

Intensive Roof Garden



The roof garden began in an informal way back in 1995 through the efforts of Property Manager, Mike Moody, a plant aficionado and seasoned gardener. Already a treasured gathering space for tenants, it has evolved into a 6,500 square foot cedar deck, resplendent with flowers, vines and bushes – many of which have been grown from seed. There are also a number of large planters that hold trees and perennial shrubs that can winter over on the roof. This fabulous outdoor space offers spectacular downtown views, including one of the CN Tower.

The roof garden is a relaxing destination for summer visitors and tenants at 401 Richmond. It provides an interesting meeting place for lunch breaks, celebrations or just a place to relax in the green oasis.

Garden Installation



The cedar deck provides an air pocket over part of the third floor roof, which not only helps to protect the roof membrane from freeze-thaw stretching but provides a layer of winter insulation for the suites underneath. Similarly, the roof garden deck and plants provide summer shade which serves to cool the suites that lie directly beneath.

The trees and shrubs in the roof garden work to mitigate air pollution by trapping particulates and absorbing gaseous emissions that arise from the busy streets surrounding the building. Similarly, the many containers trap and hold rainfall preventing polluted stormwater runoff from leaving this part of the roof. The roof garden affords a great private and public benefit, attracting visitors and tenants throughout the year.



"In a building where the creative arts flower, perhaps it's fitting that the once-sterile roof is flowering as well. What's even more incredible is that this lush, verdant oasis has been achieved by one man - not a horticulturalist, but a building manager with a newly minted green thumb - in less than 10 years"
Canadian Gardening Magazine, Summer 2004



Extensive Roof Garden



In September 2005, another 2,600 square feet of roof garden was added covering a blank roof top to the east of the deck. This new piece of greenery is an extensive green roof - quite different from the existing intensive green roof with boxes of flowers and shrubs. Rather than being perched atop a cedar deck, this installation goes directly on to the rooftop creating a carpet of succulent sedum plants.

Extensive green roofs are light weight and easily installed. This new garden provides a visual extension to the intensive roof garden and adds to the sense of being in a natural landscape despite it's height from the ground. There were also small 100 square foot green roofs installed on two of the existing heritage skylights showing that no roof is too small to green!

Garden Installation



The extensive green roof was developed and installed by Xero Flor. It is a light-weight pre-seeded vegetated mat that is grown on light sandy soil near Woodstock, Ontario. The mats can be cut to size and installed easily over any roof. The green roof is made up of a fleece mat, a coiled plastic mattress where roots and planting media adhere, and the roll of sedum plants laid over the top. Xero Flor originated in Germany in the early 1970's and has been available across Canada during the last few years.

Green roofs like this are another means of acting locally to promote social and environmental urban revitalization. As well as provide a lush common space for tenants, and innovatively adapt a heritage building.

An extensive green roof provides a number of structural, environmental, and building benefits:

- protects the roof membrane
- improves both heating and cooling in the building
- attracts wildlife
- mitigates urban heat island effect
- assists in reducing stormwater runoff
- reduces air pollution
- provides a lush outdoor space for tenants and visitors to enjoy

