



Safety Inspection Report

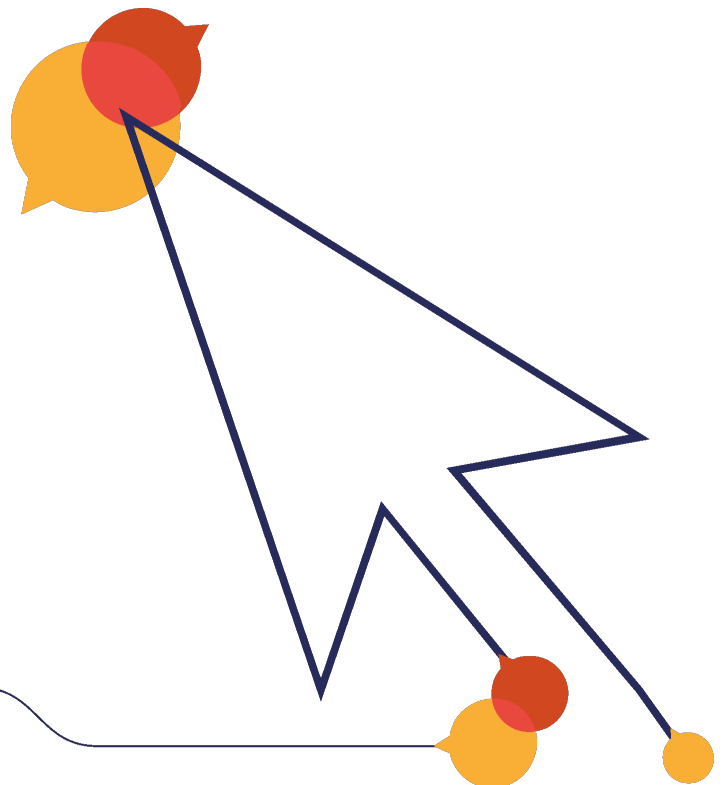
Post-installation Inspection

Connaught Park



Gravity Engineering Ltd

11 January 2023



Safety Inspection Report

Post-installation Inspection

Site name: **Connaught Park**
Date of inspection: **11 January 2023**
Inspector: **Craig Owen**



How to read your report

The assets on site are categorised as **Ancillary Items** or **Play Items**, and listed under those headings.

Each item is listed in the style shown in the image below, which contains labels to aid interpretation as follows:

- 1) The name of the asset
- 2) The manufacturer of the asset, if known,
- 3) The innate or default risk score of the asset, assuming it has no faults and complies with standards,
- 4) The actual risk score of the asset at the time of inspection, being the highest of the finding risks or the innate risk,
- 5) A statement about whether the item complies with the appropriate standards, including the names of those standards,
- 6) Details about findings, if any, including what is wrong (Description), what to do about it (Tasks), notes to aid understanding (Notes), and photograph(s) of the issue.

Primary Items

Sample Asset Name 1

Manufactured by Manufacturer Name 2

asset image here

Innate risk level: █ █ █ █ █

Actual risk level: █ █ █ █ █

Risk level:
█ Low

Potential risk score reduction:
█ 1

Remedial tasks:
█ 1



Surface: Grass

Standards: 5
EN 1176-1:2017, EN 1176-2:2017
The item and its surfacing (where applicable) meet with the requirements of the relevant standards.

Finding 6

Description Item is rusting in places.	Risk level: █ Low
Tasks Replace.	Risk score: █ 7
Note Two of the frame washers are rusting.	
Finding Photos	
asset image here	asset image here

Inspection SI0000142594. Report produced on 16/12/2019 at 12:11:07 4

Access



Innate risk level

Actual risk level

Risk level:

- Low
- Risk score as low as possible
- No remedial tasks

Litter Bin



Innate risk level

Actual risk level

Risk level:

- Very low
- Risk score as low as possible
- No remedial tasks

Lighting



Innate risk level

Actual risk level

Risk level:

- Very low
- Risk score as low as possible
- No remedial tasks

Fencing - Bow-Top



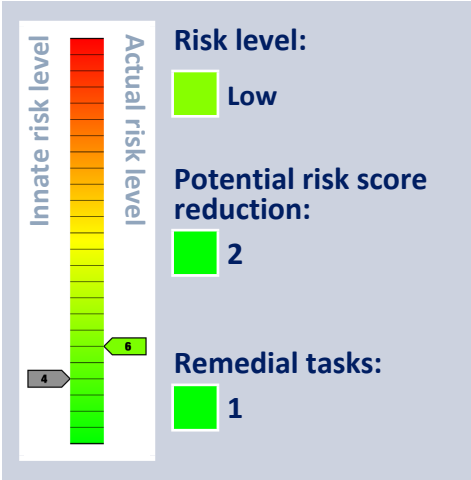
Innate risk level

Actual risk level

Risk level:

- Very low
- Risk score as low as possible
- No remedial tasks

General Surface - Tarmac



Maintenance Finding

Description

The surface is cracking.

Tasks

Repair.

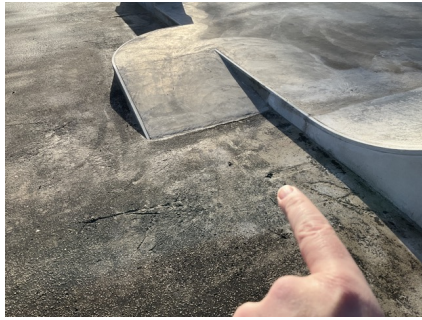
Note

Areas are cracking / cracked around the perimeter of the skate park. Repair.
Metal rod is exposed in front of the curved path. Repair.

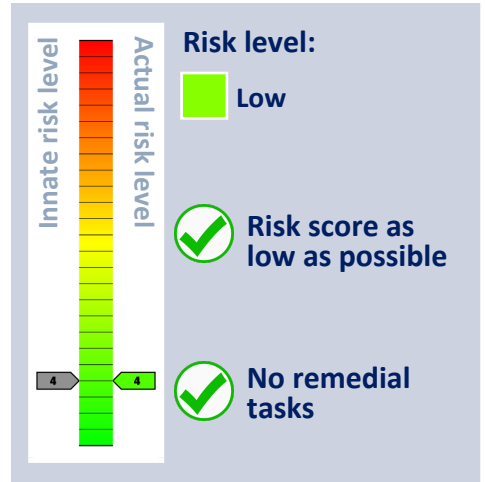


Finding Photos





General Surface - Concrete



Wheeled Sport - Stairs

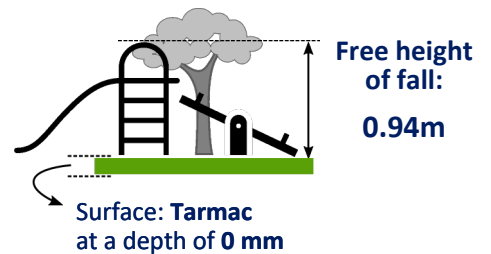
Manufactured by Gravity Engineering Ltd



Risk level:
High

Risk score as low as possible

Remedial tasks:
1



Standards:

EN 14974:2019

The item and its surfacing (where applicable) meet with the requirements of the relevant standards.

Maintenance Finding

Description

The surface is cracking.

Tasks

Read the notes for further action.

Note

Surface is cracking and damaged in areas around steps. Repair.

Risk level:

Low

Risk score:

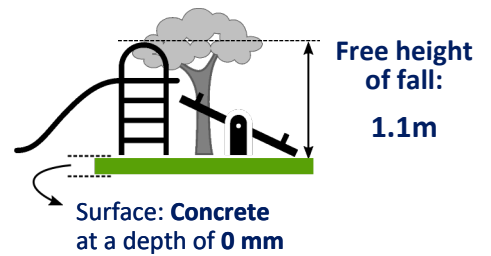
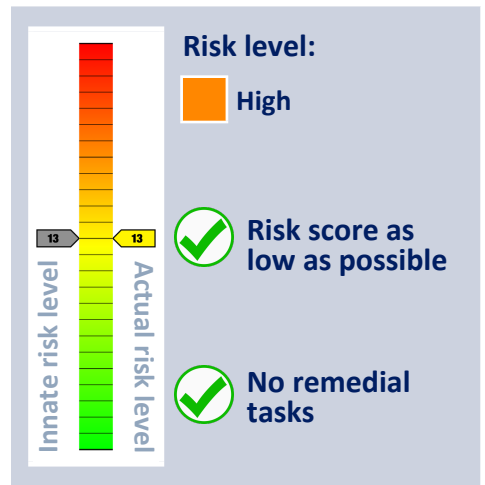
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Finding Photos



Wheeled Sport - Bowl

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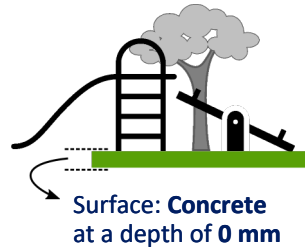
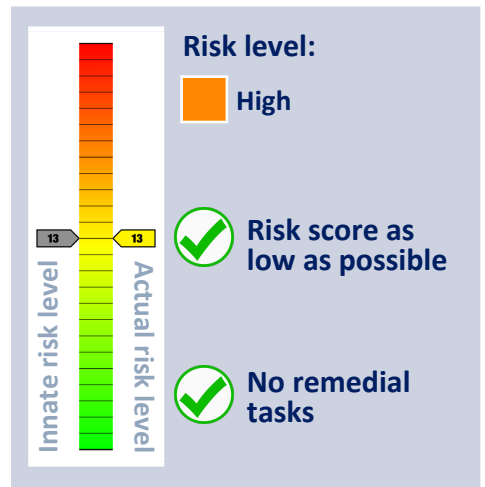
Standards: ✓

EN 14974:2019

The item and its surfacing (where applicable) meet with the requirements of the relevant standards.

Wheeled Sport - Roll-Over

Manufactured by Gravity Engineering Ltd



Standards:

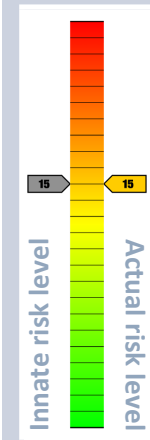


EN 14974:2019

The item and its surfacing (where applicable) meet with the requirements of the relevant standards.

Wheeled Sport - Street Course

Manufactured by Gravity Engineering Ltd

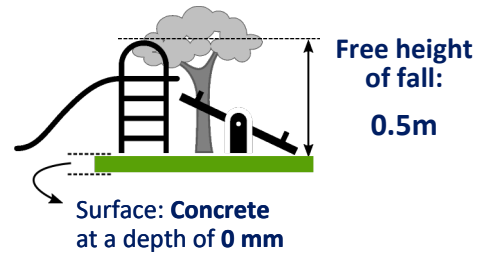


Risk level:

High

✓ Risk score as low as possible

✓ No remedial tasks



Standards:

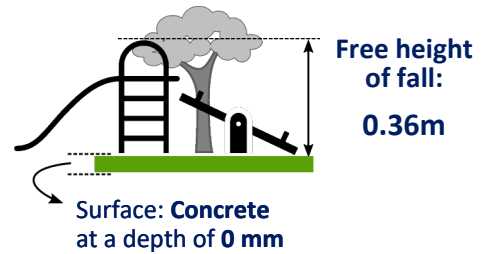
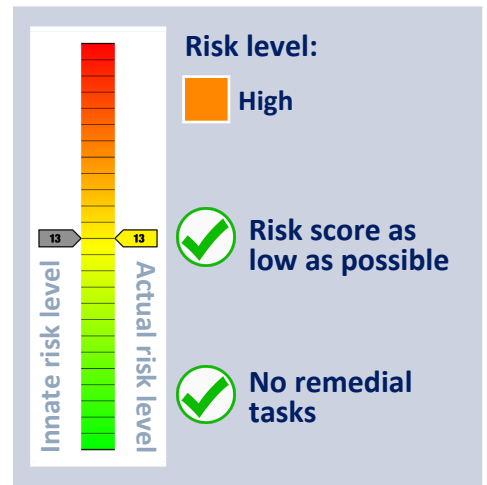


EN 14974:2019

The item and its surfacing (where applicable) meet with the requirements of the relevant standards.

Wheeled Sport - Grind Rail

Manufactured by Gravity Engineering Ltd



Standards:

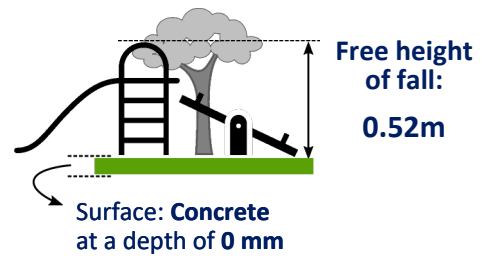
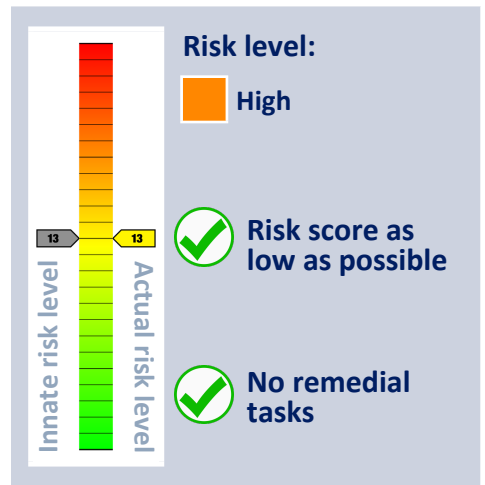


EN 14974:2019

The item and its surfacing (where applicable) meet with the requirements of the relevant standards.

Wheeled Sport - Grind Box

Manufactured by Gravity Engineering Ltd



Standards:

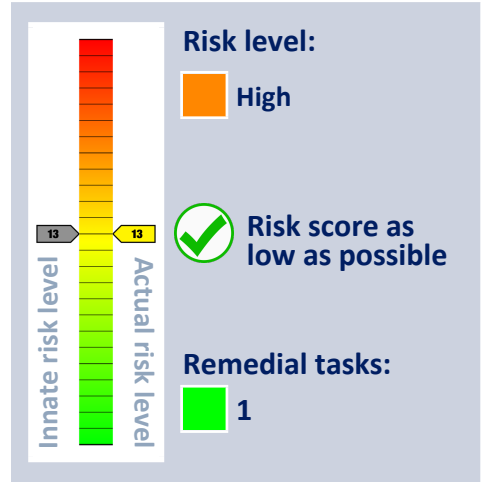


EN 14974:2019

The item and its surfacing (where applicable) meet with the requirements of the relevant standards.

Wheeled Sport - Curve Bank - With Kick Wall

Manufactured by Gravity Engineering Ltd

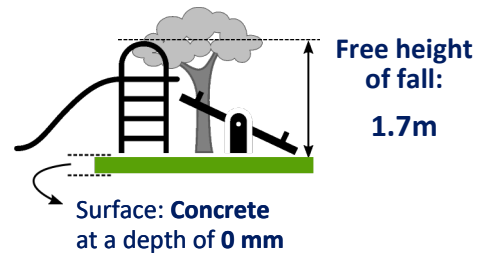


Standards:



EN 14974:2019

The item and its surfacing (where applicable) meet with the requirements of the relevant standards.



Maintenance Finding

Description

The surface is cracking.

Tasks

Read the notes for further action.

Note

Small holes at the transition near the curved path entrance.

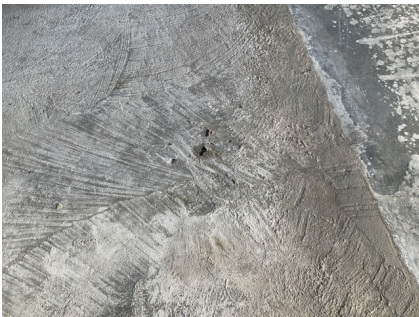
Risk level:

 Low

Risk score:

 6

Finding Photos



General Notes

The risk scores are calculated by plotting the likelihood of harm against the severity of the injury sustained. The likelihood is given a score of 1 to 5, and the severity is given a score of 1 to 5. In doing this a matrix is produced which gives a numerical assessment of the risk on a score of 1 to 25, and a judgement is made as to which risks are low, which are medium and which are high. Risk scores may be adjusted in the light of experience and therefore may not be exactly as per the table. For example, a score of 7 may be noted.

Risks are calculated in this way:

1. An assessment of the likelihood of harm taking place is made using the numbers 1 to 5, by following these descriptions:
 - a. 1 = Rare
 - b. 2 = Unlikely
 - c. 3 = Moderate
 - d. 4 = Likely
 - e. 5 = Certain
2. An assessment of the severity of the injury sustained is made using the numbers 1 to 5, by following these descriptions:
 - a. 1 = Insignificant
 - b. 2 = Minor
 - c. 3 = Moderate
 - d. 4 = Major
 - e. 5 = Catastrophic
3. The two numbers are multiplied to give a risk score on a scale of 1 to 25.
4. Scores of 1 to 7 inclusive are considered to be low risk and are considered to be tolerable where this is the innate risk of the item, but where remedial works are identified these should be undertaken,
5. Scores of 8 to 12 are considered to be medium risk and some control measures may be identified to reduce the risks to low, tolerable levels,
6. Score of 13 and above are considered to be high risk and urgent action is considered to be necessary to reduce the risks to tolerable levels.

General Notes

It is important to note that where an outcome is catastrophic, but for which the likelihood is rare this will present a score of $1 \times 5 = 5 =$ low risk. Similarly, a certain event for which the consequence is insignificant will present a score of $5 \times 1 = 5 =$ low risk. It is important to consider likelihood and consequence, and not just one of the factors in isolation.

The multiplication of the factors into a risk matrix is given here in Table 1, with a judgement made as to risk scoring indicated by colour.

Green = LOW risk, Amber = MEDIUM risk, Red = HIGH risk.

Table 1 – Risk Score Matrix

		Severity				
L i k e l i h o o d		1 Insignifi- cant	2 Minor	3 Moderate	4 Major	5 Catastro- phic
	1 = Rare	1 LOW	2 LOW	3 LOW	4 LOW	5 LOW
	2 = Unlikely	2 LOW	4 LOW	6 LOW	8 MEDIUM	10 MEDIUM
	3 = Moderate	3 LOW	6 LOW	9 MEDIUM	12 MEDIUM	15 HIGH
	4 = Likely	4 LOW	8 MEDIUM	12 MEDIUM	16 HIGH	20 HIGH
	5 = Certain	5 LOW	10 MEDIUM	15 HIGH	20 HIGH	25 HIGH

General Notes

Inspection Scope

The inspections are undertaken using the RPII's inspection scope.

Compliance with Standards

Inspections are undertaken with reference to the appropriate standards, which are listed next to each item. Compliance with these standards is not mandatory in law, but it is useful to know whether items comply or not. If we think a change is needed, then this is noted in our report. Non-compliance does not necessarily mean that a change is needed. Where a standard is undated the current version is applied, unless overlap periods are allowed by the standards committee at the time of update. The information provided herein is to assist the owner/operator to fulfil its responsibilities as detailed in the relevant standards. Other standards referenced within the listed standards do not form part of this inspection, unless they are also explicitly listed here.

The listed standards are relevant to all installations of equipment which are publicly accessible, including public parks, pay to play parks, schools, nurseries, public houses, holiday parks, indoor play centres, farm parks and the like. All equipment used in publicly accessible areas should meet with the requirements of the relevant listed standard.

Additionally, EN 1176-7 provides guidance on installation, inspection, maintenance and operation to owners/operators of equipment and ancillary items. In the United Kingdom the National Foreword forms an important part to the understanding and implementation of the recommendations set out in EN 1176-7. It clarifies the application of the document within the UK as best practice guidance, as the document has been used since its initial publication. Therefore the EN 1176-7 contains no requirement in the UK and needs to be read and implemented as guidance, with the use of the terms 'shall' therefore becoming a recommendation, as in the term 'should'.

Domestic equipment falls outside the scope of standards for publicly accessible spaces. Domestic play equipment has its own standard (BS EN 71 – Safety of Toys). Where domestic equipment can be identified this will be acknowledged in the report, but compliance may be assessed to the applicable standard relating to publicly accessible equipment.

When water play items, including spray parks, are inspected any comments concerning compliance within the inspection will refer to EN 1176. We have not assessed these against the requirements of EN 17232 (Water play equipment and features).

Compliance with standards is not always a clear-cut thing. Some interpretation can be needed, and our interpretation may differ from the interpretation of others. In some cases, we may decide not to note non-compliance in cases where we think it may mislead or be unhelpful so to do.



General Notes

What We Inspect

Annual and Post Installation inspections will take into consideration compliance with current standards and defects related to wear and vandalism. Items not listed in the report have not been included in the inspection. The inspection will cover the playground equipment and the active area (that area which is obviously part of the playground), nominally up to 3.0 metres around, the fence line if closer, or other areas as agreed.

Operational inspections only take into consideration defects related to cleanliness, equipment ground clearances, ground surface finishes, exposed foundations, sharp edges, missing parts, excessive wear (of moving parts), structural integrity, wear and vandalism. Routine visual inspections (if undertaken) relate only to the most obvious defects such as broken or missing parts, vandalism and issues created by severe weather conditions (the intention is to identify hazards created by storm damage).

The inspection is non-dismantling, non-destructive and does not include any structural, toxicology or impact assessments defined in the standard; however, the inspector will undertake a manual test for stability and if equipment fails under manual load, or any other hazard is identified as an unacceptable risk, the owner/operator will be notified as soon as practicably possible.

The inspector will access all reasonably accessible equipment and will assess all reasonably accessible parts above the standing surface. Where it is not possible to access parts of the equipment without employing an alternative means of access the report will record the action required by the owner/operator to ensure the continued safe use of the equipment. Ancillary equipment will be assessed using the inspector's knowledge and experience of the standards named in this document to ensure as far as is reasonably practicable the continued safe use of the items concerned. The owner/operator is responsible for the overall safety of the equipment and area. Inspectors who are trained to use ladders may use them where it is safe to do so, but if members of the public are present on site ladders may not be used to access the equipment.

What We Don't Inspect

The inspector will not undertake any of the following works unless specifically agreed in writing at the time of order:

Checking the depth and underlying structural integrity of any surface areas and/or carrying out any testing of impact absorbing properties of any surfaces. The identification of any corrosion, rot or other deterioration in any apparatus or equipment other than by an external inspection or the inspection of any equipment (or part thereof) that is underground or beneath the playing surface. Tightening any bolts, hinges or other fixing devices on any apparatus or equipment. Assessing or inspecting any electrical installations contained on any site and/or apparatus and/or equipment. Assessing or inspecting any water supplies and/or water features and/or any associated computerised systems (including carrying out any programming).



General Notes

The owner/operator should have a 'design risk assessment' provided by the manufacturer/designer of the area for the equipment and location in which the facility is installed.

We have inspected without dismantling or destruction and so some aspects of the relevant standards may not be testable on site.

The operator is responsible for managing risks of their provision and is required by law to carry out a 'suitable and sufficient assessment' of the risks associated with a site or activity and this inspection shall be considered as contributing to the operator's discharge of this responsibility.

Exposure to Risk

Exposure to acceptable levels of risk and challenge is essential to children's development and allows them to exercise their right to play. Therefore, it can be judged that levels of risk above low risk can be acceptable. The risk scores shown allow the operator to make a judgement after first considering the benefit of the activity to which the risk score relates.

Ownership

There may be cases where we report issues that are not the site owner's responsibility. It is not necessarily possible for us to determine who owns what, and in any case we need to bring all risks to your attention if they can affect the safety of the site's users.

Contemporaneous Findings

Our report shows the findings at the time of inspection. Subsequent events may affect the condition of the site. Suggested remedial actions are based upon our knowledge and experience. The owner/operator should seek the advice of the manufacturer or a competent person when undertaking repairs and/or modifications to equipment.

Timber

Where timbers are set into the ground it is not always possible to determine levels of decay. The owner/operator should ensure it conducts appropriate inspections to identify decay before it becomes a problem.

We can undertake more in-depth testing of your playground timbers using resistance penetration.

Timber is known to decay from the inside out. This makes it very important that you ensure proper testing and inspection is undertaken of your playground timbers, especially where defects may be hidden inside the structures. Testing using resistance penetration can help to identify defects before they become outwardly apparent, but can also confirm the condition of good timbers to prevent premature replacement with its associated costs. The testing is undertaken using a specialist machine, which uses electronically controlled drill resistance measurement. The drill is fine enough that it does not cause permanent damage to reduce the lifespan of the equipment.

Please contact us for pricing and further information.

Planting and Trees

Where planting or trees are mentioned in our report, please be advised that we do not undertake any arboricultural, horticultural or toxicological assessment of suitability or condition. You must ensure you undertake suitable inspections from an appropriate expert.



General Notes

How This Inspection Contributes to Your Annual Main Inspection

The owner/operator is responsible for following the guidance of the relevant standards. The standards give guidance on the installation, inspection, maintenance and operation of the various types of facility. The inspection guidance is listed in Table 1, with an indication of which parts will be included in your RoSPA inspection [the items in the first column are the items which comprise an “Annual Main Inspection”, the second column shows which elements form part of a RoSPA inspection, items with a cross are not included, some items may have limitations as shown in the notes to the Table 1). The standards also contain additional parts which the owner/operator should follow.

Table 1

Inspection Recommendations of relevant standards These form the Annual Main Inspection	Included in RoSPA Inspection?
6.1 d) Overall levels of safety of equipment (see note 1)	✓ [1]
6.1 d) Overall levels of safety of foundations (see note 1)	✓ [1]
6.2 d) Overall levels of safety of playing surfaces (see note 2)	✓ [2]
6.1 d) Compliance with the relevant parts of the standard and or risk assessment (see note 3)	✓ [3]
6.1 d) Effects of weather	✓
6.1 d) Presence of rot, decay or corrosion (see note 1)	✓ [1]
6.1 d) Assessment of repairs made or added or replaced components (see note 4)	✓ [4]
6.1 d) Excavation or dismantling/additional measures	✗
6.2.1 Assessment of glass reinforced plastics (see note 5)	✓ [5]
6.2.1 Inspection of one post equipment (see note 1)	✓ [1]
6.2.4 Undertaking the Operators inspection protocol	✓
6.2 c) Presence of rot or corrosion (see note 2)	✓ [2]
6.2 c) Assessment of repairs made/added or replaced components (see note 5)	✗
<p>N.B. The clause numbers above are taken from BS EN 1176-7:2020. The content is equally applicable to all other relevant standards. Playgrounds contains a range of equipment from different manufacturers and installed over a number of years; operators should implement any guidance provided by the manufacturer. Item specific detail is not readily available to RPII Playground Inspectors, whose report contributes to the operator’s overall Annual Main Inspection as details in the relevant standard.</p> <p>Notes</p> <p>[1] A manual test only is undertaken for stability. Wear and instability are only detectable where readily apparent without dismantling or destruction and without the use of tools, excavation or specialist equipment. Rot and corrosion are tested for with a hammer and/or steel rod. Decay in timber may exist which can only be found with specialist equipment. We therefore cannot be held responsible for the presence of such decay.</p> <p>[2] Only the visible condition and dimensional compliance of surface extent is considered. Neither testing of impact attenuating properties nor measurement of the thickness of bound surfaces are undertaken on annual inspections. We can conduct impact testing for additional fees.</p> <p>[3] The inspection assesses compliance where this can be tested on site using manual methods without dismantling, destruction and without the use of tools or specialist equipment</p> <p>[4] The operator should use manufacturer’s recommended parts, or equivalent. We are unable to verify if such parts have been used, and any subsequent change in quality or performance</p> <p>[5] Visible glass fibres will be noted in reports. The operator is responsible for repairs or replacement.</p>	

EN 14974 Notes – Summary of Requirements

General

No substances hazardous to health shall be present. Timber to be protected against rotting. Metals to be weather resistant. Skateparks to be separated from playgrounds. All external accessible edges rounded off (min. 3mm radius) No gaps exceeding 5 mm between ramps and the ground. Structures shall be firmly fixed to prevent displacement. All tube ends shall be blanked off.

There shall be no stairs or ladders to platforms. Free fall height shall not exceed 1500 mm, except where otherwise allowed. The ground shall be correctly level.

Rolling Surfaces

Rolling surfaces shall be even and closed. Mounting parts shall not project. Differences in height (e.g. due to misalignment of edges) shall not exceed the thickness of the material and shall not exceed 3 mm. Laminate materials shall not delaminate. Width of joints shall not exceed 5 mm. Surfaces shall be free draining.

Grinding surfaces

Shall be wear resistant.

Barriers

Shall be at least 1200 mm high. No horizontal openings greater than 89 mm. Shall not induce anyone to climb. The distance between the underside of the barrier and the top of the platform shall not exceed 60 mm. Barrier ends must be rounded off or chamfered.

Copings

Minimum diameter of 40 mm. Ends shall be sealed. Multiple piece construction – there shall be no gaps or change of levels. Pool copings can have gaps up to 5 mm wide, but they must be level. Copings in parallel must not have a gap between them > 8 mm. Coping projection shall be between 5 mm and 20 mm (upwards and forwards), except pool copings which can differ.

Kerbs & Ledges

Adjacent rolling surfaces shall be at least 1200 mm wide. The side faces and structure below the grinding surface shall be closed. Safety zone is at least 2000mm.

Rails

Height maximum 1000 mm. Square or rectangular rails width and height minimum is 40 mm. Square rail free ends width minimum is 60 mm. Rectangular rail free end minimum is 50 mm wide and 60 mm high. Circular rail diameter minimum is 40 mm. Circular rail free ends diameter minimum is 60 mm. All rail ends shall be sealed. End edges shall be rounded 3 mm minimum. Ground plates shall not stick out more than 100 mm.

Jump Ramps

Maximum height 1000 mm. Minimum width 1200 mm. Minimum radius (if applicable) 1800 mm. Maximum bank inclination (if applicable) 40 degrees. Safety zone is at least 2000mm to sides and front, and at least 5000mm beyond the jump.



EN 14974 Notes – Summary of Requirements

Platform Bank (Flat Bank)

Where height is ≤ 1000 mm no barrier is needed. See table for dimensions:

A bank higher than 1000 mm without a platform shall have a barrier. Safety zone is at least 2000mm.

Height (mm)	Width (mm)	Platform depth (mm)
≤ 1000	Min. 1200	Min. 1200
> 1000 to 1500	Min 2400	
> 1500 to 3000	Min 3600	

Platform Transition (Quarter Pipe)

Where height is ≤ 1000 mm no barrier is needed. See table for dimensions:

Copings must meet the requirements for copings. Safety zone is at least 2000mm.

Height (mm)	Width (mm)	Platform depth (mm)	Radius (mm)
≤ 1000	Min. 1200	Min. 1200	Min 1800
> 1000 to 1500	Min 2400		
> 1500 to 3000	Min 3600		

Spine Ramp

See table for dimensions:

Ridge shall be minimum of 40 mm and maximum of 140 mm wide (except for spines consisting of two flat banks) Copings must meet the requirements for copings. Safety zone is at least 2000mm.

Height (mm)	Width (mm)	Radius of transitions	Angle of bank
≤ 1000	Min. 1200	Min. 1800	Max 40 degrees
> 1000 to 1250	Min 2400		
> 1250 to 1500	Min 3600		

Wall Ramp

See table for dimensions:

Safety zone is at least 2000mm.

Structure	Radius (r) mm	Width mm	Height (wall) mm	Height (ramp) mm
Wall ramp with transition	Min 1000 Max 2000	Min 2400	Min 2000	R \pm 5%
	> 2000 to 3000	Min 3600	\geq radius	
Wall ramp with bank	-	Min 2400	Min 1500	Max 1500
		Min 3600		Min 1500 Max 2500

Pyramid Bank

Height shall not exceed 1500mm. Length of upper quadrilateral edge shall be at least 100mm. Fully sided pyramids do not have height limitations. All surfaces must be closed. Safety zone is at least 2000mm.

EN 14974 Notes – Summary of Requirements

Stair

Vertical sections must be closed. Grind rails and kerbs shall not be installed over stairs higher than 1000mm. Safety zone is at least 2000mm.

Pipe

Has a platform at each end. Platforms shall only be accessible via the rolling surface (i.e. no steps or climbing holds) Platforms shall have barriers. Copings must be fitted. Safety zone is at least 2000mm

Fun Box

Where the fun box is fully sided with rolling surfaces there are no height restrictions. If the fun box is accessible from at least three sides any rails shall project no more than 300mm into the table. Distance between the ends of the rail and the opposite table edge shall be at least 1200mm. Distance between rails/kerbs/ledges etc. shall be at least 1500mm. Any vertical surfaces of open corners shall be closed. Safety zone is at least 2000mm.

Safety Zones

Shall be clear of obstacles.

Marking

Structure should be marked with (at least):

- Name of manufacturer
- Year of manufacture
- Number and date of the standard (EN 14974:2019)







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