



# Auroville Language Laboratory

## Cost Comparison between the first two shafts (East side) and the second two shafts (West side). 28.06.2025.

(We were trying to see how to reduce costs and increase efficiency)

	<u>First 2 Shafts (in Rupees)</u>	<u>Second 2 shafts (In Rupees)</u>	<u>Comments</u>
	<b>Shaft Size : 1.5 X 1.5 X 22 feet</b>	<b>Shaft Size : 2 X 2 X 27 feet</b>	The sizes of the first two shafts and the second two shafts are different. On the East side, we reduced the width by adding bricks with lime mortar. On the West side, we reduced those costs by following the existing gaps and the original size as per the plans. The West side shafts are taller as per design.
METAL	17,773.00	17,363.90	The metal materials used for the first two and second two shafts were different due to design or functional requirements. Even though the shafts are taller on the West side, the metal cost less because of choosing MS Tubes rather than MS Angles.
POLYCARBONATE SHEET	14,034.00	17,550.00	The first two shafts used 4-foot-wide polycarbonate sheets, while the second two shafts used 5-foot-wide polycarbonate sheets.
3MM MS SHEET 8 x 4	3,590.00	3,527.00	A total of two 3mm MS sheets were used for the 4 shafts
Wind Extractors – 600mm with Base Materials	20,532.00	20,532.00	A total of 4 No. Wind Extractors were used — one for each shaft. The seller kept the same price for us in the new financial year.
SILICON	750.00	750.00	Same
OIL PAINT	2,556.00	1,704.00	The first two shafts were painted using a spray paint gun, which consumed more liters of paint. The second two shafts were painted manually, so they used less paint.
PRIMER PAINT	620.00	930.00	For the first two shafts, we used 2 liters of primer. For the second two shafts, we used 3 liters due to the difference in shaft size
THINNER	220.00	220.00	Same
METAL PASTE	60.00	120.00	One pack of metal paste was used for the first two shafts. Two packs were used for the second two shafts, due to the larger shaft size and some material is leftover to be used in the next two shafts.
SANDPAPER	100.00		Sandpaper was not used for the second two shafts. And Sanding discs were used with the angle grinder.
2X2 KADAPPA STONE - 650	1,576.00	1,932.00	The price of Kadappa stone varied between the two purchases.
WELDING ROD	450.00	900.00	One packet of welding rods was used for the first shafts. Two packets were used for the second shafts, and half a packet remained unused
CUTTING DISC	150.00	225.00	A total of 5 cutting discs were used for the first shaft, while 8 cutting discs were used for the second shaft due to the difference in height.
METAL SANDING DISC	700.00	950.00	Two different brands of metal sanding discs, each with varying prices, were used during the process. 2 discs were used for the first two shafts. The change to MS tubes in the second two shafts and their additional length required 5 discs.
2 CORE WIRE	300.00	370.00	There is a variation in size between the first and second shafts.
LED LIGHTS	360.00	360.00	Same
<b>Labor Charge</b>			
Iyannar	36,000.00	24,000.00	The first two shafts took longer to plan, as the work was new and all the details had to be worked out step by step. As a result, the welding took 6 weeks. In contrast, the second two shafts were completed in just 4 weeks, since a different approach was implemented and the team had gained experience.
Selvam	7,800.00	9,750.00	The painting of the first two shafts was completed in 2 weeks. The second set of shafts required 3 weeks because of their larger size.
Kathirvel	7,800.00	9,750.00	
<b>TOTAL COST OF 2 SHAFTS</b>	<b>115,371.00</b>	<b>110,933.90</b>	
<b>Per Shaft Cost</b>	<b>57,685.50</b>	<b>55,466.95</b>	