

Proposed Amendments requirement in IS 8086:1991

Clause No.	Clause Name	Existing Specification	Proposed Amendment	Justification
6.6	Castors	<p>The tyres used in castors shall be made from non-marking quality rubber conforming to Type B Grade 5 of IS 5192:1975,</p> <p style="text-align: center;">Amendment 3</p> <p>The Solid tyres shall be made of non-marking resilient rubber with the minimum hardness of 60 Shore 'A' with smooth treads.</p> <p style="text-align: center;">Amendment 4</p> <p>The solid tyres used in castors shall be made of Ethylene Vinyl Acetate (EVA) with minimum hardness of 60 Shore 'A' with smooth treads</p>	<p>The tyres used in castors shall be made from non-marking rubber conforming to IS:5192:1994, hardness in IRHD 70 (+5/-4), The solid tyres used in castors shall be made of Ethylene Vinyl Acetate (EVA) as per IS:17927, Polyurethane (PU) as per IS:8255, Thermo-plastic polyurethane (TPU) as per IS:17397 with their respective hardness equivalent to a minimum hardness of 60 Shore 'A'</p>	<p>Excellent Flexural fatigue strength, Excellent Resistance to weathering, High Impact Strength, Good Tear, Abrasion Resistance and added materials are Environmental friendly, recyclable and biodegradable.</p>
6.7.1	Rear Wheels	<p>The rear wheel shall be of 508 mm x 34.9 mm (20"x1¾") size and shall have rims, tyres, tubes, nipple, spokes and washers conforming to the respective Indian Standards. Solid Tyres made from non-marking quality rubber conforming to Type B, Grade 5 of IS:5192:1975, could also be used as an alternate to pneumatic tyres & tubes.</p> <p style="text-align: center;">Amendment 3</p> <p>Wheel Diameter 37-451 (20"x1¾") size and shall have rims, tyres, tubes, nipples, spokes, and washers as per the standard bicycle trade.</p> <p style="text-align: center;">Amendment 4</p> <p>Solid tyres shall be made from Rigid PVC & Ethylene Vinyl Acetate (EVA)</p>	<p>The rear wheel shall be of 37-451 (20"x1¾") size and shall have rims, tyres, tubes, nipple, spokes and washers as per the standard bicycle trade or alternatively plastic moulded rim consist of spoke hub could also be used.</p> <p>Solid Tyres made from non-marking quality rubber conforming to Type B, Grade 5 of IS:5192:1975 Rigid PVC, Ethylene Vinyl Acetate (EVA) as per IS:17927, Polyurethane(PU) as per IS:8255, Thermo-plastic polyurethane (TPU) as per IS:17397 could also be used as an alternate to pneumatic tyres & tubes.</p>	<p>Plastic being the light weight compared to MS lowers the overall weight of the wheelchair and hence makes it easier for the differently abled to move it comfortably, and added materials are Environmental friendly, recyclable and biodegradable.</p>

6.7.2	Rear Wheels	The wheels shall be firmly secured to the frame with the help of low carbon steel axles, of minimum 12 mm diameter, heat treated to 30 HRC, Min. The hardness shall be tested in accordance with IS:1586:1968	The wheels shall be firmly secured to the frame with the help of low carbon steel axles, of minimum 11.5 mm diameter, heat treated to 30 HRC, Min. The hardness shall be tested in accordance with IS:1586:1968	For the fitment of standard bearing of Internal Diameter of at least 12 mm, to achieve the desired fit between the axle and bearing.
6.8.1	Hand Rim	The handrims shall be fabricated from steel/aluminium tubing with outside diameter of 17 mm	The handrims shall be fabricated from steel/aluminium tubing with minimum outside diameter of 17 mm	As 17 mm tube is non-standard and the same is changed in IS: 7454 (Wheelchair Folding, Adult Size) in clause 7.8 in Amendment No. 6, August 2021