



OPERATION & MAINTENANCE



SPORTS EQUIPMENT

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Introduction

Broxap sports equipment has been supplied to designs that have been proven over years of development and installation.

All products are supplied in a grade of material that ensures they meet all required equipment standards and are fit for purpose and function.

To aid in ensuring the maximum life can be realised with the product, along with minimising the costs for major refurbishment, this manual has been created to assist in the ongoing maintenance requirements along with identifying important points that should be followed at all times.

Broxap are ISO9001 (Quality), ISO14001 (Environmental) and OHSAS18001 (Health and Safety) certified through the BSI.

These 3 standards have been utilised during the design, manufacture, processing and delivery of the product. Our commitment to providing a service of quality that takes into consideration the effects of the environment during its manufacture and life plus the health and safety of the Customers has been fully considered.

Other standards that have also been considered during product design and manufacture include:

- BS EN ISO 1461:2009 (Hot Dip Galvanized Coatings on Fabricated Iron & Steel Articles)
- BS EN ISO 13920:1997 (Welding Tolerances Shapes, Dimensions and Lengths)

Health & Safety Information

The vast majority of sports products have no specific operating instructions once they have been supplied / installed.

However, there is a need for certain Health & Safety notes to be followed at all times during use and ongoing maintenance.

These being:

- Sports equipment should pose no risk to any person if used correctly and as intended. However, the owner of any such equipment should undertake a risk assessment prior to its use, and also ensure that all reasonable precautions to prevent injury to the user and spectators have been taken.
- Any supervision arrangements should take into account factors such as number of users, age range and abilities, and the specific features of the equipment being used and the activities it provides. **It is the customer's responsibility to ensure that full care, responsibility, correct operation /use, and any training are adhered to at all times.**
- Broxap Ltd cannot accept any responsibility for any damage or injury to persons or property as a result of not using the product in the proper, correct and intended manner.

When moving or raising long lengths to the vertical please ensure that there are no overhead obstructions. Particular care should be taken with regard to overhead power cables.

Please consider the removal of high sports equipment (eg. rugby posts, ball stop posts etc.) prior to the onset of any forecasted severe weather conditions.

Materials & Processes

As the products are designed to utilize various customer requirements, the following is a list of materials and processes that could have been used:

Materials

- Mild Steel – various grades
- Stainless Steel – grade 304 or 316
- Aluminium
- Netting
- Acrylic / MDF backboards
- PETg sheets (shelters)
- Fixings – grade 8.8 or 10.9 in steel or stainless steel

Processes

- Bending, forming, fabrication, welding
- Extruding of aluminium
- Electro plating of fasteners
- Polyester powder coating
- Wet painting

Cleaning, Maintenance & Repair

This section gives a generic overview of the inspection and cleaning regimes, solutions, methods and techniques which will preserve the aesthetic finish of the product.

Inspection & Cleaning

To maximise life expectancy the product should be visually inspected, on a regular basis, for any signs of damage, vandalism, breakdown of surface finish and loose fixings.

During these inspections, should any concerns be noted, then the Customer's attention is brought to the following pages whereby suitable maintenance and repair methods are described for the various materials used.

In the event of serious damage to any main, or structural, component then Broxap should be contacted immediately for detailed technical advice.

In addition to the visual inspection, a regular cleaning regime is also required. We recommend that this is undertaken at least every 3 months.

The clean down should be undertaken with a mild detergent in warm water. All surfaces should be cleaned using a soft cloth or sponge. At no time should any kind of abrasive be used.

So as to prolong the life of any painted surface, we strongly recommend that no cleaners containing esters, ketones or chlorinated solvents are used, as this may soften the paint and create further issues that will require a major refurbishment to be undertaken.

Note – this document is not designed to be exhaustive and extensive in the exacting requirements of every case. If you consider your cleaning, maintenance or repair circumstances to be outside of the scope of this document, then please contact Broxap and we will be happy to help you keep our products looking as new.

All cleaning and maintenance should be recorded, detailing the method of cleaning, what products have been used, and what repair work has been undertaken.

In the case of a warranty claim against Broxap, this information will be requested.

Galvanized Coating

The Galvanizing used on the products has been processed in accordance with the requirements specified in BS EN ISO 1461:2009.

Galvanizing is a hot dip chemical reaction of molten zinc onto a steel substrate.

Note - due to the nature of the Galvanizing process some surface irregularities may occur on the surface of finished products. Although these will be finished flat, where possible, this will not be undertaken where it may breach the zinc coating. Some visual irregularities may therefore be present on galvanized products, including those finished with a polyester powder coating – these do not compromise the durability and performance of either the product or the coatings in any way.

Galvanizing has the ability to “self-heal” any minor knocks or scratches.

However, there will be occasions whereby the coating has been damaged to base steel at a size that will not allow for self-healing. Based on this there are several proprietary repair paints on the market. In Broxap’s experience we have found 2 that give a satisfactory repair and finish for ongoing use. The 2 methods are either Galvafroid or Zinga with both being available in a paste / brush application or an aerosol spray.

- Where the surface is scratched or damaged through to base steel, a check should be made to establish if rusting has occurred.
- Where rusting is present, then the area should be wire brushed / sanded to bring back to a bright steel surface.
- The system used for repair will state the required precautions that should be taken along with the application method; however, a build-up of coating should be such that the thickness will be capable of giving ongoing protection as required. The coating thickness on renovated areas should be at least 100 microns.

Powder Coating

As the name suggests, this process involves the application of a polyester powder onto the steel substrate, using an electrostatic gun. This is then oven cured to create the hard wearing outer layer that can be seen on the finished product.

Note - due to the nature of the Galvanizing process some surface irregularities may occur on the surface of finished products. Although these will be finished flat where possible, this will not be undertaken where it may breach the zinc coating. Some visual irregularities may therefore be present on galvanized products, including those finished with a polyester powder coating – these do not compromise the durability and performance of either the product or the coatings in any way.

Powder coating can last many years, but its life expectancy depends on a variety of factors, including site location, atmospheric conditions and cleaning regime.

The recommended cleaning frequency is detailed at the start of this section.

The cleaning of powder coated surfaces should be undertaken using either:

1. Warm mild soapy water and soft brush, sponge or natural bristle brush. Rinsed with clean water.
2. A proprietary car wash and wax system. Rinsed with clean water.

At no time during the cleaning process is it advisable for any abrasive cleaners, solvents, or other chemicals, to be used:

Where Graffiti is present, then it is recommended that no solvent cleaners are used in an attempt to remove it. The method of removal should be with the use of either a car 'T-Cutting' compound or through a specialist cleaner. This should be tested on a small, inconspicuous area first to assess its efficiency.

Where small repairs to the powder coat surface are required, then the following should be adhered to as a minimum:

- For light scratches / chips where the base metal is exposed then a suitable zinc-rich primer should be carefully applied to the defect, followed by a topcoat finish of a matching acrylic based paint or touch up (obtained from Broxap).
- Where scratches / chips have only exposed the galvanized surface, then the above must be followed with the exception of the Zinc Rich primer being applied.

For larger areas of damage, vandalism or coating breakdown, then Broxap should be contacted for technical advice.

Wet Painting

As the name suggests, this process involves the application of a wet paint onto the base substrate. This then cures to create the hard wearing outer layer that the customer will see.

Wet paint can last many years, but its life expectancy depends on a variety of factors, including site location, atmospheric conditions and cleaning regime.

The recommended cleaning frequency is detailed at the start of this section.

The cleaning of wet painted surfaces should be undertaken using either:

1. Warm mild soapy water and soft brush, sponge or natural bristle brush. Rinsed with clean water.
2. A proprietary car wash and wax system. Rinsed with clean water.
3. A low pressure water wash eg. hosepipe.

At no time during the cleaning process is it advisable for any abrasive cleaners, solvents, or other chemicals, to be used.

Where small repairs to the painted surface are required, then the following should be adhered to as a minimum:

- For light scratches / chips where the base material is exposed then a suitable should be carefully applied to the defect, followed by a topcoat finish of a matching acrylic based paint or touch up (obtained from Broxap).
- If required, the damaged area can be filled to bring it back up to the same level as the remaining painted surface. A proprietary car filler system would be suitable for this operation and can easily be sanded back to the finish and level needed.
- For larger areas of damage or vandalism, the areas should be sanded by the minimum amount to feather in the broken edges. As per the above, the area can be filled if required and a primer and then topcoat either brushed or sprayed onto the area.

Stainless Steel

The name suggests the exact way this material will perform, in that it is Stain Less and not Stain Never.

The two grades of stainless steel used in Broxap products are grade 304 and grade 316. Each grade of stainless steel is suited to different locations.

Grade 316 is suited to all areas, especially marine locations where high levels of sodium chloride in the air can degrade other types of stainless steel.

Grade 304 is more suited to rural and urban locations where there is less risk of sodium chlorides contaminating the surface of the steel.

Stainless Steel requires relatively low maintenance, but its corrosion resistance and aesthetic properties can be compromised if it is not kept clean.

A regular inspection and cleaning schedule will enhance the performance of the product and result in an increased service life.

Stainless steel finishes should be cleaned as required, but we recommend a frequency of at least every 3 months.

Washing down with mild soapy water followed by a clear water rinse is usually adequate. However, where stainless steel has become extremely dirty a proprietary stainless steel cleaner (from any DIY store) should be used with a lint free cloth.

To remove ground in dirt, or minor surface scratches, a light abrasive block (eg Garyflex) may be required.

These blocks are flexible and impregnated with a grit that will bring back the original polished finish to the surface.

Note - they must always be used in the same direction as the original polishing marks.

Alternatively, more detailed information regarding life expectancy of Stainless Steel or how the surface will perform along with suitable cleaning regimes can be obtained by visiting:

http://www.bssa.org.uk/technical_information.php

PETg Sheeting

PETg is a material proven to work well as a cheaper alternative to glass. The product has a certain amount of flex and therefore, allows for it to be used easier on slightly curved roofing.

PETg is considered a dimensionally stable material and moves very little due to the differences experienced with temperature. However, so as to prevent issues being seen, all fixing holes are drilled at a size larger than the required fixing along with spacers utilised to prevent fixing grab when tightened.

Cleaning should be undertaken with the use of a soft cloth and warm soapy water. It is not recommended to use a broom or similar on the surface of the PETg as this will result in scratches to the surface.

At no time during the cleaning process should any abrasive cleaners, solvents or other chemicals be used i.e.

Ajax / Cif Scourer

Nylon scouring pads

Thinners

White Spirits

Methylated Spirits etc

Should any cracks appear in the surface of the PETg or holes be knocked through due to vandalism or misuse then:

1. The shelter should be isolated with immediate effect
2. The faulty sheet/s must be removed by either – drilling out the rivets or removing the tekscrews
3. Replacement sheets can be sourced from Broxap along with the option of installation also

The reason for the above actions to be taken is to prevent the possible injury to any third party due to the resultant fracture surfaces being sharp.

Consideration should be given to the surrounding area and its usage. Where footballs or other ball games are used then the constant impact with the PETg will eventually result in damage that requires repairing. Repairs can only be effected by the replacement of the damaged panel which can be sourced from Broxap direct.

In area's and times when snow fall is heavy and a skin forms over the shelter roof, then it is a mandatory requirement for the snow build up to be removed. This activity will need to be completed in a proper and safe manner so as to reduce the risk to the operative carrying out the task or causing damage to the PETg affected.

Additional Information

Additional information on maintenance can be found on the Broxap website:

www.broxap.com/maintenance



Product Specific Recommendations

This section gives more detailed recommendations for specific products to preserve the aesthetic appearance, and ensure their continued safe use.

Please note that BS 8461 Football Goals Code of Practice should be considered at all times and may be applied not only to football goals, but all sports goal posts and fittings.

Socketed Equipment

It is recommended that sockets are well greased before the posts are inserted. The posts should then be inserted and removed fully, before being finally inserted. This process should be repeated at least once a year.

Freestanding Equipment

All non-socketed posts are designed “freestanding” and not “portable” (unless purposely supplied with wheels to make the goals portable). This equipment should be moved a little as possible.

SYNTHETIC PITCH EQUIPMENT - FOOTBALL

The facility operator is responsible for the provision of equipment that is fit for purpose and maintained to the required standard.

Also operators have a responsibility to staff under the Health & Safety at Work Act to ensure that all staff are adequately trained to carry out the required tasks for which they are employed. The facility providers could find themselves liable in the case of any accidents where staff are found to be incompetent.

Assembly & Dismantling

1. Equipment should be checked on receipt against the packing list attached. If any components are missing, the equipment should neither be assembled or used in an incomplete state. Broxap should be contacted immediately so the missing parts can be sent out.
2. When assembling or dismantling equipment you should always use the instructions and recommendations provided by the manufacturer.
3. You should always wear the appropriate Personal Protective Equipment (PPE) at all times, eg. gloves, safety footwear etc.
4. For the erection of tall and /or heavy equipment it is recommended that scaffolding and/or heavy lifting equipment is used. Prior to this a risk assessment should be carried out, if deemed necessary.
5. You must use the correct tools for the job at all times.

6. Assembly and movement of equipment must only be carried out by, or under the direct supervision of, trained, competent adults with enough experience and with adequate assistance for the size of goal being assembled.

Inspecting & Maintaining Equipment

All equipment should be checked on a regular basis. A full detailed log of inspections and findings should be maintained. Any faults or issues identified should be acted up on immediately.

1. All equipment should be checked once a week as a minimum – it should always be checked prior to a game or training activity. Equipment showing signs of excessive wear, cracking or instability must not be used.
2. A visual inspection of the whole goal should be carried out, checking for any obvious signs of damage and that there are no loose or missing nuts, bolts, pins or fixings (It is recommended that a series of spare fixings/parts is pre-ordered and held in stock).
3. Should parts of a goal be bent or have other damage present there may also be internal damage that could result in the goal collapsing or tipping. In such cases the goal should be taken out of service until it is repaired or replaced.
4. Ensure all pivot points are in good condition and are lubricated with grease.
5. Any damaged paintwork (chips and scratches) should be repaired as soon as possible, as detailed in the previous section of this manual. This will prevent corrosion.
6. All anchoring points and attachments should be thoroughly checked.
7. If weighted anchors are used, ensure the correct quantity is used for the size of goal (see table at end of this section).
8. Goals should never be modified by substituting parts with incorrect ones or welding. Any damaged or missing parts must be replaced with specified original manufacturer parts.
9. Wheel mechanisms should be complete and in full working order.
10. Inflatable tyres should be checked for punctures and inflated to the maximum pressure indicated on the tyres.
11. Ensure no netting fixings are missing or broken (may allow the ball to pass between the net and goal frame and cause confusion over whether a goal was actually scored).
12. The size of the mesh on the net has been chosen to reduce the risk of injury caused by entrapment. Should cords become broken, the holes will become large and require repair or replacement.
13. Replacement items should always be purchased from the original supplier and it is important to ensure that the combination of existing equipment and new components will continue to conform to the relevant standard(s).

Storage

1. Nets should always be stored out of direct sunlight and away from rodents.
2. Anchoring recommendations must still be adhered to when freestanding products are stored / assembled.
3. Where equipment has folding back supports it is recommended that the posts are stored flat at ground level. If they can only be stored in a vertical fashion they should be secured to prevent them falling over.

Moving

1. Care should always be taken when moving the product pre-assembly.
2. If there are no transportation wheels provided the equipment should be lifted by a sufficient number of competent people to prevent injury to the installers and damage to the product. A full size football goal should never be moved using fewer than four adults.
3. Never drag equipment across the ground. Moving equipment in this manner is most likely to cause damage to the product and surface. Equipment must be lifted clear of the ground when being moved.
4. When goals have specific folding mechanisms, care must be taken to fold in accordance with supplier instructions and labels. Damage can occur if these mechanisms are not released in the correct manner.
5. Fence / Wall folding style goals with socketed support posts are designed to be moved simultaneously by two competent people. Care should be taken when moving the goal to ensure the net does not become entangled.
6. Goals with wheels fitted should be moved by four competent people, one in each corner of the frame, and in the correct manner as stated in the assembly instructions. The goals may topple if pushed in the wrong direction. They should be moved by pushing the uprights in a backwards direction.
7. When equipment is being moved avoid any twisting or distorting of the frame as this places excessive strain on the joints and framework and may result in structural damage.
8. Where back bars are removable they should be taken off the goals prior to moving them.

Keeping Records

1. The safety of equipment is the responsibility of the facility providers (who should provide equipment that has been installed and maintained in a safe and good working condition) and users (who should always use the equipment for its intended purpose).
2. Facility providers should be aware of operation and maintenance guidelines and we recommend the keeping of records of all inspections and maintenance carried out. Below are two examples of how you may record this information.

Example 1 – Goal record sheet:

GOAL RECORD SHEET				
Goal ref:	Pitch 1			
Date	Type of Check	Findings	Action Taken	Checked By
01/10/14	Weekly	None	None	A.Person
08/10/14	Weekly	Hole in net	Replaced net	A.Person

Example 2 – Goal inspection sheet

GOAL INSPECTION SHEET			
Site	Wulstan Road	Pitch No.	Pitch 2
Goal ref.	South end	Type of Goal	Steel socketed
Size of Goal	7.32m x 2.44m	Stability Test Pass	YES / NO
Supplier	Broxap Sports	Date of Manufacture	Dec 2011
Inspected by	A.Person	Date of Inspection	Aug 2012
Findings	Net hooks missing & scratches to left hand post		
Action taken	Replaced net hooks and touched up paint		
Contact details for spares / repairs	<u>Refer to Broxap Sports distributor</u>		

Official Goal Sizes / Anchorage

Type of Goal	Sizes	Standard	Minimum no. of 2909/CW anchors required (freestanding goals)
Senior 11-a-side	7.32m x 2.44m / 24ft x 8ft	BS EN 748:2013	6 per goal
Youth 11-a-side	6.4m x 2.13m / 21ft x 7ft	BS EN 8462:2005+A2:2012	6 per goal
9-a-side	4.88m x 2.13m / 16ft x 7ft	BS EN 8462:2005+A2:2012	6 per goal
7-a-side	4.88m x 1.83m / 16ft x 6ft	BS EN 8462:2005+A2:2012	6 per goal
Mini Soccer	3.66m x 1.83m / 12ft x 6ft	BS EN 8462:2005+A2:2012	6 per goal
5-a-side	4.88m x 1.22m / 16ft x 4ft	BS EN 8462:2005+A2:2012	4 per goal
5-a-side	3.66m x 1.22m / 12ft x 4ft	BS EN 8462:2005+A2:2012	4 per goal
5-a-side	2.44m x 1.22m / 8ft x 4ft	BS EN 8462:2005+A2:2012	4 per goal

Anchorage: to achieve the above stability test, goals (in case of socketed type) must be installed with the correct manner of concrete in the ground.

Freestanding goals must be securely anchored at all times.

SYNTHETIC PITCH EQUIPMENT – OTHER SPORTS

Hockey

1. We strongly recommend that wheels are used to move hockey goals. If wheels are not present then four competent persons should take position at each corner of the goal and lift simultaneously.
2. Do not use any other device to move a goal other than those specified by the manufacturer.
3. For hockey goals with rear wheels fitted, the goals must be tipped onto the wheels by at least two competent persons positioned at each rear corner of the goal. The top rear support bar and side frames are integral parts of the goal for supporting the netting and are not to be used as the principle method for tipping the goal.
4. When flip-over style wheels are fitted use the lifting handled fitted when flipping the wheel into place. This action requires two people per side (one to lift, one to flip).

Tennis

1. When moving Freestanding Tennis Posts, transporter trolleys should always be used unless the posts have been completely dismantled.
2. Always use a minimum of two transporter trolleys per set of posts.
3. Transporter trolleys should not be used to store posts at any time.
4. Only use trolleys that have been specifically made for transporting tennis posts. Two competent persons are required to lift each end of the posts onto the trolley. Use fixing bolts to secure posts on trolleys before attempting to move them.
5. Do not over-tension the net as this can potentially cause each end of a freestanding tennis post to lift and render the posts unstable for use.
6. We recommend that the net winder handle is always removed if posts are to be left unsupervised.
7. In no circumstances should anyone sit on, or lean against, the wire as damage to the posts and/or net could result.

Netball

1. Freestanding posts must be laid down and stored in a secure covered and dry location when not in use.
2. Freestanding posts must only be wheeled in a pushing motion from the top of the post, do not drag the post.

Dugout Shelters

1. Team shelters constructed in steel or aluminium are designed to be permanently fixed to an appropriately prepared surface.
2. Always use the correct amount of fixings based on the size of the shelter.
3. Shelters should never be left unsecured.

Pitch Dividers

1. Pitch divider posts are designed to be permanent fixtures and should not be removed.
2. Should the wire be required to be taken down, first release the pressure on the wire, detach from the anchor post, coil and tie it off, then store the wire in pouch with netting.
3. Netting on pitch dividers is retractable and should always be stored in a storage bag / pouch.
4. The netting must be retracted using a “pull and draw” system. This can be achieved by standing at the storage end of the system and then by slowly pulling the net inwards until all the netting has been gathered. Do not walk it from one end to the other as this will cause the netting to become entangled and put excess stress in the clips used to suspend the netting.

ATHLETICS EQUIPMENT – Refer to separate athletics equipment maintenance recommendation downloadable from <https://www.stadia-sports.co.uk/safety-maintenance>

INDOOR SPORTSHALL EQUIPMENT

Division & Bowlers End Protection Nets

Construction

- Heavy duty extruded aluminium trackway.
- All support brackets are telescopic mild steel construction.
- Netting is 50mm square mesh. Flame retardant to BS5867 Part 2 Type B.
- Canvas screens have flame retardant treatment as standard.
- PVC storage pouch 1m wide.

Finish

Metalwork – white powder coat finish

Aluminium track – self colour

Netting – green, blue or white.

Maintenance

1. Visual inspection before each use.
2. Annual service/inspection by an approved contractor.

Dimensions

Designed to suit the customer's own requirements and allowable space.

Support steelwork

None required, all fixed to roof structure.

Weights & Loads

- Aluminium trackway is supplied in 6m lengths and weighs 5kg per length.
- Netting is 50mm square mesh and weighs 1kg per 12 square metres.
- Canvas is 1oz per square yard.
- Total weight of 1 x 18m division net 75kg including all support brackets, netting and trackway.

Service & Cleaning

Full service to be carried out at all high level fixing points, adjust and re-level nets, check and re-tighten fixings.

Operation instructions

- To use the division net unhook the fabric straps from the wall-mounted hooks on the PVC storage pouch and allow the net to “drop” to the floor.
- One person is then required to take hold of the leading edge and, ensuring the area is clear, walk back to fully extend then net to the end of the track.

- It is important to walk directly below the run of the track and not to pull the net to one side, which may cause snagging and possible damage.
- When storing nets, DO NOT gather the leading edge and walk down the length of the track.
- It is essential that the operator goes to the storage end and gathers the net in. This will ensure that the trolleys do not “bunch up” and high level and snag.
- Once nets are fully drawn back to the storage wall, they should be “scooped up” into PVC pouch and the fabric straps re-secured on the hooks.

Cricket Bay Nets

Construction

- Heavy duty extruded aluminium trackway.
- All support brackets are telescopic mild steel construction.
- Netting is 50mm square mesh. Flame retardant to BS5867 Part 2 Type B.
- Canvas screens have flame retardant treatment as standard.
- PVC storage pouch 6m x 1m wide.

Finish

Metalwork – white powder coat finish

Aluminium track – self colour

Netting – white.

Maintenance

1. Visual inspection before each use.
2. Annual service/inspection by an approved contractor.

Dimensions

Designed to suit the customer’s own requirements and allowable space.

Operation instructions

- To use the division net unhook the fabric straps from the wall-mounted hooks on the PVC storage pouch and allow the net to “drop” to the floor.
- Three people are then required to take hold of each of the 3 wing nets (double cricket bay unit) and, ensuring the area is clear, walk back to fully extend the nets to the end of the tracks.
- It is important to walk directly below the run of the track and not to pull the net to one side, which may cause snagging and possible damage.
- Check that the back sight screen is at least 1m from the storage wall end.
- Carry out visual inspection before use.

- When storing nets, DO NOT gather the leading edge and walk down the length of the track.
- It is essential that three people go to the batsman end and begin to gather the nets in from the rear. This will ensure that the trolleys do not bunch up at high level and snag.
- Once nets are fully drawn back to the storage wall, they should be “scooped up” into PVC pouch and the fabric straps re-secured on the hooks.

Cable Tension Protection Netting

Construction

- M10 x 50mm Dyno bolts to be drilled and tapped or bolted into steel channel, “I” beam or purlin at approx. 1m intervals.
- Galvanized steel 4mm wire to be tensioned using M10 x 150mm long barrel strainers.

Finish

Barrel strainers and Dyno bolts – zinc plated.

Wire – galvanized.

Netting

22mm mesh white flame retardant treated with selvages.

Maintenance

1. Visual inspection before use.
2. Annual service/inspection by approved contractor

Cleaning

Nets to be dusted down periodically.

BASKETBALL GOALS

Roof Mounted Matchplay Basketball Goals

Construction

- 60mm x 40mm x 3 mm box section.
- Heavy duty rings – Playmaker 263.
- Pressure release ring – Playmaker 270.
- Best quality nylon nets.
- Perspex backboards 1800mm x 1050mm x 20mm.
- Wood laminate backboards 1800mm x 1050mm x 22mm.

Finish

Metalwork – blue or white powder coating.

Maintenance

1. Visual inspection, checking all parts are working, boards and rings are intact with no obvious signs of damage.
2. Operate the motor or winch to ensure movement is smooth and unobstructed.
3. Consult an approved contractor if in doubt, and do not use.
4. Annual service/inspection by an approved contractor.

Dimensions

Drop to suit court markings and roof structure – regulation 1800mm x 1050mm backboards.

Support steelwork

Steelwork can be supplied and installed if required.

Weights & Loads

The gross weight of the basketball framework, winch motor, backboard and ring is 189kg. This does not account for hang weight on the basketball ring.

Servicing & Cleaning

Check tightness of all fixings. Check the trackway is free from obstructions, dirt build-up and lubricate with a silicon-based compound. Apply the same silicon-based lubricant to heavy duty roller trolleys. Face of board and frame cleaned at time of service.

Operation – Electric

- Electric operation roof mounted basketball goals are single phase power operated via a remote control key fob. There is a manual override switch in the remote receiver.
- Each goal is operated and supplied with its own remote control.

- There is an “up” and “down” arrow on the fob which needs to be pressed when the goals are required to be operated.
- Depress the button and the goals will automatically raise or lower. Ensure you are within 30m of the receiver unit (usually located by the isolator panel).
- When the goals reach either the stored position or the playing position they will stop automatically.
- You must observe the operation of the goals to ensure that no problems occur when raising or lowering.
- Both goals will operate simultaneously unless otherwise programmed.

Operation – Manual

- Manual operated goals have a hand winch fitted to the main steel at low level. This must not be fitted below a height of 2m for safety reasons.
- A suitable pair of stepladders will be required to operate the hand winch. These must be inspected and used correctly.
- To take the goal up to the stored position, turn the handle clockwise until parallel with the steel work.
- Reverse the previous process to lower the goal into the playing position.
- The winch must always be operated in line with the way instructed above. Failure to do this can cause winch problems.

Roof Mounted Sliding Basketball Goals

Construction

- 60mm x 40mm x 3 mm box section.
- Heavy duty rings – Playmaker 263.
- Pressure release ring – Playmaker 270.
- Best quality nylon nets.
- Perspex backboards 1800mm x 1050mm x 20mm.
- Wood laminate backboards 1800mm x 1050mm x 22mm.
- Steel trackway.
- Heavy duty soffits, brackets and trolleys.

Finish

Main frame – light blue or white powder coating.

Trackway – self colour.

Maintenance

1. Visual inspection before use.
2. Annual service/inspection by an approved contractor.

Dimensions

All projections are to suit court markings, with height in accordance with rules & regulations.

Support steelwork

Steelwork can be supplied and installed if required.

Weights & Loads

The gross weight of the basketball framework and ring is 189kg. This does not account for hang weight on the basketball ring.

Servicing & Cleaning

Check tightness of all fixings. Check the trackway is free from obstructions, dirt build-up and lubricate with a silicon-based compound. Apply the same silicon-based lubricant to heavy duty roller trolleys. Face of board and frame cleaned at time of service.

Operation – Manual

- To move basketball goal into the playing position, only use the pulley system installed.
- This should be operated by two members of staff at each time.
- Undo hauling line rope and pull down slowly, the goals will move smoothly towards the centre of the hall. Both goals will stop at the pre-set match playing position.
- When in position, tie off the hauling line to the cleat boards fitted to the wall. The rope should be wrapped in a figure of eight then tied with a suitable knot.
- To store the goals away after use, the procedure is the reverse of the above.

Every care should be taken to not pull the hauling line too quickly or harshly.

Hinge Wall Mounted Basketball Goals

Construction

- 60mm x 30mm box section.
- Heavy duty rings – Playmaker 263.
- Pressure release ring – Playmaker 270.
- Best quality nylon nets.
- Perspex backboards 1800mm x 1050mm x 20mm.

Finish

Main frame – light blue powder coating.

Maintenance

1. Visual inspection before use.
2. Annual service/inspection by an approved contractor.

Dimensions

Projections are to suit court markings up to 4000mm. Matchplay or practise backboards are available.

Support steelwork

Support steelwork is required if standard block type wall construction is not in place.

Servicing & Cleaning

All hinge and wall fixing bolts to be checked and tightened. Face of board and frame are to be cleaned at time of service.

Operation – Manual

- To operate basketball goal into playing position use the “boat hook” provided only. This should be hooked onto the basketball ring (not the small ring on the plunger) and slowly pulled out.
- On the diagonal locking brace there is a sprung plunger with a small ring attached that secures the goal in the correct playing position.
- The small ring needs to be pulled downwards lightly then turned through 90 degrees so that the metal ring is in line with the diagonal brace.
- This then allows the plunger to locate into the pre-drilled hole on the inner brace, which secures the frame in position.
- When the basketball goal is to be stored, the sprung plunger must be released before attempting to move the goal.
- Pull the small ring downwards slightly then turn the plunger through another 90 degrees as previous, this allows for the ring to be moved with the use of the boat hook. Move the goal into its stored position.

Fixed Projection Height Adjustable Practise Basketball Goals

Construction

- 50mm x 25mm box section frame.
- Gas shock adjustment system.
- Heavy duty rings – Playmaker 263.
- Best quality nylon nets.
- Wood laminate backboards 1200mm x 900mm x 19mm.

Finish

Main frame – light blue powder coating.

Maintenance

- 1 Visual inspection before use.
- 2 Annual service/inspection by an approved contractor.

Dimensions

A fixed projection of 1.2m.

Support steelwork

Steelwork can be supplied and installed if required.

Servicing & Cleaning

Check tightness of all fixings. Apply silicon-based lubricant to all moving parts. Face of board and frame cleaned at time of service.

Operation – Manual

- The basketball goal has a fixed projection and has a height adjustment facility which can adjust the height of the backboard and ring from 3050mm to 2600mm.
- Using the “boat hook” provided, attach to basketball ring brace and pull downwards. The goal will automatically “drop down” into the lower “Junior” position.
- To reset the ring to the “Senior” position, use the hook to push on the basketball plate. The goal will move to the required playing position.

REBOUND BOARDS

With Ground Sockets

Construction

- 6mm plate frames at each board end with wheels for moving 35mm thick laminated chipboard.
- Posts are 40mm x 40mm box steel.

Finish

Metalwork – hammer grey powder coating.

Panels – blue laminated wood.

Maintenance

3. Visual inspection before use.
4. Annual service/inspection by an approved contractor.

Dimensions

Boards are 2440mm long x 1200mm high x 35mm wide – run to suit the hall.

Servicing & Cleaning

Face of board and frame to be cleaned at time of service. The wheeling device must be checked and lubricated with silicone-based spray and all fixings checked for tightness.

Operation – Manual

- Use plunger / sucker supplied by flooring contractors to remove the capping plates.
- Use plunger /sucker provided by Broxap to remove the silver capping plate in the post sockets.
- Insert post into sockets in their required position.
- Two people are required for the fitting of boards. To assist in this we would recommend inserting the lifting handles (supplied) through the holes halfway down either end frame.
- Wheel the board to its location, being careful not to drag the wheels sideways, as this could cause damage to the floor and premature wear to the wheels.
- Lift the board into position by lining up the two slots in the end frames and the lugs on the posts. Be careful not to place feet underneath board as it is lowered.
- Fitting gate units to posts: lay post and gate unit next to each other on the floor. Align hinge lugs to hinge pins then locate pins into holes.
- Two people are then required to lift the assembled post and gate into the floor socket, being careful not to trap feet. Shoes / boots with toe protection are recommended for this operation.
- To remove the 5-a-side run reverse the previous procedure.

Mobile Rebound Boards – Free Standing

Construction

- 1” 16SWG gauge steel tube frame with Koskifutura outdoor quality ply panels.
- Dual wheel device to set up boards included.

Finish

Metalwork – blue powder coating.

Panels – white, blue or green laminated wood.

Maintenance

1. Visual inspection before use.
2. Annual service/inspection by an approved contractor.

Dimensions

Boards are 2440mm long x 1200mm high x 600mm wide, gate unit 1200mm long x 1200mm high x 600mm wide – run to suit hall.

Servicing & Cleaning

Face of board and frame to be cleaned at time of service. The wheeling device must be checked and lubricated with silicone-based spray and all fixings checked for tightness.

Operation – Manual

- Take wheeling device and insert at end of board that has a hook at low level.
- Angle wheeling device and position under central lifting brace.
- Pull wheeling device downwards and secure under hook.
- The board is now mobile and should be positioned approximately 100mm to 200mm from the wall. Reverse lifting operation to lower.
- Remove wheeling device.
- Repeat with next board and position so tabs on one board fit into the next.
- Repeat until all boards are in position.

TRAMPOLINE SPOTTING RIG

Construction

- Steel tube box section, generally 60mm x 40mm x 3mm, but bespoke to roof construction.

Finish

Epoxy resin powder coat finish in white.

Maintenance

1. Visual inspection before use.
2. Annual service/inspection by an approved contractor.

Dimensions

All dimensions are to suit existing roof structure.

Support Steelwork

This will be supplied and installed if standard roof structure is deemed to be insufficient.

Servicing & Cleaning

All wall fixing bolts to be checked and tightened if required. Snap shackles and rope to be closely inspected before each use.

Operation – Manual

- Untie rope from cleat board and allow tumbling belt to lower to ground level.
- Ensure user is safely secured into belt using the fabric strap attached.
- Once secure, user can be allowed to mount the trampoline.

Please note – it is imperative that qualified personnel only are allowed to operate spotting rigs.