



Shs 300,000

THE ESTIMATED COST OF SAND PER TRUCK

Cost

The exhaustion of sand from several mining areas has led to hiking of sand prices because the miners get it from as far as Lwera on Masaka Road, Luweero and from the islands. Various middlemen have taken advantage of the high demand for sand to also hike sand prices while others sell fake sand mixed with top soil according to Abdu Ssemujju, a builder.

According to Ssendawula, the cost of sand depends on its quality, where it is mined, the distance it is moved and how much of it one needs. He says, a 4wd tipper truck ranges between Sh250,000 and Sh300,000 around the city areas for the coarse sand and Shs200,000 and Shs250,000 for plaster sand.

One can differentiate good from bad sand by picking a handful sample and rubbing it in the palm. Ordinarily, if the sand is dry, it should not stick when you hold it in the fist and release. PHOTOS BY DOMINIC BUKENYA

When looking for building materials, some people will always look at the cost. However, there are other important factors including the type. For sand, this is one of the most important factors.

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Do you know the type of sand you are buying?

Sand is an essential building material. Having the right type of sand for a particular project is important as failure to get the required sand can bring about delay in the progress of your project since you cannot use any type of sand you come across. It is also important that you consult a structural engineer who will recommend the required type of sand depending on the type of building project you are handling since construction work follows a strict schedule.

Types
There are several types of sand and the difference may not be about its colour but rather the particles according to Francis Munyambabazi, a structural engineer at Goldenleaf Properties.

When evaluating sand, it is important to see what it is mixed with. Gravel sand or basic sand is stable, but sand mixed with more unstable soils, plant materials or clay, usually is not a recommendable for building. In order to get the different types of sand, a grading test must be done on a sand sample. The particles are

classified as either fine or coarse. If therefore one needs to build a general structure, they will need the coarse particles.

Coarse sand
According to Moses Ssendawula Wasswa, an architect at Archstone Consult, coarse sand is often used in building stable structures because it does not expand when wet, it is difficult to move thereby making it one of the most stable soil choices for building. Coarse sand has large particles and is ideal for mixing with cement and aggregate to make concrete.

"White washed sand is also known as sand pit sand and is perfect base when laying paving and installing retaining wall systems and joining between pavers. It is also used for children's sand pits. It has very fine and small particles like silt and is used for plastering, grouting joints in paving or patio slab projects," he says.

Brick sand
Brick sand is usually light grey or white in colour and is medium sized but smaller than the coarse type. It is often mixed with water and cement to make mortar for laying bricks and blocks and is ideal for underneath your pool as it is soft and finer in texture.

Good and bad sand
One can differentiate good from bad sand by picking a handful sample and rubbing it in the palm according to Ssendawula.

"The texture of good sand should be that it does not stick like clay especially if it is dry. "Its nature should not stick together like clay. Ordinarily if the sand is dry, it should not stick when you hold it in a fist and release it", he says. Munyambabazi says good sand

should not be contaminated with top soil, clay or vegetation. "This is the reason we recommend sand mined from the lake because it is usually washed and clean from impurities. The colour of the sand does not matter since it is dependent on where it is mined," she adds. If the sand is contaminated with impurities, they affect the proper bonding between the cement and the sand. The concrete will not be as strong as it would be if the sand was



Sand is mixed with cement and stones to give the mortar or concrete mix the structural strength it requires.

clean and free from the chuff. "If sand that is meant for concrete is used for plastering, the plaster would peel off immediately because the particles are very large and cannot stick together with the lime. Also, if plaster sand is used for concrete, there will not be proper binding strength in the concrete and it will not stay for long before it develops cracks or even cause collapsing of the building."

The right mixture
Sand is mixed with cement and stones to give the mortar or concrete mix the structural strength it requires. This also increases the durability of your structure. Concrete expands and shrinks with changes in moisture and temperature. It is therefore important that you make the right mixture to make your mortar (sand and cement mixture) if you are making the bricks.

It is very important to consult a structural engineer to assess and advise on how much of cement, sand or stones you must use depending on what area and project you are working on. Wet and dry sand have different water requirements which can only be determined by the structural engineer.

"The quantity of water used in the mortar mix can cause shrinkage and cracks thereafter. Vibrated concrete has less quantity of water and less shrinkage than manually compacted concrete. It is, therefore, important that you use minimum quantity of water required for mixing cement concrete or cements mortar according to water cement ratios that have been recommended," Munyambabazi says.