

Grand Piano Product Assessment



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Grand Piano Risk Assessment



Assessment Date: 24th May 2019

Assessor: Keith Dalton

Manufacturer: TNTY GROUP

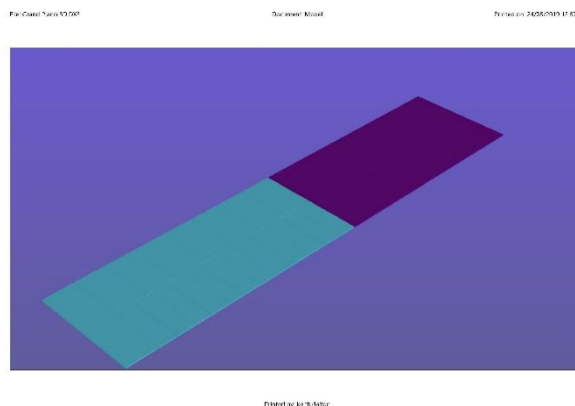
Risk Assessment: Very Low Risk

Activity: Use of musical playground equipment item

Number of Persons at Risk: Users, plus spectators

Hazards Involved with the Activity:

- Collision
- Entrapment



Safety Measures/Controls:

- All design requirements to comply fully with the requirements of BS EN 1176 Part 1 incorporating, where required, criteria from all sections of the standard where it is deemed applicable to the safety of this item.
- There are no falling height requirements for this type of equipment.
- The challenge (risk) associated with the use of the equipment is clearly foreseeable by the users.
- Age range: the intended age range for this item of equipment is for children of 3 years of age and above.
- A circulation Area of 1.50 metres is recommended to allow free movement for spectators around the item without moving into the space required for the safe use of the equipment.
- Correct siting of the equipment item within the playground environment to ensure free passage of playground users around the area.
- Detailed inspection and maintenance procedures to be provided for the equipment providing guidance on allowable tolerances during normal operation.

Risks remaining after the application of control measures:

Collision

With all control measures applied there will still be a risk remaining of users colliding with the equipment or with other users. It is considered that this remaining risk is of no significance, or any different from similar equipment item that incorporates this type of movement.

Given the provision of the safety measures detailed the remaining risk is considered to be 1 x 2 VERY LOW RISK

Additional Controls Required:

None

Risk Rating:

Likelihood		Severity	
1	Very Unlikely	1	Minor abrasion, light bruising
2	Not Very Likely	2	Small cuts, light sprains, more severe abrasion
3	Will happen at some time	3	Deep cuts, severe sprains etc. requiring medical intervention
4	Likely to happen	4	Injury requiring medical intervention and hospitalisation
5	Almost Certain to Happen	5	Permanent disability/death

Risk Score	Description	Action Required
1 – 5	Very Low Risk	Maintain control measures
6 – 10	Low Risk	Review control measures
11 – 15	Moderate Risk	Improve control measures
16 – 20	High Risk	Prevent access to item
21 – 25	Very High Risk	Remove from site

To establish the risk score, multiply Likelihood by Severity

Controls Adequate:

Signed: *KR Dalton*

Date: 24th May 2019
TNTY GROUP
Assessment Review
Date: 24th May 2020



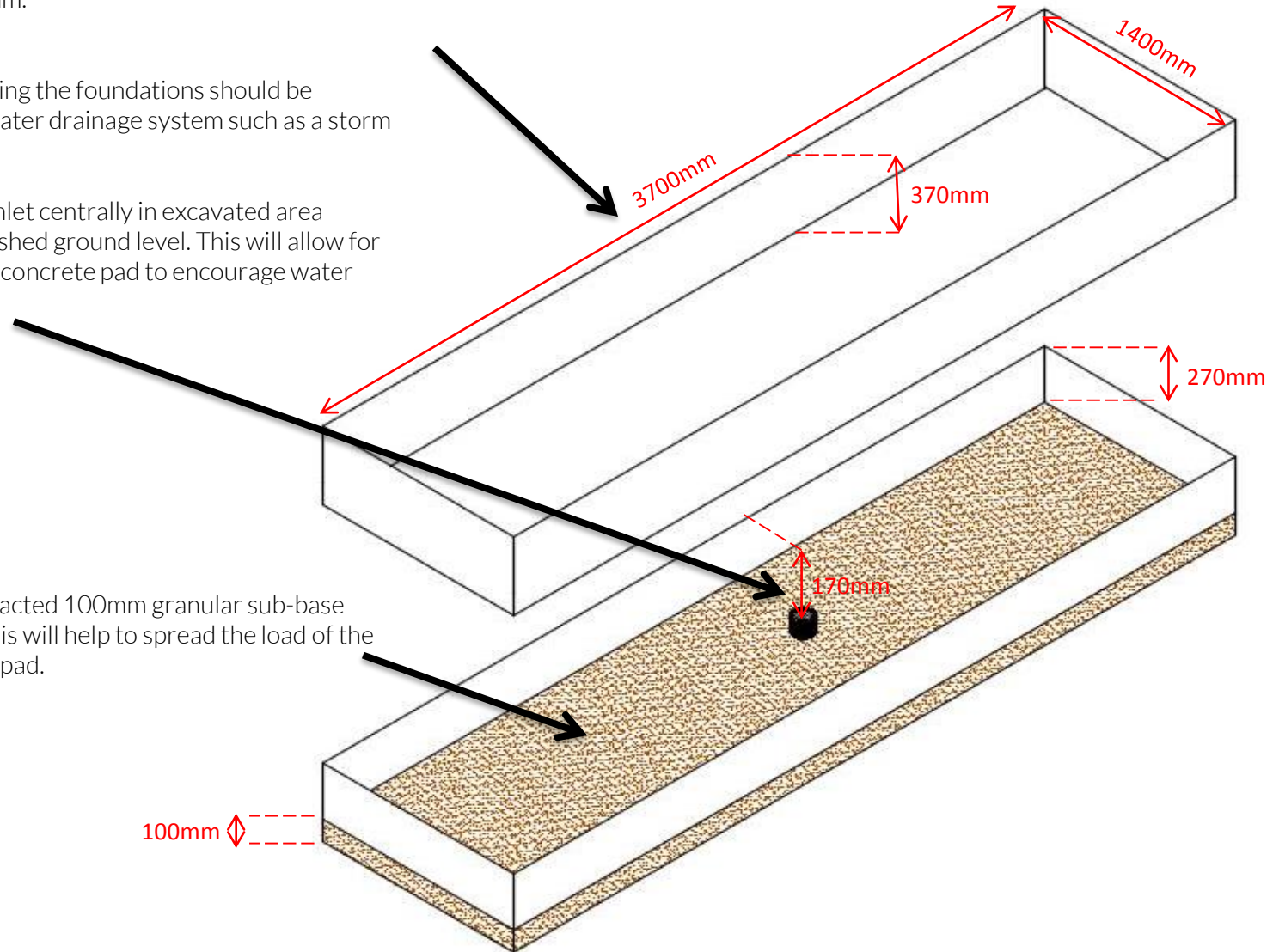
Ground Works Piano 25 Notes

1. Excavate hole below finished installation level (including surfacing) with dimensions of 3700mm x 1400mm x 370mm.

2. To prevent flooding the foundations should be connected to a rainwater drainage system such as a storm drain or soakaway.

3. Install drainage inlet centrally in excavated area 170mm from finished ground level. This will allow for a slight fall in the concrete pad to encourage water run-off.

4. Lay a level compacted 100mm granular sub-base over a geo-textile. This will help to spread the load of the concrete installation pad.



Ground Fixed

Piano Chimes
25 Notes 1 of 3

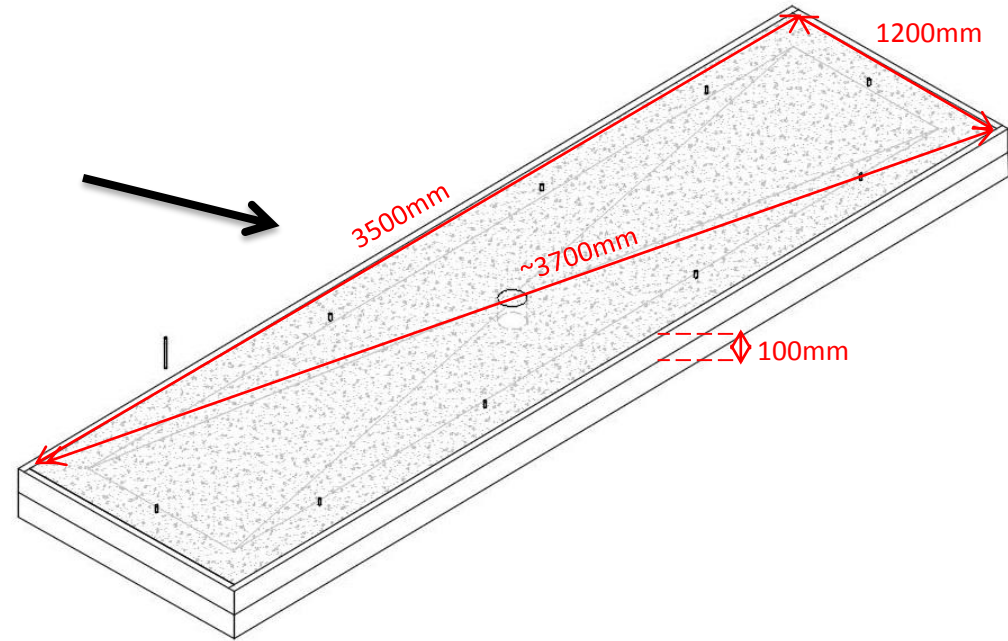
Metric Conversion:
100mm/ 4"
170mm/ 6 11/16"
270mm/ 20 55/64"
370mm/ 14 9/16"
1400mm/ 55 1/8"
3700mm/ 145 43/64"

Ground Works Piano 25 Notes

Ground Fixed

Piano Chimes
25 Notes 2 of 3

5. Create timber shuttering on top of compacted sub-base with an internal area of 3500mm x 1200mm x 100mm.
 - Note – finished height to top of shuttering should be 180mm below finished installation level (including surfacing).
 - To ensure shuttering is square, internal diagonal measurements should be ~3700mm.



6. Install A142 steel reinforcing mesh (or similar) on 50mm plastic or steel supports or “chairs” to hold mesh vertically centred in shuttering area.
7. Install the supplied installation studs jig on top of steel mesh and centre between shuttering and affix in place using cable ties (to ensure no movement when concrete is poured).
 - Note – threaded studs must be covered when concrete is poured to ensure threads do not get concrete on them.
 - Threads should protrude 30mm from top of shuttering.

M10x80mm Studs 8.8 HT BZP fixed to Jig rests on mesh

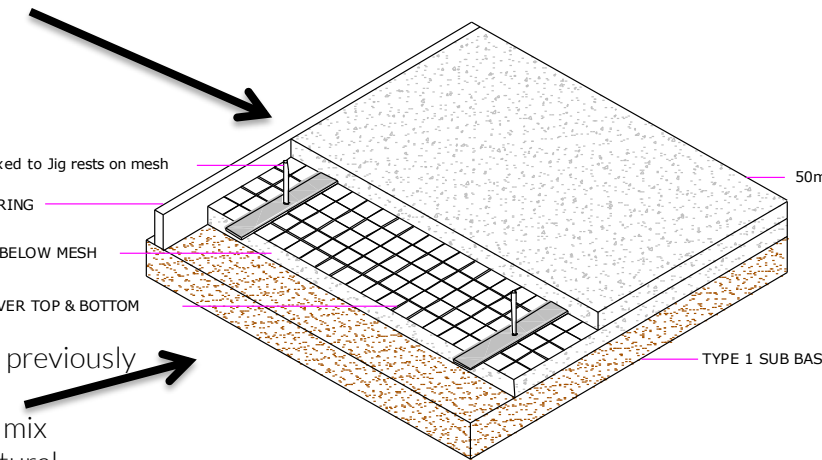
SHUTTERING

50mm CONCRETE BELOW MESH

A142 MESH MIN 50mm COVER TOP & BOTTOM

50mm CONCRETE ABOVE MESH

TYPE 1 SUB BASE



8. Pour 100mm depth concrete pad and create slight fall to previously fitted drainage inlet.
 - Consider mixing reinforcement fibres in concrete mix predominantly for crack control rather than structural strengthening.
 - Allow to poured concrete pad to cure for 24-72 hours before proceeding to next step.
 - Remove shuttering after 24-72 hours.

Metric Conversion:
100mm/ 8"
1200mm/ 47 1/4"
3500mm/ 137 51/64"
3700mm/ 145 43/64"

Ground Works Piano 25 Notes



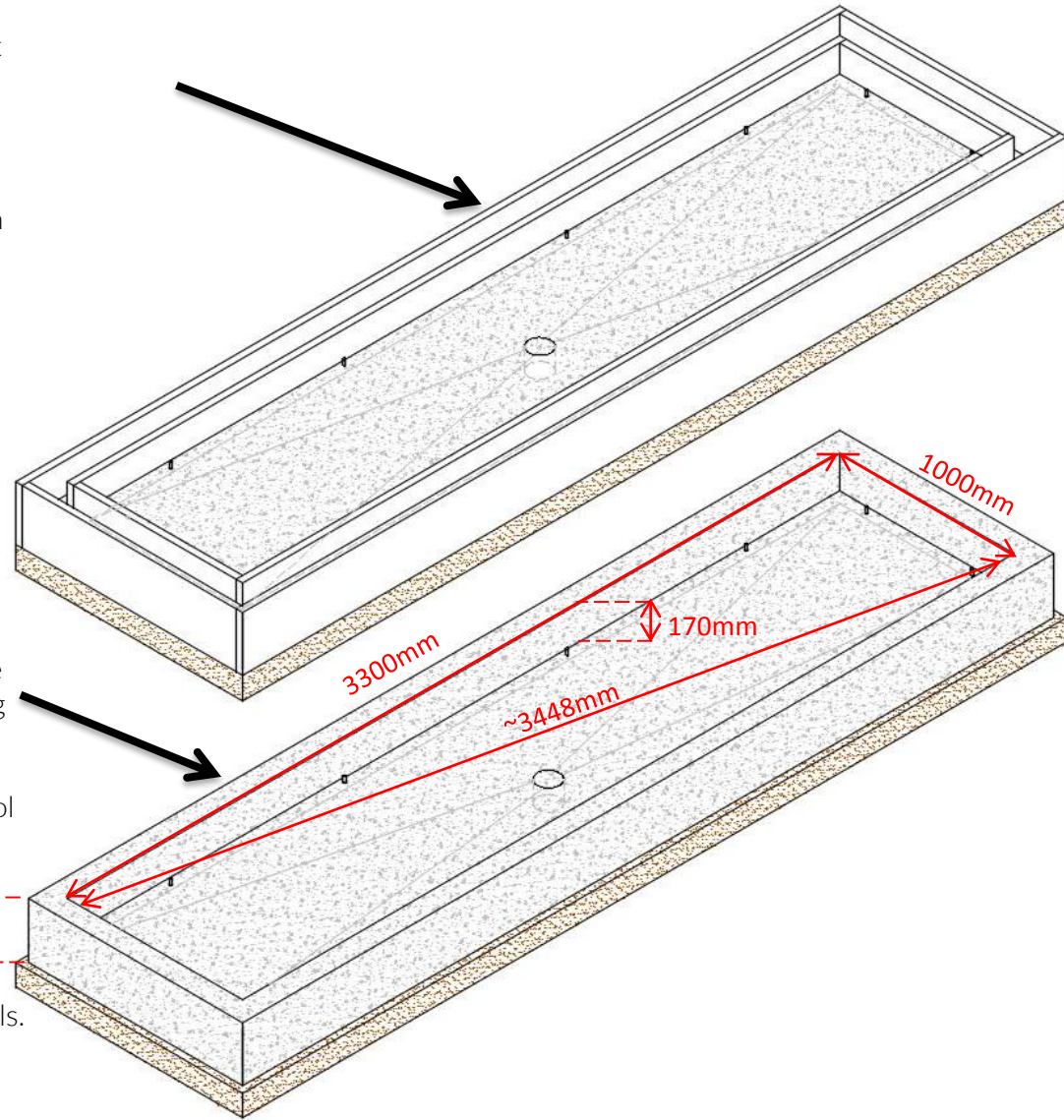
Ground Fixed

Piano Chimes
25 Notes 3 of 3

9. Create timber shuttering onto concrete pad to cast concrete walls to create an internal area (after shuttering has been removed) of 3300mm x 1000mm x 170mm.
 - Note - finished height to top of shuttering should be 10mm below finished installation level (including surfacing).
 - To ensure shuttering is square, external diagonal measurements should be ~3448mm.

10. Pour concrete between shuttering to cast concrete walls and ensure walls are filled to top of shuttering and level.
 - Consider mixing reinforcement fibres in concrete mix predominantly for crack control rather than structural strengthening.
 - Remove shuttering after 24-72 hours.

11. Backfill with soil or aggregate around external walls.
12. We recommend allowing concrete to cure for a minimum of 1 week prior to installing Floor Piano.



Metric Conversion:
170mm/ 6 11/16"
270mm/ 10 5/8"
1000mm/ 39 3/8"
3300mm/ 129 59/64"
3448mm/ 135 3/4"

Certificate of Conformity

Issue date: 24th May 2019



Products covered:

Grand Piano

The product detailed has been assessed as conforming to the main dimensional requirements of BS EN 1176:2017 based on technical drawings provided by the manufacturer

The desktop product assessments undertaken by the Play Inspection Company Ltd are not a formal certification as would be produced by an accredited test house. They are an indication of conformity based on drawings and dimensional information provided by the client.

We will check the major dimensional requirements as set out in the current standards for playground equipment (BS EN 1176 – Parts 1-6, 10 & 11 as applicable to the product assessed. These dimensions include such things as barrier heights, platform heights, free height of fall, head and neck entrapment etc. but will exclude finer detail such as finger entrapment and toggle entrapments as these cannot be fully assessed based on a drawing alone. We do not undertake any structural assessment or testing, that element remains the responsibility of the designer; nor do we assess the suitability of materials used in the construction.

Reference Standards

BS EN 1176:2017 Part 1

Assessed by: Keith Dalton

A handwritten signature in black ink that reads "K Dalton".

TNTY GROUP

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