



Operations & Maintenance Manual

Project
Name Natural Playground

Project
Address



Maintaining your Space

This maintenance book is approved by Bienenstock Playgrounds. Each component, site furnishing and materials have been described below with intended use, and applicable maintenance procedures. Any maintenance or repairs that are not conducted in accordance with this book are not recommended without consultation with Bienenstock Playgrounds.. Please take photos and send them as attachments to your email when ordering a service call.

To order a service call or consultation please phone 1-800-306-3319 or send an email to service@naturalplaygrounds.ca



Component: 3' Easy Install Hill Slide Package



Manufacturer: Plastic Slide: RTS Plastics, Slide Package: Bienenstock Playgrounds

Supplier: Nature's Instruments 1-877-733-7456

Intended Age: 1.5 to 12 years

Intended Use: User must ride the slide to the bottom while sitting with feet facing forward (not head first or standing). Bottom of slide should be clear of obstacles and other riders before the next rider uses the slide. The slide is set into the hill to reduce injury due to fall heights.

Maintenance Procedure:

Made from: Slide: Plastic. Collar, Posts and Wing Walls: Cedar

- To maintain compliance with CSA Playground Standards the safety zone at the base of slide must be maintained according to manufacturers recommendations
- The horizontal collar is intended to force users to sit before riding the slide, this item must be intact at all times and should be inspected regularly for strength and rigidity.
- Regularly inspect slide for bubbling, cracking or surface defects
- Regularly inspect slide platform for cracks, splits and splinters (sand if required)





Component: Log Jam



Manufacturer: Bienenstock Playgrounds

Supplier: Nature's Instruments 1-877-733-7456

Intended Age: 5 years to 12 years

Intended Use: Balance, gross and fine motor fitness and development.

Maintenance Procedure:

Made from: Climber: Powder Coated Steel Footings, White Oak Logs, Aluminum Spacers

- Requires regular inspection to ensure stability.
- Requires regular inspection of rubber coverings over connection points to ensure that connections are not accessible to children.
- Regular inspection for rigidity and cracks in wood, splintering, large cracking and severe rotting.
- Cracks may be filled with Commercial Grade, Exterior Clear Silicone.



Component: Large Sideways Tree



Manufacturer: Bienenstock Playgrounds

Supplier: Nature's Instruments 1-877-733-7456

Intended Age: 5-12 years

Intended Use: Gross motor and creative play

Maintenance Procedure:

- Regular inspection of the branch unions of the tree
- Regular inspection of the branch stability
- Regular inspection for sharp edges. This can be rectified through gentle sanding
- The bark on the tree will naturally erode and fall away, and should be seen as a free parts learning activity.
- When the tree is completely free of bark it may be treated with water sealant for increased longevity.





Component: 5' Climbing Wall



Manufacturer: Bienenstock Playgrounds

Supplier: Nature's Instruments Inc. 1-877-733-7456

Intended Age: 5 - 12 yrs

Intended Use: Gross Motor Play

Maintenance Procedure:

Made from: Oak & Cedar

- Regular inspection of handholds.
- Regular inspection of all wood for large splits or cracks. Fill with exterior grade clear silicone if necessary.
- Regular inspection for stability of collar posts & collar.
- The bark on the oak logs will naturally erode and fall away, and should be seen as a free parts learning activity.



Component: V-Bridge



Manufacturer: Incord Industries

Supplier: Nature's Instruments 1-877-733-7456

Intended Age: 5 years to 12 years

Intended Use: Balance, gross and fine motor fitness and development.

Maintenance Procedure:

Made from: V-Bridge: Steel Core wrapped in Polyester Rope.

Entrance: Walnut and Galvanized Strut Supports

V-Bridge

- Requires regular inspection for fraying or cuts in Polyester Rope.
- Requires regular inspection of connection points to ensure stability.
- Requires regular inspection of rubber coverings over connection points to ensure that connections are not accessible to children.
- Requires regular winter inspection and removal of snow on V-Bridge room.

Entrance

- Regular inspection for stability.
- Regular inspection for rigidity and cracks in wood, splintering, large cracking and severe rotting.
- Cracks may be filled with Commercial Grade, Exterior Clear Silicone.



Component: Spider Web Climber



Manufacturer: Incord Industries

Supplier: Nature's Instruments 1-877-733-7456

Intended Age: 5 years to 12 years

Intended Use: Balance, gross and fine motor fitness and development.

Maintenance Procedure:

Made from: Net Climber: Steel Core wrapped in Polyester Rope. Posts: White Oak Spider Web Net

- Requires regular inspection for fraying or cuts in Polyester Rope.
- Requires regular inspection of connection points to ensure stability.
- Requires regular inspection of rubber coverings over connection points to ensure that connections are not accessible to children.

Posts

- Regular inspection for stability.
- Regular inspection for rigidity and cracks in wood, splintering, large cracking and severe rotting.
- Cracks may be filled with Commercial Grade, Exterior Clear Silicone.



Component: Tunnel w Viewing Platform



Manufacturer: Bienenstock Playgrounds

Supplier: Nature's Instruments 1-877-733-7456

Intended Age: 1.5 to 12 years

Intended Use: For children to have interpretive, creative and dramatic hands-on experience.

Maintenance Procedure:

Made from: Cedar Decking and Railing, Pressure Treated Structure, Hardwood Retaining Logs and Pre-cast Reinforced Concrete Tunnel.

- There are no chemicals, insecticides or preservatives added to the logs. The species of trees are chosen for their natural resistance to rot.
- Logs have been sanded to minimize sharp edges and splintering.
- All logs will eventually rot and should be used as a learning experience .
- Regular inspection for stability, rigidity, cracks in wood, splintering, large cracking and severe rotting. Cracks may be filled With Commercial Grade Exterior Clear Silicone.
- Regular inspection for spalling or cracking of tunnel.





Component: Hexagonal Tree Deck



Manufacturer: Bienenstock Playgrounds

Supplier: Bienenstock Playgrounds 1-800-306-3319

Intended Age: 5 years to 12 years

Intended Use: Alternative Raised Surface. Creative and dramatic play.
Access platform for various climbing components.

Maintenance Procedure:

- Made from: Posts: Oak, Decking and Railing: Cedar, Structure: Pressure Treated
- Regular inspection for stability of structure, posts and railings.
 - Regular inspection of visible nuts for tightness
 - Annual inspection of growth of tree. Cut decking back to ensure approximately 1" gap at all times between decking and tree.



Component: Cargo Net Climber



Manufacturer: Incord Industries

Supplier: Nature's Instruments 1-877-733-7456

Intended Age: 5 to 12 years

Intended Use: Balance, lower body gross and fine motor.

Maintenance Procedure:

Made from: Steel Core wrapped in Polyester Rope

- Requires regular inspection for fraying or cuts in Polyester Rope
- Requires regular inspection of connection points to ensure stability
- Requires regular inspection of rubber covering over connection points to ensure that connections are not accessible to children.





Component: Durolawn Surfacing



Manufacturer: Durolawn.com

Supplier: Nature's Instruments 1-877-733-7456

Intended Age: 6 months to 12 years

Intended Use: Alternative Surfacing Material. For access, egress, accessibility, general play and playground safety surfacing.

Maintenance Procedure:

Made from: Styrene-butadiene Copolymer (green rubber) and Kentucky Blue Grass, or sod purchased from a local supplier.

- Water regularly according to weather conditions
- Roll as needed to smooth out lumps (complete this when grass is soft)
- Overseed only bare spots as needed with Rhizomatous Perennial Rye seed.
 - spread seed liberally and water.
- Cut grass as desired
- Do not aerate
- Durolawn should be blown with a power blower to ensure foreign materials and debris do not plug the openings and prevent grass from growing through.



Component: Sand Surface



Manufacturer: Various Local Landscape Supply Stores or Quarries

Supplier: Various Local Landscape Supply Stores or Quarries

Intended Age: 6 months to 12 years

Intended Use: Impact rated safety surface. Creative, free and construction play. Water may be added to increase play opportunities.

Maintenance Procedure:

- Made from: Granitic Sand (washed concrete sand)
- with depths of 300mm (12") impact attenuation of 2.5m height can be obtained
 - Requires frequent inspection for foreign matter and objects.
 - Requires periodic raking, leveling and turning over of compacted sand
 - Requires periodic addition of sand every 1-3 years



Component: Mulch Surfacing



Manufacturer: Various Local Landscape Supply Stores

Supplier: Various Local Landscape Supply Stores

Intended Age: 6 months to 12 years

Intended Use: Alternative natural surfacing

Maintenance Procedure:

Made from: Wood and Bark Chips

- Regular inspection for foreign objects and debris
- Regular raking to smooth out the surface and to contain wood chips in desired location
- May require a top up between 6-12 months from first installation and every year or every second year after that
- Regularly check to ensure a minimum depth of 100mm (4") to achieve proper coverage, top ups should bring the depth up to 150mm (6")





Component: Engineered Wood Fibre



Manufacturer: Fibre Top (Gro-Bark) 905-846-1515

Supplier: Gro-Bark 905-843-1515

Intended Age: 6 months to 12 years

Intended Use: Alternative Surfacing. Impact rated safety surface. Wheelchair accessible, weed free loose construction material.

Maintenance Procedure:

Made from: Virgin wood fibers.

-Regular inspection for foreign objects and debris.

-Regular raking to smooth out the surface and to contain wood chips in desired location

-May require a top up between 6-12 months from first installation and every year or every second year after that.

-Regularly check to ensure a minimum depth of 300mm (12") to achieve the correct impact rating to comply with the CSA Playground Standard



Component: Sod Surfacing



Manufacturer: Various Local Landscape Supply Stores or Sod Suppliers

Supplier: Various Local Landscape Supply Stores or Sod Suppliers

Intended Age: 6 months to 12 years

Intended Use: Alternative Surfacing Material. For access, egress and general play.
Sod alone is not intended as an impact rated surface.

Maintenance Procedure:

Made from: Kentucky Blue Grass

- Water grass regularly according to weather conditions
- Roll grass as needed to smooth out lumps (complete this when grass is soft)
- Overseed lawn as needed with Sun/Shade seed. -topdress lawn with 1/4" rich organic soil, spread seed liberally and water. This process can be used to fill in bare spots and/or as a general way to improve the health and vigor of the grass.
- During overseed application refrain from using the grass area for 2-3 weeks to allow for the seed to germinate.
- Cut grass as desired



Component: Limestone Screenings Path



Manufacturer: Various Local Landscape Supply Stores or Quarries

Supplier: Various Local Landscape Supply Stores or Quarries

Intended Age: 1.5 to 12 years

Intended Use: Alternative Surfacing Material. For access, egress and accessibility.

Maintenance Procedure:

Made from: Base: Compacted Gravel, Topping: Limestone Screenings

- Requires topping up at 2-5 years by evenly spreading Limestone Screenings, smoothing the path and compacting to 98% SPDD
- Requires frequent inspection for foreign matter and objects.
- Requires periodic raking and or sweeping to allow for smooth rolling of bikes and wheelchairs



Component: Unit Pavers



Manufacturer: OAKS Concrete Products 'Ridgefield Plus' -Cedar Blend Colour

Supplier: Oaks Concrete Products (905) 843-7335

Intended Age: 1.5 to 12 years

Intended Use: Alternative Surfacing Material. For access, egress and accessibility.

Maintenance Procedure:

Made from: Base: Compacted Gravel, Topping: concrete pavers.

- Requires bi-annual inspection for heaving
- Frequent sweeping is required to allow for smooth rolling of bikes and wheelchairs
- Occasional sealing with a concrete sealer
- Occasional weeding of weeds that may grow between pavers



Component: Narrow Falls/Watercourse



Manufacturer: Bienenstock Playgrounds

Supplier: Bienenstock Playgrounds

Intended Age: 1.5 years to 12 years

Intended Use: For children to have an interpretive, creative and collaborative play experience.

Maintenance Procedure:

Made from: Granite, Hardwood Logs & Concrete
Concrete Watercourse and Granite Stones

-Regular inspection for loose large stones, loose stones may be re-concreted to stabilize

-Regular inspection for large cracking in the concrete watercourse. Cracks may be filled with Commercial Grade Crack Filler.

Hardwood Logs

-There are no chemicals, insecticides or preservatives added to the logs. The species of trees are chosen for their natural resistance to rot.

-Regular inspection for stability, rigidity, cracks in wood, splintering and severe rotting. Cracks may be filled with Commercial Grade Exterior Clear Silicone

-Regular inspection for proper flow of water



Component: Water Stump



Manufacturer: Bienenstock Playgrounds

Supplier: Nature's Instruments 1-877-733-7456

Intended Age: 2+

Intended Use: Sensory experience to teach about action, reaction and water flow.

Maintenance Procedure:

Water Stump Made from: Hardwood Log, Flexible Piping and Toggle Faucet

-Regular inspection for stability of stump.

-Regular inspection for rigidity, cracks in wood, and splintering. Cracks may be filled with Commercial Grade Exterior Clear Silicone.

-Winterize the water line to the stump annually (no water may be present in the water line). Either blow out the system or gravity drain the water line to the Water Stump.

-Regular inspection of toggle faucet to ensure it turns off and on properly.

-Optional: treatment of Water Stump with Helmsman Spar Urethane

Deck Made from: Cedar Decking, Pressure Treated Structure

-Regular inspection for rigidity, cracks in wood, and splintering. Cracks may be filled with Commercial Grade Exterior Clear Silicone.



Component: Log Amphitheatre with Vertical Logs Seats



Manufacturer: Bienenstock Playgrounds

Supplier: Nature's Instruments 1-877-733-7456

Intended Age: 1.5 to 12 years

Intended Use: For children to have interpretive, creative and dramatic hands-on experience with nature.

Maintenance Procedure:

Made from: Cedar or Hardwood

- There are no chemicals, insecticides or preservatives added to the logs. The species of trees are chosen for their natural resistance to rot.
- Logs have been sanded to minimize sharp edges and splintering.
- All logs will eventually rot and should be used as a learning experience .
- Regular inspection for stability, rigidity, cracks in wood, splintering, large cracking and severe rotting. Cracks may be filled With Commercial Grade Exterior Clear Silicone.





Component: Horizontal Log Border



Manufacturer: Bienenstock Playgrounds

Supplier: Nature's Instruments 1-877-733-7456

Intended Age: 1.5 to 12 years

Intended Use: To retain loose materials. For children to have interpretive, creative, hands-on experience with nature.

Maintenance Procedure:

Made from: Cedar or Hardwood

- There are no chemicals, insecticides or preservatives added to the logs. The species of trees are chosen for their natural resistance to rot.
- Logs have been mitred and sanded to minimize sharp edges and splintering
- All logs will eventually rot and should be used as a learning experience
- Regular inspection for stability
- Regular inspection for rigidity and cracks in wood, splintering, large cracking and severe rotting
- Cracks may be filled with Commercial Grade, Exterior Clear Silicone



Component: Barrier Free Horizontal Log Border



Manufacturer: Bienenstock Playgrounds

Supplier: Nature's Instruments 1-877-733-7456

Intended Age: 1.5 to 12 years

Intended Use: To retain loose materials and allow for barrier free access. For children to have interpretive, creative, hands-on experience with nature.

Maintenance Procedure:

Made from: Cedar or Hardwood

- There are no chemicals, insecticides or preservatives added to the logs. The species of trees are chosen for their natural resistance to rot.
- Logs have been mitred and sanded to minimize sharp edges and splintering
- All logs will eventually rot and should be used as a learning experience
- Regular inspection for stability
- Regular inspection for rigidity and cracks in wood, splintering, large cracking and severe rotting
- Cracks may be filled with Commercial Grade, Exterior Clear Silicone



Component: Barrier Free Vertical Log Border



Manufacturer: Bienenstock Playgrounds

Supplier: Nature's Instruments 1-877-733-7456

Intended Age: 6 months to 12 years

Intended Use: To retain loose materials. For children to have interpretive, creative, hands-on experience with nature..

Maintenance Procedure:

Made from: Cedar or Hardwood

- There are no chemicals, insecticides or preservatives added to the logs. The species of trees are chosen for their natural resistance to rot.
- Logs have been fastened together to prevent movement
- All logs will eventually rot and should be used as a learning experience
- Regular inspection for stability
- Regular inspection for rigidity and cracks in wood, splintering, large cracking and rotting
- Cracks may be filled with Commercial Grade, Exterior Clear Silicone



Component: Willow Enclosures



Manufacturer: N/A

Supplier: Nature's Instruments 1-877-733-7456

Intended Age: 6 months to 12 years

Intended Use: For children to have interpretive, creative, hands-on experience with nature.

Maintenance Procedure:

Made from: Willow Rods, Willow Cuttings, Willow Shurbs

- Regularly inspect for branches that protrude at head level, trim branches back to main stem with pruning shears
- Keep the lower 1/3 pruned to sustain site line into the structure
- Regularly water will according to weather conditions. Willow requires more water than other vegetation.
- Regularly inspect locations where willow is tied together for ties that could protrude into the structure. Cut ties back or turn them to face upward.

