

7/04/25

# MULTIPLAY22 BASKETBALL/NETBALL TOWER

Installation, Operation & Maintenance Manual

# **PLAY HARD SPORTS EQUIPMENT**

13 Alex Fisher Drive Burleigh Heads, QLD 4220



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<u>Image 1:</u> Multiplay22



#### 1. Introduction

Thank you for choosing the Multiplay 22 – S125r Rotating Basketball/Netball System from Play Hard Sports Equipment Australia. Our Basketball Towers are designed for durability and performance and are suitable for commercial use.

This manual provides detailed information on the installation, maintenance, usage, and warranty details of the Multiplay 22 Rotating Basketball/Netball Tower supplied by Play Hard Sports Equipment Australia.

#### 1.1. Product Details:

Play Hard Sports Equipment designs and manufactures Multiplay 22 (S125r Rotating Basketball/Netball Towers using Structural-Grade Steel). The Pole and the Extension Arm are hot-dip galvanised as per Australian Standards, which offers a weather-resistant coating for long-lasting performance and stability. The tower has been load-tested, engineered, and certified by Structural Engineers.

Multiplay 22 is designed to be used in Multi Sports Courts, where the Basketball size is 28m and the Netball court size is 30.5m. The Basketball Ring Height can be adjusted from Senior 3.05m to Junior 2.6m whereas the Netball Ring Height can be adjusted from Senior 3.05m to Junior 2.4m using supplied hand tools. The main post sits on the Netball Court baseline and when rotated for basketball use, the extension arm will place the backboard 1.2M inside the basketball baseline. It has been designed for commercial spaces such as schools, public parks, and clubs with a full-size court and practice areas.

#### **Product Specifications:**

- Models:
  - Multiplay 22
  - Multiplay 22-BP
  - Multiplay 22 (Sleeve)
- Height:

**Basketball Ring/Hoop Height**: 3.05m Senior Adjustable to 2.6m Junior **Netball Ring/Hoop Height**: 3.05m Senior Adjustable to 2.4m Junior

#### Footing Option:

The tower is usually concreted directly into the ground.

Options are available for a ground sleeve or base-plated with chemset anchor studs.

Footing Size: 600 Diameter 1000mm Deep Bored Pier with N20 Concrete



- **Material**: 127 OD Pole and 150 x 100 RHS Extension Arm are made from Steel and then hot-dip galvanised after fabrication.
- Basketball Ring:
  - > R11b/ProRim
  - OzRing
- Netball Ring:
  - NR31 Ring
- Net Tie System: Patented Waverail system
- Backboard: Regulation Size 1800mm x 1050mm
  - > B1810p: Polyboard Backboard
  - B1810a: Acrylic Backboard
  - B1810g: Glass Backboard
- Hand Tools Required for operating (Supplied):
  - SN90r/S125r Rotating Tool
  - > SHF Height Adjusting Tool
  - NR31 Ring Removal Tool
- Colour Options: Standard Hot-Dip Galvanized. Various paint color options are available on request.
- Padding Options: BP150
  - 2.0m high x 360 mm round cylindrical foam
  - Vertical Velcro Seam at rear
  - Multiple colours are available, and your logo can be added too

Apart from our standard product range, we offer custom basketball towers based on site-specific requirements. Please contact our team for further details.

All our product footings have been engineered to be suitable for site soil classification as Class 'A", 'S' & 'M' per AS2870. Site-specific footing and slab engineering must be done for other Soil Classes. We also offer site-specific engineering drawings if required with additional charges.



# 2. Safety Information for the Installer

## 2.1. Important Safety Information

- Read the Manual: Ensure you read this manual in full before beginning assembly or installation.
- Supervision: Children should be supervised around the tower location during and after installation.
- Wear Safety Gear: Always wear appropriate safety gear during assembly and installation.
- Avoid Electrical Hazards: Keep electrical tools away from the goalposts and ensure the work area is dry.

## 2.2. Assembly Precautions

- Two-Person Job: Assembly requires at least two people to ensure safety and accuracy.
- Check Parts: Verify all parts are present and undamaged before starting assembly.
- Level Ground: Assemble on a flat surface to avoid instability.

### 2.3. Site Specific Precautions

- Before commencing any groundwork, please survey the ground/field for underground electrical, water, or sewage lines and check for overhead electrical lines.
- It is advised that the soil is tested to know its strength. All our Goalposts have been structurally designed to suit 'A', 'S' & 'M' Soils per AS2870. The contractors/installers must notify Play Hard Sports Equipment of any changes to the site specification. All other soil sites would require site-specific footing and slab engineering design.
- The concrete must be of a minimum 20 MPA, with a slump of 80 100 mm, and a maximum aggregate of size 20mm.
- Let the concrete set for at least 4 days before commencing further work.



# 3. Component List

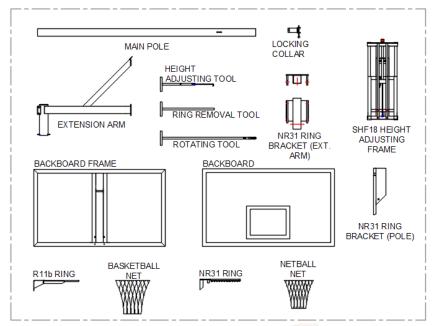


Figure 1: MULTIPLAY22 Parts List

	Quantity per Tower				
Components	Multiplay 22	Multiplay 22 BP	Multiplay 22 (Sleeve)		
Main Post (127 OD)	1	1	1		
Extension Arm	1	1	1		
Backboard Frame	1	1	1		
Locking Collar	1	1	1		
Basketball Ring	1	1	1		
NR31 Netball Ring	1	1	1		
SN90r/S125r Hand Tool	1	1	1		
SHF Height Tool	1	1	1		
NR31 Ring Removal Tool	1	1	1		
Ground Sleeve	0	0	1		
Sleeve Cap	0	0	1		
Bolt Kit					
M10 x 12 mm Gal Hex Bolt, Spring Washer, Double Flat Washer & Nut	4	4	4		
M10 x 45 mm Gal Hex Bolt, Flat Washer & Nyloc Nut	2	2	2		
M10 x 50 mm Gal Hex Bolt, Spring Washer & Nut	1	1	1		
M10 x 30 mm Zinc-Coated Socket Cap Screw, Flat Washer & Nyloc Nut	4	4	4		
M6 x 50 mm Gal Hex Bolt, & Nyloc Nut	2	2	2		
M10 x 115 mm Gal Hex Bolt, Flat Washer & Spring Washer	1	1	1		
M10 x 130 mm Gak Hex Bolt & Nyloc Nut	1	1	1		
M16 Threaded Rods or Chemset Reo 502 with levelling Nut and Washer (Not Included in the Package)	0	8	0		

<u>Note:</u> Locking Collar and Bolt Kits are packed inside the ring box. Some of the parts come pre-assembled.

Please check your order. If any parts are missing, please call us immediately.

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# 4. Footing Details

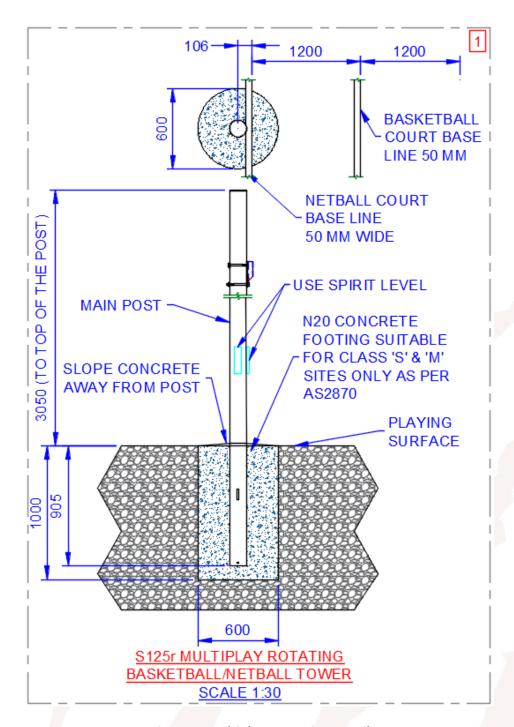


Figure 2: Multiplay22 Footing Detail



#### 5. Installation Instructions

#### 5.1. Site Preparation:

- Before commencing any groundwork, please survey the ground/field for any underground electrical line, water line and sewage line. Also, check for any overhead electrical lines.
- It is advised that the soil is tested to know its strength. All our towers have been structurally designed to suit 'A', 'S' & 'M' Soils per AS2870. The contractors/installers must notify Play Hard Sports Equipment of any changes to the site specification. All other soil sites would require site-specific footing and slab engineering design.

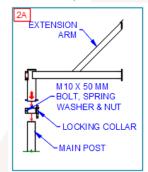
#### 5.2. Post Installation:

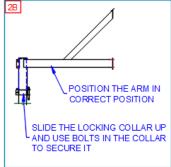
#### A. Concreted to the ground:

- ➤ Bore Drill a 600 mm Diameter and 1000 mm Deep Hole.
- ➤ If the Ground Level at the hole position is lower than the playing surface, then box up around the hole site to achieve the concrete depth of 1000mm. (Please be mindful that only 100mm of box-up is acceptable)
- ➤ Insert the main post into the hole and ensure it is centered, correctly oriented and at a correct distance from the basketball court.
  - **o** Please refer to Figure 2 for further details. The post must be installed in a specific orientation as shown in the Figure and it is the Installer/Contractor responsible for ensuring that.
- ➤ Pour the concrete into the hole. (Prevent any concrete from getting inside the post)
- ➤ Ensure the post is fixed while pouring the concrete into the hole.
- $\succ$  The concrete must be of a minimum 20 MPA, with a slump of 80 100 mm, and a maximum aggregate of size 20mm.
- > Trowel the concrete sloping away from the pole to prevent water from pooling around the post base.
- ➤ While the concrete mix is still fresh, use a spirit level to check that the post is level in all axes.
- ➤ Let the concrete set for at least 4 days before commencing further work.

## 5.3. Attaching Extension Arm (Once the concrete is set)

- Insert the locking collar into the post. *This is crucial* before attaching the Extension Arm
- Then, mount the extension arm onto the post as shown
- Correctly align the arm to the court, slide the collar up so the pin sits between the locking bracket and tighten the bolt in the collar to secure



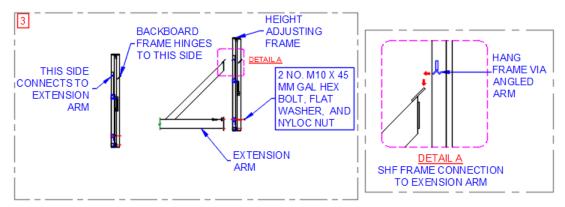


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#### 5.4. Attaching the Height Adjusting Frame

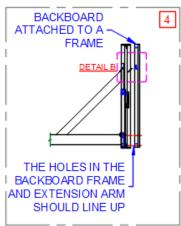
- Identify the side that attaches to the extension arm on the height adjusting frame
- Hang the frame via an angled bracket at the back end of the frame on top of the frame at the extension arm

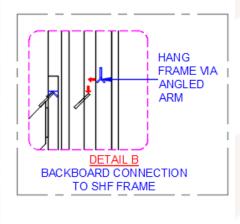


## 5.5. Attaching the Backboard Frame

• Attach the backboard frame to the front of the height adjusting frame

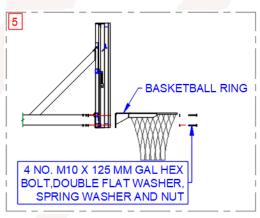
Hang the frame via the angled bracket at the back end of the frame on top of the bracket at the height adjusting frame





## 5.6. Attaching the Basketball Ring

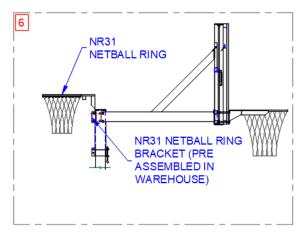
- Align the bolt holes in the backboard, the extension arm and the ring, and insert the M10 x 125mm Gal Hex Bolt, Double Flat Washer, Spring Washer and Nut (without damaging the thread)
- Run all the nuts up the bolt shaft until finger tight and use wrenches to tighten the bolts to achieve a snug fit





## 5.7. Attaching the Netball Ring

 Attach the Netball Ring to the bracket at the end of the extension arm using M10 x 30mm Gal Bolt, Flat Washer and Nyloc Nut



Note: Use anti-seize lubricants on all bolts during the installation process

# 6. Operating Instructions

The Multiplay 22 rotating basketball/netball system is easy to operate. We can use the supplied hand tools to position the tower for either basketball or netball and change the heights between senior and junior.

**Step 1:** Release (by pulling the bolt down and turning 90 degrees) the spring-loaded head releasing the bolt with the supplied hand tool as shown in Figure 5.

**Step 2:** Move around to the basketball ring, position the hand tool (Hook end) over the ring and easily walk (rotate) the tower head around, enabling the netball ring to lock securely into place as shown in Figure 4 below.



Figure 3: Step 1







Figure 4: Step 2



**Step 3:** Once rotated 180 degrees, the spring-loaded head bolt will automatically engage. For safety, always check the head is accurately locked into place with the hand tool.

Note: Please store the hand tool in a safe place and must be operated by a responsible person only



Figure 5: Step 3

**Step 4:** Use the SHF hand tool to adjust the Basketball Ring height from senior to junior or vice versa.

- The height-adjusting frame has a latch used to disengage the frame and adjust the height.
- Use the gap underneath the frame b/w the fixed and sliding frame to insert the hand tool.
- Use the hook at the top of the tool to hold onto the latch hole.
- > To lower the frame, rotate the latch and pull down the frame.
- Once the frame is fully lowered, rotate the latch to engage it against the stop at the bottom of the fixed frame.
- To reset the height, release the latch and slightly push the frame upwards and the gas strut will automatically raise the frame to senior height.



Figure 6: Step 4



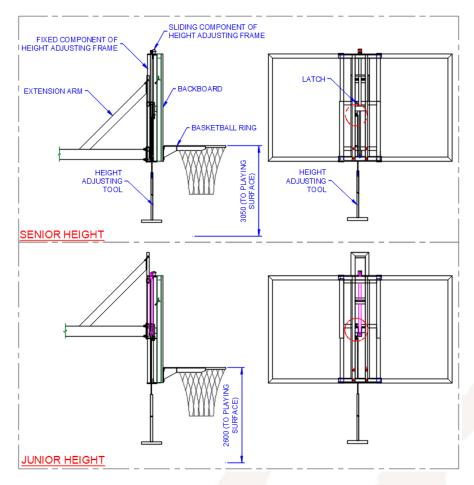


Figure 7: Height Adjusting Frame Instructions

**Step 5:** Use the NR31 Ring tool to lower the Netball Ring height from senior height to junior height and vice-versa.

Note: Please store the hand tool in a safe place and must be operated by a responsible person only





## 7. Maintenance

All our towers are designed to require a minimal level of maintenance. However, it is advisable to do:

- **Regular Inspections:** Check for any signs of wear or damage. Tighten bolts and replace nets or padding as needed.
- Cleaning: Clean the posts with a damp cloth to remove dirt. Avoid harsh chemicals that could damage the paint. If the poles have been scratched over the intended period of use, lightly scuff the area and apply 2 coats of zinc-rich primer.
- Weather Protection: Consider using protective covers during extreme weather to extend the lifespan of the equipment.

# 8. Safety Guidelines (Usage)

The owner of this equipment is responsible for ensuring all players are aware of these conditions for the safe use and operation of the equipment.

#### 1. Padding:

• Ensure padding is securely attached to reduce injury risk.

#### 2. Supervision:

- Supervise play, especially with younger players, to ensure safety.
- Prevent players from hanging from the ring or climbing up the posts to prevent serious injury.

#### 3. Height Adjustment:

- If there is an option for a height-adjusting frame, care must be taken while operating the height-adjusting frame mechanism.
- **4. During visual inspection**, if the bolts are loosened or the post or footing is damaged, the basketball system should not be used until repaired.



# 9. Certificate of Compliance:

All our products have been structurally designed and are made using structural-grade steel. All the workmanship is completed following the relevant Australian Standards. Our Products comply with the following Australian Standards.

1. AS/NZS 4100:1998 Steel Structures

2. AS/NZS 1554.1:2014 Welding of steel structures

3. AS/NZS 1664 Aluminium structures

4. AS/NZS 1665:2004 Welding of aluminium structures

5. AS/NZS 1170.0 Structural design actions – General principles

6. AS/NZS 1170.2 Structural design actions – Wind actions

7. AS/NZS 2312.1:2017 Guide to the protection of structural steel against atmospheric corrosion

by the use of protective coatings

8. AS/NZS 2311:2017 Guide to the paintings of buildings

9. AS/NZS 4680:2006 Hot-dip galvanized (Zinc) coatings on fabricated ferrous Articles

All our Basketball Towers meet the QLD Education specifications for basketball equipment. April 2023. All our towers have been load and cycle tested according to those specifications, which are the most stringent tests required in any State in Australia

All our products are designed and manufactured here in Australia.

Made in Australia

Delivered Globally

O O

AUSTRALIAN MADE



# 10. Warranty Certificate:



When you purchase a Play Hard Sports Equipment product you have the peace of mind in knowing that your product is covered by Play Hard Sports Equipment's manufacturer's warranty against faulty workmanship and materials.

The Basketball Tower Structure has 25 years of warranty. The Backboard has a 10-year warranty, the ProRim has a 25-year warranty, the OzRing has a 10-year warranty and the padding if supplied has a 2-year warranty for the padding and the net has a 1-year warranty.

The warranty covers damage or failure of the product during normal intended use. The warranty does not include damage to the product resulting from accident, misuse, improper installation, operation, or unauthorised repair or alteration. Products manufactured for home use are not guaranteed for use in commercial applications.

If the product should become defective within the warranty period, please get in touch with Play

Hard Sports Equipment customer service:

13 Alex Fisher Drive Burleigh Heads QLD 4220 Ph: (07) 55934494

Fax: (07) 55934338

Email: email@playhardsports.com.au