

11 December 2024

Mr D Emery

fyi-request-29173-5d19d03d@requests.fyi.org.nz

#### Tēnā koe

# Local Government Official Information & Meetings Act 1987 Request:

We refer to your email of 13 November 2024, which includes requests for information under the Local Government Official Information & Meetings Act 1987. Your particular requests and responses are set out below:

All communications between Timaru District Council and NuMat/Creo regarding the safety matting issues at Caroline Bay Playground, including any discussions around potential faults, repairs, or concerns about the matting's compliance with safety standards.

Copies of correspondence between Timaru District Council and Numat/Creo regarding matting are attached.

A copy of any audits and reports - third party or by Timaru DC on the Caroline Bay playground equipment and matting, including any findings, recommendations, or assessments related to the matting's condition and compliance with playground safety standards.

#### We attach the following reports:

- 1. Trish Wigley Inspection Report 30 October 2023
- Draft Report Climbing Pole 25 January 2024
- 3. Email chain Playgroundcentre compliance report 18 August 2024
- 4. Playsafe Play Report 2024
- 5. Caroline Bay Flying Fox Inspection Report August 2024



We trust this provides you with the information you are seeking, however, if you have any further information requests arising from what we have provided please do not hesitate to contact us.

Finally, you have the right to seek an investigation and review by the Ombudsman of this decision. Information about how to make a complaint is available at <a href="https://www.ombudsman.parliament.nz">www.ombudsman.parliament.nz</a> or freephone 0800 802 602.

Ngā mihi

Andrew Dixon

**Group Manager Infrastructure** 

e. Andrew.dixon@timdc.govt.nz

p. 03 687 7491

# From: Sent: Wednesday, 2 October 2024 1:07 pm To: Subject: RE: CPlay - follow up from site meeting 13th Sept Hill I am OK with the proposal of work. The key will be timing

Regards

From:
Sent: Wednesday, 2 October 2024 11:47 am
To:
Subject: FW: CPlay - follow up from site meeting 13th Sept

Hi Hi

I intend to reply and accept these remedies unless either of you have any other items to include.

Regards

From:





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Sent: Wedn	esday, Octobe	er 2, 2024 11:22 AM			
To:		the second second	A TO SERVE OF	retraction	
Cc:					THE STREET
Subject: RE:	: CPlay - follow	v up from site meeting	; 13th Sept		
· · ·	•				

Good Morning

Please find attached our letter outlining the remedies for each of the areas that need attention.

#### Kind regards,



Download our latest portfolio here



From:

Sent: Thursday, 26 September 2024 4:46 pm

To: Cc:

Subject: GPlay - follow up from site meeting 13th Sept

Hi 🔚

Looking back over my notes.

Were you preparing an email for TDC highlighting the areas that require remedial work and a time frame. I am keen to have these details and work towards a final payment to Numat for the remaining contract amount.

#### Regards



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#### Jo Williams

From:

Sent: To:

Subject:

Wednesday, 2 October 2024 12:02 pm

RE: CPlay - follow up from site meeting 13th Sept

Thanks







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From:

Sent: Wednesday, October 2, 2024 12:01 PM

Tod

Subject: RE: CPlay - follow up from site meeting 13th Sept

Hello

Yes, the letter covers the areas of concern and what was discussed, so no issues. I will arrange for the parks maintenance to remove the top board of the climbing wall, and we will also lower the posts.

Thank you







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Playspace Design and Bulld

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Kind regards,



Auckland Hamilton Wellington Christchurch Oamaru Dunedin



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From:	
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Cc:	
	• -

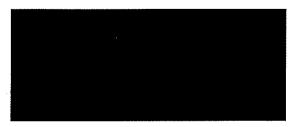
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Wednesday, 2 October 2024 11:47 am

To:

Subject:

FW: CPlay - follow up from site meeting 13th Sept

Attachments: Cplay Letter.pdf

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2/10/2024

Timaru District Council Po Box 522 Timaru 7940

Safety Surfacing Remediations - Cplay

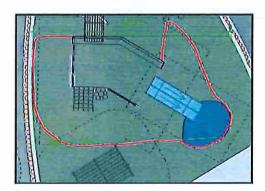


I am writing in regard to the Safety Surfacing Remediations at Cplay. Further to the completion of the project, Creo has carried out CFH testing and can confirm there are 4 areas that need attention.

The areas and remedies are listed out below:

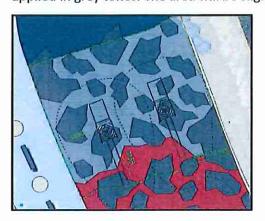
#### Area 1 - Jnr Fort

The shock pad thickness is correct in this area. We suspect that the recycled rubber included in the original shock pad is causing the issue. An area of turf similar to the below will be removed, more shock pad added and then finished with blue Pour'n'Play to achieve required CFH.



#### Area 2 - Ninja Wall

The shock pad thickness is correct in this area. We suspect that the recycled rubber included in the original shock pad is causing the issue. Additional shock pad and another top layer will be applied in grey tones. The area will be slightly raised to accommodate this as discussed onsite.





#### Area 3 - High Swing

It was found that the drawings were incorrect and that the wrong shock pad thickness was specified for this area. Additional shock pad and another top layer will be applied in a similar design. The area will be slightly raised to accommodate this as discussed onsite.



# Area 4 - Climbing Wall

The shock pad thickness is correct in this area. We suspect that the recycled rubber included in the original shock pad is causing the issue. Suggestion is to remove the top board as discussed onsite. It was noted that there are no climbing grips attached to this board.

Please indicate the council's acceptance of this resolution and we will program the work accordingly.



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Cplay Letter.pdf

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Kind regards,







Auckland Hamilton Wellington Christchurch Osmaru Dunedin



#### creospace.co.nz



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From: Graham Ward <graham@wardconsulting.co.nz>

Sent: Thursday, 26 September 2024 4:46 pm
To: Ben Witty | Creo <br/>
Sen@creospace.co.nz>

Cc: Bill Steans (bill.steans@timdc.govt.nz) <bill.steans@timdc.govt.nz>; Stewart Gutsell

<stewart.gutsell@timdc.govt.nz>

Subject: CPlay - follow up from site meeting 13th Sept

Hi Ben,

Looking back over my notes.

Were you preparing an email for TDC highlighting the areas that require remedial work and a time frame. I am keen to have these details and work towards a final payment to Numat for the remaining contract amount.

Regards

Graham Ward Ward Consulting Ltd Mob: +64 27 241 1640 264 Beaconsfield Rd, RD2 Timaru 7972, New Zealand

Email: graham@wardconsulting.co.nz

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2/10/2024

Timaru District Council Po Box 522 Timaru 7940

Safety Surfacing Remediations - Cplay

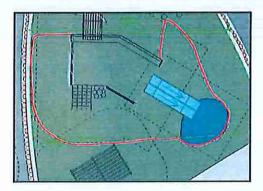


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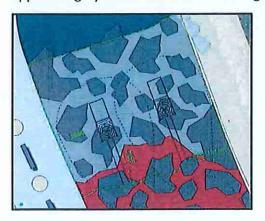
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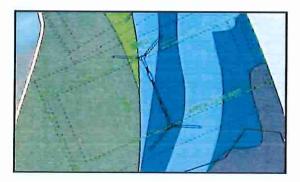
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Please indicate the council's acceptance of this resolution and we will program the work accordingly.



Jo Williams	
From: Sent: To: Cc: Subject:	Friday 27 September 2024 7:36 am  RE: CPlay - follow up from site meeting 13th Sept
Thanks Graham	
Yes, that's the	olan. Thanks for the follow up.
Kind regards,	
	Playspace Design and Build  Auckland Hamilton Wellington Christehurch Oamaru Dunedin  Auckland Hamilton Wellington Christehurch Oamaru Dunedin
creospace.co.n	
Download our late	est portfolio here
From: E Sent: Thursday, To: Cc:	September 26, 2024 4:46 PM  follow up from site meeting 13th Sept
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# Jo Williams

From:

Sent:

Wednesday, 11 September 2024 6:31 pm

To:

Subject:

Re: CPlay - safety report review

Hi Stewart



Thanks,



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From:

Sent: Wednesday, September 11, 2024 5:59:13 PM

To: bin steams some consequences Subject: RE: CPlay - safety report review

Hell



Yes, I can meet on Friday aswell.

Im not at work on Friday, but let me know the time and I will meet you on site.

Thanks







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Sent: Wednesday, September 11, 2024 4:50 PM

Subject: FW: CPlay - safety report review

Hi Stewart,

Fyi

I can meet them on Friday.

Regards



Bill Steans | Parks & Recreation Manager

Timaru District Council | PO Box 522 | Timaru 7940 P:+64 3 687 7290 | Cell: +64 27 431 0639 | W: www.timaru.govt.nz



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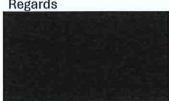
Sent: Wednesday, September 11, 2024 11:42 AM

Subject: FW: CPlay - safety report review



Numat/Creo have been testing areas of the playground and have identified some areas. Would you be available Friday afternoon to meet them on site?

Regards



Fron

Sent: wednesday, 11 September 2024 11:24 am

To Subject: RE: CPlay - safety report review Morning ( Thanks for the follow up. Yes, there are 4 areas that are going to need some attention. Pic attached. I think it would be good to meet you on site to discuss sometime. Are you around on Friday? Kind regards, Auckland Hamilton Wellington Christchurch Oamaru Dunedin creospace.co.nz Download our latest portfolio here **(1)** (2) (2) (3) From Sent: Tuesday, September 10, 2024 3:39 PM Subject: RE: CPlay - safety report review Wondering how you got on. Regards From: Sent: Monday 2 Sentember 2024 8:26 am Subject: RE: CPlay - safety report review Morning (

Sorry, I will come back to you on this. 2 or 3 of us are hoping to visit tomorrow to confirm a couple of things. Talk soon.

Kind regards,





Auckland Hamilton Wellington Christchurch Oamaru Dunedin



creospace.co.nz



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0000

From:

Sent: Tuesday, August 27, 2024 9:36 AM

Subject: RE: CPlay - safety report review

Thanks for the update.

Is it possible to show on an aerial view approximately the areas you have noted.

I am also aware that I haven't checked the variation requests that Mike priced during construction as it relates to the area immediately south of the Obstacle Course.

I will get this through to you sometime this week.

Regards

Sent: Tuesday, August 27, 2024 6:44 AM

Subject: RE: CPlay - safety report review

Morning

I'm sorry for not getting back to you sooner. We have been waiting for our CFH testing unit to return from being calibrated in the USA.

Thank you for sharing Trish's report. Her notes on mounds vs. vertical falls address several of the surfacing-related concerns.

We have conducted our own CFH testing of all equipment areas and can confirm there are two areas of concern. We are formulating a plan to rectify these and will let you know.

Kind regards,





Auckland Hamilton Wellington Christchurch Oamaru Dunedin





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From	
Sent: Thursday, August 15, 2024 9:16 PM	
To: MULE AND DESCRIPTION OF THE PARTY OF THE	
Subject: FW: CPlay - safety report review	

Sorry Pressed the send in error.

Thankyou for time to catch up today over a couple of niggly items left over from what has been a great project. I have attached a copy of feedback on this report from Trish which I have shared with Bill at TDC. It would be helpful to have some thoughts/feedback from Numat on items raised in the Playsafe report. It would also be helpful if we could arrange to test the surfacing in a couple of places to demonstrate it meets the requirements.

I will look back at the variation request information from Mike to check what allowance was made to have Pour'n'Play laid in the area to the south of the Obstacle Course. This was originally planned to be turf and ended up laid in turf

Regards

From:	
Sent: Thursday, August 15, 2024 9:08 PM	
To	
Subject: CPlay - safety report review	
Hi <b>Bara</b>	

Regards



#### Jo Williams

From:

Sent:

Wednesday, 11 September 2024 4:50 pm To:

Subject:

FW: CPlay - safety report review

WhatsApp Image 2024-09-10 at 16.32.40\_a88861aa.jpg **Attachments:** 

Hi

Fyi

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# Bill Steans | Parks & Recreation Manager

Timaru District Council | PO Box 522 | Timaru 7940 P:+64 3 687 7290 | Cell: +64 27 431 0639 | W: www.timaru.govt.nz



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From:

Sent: Thursday, August 15, 2024 9:08 PM

To

Subject: CPlay - safety report review

Regards

# INSPECTION REPORT

OWNER:

TIMARU DISTRICT COUNCIL

SITE:

CAROLINE BAY PLAYGROUND

INSPECTOR:

TRISH WRIGLEY

EMAIL:

INFO@TWENTY24.CO.NZ

DATE:

30-10-2023

TIME:

11.20AM

Рн:

021 951 300

A post-installation inspection of Caroline Bay Playground was undertaken in accordance with NZS5828:2015.

# Site Information and Summary

The playground was near complete when inspected, with surfacing being finished.

Wheelchair accessibility: Consideration to wheelchair access is well integrated into the design.

Park Signage: Interpretation signs and instructions are found throughout the playground.

However, Timaru District Council signage is recommended, clearly displaying:

- · Intended age of users
- · Emergency numbers
- Owner/Manager

Equipment Compliance: Yes.

Surface Compliance: Yes.

Some minor findings were discussed with the project manager for rectification. When these items have been attended to, and the surfacing has been completed, the playground can be opened to the public.



# FINDINGS INFORMATION

Finding	Requirement	Risk	Recommend
Wood splintered on lighthouse deck	No sharp finishes.	Low	Sand back and cover to ensure no sharp or rough edges.
Finger entrapment in safety chain on baby seat.	No entrapments.	Low	Squash chain so opening is less than 8.6mm.
Finger entrapment in me-and- you swing chain.	No entrapments.	Low	Liaise with manufacturer. Minimise the chain opening or install cufflink in chain opening.

	Failure of radius probe on horse.	Side profiles that may give an impact on children passing shall not have projections with a radius of less than 20mm.	Very Low	No action.
	Toggle entrapment and finger entrapment on slide.	No entrapments.	Medium	Cover gaps as discussed on site.
29 19 09 69 89 19 99 99 99 59 75 19 09 6b 8b 1b 9b 9b	Opening of barriers 56cm on Whare.	Openings in barriers of easily accessible equipment shall be 500mm maximum.	Low	No action.

Sharp finish on whare	Edges shall have a radius less than 3mm	Very Low	Sand back.

# MAINTENANCE INFORMATION

It is a requirement of NZS5828:2015 for play equipment manufacturers to provide TDC with instructions for maintenance, stating the frequency of inspection.

Based on audit findings in other districts I recommend the following items be added to the playground maintenance schedule:

- Whare Timber steppers should be regularly weather proofed to ensure longevity. Over time they will split and allow water into the footings.
- Small timber steppers around the edge of the whare should also be regularly weather proofed.
- Monitor Corten steel of whare for heat in high temps. (Avoid burns)
- Chain covers need to be removed to check wear/condition regularly.
- Tunnel slides need to be checked for opening on the joins regularly. Sharp objects can get caught in the openings.

# **Asset Photos:**

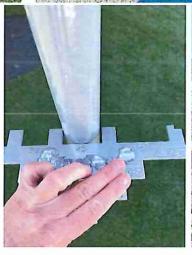
















# **Risk Assessment Matrix**

# Probability

5	Very High	VL	L	M	Н	VH
4	High	VL	L	М	Н	Н
3	Moderate	VL	L	L	М	M
2	Low	VL	L	L	L	М
1	Very low	VL	VL	VL	VL	VL
		Very low	Low	Moderate	High	Very High
		1	2	3	4	5

Severity >>

Probability score		Probability of Occurrence
1	Very low	No significant probability
2	Low	Minimal probability of occurrence.
3	Moderate	Moderate probability. An added factor is needed to cause an accident.
4	High	High probability. Accident is probable without any added factor.
5	Very High	Very High probability. If situation is not addressed an accident will almost certainly occur

Sev	erity Score	Severity of Injury
1	Very Low	No injury likely e.g. damaged or soiled clothing, bruising.
2	Low	Minor injury laceration or bruising only first aid required
3	Moderate	Injury requiring medical intervention e.g. laceration requiring stitches, Sprain, fracture of small bones of hand or foot.
4	High	Serious injury including hospitalisation for observation, e.g. concussion, fracture of long bones of leg/arm, back/neck injury, fractured skull
5	Very High	Severe injury involving potential for permanent disability e.g. amputation, loss of sight, spinal injury, fatality



# C-Play – Altima J3505 Climbing Pole Investigation of Climbing Components

Inspection Date: 18 Jan 2024

Report Date:

25 Jan 2024

#### BACKGROUND

There have been several notified instances where the participant has apparently jumped from the top of pole rather than climbing back down,

leaving the foot and hand climbing devices in elevated positions.

The foot and hand climbing devices are reportedly falling relatively fast if the pole is tapped and have hit some participants.

#### WORKSAFE NOTIFIED INSTANCES

A reasonably quick search on "Altima Climbing Pole Incidences", did not yield any notified instances or related issues.

#### PROLUDIC SPORT

The Proludic Sport website did not note any safety issues, improvement recommendations and/or actions.



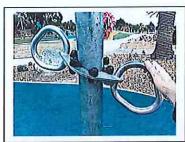
#### INSPECTION

An inspection of the devices was undertaken on 18th Jan 2024

#### FOOT DEVICE

The foot device on both Altima poles, appear to move down the pole immediately, if any weight is removed, at a "walking type motion" rather than free falling.

Both foot devices appear to fall immediately when the participant load is removed & do not appear to remain elevated.





#### HAND DEVICE

The hand device is rather "hit & miss" as-to whether it remains elevated when the participants weight is removed.

If the hand device does remain elevated, it does appear that it can fall reasonably quickly and randomly, whether the pole is knocked or not touched at all.

If the hand device does fall, the fall occurs reasonably fast, without any "walking type motion", and would certainly hurt if the hand device hits a C-Play participant.



#### HAND DEVICE TRIALS

Several trials were conducted to slow, or stop, the hand device descent. One trial achieved the slowing of the descent, by adding some weight to the hand-hold area. The image shows the adjustable spanner that was added to the hand-hold area, this did in fact, stop the descent.

Please Note: the adjustable spanner was only used for the trial, as that was all that was available.



#### POSSIBLE SOLUTION

#### Possible solution:

To add an equivalent weight to the front edge of the hand device.

This would not affect the hand-hold area.

And would stop the hand device rapid free-fall.



#### POTENTAIL ISSUE

There could be one potential issue with this modification with respect to the Proludic Sport warranty, relating to the modification of their device .

It is recommended that this issue along with the associated incidents be notified to Proludic Sport along with the above proposed solution, with the view to get their feedback, recommendations and/or alternative actions.



#### Jo Williams

From:

Sent:

To:

Subject:

Attachments:

Monday, 19 August 2024 9:01 am

FW: CPlay - safety report review

Adam reply Caroline Bay.docx; Seesaw Mokihi - SIGNED.pdf; Pohutukawa Rocker Large.pdf; Tunnel Through mound impact test.pdf; NZ manufacturer's meeting Minutes 18 Oct 2017.pdf



Fyi.

Regards







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From:

Sent: Sunday, August 18, 2024 8:29 PM

To:

Subject: FW: CPlay - safety report review

Please see reply from PGC in regards the audit from Play Safe.

FYI, I am expecting some feedback from Numat as well. They are planning to bring their test rig to site this coming week and check a few spots for compliance.

#### Regards



From: Playground Centre playgroundcentre.com>

Sent: Friday, August 16, 2024 5:13 PM

To:

Subject: RE: CPlay - safety report review

Good Afternoon

Thanks for your time on the phone today!

Please find comments from our Design/ Compliance team below.

Included in this are a few minor fix up suggestions that we would be happy to action once we get confirmation that you/ Timaru DC are happy with these comments. Please advise.

I have also checked in with our accounts team and they are going to be sending through the final claim invoice soon.

Trust this all sounds ok! Have a great weekend and hear from you soon.

#### Kind Regards,



Recreation Consultant South Island Territory Manager



230 Guyton Street Wanganui, 4540 New Zealand







Pages and pages of fun for every age and stage 🔈









- Issue /Finding 1 I agree with you, its fine, however from the manufacturer point of view, not a great finish, better to have a dome nut on them or shorter bolts. PGC should replace
- Issue 3 This is an old rocker they refurbished, being forced movement (I assume it moves?) there shouldn't be a head/torso entrapments. As its likely 30+years old the client could risk assess as when it was made there were likely no stds. They could review incidents. Same applies to the horse head and 20mm.
- Issue 5 agree with you the tyre offers dampening, attached is the cert for this custom Mokihi from CCEP
- Issue 8 Appears to be a finger entrapment, the 8mm probe passes but appears 25mm doesn't at the bottom and it should. If the 25mm probe passes no problem
- Issue 9 fix with silicon installer?
- Issue 10 agree with your logic here, could be called a cluster also

- Issue 11 opening should be less than 500mm relatively easy fix, add a board to reduce
- Issue 12 the use of the fish tool is often mis understood, Philippa had some examples and discussed with Keith while in UK I believe. Would be good to circulate these to all auditors (I'll see if she has some she can). As a general rule when we manufacture these barriers we also make the horizontal less than 45mm from the platform so there is no argument. As the platform is horizontal, at the very worst it is a very small risk. We always joke you could sand the platform so it slopes away and then the fish tool doesn't apply as the neck rolls out.
- Issue 13 crawl tunnel its for crawling not running/walking. He's picked us up on this before, there is no common sense
- Finding 14 Trampolines you're right in NZ there is no standard for bouncing equipment. Aus and EN there is and he is referencing those where there should be 2m and even up to 3m if there is predetermined direction of bounce
- Finding 15 springs on Pohutukawa rocker. Appears the rocker has been installed too
  low. The safety surface when wetpour should allow for the replacement of the springs. At the
  bottom of the spring we supply 'plastic wedges' to prevent this being an entrapment. However
  due to the location, under the platform and wetpour offering some relief to squashing I would
  consider this acceptable and monitor. Becomes more of an issue if the spring needs replacing
- Finding 17 PGC should replace the access plate with compliant version very low risk considering its under the seat
- Finding 18 Crawl through tunnel we have had our crawl thru tunnels impact tested by CCEP/Philippa (see attached report), it passed up to 1m. Adam shows this being slightly higher (50mm). I would accept as very low risk. Our install instructions state to install no more than 200mm above the mound so I wonder if he's measured on the angle rather than vertical
- Finding 20 Embankment slides don't need cross bars so no issue with the height being outside the spec
- Finding 22 best for PGC just fill this with silicon & screw to post
- Finding 26 The mound. If you recall the meeting we had in 2017 mounds were raised, we
  agreed it was to be risk assessed, not a non compliance, I've attached the minutes from this
  which Adam was also present
- Finding 27 As a mfg we don't make anything wider than 45mm as the unwritten rule is not to
  make this sort of area a platform. You are right though std is not prescriptive. An easy fix
  would be to rip a board at 45deg and attach to deter standing on this surface
- Finding 28 should have a bump rail or something attached to prevent head strikes, could fix a timber board with routed edges or rubber extrusion
- Finding 30 Monitor for now. If still an issue remove red board or use larger D shackle at top and shorten chains
- Finding 31 Should monitor for now, originally we had a shorter shrould designed, I wasn't
  involved in the longer one, was that raised as an issue at the first audit. Could wrap the
  chimney with finer mesh
- Finding 33 The rubber fall prevention was designed as its on a angle, they could be flipped so
  they alternate but in my opinion this probably doesn't help, gravity will make you fall to the
  side
- Finding 37 shouldn't have been raised as an issue
- Finding 39 probably a fair point although presume its impact attenuated, bit of a weird thing to put there.
- Finding 40 should be under 600mm vertically and if you measured less then ok
- Finding 42 put back onto the matting team, is the nib attenuated?
- Finding 46 PGC should fix Bow shackle
- Finding 48 Would be interested to see his test rig at correct weight etc before making any judgement, 100kg is not the correct test weight

- Finding 52 –Our design had the horizontal brace 450mm from the top so I'm not sure what happened between drawings and install. It is a bracing element so according to the std can be there. I don't think it's a good design though
- Finding 58 PGC should fill the hole with appropriate bolt or silicon

A few comments he made on the older equipment/s/steel slide are probably valid but should also state when these were made to an older standard so client can risk assess

#### Cheers

Hamish 021 706864

From: Graham Ward <graham@wardconsulting.co.nz>

Sent: Thursday, August 15, 2024 9:06 PM

To: Warren Walker | Playground Centre < warren.walker@playgroundcentre.com >

Subject: CPlay - safety report review

#### Hi Warren,

Thankyou for time to catch up today over a couple of niggly items left over from what has been a great project. I have attached a copy of feedback on this report from Trish which I have shared with Bill at TDC. It would be helpful to have some thoughts/feedback from PGC on items raised in the Playsafe report

#### Regards

Graham Ward Ward Consulting Mob: +64-27-241-1640

#### Finding 1 -

**Disagree** - Ref 4.2.5 Finish of equipment "Nuts and bolt heads that project less than 8 mm shall be free from burrs." EN 1176.1:2008



Finding 3



Not a failure shown in photo where there is foot support – due to less than 600mm drop. Yes to failure at back of seat.

Finding 4



Agree with the horse head failing-picked up profile issue on my audit. But don't agree with equipment edging failure.

#### 4.8 Side view profiles

Those parts of the side profile, which may give an impact on children passing by or on the user shall not have projections with a radius of less than 20 mm (see Figure 8).

Changes in the shape of the edge of the front and the back of parts, projecting from the principal profile, shall be rounded with a radius of at least 20 mm (see Figure 8).



Figure 8 — Example for rounded side profile (Note in this example – the edges of the animal do not need to meet the 20mm requirement)

## Disagree with the body of the horse having to meet 20mm radius. 3mm should be sufficient. 4.2.5 Finish of Equipment

Corners, edges and projecting parts within the space occupied by the user that protrude more than 8 mm, and which are not shielded by adjacent areas that are not more than 25 mm from the end of the projecting part, shall be rounded off. The minimum radius of the curve shall be 3 mm.

Issue 5



Disagree

Standards site 230mm ground clearance not required when dampening in effect - i.e. tyre damping was deemed sufficient by Keith in outdoor inspectors course.

#### 4.9 Entrapment EN1176.6.2006

Equipment shall be designed to prevent entrapment between the equipment and ground surface (see Table 1). This may be achieved by

- a) having a minimum ground clearance of 230 mm; or
  - b) use of damping effects; Damping is defined as combined effect of the supporting component(s) that moderates the speed at which the equipment can move and the reduction of shock effects at the outer positions of the equipment

Finding 6



As above - 3mm required. Adam has misread the standard.



Note - possible the wood has warped - inconsistent opening.

#### Disagree with Adam's finding - evidence in EN 1176.1:2008

#### 4.2.7.6 Entrapment of fingers

8 mm finger rod (see Figure D.10 a)) shall not pass through the minimum cross-section of the opening and the profile of the opening shall be such that the rod cannot be locked in any position when set in motion as given in D.4.2; or

The probe would fall out. – Adam is not using the probe as intended for this test.

#### Finding 9



Agree –this one was found in my audit.



Disagree – fall from each step is less than 600mm and no different from stairs or steep play leading to deck.

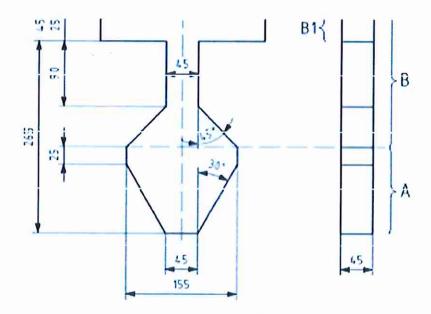




Considering Adam's recommendation of closing the gap to  $\underline{45mm}$ , I feel that Adam has not applied the range 2 rule correctly to this scenario. The depth needs to be 120mm or more to fail. There is no evidence in his report that he tested this

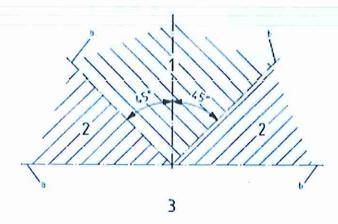
There is no demonstration of this scenario in the standards, common sense prevails. Torso, shoulders and head do not pass through this partial opening. Adam has not shown the depth of the opening - to conform as entrapment it must be deeper than A section (120mm)

Range 2: (template centre line from horizontal to + 45°); when the template apex contacts
the base of the opening, the depth of the opening shall be less than the 'A' portion of the
template. If the depth of the opening is greater than the 'A' portion of the template all parts
of the opening above the 'A' portion shall also allow insertion of the shoulder section of the
template or probe D.



## Opening is Partially bound, Proceedure Applies

### D.2.2.2 Procedure



Finding 13

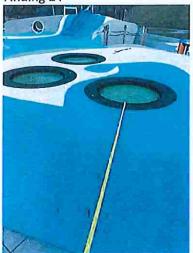


4.2.7.5 entrapment of foot - surfaces intended for running/walking. this tunnel is intended for crawling.

Finding 15 – Correct, I didn't spot this. A small wedge would mitigate.



Finding 14



There is no rule in the 5828:2015 standards regarding trampolines. See certified equipment requirements by supplier/manufacturer for fall space requirements.

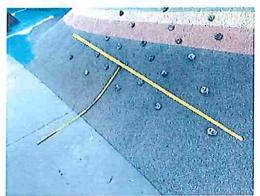


Question impact attenuation of plastic - fall from height of tunnel, not top of mound - ground level.



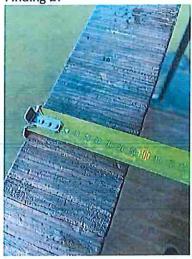
This rule only applies to attachment slides with a fall height greater than 1m. This is an embankment slide.

Finding 26



Disagree - Not a vertical fall. 35 degrees is not steep play. This is the ground.

Finding 27



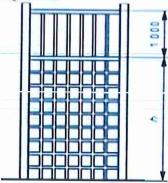
Not a failing in the standard. no measurement given on width of barriers. Adams finding is opinion. No horizontal railings to encourage sitting.



No vertical fall above 600mm. Child can stand up.



Disagree with adams measurement of fall to blunt support - This distance is a hand hold minus 1m to support bar, so the distance of the fall to impact is 640mm. If measured correctly. EN 1176.1:2008 figure 14.



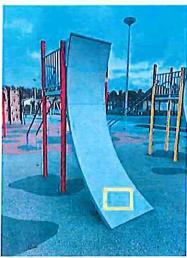
This is 4cm over the limit of fall within a play structure if Adam's measurement to full height is correct.

4.2.8.4 Protection against injuries in the falling space

NOTE 1 The intention of this requirement is not to protect the user from minor knocks or bumps, that might lead to a bruise or sprain etc., as these types of injuries are possible in all situations.

The following parts of play structures may be in the falling space:

adjacent parts of play structures with a difference in free height of fall of less than 600 mm;



Disagree with Adams finding - The purpose of the finger entrapment ruling is to stop fingers getting caught during forced movement. The definition of forced movement can be argued for this equipment. I think common sense prevails in this situation, considering movement ceases on the ground.

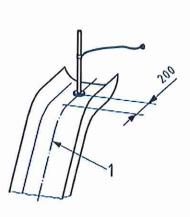


Disagree with Adam's findings. Free height of fall is defined as vertical height in the standards. These mounds are not slides, they have grip. They can be walked up and down.



#### Disagree - not a surface designed for walking on.





a) Narrow slide

I disagree with this toggle entrapment finding based on the following evidence.

Looks like the toggle strap was placed here? Was the test undertaken with a movement down the slide from the centre of the slide as shown in the standards?

Adam's toggle entrapment tool does not match that shown in the standard. It is missing the 400mm sliding pole, that is placed on the slide. I disagree

#### The tool is to be placed on the slide to preform the test.

Randomly place the toggle and chain under the action of its own weight to all positions within range, without applying additional force or influence. In the event that the test device is obstructed, apply a maximum force of 50 N in the direction of the forced movement. If the device is released, this position within the equipment passes the test.

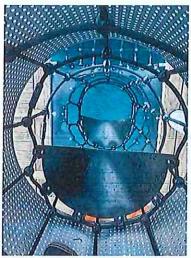


Adam wrote "Slide Type 1 -The slide run-out should be surrounded by an impact attenuating area that extends at least 1.0m on each side and at least 2.0m in front. This impact area should be free from any overlapping falling"

Doesn't say this in the standards.

Standard requirements are that free space cannot be overlapped. Slide free space is measured from the centre of the slide., extending 1m.

I need to check, but I thought the disc was out of the 1m free space. And had I was informed had a CFH of 1m.



I questioned this with manufacturer at the time of completion, and the answer was because the angled fall the 'rubber valves' were placed to slow fall. Adams photo has been taken to increase the angle – the vertical fall is not as it appears in photos. I will let the manufacturer answer these ones.

# CCEP

#### CONSULTING COORDINATION

#### **SAFETY ENGINEERING**

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AUSTRALIAN & NEW ZEALND STANDARDS COMPLIANCE CERTIFICATE - PLAYGROUND EQUIPMENT - PLAYGROUND CENTRE - SEESAW MOKIHI

220507-2

**EQUIPMENT:** 

SEESAW MOKIHI

MANUFACTURER:

PLAYGROUND CENTRE

PO BOX 14

WANGANUI 4540 NEW ZEALAND

**DOCUMENTS:** 

Z12843SS Seesaw Mohiki Complete Assembly.pdf

We, Consulting Coordination Pty Ltd of Level 1, Suite 5, 2481 Gold Coast Hwy, Mermaid Beach, QLD, 4218, hereby certify that we have assessed the above playground equipment modules as specified above for compliance with current Australian Standards. Based on our assessment, we are satisfied that the equipment specified above complies with the requirements of AS4685:2021, NZS:5828:2015 and AS4685.0:2017 providing manufacture, assembly and installation is undertaken in accordance with AS4685:2021, NZS:5828:2015 and inspection and maintenance in accordance with AS4685:2021, NZS:5828:2015 and AS4685.0:2017 is undertaken by the facility owner.

This certificate is issued subject to the provision of structural assessment and footing details by a local structural RPEQ engineer.



#### SAFETY ENGINEERING

ASIA PACIFIC

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## AUSTRALIAN STANDARDS COMPLIANCE CERTIFICATE - PLAYGROUND EQUIPMENT IMPACT TESTING - MINGLE PARK PLASTIC TUNNEL

170805

TESTING LOCATION:

MINOGUE PARK

FOREST LAKE, HAMILTON, 3200

NEW ZEALAND

CLIENT:

PLAYGROUND CENTRE NZ

PO BOX 14

WHANGANUI, NZ, 4500

IMPACT MEASURING

EQUIPMENT:

TRIAX 2015 PORTABLE IMPACT TESTING RIG

SURFACING TYPE:

INTERNAL LOWER LEVEL OF PLASTIC TUNNEL

SAMPLE:

PLASTIC TUNNEL THROUGH MOUND INSTALLED AS PER PLAYGROUND CENTRE INSTALLATION INSTRUCTIONS

METHOD OF FIXING:

EOUIPMENT TESTED AS INSTALLED ONTO 100MM CRUSHER DUST/

AP7 AND ARTIFICIAL GRASS TOP LAYER

CRITICAL FALL HEIGHT:

1.00M

We, Consulting Coordination Australia Pty Ltd of u101/437 Bourke St, Surry Hills, 2010, NSW, Australia, hereby certify that we have assessed the internal lower level of plastic tunnel as specified above for compliance with current Australian Standards. Testing with a Triax 2015 Portable Surface Impact Testing Rig was conducted in accordance with the procedure set down in clause 2.6.1 of AS 4422:2016 Playground Surfacing Specifications, requirements, and test method. Based on our assessment and testing, we are satisfied that the internal lower level of plastic tunnel manufactured by Playground Centre NZ will satisfy the impact attenuation requirements of AS 4422:2016 and AS 4685.1:2014 up to the stated critical fall height when installed and maintained.

This certificate is valid for three (3) years from date of issue and subject to no change or difference in material content of the surfacing tested.

RICHARD ERWIN. BSc Eng (Civil) (Aust) MIEAust RPEQ CPEng



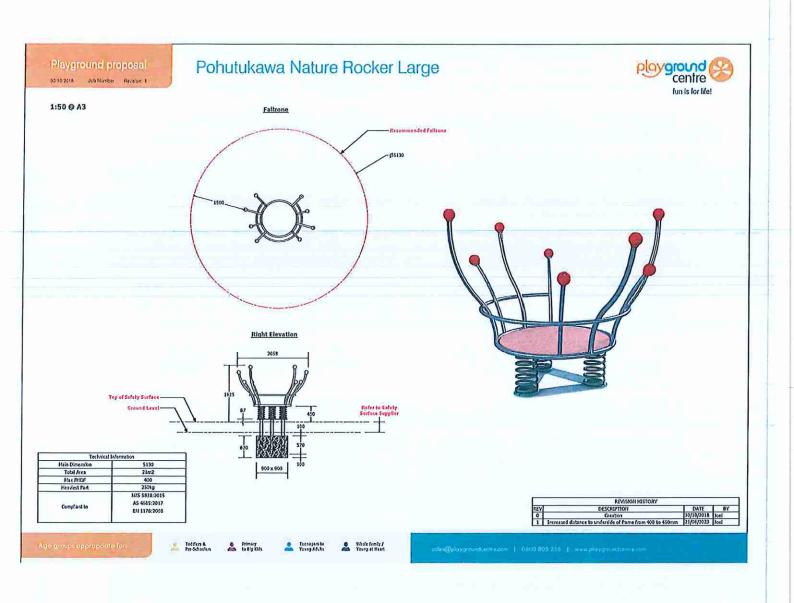
### TESTING PHOTOS



TESTED EQUIPMENT



TESTED EQUIPMENT



## 2017 New Zealand Playground Manufacturers Meeting

Venue: Celsius Bar, Corner Ormiston Road and Te Irirangi Drive. Time: 9am - 1pm Date: Wednesday 18th October 2017

#### Attendees:

Simon Filleul, Glenn Neal, Hamish Smith (Playground Centre), Ross Archer, Ryan Archer (Playco), Adam Stride (Park Supplies), Leith McFadden, Kane McFadden (Playground People), Dave Cap (Tredsafe), Allan Grant, Tim Johnstone (AJ Grant), Nick Shorter (Playscape), Laurence Hoyle (Playground Creations), Theo Jaques (Roktopus), Garth Galloway (Galloways), Trish Wrigley (PlayingSafe), Philippa Bollond (Future Landscapes).

**Meeting Chairs:** 

Simon Filleul, Ross Archer

Apologies: Tina Dyer (Park Central)

**Meeting Minutes:** 

Trish Wrigley

Meeting opened by Ross Archer at 9.00am.

Purpose: To achieve more open dialog amongst manufacturers. Invites to all PG manufacturers in NZ & all current Level 3 play inspectors.

Agenda Item 1: Clarity around the definition "Easy Access" - Currently platforms less than 600mm high and ladder's first rung less than 400mm.

#### Discussion points:

Is a cargo net easy access? There is a definition of a ladder in the standard.

Philipa suggested a cargo ladder for in accessible equipment should be designed with a bottom rung higher than 400mm or even as high as 600mm as 400mm doesn't deter 36 months old.

Simon asked "Does a chain climber, or rope climber fall under easy access as they move around a lot and are difficult for toddlers to climb?" - Answer from Adam was that Accessibility defined in the standards refers to equipment (not just ladders).

Intention of the clause is to prevent easy access to toddlers, not to stop them climbing.

Does a cargo net fall under easy access? Garth says any climbing element is an access. So would fall under easy access. Interpret the literal sense of meaning.

Action/Resolution:	Who
1. We accept that all all climbing items on not easily accessible equipment shall have a first foot height of more than 400mm. This includes cargo type nets but does not include steep play which is a separate item.	All
2. Ross via Philippa to write to Keith to show him how we interpret the standards.	Ross/Philippa

Agenda item 2: "Intended Use" versus "Climb-ability" - Consider slide flanges, towers with barriers. Discussion points:

The example was kids climbing the outside of a tube slide. There are clauses in the standards that helps you to consider what is climbable.

Inspectors should use their common sense to say it's not easy accessible?

Leith - commented the top of tube-slides are being climbed on to over 3m high. Due to it's prevaliance Leith felt manufacturers need to address the risk. If a slide is over three meters there should be some sort of halo or barrier to stop them getting up past a certain point (PGC has done one in Auckland).

Garth - commented that the slides should not have any flange or hand holds to encourage climbing.

Phillipa - council is concerned about the safety and liablity.

Garth—we are within the standard regarding intended use. However Garth felt manufacturers need to look at ways to stop kids climbing if over impact attenuation capability.

Glen – In Australia playground managers made a risk assessment and chose to put a halo around the slide to reduce the probablity of kids climbing the outter tube slide.

Philipa Noted: "Intended Use" is the critical word in the legal sense. However, playgrounds need to be as safe as "practicabile", (not "possible").

#### Action/Resolution:

We acknowledge that kids will climb up things not intended for climbing.

As manufacturers we recognise the 3m FHOF height limit so should – put a halo/ barrier/ deterrent on the slide to deter them from climbing over 3m.

The design of the halo/barrier/deterrent should be up to the manufacturer. The intention of this action is to reduce risk – even though a slide without the halo/barrier/deterrent would comply to the standard.

Agenda Item 3: Rubber deck mats – Impact attenuation properties, when they are required. (Clause 4.2.8.5.2)

#### Discussion points:

In the 2017 standard any modular playground that has an overhead climber and deck below needs impact attenuation underneath.

Do Cargo nets need it too (over 1m fall height)? (discussed further in Item 4)

This rule is not retrospective. If you improve or modify the playground it must conform to current standard. If you reinstall a playground then it must conform to new standard. If you add on parts to the new standard then the new bits need to comply, but not the old parts.

Adam argued that the rule was part of the 2005 standard, but was not interpreted by the manufacturers. So he does a risk assessment when auditing playgorunds and recommends a medium level or risk, and covering decks.

#### Action/Resolution:

If the equipment has been built under the new 2015 standard it is mandatory to have impact mats on the decks of overheads. Prior to this 2015 standard, equipment is compliant without the impact attenuation on the decks, but it is a safety recommendation/ suggestion to retrofit due to the identified risk.

The standard is not retrospective, but risk assessment does take over at some stage. This becomes a discussion with owner and operator of the playground.

Agenda item 4: Non-impact attenuated objects in fall zones – ladder at 90 degrees to a climber or objects at the end of an overhead.

#### Discussion points:

Is a bar at the base of a vertical rope climber ok to be raised above the surface level? Or should it be buried. A vertical climber with solid bar is accepted under TUV (equipment has been certified).

Garth – suggested a risk assessment with regards to health and safety 1). Make sure you're well insured. 2). Look at a risk interpretation, look at a way of designing around the risk. Lawyers will go for the literal sense. Garth is saying be aware and reduce risk.

A diagram was drawn on white board of ladder and deck 90 degrees from rope climber cargo. If top of cargo net to deck is over 1m then does the deck need impact attenuation rubber on it?

What about horizontal bar in the fall space? Should they be e.g. monkey bars step up on a bar or timber bar. – This is a solid object in the fall zone.

Monkey bars: Most manufacturers agreed that a rock hold on side of frame is accepted for access to monkey bars. Because it's a glancing blow. Cross bars in the fall space are not ok.

Simon: From a risk assessment point of view how do we evaluate it? Adam answered - (low risk).

Glen - PGC have designed out all solid bars in the base of cubes/climbers.

Ross - suggested it is good practice to avoid bottom beams in climbing items.

Actions(s):	Who
TO BE CONSIDERED – no resolution at this stage. Inspectors should deal with it when	All
regarding risk assessment. We can't change imported product. It was agreed that a rock (of	
suitable shape) fixed to the side of the posts supporting overheads was sufficient for use and	
compliant. Would be good to get Keith (RPII) to endorse this point.	

Agenda item 5: Is there an agreeable acceptable barrier height for a platform above 600mm high that is deemed un-passable rendering the platform fully enclosed and safety surfacing not required?

#### Discussion points:

Only a fully enclosed platform is "un-passable".

#### Action(s):

Unless a platform is fully enclosed, then it needs surfacing and fall zone. (4.2.8.4 covers that).

Agenda Item 6: Acceptable falls between platform to platform within a structure – think two 1m2 decks Joined side-by-side but set 1500m high apart in height difference,

Discussion points: Diagram drawn, e.g. Fall between adjacent platforms.

#### Action/Resolution:

Where falls between adjacent decks are greater than 1m then barriers providing handgrips and deck pads are required. Alternatively design equipment so fall height is less than 1m.

Agenda item 7: Agreeable separation of horizontal rails in barriers that is deemed not climbable.

Discussion points: a gap of 400mm for easily accessible equipment was suggested.

#### Action/Resolution:

Anything over 70mm thick will encourage a child to sit or stand.

Agenda item 8: Correct projection for impact area for a fully enclosed platform. – will need to consider access/transitional/exit equipment.

#### Discussion points:

#### Action/Resolution:

Fall space and impact attenuation required in a radius taken at platform entrance. If a platform is not fully enclosed it requires fall space and impact attenuation relevant to the height.

Agenda item 9: Clarification around partial barrier openings re steep play elements and easy access – part two is applying the "Fish Tool" to these barriers.

#### Discussion points:

Partial openings in relation to fish tool. We drew a diagram of a deck, and d handle at the top, creating a partial bound opening. Often seen with a slide next to it.

Part 1: Is it a partially bound opening? If so, then use the fish tool flat and then in the angle. Then go through a risk assessment looking at the height of equipment. Adam spoke of the possiblity of "roll out" in zone 2 of the test area.

Part 2: On easily accessible equipment the barrier openings for steep play elements have a max opening of 500mm. Key word is opening. Covered in standard.

Action(s):	Who
Seek clarifcation from Keith on use of the fish probe with regards to "roll out".	Ross/Philippa
Ross to run this question to Keith (via Philippa) using the drawing on the board - fish tool not	
reaching the end/depth of the opening, (using the scenario of d handle over deck).	

#### Agenda Item 10: Stairs to a platform being inside the impact area.

#### Discussion points:

Measure 1.5m from the 600mm high point. Stairs don't need impact attenuation, but the path does. Means of access are not impact tested.

At what point does a step turn into a stair. (answer is 3 or more).

#### Action/Resolution:

Explained in the standard document on page 32

Fall space requirement under 600. Minimum 1.5m <u>fall space</u> irrelevant if it 's over 600 or not. Impact attenuation required if over 600mm.

1.5m fall space is taken from the extremity of the equipment reguardless of height. Cluster of stepping logs is OK within that 1.5m.

Agenda item 11: Is it agreeable that up to 45 degrees angle on embankments is considered a tu critical fall height can be reduced.	mble and th
Discussion points:	
Free height of fall from highest point. Is impact attenuation required in slope on a 45 degree.	
Action(s):	Who
Seek clarification from Keith on what slope of bank requires impact absorption. When is it a fall and when is it a tumble? This scenario becomes a risk assessment. E.g. think of climbing mounds with rock holds up it. They are so steep that they need hand holds. (Think margaret mahey). If the gradient was 10 degrees would it need impact attenuation? Is there a gradient identified that needs impact attenuation?	Ross via Philippa

#### Agenda item 12: Finger Entrapments on floors of large elevated platform areas.

#### Discussion points:

Access points and forced movement should not have any finger entrapment in deck. Finger entrapment tool should fall out if measured under the deck.

#### Action/Resolution:

Accepted finger entrapments on a deck were OK except at entry points and where there is forced movement. (To a metre radius around these points)

#### Agenda item 14:

Clarity around bridges - heights of slats, sway type bridges and where barriers are and are not required.

#### Discussion points:

Generally accepted 1.5m high clatter bridge is OK without barriers.

Clatter bridges are not easy accessible, because they can't be fully barriered.

Clatterbridges are often used in preschools.

Risk of falling off the side is low – it's more likely users will fall off the decks where they are moving through a module.

Action/Resolution:	Who
Generally accepted that clatter bridges with a 1.5m high platform can have guardrails (not barriers). If the platform is over 1.5m in height then it needs to be inaccessible to under 36 month kids and requires a guardrail.	Ross via Philippa
Philippa to write to Keith to show him how we interpret the standards.	

## Agenda item 15: TUV Certs – at what point are they considered sufficient compared to the view of an Inspector.

#### Discussion points:

TUV on imported equipment - A lot of TUV is based on risk assessment. Typically to get a TUV cert you have to have a structural certificate of compliance.... and a playground cert of compliance.

Inspectors may ask questions of, or about the TUV if he/she thinks it's a technical breach. Clients make the decision on whether they override the TUV. We as inspectors don't have the jurisdiction to override a TUV.

#### For example:

Philipa may bring up something of concern during a post install inspection - but it has TUV

Client may come back to the supplier in NZ asking for additional safety items.

However - Manufacturer says but we have TUV, so why do we have provide additional safety measures? Philipa is suggesting they can add the changes at an extra cost to the client.

Note: Garth suggests as a manufacturer that they validate the TUV. Get a professional engineer here to sign off of TUV.

#### Action/Resolution:

TUV is considered sufficient in the standards. Extra requirements requested by the client over and above the TUV may incur additional cost, but this is negotiated between the client and manufacturer/ supplier.

#### Agenda item 16: General.

#### Discussion points:

Allan Grant pointed out we can write an amendment to the standard – great standard, but a few mistakes in it.

Loosefill – if it's certificed it's OK at 200mm compacted. Most installers are still installing to 300mm compacted. If it's not tested you need to add a further 100mm to the requirements (i.e 300 + 100mm for uncertified loosefill (see page 36 of standard).

Philippa requested manufacturers all use the same base level indicator on their equipment because the are not easy to find as they are all different and get mixed up with string lines etc. Manfacturers argued they can't uniform the mark because of the different equipment being imported. Philippa withdrew her request.

#### Where to from here:

- Make this an annual get together to discuss clarification on the standards.
- Make sure RPii inspectors get copied in with the notes from the meeting.
- Generate an email discussion with the forum attendees on any 'grey' issues.
- Ross encouraged others in the group to initiate and facilitate the meeting so that they workload is shared out.
- Trish and Ryan have a copy of the power point if anyone would like it.

Meeting closed at 12.36pm.





# **PLAY REPORT 2024**

**TDC - Caroline Bay Playground (CPlay)** 





## Wow, awesome playground!

Thankyou, for engaging Playsafe to conduct a Post-installation audit/inspection of your play area to NZS5828:2015. Your Post-install Report is enclosed.

Our inspection includes a comprehensive assessment by a Level 3 RPII certified inspector to verify compliance with the NZS5828:2015 standard. We have checked for issues relating to structural stability, body entrapment, falling spaces, impact areas, materials and finishes, as well as quality control and construction workmanship.

To receive the "Certificate of NZS5828 Compliance," please address the FLAGGED findings listed on page 5 of the report and supply visual proof of the resolution within 30 days.

Once the requirements of NZS5828 are satisfied, we'll issue a Compliance Certificate. Any non-compliance issues identified during the post-installation inspection must be rectified within 30 days before the final certificate is issued. Please note that we require photo evidence of rectification work, therefore a second inspection is not generally necessary. The certificate is subject to the final satisfaction of Playsafe.

Playsafe Consulting Ltd is NZ's leading playground professional services provider specializing in safety inspections, surface impact testing, design reviews, and inspection training. We are accredited by the Register of Playground Inspectors International (RPII) and have a team of police-vetted inspectors who carry professional indemnity insurance for professional consulting services. Our inspection services are certified, independent, impartial, and confidential, and are highly recommended by the Ministry of Education and Education Review Office, as well as Councils throughout New Zealand.

Playsafe's goal is to ensure safe play environments for all children, enabling them to have hazard-free fun while growing and developing.

Thank you again for choosing Playsafe, and we look forward to working with you again soon. We would also love to hear your <u>feedback</u> on our services, as we aim to continue providing the best possible experience for our clients.

Adam Stride

Founder | Director | RPII L3 Outdoor & L4 Enclosed Play Area Specialist M#1074A / M#1023AF





Look for the Playsafe SAFETY CHECK Label on your next playground visit!



G.		



#### **DEFINITIONS**

The official definitions may be found in the Standard. The explanations which follow attempt to explain them in everyday terms.

Climbing equipment: items on which Children cannot stand unaided but must hold on, requiring three points of contact unless moving.

**Playing surface:** the ground or the surface from which play commences.

Forced movement: a movement to which a child is committed by the design of the equipment (i.e. swinging, sliding, or rotating).

Free space: the space in which children are undergoing a movement forced by the equipment (i.e. slide chute or fireman's pole).

Falling space: a 3D space through which a child may fall from an elevated point on the equipment.

Free height of fall: distance from the clearly intended body support, or from a position which can easily be reached, to the impact area.

Collective use: use by more than one user at a time.

Ladders, stairs, and ramps: means of access or egress.

Impact Area: the area where the child will strike the surface after undergoing a fall.

**Grip and grasp:** a specific part of the equipment which the child needs in order to support their weight will require grip, whilst a specific part the child requires for balance would require grasp.

**Obstacle:** a piece of the equipment extending into the path of movement.

**Easily accessible:** requiring only basic skills to access the equipment and not slowing the child sufficiently to allow time for a parent or carer to intervene.

Cluster: separate items designed to be grouped together (i.e. adventure trails).

**Steep play element:** a play feature steeper than 45° used to enter or leave equipment.

Adequate level of impact attenuation: properties of a surface having the necessary impact attenuation for a given free height of fall.

## **ENTRAPMENTS**

One of the key safety principles outlined in NZS5828 is the prevention of unintended entrapment within play equipment.

Entrapment is defined as any situation that hinders the removal of a body or body part once it has passed through an opening. Younger children, in particular, are at risk of head entrapment. They may insert their bodies into small openings, only to find that their heads cannot pass through. Due to their limited reasoning abilities, they may not be able to support their body, leading to the risk of strangulation.

Playsafe inspectors employ probe templates that simulate a child's torso, head, and neck. They thoroughly inspect all openings and gaps in play equipment.

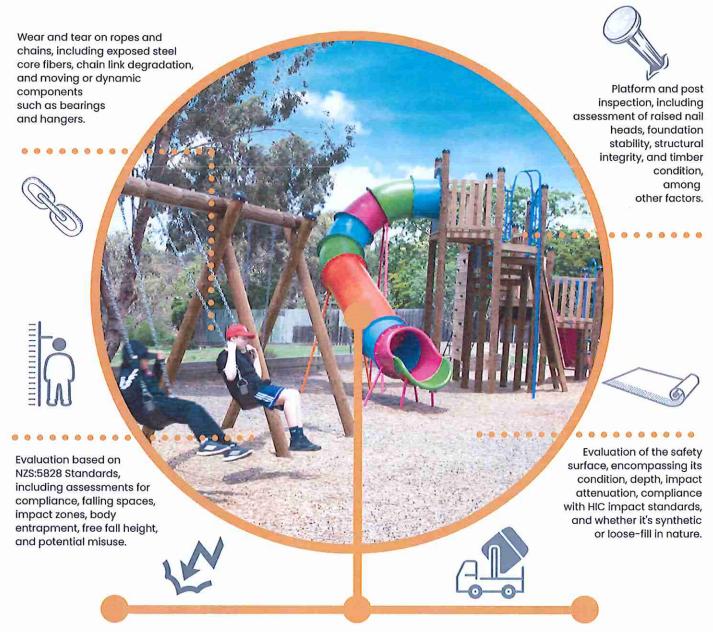
Our inspections encompass various forms of entrapment, including foot/leg entrapment, fully enclosed rigid openings like those between guardrail rungs and barriers, completely enclosed flexible openings like those in climbing nets, and assessments for potential finger pinching, crushing/shearing within openings, gaps, moving parts, and connections.





# Poorly maintained playground equipment and surface areas can contribute to serious injury.

Inspections, maintenance and replacement of damaged parts is essential to users safety. The following highlights some of the main focus points within an inspection:



The impact-attenuating surface serves as the safety net. Statistics reveal that approximately 70% of severe playground accidents result from falls onto these surfaces.

Structural foundation elements
like concrete footings, pole
foundations, and other
structural components require
consistent inspection to
maintain their structural
integrity and prevent potential
failures.

Fixtures and fittings such as shackles, eyebolts, trolleys, bearings, and other movable components are designed with wear in mind and are prone to failure if not routinely inspected, maintained, or replaced.





## SURFACING - LOOSEFILL

Loosefill surfaces (i.e bark, woodchip, sand or peagravel) are checked during the audit with our exclusive Playsafe depth Probe.

In accordance with NZS5828, it's essential to maintain a minimum depth of 300mm for loosefill surface material.

Our depth probe employs appropriate force to evaluate both the depth and quality of your loosefill. It features 50mm increment indicators that are used to determine the average depth from multiple points across the surface. Any discrepancies in depth are clearly highlighted in the resulting report.

Playsafe recommends the source of loosefill materials are from pre-certified suppliers.

100mm

50mm

150mm

200mm

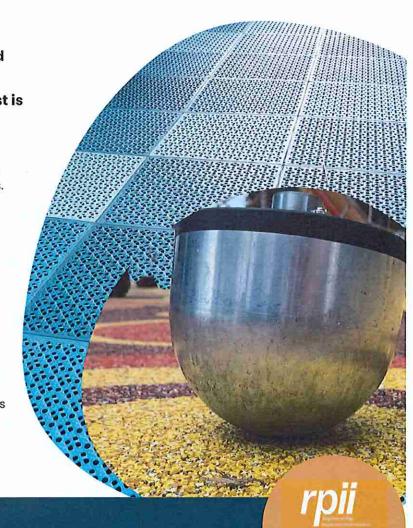
## SURFACING - SYNTHETIC

Synthetic surfaces should be impact tested every two years to verify head injury compliance. Playsafe recommends this test is completed as part of the Annual audit.

Falls are the leading cause of injuries on playgrounds, often resulting in serious head, neck, and back injuries.

Roughly 70 percent of injuries related to playground equipment occur due to falls onto either insufficient surfacing or hard objects. The most common type of injury is a fracture in the long bones, affecting the arms and legs.

Through our Certified Surface Impact Test, we assess your playground's surface performance against the critical fall height criteria for the specific play equipment. This testing process provides a detailed electronic report that identifies any issues and ensures compliance with the head injury performance standards outlined in NZS5828:2015 + EN1177.





## INSPECTION SCOPE OVERVIEW

Playsafe Ltd conducts Annual RPII Inspections for various types of playgrounds, adhering to the listed standards.

The inspection reports assist owners/operators in fulfilling their responsibilities as per the relevant standard. Standards not listed here are excluded from the inspection, unless referenced within the listed standards.

#### **Relevant Standards:**

- NZS5828:2015/ EN1176 Playground equipment for permanent installation outdoors & indoors, including specific parts and appendices.
- NZS5828:2015/ EN1176 Part 7 'Guidance on Installation, Inspection, Maintenance, and Operation,' excluding ancillary items.

#### **Inspection Details:**

- Compliance with current standards, defects (wear, vandalism) covered in Annual and Post Installation inspections.
- Inspection area includes playground equipment and immediate surroundings, up to three meters around, fence line, or as agreed.
- Operational and routine inspections identify defects (cleanliness, clearances, finishes, sharp edges, wear, structural integrity) non-destructively.
- Manual stability test conducted, and accessible parts assessed above the surface. Inaccessible parts noted with required action.
- · Ancillary equipment assessed based on inspector knowledge.

#### **Operator Responsibilities:**

- · Operator must follow guidelines in relevant standards for installation, inspection, maintenance, and operation.
- Playground may have various equipment; operator should adhere to manufacturer's guidance for each item.
- · Stability assessed through manual test; wear, instability detected if visible. Rot and corrosion tested.
- Inspection covers visible condition, dimensional compliance. Impact properties and surface thickness not tested.
- Glass fibers noted; repairs/replacement the operator's responsibility.

Playsafe's inspection reports contribute to the operator's inspections as part of a playgroundsafety management plan. This overview is applicable to all relevant standards and emphasizes adherence to manufacturer guidance and safety measures.

Inspection Recommendations of relevant standards Refer to relevant standards for full text	Annual Main	RPII Annual, Post Installation Inspection
6.1 d) Overall levels of safety of equipment (see note 1)	<b>~</b>	<b>✓</b> [1]
6.1 d) Overall levels of safety of foundations (see note 1)	~	<b>✓</b> [1]
6.1 d) Overall levels of safety of playing surfaces (see note 2)	~	<b>/</b> [2]
6.1 d) Compliance with the relevant parts of the standard and or risk assessment (see note 3)	~	<b>✓</b> [3]
6.1 d) Effects of weather	~	~
6.1 d) Present of rot, decay, or corrosion (see note 1)	~	<b>✓</b> [1]
6.1 d) Assessment of repairs made or added or replaced components (see note 4)	<b>V</b>	<b>✓</b> [4]
6.1 d) Excavation or dismantling/additional measures	<b>V</b>	×
6.2.1 Assessment of glass reinforced plastics (see note 5)	~	<b>✓</b> [5]
6.2.1 Inspection of one post equipment (see note 1)	~	<b>✓</b> [1]
6.2.4 Undertaking the Operators inspection protocol	~	×

September 2023







## **HEALTH & SAFETY**

At Playsafe Consulting Ltd, our top priority is health and safety management. We aim to continuously improve our performance in this area by making safety a key part of all our operations.

Our commitment to the health and safety of our staff, clients, and colleagues is unwavering. We are proud to hold a Site Wise GREEN designation, which reflects our strong commitment to health and safety and demonstrates the high quality of our health and safety systems.

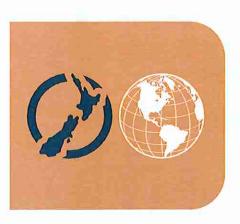
## SITE SAFE | SITEWISE

Playsafe Consulting is committed to the Health & Safety of our staff, clients and colleagues.

We are proud to carry a **Site Wise status** that demonstrates a high quality health and safety system in place.







## NATIONWIDE

Playsafe is headquartered in Auckland, New Zealand, and provide our services across New Zealand, Asia Pacific, Australia and South Africa.

Playsafe South Africa, based in Johannesburg, South Africa.

Our team of inspectors frequently travels to various locations in New Zealand, the Pacific Islands, Asia Pacific, and South Africa to carry out our services.





## **INSURANCE**

Playsafe Consulting Ltd is an incorporated New Zealand owned and operated Limited liability company NZBN: 9429046546753

We are fully insured with comprehensive Professional Services Indemnity Insurance (\$1,000,000 coverage) and Public Liability Insurance (\$20,000,000 coverage).







## ACCREDITATION

Our inspectors at Playsafe are certified by the Register of Playground Inspectors International (RPII) at the international level. They hold accreditation for Level 3 Outdoor Play Inspection, Indoor/Enclosed Play Inspection, Operational Inspection, and HIC Impact Testing, and are experts in providing compliance services to EN1176/NZS5828 Playground Safety Standards. Additionally, Playsafe is the leading registered and accredited training and examination center for the RPII in Asia Pacific and New Zealand.



























## DISCLAIMER

The information presented in our reporting is believed to be accurate at the time of publication by our assessors. However, we do not assume responsibility for any consequences resulting from the use of this information.

Please note that our reporting is based on the observations and findings of the assessors on the day of the assessment and is not intended to provide an exhaustive record of all potential risks or hazards that may exist, nor all possible areas for improvement.

The inspection conducted was in accordance with the NZS5828/EN1176 Playground Safety Standards, including Appendix A for supervised early childhood and EN1177 for surfacing.

#### CONFIDENTIALITY

Confidentiality is a key aspect of our inspection services. To preserve the credibility and integrity of the risk assessment process and to protect all involved parties, our assessors will not disclose any information obtained during the risk assessment to unauthorized individuals, unless legally required to do so.

### PROFESSIONALISM

At Playsafe, we take pride in delivering professional services that are certified, impartial, confidential, and independent. We are committed to maintaining an unbiased and unprejudiced approach to ensure the health and safety of all those who use playground equipment and surfaces. Our team operates under the highest standards of professionalism and strictly adheres to the code of conduct established by the Register of Playground Inspectors International. We take our professional responsibilities seriously and always strive to provide the best possible service.

## **UNDERSTANDING**

Playsafe provides its services on the understanding that clients are aware of the following: As a certified provider of RPII Playground Compliance services, we specialize in inspecting, training, and conducting impact tests on playground equipment and surfaces in accordance with NZS5828/EN1176/SANS51176/EN1177 standards.

Please note that Playsafe Consulting Ltd is not an AS/ISO agency or a testing laboratory. Our expertise lies in being a suitable and recognized testing facility for playground compliance and surface impact testing. We are not structural engineers and do not provide structural calculations. For any structural advice, we recommend seeking the services of a chartered professional engineer.



### WHY US

Our team has over 30 years of combined experience in the playground industry, with a broad background in playground design, compliance, construction, engineering, and maintenance. We take pride in our practical approach to providing comprehensive reporting services with effective solutions.

Playsafe is a highly experienced specialist in the industry, particularly in the area of compliance, inspection and impact absorbing surfaces, with extensive knowledge of their various types and properties.







## **Our Story**

Our story at Playsafe began with a passion for playground safety and a dedication to making a difference in the lives of children.

Our founders, brought together their expertise in project management, engineering, and construction of playgrounds to create a company that could provide a unique level of safety and operational support to the playground industry.

#### **Our Team**

With over 30 years of experience in the commercial park and recreation industry, our team has a deep understanding of playground design, construction, project management, compliance, and maintenance.



Adam is the founder and director of Playsafe and has over two decades of expertise in the playground industry. With a strong background in design, compliance, manufacturing, construction, and project management, Adam is widely considered to be one of the most knowledgeable professionals in the industry when it comes to playground maintenance and compliance matters. He is a certified RPII Level 3 Outdoor Play Inspector and the only accredited RPII Level 4 Indoor Enclosed Play Inspector in New Zealand.

Adam is also an expert in conducting surface impact tests on various types of impact-absorbing playground surfaces, which is one of his specialties.



## **Daniel Winchester**

Daniel is a qualified RPII L3 Outdoor Play Inspector with a strong background in playground engineering and production. With over a decade of experience managing production for one of New Zealand's largest manufacturers, he brings a wealth of knowledge and insight to his role as a inspector at Playsafe.

Daniel's practical and solution-oriented approach to issues enhances the expertise of the Playsafe team.







### **PLAY SAFETY**

Playgrounds provide children with the opportunity to improve their physical, cognitive, perceptual, and social skills within a challenging physical setting.

Regrettably, they can also pose a risk for avoidable injuries that can result in significant harm. However, through the implementation of certified safety inspections and adherence to fundamental safety guidelines, numerous instances of these injuries can be averted.

## **ABOUT US**

Playsafe Consulting Ltd stands as New Zealand's premier provider of professional playground services, encompassing safety inspections, surface impact testing, design evaluations, and inspection training. Our clientele extends to Council Parks, Schools, and Early Childhood centers throughout the nation.

With international accreditation from the Register of Playground Inspectors International (RPII), our services come highly endorsed by both the Ministry of Education and the Education Review Office. Our inspectors are known for their independence, impartiality, confidentiality, police vetting, and professional indemnity insurance.

Boasting more than three decades of experience in the commercial park and recreation sector, our team possesses an in-depth comprehension of playground design, construction, project management, regulatory compliance, and ongoing maintenance.

Our journey is one fueled by passion, unwavering dedication, and a steadfast commitment to effecting positive change.

## **SERVICES**

Playsafe specialises in a range of playground safety services, including:

- Design Review
- Certified Inspections
- · Post-Installation Inspections
- Surface Impact Testing
- · Expert Witness and Injury Investigation
- Inspector Training









Photo 307

Inspector Adam Stride

Adam Stride - Director | Principal | RPII L3 Outdoor & L4 Enclosed Play Area Inspector M#1074A / M#1023AF

Playsafe Ltd | Playground Safety Specialists New Zealand

www.playsafe.co.nz | info@playsafe.co.nz

Summary	
Compliance Summary	
Equipment marking / labelling	Satisfactory
Structural Stability	Satisfactory
Entrapment	Non-compliant (fails to meet the requirements of NZS5828:2015 - see report findings for details)
Falling Spaces / Impact Areas	Non-compliant (fails to meet the requirements of NZS5828:2015 - see report findings for details)
Fall heights (FHF)	Non-compliant (fails to meet the requirements of NZS5828:2015 - see report findings for details)
Ground Clearances	Satisfactory
Appendix A - Supervised Early Childhood	Not applicable
Appendix B - Upperbody Overhead Equipment	Compliant (meets the requirements of NZS5828:2015)
Materials / Finishes / Protrusions	Non-compliant (fails to meet the requirements of NZS5828:2015 - see report findings for details)
Surface (Loosefill) Depth	Not applicable
Surface (Synthetics) CFH	Non-compliant (fails to meet the requirements of NZS5828:2015 - see report findings for details)
Compliance Status (at time of inspection)	
Compliance Status / Outcome	The minimum compliance requirements of NZS5828: 2015 have not yet been met. To achieve a certificate of complaint please resolve the FLAGGED items on page 4 of this report.

#### Summary Notes (if required)

Playsafe conducted a impact test basic verification for the synthetic surfaces (wetpour rubber and artificial turf). Unfortunately, the tests revealed instances of potentially non-compliant CFH (critical fall height) impact performance when compared to the play equipment's determined free height of fall (FHF). To address this issue, we recommend a more comprehensive round of impact testing. We would be happy to conduct this additional testing, which would involve additional Playsafe inspectors, a tripod test rig, and grid testing. Please get in touch if you would like us to undertake this independent testing.

#### Inspector

#### Inspection label applied

Yes

Compliant?	N/A
Synthetic Fallzone Required - (1.75m) + (Note: add additional +0.5m no obstacles buffer)	3180.55
Compliant?	Yes
Loosefill Fallzone Required - (2.25m)	3680.55
Compliant?	N/A

Compliant?	N/A
Synthetic Fallzone Required - (1.75m) + (Note: add additional +0.5m no obstacles buffer)	3267.25
Compliant?	Yes
Loosefill Fallzone Required - (2.25m)	3767.25
Compliant?	N/A

## Swing 4



Photo 305

Swing Type	Swing Frame - 4 Bay
Swing pivot height (surface to pivot) mm	2150
Seat Height (surface to top of seat)	500
Suspension member length (incl seat)	1650
Side Clearance (Frame to swing)	530
Compliant?	Yes
Seat Separation (seat to seat)	630
Compliant?	Yes
Max free height of fall (Fhf)	1325
Compliant?	Yes
ECE Fallzone Required - (1.50m)	2930.55

## Synthetic Fallzone Required - (1.75m) + (Note: add additional +0.5m no obstacles buffer)

3310.6

Compliant?	Yes
Loosefill Fallzone Required - (2.25m)	3810.6
Compliant?	N/A

#### Swing 3

#### **Photos**

2x basket frame and 1x 2 bay frame



Photo 304

Swing Type	Basket Swing
Swing pivot height (surface to pivot) mm	2250
Seat Height (surface to top of seat)	500
Suspension member length (incl seat)	1750
Side Clearance (Frame to swing)	550
Compliant?	Yes
Seat Separation (seat to seat)	650
Compliant?	Yes
Max free height of fall (Fhf)	1375
Compliant?	Yes
ECE Fallzone Required - (1.50m)	3017.25

## Synthetic Fallzone Required - (1.75m) + (Note: add additional +0.5m no obstacles buffer)

4116.91

Compliant?

Loosefill Fallzone Required - (2.25m)

Compliant?

N/A

#### **Photos**

Swing 2



Photo 303

Swing Type	Swing Frame - 4 Bay
Swing pivot height (surface to pivot) mm	2250
Seat Height (surface to top of seat)	450
Suspension member length (incl seat)	1800
Side Clearance (Frame to swing)	560
Compliant?	Yes
Seat Separation (seat to seat)	660
Compliant?	Yes
Max free height of fall (Fhf)	1350
Compliant?	Yes
ECE Fallzone Required - (1.50m)	3060.6
Compliant?	N/A

## **Swings**

Swing

Swing 1

#### **Photos**

## Mega



Photo 302

Swing Type	Swing - Belt Strap Seat/s
Swing pivot height (surface to pivot) mm	3230
Seat Height (surface to top of seat)	500
Suspension member length (incl seat)	2730
Side Clearance (Frame to swing)	746
Compliant?	Yes
Seat Separation (seat to seat)	846
Compliant?	Yes
Max free height of fall (Fhf)	1865
Compliant?	Yes
ECE Fallzone Required - (1.50m)	3866.91
Compliant?	N/A

requirement. To prevent the risk of ankle rolling or sprain injuries it is recommended to close the gaps in the bottom board.

Although these are benches and not play elements, it is reasonably foreseeable that children might climb and walk along them. Therefore, any dimensional entrapment gaps within the holistic play area should be considered according to NZS5828 standards.

Risk Assessment	Low Risk
Recommendation	Rectify

Playsafe recommends providing a falling space and impact area for any mound above 30 degrees. The falling space should be measured at any point where the free height of fall exceeds 600mm, with a minimum 1500mm impact area consisting of impact attenuation material. This methodology has been successfully implemented on the wetpour tunnel mounds at the northern end, using an artificial turf impact area radius around the perimeter, which is considered good design.

**Risk Assessment** 

Low/ Medium Risk

Recommendation

Monitor/ Maintain

Issue / Finding 60

#### **Photos**



Photo 299

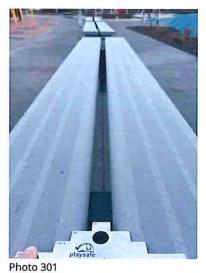




Photo 300

#### Activity/Equipment definition

Bench/es

Issue

Potential foot/leg entrapment hazards exist due to gaps larger than 30mm in the direction of travel. These gaps do not comply with the entrapment Issue / Finding 59

1 flagged

#### **Photos**



Photo 296



Photo 297



Photo 298

#### Activity/Equipment definition

Mound

General

#### Issue

There are potential falls to lower blunt hard objects possible. Hard objects in the falling space do not meet the standard.

The high to low (>600mm difference) adjacent hard object in the falling space and do not meet the head impact requirements of the standard.

Many examples of steep mounds that have concrete nibs or pathways at their base perimeter, with slopes often exceeding 30 degrees and some reaching up to 43 degrees. Mounds are typically considered to result in largely glancing contact due to deflection. However, depending on the height and steepness, if a fall from a height greater than 600mm FHF could result in contact with a blunt rigid object, appropriate impact attenuation protection is necessary.

#### Recommendation

Rectify

#### Issue / Finding 58

#### **Photos**



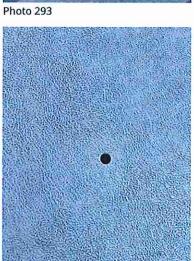




Photo 294

#### Activity/Equipment definition

Climbing Wall

#### Issue

Photo 295

Missing fastenings - Replace.

This aperture is in close proximity of 'forced movement' by the equipment.

Potential Entrapment - There is a potential entrapment risk due to an undesirable gap. It is recommended to block or fill the gap to prevent entrapment.

#### **Risk Assessment**

ow Risk

#### Issue

Design -A barrier should be provided - device intended to prevent the user from falling and from passing beneath.

Barriers - Openings between the platform surface and the lower edge of the barrier and between any infilling elements shall not allow passage of the probe C. (Torso 89mm x 157mm).

Platform height 700mm

#### **Risk Assessment**

Low/ Medium Risk

#### Recommendation

Rectify

Issue / Finding 57

1 flagged

#### **Photos**



Photo 290



Photo 291



Photo 292

#### Activity/Equipment definition

**Embankment Slide** 

Issue

All exposed bolt threads should be cut off and bolt heads / nuts cap covered.



Photo 286



Photo 287

**Embankment Slide** 

#### Issue

Entrapment of fingers (FORCED MOVEMENT) - Equipment shall be constructed so that any finger entrapment openings (holes 8-25mm dia) are not created within forced movement areas.

Slide Access - Slide should have a starting section of at least 350mm (between 0-5 degrees). For attachment slides the platform can be considered a starting section but this should be reasonably level with slide entry.

Close all deck gaps for a min of 350mm behind the slide.

**Risk Assessment** 

Medium Risk

Recommendation

Rectify

Issue / Finding 56

1 flagged

#### **Photos**



Photo 288



Photo 289

### **Activity/Equipment definition**

Barrier



Photo 283

**Embankment Slide** 

Tower

#### Issue

An adequate impact attenuating surface does not exist.

Barriers - Barriers alone are not sufficient to eliminate the need for protection against falling and to ensure adequate surfacing. It is important to ensure that there are no hard objects within the falling space to prevent potential injuries. If the goal is to completely eliminate falling space careful consideration should be given to constructing a fully enclosed structure that meets the necessary safety requirements.

F0700 - Free height of Fall 0.70m - Surface area fallzone should extend min 1.50m around this item to meet the minimum requirements of fallzone distance as per the standard.

**Risk Assessment** 

Low/ Medium Risk

Recommendation

Rectify

Issue / Finding 55

1 flagged



Photo 284



Photo 285



Photo 280

**Embankment Slide** 

#### Issue

An adequate impact attenuating surface does not exist.

Does not meet the minimum requirements of impact area/fallzone as per NZS 5828:2015.

There are potential falls to lower blunt hard objects possible. Hard objects in the falling space do not meet the standard.

Surfacing - Beneath all playground equipment with a free height of fall of more than 600 mm there shall be impact attenuating surfacing over the entire impact area.

**Risk Assessment** 

Low/ Medium Risk

Recommendation

Rectify

Issue / Finding 54

1 flagged



Photo 281



Photo 282

#### Issue

The high to low (>1000mm difference) adjacent hard object in the falling space and do not meet the head impact requirements of the standard.

There are potential falls to lower blunt hard objects possible. Hard objects in the falling space do not meet the standard.

Falling space - shall not contain contact parts of the equipment with an inclination of less than 60 degrees from the horizontal (no longer glancing contact or adequate deflection).

Max FHF 2950mm, top to blunt horizontal mount 1640mm

#### **Risk Assessment**

Low/ Medium Risk

#### Recommendation

Rectify

Issue / Finding 53

1 flagged



Photo 276



Photo 278



Photo 277



Photo 279



Photo 270



Photo 272



Photo 274

Photo 271



Photo 273



Photo 275

Climbing Wall

Rock



Photo 266

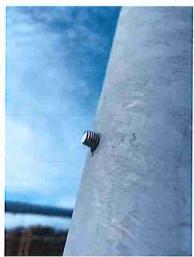


Photo 268



Photo 267

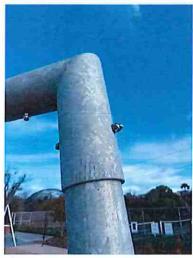


Photo 269

Activity/Equipment definition	Rope Swing
Issue	Missing fastening/s – Rectify.
Risk Assessment	Low/ Medium Risk
Recommendation	Replace
Issue / Finding 52	1 flagged



Photo 263



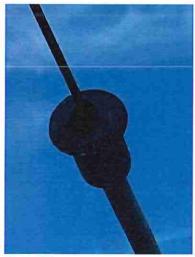


Photo 265

Activity/Equipment definition	Flying Fox
Issue	Worn / wear evident.
Finger plates worn. Spring stopper rubber pad worn.	
Risk Assessment	Low Risk
Recommendation	Monitor/ Maintain
Issue / Finding 51	1 flagged



Photo 260

IMG 6589.mov

## Activity/Equipment definition

Flying Fox

#### Issue

Cableway Stops - The stop at the terminus shall progressively slow down the traveller until it stops and the suspension element shall not swing through an angle of more than 45 degrees.

Running at a maximum speed of approximately 17kph with a 100kg load equating to about 5m/s) (within the 7 m/s limit). Provides a good fast ride however, the stop is quite violent and exceeds 45 degrees at the end. Try decreasing the wire tension slightly to improve stop dampening.

#### **Risk Assessment**

Low/ Medium Risk

#### Recommendation

Rectify

Issue / Finding 50



Photo 261



Photo 262



Photo 256

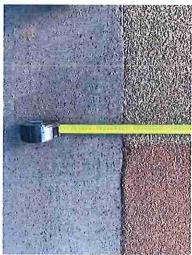


Photo 258



Photo 257



Photo 259

Endstop/Terminus

#### Issue

Flying Fox

Cableway Stops - The stop at the terminus shall progressively slow down the traveller until it stops and the suspension element shall not swing through an angle of more than 45 degrees.

Impact area when the traveler comes to a halt against a stop. The falling space and impact area shall be free from obstacles that could cause injury and shall be as shown. In addition to the requirements given in EN 1176-1, the falling space and impact area shall be provided to a distance of at least 2000 mm beyond the end of the swinging position, (max 45°, end stop compressed) seat. Currently I believe this is approx 200mm short. Adjusting the position of the stop forward 500mm should be my recommendation.

Risk Assessment	Low/ Medium Risk
Recommendation	Rectify
Issue / Finding 49	1 flagged



Photo 252



Photo 253

Activity/Equipment definition	Pommel Seat Assembly
Issue	This item is damaged.
Risk Assessment	Low Risk
Recommendation	Replace
Issue / Finding 48	1 flagged



Photo 254



Photo 255



Photo 251

Flying Fox

**Pommel Seat Assembly** 

Issue

Connections - Gaps that experience dimensional changes during use must maintain a minimum dimension of 12mm in any position. Gaps should not exceed a maximum opening of 8.6mm in any one direction except in cases where connections are made where the maximum opening may be greater than 12mm.

**Risk Assessment** 

Low/ Medium Risk

Recommendation

Rectify

Issue / Finding 47

#### Issue

The high to low (>600mm difference) adjacent hard object in the falling space and do not meet the head impact requirements of the standard.

F0850 - Free height of Fall 0.85m - Surface area fallzone should extend min 1.50m around this item to meet the minimum requirements of fallzone distance as per the standard.

An adequate impact attenuating surface does not exist.

Rock hold access/egress activity - the mound in this position is approx 42 degrees and clearly intended body support has been given (rock holds). A 1500mm falling space/ impact area of adequate attenuating surface should be extended at where the point of >600mm free height of fall is vertically identified. (see annotation for example of the 1500mm impact area).

**Risk Assessment** 

Low/ Medium Risk

Recommendation

Rectify

Issue / Finding 46

1 flagged



Photo 249



Photo 250



Photo 242



Photo 244

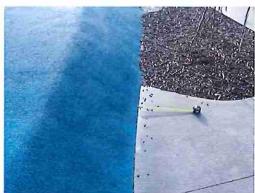


Photo 246



Photo 248

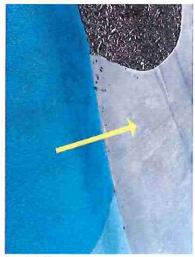


Photo 243



Photo 245



Photo 247

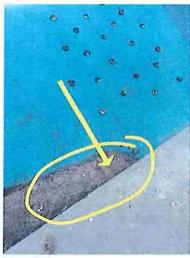


Photo 240



Photo 241

Flying Fox

Mound

#### Issue

The high to low (>600mm difference) adjacent hard object in the falling space and do not meet the head impact requirements of the standard.

There are potential falls to lower blunt hard objects possible. Hard objects in the falling space do not meet the standard.

An adequate impact attenuating surface does not exist.

Rock hold access/egress activity - the mound in this position is approx 35 degrees and clearly intended body support has been given (rock holds). A 1500mm falling space/ impact area of adequate attenuating surface should be extended at where the point of >600mm free height of fall is vertically identified. (see annotation for example of the 1500mm impact area).

Risk Assessment	Low/ Medium Risk
Recommendation	Rectify
Issue / Finding 45	1 flagged



Photo 234



Photo 236



Photo 238



Photo 235



Photo 237



Photo 239



Photo 230



Photo 232



Photo 231



Photo 233

	Tower	Panel
Issue		Entrapment of fingers (STATIC) - Equipment shall be constructed so that any finger entrapment penings (holes 8-25mm dia) are not created.
Risk Assessment		Low Risk
Recommendation		Rectify
Issue / Finding 44		1 flagged



Photo 229

Rockwall

Surface - Wet Pour

#### Issue

F2500 - Free height of Fall 2.50m - Surface area fallzone should extend min 2.17m around this item to meet the minimum requirements of fallzone distance as per the standard.

There are potential falls to lower blunt hard objects possible. Hard objects in the falling space do not meet the standard.

There is only 1640mm to the wetpour block nib. While the bank/slope forms an acceptable part of the falling space/impact area, it is uncertain if the raised solid wetpour block nib provides adequate impact attenuation for a 2500mm CFH. In my professional judgement a solid block of wetpour (without a shockpad interior, would struggle to achieve this critical fall height). Both the top face and edge radius could create a hard blunt object within the falling space, however I could not perform this test during inspection and recommend further impact testing to verify this - see summary note.

Risk Assessment Medium Risk

**Recommendation** Rectify

Issue / Finding 43

# Recommendation

Monitor/ Maintain

Issue / Finding 42

1 flagged



Photo 225



Photo 227



Photo 226



Photo 228

F0750 - Free height of Fall 0.75m - Surface area fallzone should extend min 1.50m around this item to meet the minimum requirements of fallzone distance as per the standard.

An adequate impact attenuating surface does not exist.

**Risk Assessment** 

Medium Risk

Recommendation

Rectify

Issue / Finding 41

#### **Photos**



Photo 221



Photo 223



Photo 222



Photo 224

# Activity/Equipment definition

Platform/s

Missing parts.

Issue

Many missing rubber profiles, however I don't believe they are needed on this particular platform underside as the frames have an adequate min 3mm radius.

spaces or hard objects.

Freespace - The free space shall not contain any obstacles that interfere with the passage of a user whilst undergoing a forced movement.

The red wetpour cylinder is considered an obstacle within the impact area/freespace.

#### **Risk Assessment**

Low Risk

#### Recommendation

Monitor/ Maintain

Issue / Finding 40

1 flagged

### **Photos**



Photo 217

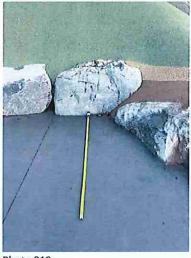


Photo 219



Photo 218



Photo 220

### Activity/Equipment definition

Rockwall

**Retaining Wall** 

# Issue

Accessibility -

Slide Access - The rail or crossbar shall be positioned between the platform guard rail or barrier and the start of the sliding section.

Slide Access - The height of the rail or crossbar shall be between 600 mm and 900 mm above the starting section.

Slide Access - For all attachment slides with a fall height greater than 1000 mm, a rail or crossbar across the access opening shall be provided.

Fall height of side: 1500mm

**Risk Assessment** 

Low/ Medium Risk

Recommendation

Issue / Finding 39

#### **Photos**



Photo 214



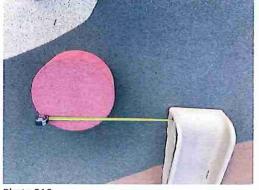


Photo 216

### Activity/Equipment definition

Slide - Runout Section

#### Issue

Obstacle - There is an object or portion of object that protrudes inside the space occupied by equipment, the falling space or the free space of a user.

Slide Type 1 -The slide run-out should be surrounded by an impact attenuating area that extends at least 1.0m on each side and at least 2.0m in front. This impact area should be free from any overlapping falling



Photo 211

**Embankment Slide** 

Slide - Opening / Starting section

#### Issue

Entrapment of the head and neck - Openings shall have no parts that converge in the downward direction at an angle of less than 60 degrees. Partially bound and V-shaped openings/ Neck Wedge.

There is a potential risk of head and neck wedge entrapment due to the V-shaped gap that does not meet the requirements for neck wedge entrapment. According to the standard a partially bound opening is defined as any opening that has at least one side or portion open which could potentially trap and suspend a user by the neck. To mitigate this risk the gap should be less than 45mm wide or deep to ensure it does not pose a wedge probe entrapment hazard.

Gaps with a free height of fall less than 600mm are typically not considered for head and neck entrapment, as the body should be easily supported at ground level. However, the slope of this mound, approximately 35 degrees, makes this gap more concerning.

**Risk Assessment** 

Low/ Medium Risk

Recommendation

Rectify

Issue / Finding 38

1 flagged

#### **Photos**

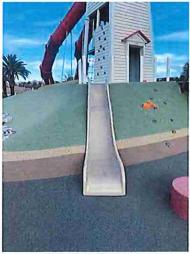


Photo 212

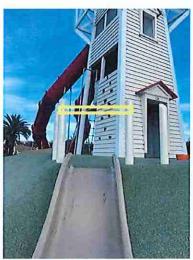


Photo 213

### Activity/Equipment definition

**Embankment Slide** 

#### Issue



Photo 205



Photo 207



Photo 209



Photo 206

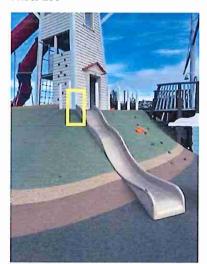


Photo 208

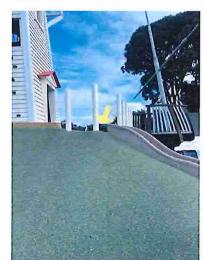


Photo 210



Photo 201



Photo 203



Photo 202



Photo 204

Steering Wheel

### Issue

Entrapment of fingers (FORCED MOVEMENT) - Equipment shall be constructed so that any finger entrapment openings (holes 8-25mm dia) are not created within forced movement areas.

Although the holes are not deep enough to be considered a technical finger entrapment they are undesirable within this element due to the rotational spindle.

Risk Assessment	Low Risk
Recommendation	Rectify
Issue / Finding 37	1 flagged



Photo 197



Photo 199



Photo 198



Photo 200

Bell

Issue

Missing fastening/s - Rectify.

Bolt is bent and missing nuts.

**Risk Assessment** 

Low/ Medium Risk

Recommendation

Rectify

Issue / Finding 36

#### **Photos**



Photo 195



Photo 196

8F29D43C-D0C4-403B-92A7-57CA24F51D73-video.mov

### Activity/Equipment definition

Pole

### Issue

There shall be no crushing points or shearing points between moving and/or stationary parts of the equipment

The flexing of the mast creates a pinch point between the mast and the platform. Although the 8mm finger probe does not fail, the tip does get pinched, causing concern. This gap will only get larger with timber shrinkage. I would suggest a packer, shroud or cowling over this variable gap.

**Risk Assessment** 

Low/ Medium Risk

Recommendation

Monitor/ Maintain

Issue / Finding 35

1 flagged



Photo 191

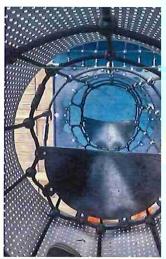


Photo 193

# Issue

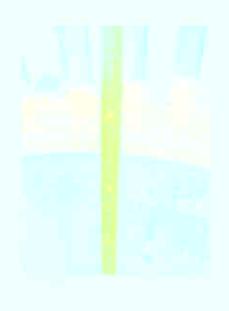
Note: The opening is 750mm surface, forming a half-circle

Possible solution: Rotating th 3180mm to 2400mm by creat

# **Risk Assessment**

# Recommendation

Caroline Bay Playground (CPlay) / Private & confidential | Playsafe L





Lord Medicatilla

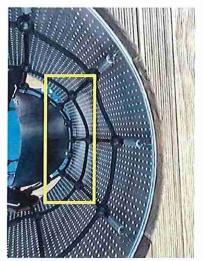


Photo 187



Photo 189



Photo 188

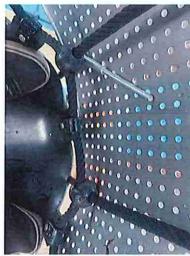


Photo 190

Rope

Net

#### Issue

There shall be no crushing points or shearing points between moving and/or stationary parts of the equipment

Due to the angle of the ship, the vertical rope net tube is not plumb or concentric with the perforated metal tube. This misalignment creates a finger pinch and crush hazard between the rigid plastic rope fittings and the perforated metal tube when user weight is applied to the net.

Low/ Medium Risk **Risk Assessment** Recommendation Rectify Issue / Finding 33

#### **Photos**

1 flagged



Photo 186

Vertical Cargo Net

Mast

Issue

There is a potential risk of head and neck entrapment as the gap fails Probe C and D (Torso then Large Head) with dimensions between 89-230mm for free heights of fall greater than 600mm the requirement for head and neck entrapment is that the gap should be less than 89mm or greater than 230mm in diameter.

Due to the angle of the ship, the vertical rope net tube does not sit plumb or concentric to the perforated metal tube. This misalignment creates multiple instances of head entrapments that would fail Probes A, C, and D tests. Additionally, visibility and supervision in this area are limited, leading to an increased risk assessment.

Risk Assessment	Low/ Medium Risk
Recommendation	Rectify
Issue / Finding 32	1 flagged





Photo 182



Photo 184



Photo 181



Photo 183



Photo 185



Photo 177





Photo 179

06FA946D-931B-45D5-A6F5-E0C4ECB4159F-video.mov

# Activity/Equipment definition

**Incline Net** 

#### Issue

Moving Parts - There shall be no crushing points or shearing points between moving and/or stationary parts of the equipment.

Moving Parts - Gaps whose dimensions change during use of the equipment shall have a minimum dimension in any position of 12mm.

Potential Pinch Crush or Shear Point Hazard - The gap in question does not comply with the requirements for preventing pinch crush or shear injury. This poses a potential risk of injury to individuals who may inadvertently place their body parts within the gap leading to crush/shear risk.

Risk AssessmentLow/ Medium RiskRecommendationRectifyIssue / Finding 311 flagged



Photo 174



Photo 175



Photo 176

	Balustrade	Boat
Bow		
Issue		Component is damaged / failed.
Risk Assessment		Low Risk
Recommendation		Repair
Issue / Finding 30		1 flagged



Photo 173

Access / Egress

Roof

Whare

#### Issue

Edge - The profile of this element does not conform to the min 3mm radius profile requirement of the standard.

Scalping Hazard - Recommend a large radius be provided to this edge/projecting element. Rationale: a bump or bruise is acceptable however a laceration is not.

Scalping Hazard - Presents a facial/ forehead injury risk to users.

**Risk Assessment** 

Low/ Medium Risk

Recommendation

Rectify

Issue / Finding 29

**Risk Assessment** 

ow Risk

Recommendation

Monitor/ Maintain

Issue / Finding 28

1 flagged



Photo 169



Photo 171



Photo 170



Photo 172

Rock hold access/egress activity - the mound in this position is approx 36 degrees and clearly intended body support has been given (rock holds). A 1500mm falling space/ impact area of adequate attenuating surface should be extended at where the point of >600mm free height of fall is vertically identified. (see annotation for example of the 1500mm impact area).

**Risk Assessment** 

Low/ Medium Risk

Recommendation

Monitor/ Maintain

Issue / Finding 27

#### **Photos**



Photo 166



Photo 168



Photo 167

### Activity/Equipment definition

Barrier

Issue

A flat horizontal or near horizontal surface over 70mm width could encourage sitting or standing and may increase the potential free height of fall.

Top of balustrade should be designed to discourage body support, when near horizontal they should be less



Photo 161



Photo 163



Photo 165



Photo 162



Photo 164

Climber

Mound

# Issue

An adequate impact attenuating surface does not exist.

Surfacing - Beneath all playground equipment with a free height of fall of more than 600 mm there shall be impact attenuating surfacing over the entire impact area.

F0600 - Free height of Fall 0.60m - Surface area fallzone should extend min 1.50m around this item to meet the minimum requirements of fallzone distance as per the standard.

#### Issue

Connections - Gaps that experience dimensional changes during use must maintain a minimum dimension of 12mm in any position. Gaps should not exceed a maximum opening of 8.6mm in any one direction except in cases where connections are made where the maximum opening may be greater than 12mm.

### **Risk Assessment**

Low/ Medium Risk

### Recommendation

Rectify

Issue / Finding 26

1 flagged



Photo 157



Photo 158

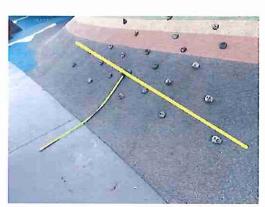


Photo 159



Photo 160

#### Issue

Connections - Gaps that experience dimensional changes during use must maintain a minimum dimension of 12mm in any position. Gaps should not exceed a maximum opening of 8.6mm in any one direction except in cases where connections are made where the maximum opening may be greater than 12mm.

Low/ Medium Risk

**Risk Assessment** 

2x swings (4 gaps are an issue)

#### Recommendation

Rectify

Issue / Finding 25

1 flagged

#### **Photos**



Photo 153



Photo 155



Photo 154



Photo 156

# **Activity/Equipment definition**

Swing

#### Issue

Slide Opening / Starting Section - Potential Clothing Toggle Entrapment Hazard. The gap in the slide opening does not meet the requirements for preventing clothing toggle entrapment. This poses a risk of entanglement and potential strangulation for users wearing clothing with toggles or drawstrings. It is recommended to address this gap to ensure the safety of individuals using the slide.

Roof - Potential Clothing Toggle Entrapment Hazard. The gap in the roof structure does not comply with the requirements for preventing clothing toggle entrapment. This presents a potential risk of entanglement and strangulation for individuals wearing clothing with toggles or drawstrings.

**Risk Assessment** 

Low/ Medium Risk

Recommendation

Rectify

Issue / Finding 24

1 flagged

#### **Photos**



Photo 149



Photo 151



Photo 150



Photo 152

# **Activity/Equipment definition**

**Basket Swing** 

Swing



Photo 144



Photo 146



Photo 148



Photo 145



Photo 147

**Embankment Slide** 

Roof



Photo 140



Photo 142



Photo 141



Photo 143

**Embankment Slide** 

### Issue

Missing fastening/s - Rectify.

Slide Opening / Starting Section - Potential Clothing Toggle Entrapment Hazard. The gap in the slide opening does not meet the requirements for preventing clothing toggle entrapment. This poses a risk of entanglement and potential strangulation for users wearing clothing with toggles or drawstrings. It is recommended to address this gap to ensure the safety of individuals using the slide.

Risk Assessment	Low/ Medium Risk
Recommendation	Rectify
Issue / Finding 23	1 flagged

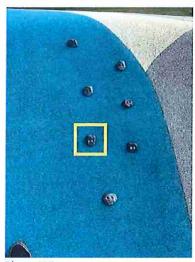


Photo 137



Photo 138



Photo 139

	Mound	Rock
Issue	Th	e component has failed (broken).
Risk Assessment		Low/ Medium Risk
Recommendation		Replace
Issue / Finding 22		1 flagged



Photo 134



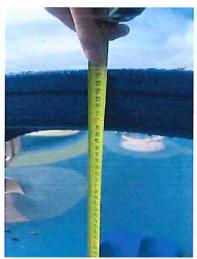


Photo 136

Activity/Equipment definition	ity/Equipment (	definition
-------------------------------	-----------------	------------

	Embankment Slide	Slide - Opening / Starting section (Guarding)
<b>Issue</b> Positioned too high.		Slide Access - The height of the rail or crossbar shall be between 600 mm and 900 mm above the starting section.
Risk Assessment		Low/ Medium Risk
Recommendation		Rectify

# **Photos**

Issue / Finding 21

1 flagged

# Issue / Finding 19

# **Photos**

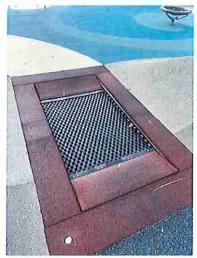


Photo 133

# F173B48F-1664-44CF-A95D-8521D17E94C7-video.mov

Trampoline
Design - Parts of playground equipment should be designed so that they do not accumulate water.
Low Risk
Rectify
1 flagged



Photo 130





Photo 132

**Crawl Tunnel** 

### Issue

The high to low (>600mm difference) adjacent hard object in the falling space and do not meet the head impact requirements of the standard.

There are potential falls to lower blunt hard objects possible. Hard objects in the falling space do not meet the standard.

Falling space - shall not contain contact parts of the equipment with an inclination of less than 60 degrees from the horizontal (no longer glancing contact or adequate deflection).

Issue: Fall height from top of mount to tunnel floor approx 1050mm and from top of mound to blunt horizontal side rail approx 650mm.

A hard, rigid horizontal floor or side rails of a tunnel mouth tube should not be used for a falling space/impact area from heights above exceeding >600mm FHF. Playsafe does not believe the 'mouth tube' should be used for this purpose.

**Risk Assessment** 

Low/ Medium Risk

Recommendation

Monitor/ Maintain



Photo 126

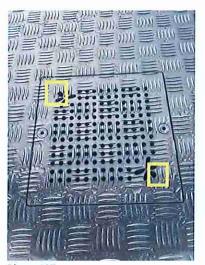


Photo 127

Carousel

### Issue

Within the freespace of forced movement.

Entrapment of fingers (FORCED MOVEMENT) - Equipment shall be constructed so that any finger entrapment openings (holes 8-25mm dia) are not created within forced movement areas.

**Risk Assessment** 

Low/ Medium Risk

### Recommendation

Rectify

Issue / Finding 18

1 flagged



Photo 128

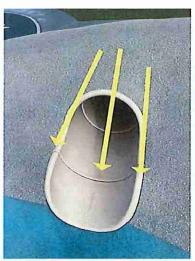


Photo 129



Photo 123

Xylophone

	Aylophone
Issue	Missing lid cap/s
Risk Assessment	Low Risk
Recommendation	Repair
Issue / Finding 17	1 flagged



Photo 124



Photo 125



Photo 120

### BC0FC445-4071-4FFF-8178-ACAA9E4D3446-video.mov

# Activity/Equipment definition

Rocker

#### Issue

Moving Parts - There shall be no crushing points or shearing points between moving and/or stationary parts of the equipment.

Moving Parts - Gaps whose dimensions change during use of the equipment shall have a minimum dimension in any position of 12mm.

#### **Risk Assessment**

Low/ Medium Risk

#### Recommendation

Rectify

# Issue / Finding 16



Photo 121



Photo 122



Photo 117

Trampoline

#### Issue

An adequate impact attenuating surface does not exist.

This combination of 3 tramps is considered a large jumping device >1.44, this requires a falling space of 2000mm of fall protection material all around the perimeter of the jumping area, which it has when including the wetpour at the path level. The falling space includes a 600mm difference between jumping surface and lowest point of the impact surface. As per the standard the height difference must be added to the maximum free fall height of the jumping device 0.90m making a requirement of 1.50m Max free height of fall. The issue is the lower wetpour fails to meet this CFH.

Notes: Tramp Dia 1200mm, Gap between tramps 940mm, therefore 2000mm falling space. Mound height from path: 600 mm

Risk Assessment	Medium Risk
Recommendation	Rectify
Issue / Finding 15	1 flagged



Photo 118



Photo 119



Photo 111



Photo 113



Photo 115



Photo 112



Photo 114



Photo 116



Photo 108

**Crawl Tunnel** 

Issue

Potential foot/leg entrapment hazards exist due to gaps larger than 30mm in the direction of travel. These gaps do not comply with the entrapment requirement. To prevent the risk of ankle rolling or sprain injuries it is recommended to close the gaps in the bottom board.

Low risk due to tunnel (crawling) as opposed to a bridge (walking).

**Risk Assessment** 

Low Risk

Recommendation

Monitor/ Maintain

Issue / Finding 14

1 flagged



Photo 109



Photo 110



Photo 105

Barrier

### Issue

Entrapment of the head and neck - Openings shall have no parts that converge in the downward direction at an angle of less than 60 degrees. Partially bound and V-shaped openings/ Neck Wedge.

There is a potential risk of head and neck wedge entrapment due to the V-shaped gap that does not meet the requirements for neck wedge entrapment. According to the standard a partially bound opening is defined as any opening that has at least one side or portion open which could potentially trap and suspend a user by the neck. To mitigate this risk the gap should be less than 45mm wide or deep to ensure it does not pose a wedge probe entrapment hazard.

Position 2 wedge.

### Risk Assessment

Low/ Medium Risk

### Recommendation

Monitor/ Maintain

Issue / Finding 13



Photo 106



Photo 107

### Issue

Easily Accessible - Step photos shown to depict 'easily accessible' determination.

Steep Play - For steep play elements provided on easily accessible parts of equipment the opening in the barrier shall be 500 mm maximum.

Access Restriction - Access restriction by height should be employed - this is where the lowest rung is set more than 400mm above the ground.

The logs are considered easily accessible to under <3yrs due to the first step height (150mm) and subsequent 150mm step heights. The platform openings exceed 500mm width.

Risk Assessment Low/ Medium Risk

Recommendation Monitor/ Maintain

Issue / Finding 12



Photo 101

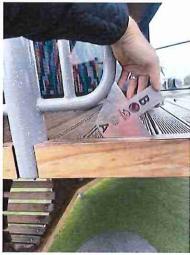


Photo 103



Photo 102



Photo 104



Photo 95



Photo 97



Photo 99



Photo 96



Photo 98



Photo 100

Access / Egress

Platform Opening



Photo 92



Photo 93



Photo 94

Stepping Logs

### Issue

The high to low (>600mm difference) adjacent hard object in the falling space and do not meet the head impact requirements of the standard.

There are potential falls to lower blunt hard objects possible. Hard objects in the falling space do not meet the standard.

Falling space - shall not contain contact parts of the equipment with an inclination of less than 60 degrees from the horizontal (no longer glancing contact or adequate deflection).

950mm difference in height. The lower ones should be capped with wetpour.

Risk Assessment	Low/ Medium Risk
Recommendation	Rectify
Issue / Finding 11	1 flagged



Photo 88



Photo 90



Photo 89



Photo 91

Slide - Opening / Starting section

### Issue

Entrapment of fingers (FORCED MOVEMENT) - Equipment shall be constructed so that any finger entrapment openings (holes 8-25mm dia) are not created within forced movement areas.

Slide Opening / Starting Section - Potential Clothing Toggle Entrapment Hazard. The gap in the slide opening does not meet the requirements for preventing clothing toggle entrapment. This poses a risk of entanglement and potential strangulation for users wearing clothing with toggles or drawstrings. It is recommended to address this gap to ensure the safety of individuals using the slide.

Risk Assessment	Medium Risk
Recommendation	Rectify
Issue / Finding 10	1 flagged



Photo 84



Photo 85

Slide - Opening / Starting section

### Issue

Entrapment of fingers (FORCED MOVEMENT) - Equipment shall be constructed so that any finger entrapment openings (holes 8-25mm dia) are not created within forced movement areas.

Wedges the 25mm probe in a downward direction.

**Risk Assessment** 

Low/ Medium Risk

Recommendation

Rectify

Issue / Finding 9

1 flagged



Photo 86



Photo 87



Photo 81

Seesaw

### Issue

Entrapment of fingers (FORCED MOVEMENT) - Equipment shall be constructed so that any finger entrapment openings (holes 8-25mm dia) are not created within forced movement areas.

Probe does not freely enter but catches on entry. Hole is only on one end and serves no function - recommend this is promptly filled due to forced movement position.

Risk Assessment

Low/ Medium Risk

Recommendation

Rectify

Issue / Finding 8

1 flagged



Photo 82



Photo 83



Photo 77

Issue



Photo 78

# Activity/Equipment definition

Seesaw

Rocker - Side view profiles -Changes in the shape of the edge of the front and the back of parts, projecting from the principal profile, shall be rounded with a radius of at least 20 mm.

Low/ Medium Risk

# Recommendation

**Risk Assessment** 

Monitor/ Maintain

# Issue / Finding 7

1 flagged



Photo 79



Photo 80

Recommendation

Issue / Finding 5

1 flagged

### **Photos**



F

Photo 75

Photo 76

4E2FA854-DBDF-459E-9DDE-E9470CABB73F-video.mov

### Activity/Equipment definition

Seesaw

to prevent entrapment between the equipment and ground surface. This may be achieved by having a minimum ground

surface. This may be achieved by having a minimum ground clearance of 230 mm; or use of damping effects; or deflecting effects from the construction of the equipment.

Rocker - Entrapment - This equipment should be designed

A min ground clearance of 230mm has not been achieved however a tyre (dampener) does exist, except the tyre used is extremely rigid.

 Risk Assessment
 Low/ Medium Risk

 Recommendation
 Monitor/ Maintain

 Issue / Finding 6
 1 flagged

Recommendation Monitor/ Maintain

Issue / Finding 4

1 flagged

### **Photos**



Photo 71



Photo 73



Photo 72



Photo 74

04F75AEC-D2CE-4BB0-BE15-C0154D1C232D-video.mov

# Activity/Equipment definition

Rocker

Issue

Rocker - Side view profiles -Changes in the shape of the edge of the front and the back of parts, projecting from the principal profile, shall be rounded with a radius of at least 20 mm.

Action is smooth and is reasonably self limiting given its weight and multiple pivot pionts. It is also a bright obvious color which is a reasonable mitigation to the profile discrepancies. (note Ground clearance approx 320mm and range of movement doesn't exceed 600mm)

**Risk Assessment** 

Issue / Finding 3

1 flagged

### **Photos**



Photo 68



Photo 69



Photo 70

# Activity/Equipment definition

Rocker

Issue

There is a potential risk of head and neck entrapment as the gap fails Probe C and D (Torso then Large Head) with dimensions between 89-230mm for free heights of fall greater than 600mm the requirement for head and neck entrapment is that the gap should be less than 89mm or greater than 230mm in diameter.

800mm above surface.

**Risk Assessment** 

Recommendation

Issue / Finding 2

1 flagged

### **Photos**



Photo 65



Photo 67



Photo 66

# Activity/Equipment definition

Swing Seat/s

Issue

Connections - Gaps that experience dimensional changes during use must maintain a minimum dimension of 12mm in any position. Gaps should not exceed a maximum opening of 8.6mm in any one direction except in cases where connections are made where the maximum opening may be greater than 12mm.

**Risk Assessment** 

signs atmospheric degradation, corrosion or decay noted. Structural integrity: Sound / Excellent. No current risk of deterioration or stability. Condition requiring regular monitoring of the materials.

Issue / Finding

47 flagged

Issue / Finding 1

1 flagged



Photo 62



Photo 63



Photo 64

Activity/Equipment definition	Swing
Issue	All exposed bolt threads should be cut off and bolt heads / nuts cap covered.
Risk Assessment	Low/ Medium Risk



Photo 60



Photo 61

### **Equipment Supplier**

Creo Space Ltd

Huck

Kompan

Playground Centre

### **Manufacturers Identification**

No

Supplier Marking: There is no marking as per the requirements of NZS5828:2015.7 - The equipment should be marked legibly, permanently and in a position visible from ground level with at least the following: a) Name and address of manufacturer, b) Equipment reference and year of manufacture. c) Number and date of standard (NZS5828:2015), d) Basic level mark.

### **Current Age (Estimate)**

0-1 years

### NZS5828:2015 Classification: (Current)

NZS5828:2015 - EN 1176.1.2008 General NZS5828:2015 - EN 1176.2.2008 Swings - swing with one rotational axis (Type 1)

NZS5828:2015 - EN 1176.3.2008 Slides

NZS5828:2015 - EN 1176.4.2008 Cableways

NZS5828:2015 - EN 1176.5.2008 Carousels - carousel type B Classic Carousel. Carousel with a closed rotating platform whose user stations are defined by the upper side of the platform itself and/or by additional seats or handholds that are rigidly fixed on the platform and/or the central shaft.

NZS5828:2015 - EN 1176.6.2008 Rocking - axial seesaw (Type 1). Equipment in which only vertical movement can take place.

NZS5828:2015 - EN 1176.6.2008 Rocking - multi-point seesaw/multi-point rocking equipment (Types 3A and

NZS5828:2015 - EN 1176.6.2008 Rocking - rocking seesaw (Type 4). Rquipment that is fixed so that the movement, which is mainly horizontal, is guided by several parallel axes and moves in one (to-fro) direction only.

NZS5828:2015 - EN 1176.11.2008 Spatial Network NZS5828:2015+ Appendix D -Overhead Upper Body Equipment

EN1177:1997 & 2008 Impact Attenuating Surfacing DCFH

EN 1176-1:2017-12 Jumping Devices (Inground Trampolines)

### **Condition Grading:**

1 - EXCELLENT: 90% of life remaining. Degradation: Early

Equipment	48 flagged
Play Item / Equipment:	48 flagged
Play Item / Equipment: 1	48 flagged

# **Equipment Photos**



Photo 54



Photo 56



Photo 58



Photo 55



Photo 57



Photo 59







Photo 53

Surface Type	Wetpour granulated rubber
Surface Impact Attenuation Test	Synthetic Impact Test Conducted
Shock Attenuation Pad Type	Wetpour base pad
Infill	N/A
Play Equipment - Max Free height of Fall (Max FHF determined)	1700mm

Starting Platform: The platform height plus laden seat height is 1700mm FHF, which the wetpour comfortably meets.

Terminus: The wetpour impact performance at the impact area of the terminus end is marginal, with a maximum FHF of 1600mm, which it barely achieves. Unfortunately, this area will also experience hard landings when users stop at an upward angle of 45°. Slackening the rope will slow this down, reducing both the impact and the maximum free fall height at the terminus.

Test Result - Surface Max Critical Fall Height (CFH)	Failed to meet some of the critical fall heights of the play equipment.
Drop Test Report	No



Photo 49



Photo 51



Photo 50

### Issue

The impact attenuation performance of this surface may be compromised and may not meet the requirements of the equipment fall heights.

Recommend impact test.

Note: the surface test excludes the surface around th timber climbing wall and warped wall elements as I could not properly test from that height (2950mm)

Risk Assessment	Medium Risk
Recommendation	Rectify
Surface Asset 14	1 flagged

### **Surface Area Photos**







Photo 48

Surface Type	Wetpour granulated rubber
Surface Impact Attenuation Test	Synthetic Impact Test Conducted
Shock Attenuation Pad Type	Wetpour base pad
Infill	N/A
Play Equipment - Max Free height of Fall (Max FHF determined)	3000mm

Note FHF: Monkey bars 2200mm Huck rope course 2600mm Cliff hanger 2200mm Decks 2030mm Bannisters 2650mm Warped wall 2990mm Timber walls 2950mm

Test Result - Surface Max Critical Fall Height (CFH)	Failed to meet some of the critical fall heights of the play equipment.
Drop Test Report	No
Finding	1 flagged
Finding 1	1 flagged

# Play Equipment - Max Free height of Fall (Max FHF determined)

2550mm

Rockwall 2 - 2540mm Net, ladder and pole - 1800mm

# Test Result - Surface Max Critical Fall Height (CFH)

Failed to meet some of the critical fall heights of the play equipment.

Failed drops from Rockwall 2. Requires 2540 mm critical fall height and is achieving approximately 2400mm.



Photo 44

# **Drop Test Report**

No

Surface Asset 13

2 flagged

### **Surface Area Photos**

Note: Test Excludes timber vert rock climbing wall and warped walls



Photo 45



Photo 46

# Play Equipment - Max Free height of Fall (Max FHF determined)



Assume this is the Corocord MIDI Spacenet (<a href="https://www.kompan.com/en/int/p/cor31331">https://www.kompan.com/en/int/p/cor31331</a>) which has a specified MFHF of 1350mm, however the rope depicted on spec sheet is actually 1400mm installed height.

Test Result - Surface Max Critical Fall Height (CFH)

Met all of the critical fall heights of the existing play equipment.

**Drop Test Report** 

of the existing play equipment.

Surface Asset 12

1 flagged

### **Surface Area Photos**



Photo 41



Photo 42



Photo 43

Surface Type	Wetpour granulated rubber
Surface Impact Attenuation Test	Synthetic Impact Test Conducted
Shock Attenuation Pad Type	Wetpour base pad

# Test Result - Surface Max Critical Fall Height (CFH)

Failed to meet some of the critical fall heights of the play equipment.

Both the turf and the wetpour fail the 1850mm FHF requirement here.

# **Drop Test Report**

No

Surface Asset 11

# **Surface Area Photos**



Photo 37



Photo 39



Photo 38



Photo 40

# **Surface Type**

	Artificial/Synthetic Turf Grass	Wetpour granulated rubber
Surface Impact Attenuation Test		Synthetic Impact Test Conducted
Shock Attenuation Pad Type		Wetpour base pad
Infill		Sand approx 5-10mm depth

### Artificial/Synthetic Turf Grass

Wetpour granulated rubber

Surface Impact Attenuation Test	Synthetic Impact Test Conducted
Shock Attenuation Pad Type	Wetpour base pad
Infill	Sand approx 0-5mm depth
Play Equipment - Max Free height of Fall (Max FHF determined)	1350mm
Test Result - Surface Max Critical Fall Height (CFH)	Met all of the critical fall heights of the existing play equipment.

Whipple tests fine in the area however, the turf is variable and inconsistent on average it achieves a max critical full height of 1300mm in the free height of fall of these swings 1325 mm

**Drop Test Report** 

No

Surface Asset 10

1 flagged

### **Surface Area Photos**



Photo 35



Photo 36

# **Surface Type**

A	rtificial/Synthetic Turf Grass	Wetpour granulated rubber
Surface Impact Attenuation Test		Synthetic Impact Test Conducted
Shock Attenuation Pad Type		Wetpour base pad
Infill		Sand approx 0-5mm depth
Play Equipment - Max Free height of determined)	Fall (Max FHF	1850mm





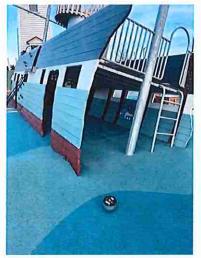


Photo 32

C	rfa		T	
<b>NII</b>	rta	CO.	IV	ne
-				~~

**Surface Impact Attenuation Test** 

**Shock Attenuation Pad Type** 

Infill

Play Equipment - Max Free height of Fall (Max FHF determined)

Multiple FHF and variable shock pads

Test Result - Surface Max Critical Fall Height (CFH)

**Drop Test Report** 

Surface Asset 9

Wetpour granulated rubber

Synthetic Impact Test Conducted

Wetpour base pad

2400mm

No

# **Surface Area Photos**



Photo 33



Photo 34

# **Surface Type**



Photo 27



Photo 29



Photo 28



Photo 30

# **Drop Test Report**

Surface Asset 8

# **Surface Area Photos**

No

Surface Asset 7

1 flagged

### **Surface Area Photos**



Photo 24



Photo 25



Photo 26

Surface Type	Artificial/Synthetic Turf Grass
Surface Impact Attenuation Test	Synthetic Impact Test Conducted
Shock Attenuation Pad Type	Unknown
Infill	Sand approx 5-10mm depth
Play Equipment - Max Free height of Fall (Max FHF determined)	1500mm
Test Result - Surface Max Critical Fall Height (CFH)	Failed to meet some of the critical fall heights of the play

The impact test on the turf around the entire structure fails to meet the minimum critical fall height requirements for this equipment. With a platform height of 1.5m, the tests around the log incline, fireman pole, and all platform openings do not pass.



Photo 20



Photo 22



Photo 21



Photo 23

# **Surface Type**

A	rtificial/Synthetic Turf Grass	Wetpour granulated rubber
Surface Impact Attenuation Test		Synthetic Impact Test Conducted
Shock Attenuation Pad Type		Wetpour base pad
Infill		Sand approx 0-5mm depth
Play Equipment - Max Free height of determined)	Fall (Max FHF	1400mm
Fall heights- Slide impact exit and spring rocker 1000m Rear mound rock holds /turf say 1500mm	m	

Test Result - Surface Max Critical Fall Height (CFH)

Wetpour passes, Turf fails 1500mm, test indicates appox 1300mm CFH

Failed to meet some of the critical fall heights of the play equipment.

# Surface Asset 5

# **Surface Area Photos**



Photo 17



Photo 18



Photo 19

Surface Type	Wetpour granulated rubber
Surface Impact Attenuation Test	Synthetic Impact Test Conducted
Shock Attenuation Pad Type	Wetpour base pad
Infill	N/A
Play Equipment - Max Free height of Fall (Max FHF determined)	1000mm
Test Result - Surface Max Critical Fall Height (CFH)	Met all of the critical fall heights of the existing play equipment.
Drop Test Report	No
Surface Asset 6	1 flagged

### **Surface Area Photos**

1 flagged

Surface Impact Attenuation Test	Synthetic Impact Test Conducted
Shock Attenuation Pad Type	Wetpour base pad
Infill	N/A
Play Equipment - Max Free height of Fall (Max FHF determined)	900mm
Test Result - Surface Max Critical Fall Height (CFH)	Met all of the critical fall heights of the existing play equipment.
Drop Test Report	No
Surface Asset 4	1 flagged

# **Surface Area Photos**





to 15		Photo

Surface Type	Wetpour granulated rubber
Surface Impact Attenuation Test	Synthetic Impact Test Conducted
Shock Attenuation Pad Type	Wetpour base pad
Infill	N/A
Play Equipment - Max Free height of Fall (Max FHF determined)	1500mm

600mm difference between jumping surface and lowest point of the impact surface. Therefore the height difference must be added to the maximum free fall height of the jumping device 0.90m making a requirement of 1.50m MFHF

# Test Result - Surface Max Critical Fall Height (CFH)

Failed to meet some of the critical fall heights of the play equipment.

The test indicated approximately 1200mm critical fall height, while the tramps have a free height of fall of 1500mm FHF measure to the lower terrace wetpour as per EN1176 - 4.2.16.1.

# Surface Asset 2

# **Surface Area Photos**



Photo 11



Photo 12

Surface Type	Artificial/Synthetic Turf Grass
Surface Impact Attenuation Test	Synthetic Impact Test Conducted
Shock Attenuation Pad Type	Unknown
Infill	Sand approx 5-10mm depth
Play Equipment - Max Free height of Fall (Max FHF determined)	850mm
Test Result - Surface Max Critical Fall Height (CFH)	Met all of the critical fall heights of the existing play equipment.
Drop Test Report	No

# Surface Asset 3

# **Surface Area Photos**



Photo 13



Photo 14

Surfacing	8 flagged
Surface Asset	8 flagged
Surface Asset 1	8 flagged
Surface Asset	8 flagged
Surface Asset 1	

### **Surface Area Photos**







Photo 10

# **Surface Type**

Artificial/Synthetic Turf Gra	ass Wetpour granulated rubber
Surface Impact Attenuation Test	Synthetic Impact Test Conducted
Shock Attenuation Pad Type	Unknown
Infill	Sand approx 5-10mm depth
Play Equipment - Max Free height of Fall (Max FHF determined)	1350mm
Test Result - Surface Max Critical Fall Height (CFH)	Met all of the critical fall heights of the existing play equipment.
Drop Test Report	Yes

### Test report upload

### BlueImpactReport CB3.pdf

This test was carried out on site under the particular climatic and site conditions occurring on the day of test, therefore it should not be assumed that the same results would be obtained under other conditions. Limits of HIC 1000 and gmax 200 were used as per EN1177:2008. The uncertainty of this result under controlled laboratory conditions is  $\pm 7$  %. Under site conditions, the uncertainty may be greater. Does not consider the depth or quality requirements of loose fill

### Signage

### Signage

No - Adequate signage does not exist

No emergency details or address listed



Photo 5



Photo 7



Photo 6



Photo 8

Adequate signage not installed as per NZS5828. On the playground there should be a sign (pictogram) giving the following information: General emergency telephone number, telephone number to contact maintenance personnel, name of the playground, address of the playground; and other relevant local information. Playsafe also recommends the following content: Supervision Note, No Helmets to be worn on equipment along with the intended age range. Further info can be found here: <a href="https://www.playsafe.co.nz/post/play-area-signage">https://www.playsafe.co.nz/post/play-area-signage</a>

Risk Assessment Low/ Medium Risk

Low/ Medium Risk **Risk Assessment** Equipment / Play Item / Equipment: / Play Item / Equipment: 1 / Issue / Finding / Issue / Finding 38 Low/ Medium Risk Risk Assessment Equipment / Play Item / Equipment: / Play Item / Equipment: 1 / Issue / Finding / Issue / Finding 40 Risk Assessment Equipment / Play Item / Equipment: / Play Item / Equipment: 1 / Issue / Finding / Issue / Finding 42 Risk Assessment Equipment / Play Item / Equipment: / Play Item / Equipment: 1 / Issue / Finding / Issue / Finding 44 Low/ Medium Risk Risk Assessment Equipment / Play Item / Equipment: / Play Item / Equipment: 1 / Issue / Finding / Issue / Finding 45 Low/ Medium Risk Risk Assessment Equipment: / Play Item / Equipment: / Play Item / Equipment: 1 / Issue / Finding / Issue / Finding 46 Low/ Medium Risk **Risk Assessment** Equipment / Play Item / Equipment: / Play Item / Equipment: 1 / Issue / Finding / Issue / Finding 48 Low/ Medium Risk **Risk Assessment** Equipment / Play Item / Equipment: / Play Item / Equipment: 1 / Issue / Finding / Issue / Finding 49 Low/ Medium Risk Risk Assessment Equipment / Play Item / Equipment: / Play Item / Equipment: 1 / Issue / Finding / Issue / Finding 51 Risk Assessment Low/ Medium Risk Equipment / Play Item / Equipment: / Play Item / Equipment: 1 / Issue / Finding / Issue / Finding 52 Low/ Medium Risk Risk Assessment Equipment / Play Item / Equipment: / Play Item / Equipment: 1 / Issue / Finding / Issue / Finding 53 Low/ Medium Risk Risk Assessment Equipment / Play Item / Equipment: / Play Item / Equipment: 1 / Issue / Finding / Issue / Finding 54 Low/ Medium Risk Risk Assessment Equipment / Play Item / Equipment: / Play Item / Equipment: 1 / Issue / Finding / Issue / Finding 55 Risk Assessment Equipment / Play Item / Equipment: / Play Item / Equipment: 1 / Issue / Finding 56 Low/ Medium Risk **Risk Assessment** 

Equipment / Play Item / Equipment: / Play Item / Equipment: 1 / Issue / Finding / Issue / Finding 59

Equipment / Play Item / Equipment: / Play Item / Equipment: 1 / Issue / Finding 57

**Risk Assessment** 

Risk Assessment Low/ Medium Risk

Equipment / Play Item / Equipment: / Play Item / Equipment: 1 / Issue / Finding / Issue / Finding 18

Risk Assessment Low/ Medium Risk

Equipment / Play Item / Equipment: / Play Item / Equipment: 1 / Issue / Finding / Issue / Finding 20

Risk Assessment Low/ Medium Risk

Equipment / Play Item / Equipment: / Play Item / Equipment: 1 / Issue / Finding / Issue / Finding 21

Risk Assessment Low/ Medium Risk

Equipment / Play Item / Equipment: / Play Item / Equipment: 1 / Issue / Finding / Issue / Finding 22

Risk Assessment Low/ Medium Risk

Equipment / Play Item / Equipment: / Play Item / Equipment: 1 / Issue / Finding / Issue / Finding 23

Risk Assessment Low/ Medium Risk

Equipment / Play Item / Equipment: / Play Item / Equipment: 1 / Issue / Finding / Issue / Finding 24

Risk Assessment Low/ Medium Risk

2x swings (4 gaps are an issue)

Equipment / Play Item / Equipment: / Play Item / Equipment: 1 / Issue / Finding / Issue / Finding 25

Risk Assessment Low/ Medium Risk

Equipment / Play Item / Equipment: / Play Item / Equipment: 1 / Issue / Finding / Issue / Finding 26

Risk Assessment Low/ Medium Risk

Equipment / Play Item / Equipment: / Play Item / Equipment: 1 / Issue / Finding / Issue / Finding 28

Risk Assessment Low/ Medium Risk

Equipment / Play Item / Equipment: / Play Item / Equipment: 1 / Issue / Finding / Issue / Finding 30

Risk Assessment Low/ Medium Risk

Equipment / Play Item / Equipment: / Play Item / Equipment: 1 / Issue / Finding / Issue / Finding 31

Risk Assessment Low/ Medium Risk

Equipment / Play Item / Equipment: / Play Item / Equipment: 1 / Issue / Finding / Issue / Finding 32

Risk Assessment Low/ Medium Risk

Equipment / Play Item / Equipment: / Play Item / Equipment: 1 / Issue / Finding / Issue / Finding 33

Risk Assessment Low/ Medium Risk

Equipment / Play Item / Equipment: / Play Item / Equipment: 1 / Issue / Finding / Issue / Finding 34

Risk Assessment Low/ Medium Risk

Equipment / Play Item / Equipment: / Play Item / Equipment: 1 / Issue / Finding / Issue / Finding 35

Risk Assessment Low/ Medium Risk

Equipment / Play Item / Equipment: / Play Item / Equipment: 1 / Issue / Finding / Issue / Finding 37

Flagged items - Equipment Equipment / Play Item / Equipment: / Play Item / Equipment: 1 **Manufacturers Identification** No Equipment / Play Item / Equipment: / Play Item / Equipment: 1 / Issue / Finding / Issue / Finding 1 **Risk Assessment** Low/ Medium Risk Equipment / Play Item / Equipment: / Play Item / Equipment: 1 / Issue / Finding / Issue / Finding 2 **Risk Assessment** Low/ Medium Risk Equipment / Play Item / Equipment: / Play Item / Equipment: 1 / Issue / Finding / Issue / Finding 3 Low/ Medium Risk Risk Assessment Equipment / Play Item / Equipment: / Play Item / Equipment: 1 / Issue / Finding / Issue / Finding 4 Low/ Medium Risk Risk Assessment Equipment / Play Item / Equipment: / Play Item / Equipment: 1 / Issue / Finding / Issue / Finding 5 **Risk Assessment** Low/ Medium Risk Equipment / Play Item / Equipment: / Play Item / Equipment: 1 / Issue / Finding / Issue / Finding 6 Low/ Medium Risk Risk Assessment Equipment / Play Item / Equipment: / Play Item / Equipment: 1 / Issue / Finding / Issue / Finding 7 Risk Assessment Low/ Medium Risk Equipment / Play Item / Equipment: / Play Item / Equipment: 1 / Issue / Finding 8 Risk Assessment Low/ Medium Risk Equipment / Play Item / Equipment: / Play Item / Equipment: 1 / Issue / Finding 9 Risk Assessment Equipment / Play Item / Equipment: / Play Item / Equipment: 1 / Issue / Finding / Issue / Finding 10 Low/ Medium Risk Risk Assessment Equipment / Play Item / Equipment: / Play Item / Equipment: 1 / Issue / Finding / Issue / Finding 11 Low/ Medium Risk Risk Assessment Equipment / Play Item / Equipment: / Play Item / Equipment: 1 / Issue / Finding / Issue / Finding 12 Low/ Medium Risk Risk Assessment Equipment / Play Item / Equipment: / Play Item / Equipment: 1 / Issue / Finding / Issue / Finding 14 **Risk Assessment** Equipment / Play Item / Equipment: / Play Item / Equipment: 1 / Issue / Finding / Issue / Finding 15 Low/ Medium Risk Risk Assessment

Equipment / Play Item / Equipment: / Play Item / Equipment: 1 / Issue / Finding / Issue / Finding 17

### Flagged items - Surfaces

Surfacing / Surface Asset / Surface Asset 1 / Surface Asset / Surface Asset 4

Test Result - Surface Max Critical Fall Height (CFH)

Failed to meet some of the critical fall heights of the play equipment.

Surfacing / Surface Asset / Surface Asset 1 / Surface Asset / Surface Asset 6

Test Result - Surface Max Critical Fall Height (CFH)

Failed to meet some of the critical fall heights of the play equipment.

Surfacing / Surface Asset / Surface Asset / Surface Asset / Surface Asset 7

Test Result - Surface Max Critical Fall Height (CFH)

Failed to meet some of the critical fall heights of the play equipment.

Surfacing / Surface Asset / Surface Asset 1 / Surface Asset / Surface Asset 10

Test Result - Surface Max Critical Fall Height (CFH)

Failed to meet some of the critical fall heights of the play equipment.

Surfacing / Surface Asset / Surface Asset 1 / Surface Asset / Surface Asset 12

Test Result - Surface Max Critical Fall Height (CFH)

Failed to meet some of the critical fall heights of the play equipment.

Surfacing / Surface Asset / Surface Asset 1 / Surface Asset / Surface Asset 13

Test Result - Surface Max Critical Fall Height (CFH)

Failed to meet some of the critical fall heights of the play equipment.

Risk Assessment

Surfacing / Surface Asset / Surface Asset 1 / Surface Asset / Surface Asset 14

Test Result - Surface Max Critical Fall Height (CFH)

Medium Risk

Failed to meet some of the critical fall heights of the play equipment.

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#### **Inspection Type**

#### Post Installation Inspection

Compliance

#### **Report Document Number**

PSI000241

Post-Install Audit Scope:

Playsafe has conducted this Post-installation audit/inspection of your play area to NZS5828:2015. This inspection is a technical compliance process to achieve a certificate of NZS5828 compliance issuance.

This inspection included a comprehensive assessment by a Level 3 RPII certified inspector to verify compliance with the NZS5828:2015 standard. We have checked for issues relating to structural stability, body entrapment, falling spaces, impact areas, materials and finishes, as well as quality control and construction workmanship.

To receive the final "Certificate of NZS5828 Compliance," please address the FLAGGED findings listed on page 5 of the report and supply visual proof of the resolution within 30 days. Once the requirements of NZS5828 are satisfied, we'll issue a Compliance Certificate. Any non-compliance issues identified during the post-installation inspection must be rectified within 30 days before the final certificate is issued. Please note that we require photo evidence of rectification work, therefore a second inspection is not generally necessary. Note: The certificate is subject to the final satisfaction of Playsafe.



# Playsafe | Post-Installation Compliance Report

Caroline Bay Playground (CPlay) / Play Area

Complete

Flagged items

56

Client

Caroline Bay Playground (CPlay)

Location Address (Obtained by GPS)

Canterbury Timaru 7910 New Zealand (-44.38987959180436, 171.24718286112997)

Play Area Type

Play Area

## **Play Area Photos**



Photo 1



Photo 3



Photo 2



Photo 4

**Inspection Date / Time** 

22.05.2024 11:06 NZST

Inspection



## CONDITION GRADING

Following an inspection, your report will include a condition grade and estimated equipment lifespan. These evaluations are based on structural stability, material condition, material type, usage level, wear and tear, environmental factors, and vandalism. Proper maintenance can significantly extend equipment life by decades.

#### 1 - EXCELLENT. LOW RISK. 90% of life remaining.

Early signs of atmospheric degradation, corrosion or decay were noted. Stability: Sound/As New. No deterioration to the appearance of the materials. Action: Regular monitoring and maintenance.

#### 2 - GOOD. LOW RISK. 70-80% of life remaining.

Early signs of atmospheric degradation, corrosion or decay were noted. Stability: Sound. Some visual deterioration to the appearance of the materials. Action: Regular monitoring and maintenance.

#### 3 - FAIR. LOW/MEDIUM RISK. 40-60% of life remaining.

Signs of general degradation, corrosion or decay were noted.

Stability: Average. Some visual deterioration to the appearance of the materials.

Action: Proactive/preventative maintenance, followed by regular monitoring.

#### 4 - POOR. MEDIUM/HIGH RISK. 10-30% of life remaining.

Signs of significant corrosion or decay were noted. Risk of structural instability. Stability: Poor. Moderate deterioration to the appearance of the materials in serviceable life parameters.

Action: Reactive/Remedial repair, followed by regular monitoring.

#### 5 - UNSERVICEABLE. HIGH. No useful life remaining.

Signs of severe corrosion or decay were noted. Structurally Compromised. Stability: Poor. Risk of structural instability. Significant degradation of materials. Beyond serviceable life parameters.

Action: Reactive/Replacement.

## RISK ASSESSMENT

When evaluating play area hazards, it's crucial to factor in both the likelihood and potential seriousness of injuries. In your report, we have assigned a Risk Level to each discovery based on these elements, alongside considering equipment location, age, usage, and condition. This is an important step in identifying and formalising risks within your play area.

### **RISK MATRIX**



#### SEVERITY

#### PROBABILITY/LIKELIHOOD

- · LOW: Requires a significant factors for an injury to take place.
- MEDIUM: Added factors are needed to cause an injury.
- · HIGH: If the situation is not addressed an accident is almost certain.

#### SEVERITY

- · LOW: Minor injury / minor bruising, damaged clothing.
- MEDIUM: Injury requiring medical intervention- eg stitches, sprain, fracture.
- HIGH: Potential for permanent disability, amputation, sight-loss, spinal injury, fatality.

## RECOMMENDATIONS

The risk-assessed findings will be accompanied by practical and appropriate actions, which are generally as follows:

#### **ACTIONS**







# Caroline Bay Playground Flying Fox Inspection Report

Report Date: 19 August 2024

Inspection Date: 15 August 2024

Inspected By: Kerl Boieles

Inspector Certificate No: ACCT cert No: 8212408, RPII OP6399, PPE inspector ID No: 024781-02.

Date of Last Inspection: First inspection

Previous Inspection: NA

Address: Caroline Bay, Caroline bay RD, Timaru

Postal Address: 22 Martin Steet, PO Box 515, Timaru, 7940, New Zealand

Contact name: Andrew Swales

Phone: (027) 816 3352

Email: Author Swales Goode G

Estimated usage rating: High

Dynamic Access & Adventure Ltd www.dynamicaccessadventure.co.nz



Please consider the environment before printing

#### Disclaimer

This inspection of your Flying Fox and associated equipment. The inspection is limited to a visual inspection only and cannot, and is not intended to, guarantee the ongoing integrity and safety of your FlyingFox and associated equipment. This inspection is limited to visually assessing the condition of materials and equipment at the date of inspection only. The owner of the Flying Fox and associated equipment is responsible for ensuring the integrity and safety of the Flying Fox and associated equipment at all times. This is not a safety inspection, but is instead, an inspection and report made to assist owners and operators to meet their obligations to Flying Fox and associated equipment users. Dynamic Access and Adventure and its employees cannot, and do not, accept any responsibility for the integrity and safety of the materials and equipment in your Flying Fox and associated equipment.

In particular this visual inspection cannot and does not, include the condition of any materials, equipment or other items that are not capable of visual inspection on the date of the inspection and includes but is not limited to equipment such as covered ropes and posts buried in the ground. The inspection has been done on the basis that the quality and/or composition of materials and equipment have not been the subject of any replacement or substitution of material and/or equipment of a lesser quality or composition. This inspection report does not cover items, materials, or equipment that has been modified or repaired by persons other than Dynamic Access and Adventure or its employees.

Dynamic Access and Adventure does not accept responsibility for any accidents or injuries arising from the Flying Fox and associated equipment. It is the owner's responsibility at all times to ensure that all users and operators have the necessary knowledge, skills and experience to safely operate and maintain the Flying Fox and associated equipment on a day to day basis.



## Report Information

The system must only be used by persons trained and competent in its use.

Dynamic Access & Adventure's inspections are undertaken in accordance with the ASG High Wire & Swing Guidelines 2018 V3 and ANSI/ACCT 03-2019 standards Association for challenge course technology.

Other standards and information also considered are: A Code of Practice for Flying Foxes in New Zealand, NZS5828:2004, Playground Equipment and Surfacing, New Zealand building code, Height Safety standard AS/NZS 1891/4488, AS 2316.1-2009, AS/NZS1819.4:2009, EN 13411 and site-specific engineering, manufacturers recommendations and arborist reports.

## Inspection Ratings

All structures and equipment inspected are listed below. Each element receives a rating of either:

**GREEN -** Pass; an acceptable level of wear. Meets current ACCT Standards for inspections and manufacturer's recommendations.

**ORANGE** - Serviceable; some wear, defects, or damage obvious that require remedial work. Minor modifications, replacement or repairs required. Not critical or life threatening at this point. May not meet ACCT or manufactures recommendations.

**RED** - Fail; excessive wear, defects, or damage. Requires immediate closure or replacement. Unsafe for use. Potentially critical or life threatening at this point. Does not meet current ACCT Standards for inspections or manufacturer's recommendations.

BLACK - Not inspected or not in use.

Elements or equipment that receive an ORANGE rating require repairs or maintenance that must be completed in a timely fashion or as stated in the report. Elements or equipment that receive a RED rating must not be used until all necessary repairs have been implemented, or action taken and a further inspection carried out. A rating of GREEN must again be achieved before the element or equipment is safe to be used. Elements or equipment that receives an ORANGE or RED rating will include notes and if available photographs on the exact deficiencies.

## Usage ratings

To better understand how we can support the maintenance of your course please consider the below categories and let us know which your organization best fits into.

High 20+ days a month

Medium 10 - 19 days per month

Low - 1-9 days per month



Flying Fox #1 (road side)	Green	Orange	Red	Black
Main Cable & Terminations				
Pulley				
Seat and Lanyard				
Backup / Redundancy				
Guy Cables & Anchors				
Steel Fixings, Fasteners & Steel structural components				
Brake System				
Notes	Spring brakes replaced.			
	Minor wear to pulley sheaths.			
	Chain at 5 to 10% wear.			

Flying Fox #2	Green	Orange	Red	Black
Main Cable & Terminations				
Pulley				
Seat and Lanyard				
Backup / Redundancy				<b>基础基数</b>
Guy Cables & Anchors				
Wood Structures & Poles				
Steel Fixings, Fasteners & Steel structural components				
Brake System				
Notes	Spring brakes replaced.			
	Chain at 5 to 10% wear.			
	Minor wear to pulley sheaths.			

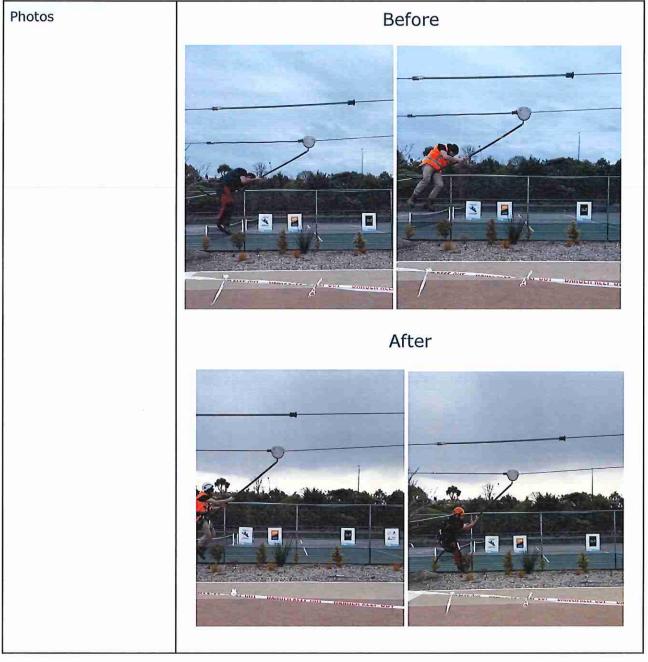


Additional Items	Green	Orange	Red	Black
Platform				
Ground Cover & Surrounding environment			t <sup>2</sup>	
Signage				
Ride Height & Speed				
Notes	Springs replaced to bring stopping under 45 degree angle.  Ride height at minimum ground clearance at landing area.  Seat height at take off ends quite high (may be hard for smaller users to hop on ride).  No signage present.			
Photos	No signage present.			



## Overview

During the inspection the brake springs were replaced to bring the angle below 45 degrees at the braking zone, due to the nature of this flying fox and the design there are no other ways to decrease the speed or add additional gravity brake to the system.





# Area's for Corde to monitor or repair

- Monitor ride height and speed
- Monitor pulley sheath wear

## General Recommendations

Next Inspection is due August 2025

Dynamic Access & Adventure

4b Kingsley Place, Mount Maunganui, New Zealand, 3116

