



NYC Parks
GreenThumb

GreenThumb Safe Soil Gardening Requirements

Growing food in urban soils can be a challenge, and it is important that all food grown in GreenThumb gardens is done in the safest manner possible. Soil contamination comes from a variety of sources, including historic use of leaded gasoline, garbage dumps, old building materials that may contain peeling paint, air and water pollution, and other sources. Visit Cornell's Healthy Soils, Healthy Communities website for more information:

blogs.cornell.edu/healthysoils/

GreenThumb Policies:

GreenThumb follows the framework for understanding urban soils outlined in the U.S. Environmental Protection Agency (EPA) document *Reusing Potentially Contaminated Landscapes: Growing Gardens in Urban Soils*.¹

Minimize the likelihood of heavy metals entering your food by adhering to these GreenThumb requirements:

- Grow any fruits and vegetables that are available for human consumption using best practices that minimize the likelihood of contact with potentially contaminated soil. This includes growing all fruits and vegetables in raised beds and placing barriers (like landscape fabric) between these areas and the surrounding soil. Alternative methods for meeting this requirement may be considered and are subject to approval by GreenThumb. Please contact your Outreach Coordinator for next steps.
- Keep all play areas, seating areas, pathways, and other areas with exposed soil covered in mulch (i.e. wood chips), grass, or another ground cover. This prevents dust migration and splash back on crops, and protects against human exposure when gardening.
- Every fall or spring, fill each raised bed back to the top with a couple inches of compost and spread a couple inches of new woodchips over the garden paths.
- GreenThumb will use reasonable efforts to assist the garden group in complying with this requirement, subject to the availability of resources.

For free lumber, soil, compost, wood chips, and mulch, you can pick up request forms at any GreenThumb workshop. In addition to the requirements above, GreenThumb recommends:

- Add organic matter such as compost to your soil. Organic particles may bind with metals and help prevent them from being absorbed by your plants.
- Keep pH levels close to neutral and make sure drainage is adequate. This helps to assure that the contaminants do not move in your soil. Your ideal pH level is between 6.5 and 6.8. If soils contain heavy metals, a pH closer to 7.0 is better.
- Wear gloves when gardening and thoroughly wash hands after gardening. Shake off any excess soil from boots and clothes before going home.
- Thoroughly wash produce and peel root vegetables before eating.

¹ Download a copy of this document at epa.gov/sites/production/files/2014-03/documents/urban_gardening_fina_fact_sheet.pdf

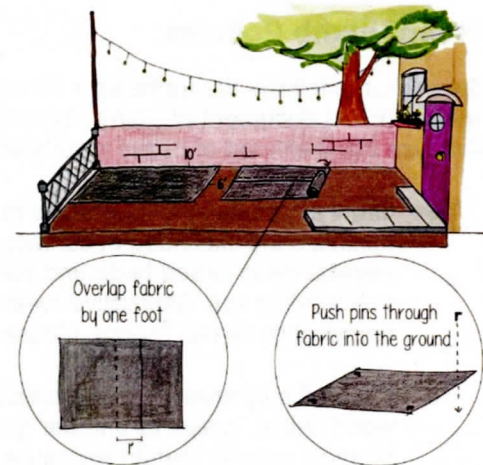
Raised Beds

For more detailed information about building raised beds, please see the GreenThumb Gardener's Handbook. Registered GreenThumb garden groups can request free soil, compost, lumber, and woodchips through their GreenThumb Outreach Coordinator.

1. Build a raised bed. Your bed can be one level, double level, or even triple! Build double raised beds if you plan to grow root vegetables or any vegetables with deep roots such as tomatoes, kale, collards, corn, and squash, which ensures that fruit and vegetable crops have enough space for their roots to grow without contact or intermingling with existing site soils. A single-level raised bed is fine for herbs and baby leafy greens such as arugula.
2. Line your raised bed with landscape fabric. GreenThumb keeps a limited amount on hand so ask your Outreach Coordinator for some when you're building raised beds.
3. Fill your raised beds all the way to the top with a mix of topsoil and compost.
4. Cover the pathways between raised beds and all over the garden with at least 3" of woodchips (larger pieces) or at most 3" of mulch (smaller, partially broken down pieces).

Every fall or spring, fill each raised bed back to the top with a couple inches of compost and spread a couple inches of new woodchips over the garden paths.

Roll out and pin landscape fabric.



Additional Resources

Visit the following resources for more information about safe soil practices:

- EPA publication on Growing Gardens in Urban Soils: epa.gov/sites/production/files/2014-03/documents/urban_gardening_fina_fact_sheet.pdf
- GreenThumb Gardener's Handbook: nyc.gov/parks/greenthumb
- Cornell University Healthy Soils, Healthy Communities: blogs.cornell.edu/healthysouls/
- Cornell Waste Management Institute's Dept. of Crop & Soil Sciences: cwmi.css.cornell.edu/soilquality.htm
- NYC Department of Health and Mental Hygiene: www1.nyc.gov/site/doh/health/health-topics/urban-gardening.page
- NYC Urban Soils Institute: usi.nyc
- NYC Compost Project: www1.nyc.gov/assets/dsny/site/our-work/reduce-reuse-recycle/community-composting

Construct container boxes on top of fabric.

