CADCrowd.com Contest:

COVID-19 Classroom Safety and 3D Product Design Challenge (open-source designs)

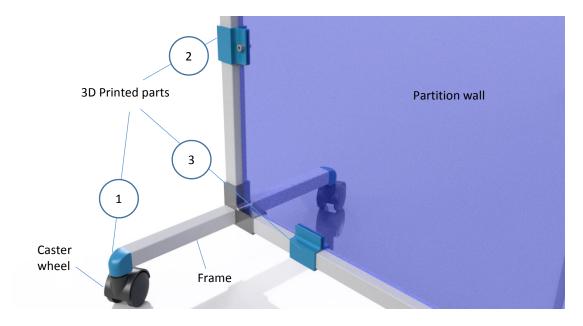
3D Printed Bracket for mobile barrier

By Insan Gunawan



Mobile barrier can be used for social distancing in library, canteen, hall partition, classroom, etc.

The barrier consist of frame (square pipe), wheels, partition wall (acrylic, polycarbonate, plywood, etc), caster wheels, and 3D printed bracket.



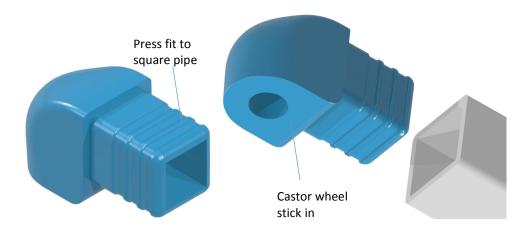
A. 3D Printed Component:

- 1. Square pipe end caster wheel bracket
- 2. Split partition clamp bracket
- 3. Slide in partition bracket

All parts delivered in .stl file format

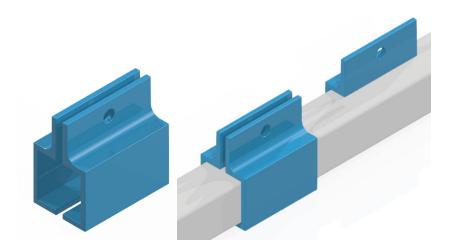
1. Square pipe end caster wheel bracket

Push and press the bracket to the square pipe. Attach the caster wheel stick into the hole.



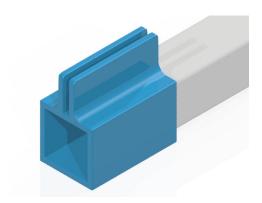
2. Split partition clamp bracket

Use a fastener / bolt connection through the holes to clamp the partition walls and attach them to the square pipe. Easy assembly, just align the holes and snap it.



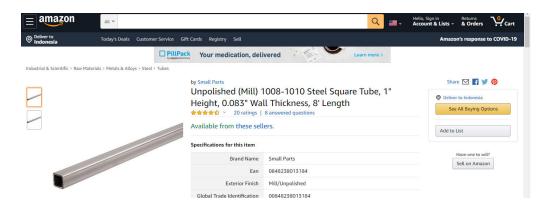
3. Slide in partition bracket

No fastener needed. Slide in the square pipe to bracket. Not recommended for long pipe. Suitable for 3mm wall thickness.

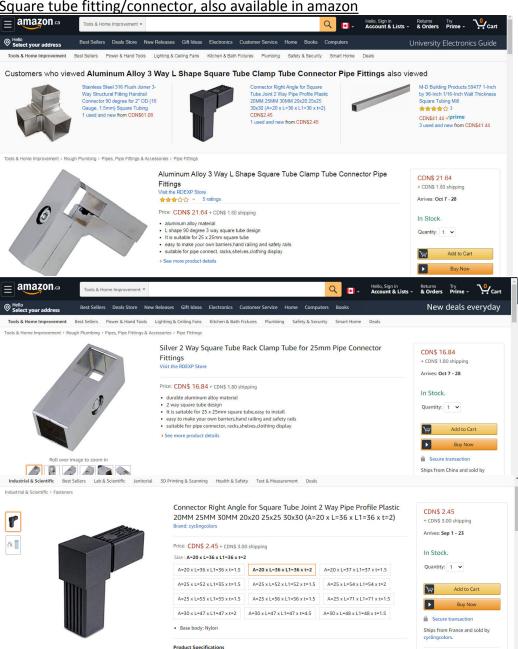


B. Existing Component that available in the market:

Square tube, 1" height for frame



Square tube fitting/connector, also available in amazon



Caster Wheel, slip stick type, 2 inch wheel diameter



Assembly sample:

