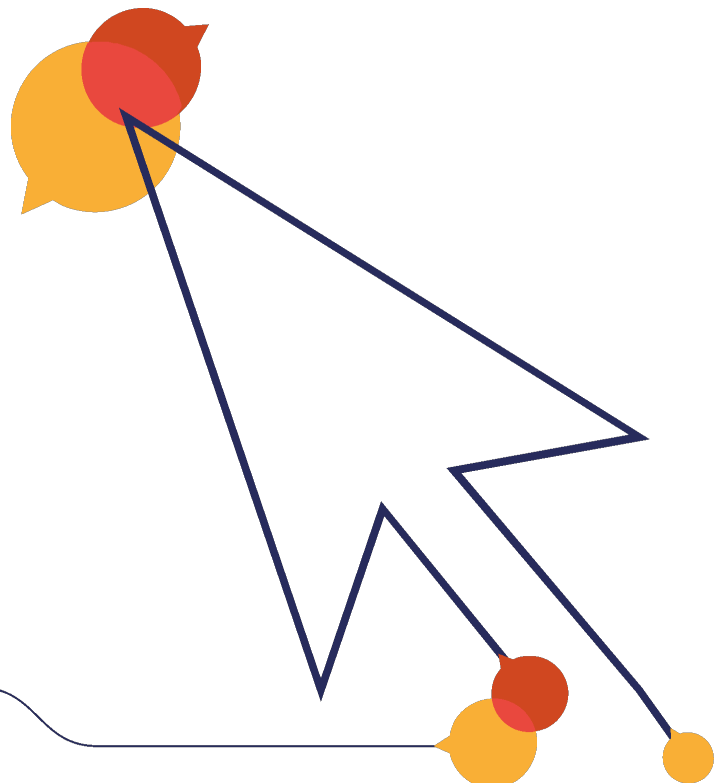


# Brec - Llangammarch Wells, Tan-y-Deri



Powys County Council

26 June 2018



# Safety Inspection Report

Site name: **Brec - Llangammarch Wells, Tan-y-Deri**  
Date of inspection: **26 June 2018**  
Inspector: **Toby Knight**



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:

<b>Name of item or items</b>	(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:

<b>Name of item</b>	
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.

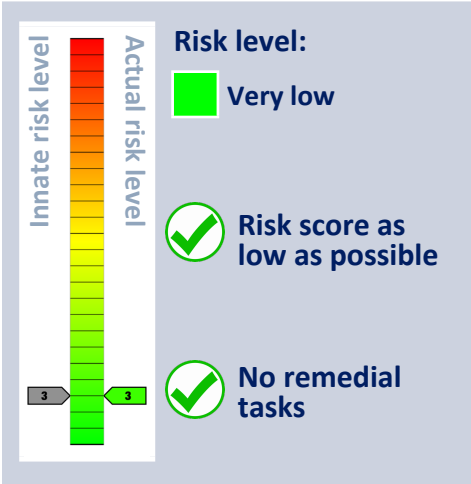
# Fencing

Manufactured by (Unknown)

Photo not possible

Standards: 

The item meets with the requirements of the relevant standards.



# Gate

Manufactured by (Unknown)

Photo not possible

Standards: 

The item meets with the requirements of the relevant standards.



## Finding

### Description

Entrapment on side(s) of the gate.

### Tasks

No Tasks for this Finding

### Note

Photo not possible

Risk level:



Low

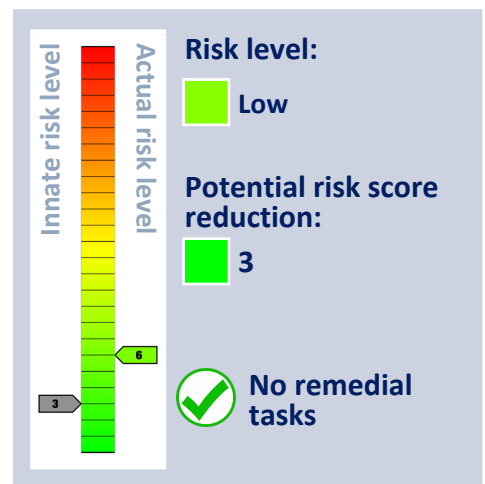
Risk score:



6

## General Surface

Photo not possible



## Finding

### Description

Encroaching vegetation or trees.

### Tasks

No Tasks for this Finding

### Note

Through fencd

Photo not possible

Risk level:



Low

Risk score:



6

# Finding

Description

Surface needs repair.

Tasks

No Tasks for this Finding

Note

Slabs broken and uneven.

Photo not possible

Risk level:

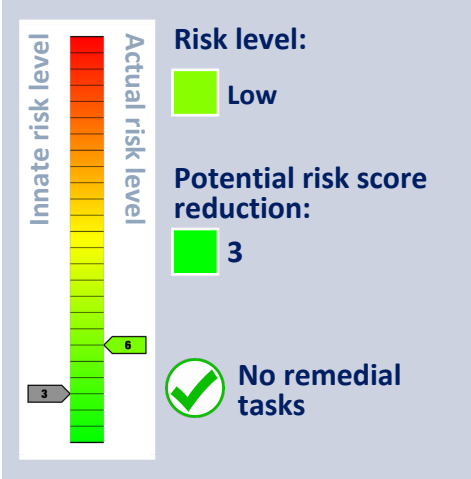
Low

Risk score:

6

# Litter Bin

Photo not possible



# Finding

Description

Item broken.

Tasks

No Tasks for this Finding

Note

Bin not attached.

Photo not possible

Risk level:

Low

Risk score:

6

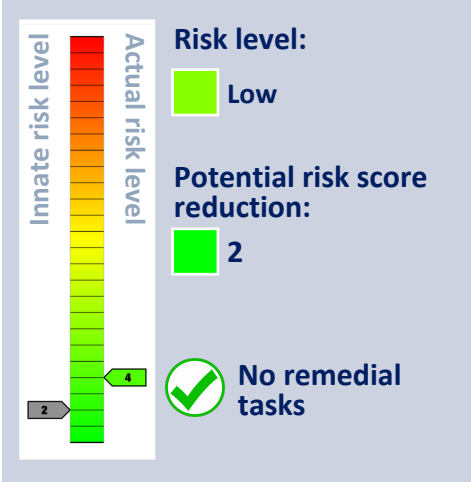
# Sign - Info

Manufactured by (Unknown)

Photo not possible

Standards: 

The item meets with the requirements of the relevant standards.



## Finding

Description

Dog ban & ownership signs recommended.

Tasks

No Tasks for this Finding

Note

Photo not possible

## Finding

Description

Missing item.

Tasks

No Tasks for this Finding

Note

Photo not possible



# Carousel - Sputnik

Model Wicksteed Leisure Limited Manufactured by Wicksteed Leisure Ltd

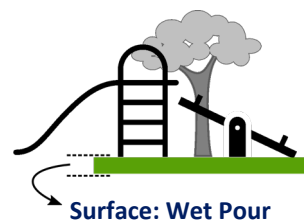
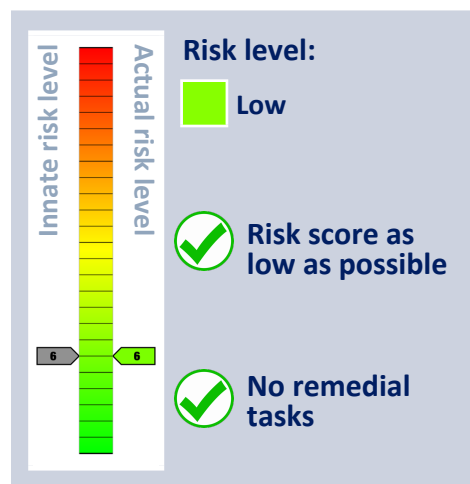
Photo not possible

## Standards:



EN 1176-1:2008, EN 1176-5:2008

The item is not compliant with the requirements of the relevant standards.



## Finding

### Description

Item has corrosion.

### Tasks

No Tasks for this Finding

### Note

At base

**Risk level:**

Low

**Risk score:**

6

Photo not possible

## Finding

Description

Paintwork is in poor condition.

Tasks

No Tasks for this Finding

Note

Photo not possible

Risk level:

 Low

Risk score:

 4

## Finding

Description

The axis of the carousel support is inclined at an angle of more than the maximum permitted of 5 degrees.

Tasks

No Tasks for this Finding

Note

Photo not possible

Risk level:

 Low

Risk score:

 4

## Finding

Description

There is a head entrapment.

Tasks

No Tasks for this Finding

Note

In seat frames

Photo not possible

Risk level:

 Low

Risk score:

 4

# Rocker - Daisy

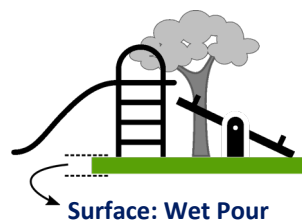
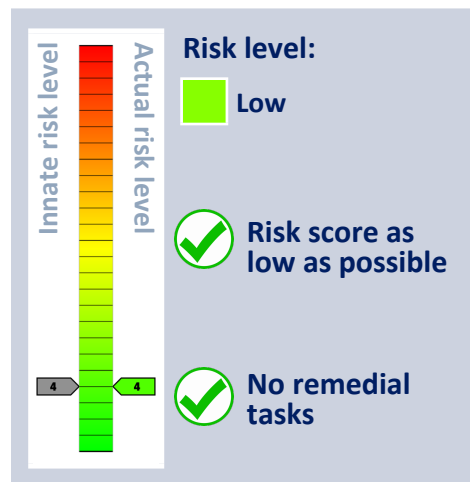
Model Proludic Limited Manufactured by Proludic Ltd

Photo not possible

Standards:



The item meets with the requirements of the relevant standards.



## Finding

Description

Item has corrosion.

Tasks

No Tasks for this Finding

Note

Spring.

Risk level:

Low

Risk score:

4

Photo not possible

# Rocker - Plane

Model Proludic Limited Manufactured by Proludic Ltd

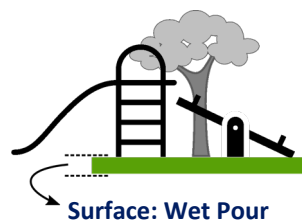
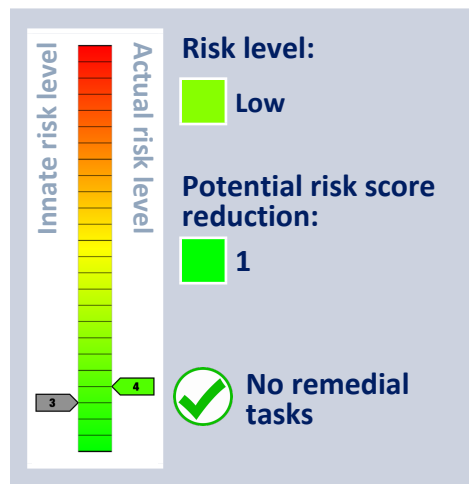
Photo not possible

## Standards:



EN 1176-1:2008, EN 1176-6:2008

The item is not compliant with the requirements of the relevant standards.



## Finding

### Description

Fixtures loose or missing.

### Tasks

No Tasks for this Finding

### Note

Seat loose.

**Risk level:**

Low

**Risk score:**

4

Photo not possible

## Finding

### Description

Protruding handles / foot rests.

### Tasks

No Tasks for this Finding

### Note

Photo not possible

Risk level:

 Very low

Risk score:

 2

## Slide - Embankment

Model Wicksteed Leisure Limited Manufactured by Wicksteed Leisure Ltd

Photo not possible

### Standards:

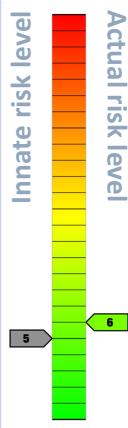


EN 1176-1:2008, EN 1176-3:2008

The item meets with the requirements of the relevant standards.


Innate risk level

Actual risk level





5 6

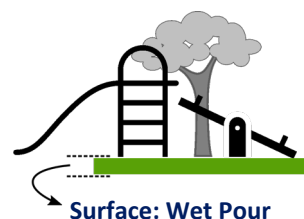
Risk level:

 Low

Potential risk score reduction:

 1

 No remedial tasks



# Finding

Description

Bolt(s) missing.

Tasks

No Tasks for this Finding

Note

At start section.

Photo not possible

Risk level:

 Low

Risk score:

 6

## General Notes

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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,
5. Scores of 8 to 14 are considered to be medium risk and some control measures may be identified to reduce the risks to low, tolerable levels,
6. Score of 15 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

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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

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Equipment has been assessed for compliance with 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.

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.

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.

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.

Our report shows the findings at the time of inspection. Subsequent events may affect the condition of the site. We have inspected without dismantling or destruction and so some aspects of the relevant standards may not be testable on site.

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



# EN 1176 Notes – Summary of Requirements

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## 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 200mm more than the depth required to meet the HIC reading (usually 100mm)
- \* 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 (i.e. handrails on steps)
- \* Not easily accessible for children under three

## 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 (i.e. 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 seven probes: the Torso Probe, the Large Head Probe, Probe 1, Probe 2, the Wedge Probe and the two Finger Probes. There is also a toggle test to reduce the dangers of clothing toggles being caught on slides, fireman's poles and roofs.

- 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 45° 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  $\pm 3^0$  (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

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## 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: .867 x length of suspension member + 1.75m 2. loose-fill: .867 x length of suspension member + 2.25m

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 \* BS type: 1m each side and 1m beyond

## CABLE RUNWAYS

This section was not included in BS 5696 and previous requirements were found in DIN 7926.

### 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 (1 x 16 stone adult) 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:

# EN 1176 Notes – Summary of Requirements

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Platform roundabouts:

- \* 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. (i.e. 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



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