

# 5

## Playground Surfacing and Edging

Implement resilient, easy to maintain, inclusive surfacing and edging



Image Credit: Earthscape, McMaster Children's Centre, Hamilton ON

**Inspiration:** Universally accessible poured-in-place rubber surfacing is integrated with boulders and other climbing features to create edges and transitions between spaces while also offering play value.



Image Credit: Michelle Mathis Silver Falls State Park, Oregon

**Inspiration:** Boulders or logs used as edging for loose play surfacing in nature play areas



Image Credit: Martins Park Boston Martins Park, Boston MA

**Inspiration:** A seamless transition between play surfacing and pathway creates a barrier-free play area for all to enjoy. Contrasting colours between the play area and the circulation route define zones and create clear paths of travel.

### Background & Rationale

- Material selection for playground surfacing and edging should be informed by the usage intensity of the site, accessibility, cost, character, play value, lifespan, and maintenance and environmental considerations.
- Many public engagement participants expressed concerns about safety in Courtenay's parks, including presence of unsafe garbage and debris in playground areas. All surface types will require ongoing maintenance and cleaning to support safe and accessible play spaces. Unitary surfaces such as poured-in-place rubber have high degrees of visibility and are easiest to maintain to keep debris-free.
- Poured-in-place rubber surfacing has many advantages including resiliency, fostering inclusive play, lifespan, and maintenance. However, it has a much higher initial cost than other surfacing types and capital budgets may not be able to support rubber surfacing in all of Courtenay's playgrounds. Priority should be given to Community Park Playgrounds and select Neighbourhood Park Playgrounds.

### Design Standards

#### Surfacing

- Plan the appropriate surfacing type according to the playground classification:
  - » For Community Park Playgrounds, integrate poured-in place rubber surfacing for the main play areas, including all areas surrounding universally accessible play features.
  - » Where budget or other factors do not permit the entire play area to be poured-in-place rubber, consider engineered wood fiber or wood chips in select supporting areas.
  - » For Neighbourhood Park Playgrounds, integrate poured-in-place rubber surfacing, engineered-wood-fiber or wood chips, to be determined on a site-by-site basis.
  - » For Community and Neighbourhood Park Playgrounds, consider use of synthetic turf (e.g. mounds, hills) in limited areas for accessibility, longevity, and play value. Locate playgrounds away from environmentally sensitive areas to reduce environmental impacts (see Standard 2).
  - » For Nature Parks, or nature play areas in Community or Neighbourhood Park Playgrounds, integrate engineered wood fiber or wood chips. Sand, sod, or earth / soil may also be used in areas around lower-height structures (450mm or less per CSA standards).
- Install all play surfaces in fall zones to proper thicknesses as indicated by CSA safety standards and manufacturer's recommendations. Extend protective surfacing in all directions from the play equipment, within the fall-zone identified by the equipment manufacturer.

## Design Standards (cont'd)

- Ensure unitary surfaces (e.g., poured-in-place rubber, synthetic turf) are installed with min. 2% cross slopes to drain to area drains or other integrated stormwater management strategies (e.g., rain gardens, swales). Install surfacing sub-bases to required depths and compaction per manufacturer's standards to avoid differential settlement.
- If mixing surface types (e.g., poured-in-place rubber surfacing and engineered wood fiber) plan pathways or other transition zones between materials to limit loose materials spilling over and impacting safety, accessibility, and ongoing maintenance.
- Where one surface type transitions to another (e.g., poured-in-place rubber to cast-in-place concrete), install surfaces flush to create barrier-free paths of travel. Avoid minor grade changes, which can create tripping hazards or other mobility challenges.
- Plan surface types with consideration for thermal comfort (e.g., dark rubber play surfacing can retain heat and contribute to heat island effect). Choose light colours and plan in coordination with shade trees and shade structures (see Standard 9).

## Edging

- Plan the appropriate edging type according to the playground classification:
  - » For Community Park Playgrounds, add cast-in-place concrete edging surrounding poured-in-place rubber surfacing. Integrate composite bender-board edging or untreated timber edging surrounding loose surfaces such as engineered wood fiber or wood chips.
  - » Consider strategies to reduce the amount of cast-in-place concrete edging where possible, including integrating boulders or logs, placing rubber play surfacing next to new or existing concrete pathways in good condition, and installing surfacing with no edge (on a turn-down slope) adjacent to loose surfacing like engineered wood fiber.
  - » For Neighbourhood Park Playgrounds, include cast-in-place concrete, composite bender-board, or timber edging (to be determined on a site-by-site basis)
  - » For Nature Park Playgrounds or nature play areas within Community or Neighbourhood Park Playgrounds, integrate timber edging, boulders, logs, or no edging.
- Cast-in-place concrete edging should be installed with a 2% cross-slope to drain towards nearest drainage structure or integrated green stormwater management strategy.
- Ensure edging is installed flush to adjacent surfaces for smooth, even transitions and to avoid tripping hazards.

## Additional Considerations

Creative playground surfacing can enhance play value and sense of place. Opportunities exist to create unique play experiences by integrating custom public art, imagery, and themes in poured-in-place surfacing or manipulating ground planes to include mounds, stepping stones, climbing hills or other play features that reflect the character of the Courtenay region.

