Location: Downtown Austin

Project type: High-rise residential condominium

Year installed: 2010

Description: The Austonian green roof is a privately accessible terrace serving as a backyard for residents of the building. The terrace offers a place to relax, cook, entertain and swim. The terrace is more than 12,000 square feet in size. It sits on the top of the building’s ten-story pedestal. Construction is cast-in-place concrete.

Green roof area: 6,420 square feet

Green roof type: Extensive, monolithic, 4 – 7 inches soil depth (616 square feet) and intensive, monolithic, 16 – 18 inches soil depth (5,804 square feet) with two tree wells 5 feet deep.

Reason for green roof: Aesthetic, amenity, reduce ambient temperature

Green roof components: Garden Roof Assembly, American Hydrotech

Vegetation: Over 65 native and adaptive drought-tolerant plants including two clusters of Red Oak trees, ground cover, lawn, shrubs, and an herb garden.

Water use: Pressurized irrigation system using HVAC condensation collected in eight 1,600 gallon tanks.

Amenities: Pool, fountain, cooking area, dog park, passive gathering spaces

Lessons learned: Sun/shade modeling and calculating solar reflectivity from adjacent tower glazing systems are important to determine appropriate plant species and location. Garden will be monitored during the first year and modified accordingly to assess plant growth and reflectivity throughout the year. Future high-rise development may affect the sun/shade aspect of the garden and its microclimate requiring modifications to plant types and locations.