



0191 Sundry items

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00 Design principles

0.01 Main considerations

It is a requirement to undertake the [00 PLANNING AND DESIGN/ 0001R - DESIGN REFERENCE](#) and [GLOSSARY OF TERMS](#) information into all aspects of design, detailing and delivery when developing the content here within. Clear demonstration of adherence to these requirements is part of the services and will be called upon at key points in the project and during at the discretion of the Department of Education (DoE).

Specification

01 General

As per current NATSPEC except as follows:

1.5 Fixtures and Fittings

Supply and installation

The Selections indicate proprietary fixtures, fittings and equipment (FF&E). All items are identified with a group number which indicates who is responsible for the item according to a construction industry accepted description as follows.

Table 01: Supply Group descriptions

Group	Description
1	Provided and installed by the Contractor
2	Provided by the Principal and installed by the Contractor
3	Provided and installed by the Principal

Installation

Allow to supply and install all Group 1 items

Allow to install all Group 2 items supplied by the Principal.

Group 2 items

Receive delivery of the items of FF&E at the normal site delivery point for convenient off-loading. The delivery point must be agreed to by the contractor and nominated FF&E supplier.

Promptly remove and place off-loaded FF&E in safe storage until required for final placing in the works.

Examine the items of FF&E upon delivery to ascertain whether they are in conformity with the order and whether they have been damaged in transit. Examine the FF&E immediately on delivery and any defect as to quantity or description or damage shall be brought to the notice of the carrier and noted on the document upon which receipt of the FF&E reported is acknowledged. Report defects/damages immediately to the responsible carrier and to the Person with Full Authority/Superintendent's representative.

Once the contractor has acknowledged the receipt of FF&E as being in good order and condition, the contractor shall be responsible for any such defect or damage that may be discovered by examination of the FF&E and shall be responsible for replacement of the FF&E at his own cost.

The contractor must sign all delivery dockets at time of receipt of FF&E items.

Position the FF&E at the locations shown on the plans or in the schedule's hereafter. To facilitate flexibility, most items are to be loosely placed to allow rearrangement by the Principal. Only items specifically listed as fixed are to be fixed in position. Remove packaging/wrapping from all the furniture.

When delivered, except as specified below, the items will be in a finished state and should not require any further finishing on the site, except for stopping of nail holes and touching up to match the general finish, where blemishes occur on site.

1.6 Installation

General

Supply, install all Sundry items accordance with manufacturer's instructions and carry out operational testing of the items as specified in this subsection.

02 Product

As per current NATSPEC.

03 Execution

As per current NATSPEC.

04 Selections

As per current NATSPEC except as follows:

4.1 Fixtures

Dispensers for Toilet Paper

GUIDE NOTE: The toilet paper dispensers that comply with the specification requirements described below can be acceptable. Insert project specific locations.

Supply: Group 1

TYPE 1 (Students)

Location:

Description

- Surface mounted
- 2 roll capacity
- White powder coat finish with lock (All keyed alike)
- Dimension (nominal): 115w x 315h x 130mm deep

Standards

- All fittings and installation for Access, Disabled and Self-Help Units must comply with Australian Standards (AS)1428.1

Installation

- Screw fix to partition using round head bolts and chrome plated acorn nuts (on the opposite side) Apply a small amount of a proprietary thread adhesive to the acorn nut and thread. Four fixing screws to each dispenser, screw fix through pre-drilled holes in each outer corners of the dispenser (4 holes).

-
- Fix to concrete/brick walls using 6.5mm diam. (minimum) metal masonry anchors. Four fixing anchors to each dispenser, fix through pre-drilled holes in each outer corners of the dispenser.

Height from finished floor level:

TYPE 2 (Staff)

Location:

Description

- Single roll capacity
- Satin Chrome Plate (SCP) or Satin Stainless Steel (SSS) finish with metal roller
- Screw fixed securely to walls/doors

Operation

- Roller is to withdraw within the holder to enable toilet paper roll to be inserted. (The roller must remain attached to the holder when toilet paper roll is being inserted)

Standards

- All fittings and installation for Access, Disabled and Self-Help Units must comply with AS1428.1.

GUIDE NOTE: Toilet paper holders with open hook end for toilet roll attachment must not be used in schools.

TYPE 3 (Ambulant cubicles and access WCs)

GUIDE NOTE: Toilet paper dispensers that comply with the specification requirements described Below may be acceptable.

Location:

Description

- Enclosed, lockable, controlled delivery unit
- Finish – SSS

Standards

- All fittings and installation must comply with AS1428.1

Dispensers for Paper Towel

GUIDE NOTE: Dispensers for Paper towel are for disabled toilets only. However, consideration must be given where necessary. Paper towels are not recyclable and generates waste.

Supply: Group 1

Location: Disabled toilets

Standards

- All fittings and installation for Access, Disabled and Self-Help units must comply with AS1428.1

Description

- Roller type unit to suit 197 mm wide paper rolls. White baked enamel finish, fixed to wall where shown.
- Height from finished floor level:

Student Toilet Soap Dispenser

GUIDE NOTE: Include soap dispensers in boys/girls toilets when nominated in the Educational Facilities Standards and Guidelines (EFSG). Select one of the following alternatives (alternative 1 or alternative 2).

Supply: Group 1

Location: Toilets - Boys/Girls

Instructions

Clear instructions must be provided in accordance with the following:

- Location
- Brand and supplier of soap dispenser
- Type of soap that to be used with the soap dispenser.

-
- The soap type to be nominated by the supplier/manufacture of the soap dispenser.
Note: To avoid warranties from becoming invalid compatible soap must be used with the soap dispenser.
 - Name and address of soap supplier/manufacture.
 - Size (instructions): A4
 - Finish: Laminated
 - Location: Cleaning Distributed Stores and Cleaning Supplies Stores
 - Hand one copy to the Principal's Authorised Person / Principal's Representative

Installation

- Fasten to wall in a clearly displayed position.

Alternative 1

Description

Pressure die-cast in aluminium body pump action soap dispenser

- Body: Stainless Steel
- Lid: Stainless Steel
- Push Button: Plastic

Soap valve: Corrosion resistant with a delivery system.

- Settings: Minimum 4 (0.25 to 1.0 mls)
- Setting: Pre-set to deliver 0.25 mls

Dimensions (nominal)

- Height: 290 mm
- Width: 125 mm
- Depth: 100 mm
- Capacity: 1.18 to 1.2 litres

Locking system: Vandal resistant proprietary key to open dispenser

- One key to operate all dispensers
- Hand all keys to the Principal's Authorised Person / Principal's Representative

Labelling: Dispenser to be labelled advising name of compatible soap that must be used with dispenser.

Fixing

- Securely fix to wall by means of a backplate permanently fixed to the wall. The dispenser is to be locked to the back plate by means of the lid.
- Installed in a position over the trough/basin to prevent drips from the dispenser landing on the floor.

Height from finished floor level:

Refer to [08 HYDRAULIC/0811 SANITARY FIXTURES](#)

OR

Alternative 2

GUIDE NOTE: The soap dispenser cartridge that comply with the specification requirements described Below may also be acceptable.

Description

- Surface mounted stainless steel pump action soap dispenser
- Body: 16 gauge stainless steel
- Door: 22 gauge stainless steel with piano hinge
- Fingertip lever: Stainless steel
- Finish: Satin

Soap valve

- Corrosion resistant
- Settings: preset

Dimensions (nominal)

- Height: 280mm
- Width: 110mm
- Depth: 100mm
- Capacity: 1500 hand washes per cartridge

Locking system

- Vandal resistant proprietary key to open dispenser
- One key to operate all dispensers
- Hand all keys to the Principal's Authorised Person / Principal's Representative

Fixing

- Securely fix to wall through pre drilled fixing holes in the assembly.
- Installed in a position over the trough/basin to prevent drips from the dispenser landing on the floor.

Height from finished floor level:

Refer to [08 HYDRAULIC/0811 SANITARY FIXTURES](#)

Staff Toilet Soap Dispensers

GUIDE NOTE: Only include soap dispensers in staff toilets if nominated in the EFSG. Soap dispensers that comply with the specification requirements below may also be acceptable.

Supply: Group 1

Location: Toilets – staff

Item

- Stainless steel surface mounted lockable body pump action soap dispenser.
- Stainless steel: 304 grade
- Finish: Satin
- Capacity: 1.2 litres
- Soap valve: Corrosion resistant
- Plunger: Semi-flush. Maximum protrusion 12 mm
- Locking system: Vandal resistant proprietary key to open dispenser.
- One key to operate all dispensers
- Hand all keys to the Principal's Authorised Person / Principal's Representative

Fixing

- Concealed
- Securely fix to wall by means of a backplate permanently fixed to the wall and the dispenser is to be locked to the back plate by means of the lid.
- Installed in a position over the trough/basin to prevent drips from the dispenser landing on the floor.

Height from finished floor level:

Instructions

Clear instructions must be provided identifying and in accordance with the following:

- Location
- Brand and supplier of soap dispenser
- The type of soap recommended by the supplier/manufacturer of the soap dispenser.
- Name and address of soap supplier.
- Size (instructions): A4

Finish

- Laminated

Location

- Cleaning Distributed Stores
- Cleaning Supplies Stores

Hand one copy to the Principal's Authorised Person / Principal's Representative

Installation: Fasten to wall in a clearly displayed position.

Soap Holders

GUIDE NOTE: Insert project specific locations

Supply: Group 1

Location:

Description

- CP brass soap holders screw fixed to wall in a position over the trough/basin to prevent drips from the soap holder landing on the floor.

Hook for Clothes

GUIDE NOTE: Insert project specific locations.

Supply: Group 1

Location:

Type

- Stainless steel or satin chrome finish on cast brass.

Proprietary item

- For all products and/or suppliers that meet the specific criteria set here within, refer to Government procurement methods and obligations under the delivery contract.

Installation

- Screw to fix to wall plugs.

Folding Shower Seat

Supply: Group 1

Location:

Standards

- All fittings and installation must comply with AS1428.1 and 2.

Type

- Metal fold away shower seat with epoxy coated seat slats and safety spring clutch mechanism.
- Mounting height: 470mm above finished floor

Frame

- Stainless steel
- Grade: 304 18/8

-
- Finish: Satin

Safety spring clutch

- Material: Stainless steel and bronze

Seat Slats

- Aluminium (all ends sealed)
- Finish: White epoxy
- Width (nominal): 355mm
- Length (nominal): 1060mm

Fixing

- To the manufacturer's recommendations

Waste Paper Bin

Supply: Group 1

Location:

Description

- White plastic waste bin with swing top waste container

Material

- Polythene and high impact polystyrene
- Colour: White
- Capacity: 0.028 cubic metres

Letter Box

GUIDE NOTE: Insert project specific locations.

Supply: Group 1

Location: Confirm exact location on site with Principal's authorised person.

Type

- Proprietary metal letter box with corrosion resistant, weatherproof body, weather protected letter slot, lockable-hinged door, school street number or identification, and accessories necessary for correct installation.

Standard

- To Australian and New Zealand Standards (AS /NZS) 4253.

Aperture (minimum)

- The minimum size of the aperture for receiving mail to be 330 x 30mm (AS/NZS 4253).

Opening

- Rear opening with built in key locking system

Dimensions (minimum)

- Internal space: 390 x 230 deep x 160mm high
- Height: Positioned so that the aperture is between 900mm and 1200mm above finished ground/ pavement level (AS/NZS 4253).
- Confirm exact height with Principal's authorised person.

Keys

- Provide a minimum of 2 keys
- Hand keys to the Principal's Authorised Person / Principal's Representative prior to completion.

Flagpoles

GUIDE NOTE: Insert project specific locations.

Supply: Group 1

Location:

Number

- 2 per School.

Construction

- Aluminium flagpole, machine tapered, hot dipped galvanised steel spigot and base plate, complete with “anti-vandal” internal halyard systems and all fittings required to fly flags.
- Height: 8500 to 9000mm.

Dimensions

- 100mm diameter at base tapering to approx. 60mm (nominal) at top x 2.5mm wall thickness.

Finish

- Natural clear anodised.

Footings

- Reinforced concrete footing to structural engineer’s design (including anchor bolts).

4.2 Sports Equipment

Gymnasium Equipment

Supply: Group 1

Location:

Type

- One complete proprietary system must be used (mandatory) for all floor inserts and net posts (do-not use a mixture of different proprietary products).

Floor Inserts

GUIDE NOTE: Insert project specific locations. Refer to the EFSG.

Location - Gymnasium Size: As shown on Drawings.

Types

- Volleyball post sockets, Number: 2
- Badminton posts sockets, Number: 6
- Netball post sockets, Number: 2

Description

- Zinc plated steel proprietary inserts

Installation

- Recessed flush with floor surface.

Badminton Posts

Location: As shown on Drawings.

GUIDE NOTE: Insert project specific locations. Refer to the EFSG.

Description

- Proprietary post in mild steel complete with welded closed ends, stays, locking stud and bearing pad/s all in accordance with the International Badminton Federation.

Posts, Base

- Fit proprietary compatible floor sockets
- Number Required: 3 sets (total 6)

Finish

- Protective coating and paint system by manufacturer prior to delivery.

Volleyball Posts

GUIDE NOTE: Insert project specific locations. Refer to the EFSG

Location: As shown on Drawings.

Description

- Proprietary post in mild steel complete with base to fit floor sockets, locking device and bearing pad/s all in accordance with the Australian Volleyball Federation requirements.
- Height: Adjustable
- Hooks (if applicable): Welded (fitted to upper section)
- Winch: One (to tension top of net)

Posts, Base

- Fit proprietary compatible floor sockets
- Number required: 1 set (total 2)

Finish

- Protective coating and paint system by manufacturer prior to delivery.

Netball Posts

GUIDE NOTE: Insert project specific locations. Refer to the EFSG.

Location: As shown on Drawings.

Description

- Proprietary post in mild steel with net and ring complete with base to fit floor sockets, locating pin, locking device and bearing pad/s all in accordance with Netball Australia requirements.

Post

- 60mm diameter pipe
- Height: 3050mm

Finish

- Protective coating and paint system by manufacturer prior to delivery.

Pads

- Description: 15mm high density close cell foam covered with heavy-duty nylon reinforced vinyl netball post padding
- Height (minimum): 2400mm from floor level
- Diameter (maximum): 80mm
- Fastening: Held to post with an easily removable touch tape
- Colour: Red

Basketball Backboard Support

Selection

- Select appropriate type of backboard (see below) either (A), (B), or (C).

GUIDE NOTE: Write separate specification description for basketball supports if types listed are not applicable.

Installation

- In line with manufacturers recommendations.
- Structural certification is required for all proprietary items. This certification will cover all materials, connections, attachment points, fixings and installations including static and active loads.
- All certification is to be provided at hand-over as part of final documentation.

Type 1 Support - Fixed

Location: Gymnasium

Description

- Proprietary framework to support backboard frame and net at correct height in a fixed position.
- Supply and install all brackets and fixings as per the manufacturer's recommendations.

Support Frame

- Fix framework securely to brickwall/structural steel in accordance with engineer's requirements. The backboard support frame to be welded together with all joints mitred and ends welded closed. Provide diagonal braces across and between support arms.
- The cantilevered backboard should not exceed 1200mm from the fixing location.
- Wall frame, arms and board frame: 38mm Square Hollow Section (SHS) (minimum)

Finish

- Protective coating and paint system by manufacturer prior to delivery.

Type 2 Support - Lift-Up

Location: Gymnasium

Description

- Proprietary framework to support backboard and net at correct height. Allow backboard to be raised with winch when not in use.
- Supply and install all cables, brackets, winch and pulleys as required.

Support Frame:

- Fix wall mounting frame securely to brickwall/structural steel in accordance with engineer's requirements.
- The four moveable arms to be supplied with steel tube bearing type hinges that allows the back board to lift up.
- To support backboard at correct working height, attach two 5mm diameter galvanised steel cables with galvanised steel turnbuckles and lock nuts to shackles on top of board, fix cables securely to wall or ceiling with cable brackets.
- Provide a 5mm diameter galvanised steel hauling cable fixed to centre of backboard and a swivel anchor sheave block fixed to wall or frame in position to provide correct operation of the lift-up action of the backboard.
- Fix winch securely to wall or frame in correct operating position and install cable. The handle of the winch's worm drive must be operable for both down and up movements.
- Wall frame, arms and board frame: 38mm SHS (minimum)

Finish

- Protective coating and paint system by manufacturer prior to delivery

Type 3 Support - Side Swinging

Location: Gymnasium

Description

- Proprietary framework to support backboard and net at correct height. Allow backboard to swing sideways when not in use.
- Supply and install all cables, brackets and fixings as required.

Support Frame

- Fix wall mounting frame securely to brickwall/structural steel in accordance with engineer's requirements.
- The four moveable arms to be supplied with steel tube bearing type hinges at each end that connect to matching hinge points on wall and backboard frame allowing the back board to swing sideways.
- To support backboard at correct working height, attach two 5mm diameter galvanised steel cables with galvanised steel turnbuckles and lock nuts to pivot brackets fixed to wall directly above backboard pivot points and fix the other end of the cables to shackles welded to backboard framework.
- All cables to be clamped with aluminium ferrules.
- Brace fix the backboard support in the working position with either cables with toggle tension device or internal telescopic device adjustable from the floor.
- Install rope cleats and provide ropes or a dedicated device to enable the backboard assembly to be operated from the floor.

Finish

- Protective coating and paint system by manufacturer prior to delivery

Basketball Ring

Location: Gymnasium

Description

- Provide a 22mm diam. triple strutted basketball ring. Solid mild steel double rod ring with provisions for net fastening.
- Fix ring to backboard assembly with a 150mm wide x 5mm thick steel plate cleat with two 10mm diam. steel rod braces.
- All in accordance with the Australian Basketball Federation requirements.

Finish

- Protective coating and paint system by manufacturer prior to delivery.

Colour

- Orange

Basketball Backboard Assemblies

Location: Gymnasium

No. each space: 1 set (total 2)

Frame Description

- Proprietary welded framework with mitred corners and centre vertical member. Bolt holes pre-drilled in frame for basketball ring.
- Provide lugs and if required cable fixing and hinges to connect backboard support.

Finish

- Protective coating and paint system by manufacturer prior to delivery.

Backboard Description

- An approved moisture resistant custom wood backboard bolted to frame with 10mm diam. countersunk bolts equally spaced at 350mm maximum centres.
- Size: 1800 x 1050mm finished
- Thickness: 25mm
- Graphics: Generally semi-gloss white enamel with edges and 50mm line markings in semi- gloss black enamel as shown on Drawings.

Basketball Backboard Support Post and Assemblies

Location: Games Court

Support post

- A proprietary outdoor basketball post system.
- The post is to be extended 750mm (minimum.) into a reinforced concrete footing and permanently secured by anchor pins or sleeve locking devices.
- The post/sleeve must be securely tied into the concrete to prevent any risk of the post rotating when under pressure from wind loading and/or live loads.

Horizontal section

- Fabricated with a special, slotted mounting plate to the level of the backboard and ring (goal).
- Bolts from the front mounting goal must mount directly through the backboard and into the mounting plate.

Standards

- To AS 1163, AS 1554.1, AS 1170, AS 4100

Galvanising

- Weld, pre-drill bolt holes and hot dip galvanise whole steel assembly after fabrication (all backboard fixing bolts, washers and nuts to be galvanised).
- Hot dip galvanising to AS 4680

Footings

- Reinforced concrete to structural engineer's design.
- The top of the footing to be a minimum of 15 mm above the finished surface (where the support post penetrates the concrete footing) and sloped the edges to drain water away from support post.
- Standards: To AS 3600.
- Concrete: 25 MPa

Installation

- In accordance with the "The Official Basketball Rules" produced by Basketball Australia unless otherwise stated.
- Backboard support post: Distance from the outside edge of the end line minimum 1000 mm minimum (mandatory).

Colour

- Bright Ultraviolet (UV) stabilised colour in contrast with the background in order that it will be clearly visible.

Protective padding, support post

- Each post is to be supplied with removable cylindrical shaped protective padding.
- Filler: High-density polyurethane foam
- Cover: UV stabilised reinforced vinyl cover with concealed "Velcro" closure flaps (to enable ease of installation and removal).
- Height: Minimum 2100mm from base.
- Colour: Bright colour in contrast with the background in order that it will be clearly visible.
- Storage: Store in safe location.
- Hand pads to The Principal's Authorised Person / Principal's Representative on completion of project.

Backboard

Cast aluminium fan shaped or full-size waterproof/rotproof ply. Fixing position to be in accordance with the "The Official Basketball Rules" produced by Basketball Australia.

- Aluminium backboard: Cast from high tensile #310 aluminium.
- Ribs: Cast with structural reinforcing ribs on backside with a 37 mm (nominal) deep perimeter flange. Finish: Powder coated.
- Colour: White with orange perimeter and target line markings.
- Size: (nominal) 1370 x 990 mm high

OR

- Waterproof plywood backboard: Waterproof/rotproof
- Grade: Exterior plywood to AS 2271, AS 1720
- Size: 1800 x 1050 high x 20 mm (minimum) thick
- Finish: White with edges line markings in black

Rings

- Refer to "Basketball Rings". Ring dimensions and fixing height to be in accordance with the "The Official Basketball Rules" produced by Basketball Australia.
- Finish: Protective coating and paint system by manufacturer prior to delivery.
- Colour: Orange

Installation

- Ring and backboard mounting must be bolted directly to backboard support plate with galvanised bolts washer and security type tamper proof shear nut sleeve assembly.
- The tamper proof nuts are to be designed to shear when sufficient torque is applied allowing the remaining protective sleeve to turn freely preventing removal.

Proprietary system

- One proprietary system is to be used for the complete assembly of support post, backboard and ring. Do not use a mix of different manufacturers' proprietary items.

Certification – Mandatory

- The complete system including posts reinforced footings and assembly must be certified by a registered structural engineer (mandatory). Hand one copy of the certification to The Principal's Authorised Person / Principal's Representative.

Provision for Movable Posts

Location: Games Court

Description

- Proprietary hot dipped galvanised steel tube inserts with a hinged cap to seal top of insert when net holding posts removed.
- Metal insert to be set well in concrete footing and finished flush with the top of the finished surface level.
- Footings to structural engineer's design.
- Footing: Concrete footing to structural engineer's design.

Insert Dimensions (Minimum)

- 64mm ID x 5.2mm thick x 240mm long designed to receive compatible holding posts.

Drawing reference

GUIDE NOTE: Refer to EFSG drawing below and include into appropriate project drawing package and number.

Guide only for metal fixtures. Do not use as a construction detail. Not to Scale (NTS)

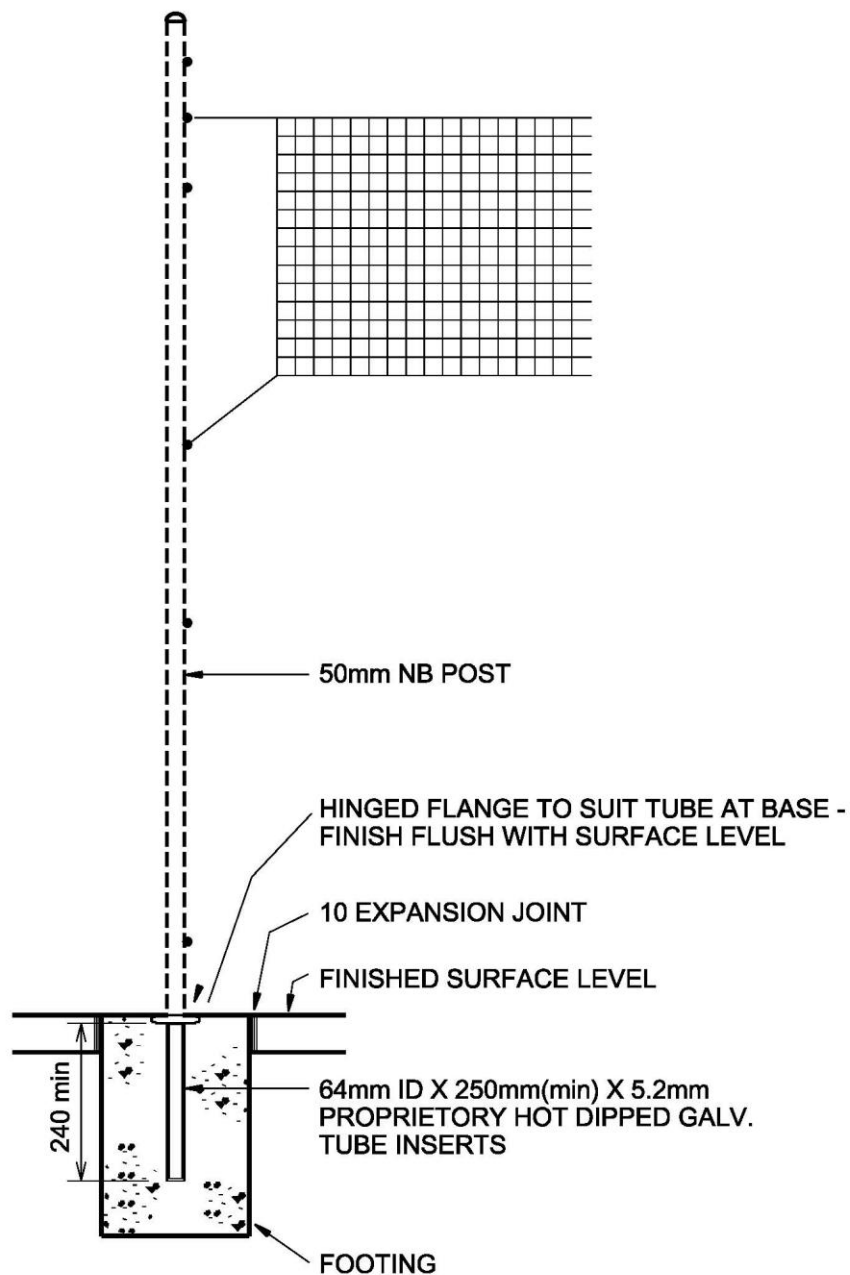


Figure 01: Games Court Moveable Post Detail

Netball Post and Ring

Location: Games Court

Requirement

- Post and ring assembly

Post

- Each post shall be a vertical 60mm Outside Diameter (OD) tubular steel pipe, capped at the top and ragged or keyed at the bottom to prevent rotation when fixed in position.
- Terminate post 150mm from bottom of footings.
- Fixed posts set in concrete footing.
- Fix ring at the top of the post at 3050mm above the finished court surface level all in accordance with the Australian Netball Association.
- Footing: Reinforced concrete footing to structural engineer's design.
- Finish: Hot dipped galvanise to AS 4680.

Ring

- Each post to be fitted with a 380mm Inside Diameter (ID) circular ring of 15mm M.S. rod welded to a 10mm thick M.S. bracket, which shall help support the ring 150mm from the post (measured from internal edge of ring).
- Two 10mm diameter Mild Steel (MS) rod braces to be welded from each side of the M.S. bracket to each side of the ring all in accordance with the Australian Netball Association.

Reversible Basketball / Netball Support Post and Assemblies

GUIDE NOTE: Refer to the reversible basketball/netball support post and assembly's system described below. This system is designed for use in schools. Other proprietary systems that comply with the specification requirements described below may also be acceptable. Ensure netball and basketball courts are standard sizes.

Location: Games Court

Description

A proprietary system comprising of a steel vertical post with a horizontal tube supporting a steel bracket, weatherproof plywood backboard and steel basketball ring. The unit must be able to rotate around its own axis to enable netball ring to be exposed to the playing area.

- Lockable with a minimum of two keys supplied
- Turning tool supplied
- Hand keys and turning tool to the Principal's Authorised Person / Principal's Representative on completion of project

Standards

- To AS 1163, AS 1554.1, AS 1170, AS 4100

Galvanising

- Weld, pre-drill bolt holes and hot dip galvanise whole steel assembly after fabrication (all backboard fixing bolts, washers and nuts to be galvanised).
- Hot dip galvanising (HDG): To AS 4680.

Installation

- In accordance with the “The Official Basketball Rules” produced by Basketball Australia unless otherwise stated.

Backboard support post

- Distance from the outside edge of the end line minimum 1000mm minimum (mandatory).

Proprietary system

- One proprietary system is to be used for the complete assembly of support post, backboard and ring. Do not use a mix of different manufacturers proprietary items.

Structure, tower and assemblies.

- All welded metal construction.

Material

- Vertical and horizontal posts to be rolled hollow metal steel tubing 115 mm (minimum) OD.
- Thickness (minimum): 5.0mm
- Finish: HDG

Design

- Posts to be designed for minimum deflection in use and to have a 900 x 200mm (minimum) gusset on internal angle. The post or sleeve must be securely tied into the concrete to prevent any risk of the post rotating when under pressure from wind loading and/or live loads.

Netball ring, fitting

- Attach netball ring at rear of posts 3.05mm above ground level.

-
- Fix ring at the top of the post at 305 mm above the finished court surface level all in accordance with the Australian Netball Association.

Backboard support

- All metal welded hot dipped galvanised construction
- Supporting bracket: Star or framed steel bracket with a minimum of 10 anchor points to attach backboard and ring. Weld a metal plate to the bracket to enable attachment of basketball ring so that the ring has direct support to the tower.
- Install the bracket to enable it to be adjusted to provide sufficient clearance from the face of the backboard to the front of the vertical post.

Backboard

- Waterproof/rotproof ply
- Dimensions: 1800 x 1050mm
- Thickness (nominal): 19mm
- Installation and markings: To be in accordance with the "The Official Basketball Rules" produced by Basketball Australia.
- Finish: Non-glare heavy-duty all-weather acrylic finish.
- Sign: Attach to the face of the backboard a proprietary sign/logo in red colour illustrating the risks of slam-dunking.

Rings

Basketball:

- Refer to "Basketball Rings" with provisions for net fastening.
- Ring dimensions and fixing height to be in accordance with the "The Official Basketball Rules" produced by Basketball Australia.
- Construction (minimum): 22mm steel rings with triple strutted construction.
- Finish: Factory applied powder coat finish.
- Colour: Orange/red.

Netball:

- Heavy-duty ring
- Construction (minimum): 22mm steel rings with double strutted construction
- Ring internal diameter and fixing height to be in accordance with Netball Australia's requirements

Vertical axis post

A proprietary rotating post system comprising of a 114.3x6.0mm Circular Hollow Section (CHS) with a larger outer sheath to allow rotation.

Outer steel tube: 139.7x5.4 mm CHS OD (minimum) x 1000mm long

Footings

Fixed posts set in concrete footing to structural engineer's design. The top of the footing to be a minimum of 5 mm above the finished surface (where the support post penetrates the concrete footing) and sloped the edges to drain water away from support post.

- Standards: To AS 3600
- Concrete: 25 Mpa

Protective padding, support post

Each post is to be supplied with removable cylindrical shaped protective padding. Filler: High-density polyurethane foam

Cover: UV stabilised reinforced vinyl cover with concealed "Velcro" closure flaps (to enable ease of installation and removal).

Height: Minimum 2100 mm from base

Colour: Bright colour in contrast with the background in order that it will be clearly visible

Storage: Store in safe location. Hand pads to the Principal's Authorised Person / Principal's Representative on completion of project.

Certification - Mandatory

The complete system including posts reinforced footings and assembly must be certified by a registered structural engineer (mandatory). Hand one copy of the certification to the Principal's Authorised Person / Principal's Representative.

4.3 Equipment Requiring Services Connection

Gas / Electric Hybrid Stove

GUIDE NOTE: Insert job specific locations. Alter group number if required.

Supply: Group 1

Location:

Type

Electric oven with gas cooktop

- Colour: White
- Capacity (nominal): 74 litres
- Maximum power input 8kW elec & 29MJ/j gas
- Grill: Slide out
- Burners: 4 off (includes 1 wok burner)
- Ignition: Auto or Piezo
- Timer/clock: 60 minute timer
- Door: Clear window insert in enamelled oven door

GUIDE NOTE: Select appropriate gas type. Delete gas type not applicable.

Type of Gas

- Natural or Liquid Petroleum Gas (LPG)

GUIDE NOTE: These dimensions are only nominal. Check with supplier/manufacturer for correct dimensions

Dimensions (nominal)

- 1070 high x 540 wide x 630mm deep.

Instructions

- Operation manual supplied by the manufacturer

Electric Stove

GUIDE NOTE: Insert job specific locations. Alter group number if required.

Supply: Group 1

Location:

Type

- Upright, low oven
- Fan forced auto oven
- See through door
- Semi Auto
- Auto timer
- Hotplates: Monotube or radiant
- Elements: 4 off
- Electronic clock

GUIDE NOTE: These dimensions are only nominal. Check with supplier/manufacturer for correct dimensions

Dimensions (nominal)

- 1135 high x 540 wide x 610mm deep.

Instructions

- Operation manual supplied by the manufacturer

Proprietary Item

- For all products and/or suppliers that meet the specific criteria set here within, refer to Government procurement methods and obligations under the delivery contract.

Gas Cook Top, 4 Burner

GUIDE NOTE: Insert job specific locations. Alter group number if required.

Supply: Group 1

Location:

Type:

Bench top cooker, natural gas

Cook Tops

- Burners: 4 (1 simmer, 1 wok and 2 semi rapid)
- Flame failure protection
- Ignition: Electronic

GUIDE NOTE: Select appropriate gas type. Delete gas type not applicable.

- Gas: Natural or LPG
- Finish: White enamel
- Warranty: 2 years

Dimensions (nominal)

- 580 wide x 510 deep x 50mm high

GUIDE NOTE: These dimensions are only nominal. Check with supplier / manufacturer for correct dimensions

Instructions

- Operation manual supplied by the manufacturer

Gas Commercial Range with Gas Convection Oven

GUIDE NOTE: Insert job specific locations. After group number if required.

Supply: Group 1

Location:

Type:

Free standing heavy-duty stainless-steel commercial gas range with gas oven. Access to all parts via control panel.

Cook Tops

- 4 Burners - Open burners with double-crown burner cap.
- Burner Rating: 21.6 MJ/h each
- Flame Failure Device: Standard on all burners

GUIDE NOTE: Select appropriate gas type. Delete gas type not applicable.

- Gas: Natural or LPG

Gas convection oven (fan forced)

- Oven burner rated at 21.6 MJ/h

Dimensions (nominal)

- 700w x 700d x 900 mm high
- Net weight: 110 Kg

Proprietary items

- For all products and/or suppliers that meet the specific criteria set here within, refer to Government procurement methods and obligations under the delivery contract.

GUIDE NOTE: 1 additional chrome plated oven shelf at 1/1 GN standard size to be ordered with each oven range.

Note: Other proprietary commercial gas ranges with gas ovens that comply with the specification requirements may also be acceptable.

GUIDE NOTE: Australian Gas Association (AGA) Approval is mandatory

Gas Commercial Range with Electric Convection Oven

GUIDE NOTE: Insert job specific locations. Alter group number if required.

Supply: Group 1

Location:

Type

Free standing heavy-duty stainless-steel commercial gas range with electric oven. Access to all parts via control panel.

Cook Tops

- 4 Burners - Open burners with double-crown burner cap.
- Burner Rating: 21.6 MJ/h each
- Flame Failure Device: Standard on all burners

GUIDE NOTE: Select appropriate gas type. Delete gas type not applicable.

- Gas: Natural or LPG

Electric convection oven (fan forced)

- Elements rated at 5.2 kW

Dimensions (nominal)

- 700w x 700d x 900 mm high
- Net weight: 130 Kg

Proprietary items

- For all products and/or suppliers that meet the specific criteria set here within, refer to Government procurement methods and obligations under the delivery contract.

GUIDE NOTE: 1 additional chrome plated oven shelf at 1/1 GN standard size to be ordered with each oven range.

Note: Other proprietary commercial gas ranges with electric ovens that comply with the specification requirements may also be acceptable.

GUIDE NOTE: AGA (Australian Gas Association) Approval is mandatory

Microwave Oven, 32 Litres (Nominal)

GUIDE NOTE: Insert job specific locations. Alter group number if required.

Supply: Group 1

Location:

Type

- Microwave oven
- Capacity: 32 litres
- Power Rating: 1100 W

Features

- Electronic touchpad operation
- Auto menu cooking
- 10 power levels

Dimensions (nominal)

- 520 wide x 300 high x 400 mm deep.

Instructions

- Operation manual supplied by the manufacturer

Microwave Oven, 42 Litres (Nominal)

GUIDE NOTE: Insert job specific locations. Alter group number if required.

Supply: Group 1

Location:

Type A

- Microwave oven
- Capacity 42-45 litres
- Power Rating: 1000-1200W

Features

- 1250W Quartz grill
- Inverter cooking technology
- Touch control or Sensor type oven
- 14 - 20 pre-set cooking categories

Dimensions (nominal)

- 600 wide x 400 high x 500 mm deep.

Boiling Hot Plate

GUIDE NOTE: Insert job specific locations. Alter group number if required.

Supply: Group 1

Location:

Type:

Double boiling hot plate, single phase with 10 Amp with plug and flex.

Hot Plates:

- Cast Iron
- Elements: 2
- Diameter: 190 mm each
- Heat Settings: 6 for each hot plate
- Recovery: High speed
- Rating: 2.4 kw

Body

- Stainless steel

GUIDE NOTE: These dimensions are only nominal. Check with supplier/manufacturer for correct dimensions.

Dimensions (nominal)

- 505 wide x 100 high x 275mm deep

Instructions

- Operation manual supplied by the manufacturer

Boiling Water Unit - 5 Litre

GUIDE NOTE: Insert job specific locations. Alter group number if required.

Supply: Group 1

Location:

Type

5Lt Electric, automatic, wall mounted, non-drip outlet model with flex and plug.

- Filtration: 5 microns Triple Action Filter.
- Delivery Capacity: 30 cups at one time, 150 cups/hr.
- Tank: Stainless steel
- Element Rating: 2.4 kW
- Dimensions (nominal): 318 wide x 465 high x 198mm deep

Installation

- Position: Above sink draining surface.
- Height (nominal): 300mm from sink drainer surface to bottom of outlet nozzle.

Proprietary Item

- Select appliance from NSW Government contract 278

Boiling Water Unit - 7.5 Litre

GUIDE NOTE: Insert job specific locations. Alter group number if required.

Supply: Group 1

Location:

Type

7.5Lt Electric, automatic, wall mounted, non-drip outlet model with flex and plug.

- Filtration: 5 microns Triple Action Filter.
- Delivery capacity: 45 cups at one time, 150 cups/hr

-
- Tank: Stainless Steel
 - Element Rating: 2.4 kW
 - Dimensions (nominal): 318 wide x 578 high x 198mm deep.
 - Casing finish: White

Proprietary Item

- Select appliance from NSW Government contract 278

Installation

- Position: Above sink draining surface.
- Height (nominal): 300mm from sink drainer surface to bottom of outlet nozzle.

Dishwasher

GUIDE NOTE: Insert job specific locations and group number.

Supply: Group 1

Location:

Type

- Domestic, free standing (removable worktop).
- Energy Star Rating: Refer to the specific GREP policy measures, targets and minimum standards for this item.
- Water Efficiency Rating Labels (WELS) Star Rating: Refer to the specific Government Resource Efficiency Policy (GREP) policy measures, targets and minimum standards for this item.
- Dimensions (nominal): 600w x 600d x 850mm high.
- Programs: 6
- Finish (colour): White

Instructions

- Operation manual supplied by the manufacturer

Dishwasher Under Bench

GUIDE NOTE: Insert job specific locations and group number.

Supply: Group 1

Location:

Type

- Domestic, free standing (removable worktop)
- Energy Star Rating: Refer to the specific GREP policy measures, targets and minimum standards for this item.
- WELS Star Rating: Refer to the specific GREP policy measures, targets and minimum standards for this item.
- Dimensions (nominal): 600w x 600d x 850mm high
- Programs: 6
- Finish: Stainless Steel

Instructions

- Operation manual supplied by the manufacturer

220 Litre (Nominal) Refrigerator / Freezer

GUIDE NOTE: Insert job specific locations and group number.

Supply: Group 1

Location:

Type

- Domestic, 2-door, RH or LH door
- Left hand door conversion kit available
- Energy star Rating: Refer to the specific GREP policy measures, targets and minimum standards for this item.
- Frost free

-
- Colour: White
 - Vegetable box

Capacity

- Refrigerator/ Freezer: 230 -250 litres

Dimensions (nominal)

- 550 wide x 1500 high x 6240mm deep

Instructions

- Operation manual supplied by the manufacturer

300 Litre (Nominal) Refrigerator / Freezer

GUIDE NOTE: Insert job specific locations and group number.

Supply: Group 1

Location:

Type

- Domestic, 2-door, LH or RH door.
- Energy star Rating: Refer to the specific GREP policy measures, targets and minimum standards for this item.
- Frost free
- Fresh food and freezer compartments

Capacity

- Refrigerator/ Freezer: 320-350 litres

Dimensions (nominal)

- 1500 high x 610 wide x 700mm deep

Instructions

- Operation manual supplied by the manufacturer

500 Litre (Nominal) Refrigerator / Freezer

GUIDE NOTE: Insert job specific locations and group number.

Supply: Group 1

Location:

Type

- Domestic, 2-door, LH or RH door
- Energy star Rating: Refer to the specific GREP policy measures, targets and minimum standards for this item.
- Frost free
- Vegetable storage box

Capacity

- Refrigerator / Freezer: 500-530 litres

Dimensions (nominal)

- 1700 high x 800 wide x 750mm deep

Instructions

- Operation manual supplied by the manufacturer

Refrigerator, Food and Beverage - Commercial

GUIDE NOTE: Insert job specific locations and group number.

Supply: Group 1

Location:

Type

- Glass fronted
- Capacity (nominal): 1100 litres
- Doors: 2

-
- Shelves: 4 shelves per door
 - Finish (exterior/interior): Stainless steel

Dimensions (nominal)

- 1400 wide x 700 deep x 2040mm high

Instructions

- Operation manual supplied by the manufacturer

Range Hood

GUIDE NOTE: Insert job specific locations. Alter group number if required.

Supply: Group 1

Location:

Type

- Universal type domestic range hood capable of being fixed independently.
- Fan: 3 speed
- Capacity (nominal): 400 m3/hr
- Exhaust: Recirculating
- Filters: Removable
- Colour: White

GUIDE NOTE: Delete model width not applicable.

Dimensions

- 600mm/900mm wide (nominal)

Maintenance instructions

- Operation manual including filter maintenance instructions supplied by the manufacturer.

Installation

- To AS 4386.1 and AS 4386.2 – Domestic kitchen assemblies

Clothes Dryer (Commercial)

GUIDE NOTE: Insert job specific locations. Add group number.

Supply: Group 1

Location:

Type

- Rotary single phase, with 20 amp plug and flex.
- Capacity (minimum): 9kg
- Non coin operated
- Energy rating: Refer to the specific GREP policy measures, targets and minimum standards for this item.

Instructions

- Operation manual supplied by the manufacturer

Washing Machine (Commercial)

GUIDE NOTE: Insert job specific locations. Add group number

Supply: Group 1

Location:

Type

- Heavy duty automatic, top loading, hot and cold water connections compete with flex and plug.
- Capacity: 8.2 kg
- Energy rating: Refer to the specific GREP policy measures, targets and minimum standards for this item.

Dimensions

- 1065 high x 685 wide x 650mm deep.

Instructions

- Operation manual supplied by the manufacturer

Pottery Wheel

GUIDE NOTE: Insert job specific locations. Add group number

Supply: Group 1

Location:

Type

Commercial electric pottery wheel with the following features:

- 33cm wheelhead with removable bat pins
- 1/4 HP direct drive motor
- Forward/reverse touch speed control
- Stainless steel body & legs with aluminium tray
- 10 year warranty on tray & frame
- Foot pedal with speed hold
- Height adjustable feet

Hand Dryer

GUIDE NOTE: Insert job specific locations.

Supply: Group 1

Location:

Type

- Electric 240 volt 50Hz 10A hand dryer.
- Housing: Cast Aluminium or Zinc Die Cast, with heavy duty powder coat white finish.
- Element: 2400 watts, protected by thermal overload switch.
- Motor: 2 pole, with permanently lubricated ball bearings.
- Timer: 45 second cycle.
- Operation: Push button

-
- Mounting Height to Underside:
 - 750 mm, Generally, 1 off
 - 1150 mm, P.S. - Self Help Toilet, 1 off
 - 1150 mm, H.S. - Self Help Toilet, 1 off

Hydraulic Operated Step Lift

GUIDE NOTE: Insert job specific locations.

Supply: Group 1

Location:

Type

- Proprietary mechanical step lift designed to transport people with disabilities with or without wheelchair between two levels up to a height of 1000 mm.
- Standards: BS 6440
- Safe Working Load: 250 kg
- Platform Unit: Composite aluminium/steel assembly covering the base frame.
- Wiring: Hard wired. Wiring must be concealed.
- Controls: Push button mounted on the platform handrail and at the upper and lower levels (depending on requirements)

Safety Systems

Unit must comply with WorkCover requirements and the items listed below:

- Guarding: Provide guards to prevent trapping between the underside of the platform and any obstruction in the mechanism.
- Gate (upper level): Provide an electronically locking self-closing gate with steel mesh or acrylic panel. The gate must only be capable of being opened when the lift is in the call position (eg. the lift at the same level as the gate)
- Isolating switch on mains power
- Mains Failure: Full battery backup system
- Low voltage operation (24 VDC)
- Full platform and ramp safe edge as standard
- Scissor mechanism fully enclosed by bellows

-
- Wheelchair security: Automatic arrestor bar to be fitted at the open end of the platform
 - Arrestor mechanism incorporated into ramp
 - 150 mm (min) clearance on each side of lift

Model

Check with the manufacturer/s to determine the current correct model for the specific location.

Delivery

Order and confirm delivery instructions with the supplier not less than 12 weeks prior to date required.

Installation

The lift installation and distance of power unit from the lift must be in accordance with the manufacturer's requirements.

Electronic Security Gates / Barrier

GUIDE NOTE: Insert job specific locations.

Supply: Group 1

Location:

Type

- Type: A proprietary electronic security barrier using magnetic detection principals.
- The unit will be microprocessor controlled and automatically adjust to its electronic environment.
- The system must be purpose designed for use in libraries.

Processor

- Self-contained within the unit

OR

- Separate, contained in a vandal resistant container and installed under bag storage facilities.

Electronic Barrier:

Dual corridor detection system consisting of three panels or single corridor detection system consisting of two panels.

Panels (frames): Either mounted on a ramp style base plate or directly to the floor.

Height:

- 1550mm (minimum) from base plate (if mounted on ramp style base plate)
- 1550mm (minimum) from floor (if mounted on floor).

Mounting

- Baseplate, ramp style.
- Supplied with commercial grade colour coordinated carpet.
- Ramps to AS1428 Part 1

Corridor width

- 900 mm (minimum)
- To AS1428 Part 1 and 2

Cables

- Where practicable, all cables should be concealed and cable covers (wire moulding) should not protrude above floor surfaces in passageways.
- If cables cannot be effectively concealed between the gates (frames) and the processor, cover the cable with a proprietary aluminium cable cover (ramp style).

Alarms

- The system to provide audible and visible alarms when responding to an active strip in the corridor.
- Multiple corridors: The alarm light to be corridor specific, indicating in which corridor the alarm was created.
- Status display window: Incorporated into the systems to show a patron and an alarm count when the system is operating normally.
- Optional: A diagnostic code number if a problem occurs.

Power

- Single phase.

-
- Complete with power cord. The power cord to be of sufficient length to reach dedicated GPO.
 - The system must interrogate “look for” library materials only when activated by exiting patrons. It must not be continuously interrogating, or continuously operating.

Protection

- Must be capable of detecting books in all orientations with a single security strip.
- Activated by existing patrons interrupting a passive detector
- Computer diskettes, audio cassettes, magnetic video tapes and other audio/visual material must not be affected when carried through the corridor.

Video

- Capable of accepting a compatible video security system

Placement

Relative to the following interfering objects:

- Large metal objects: Must not be within 610 mm of security gates.
- Walls (steel studs): Must not be within 910 mm of security gates.
- Metal framed doors and windows: Must not be within 1200 mm of security gates.
- Other items: Check with the manufacturer/supplier for a list of other items that may affect the placement and performance of the system.

Installation

- All in accordance with manufacturers printed instructions.

Desensitiser/Re-sensitiser

- General: A compatible proprietary desktop desensitiser/re-sensitiser.
- Trigger: Optical.
- Operation: Audible signal to verify if materials have been re-sensitised.

Security Strips

- Compatibility: The security system must have compatible security strips available that can be inserted in the spines of books and attached to electronic media (eg. CD's and DVD's).
- Do not provide the security strips. The strips are the responsibility of the Department of Education (DoE).