

## TEPI Formwork In Comparison To Aluminum and Imported Formwork

Product	TEP1 Formwork 12 MM	Aluminium Formwork 4-MM	Imported Formwork
Material used	Polypropylene or Solid Aluminum Composite Polymer Boards with MS Steel Frame.	Aluminum sheets with Aluminum Frames.	Birch Ply with Mild steel or Molded Plastic.
Fixing Method	Only Bolts & Nuts. No Tie Rods for low thickness concrete.	Wedges & Pins. Require Tie Rods & Walers	Wedges & Pins, Bolt nuts. Require Tie Rods & Walers
Cost of Owning	Average cost of ₹ 2500/- to 3500/- per Sq.Mtr	Average price of ₹ 7000/- per Sq.Mtr	₹ 5500/- to ₹ 9000/- per Sq.Mtr
Cost of Accessories	Very Low	More Accessories required and supplied by Design.	More Accessories required and supplied by Design.
Jacks and Prop Support	Reasonable supports and prop Required. Requires only 50-60% compared to other systems.	No. of Jacks and Props required is relatively high.	No. of Jacks and Props required is very high.
Time and Cost for Execution	Reduced Labor Cost. Needs less labor, easy installation. Learnable by any unskilled to semi-skilled labor.	Higher Labor Cost. Needs skilled labor.	Higher Labor Cost. Needs skilled labor.
Size	Can Custom make to any Size and Design Specification. Flexible to use in areas other than specific project requirements.	Custom Made to specific projects requirement and highly Restricted.	Very Fixed Sizes. Highly rigid and Restricted.
Deformation Condition	Very less and easily repairable at site.	Yes. Need factory repair	Yes. Not repairable.
Water Resistance	Yes	Yes	Limited.
Stripping Process	Easy and available for immediate re-use.	Moderate and need to wait for complete cleaning. Adds to Time and Cost.	Moderate and need to wait for complete cleaning. Adds to Time and Cost.
Corrosion Resistance	Excellent	Good	Good
Maintenance	Very Minimal maintenance. Cleans with wet cloth after demolding. Minimal Oiling Required. Very easy to repair the boards or the frame and hence greater reusability.	Moderate to High Maintenance. Needs chemical cleaning, involves time and additional cost. Repair is expensive.	Moderate to High Maintenance. Repair is very Expensive or not possible.
Scrap Value	Both boards and Steel have	Aluminum has good scrap	Steel frames have good salvage value. Molded Plastic has very low

	good Salvage value.	Value.	resale value.
Recyclability	Yes. Fully Recyclable.	Yes. Fully Recyclable.	Used Birch Ply cannot be recycled. Rest is all Recyclable.
Impact on Environment	Less and Low Energy Consuming.	Moderate to High	Moderate to High.
Usage	100-150 Repetitions based on good maintenance and usage.	70 – 100 Repetitions based on good maintenance and usage.	60-80 Repetitions Max.

### **TEPI Formwork In Comparison To Conventional Formwork**

<b>Product</b>	<b>TEP1 Formwork 12 MM</b>	<b>Wooden Formwork 12 MM</b>	<b>MS Plate Formwork</b>
Material used	Polypropylene or Solid Aluminum Composite Polymer Boards with Mild Steel Frame.	Film face Plywood Boards Fixed with Wooden Runners	Angles and MS sheet Plates.
Fixing Method	Only Bolts & Nuts. No Tie Rods for low thickness concrete.	Nails. Require Tie Rods & walers,	Nails. Require Tie Rods & Walers
Cost of Owning	Average cost of ₹ 2500/- to 3500/- per Sq.Mtr	Average price of ₹ 2000/- per Sq.Mtr	Average price of ₹ 2300/- to ₹ 2800/- per Sq.Mtr
Cost of Accessories	Very Low	NA. Single use Convention Nails and Runners.	NA. Single use Convention Nails and Runners.
Jacks and Prop Support	Reasonable supports and prop Required. Requires only 50-60% compared to other systems.	Number of Jacks and Props required is very high.	Number of Jacks and Props required is very high.
Time and Cost for Execution	Reduced Labor Cost. Needs less labor, easy installation. Learnable by any unskilled to semi-skilled labor.	Higher Labor Cost. Needs more labor, cumbersome carpentry work, needs skilled labor. Too much of Wastage.	Higher Labor Cost. Needs more labor, cumbersome work, needs skilled labor.
Size	Can Supply Any Size	NA. Makeups done in Ply and wood at site according to the need. Goes waste after use.	NA. Fixed Size of 3 X 2 FT. Makeups done in Ply and wood at site according to the need. Goes waste after use.
Deformation Condition	Very less and easily repairable at site.	High. Directly gets Damaged.	High. Repairs make the sheet weak.
Water Resistance	Yes	No	No
Stripping Process	Easy and available for immediate re-use.	Moderate and susceptible to Damages. Need Oiling.	Moderate and susceptible to Damages. Need Cleaning and Oiling.
Corrosion	Excellent	NA. Wood damages after a few	Bad

Resistance		uses.	
Maintenance	Very Minimal maintenance. Cleans with wet cloth after demolding. Minimal Oiling Required. Very easy to repair the boards or the frame and hence greater reusability.	Oil before use and easy clean after demold, but depends on quality of board's surface Coating. Not repairable and hence very repetitions possible.	Cumbersome Cleaning. Difficult to repair and Maintain.
Scrap Value	Both boards and Steel have good salvage value	No Scrap Value	Reasonable scrap value.
Recyclability	Recyclable	Not Recyclable.	Recyclable
Impact on Environment	Less and Low Energy Consuming.	High and Threat of deforestation.	High & More Energy Consuming.
Usage	100-150 Repetitions based on good maintenance and usage.	7-15 Repetitions Max on Good Usage.	40 – 60 Repetitions Max on Good Usage and Repairs.