

# Commercial Tender Specifications

## Mobile Rollers

### Design Notes

Where possible, pool covers should be positioned where starting blocks are not present, or removeable. This will significantly aid the daily operation of covers, saving time and energy.

Allowing additional roller 'runout' (roller extends past cover) is essential for convenient operation. This can be maximised by using staggered rollers, For In-Pit, Wall and Ceiling mounted rollers, staggering can be achieved at the same end of the pool. For Underseat Rollers ends of the pool must be staggered.

### Roller Tube

All Sunbather Pool Cover Rollers are constructed from 6060-T5 Aluminium, anodised to a minimum depth of 15µm (microns).

Rollers must be of suitable diameter to prevent excessive creasing whilst coiling. For commercial pool covers minimum roller sizes of Ø150mm or Ø200mm are to be considered. For ramp covers and bathing cover sections roller diameters of minimum Ø114mm may be considered.

Roller design must limit deflection to no greater than one three hundredth of its length with internal bending stress no greater than 27.5 MPa (safety factor 4.0).

### Bungs

All Ø150mm or Ø200mm bungs are constructed of glass filled nylon, insert moulded with ferrules for coupling with shafts and handwheels.

### Shafts

Austenitic stainless-steel bar of minimum grade SAE 304 (ASTM 276) is to be used.

For indoor environments electropolishing of shafts is highly recommended to combat stress corrosion cracking, evident in high chloride environments.

### Bearings

Bearings for all commercial rollers are to include stainless-steel ball bearings.

Pillow block and flange mounted bearing housings and inserts are to be constructed from corrosion resistant SAE 304 stainless-steel. Further corrosion inhibiting treatment is recommended for indoor pool centres.

Radial ball bearings inserted in mobile roller end-frames are to be constructed from corrosion resistant SAE 440C grade stainless steel or greater.



 **1800 228 437**

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## End Frames

Mobile Roller carriages for 150 and 200 Roller frames are to be constructed from SAE 304 stainless-steel tube, welded and electropolished for corrosion protection.

Attached Starting Block Extensions (SBE's), with an offset Ø114 idler roller can be included as required, on the 200 Roller model.

Mobile Underseat frames are to be powder-coated or epoxy painted, in a limited selection of colours.

All models of commercial mobile rollers, aside from the 114 SS-W can be driven by Aqua Valet winch units.

## Manual Operation

150 Mobile Rollers are to come equipped with 700-millimetre diameter, 4-spoke handwheels. Constructed of Ø25.4mm SAE 304 and electropolished for protection. Crank handle options can be provided as an alternative.

200 Mobile Rollers are to come equipped with 900-millimetre diameter, 4-spoke handwheels. Constructed of Ø25.4mm SAE 304 and electropolished for protection.

The Mobile Underseat has no permanent manual drive methods and must be driven by the Aqua Valet. However, a removable crank-handle can be provided for emergency situations.

## Drop Bolts

Ø14.28mm SAE 316 stainless-steel drop bolts are to be fitted as standard with matching drop bolt sleeves to be chemically anchored into the concourse with Ramset 801 XC<sup>2</sup> or 502<sup>PLUS</sup>.

114 SS-W do not include drop-bolts and rely on locking castors for location.

For Mobile Rollers with attached starting block extensions, locking drop bolts are required.

A secondary set of drop bolt sleeves for storage position can be provided as required.

Polyurethane bumper pads are to be fitted, mitigating damage to raised end-walls or other structures during deployment.

## Castors

150 and 200 Mobile Rollers include 125-millimetre diameter black nylon wheels, housed in a 360° swivel frame castor made from SAE 304 stainless steel with M12 pintle bolt. Rated to 100kg/ea.

114 SS-W include 100-millimetre diameter black nylon wheels, housed in a 360° swivel frame castor made from SAE 304 stainless steel with M12 pintle bolt. Rated to 100kg/ea

Mobile Underseat Rollers include 75-milimeter diameter grey polyurethane-on-nylon wheel, housed in a 360° swivel frame castor made from SAE 304 stainless steel with M12 pintle bolt. Rated to 200kg/ea.

## Colour

Custom Powder Coating POA

## Warranty

10 Year – Stainless End Frames

10 Year – Roller Tube & Bungs

3 Year – Bearings & Castors

1 Year – Accessories & Installation

Please see full warranty information – <https://sunbather.com.au/support/warranty/>



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