



ECO-FAB
STRUCTURE PVT. LTD.

"Economy By Fabrication"

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Manufacturers of Pre-stress Precast compound wall (PSPCW)

INTRODUCTION

The Compound Wall is a type of fortification made of concrete, block of clay, glass blocks, bricks, steel panels etc surrounding building among several buildings or a land in large piece of Land . It is used to protect against threat to themselves or their property.

PSPCW Boundary Wall is Eco-Friendly, as we don't have to dig the pits to make Bricks thus leading to making the grounds unusable and barren. The Brick Industry hence destroys the cycle of nature leading to less agriculture in the country and destroying the land potential. We gain the upper hand in the time to come, making our product more usable and compatible, providing more strength and better finish at a lower cost and least time consumption. Our product also doesn't disturb the natural process, since we are using the products easily available and collected from Crushers and Cement Mills.

The technology that we are trying to introduce is already in use in the country, but not used particularly for the Boundary Wall. It is being used for making the bridges, roads, dividers, and heavy constructions like hydro powers and electrical transmission line pillars. So we are bringing in just a new product with an already used technology but in different segments. We want the strength and durability to be available for everyone on common levels.

Pre Stress Pre Cast Boundary is the modern technology for the Construction Sites, to make them more secured and attractive instantly, in a very short span of time. It is stronger, durable, faster and economical and always a better option than the traditional Brick and Mortar Walls.

It consists of Pre Stress Poles and Panels, made of high grade concrete (M-20) and high tensile steel wires using modern technology and trained labor forces.



THE PROJECT

We are the first company in Nepal to use the Pre-Stress Technology for both Panels and Poles. **Pre Stress Precast Compound Wall (PSPCW)** is such a technology which fulfils the modern requirements. It is stronger, more durable, lean, time saving and economical than traditional boundary wall. PSPCW consists of Pre stress poles and pre stress panels. The poles and panels are made of high grade concrete and high tensile carbonized steel wires using pre stress technology in an automatic plant.

PSPCW are known for their tough construction, low maintenance, eco-friendly nature, high strength, optimum durability and ability to withstand harsh weather conditions. PSPCW is generally used for the bifurcation and surrounding of the large or small commercial and residential areas.

The time has been a very crucial game changer for this product all along with the cost savings it generates.

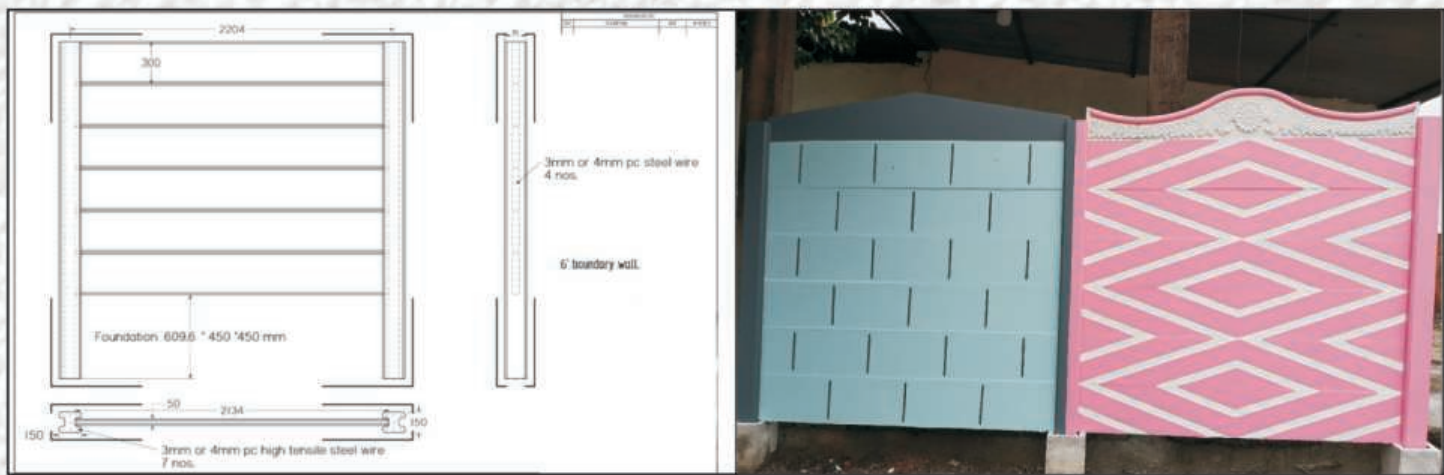
PROJECT OBJECTIVE

- ✧ Manufacturing different designs of PSPCW, Concrete Benches and Sockets.
- ✧ Marketing and sale of above manufactured products & other prefabricated items.
- ✧ Coloring of PSPCW.
- ✧ Construction of Economy Homes, Portable Offices, Canteens, Guard Rooms, Labor Quarters, Storage Areas, Toilets, etc. as per utility.



TECHNICAL SPECIFICATIONS

POLE DIMENSION	150mmX150mm; length 8-12 ft. groove width 60mm, depth 40mm
POLE WEIGHT	14 kg approx. per feet
POLE REINFORCEMENT	3mm dia. High tensile carbonized steel wire 6 nos.
PANEL DIMENSIONS	1 feet wide, 50mm thick, 7 feet length
PANEL WEIGHT	75-80 kg
PANEL REINFORCEMENT	3 or 4 mm dia. High tensile carbonized steel wire 4 nos.
GRADE OF CONCRETE	M-20 CUBE TESTING



QUALITY CONTROL

The raw materials used have been put up with certain standards so that the quality is uniform from one slab to another. Chemical composition, yield strength, hardness, corrosion, resistance, etc. are all tested batch wise. M-20 test grade concrete and High Tensile Steel Wires add more assurance to our form and structure of testing and quality.

Quality is of vital importance for us to gain immense success in this domain. Being a quality conscious organization, zero tolerance policy is implemented towards the quality of our product range. Moreover, we have associated ourselves with the most trusted vendors of the market for procuring the raw material, which is used in the production process. The quality controllers appointed by us stringently check the final products on certain well-defined parameters to gauge their flawlessness. The quality controllers have industrial experience and take control of the production with their ability to establish a very polished and disciplined team of workers.

FUTURE READY TECHNOLOGY

As we have seen there is no cheaper and safer means to construct a Boundary Wall than this method which uses good graded raw material and trained labor force into action, leading to time and cost benefits which can be very easily realized.

Comparative Analysis

S.N.	PROPERTY	TRADITIONAL BOUNDARY WALL	PRE STRESS PRE CAST BOUNDARY	REMARKS
1	Construction Time	100 mtr. wall requires, 7 days to construct , 7 days for water curing.	100 mtr. wall requires only 4 days for construction.	SAVES CONSTRUCTION TIME
2	Strength	150mm thick brick masonry is weak, as it can be easily broken by hand tools.	Contains High Tensile Wires at every 75 mm distance, cut only by mechanical tools.	BETTER SECURITY FOR COMPOUNDS & INDUSTRIES
3	Durability	Depends upon the quality of plaster, its thickness, sand quality, quality of curing and labor.	Made up of void less, dense, high grade concrete, smooth surface to disallow water penetration.	NIL MAINTENANCE COST
4	Repair Ability	In case of over turning failure a large section of BW may damage and require almost new construction as repair and require several weeks time to repair	In case of failure only few columns may get damaged and require to be reused in repair in negligible time.	NEGLIGIBLE COST AND FAST WORK ABILITY
6	Painting	Only after plastering, and to save weather decay.	Only for decoration.	COST SAVING
7	Re-use	Re-used only after a lot of labor hours invested.	Almost 100% panels, 60% columns reused.	EFFICIENT PRODUCT
8	Weathering Effect	Plaster absorbs moisture, cracks and peels off, re-plastering as solution.	Almost NIL moisture absorption, no maintenance.	HIGHLY DURABLE PRODUCT
9	Cleaning	Moisture absorbed attracts fungus, algae, plants, etc. requires cleaning and paint	Simple water washing is enough	HASSLE FREE FOR LIFE



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Sample Site

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Work Area:

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Behind Multifuel Diesel Power Station

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