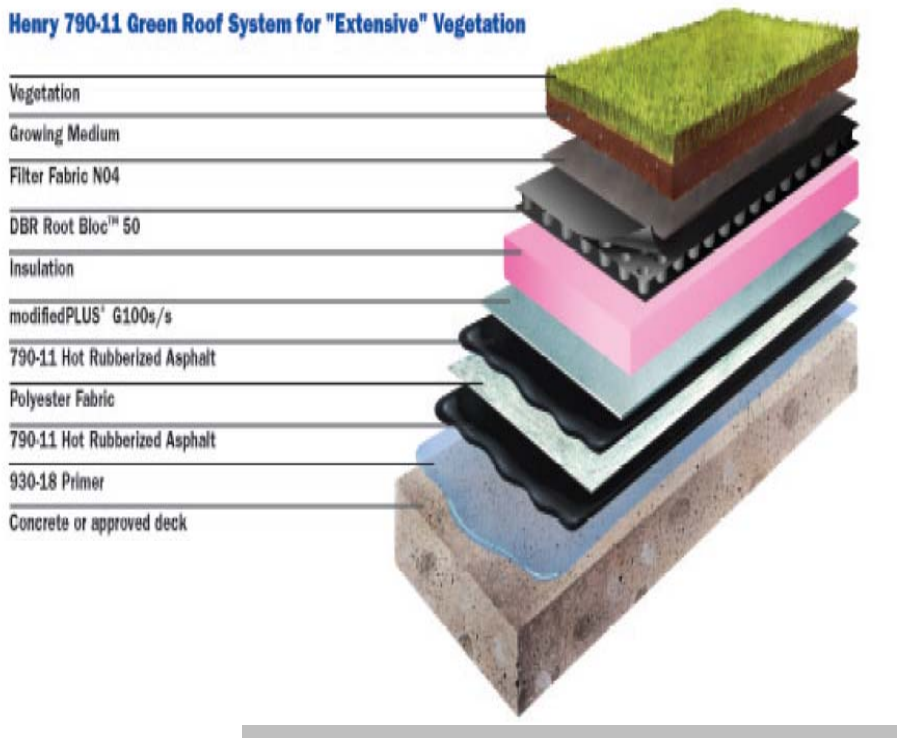
- Small spreading plants
- Relatively thin “soil” layer
- Moderate weight and cost.

Benefits of a Green Roof

- Storm water retention.
- Improve building thermal efficiency.
- Reduction of heat island effect.
- Increase roof life.
- Reduction of noise transmission.
- Increase green space.

Green Roof Construction

Henry 790-11 Green Roof System for "Extensive" Vegetation



- Start as a standard built-up roof.
- Insulation
- Root barrier
- Drainage mat
- Growth media
- Plants.

Green Roof – London Bridge Road

- 60,000 sq. ft.
- Completed in May 2007.
- Plants established in 1st year.
- Watering may be necessary.
- 2-3 years to cover roof.



Future Green Roofs



- Second roof completed in October 2007.
- Eliminate need for retention pond.
- Very flexible system.
- Future installations.

Green Roof Challenges

- Additional weight
 - Foundation and steel structure modifications
- Increased construction time
- Increased upfront cost
 - Roof system + \$12/ sq. ft.
 - Structure + \$8/ sq. ft.

Conclusion

“ As a leader in the outdoor power equipment industry, it is our duty to set the example. We will continue to invest in innovative technologies, programs and partnerships as part of our ongoing commitment to socially responsible environmental stewardship. ”



– **FRED WHYTE**
PRESIDENT, STIHL INCORPORATED

- We have a social and environmental responsibility
- It is the right thing to do
- It is good for our business