

Maintenance Guide for the Chaeli Cottage Playhouse Built December 2022

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Maintenance of the Playhouse

We designed the playhouse so that it would need very little maintenance but we have included possible solutions to three problems that could take place.

- If a piece of bamboo breaks so much that it is not safe for kids there are two options you can do to fix it. To replace the bamboo, pull out the nails and unscrew the screws. Then take off the piece of bamboo that it broke.
 - The first option is to replace it with bamboo from Builders Warehouse which involves cutting and sanding the piece to size and screwing it back into the wall.
 - The second option is leaving it off of the wall as that will not take away from the structural integrity and the large gap would just make it easier to see into the playhouse.
- If the sensory items fall off, you can choose to screw them in again or attach them in whatever way that would be most beneficial to the user.
- If the roof breaks then unscrew the screws and replace the section of roof that broke with the polycarbonate sheets that are found in the list of resources.

Maintenance Recommendations

We recommend that the following checks are completed periodically to ensure safety in the playhouse:

- *Sanding of the wood once a year:* This is to ensure there is no loose wood that can cause splinters or other injuries to students.
- *Security of activities once every three months:* This is to ensure that the sensory activities remain attached to the playhouse.
- *Clean the sand table once a year:* This is to ensure that the sand table retains its waterproofing quality and isn't deteriorating.
- *Checking the supports of the sand table once a year:* This is to ensure that the weight of the sand table is continuously supported over time.
- *Inspection for sharp objects twice a year:* This is to ensure that there are no sharp objects in the playhouse that can cause injuries to students.
- *Check for broken bamboo twice a year:* This is to ensure that the bamboo siding remains intact.
- *Clean the roof once every three months:* This is to ensure that there is no debris on the roof as the roof was not created to hold weight.

Future Additions

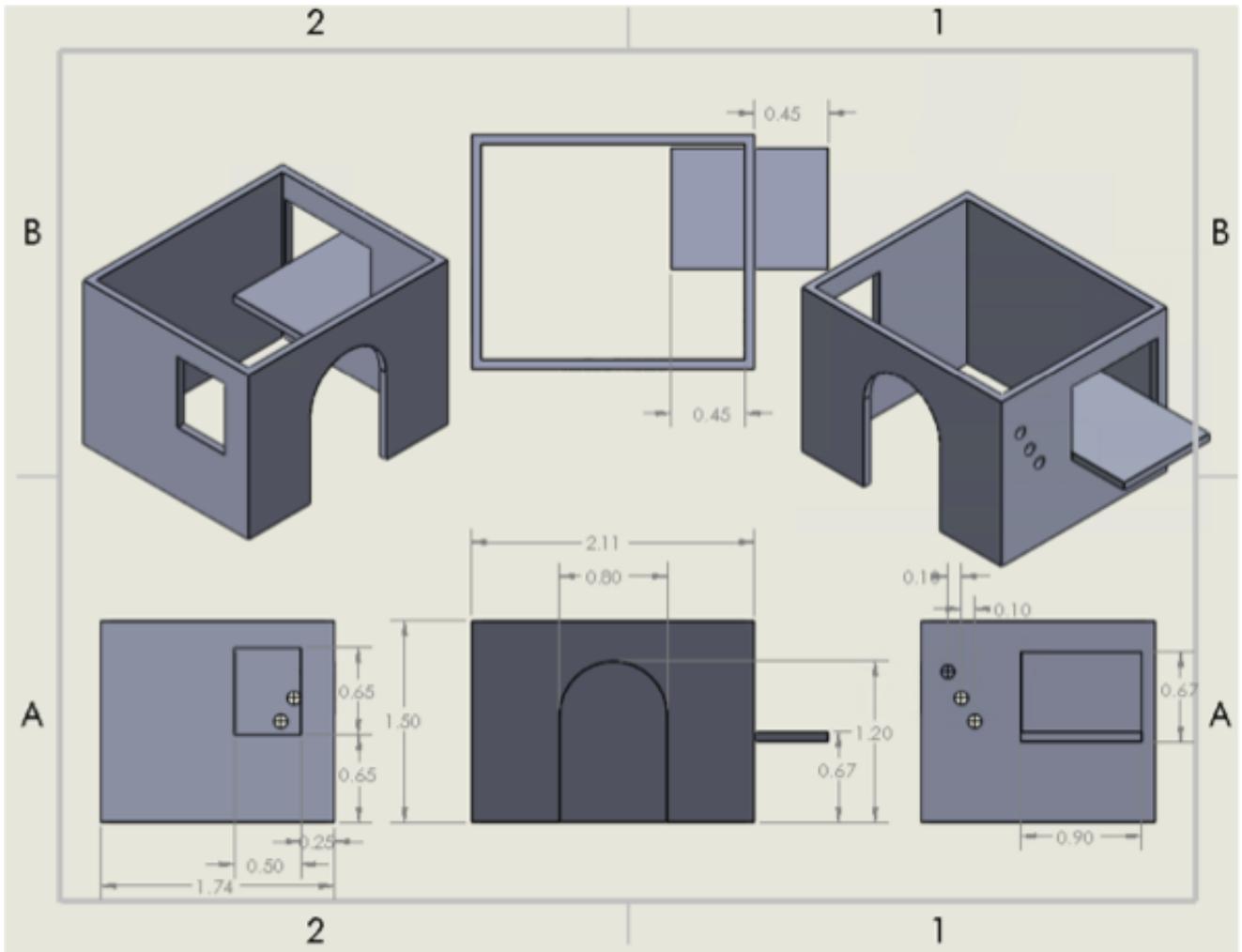
Based on our findings, we recommend that Chaeli Cottage include the following in future additions to the playhouse:

- *Multiple heights to the sand table:* Therapists requested that there be multiple heights of the sand table to allow play of all students.
- *Additional sensory activities:* As the sample of students at Chaeli Cottage changes, it will be beneficial to the students to change the sensory activities to those that are tailored towards their wants and needs.
- *Bring sensory items further off of the wall:* This would allow for better access to these items for children who use wheelchair and would allow them to face the activity that they are using instead of having to play from the side.

List of Resources

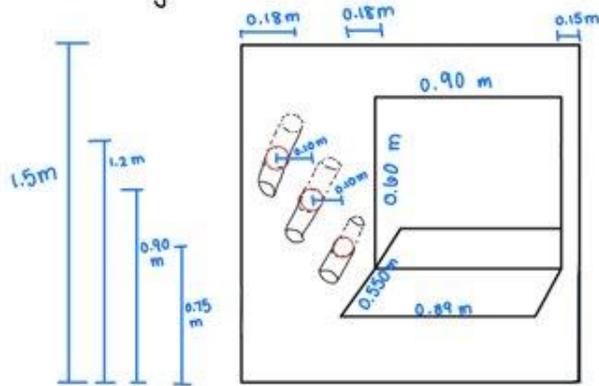
Item	Purpose	Amount Needed	Cost (ZAR)	Cost (USD)	Supplier
South African Pine Laminated Beams and Posts	Corner Posts/Supports (70 mm x 70 mm x 2.4 m)	16	3,120.00	\$180.87	Somerset Timbers
Water Resistant Particle Board (1200mm x 2400mm)	Sand Table	1	760.00	\$44.06	Somerset Timbers
Bamboo (1500mm x 2000mm)	Siding	3	Donated	N/A	Happinest
Water Proofing Cover, Exterior Wood Care Preservative by Plascon	Sand Table	1	325.00	\$18.84	Builders Warehouse
Screws (4.2mm X 45mm)	General	---	510.00	\$29.57	Builders Warehouse
Screws (6.0mm X 120mm)	General	60	235.00	\$13.62	Builders Warehouse
Chalkboard	Sensory Game	1	Donated	N/a	N/a
Velcro	Poster	1 pack	Donated	N/a	N/a
PVC Piping	Sensory Game	3	177.00	\$10.26	Builders Warehouse
Talking Tube PVC	Sensory Game	3	237.00	\$13.74	Builders Warehouse
Wood Abucus	Sensory Game	1	194.00	\$11.25	Mambo's
Flat Abucus	Sensory Game	1	79.00	\$4.58	Mambo's
Roof Material Polycarbonate Sheets	Roof	3	747.00	\$43.30	Builders Warehouse
Wood Glue	General	1	145.00	\$8.41	Builders Warehouse
Floor Lamp Button (Doorbell)	Sensory Activity	1	79.00	\$4.58	Builders Warehouse
Filla Foam	General	1	187.00	\$10.84	Builders Warehouse
Planter Box	Planter	1	139.00	\$8.06	Builders Warehouse
Screws (4mm X 75mm)	General	150	205.00	\$11.88	Builders Warehouse
		Total Calculated Cost	7,139.00	\$413.86	

CAD Model

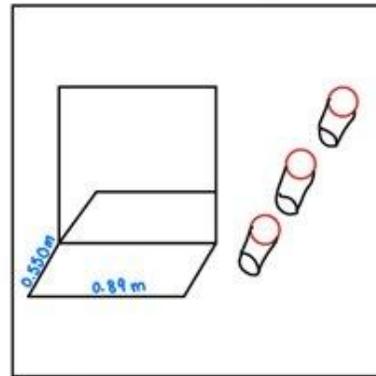


Hand Drawings

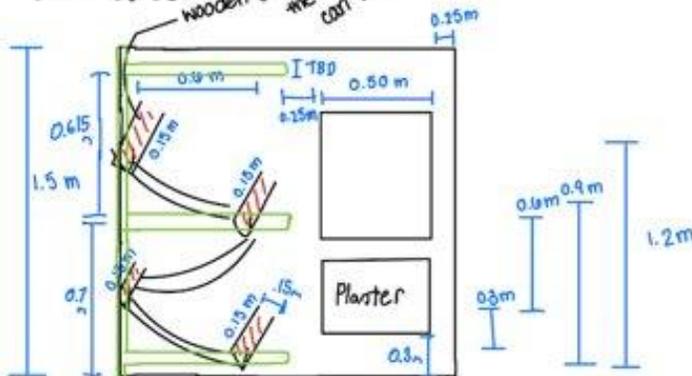
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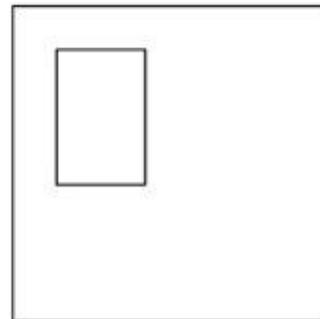
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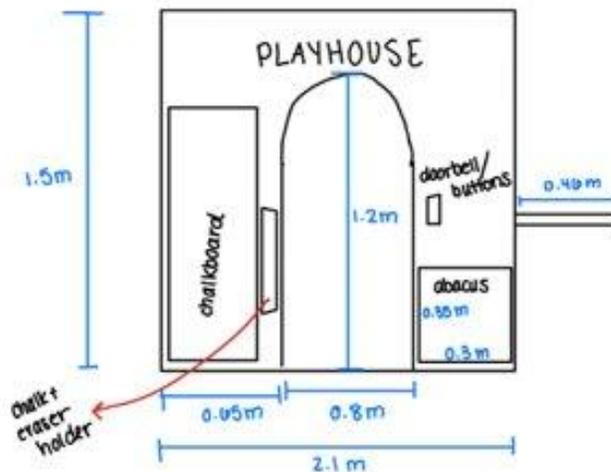
Left Outside:
wooden block that slides off the wall so wheelchair users can reach



Left Inside:



Front Outside:



Front Inside:

