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# A Review of Vastu Shastra Planning for Residential Building & Commercial Building as Per Traditional Indian System & Science of Architecture

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**ABSTRACT**: The demand of Vastu Shastra planning is moreover with architectural practice as it is applicable for all types of buildings such as residential buildings, commercial buildings and all types of worship structures. The presence of positive energy and negative energy in the environment affects human life. So it is necessary to predict the loss of positive energy from the environment. The study of Vastu shastra has been included so many years ago. The traditional system of Vastu Shastra is used in the old structures which are still available with all-natural resources. The traditional system of Vastu Shastra shows how they are managing the natural resources such as refraction of lights, wind direction, maintaining temperature according to climates, and use of particular types of material. The main aim of Vastu is to create positive energy within the usable space.

**KEYWORDS**: Traditional systems, Science of the architecture, Vastu elements, Residential & Commercial buildings.

#### I. INTRODUCTION

The energy created within the structure depends on several factors but as per the study 5 elements are directly or indirectly interconnected for the development of positive and negative energy such as Prithvi (Earth), Jal (water), Agni (fire), Vayu (Air) and Aakash (Space).

According to a planet study, the movement of the earth also affects the development of energy. The movement of the earth is always concerning its direction, so it is essential to study the 4main directions of the earth and the 4 sun directions of the earth which include North, South, East, West, and North-East, North-West, South-East, South-West respectively.

Vastu shastra Planning creates harmonious energy inside the structure. Vastu shastra and the science of architecture, both are based on theoretical and experimental analysis. It is helpful for civil engineering as well as architecture, so the study of Vastu shastra helps while planning different types of structures.

#### II. RELATED WORK

#### Concept of planning related to Vastu shastra:-

For the architectural view, some principles are discussed for a structure. This principle ensures proper and economical utilization of space and other resources of principle are as follows:-

- \* *Aspect*:-It is defined as the positioning of windows and doors in external walls to take maximum advantage of natural gifts such as sunlight and wind or breezes.
- \* *Prospect*:-It means taking advantage of desirable views available from windows, doors, and balconies of such features outside the building such as gardens, lake, sea, river, hill, etc.
- \* *Orientation:*-Orientation means the placement of different types of rooms in the northern direction. The same plan can be plotted in various ways to give different orientations.

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According, to civil engineering the plan can be oriented concerning the north in such a way that the kitchen lies towards east and north-east, the bedroom is towards south to southwest and maximum hall windows face north, north-east for public building north exposure is desirable.

These three principles viz. aspect, prospect, and orientation can be employed in planning by the use of a "sun diagram" (Ref. Fig. 1).

- \* *Privacy*:-The two types of privacy are in consideration.
- a. *External privacy*:-This means the privacy of the entire building from the surrounded building privacy which affects noise pollution overcrowding of the building etc.
- b. *Internal privacy*:-This means the placement of internal or external openings which prevents direct view inside of any room from outer space.
- \* Circulation:-It means a moment of a human being from one place to another place side the structure.
- \* *Grouping*:-In some conditions same or similar functions together are grouped and placed in the same direction for taking advantage of the economy.
- \* *Roominess*:-In human psychological feeling, the space provided inside the room is called roominess.
- \* *Furniture requirement*:-Furniture arrangementsare made according to the types of furniture used for different rooms and their nominal sizes.
- \* *Sanitation*:-Sanitation is concerned with lighting and ventilation. It also includes proper planning for drainage arrangements for ventilation and light.
- \* *Elegance*:-It refers to the elevation of the building the front elevation of the building must aesthetically pleasing ugly features like drainage pipes, and radiators of the air conditioner should be avoided in the front view.
- \* *Economy*:-The planning of building should be economical, avoiding all types of wastage.The wastage of raw materialsaffectseconomic planning.
- \* *Access*:-The principle of access indicates ease in moving from room to room. according to his principle, it must be possible to go from one room to any other room, without crossing the third room.
- \* Architectural composition:-This principle deals with the aesthetic view or the beauty of a building.
- a. *Unity*:-All the elements of a building must be unified to look a unique distraction in unity leads to an incomplete look.
- b. *Contrast*:-Repetition of the same geometrical shape causes monotony in the appearance of the building. contrast means the use of different geometrical shapes to break the monotony.
- c. *Scale*:-This refers to the total mass of the building, whether its planning is on a domestic, public, or monumental scale. According to the scale, the architectural planning of the building will change.
- d. *Proportion*:-the elements of the building must have a proportion between them. A door too wide or too high will spoil the appearance of the building. The proportion of length, breadth, and height should be planned in such a way that a feeling of roominess is created.
- e. *Mass composition*:-A mass means a three-dimensional shape or volume. The masses and their grouping in the formation of the building are called mass composition. This composition can be done in various ways to strike a balance so that aesthetics or beauty is achieved.
- f. *Form and Function*:-Depending upon the function of the building it is necessary to adopt a particular form of the building. The form is also closely related to scale. There are monumental from which must be followed while designing particular buildings.
- \* *Climate and its effect*:-The openings are placed according to the sun diagram and wind direction to avoid the effect of climate.

#### III. METHODOLOGY

#### Location of Residential Building elements as per Vastu:

- \* *Parking Area*:-A parking area means an area or structure provided for the parking of motor vehicles in a private area. According to Vastu shastra, the ideal place is the southwest corner, with a west or south-facing direction. in Vastu shastra must avoid parking in the northeast direction because the northeast does not welcome any statement material to their place.
- \* *Veranda*:-The best direction to build a balcony or a veranda is the northern and eastern direction of the house. North to north-east and east and eastern direction is considered positive direction and south and south-west are considered as directions enhancing the negativity of the hours. It will have a welcome or enjoy sitting in front of

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the house, in some condition's veranda build for the sitting, take out footwear outside from home and it gives protection from rain which does directly not enter in the front main entrance of the house.

- \* Living room or Hall:-The living room should be in the North or East direction. If you have a house, which is southfacing, then the living room can be in the southeast corner. North is the best direction for the living room according to Vastu for the hall. According to Vastu Shastra, every window of the living room should be north and East facing to welcome the morning, every day! The ideal area of the living room size as per Vastu is 170 sq. ft or 16 sq. m. this is the area we see when we use the house so it is to be located near the entrance to the residential.
- \* *Kitchen*:-According to Vastu Shastra, the Lord of Fire—Agni—prevails in the southeast direction of the home, which means that the ideal placement of the kitchen is the southeast direction of your home. If for any reason, you are unable to do so, the northwest direction will work. Also, the minimum kitchen room size as per Vastu must be 85 sq. ft or 8 sq. m.
- \* *Dining room*:-On the south, west, or east side of the house, the dining room should be connected to the kitchen. Also, because it is the most advantageous position, the ideal direction to build a dining room is west. according to Vastu Shastra, the dining table should be in the southeast direction of the house. In this direction, eating food while sitting at the dining table keeps good coordination between the family members, and there remains happiness in the house.
- \* *Pooja room*:-The northeast, East, or North directions are preferred for constructing a pooja room. These directions are considered the most auspicious. Avoid placing the pooja rooms beneath the staircases and next to the toilets to ensure zero negative energy. The measurement of an enclosed medium-sized pooja room should be at least 5x7 feet so that two or three people can comfortably pray together. Note that this size of a pooja room can be accommodated only within homes that have a carpet area of more than 1500 square feet.
- \* *Bedroom*:-The ideal room size as per Vastu for a bedroom is 130 sq. ft or 12 sq. m. According to the Vastu Shastra, you should also make sure that when you design and build a house, the bedrooms of the house should always be an even size.
- \* *Master Bedroom*:-As per 'Vastu Shastra' experts, the only direction in which the master bedroom should be planned is the 'South-West' of the house. The average size of a master bedroom is 14 x 16 feet. It may be bigger than that but 224 square foot is a minimum. This ensures that you can easily accommodate a king or queen-size bed in the master bedroom while still leaving enough closet space.
- \* *Children Bedroom*:-Direction plays a vital role in the science of Vastu. And Vastu for kids' room is not an exception to this rule. It is ideal for a child's room to face the east, northeast, or north. East is the most preferred among these as it means that the room faces the rising sun. West direction is ideal for the children's room and must be placed there. Keep the bed in the South-west portion of the room and let your child sleep ahead towards the South or East direction for peace of mind. The door of the children's room should not directly face the bed.
- \* *Reading Room or Working Room or Study room*:-Place Study Table in the North or East Direction. The best direction for the study table according to Vastu is in the north or east direction of your home. It should be placed in such a way that the student faces east or north direction while studying. The study room should always be facing the east or west direction of the house, north is the second-best direction. The child should face east or north while studying and all their rewards and recognitions, certificates, trophies, and motivational posters should be displayed on the north or east wall.
- \* *Store Room*:-The storeroom should be placed in the north-western or southwest corner of the home. This direction is appropriate as it prevents the accumulation of things. In case you want to store heavy equipment in the room, then the southwest corner is just perfect. Never locate the storeroom in the east or north direction. The southwest direction is considered the most appropriate direction for carrying heavy goods. While building a house, it should be kept in mind that the southwest part of it should be kept high. Also, the walls of this direction should be made thicker than the walls of other directions.
- \* *Bathroom*:-Vastu Shastra considers the north-west or the west as the right position in the room for the toilet. Another favourable side of the room can be the southern side of the room. However, never go for having the toilet on the North-eastern or the eastern side of the room. The bathroom and toilet area must be in the north direction or north-west portion of your house, as per Vastu. Do not build the bath area in the south direction or even in the southeast or south-west direction, as it is said to hurt the health of the people in the house.
- \* *Water Closet*:-According to Vastu Shastra, the Flush Toilet or the Commode should have its place where the user faces any direction but never West or East. Therefore, the best place to have the Flush Toilet is either in the Southeast or the Northwest facing the North or the South. The toilet seat should always be placed in such a

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direction that the person using it would be facing the northern or southern direction of the home. This will keep the health of the family members balanced.

\* *Staircase or lift or ramp*:-Vastu experts believe that for internal staircases, the southwest portion of the property is an ideal choice. The south and the west portions happen to be the second-best choices. In this case, the staircase must start from the north and go towards the south. A staircase must always be built in the western or southern part of the house. It should not be constructed in the northeast corner, as it is believed that a staircase here can lead to financial losses. A staircase in any corner except the western or southern corner is believed to lead to losses.

#### Location of commercial Building elements as per Vastu:

- \* *Main entrance:*-The main entrance of hospitals is very important because people have to easily access get patients' rooms, emergency rooms, and doctor's rooms. However, the hospital's main entrance should be in the east, north, or northeast direction. the central part of the hospital should be kept open for natural light and fresh air to come inside.
- \* *Operation theater:* In the hospital, there are many rooms according to their purpose. Operation theater is often used for surgeries and it is considered one of the critical places in the hospital. Therefore, OT is on the west side of the hospital. The patient's head ought to be south side while centering the OT.
- \* *Consultation Room:*-In-hospital is a place where people are depressed and need positivity and healing energies. The consultation room is the place where patients meet the Doctor to discuss their problem and write a prescription the solution room should be in the northeast direction it brings prosperity to the head of the respective doctor.
- \* *Emergency Room:*-In every hospital, there are two or more emergency rooms required for those patients who need immediate attention and they have to be easily accessible. The emergency room is South-West direction as it helps the patient recover fast and heal.
- \* Storeroom/ medical Equipment/ medical books rack:- There is always have to storeroom to keep medical equipment and apparatus which are not in use or which are extra used in an emergency. The proper location of the storeroom is the South, west or South-West only. Also, make sure that the storeroom is always in a higher place than the higher place the flooring of the main hospital.
- \* *Drinking water:* -The place of drinking water is very important for the relaxation of people. Therefore, the right place for the drinking water cooler is the northeast direction. natural sun rays come and kill the bacteria.
- \* *Toilet:* -The appropriate place for the bathroom is on the west side of the floor. It ensures good health and is easily accessible.
- \* The best location for changing rooms and bathrooms is south or west.
- \* *Nurse quarters:* -For relaxing and resting the nurse and other staff rooms should be is southeast should be in southeast and northwest zones.
- \* *ICU and Recovery Room:* -For the ICU and recovery room, the North zone is very useful as natural light comes and it helps to quick recovering of the patient.
- \* Medicinal books can be set in the south or west direction. the southeast location room would be only well suited for the x-ray.

	Aspect	Direction	Reasons
1.	Main Entrance	East, North, or North- East	Open for natural light and fresh air to come.
2.	Toilet	West	Ensure Good Health
3.	ICU & Recovery Room	North zone	Natural light is best for quick recovery
4.	Medical Equipment	South-East, west, Or Scheduling	As a dark place, the location for the heavy objects is suitable.
5.	Doctor Consulting Room	North-East	Distance is concussive for diagnosis
6.	Operation Theatre	South-West	The patient's head ought to be in the south direction.

#### Location of Elements for Hospital Building as per Vastu Shastra:

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7.	Labour Room	South-West		This direction is a sign of prosperity
8.	Patient Room	North-East		Proper ventilation and positive rays.
9.	Emergency Patient3 Room	South-West		For quick recovery and healing
10.	Drinking-Water	North-East		Thiswill attract prosperity to your life. As sun rays directly contact it is beneficial to health.
11.	Nurse Quarter	South-East, West	North-	This direction is best for relaxing purposes.
12.	Medical Book rack or Shelves	South or West		This direction is a sign of prosperity

### Location of Elements for Office Building as per Vastu Shastra:

	Aspect	Direction	Reasons
1.	The face of the office building	North, North-East, or North-West	It brings good lust and positive energy
2.	Main Entrance	East-North	It brings good luck and positive energy
3.	Room of office owner	South-West	To keep financial documents
4.	Account department	North-East	It is ruled by the god of wealth
5.	Desk and Work station		Should be rectangular, or square. This is indicative of a person's financial wealth
6.	Welcome Room	North-East corner	considered to be auspicious and bring positivity
8.	Staff	North Or East	positive energy
9.	Conference room	North-West	It brings positive Energy, Indicative of a person's financial health.

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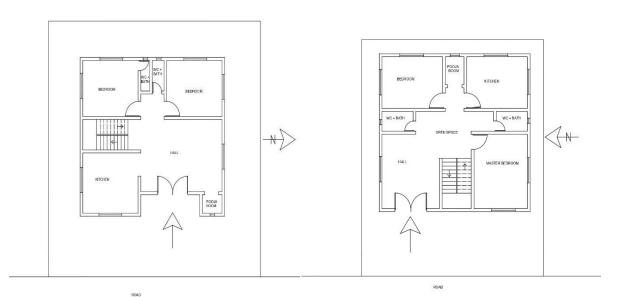


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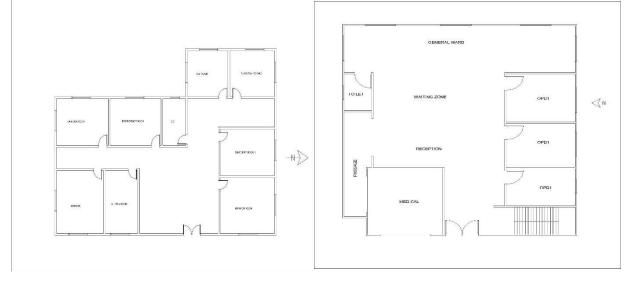
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IV. EXPERIMENTAL RESULTS

• Planning of Residential building with knowledge of Vastu & science of architecture.



• Planning commercial buildings with knowledge of Vastu& science of architecture.



#### V. CONCLUSION

- a. Study of the traditional Indian system and ancient science of architecture shows similar requirements in Vastu shastra planning.
- b. Residential planning and commercial planning shows similar requirements of Vastu shastra.
- c. Study shows that Vastu shastra is an important parameter in the construction industry.
- d. Study of the traditional Indian system and ancient science of architecture shows similar requirements in Vastu shastra planning.
- e. The main aim of writing this paper is to present a simple way of Vastu shastra planning for Residential and commercial Buildings.

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f. Detail Study of Vastu shastra provides the easiest Planning of the plot with the same location and different north direction.

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