

Steel sections are all mild steel to the relevant E.N. steel standards.

Fixings are mostly BZP, high tensile steel, hex head bolts with washers and Nyloc nuts.

Chains are 6.5mm short link galvanised.

Coatings

All steel equipment made by Play & Leisure is shotblasted to SA 2.5 before a 60-micron thick epoxy based zinc phosphate primer is applied and finally a 70 micron thick coating of polyester powder.

All Play & Leisure Ltd's equipment & surfacing complies to BS EN 1176 parts 1-7, BS EN. 1177 and BS EN 15312. Equipment is guaranteed for 25 years against structural failure.

INSTALLATION INSTRUCTION

1. Excavate area for the surfacing as shown in either Fig 1 or Fig 2(not required for Grass mat)
2. Excavate hole and lower base into position and level in all directions. See Fig 3 or Fig 4 depending on surfacing required
3. Pour in 1.5m³of low slump concrete and vibrate down with vibrating poker.
4. Re-check levels.
5. Fit temporary protection plate(if supplied) using items J and L.
6. Leave for 7 days prior to fitting arc.

Do not leave unattended until satisfied the concrete has cured or the site is sufficiently secure.

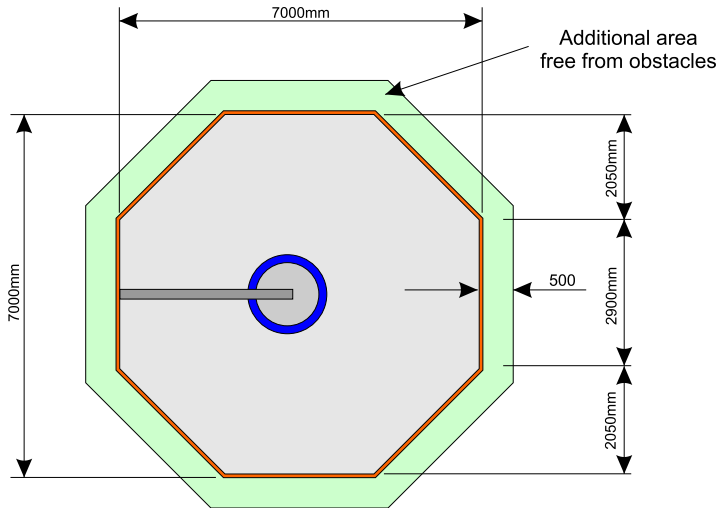
RETURN VISIT

1. Remove temporary protection plate, if supplied from base, be sure to retain items J and L for later use.
 2. Fit arc into base. See Fig 5
- The arc beam requires lifting equipment capable of lifting 300kg. ie Hiab Crane or similar.**
3. Bolt arc to base. Using a torque wrench tighten bolts to 200 ft-lb. See Fig 6.
 4. Attach basket and chains to head assembly using shackles and oilite bearings supplied. See Fig 7.

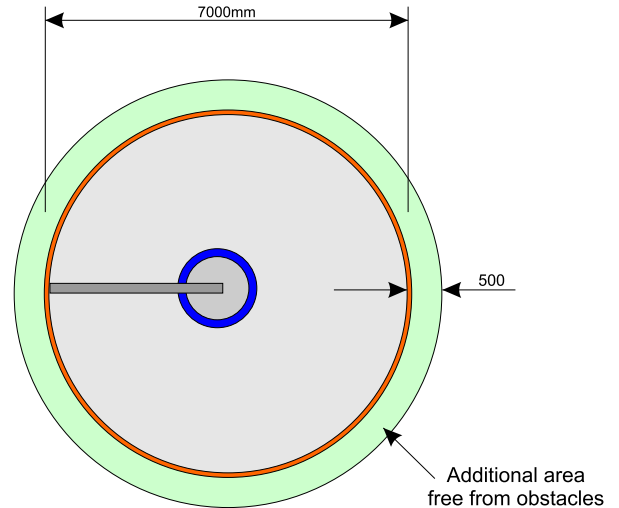
On completion of the installation, a post-installation inspection should be carried out by a competent person to assess compliance with the relevant part(s) of BS EN 1176:2008.

Cantilever Swing - ECS5

Surfacing Dimensions

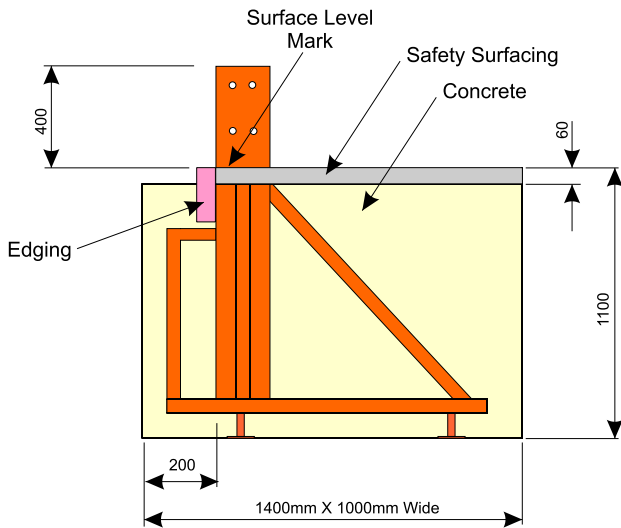


Hexagonal Base(fig 1)

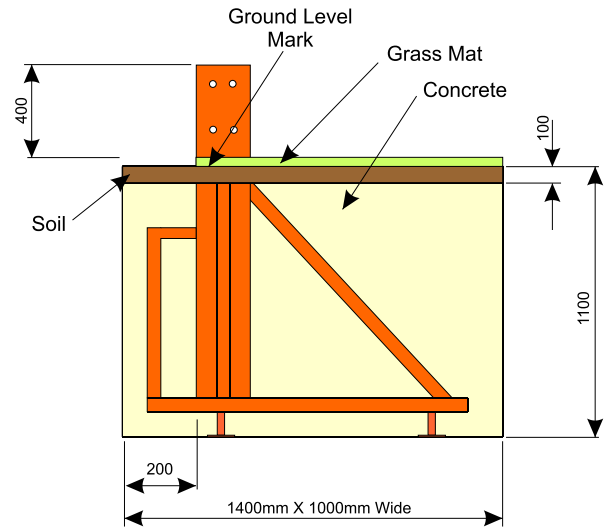


Circular Base(fig 2)

Foundation Detail

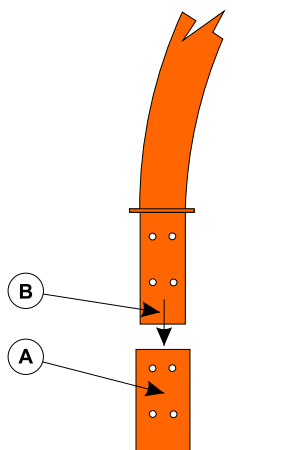


Wetpour/Tile Surfacing(fig 3)

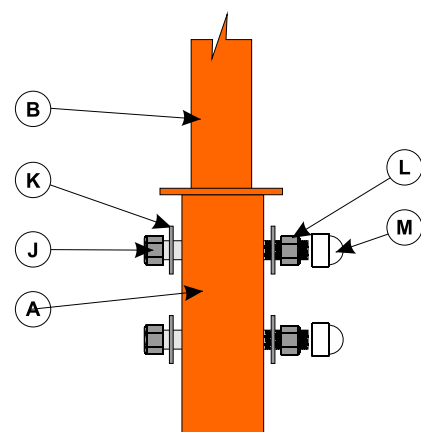


Grass Mat Surfacing(fig 4)

Arc Installation Detail



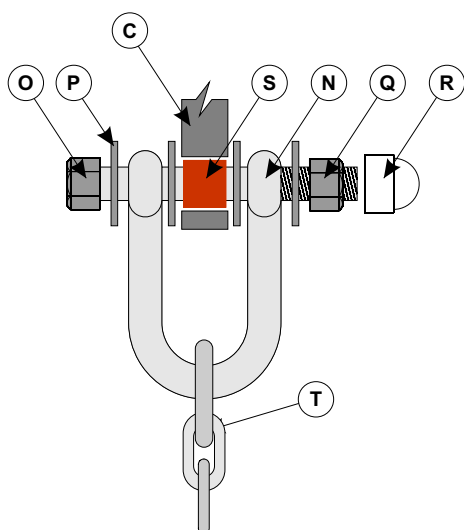
Arc Installation(fig 5)



Arc Fixing(fig 6)

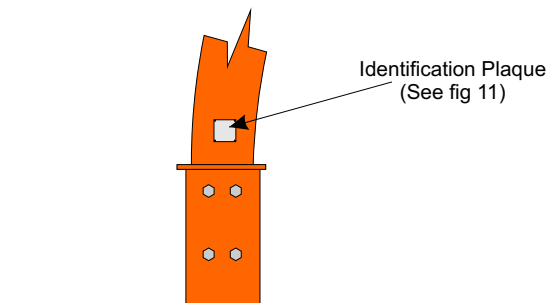
Cantilever Swing - ECS5

Basket Fitting



Top Shackle Assembly(fig 7)

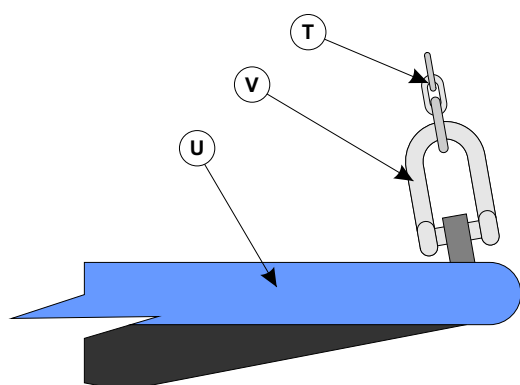
Do not tighten shackles too tight making sure the shackle still moves when tightened.



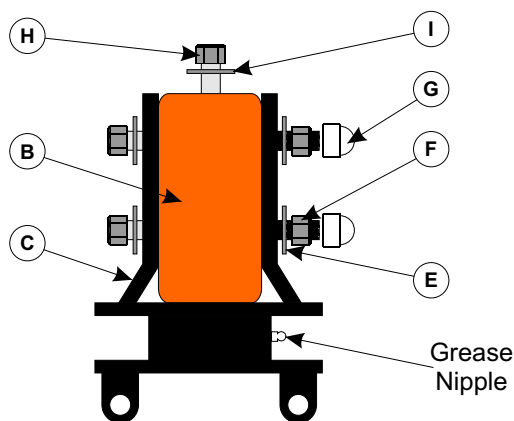
Identification Plaque Location(fig 10)



Identification Plaque(fig 11)



**Basket Assembly(fig 8)
(Pre-assembled upon delivery)**



Head Assembly(fig 9)

Component List

| Ref | Main Parts | Weight | Qty |
|-----|-----------------|--------|-----|
| A | Cantilever Base | 100kg | 1 |
| B | Cantilever Arc | 200kg | 1 |

| Ref | Head Assembly | Weight | Qty |
|-----|---------------------------------|--------|-----|
| C | Cantilever Head | 13kg | 1 |
| D | M16 x 130mm Bolt | 224g | 4 |
| E | M16 Washer | 10g | 8 |
| F | M16 Nyloc Nut | 37g | 4 |
| G | M16 Black Caps | 5g | 4 |
| H | M12 x 150mm Bolt(failsafe Bolt) | 139g | 1 |
| I | M12 Washer | 6g | 1 |

Items for Head assembly are pre attached to arc upon delivery.

| Ref | Base Assembly | Weight | Qty |
|-----|-------------------|--------|-----|
| J | M20 x 130mm Bolts | 366g | 4 |
| K | M20 Washers | 15g | 8 |
| L | M20 Nyloc Nut | 68g | 4 |
| M | M20 Black Cap | 9g | 4 |

| Ref | Top Shackle Assembly | Weight | Qty |
|-----|---------------------------------------|--------|-----|
| N | 1/2" x 1 1/4" Stainless Steel Shackle | 174g | 4 |
| O | 1/2" x 3" UNF Bolt | 87g | 4 |
| P | M12 Washer | 6g | 16 |
| Q | 1/2" UNF Nyloc Nut | 20g | 4 |
| R | M12 Black Caps | 2g | 4 |
| S | 1/2" x 3/4" x 3/4" Oilite Bush | 20g | 4 |
| T | Chains | 2kg | 4 |

| Ref | Basket Assembly | Weight | Qty |
|-----|-----------------------------------|--------|-----|
| U | Cantilever Basket - 0.9m Diameter | 20kg | 1 |
| V | Shackle | 107g | 4 |

Play and Leisure hold a comprehensive range of spare parts in stock, which will normally be dispatched in 48 hours of request.

Cantilever Swing - ECS5

Maintenance & Inspection

The Cantilever Swing should be inspected and maintained in accordance with the recommendations as detailed in BS EN 1176-7:2008

If any part of the equipment is found to be unsafe during an inspection and cannot be immediately rectified the equipment should be protected against further use.

Routine Visual Inspection.

Routine visual inspections are to be conducted to identify obvious hazards resulting from vandalism, use or weather conditions. e.g. Hazards such as broken parts or broken bottles.

Operational Inspection.

To reduce accidents the operator should ensure an appropriate routine maintenance schedule is established, implemented and maintained. Inspection shall be carried out on a monthly basis, although consideration should be taken regarding local conditions and usage.

During an operational inspection, the following should be included:

- Tightening of fastenings.
- Re-painting and re-treatment of surfaces.
- Maintenance of any impact attenuating surfaces.
- Lubrication of bearings via grease nipple. See Fig 9.
- Marking of equipment to signify loose fill finished surface levels.
- Cleaning.
- Removal of broken glass and other debris or contaminants.
- Restoring loose fills to the correct level.
- Maintenance of free space areas.

Annual Main Inspection (NOT EXCEEDING 12 MONTHS)

Inspection intended to establish the overall level of safety of equipment, foundation and playing surfaces.

- Effects of weather.
- Rotting or corrosion.
- A change in the level of safety of the equipment as a result of repairs made, or of added or replaced components

One Post Equipment Maintenance.

Special attention should be paid to the stability of the Cantilever Swing due to it being of a one post design.

Corrective Maintenance.

Corrective maintenance should include measures to correct defects, or to-establish the necessary levels of safety of the playground equipment and surfaces. Such measures should include:

- Replacement of fastenings.
- Welding or welding repairs.
- Replacement of worn or defective parts.
- Replacement of defective structural components.

Equipment Alterations.

Alterations to parts of the Cantilever Swing that could affect the essential safety of the equipment should only be carried out after consultation with Play and Leisure.

Equipment Identification

Information regarding the manufacturer, I.D. Number, year of manufacturer and the European Standard is displayed on a plaque at the base of the arc(see fig 10)

| | | | | | | | |
|------------|--------------------------------|-------------|---------------------------------------|-------|---------------------------------------|---------|--|
| Issue. No. | <input type="text" value="1"/> | Created By: | <input type="text" value="S. Adams"/> | Date: | <input type="text" value="05/03/09"/> | Signed: | <input type="text" value="Simon K. Adam"/> |
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