

## Materials and Vegetation

- **High-albedo surfaces:** Use light-colored paving and wall finishes (high solar reflectance) on courtyard floors and walls to reduce heat absorption and mitigate local heat buildup  
{category: Materials and Vegetation, sub\_category: High-Albedo Materials, climate\_type: all, goal: Thermal Comfort}
- **Green cover:** Plant trees, shrubs and groundcover in courtyards to provide shade, evaporative cooling and improved air quality. Use native/drought-tolerant species to minimize water use.  
{category: Materials and Vegetation, sub\_category: Vegetation Cover, climate\_type: all, goal: Thermal Comfort & Biodiversity}
- **Water elements:** Integrate fountains, ponds or rain gardens in courtyards for evaporative cooling and aesthetic appeal. Shade these water bodies to increase effectiveness.  
{category: Materials and Vegetation, sub\_category: Water Features, climate\_type: all, goal: Thermal Comfort & Aesthetic}
- **Permeable paving:** Choose porous or permeable paving materials (e.g. gravel, pavers, green swales) to allow rain infiltration and reduce runoff, which also cools the surface.  
{category: Materials and Vegetation, sub\_category: Permeable Surfaces, climate\_type: all, goal: Water Management & Cooling}
- **Shade structures with vegetation:** Incorporate green pergolas, trellises covered with vines or planted living walls to create shaded courtyard zones that blend structure with nature.  
{category: Materials and Vegetation, sub\_category: Shade Structures, climate\_type: all, goal: Shading & Greenery}