



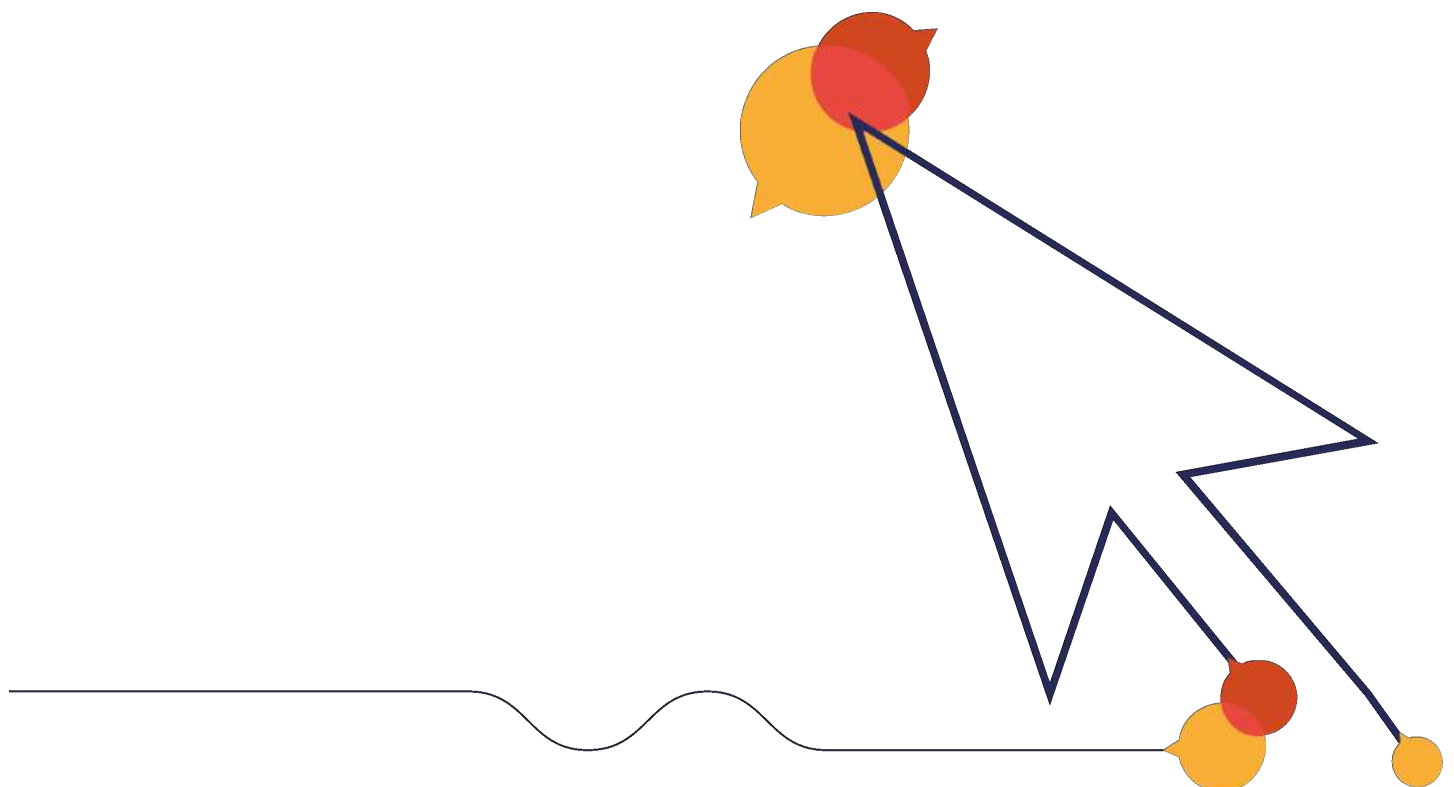
Safety Inspection Report

Annual Inspection

King George V Recreation Ground

Hurstbourne Tarrant Parish Council

16 May 2019



Safety Inspection Report

Annual Inspection

Site name: **King George V Recreation Ground**
Date of inspection: **16 May 2019**
Inspector: **Chris Taylor**



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

Each **Ancillary Item** is listed in this way:

Name of item or items	(some listings may include multiple items)
Default risk = n	(This is the item's intrinsic risk if in pristine condition)
Photo	(A representative photo is included)
Findings	(Findings are listed with remedial action, risk score and photograph. If no faults are listed the item is satisfactory and assumes the Default risk.)

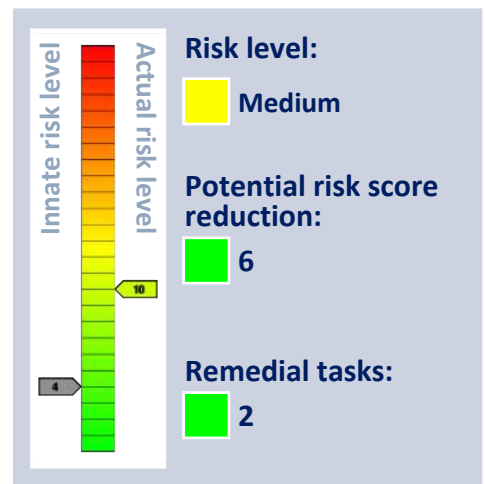
Each **Play Item** is listed in this way:

Name of item	
Manufacturer	(The name of the manufacturer or supplier, if known)
Applicable Standard:	(The number of any applicable standards are shown here)
Default risk = n	(This is the item's intrinsic risk if in pristine condition)
Photo	
Faults	(Findings are listed with remedial action, risk score and photograph. If no faults are listed the item is satisfactory and assumes the Default risk.)

The risk score for any items is the higher of the Default risk or the Finding risk.

Access - Bridge

Manufactured by (Unknown)



Standards:



None

This item has not been assessed against any applicable standards, but the principles of other standards may have been applied to ensure suitable safety.

Finding

Description

Fixtures loose or missing.

Tasks

Tighten/replace.

Risk level:

Low

Risk score:

6

Finding Photos



Finding

Description

Timber is decayed.

Tasks

Replace affected parts.

Note

Various pieces including supports under bridge showing severe signs of decay.

Risk level:

 Medium

Risk score:

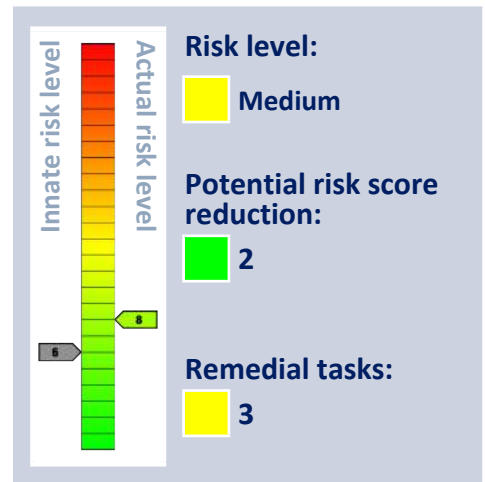
 10

Finding Photos



Youth Shelter

Manufactured by (Unknown)



Standards:



None

This item has not been assessed against any applicable standards, but the principles of other standards may have been applied to ensure suitable safety.

Finding

Description

Item is damaged.

Tasks

Repair.

Risk level:

Low

Risk score:

7

Finding Photos



Finding

Description

There are sharp edges or projections.

Tasks

Remove the sharp/projecting parts.

Note

Nails projecting from the roof.

Risk level:

 Low

Risk score:

 6

Finding Photos



Finding

Description

Timber is rotting.

Tasks

Replace rotten timbers.

Risk level:

 Medium

Risk score:

 8

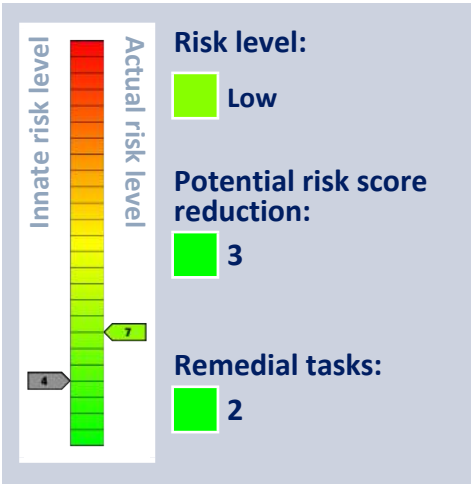
Finding Photos



Fencing



Gates



Finding

Description

Fixtures loose or missing.

Tasks

Tighten/replace.

Risk level:

 Low

Risk score:

 4

Finding Photos



Finding

Description

Trip points on the surface.

Tasks

Make level.

Note

Tree roots becoming trip hazard - add more gravel / earth to eliminate risk.

Risk level:

 Low

Risk score:

 7

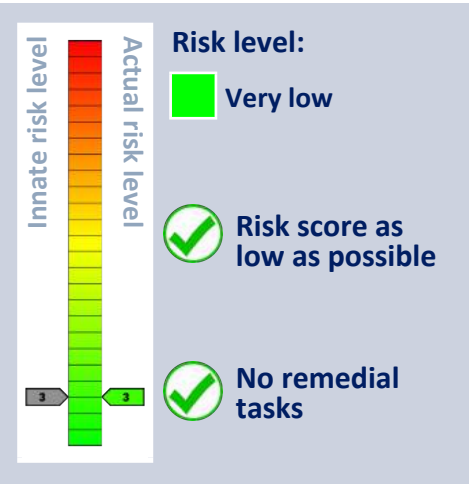
Finding Photos



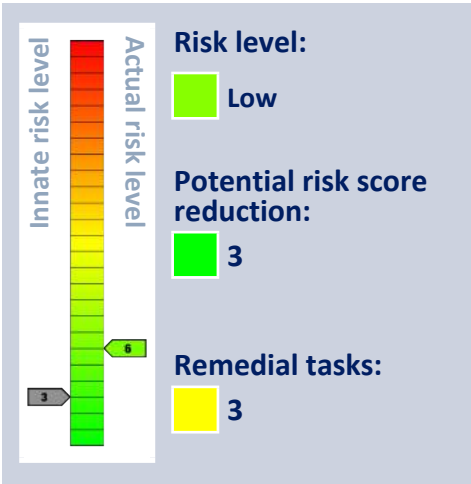
Signage



Litter Bins



Seating



Finding

Description

RoSPA recommend a minimum distance of 1 m between seat and fence. This is to reduce the likelihood of children vaulting the fence via the seat.

Tasks

No reasonably practicable action is identified.

Risk level:

Low

Risk score:

5

Finding Photos



Finding

Description

Surface is wearing.

Tasks

Repair.

Risk level:

 Low

Risk score:

 6

Finding Photos



Finding

Description

Timber is not in good condition.

Tasks

Repair.

Risk level:

 Low

Risk score:

 6

Finding Photos



Swing - Mixed - 2 Bay 2 Junior 2 Toddler Seat

Manufactured by (Unknown)

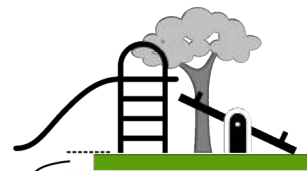
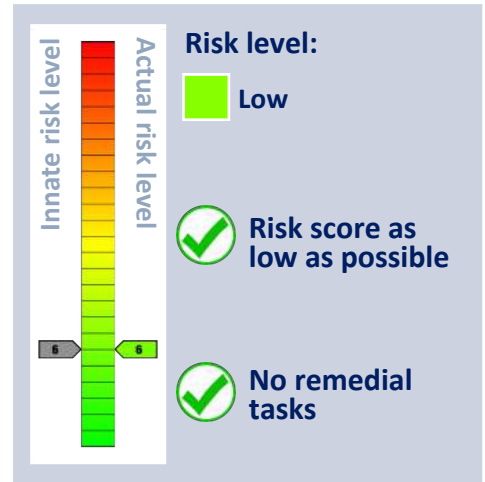


Standards:



EN 1176-1:2017, EN 1176-2:2017

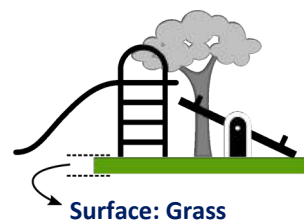
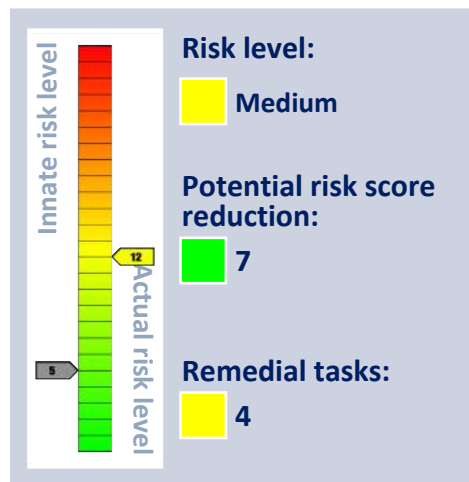
The item and its surfacing (where applicable) meet with the requirements of the relevant standards.



Surface: Rubber - Mulch - Bonded

Rocker - Seesaw - Plank

Manufactured by (Unknown)



Standards:



EN 1176-1:2017, EN 1176-6:2017

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

Finding

Description

Cap missing.

Tasks

Replace.

Note

Centre bolt.

Risk level:

Low

Risk score:

4

Finding Photos



Finding

Description

There is decay to timber components which may affect structural integrity. We do not recommend replacing rotten supports with timber posts which are directly set in the ground due to the increased problem of timber rot, especially in posts in contact with the ground.

Tasks

Replace decayed components where possible and plan replacement of item. Check on a routine basis, especially at ground or foundation level.

Note

Main support and plank.

Risk level:

Medium

Risk score:

8

Finding Photos



Finding

Description

Item is at the end of its useful working life.

Tasks

Read the notes for further action.

Note

This item is very close to the end of its useful working life. Significant repairs must be made to much of the structure to prolong its life.

Risk level:



Medium

Risk score:



12

Finding Photos



Finding

Description

Ground erosion present.

Tasks

Repair the worn areas.

Risk level:



Low

Risk score:



4

Finding Photos



Multiplay - Climber

Manufactured by (Unknown)



Innate risk level

Actual risk level

7

8

Risk level:

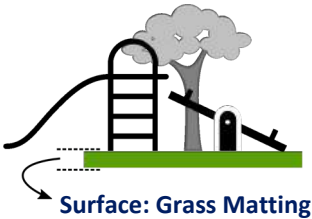
Medium

Potential risk score reduction:

1

Remedial tasks:

5



Standards:

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

Finding

Description

Fixtures loose or missing.

Tasks

Tighten/replace.

Risk level:

Low

Risk score:

6

Finding Photos



Finding

Description

Additional comments are noted below.

Tasks

See the notes.

Note

This unit is attractive, well put together, and should provide excellent play value for many years. While there are some standards failures and entrapments, the risks are manageable - monitor use.

Risk level:



Low

Risk score:



7

Finding Photos



Finding

Description

RoSPA is concerned by accidents on some types of overhead ladders and rings. However, there is a strong development value in these items.

Tasks

The protective surface under all bars and rings must be kept in good condition.

Risk level:



Medium

Risk score:



8

Finding Photos



Finding

Description

There are natural splits / shakes in the timbers.

Tasks

Shakes vary. Monitor and consult manufacturer if dimensions exceed 8 mm at sections used to grip / grasp.

Risk level:



Low

Risk score:



6

Finding Photos



Finding

Description

Surface needs repair.

Tasks

Repair.

Note

Tree root has damaged surface within the impact area.

Risk level:



Medium

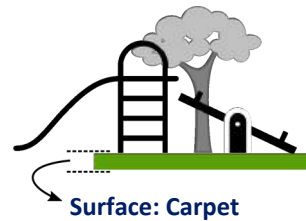
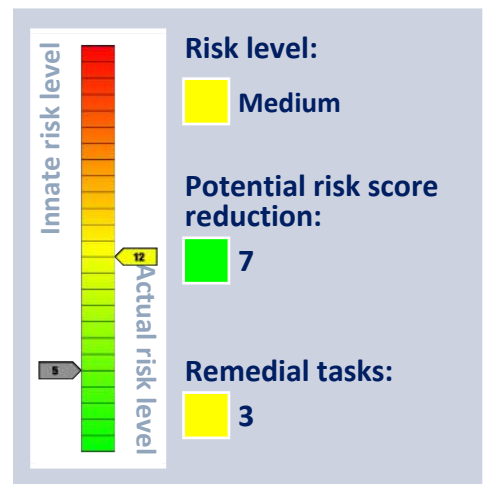
Risk score:



8

Finding Photos





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

Finding

Description

There is decay to timber components which may affect structural integrity. We do not recommend replacing rotten supports with timber posts which are directly set in the ground due to the increased problem of timber rot, especially in posts in contact with the ground.

Tasks

Replace decayed components where possible and plan replacement of item. Check on a routine basis, especially at ground or foundation level.

Note

Significant decay throughout the trail. Affected posts must be replaced.

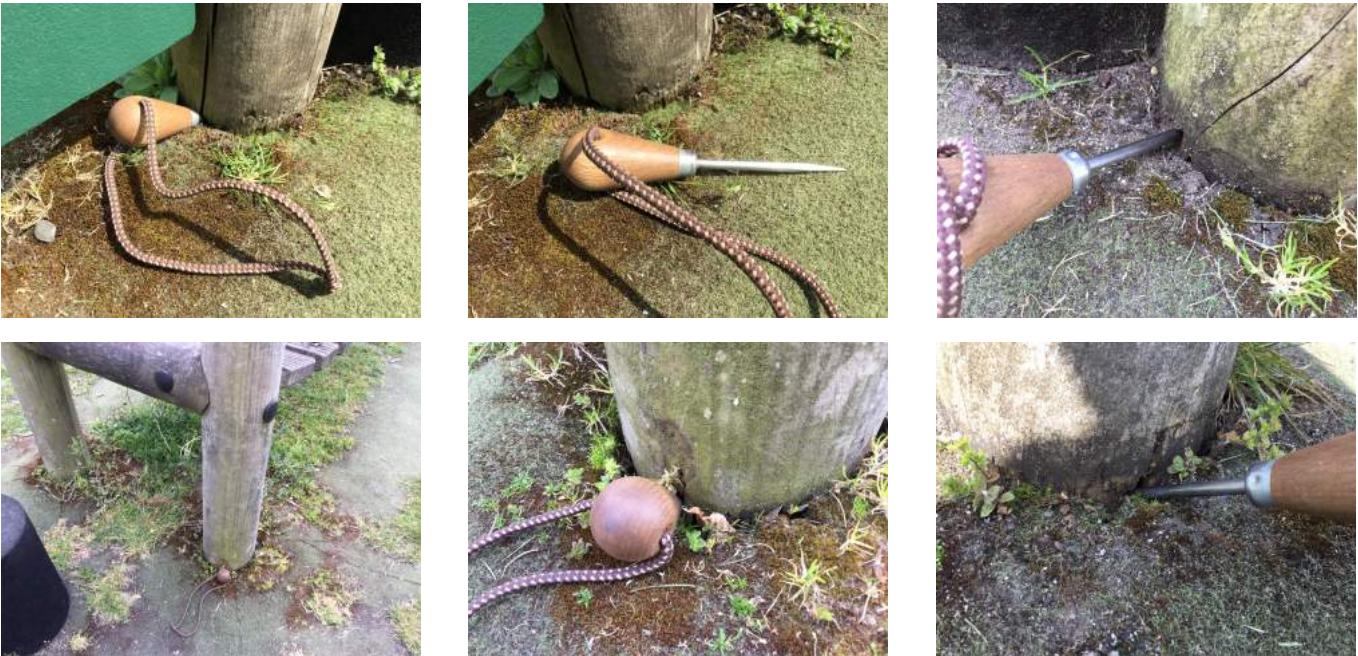
Risk level:

Medium

Risk score:

12

Finding Photos



Finding

Description

Fixtures loose or missing.

Tasks

Tighten/replace.

Note

Climbing grips loose - monitor and tighten as needed.

Risk level:



Low

Risk score:



6

Finding Photos



Finding

Description

Exposed metal rope core(s).

Tasks

Replace the worn ropes.

Note

Wrap and monitor while preparing to replace.

Risk level:



Low

Risk score:



7

Finding Photos



Cableway

Manufactured by Playforce Ltd



Innate risk level

Actual risk level

Risk level:

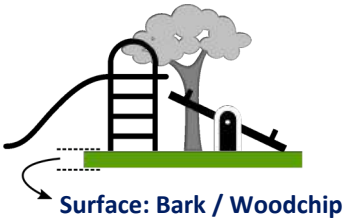
Medium

Potential risk score reduction:

6

Remedial tasks:

8



Standards:

EN 1176-1:2017, EN 1176-4:2017
The item or its surfacing are not compliant with the requirements of the relevant standards.

Finding

Description

Some chain wear.

Tasks

Monitor for further deterioration and replace before 40% wear.

Risk level:

Medium

Risk score:

8

Finding Photos



Finding

Description

Chain link connectors worn.

Tasks

Replace worn parts.

Note

At button seat.

Risk level:

 Medium

Risk score:

 10

Finding Photos



Finding

Description

There is decay to timber components which may affect structural integrity. We do not recommend replacing rotten supports with timber posts which are directly set in the ground due to the increased problem of timber rot, especially in posts in contact with the ground.

Tasks

Replace decayed components where possible and plan replacement of item. Check on a routine basis, especially at ground or foundation level.

Risk level:

Medium

Risk score:

12

Finding Photos



Finding

Description

The supporting components should be dismantled and inspected according to the manufacturer's instructions. This will need doing on a regular basis.

Tasks

Dismantle and inspect according to manufacturer's instructions.

Risk level:

 Medium

Risk score:

 8

Finding Photos



Finding

Description

Where the cable enters into a tube, top bar or similar it is not possible to determine its condition, therefore this is excluded from our inspection. It is vital that the operator arranges to dismantle the unit to inspect the full length of the cable for any corrosion, wear or damage.

Tasks

Conduct an appropriate dismantling inspection.

Risk level:

 Medium

Risk score:

 11

Finding Photos



Finding

Description

Item broken.

Tasks

Replace.

Note

Cable stop spring.

Risk level:



Low

Risk score:



7

Finding Photos



Finding

Description

Excessive weed growth on surfacing.

Tasks

Mechanical removal is recommended.

Risk level:



Low

Risk score:



7

Finding Photos



Finding

Description

It is considered that the runway will have insufficient ground clearance under seat.

Tasks

Modify to give a minimum 400 mm clearance under load.

Risk level:
Medium

Risk score:
8

Finding Photos



Rocker - Clown - Double

Manufactured by BOERplay B.V.



Innate risk level

Actual risk level

3

6

Risk level:

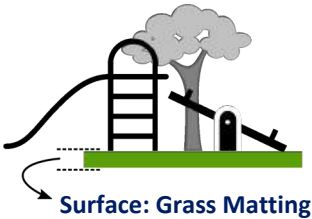
Low

Potential risk score reduction:

3

Remedial tasks:

2



Standards:

EN 1176-1:2017, EN 1176-6:2017
The item and its surfacing (where applicable) meet with the requirements of the relevant standards.

Finding

Description

The equipment is dirty or algae covered.

Tasks

Clean off.

Risk level:

Low

Risk score:

4

Finding Photos



Finding

Description

There is significant corrosion on this item.

Tasks

De-scale back to good metal and coat with lead free paint, using appropriate precautions. Repairs may be necessary where corrosion is severe.

Risk level:

Low

Risk score:

6

Finding Photos



Carousel

Manufactured by B Hirst and Sons



Innate risk level

Actual risk level

6

8

Risk level:

Medium

Potential risk score reduction:

2

Remedial tasks:

4



Standards: 

EN 1176-5:2008, EN 1176-1:2017
The item or its surfacing are not compliant with the requirements of the relevant standards.

Finding

Description

Trip points on the surface.

Tasks

Remove trip points.

Note

Surface requires various repairs.

Risk level:

Medium

Risk score:

8

Finding Photos



Finding

Description

Carousel where the ground clearance is over 110 mm must have a continuous smooth surface.

Risk level:



Low

Tasks

No reasonably practicable action is identified.

Risk score:



6

Finding Photos



Finding

Description

There is a head entrapment.

Risk level:



Low

Tasks

No reasonably practicable action is identified.

Risk score:



6

Note

Hand rails.

Finding Photos



Finding

Description

There is an obstacle in the falling space or minimum space.

Tasks

No reasonably practicable action is identified.

Note

Fence within the impact area.

Risk level:

Low

Risk score:

7

Finding Photos



Slide

Manufactured by B Hirst and Sons



Innate risk level

Actual risk level

5

9

Risk level:

Medium

Potential risk score reduction:

4

Remedial tasks:

7



Standards:

EN 1176-1:2017, EN 1176-3:2017
The item or its surfacing are not compliant with the requirements of the relevant standards.

Finding

Description

Shrinkage / separation of the surface. This may give a trip hazard.

Tasks

Re-glue and fill gaps and joints as necessary.

Risk level:

Low

Risk score:

5

Finding Photos



Finding

Description

Paintwork is in poor condition.

Tasks

De-scale back to good base material and coat with lead free paint, using appropriate precautions. Repairs may be necessary where corrosion is severe.

Risk level:



Low

Risk score:



5

Finding Photos



Finding

Description

There is significant corrosion on this item.

Tasks

Repair.

Risk level:



Medium

Risk score:



9

Finding Photos



Finding

Description

Surface has holes in it.

Tasks

Repair.

Risk level:

 Medium

Risk score:

 9

Finding Photos



Finding

Description

Access fails entrapment requirements.

Tasks

No reasonably practicable action is identified.

Risk level:

 Low

Risk score:

 4

Finding Photos



Finding

Description

The spacing between the barrier bars is in excess of 89 mm.

Tasks

No reasonably practicable action is identified.

Risk level:

 Low

Risk score:

 6

Finding Photos



Finding

Description

The depth of stair tread is either less than 110 mm or the projection is less than 140 mm, or both.

Tasks

No reasonably practicable action is identified.

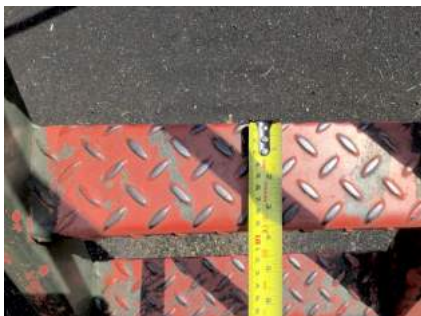
Risk level:

 Low

Risk score:

 7

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,
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

L i k e l i h o o d	Severity					
		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 Methodology

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

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.

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.

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.

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.

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 up to 3.0 metres around, or the fence line if closer.

Operational inspections only take into consideration defects related to 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 for 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



General Notes

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 standing surfaces as necessary on the equipment and assess all parts up to 2.5m 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. 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).

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.



General Notes

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 a resistograph. 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 a resistograph 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 and 6.2 c) Inspect and maintain in accordance with the manufacturer’s instructions (see note 1)	✗ [1]
6.2 a) Identify obvious hazards	✓
6.2 b) Check for operation, stability and wear (see note 2)	✓ [2]
6.2 b) Check sealed for life parts	✗
6.2 b) Check for cleanliness, equipment ground clearances, ground surface finishes, exposed foundations, sharp edges, missing parts, excessive wear (of moving parts) and structural integrity (see note 2)	✓ [2]
6.2 c) Overall levels of safety of equipment	✓
6.2 c) Overall levels of safety of foundations (see note 2)	✓ [2]
6.2 c) Overall levels of safety of surface (see note 3)	✓ [3]
6.2 c) Compliance with the relevant parts of the standard (see note 4)	✓ [4]
6.2 c) Undertaking the responsibility of the operator’s periodic, systematic assessment of the effectiveness of all their safety measures (BS EN 1176-7, 8.2.1)	✗
6.2 c) Effects of weather	✓
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)	✓ [5]
6.2 c) Excavation/dismantling/additional measures	✗
6.3.1 Assessment of glass reinforced plastics (see note 6)	✓ [6]
6.3.2 Maintenance of one post equipment (see note 2)	✓ [2]
<p>N.B. The clause numbers above are taken from BS EN 1176-7. The content is equally applicable to all other relevant standards.</p> <p>Notes</p> <p>[1] Playgrounds contain 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 detailed in the relevant standards</p> <p>[2] 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</p> <p>[3] 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</p> <p>[4] 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>[5] 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>[6] Visible glass fibres will be noted in reports. The operator is responsible for repairs or replacement.</p>	

EN 1176 Notes – Summary of Requirements

PROTECTION AGAINST INJURIES IN THE FREE SPACE

- * No obstacles in the minimum space (other than structures to assist or safeguard the user)
- * Traffic flows should not go through the minimum space

PROTECTION AGAINST INJURIES IN THE FALLING SPACE

- * Free height of fall should not exceed 3m
- * No obstacles in the falling space
- * Platforms with fall heights of more than 1m between them require surfacing

PROTECTION AGAINST INJURIES DUE TO OTHER TYPES OF MOVEMENT

- * No unexpected obstacles

SURFACING SAFETY REQUIREMENTS

- * Surfacing should have no sharp edges or protrusions
- * Loose fills should be 100mm more than the depth required to meet the HIC reading (usually 200mm)
- * Hard surfaces should only be used outside where children fall
- * Testable Impact absorbing surfaces if falls over 600mm are possible. Topsoil or turf may be used up to 1m

DESIGN AND MANUFACTURE

- * The equipment must be suitable for the user and risks should be identifiable by the child
- * Accessibility: adults must be able to gain access to help children
- * Grip requirements: permitted diameter 16 - 45mm (i.e. overhead bars)
- * Grasp requirements: maximum diameter 60mm (e.g. handrails on steps)
- * Requirements for easily accessible equipment

FINISHING

- * Timber species and synthetics should be splinter resistant
- * No protrusions or sharp-edged components
- * Bolts should not protrude by more than 8mm
- * Corners, edges or projecting parts over 8mm should have a 3mm radius.
- * No hard and sharp-edged parts (e.g. razor blade effect caused by sheet steel)
- * No crushing or shearing points
- * Connections should not come loose by themselves and should resist removal.
- * Timber connections should not rely solely on screws or nails.
- * Leaking lubricants should not stain or impair the safety of the equipment

FIBRE ROPES

- * Conform to EN 701 or 919 or have a material and load certificate
- * Ropes used by hands shall have a soft, non-slip covering

WIRE ROPES

- * Non-rotating and corrosion resistant with no splayed wires outside the ferrule
- * Wire connector clip threads should protrude less than 8mm
- * Turnbuckles should be enclosed, have a loop at each end and be secured

CHAINS

- * Maximum opening of individual links: 8.6mm in any one direction.
- * Connecting links between chains must be less than 8.6mm or over 12mm

SWINGING SUSPENDED ROPES

- * Not combined with swings in the same bay
- * Less than 2m long: over 600mm from static parts; over 900mm from swinging parts
- * 2m - 4m long: over 1000mm from anything
- * Diameter: 25 - 45mm

CLIMBING ROPES

- * Anchored at both ends and movement less than 20% of rope length
- * Single climbing rope diameter: 18 - 45mm (nets comply with Grip requirements)

ENTRAPMENTS

- * Entrapment: a place from which children cannot extricate themselves unaided
- There are six probes: the Torso Probe, the Large Head Probe, The Small Head probe, the Wedge Probe and the two Finger Rods. There is a toggle test to reduce the dangers of clothing toggles being caught on slides, fireman's poles and roofs, and a ring gauge to test for rocker hand/foot rest protrusions.

BRIDGES

- * The space between the flexible bridge and rigid sides should be not less than 230mm

ENTRAPMENT OF FEET AND LEGS

- * Inclined planes (not suspension bridges) less than 38° should have no gaps over 30mm
- * There are no requirements for suspension bridge gaps other than the main entrapment requirements

FINGER ENTRAPMENTS

- These occur in: 1. gaps where child's movement may cause a finger to become stuck; 2. open-ended tubes; 3. moving gaps
- * Tube ends should be securely enclosed and removable only with tools
 - * Moving gaps should not close to less than 12mm

BARRIERS AND GUARD-RAILS

- * Hand-rail: a rail to help the child balance
- * Guard-rail: a rail to prevent children falling
- * Barrier: a guard-rail with non-climbable in-fill

HAND-RAILS

- * Where required they should be between 600 and 850mm above the standing surface

EQUIPMENT FOR UNDER 3'S

- * Platforms over 600mm require a barrier with a minimum height of 700mm high + impact absorbing surfacing

EQUIPMENT FOR OVER 3'S

- * Platforms up to 1000mm: No barriers or guard-rails required + impact absorbing surface over
- * Platforms 1000-2000mm: 600 - 850mm high guard-rail + impact absorbing surfacing
- * Platforms 2000-3000mm: 700mm high barrier + impact absorbing surfacing
- * No bars, infills or steps which can be used as steps. Tops should discourage standing or sitting

MEANS OF ACCESS

- The main change in this area is that the probes should now be applied to accesses. All means of access should have no entrapments; be securely fixed; be level to $\pm 3^\circ$ (ramps across width) and have a constant angle. It does not refer to agility equipment used as an access i.e. arched climbers, scramble nets. There are specific measurements for ladders, stairs and ramps.

EN 1176 Notes – Summary of Requirements

SWINGS

The main changes relate to requirements for new types of swings, dimensions and surfacing areas.

REQUIREMENTS

* No all rigid suspension members (i.e. solid bar top to bottom) * Design should be principally for use by seated children (RoSPA interpretation) * Two seats per bay maximum. Do not mix cradle and flat seats in same bay * Some types of swings have slightly different requirements. Information should be obtained from the supplier * Single point swing chains should not twist round each other * Single point swings require a secondary bearing support mechanism

DIMENSIONS

* Minimum ground clearance at rest: 350mm (400mm for single point swings and tyres) * No maximum seat surface height but RoSPA recommends a max. height of 635mm for cradles and flat seats * Distance between seat and frame: 20% of swing suspension + 200mm * Distance between seats: 20% of the swing suspension + 300mm * Pivot splay (separation distance) at crossbar: width between seat fixings plus 5% of swing suspension length

SITING

* Swing sets for young children should be separated from those for older children and sited to avoid cross traffic

SURFACING REQUIREMENTS

Forward and Back

* Different areas for synthetic and loose-fill surfaces in a box or pit. Measurements each way are: 1. synthetic: $0.867 \times \text{length of suspension member} + 1.75\text{m}$ 2. loose-fill: $0.867 \times \text{length of suspension member} + 2.25\text{m}$

Side width

* Seat width no greater than 500mm: 1.75m minimum (i.e. .875m each way from seat centre)

* Areas for two seats in one bay may overlap providing the distance between seats is correct

Single point swings

* Circular area with a radius equal to the Forward and Backward figure for other swings

SLIDES

SAFETY REQUIREMENTS

* Free-standing slides: the max. vertical height which a stairway can reach without a change of direction is 2.5m. * Starting section at the top of each chute: length 350mm minimum, zero to 5° downwards at the centre line.

N.B. This can be the platform if the slide is attached to it * If the starting section is over 400mm long, platform requirements apply *

From a platform, the gap to the slide is the same width as the slide * Attachment slides over 1m free fall height should have starting section barriers 500mm min. high at one point * Attachment slides over 1m FFH should have a guard-rail across the entrance at a ht. of between 700-900mm

Sliding sections

* Maximum angle: 60° at any one point and an average of 40° * The width of open and straight slides over 1500mm long should be less than 700mm or greater than 950mm * Spiral or curved slides should have a width less than 700mm

RUN -OUTS

* Run-outs of at least 300mm are required if the sliding section is under 1.5m long. * Additional requirements are required for different types of slides * Average angle of run-outs: DIN type 10° (BS type) 5° (both downwards) * Height of run-out: Less than 1.5m sliding length: max. 200mm. Greater than 1.5m sliding length: max. 350mm * Users should come to a stop on the run-out section (BS type only)

* Chutes should have a side height related to the fall height: 1.2m: 100mm minimum : 1.2m - 2.5m: 150mm minimum : Over 2.5m: 500mm minimum

* Maximum side angle from slide bed: 30° * Tops of sides should be rounded or radiused to at least 3mm * Tunnel slides should be a minimum 750mm high and 750mm wide * Tunnels should start on or at the end of the starting section and be continuous over the sliding section only

SURFACING REQUIREMENTS

Normal distances except for the run-out which should be: * DIN type: 1m each side and 2m beyond (or just 1.5m beyond for short slides) * BS type: 1m each side and 1m beyond

CABLE RUNWAYS

SAFETY REQUIREMENTS

* Stop at end should progressively slow down the traveller * Traveller should not be removable except with tools * No access to internal mechanism * Suspension mechanism: flexible, exclude risk of strangulation or be at least 2m above the ground in the middle * Where children hang by the hands, the grip should not be enclosed (i.e. a loop)

* Climbing should be discouraged onto the grip * Children should be able to get off the seat at any time (i.e. no loops or straps) *

Maximum loaded (69.5kg) speed is 7m per second * If two cables are placed parallel the min. distance between them is 2m

IMPACT AREAS

* 2m either side of main cable

ROTATING ITEMS

The main changes are in clearer separation into different types. A change in the clearance between the underside and the ground will affect older items. The change should provide greater safety. NOTE: Rotating items under 500mm diameter are excluded from these requirements

SAFETY REQUIREMENTS

* Maximum free height of fall: 1000mm (For overhead items: 1500 - 3000mm) * Max. speed at periphery under reasonable use: 5m per second. As no method is given, this cannot be tested * Hand grips should be between 16 - 45mm

SPECIFIC REQUIREMENTS

There are specific requirements for different types of roundabout. The two most common ones are:

Platform roundabouts:

EN 1176 Notes – Summary of Requirements

* Platforms should be circular and enclosed * All parts should revolve in the same direction * No super-structure over the edge of the platform * Mechanism should be enclosed * Height between underside and ground 60 – 110mm for 300mm in * Protective skirts should be of rigid material and have no burrs or other defects * The bottom edge should be flared towards the inside or protected

Giant revolving discs

* Clearance of underside at lowest point: 300mm * Max. platform height: 1m * Free space: 3m * Upper surface should be continuous, smooth and with no handles or grips * Underside should be continuous, smooth and without any radial variations (i.e. spokes) or indentations

MINIMUM SPACE

* Free space: Horizontal: 2m all round * Vertical head clearance from platform: sitting 1.5m ; standing 1.8m * Small rotating items under 500mm diameter are excluded but RoSPA suggests as for rocking items

SURFACING REQUIREMENTS

* There are no special extra requirements for surfacing areas * Surfaces should be continuous underneath and level

ROCKING ITEMS

DEFINITIONS

* Rocking equipment which can be moved by the user and is supported from below

* Damping: any movement restricting device. (N.B. Springs are treated as self-damping)

SAFETY REQUIREMENTS

* Throughout the range of movement gaps in all accessible joints should be under 12mm * Progressive restraint at extremity of movement is required * Foot rests should be provided where the ground clearance is less than 230mm * Hand grips should be provided for each seat or standing position

* Foot rests and hand grips should be firmly fixed and non-rotating * Hand grip diameter: 16 - 45mm (for toddler items: 30mm maximum) * Right -angled corners on moving equipment should be 20mm radius min. (e.g. a bird's beak)

MINIMUM SPACE

* 1000mm between items at maximum movement.

SURFACING REQUIREMENTS

There are no special extra requirements for surfacing areas

INSTALLATION, INSPECTION, MAINTENANCE AND OPERATION

SAFETY

* Appropriate safety systems must be established by the operator * No access should be allowed to unsafe equipment or areas * Records should be kept by the playground operator * Effectiveness of safety measures should be assessed annually * Signs should be provided giving owner details and emergency service contact points * Entrances for emergency services should be freely accessible * Information on accidents should be kept (RoSPA has a suitable form)

* Staff and users should be safe during maintenance operations

INSPECTION

* Manufacturers will recommend the inspection frequency although some sites may need a daily check

Frequency

Routine visual inspections: identification of hazards from vandalism, use or weather conditions (RoSPA recommends a recorded daily or weekly inspection) Operational inspection: every 1 -3 months or as recommended. Checks operation, stability, wear etc. Annual main inspection: checks long-term levels of safety

* An inspection schedule should be prepared for each playground, listing components and methods

* Appropriate action should be taken if defects are noted

ROUTINE MAINTENANCE

* Basic routine maintenance details should be supplied by the manufacturer

CORRECTIVE MAINTENANCE

* This covers remedial work and repairs as required * Alterations should only be carried out after consultation & agreement with the supplier or a competent person





Playsafety Ltd
78 Shrivenham Hundred Business Park
Watchfield
SWINDON
SN6 8TY
+44 (0)1793 317470

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