

Green Business Workshop: Green Roof Design



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Vegetated



White Roof

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Green Roof Types

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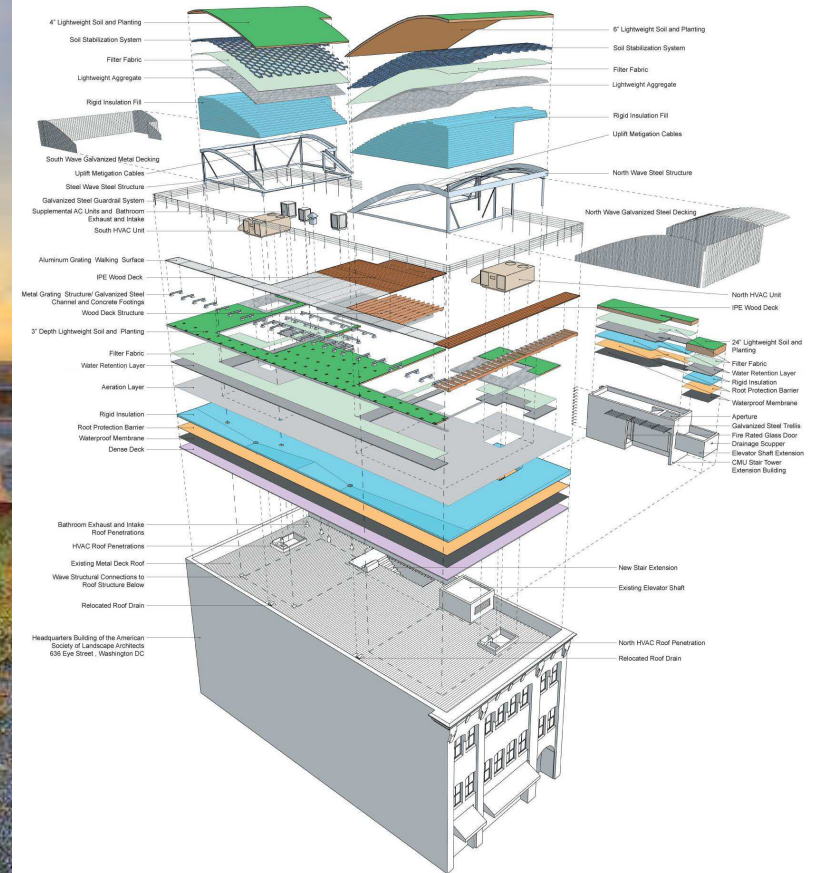


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Chicago
Green Roof Examples

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ASLA Green Roof

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**Washington Mutual Center
Green Roof**

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- Soil depth 3-6 inches
- Lightweight: 15-50 lbs/sq. ft.
- Only 10 -20% organic matter in soil
- Limited plant species options
- Lower maintenance, nutrient, and irrigation requirements

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Extensive Green Roof

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- Soil depth 6 inches or more
- Heavier weight load on roof: up to 150 lbs/sq. ft.
- Many more plant options including trees and shrubs
- Require irrigation, fertilization, and maintenance

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Intensive Green Roof

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- Reduces stormwater runoff and filters pollutants; neutralizes acidity of acid rain
- Aesthetically pleasing; improves productivity and morale in corporate environments
- Qualifies for up to 15-20 LEED certification points from USGBC
- Create habitat for birds and insects

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Benefits

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- Increases usable area
- Doubles to triples lifespan of roof by protecting roof surface from contraction and expansion and harmful UV rays and acid rain degradation
- Insulates and cools building, reducing utility costs
- Reduces "urban heat island effect" by cooling urban environment through evaporative transpiration (among other ways)

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Benefits

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- **Minimal, but some**
 - Watering
 - Weeding
 - Plant Care (Seasonal)
 - Fertilizer
- **Dealing with Leaks**
- **Life Cycle Costs**

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Maintenance

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