City Blossoms has been co-designing and building kid- and youth-driven outdoor classrooms for over 10 years. We collaborate with students, parents, educators and neighbors, and we aim to create safe green spaces that provide opportunities for educational and social growth.

Our partners often decide to include raised beds in their garden designs, and we frequently get questions about how to build them. There are lots of ways to construct raised beds and a wide range of materials to choose from. Here are a few ideas on different materials to consider, along with information about how we tend to construct raised beds.

**WHAT TO BUILD WITH:** We highly recommend using lumber that is 2 inches thick. This will help increase the lifespan of your raised beds and will limit how much your beds bow as they age. Here are some different wood options to consider:

- **Untreated Cedar:** Our favorite option when possible. A more expensive choice, and usually sold only at lumberyards, but it’s pest-resistant, attractive, safe for food production, biodegradable, and has a life expectancy of 5-7 years. If you get the knotty-grade cedar as opposed to the clear-grade, you’ll save money.

- **Treated Wood:** Less expensive than cedar, and available at most hardware stores. Although chemically treated wood resists fungal destruction and decay, giving it a life expectancy of 15+ years, it may not be safe for food production.

- **Untreated Pine:** Less expensive than treated wood and cedar, and available at many hardware stores. This option is not naturally pest-resistant, has a life expectancy of 4-5 years, and is safe for food production.

- **Recycled Wood:** Usually the cheapest (and sometimes a free) option. Its lifespan varies but 3-4 years is a good estimate. It may be hard to determine if this wood is safe for food production.

- **High-Density Polyethylene or Composite Wood:** A mix of recycled wood and plastic, or completely plastic. This is more expensive than treated wood, easy to work with, comes in a few different colors, and has a life expectancy of 20+ years.
Other materials to experiment with: cinder blocks (may not be safe for edible crops), hay bales, logs, stones, bricks, metal-sheeting.

**WHY USE RAISED BEDS:** Some advantages of raised beds are...
- They create growing space using healthy soil or compost
- They prevent soil compaction and provide good drainage
- Due to their height, they may help people with different physical abilities garden more comfortably, making gardens more accessible
- They increase and organize growing space in small areas
- They control weeds

**WHERE TO PLACE RAISED BEDS:** Depending on what you’re planting, consider sunlight, water access, and terrain when deciding where to place your raised beds.

**HOW TO BUILD A CEDAR RAISED BED:** Here are some directions for building a 3ft x 3ft x 1ft cedar raised bed, which you can install on top of soil.

**Building Materials:**
- 2+ people
- Four 4”x4” untreated posts cut to 13”
- Eight 2”x6” untreated cedar boards cut to 3’ pieces
- Approximately 32 3” deck screws/outdoor wood screws
- Drill and bits
- (Optional) Six ½” metal straps*
- (Optional) Approximately 12 1” deck screws/outdoor wood screws*
- (Optional) Six ½” PVC pipes cut into 8” segments*

*These are to create season-extending crop cover, and can also be added after you have installed your raised bed.

**Planting Materials:**
*Compost mix:* there are many soil calculators available online to help you estimate how much soil you will need for your new raised bed.

*Mulch:* spreading natural shredded mulch around your new plants is like giving them a protective blanket. It can help limit the growth of weeds, regulate soil temperature, and increase water retention.

*Recycled cardboard:* putting down cardboard before you fill your new raised bed with soil will help deter weeds. It’s also a great way to reuse cardboard boxes.
**Steps:**

1. Cut the 2”x6” boards to the planned length and width of the bed (or ask the lumberyard to cut them).
2. Cut the 4”x4” posts to the height of the bed + a few extra inches.
3. Make a side panel by screwing two 2”x6” boards to two 4”x4” posts, using a triangular shape with three screws each side. Make sure the top board is flush with the posts.
4. Turn panel upside down and add additional panels the 4”x4” posts, creating the three other sides of the raised bed.
5. Optional - Attach PVC pipes every 2 ft (or so) along the sides of the beds to be able to build season-extending crop cover.
6. Clear the selected place for your bed by removing weeds and grass.
7. Dig your 4”x4” posts into the ground until the whole bed is level, securing it in its new spot.
8. Cover the ground inside the bed with a thick layer of cardboard to prevent weeds from growing.
9. Fill your bed to the top with soil mix, which will settle in a few days.
10. Optional - if your raised bed is in a weedy area, make a cardboard-and-mulch border to keep unwanted roots from sneaking in through the bottom of your bed.
11. Plant some of your favorite veggies, flowers, or herbs.
12. Cover the soil with mulch after the seedlings get themselves established, being sure to leave a bare circle around the base of plants so that they can breathe.
13. Enjoy the new things you grow!

If you have any questions about where to source materials, or want to share a picture of your new raised bed, please reach out to willa@cityblossoms.org!