



### Advantages of using Silica Sand

Ordinary Sand	Silica sand
As it is unsorted sand, particle size variation is more.	Due to well sized material saving up to 23% of material
Crack development occurs in plaster and construction in long duration.	Negligible chances of cracks due to good bonding.
Re-Plastering required in long term due to weak bonding.	Plaster remains as it is for long duration due to strong bonding.
Due to unsorted sizing plaster requires more thickness.	Due to perfectly sized silica thickness of plaster can be lesser than ordinary sand.
Average construction strength	Strength of construction is higher.
Due to lower heat resistance walls gets more heated and thus energy consumption will be more.	Due to high heat resistance the wall gets heated very less, and thus saves energy.
Corrosion of Iron rods takes place in long term due to presence of chemically reactive particles.	Due to nonreactiveness of Silica sand, no crack developed in long term, and thus the Iron rods corrosion doesn't take place
Comparatively rough finishing due to uneven sized material.	Surface finishing of plaster much smoother compared to plaster done with ordinary sand.
More cement utilized due to unsorted sizing.	Less cement is required in construction due to sorted sized silica sand.
Much material is wasted due to unsorted size.	0% wastage as the material is well sorted.
Concrete strength is lesser.	Laboratory tests shows the strength of Mortar Mix increase by at least 10% due to us of silica sand.

Strength Comparison for Mortar Mix	
Compressive Strength (N/mm <sup>2</sup> ) (28 days) (Average 3 samples)	
Ordinary Sand	Silica Sand
39.9	44.8



Washed Silica Sand



Unwashed Silica Sand



River Sand