



Design Considerations

As development becomes more dense, the places in which to incorporate trees and other landscaping is increasingly limited to spaces on rooftops and over parking garages or habitable space. We are all familiar with renderings of projects that depict such amenity decks as lush environments complete with significant trees to provide shade.

To realize these visions, adequate growing space must be provided. The structural analysis and design to support the significant weight of plants and soil should be considered early-on in the planning process, if costly changes are to be avoided later. If trees are placed in planters barely

larger than the initial volume of their roots, no amount of subsequent care will allow them to attain anywhere near their full potential. Such plantings will remain static and ultimately fail.

Including 50% or more of locally-indigenous plants helps people become more connected to our place and provides habitat. All plants selected should be easy to maintain species that will require little supplemental water once established. Minimum soil required to support the growth of healthy plants is as follows, based on height or canopy at maturity:



Trees:

Canopy Diameter

15' - 19'
20' - 24'
25' - 29'
30' - 34'

Soil Volume

220 cu. ft.
400 cu. ft.
620 cu. ft.
900 cu. ft.

Note: trees also require 42" minimum soil depth

Shrubs, Perennials + Ground Cover

Height

< 1'
1' - 8'
9' - 15'
15' - 40'

Soil Depth

18"
24"
36"
42"