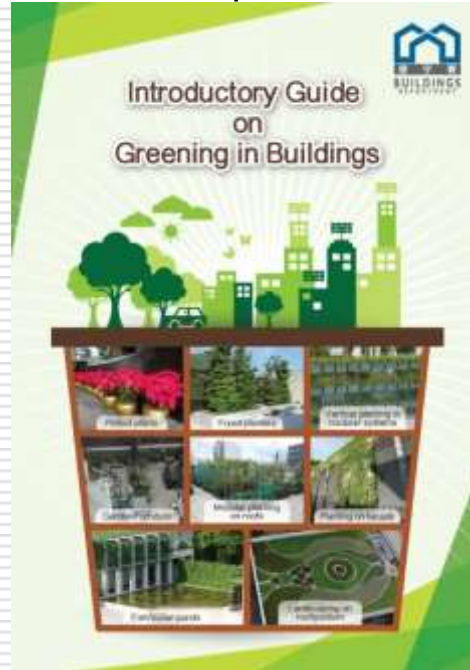


Introductory Guide on Greening in Buildings

Purpose

- To provide a reference for safe provision of greening in buildings



Introductory Guide on Greening in Buildings

(1) Planning & Design

□ BD's Approval

- Depends on location & extent of the greening, and structural & drainage design of the building
 - **Not required**, if not involving any new building works (e.g. addition of new building structure, strengthening of structure, modification of drainage system)
 - **Required**, if
 - (1) involving new building works;
 - (2) significantly affects the load bearing capacity, drainage system/fire safety in existing buildings, or any associated change in use
-

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□ **Size & Scale**

- Larger/heavier greenings has substantial impact on the existing building structure
- Especially on critical elements (e.g. long-span roof/ podium and cantilevered structures)

□ **Professional Advise**

- Safety and feasibility – Consult Qualified professionals (e.g. Authorized Person and/or Registered Structural Engineer)
 - Selection of greening, plant variety, etc. – Consult landscaping expertise (e.g. Registered Landscape Architect)
-

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Examples	Less Loading Concern	More Loading Concern
Potted Plant	 A photograph showing a small potted plant in a light-colored pot sitting on a paved sidewalk. The plant is a small, bushy green shrub.	 A photograph of a long, narrow raised garden bed made of wooden planks. It is filled with soil and various green plants. A white mesh cover is draped over part of the bed.
Roof Farming	 A photograph of a rooftop garden. A black rectangular planter box is filled with soil and several green plants. A clear glass enclosure is built around the planter box to protect the plants.	 A photograph of a rooftop garden. A concrete path runs alongside a raised garden bed filled with soil and small green plants. A building is visible in the background.
Garden Furniture	 A photograph of garden furniture on a rooftop. There is a table and chairs under a large white umbrella. A potted plant is visible in the foreground.	 A photograph of garden furniture on a rooftop. There is a square table and four stools made of stone or concrete blocks, arranged on a paved surface.

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Examples	Less Loading Concern	More Loading Concern
Garden Feature		
Flower Bed		

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□ Other Considerations

■ Structural Assessment

Inaccessible roofs



Long-span roof/podium structures



Cantilevered Structures



Water ponds & associated features



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■ Drainage and waterproofing



Provision of drainage outlet in greening to discharge excess water



Improper maintenance of drainage system



Proper installation, protection and upkeep of waterproofing layer on roof/podium



Inadequate or damaged waterproofing may result in water seepage and spalling of structural elements

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- Fire Safety & Potential Inappropriate Uses



- Maintenance Access & Protective Barriers



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(2) Construction

□ Site Work

- Engage qualified contractor and provide adequate site supervision
- Amendments on greening proposal

□ Completion

- Engage professionals for certifying completion of the greening works
 - Provide the design & maintenance information to building owner
-

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(3) Maintenance & Upkeep

□ Regular Maintenance

- Provide regular inspection and maintenance of both greenery and building itself

□ Changes

- May affect the original design parameters
 - Advice from qualified professionals should be sought beforehand
-

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Newly Proposed Greening

New Building	Existing Building
<ul style="list-style-type: none">- Appoint AP/RSE	<ul style="list-style-type: none">- Consult AP/RSE/building professionals
<ul style="list-style-type: none">- Cater for greening in design- Include provision of greening in building, structural and drainage plans for approval and consent from the BD as appropriate.	<ul style="list-style-type: none">- Consider implications of greening on the existing building, including structural, drainage and fire safety- Assess whether submission to the BD for approval of the greening proposal is necessary. If yes, appoint AP/RSE.- Submit relevant plans to the BD for approval if alteration and addition, or structural strengthening works are required.
<ul style="list-style-type: none">- Appoint registered contractor for carrying out of associated buildings works	<ul style="list-style-type: none">- Appoint registered contractor for carrying out of associated buildings works

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Existing Greening

Greening Approved by BD

- Ensure existing provision, installation and usage is consistent with the original design and intended use. Otherwise, an overall assessment is required.

- Rectify any defects promptly

- Inspect and maintain regularly

Greening Not approved by BD

- Consult AP/RSE/building professionals on effects of provision and installation on the existing building, including structural, drainage and fire safety

- Remove the associated provision and installation promptly if there are signs of overloading or safety concern
- Rectify any defects promptly
- Remove unauthorised building works
- Submit a proposal to BD for approval if necessary

- Inspect and maintain regularly
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