

Pashchimanchal Vidyut Vitran Nigam Limited

(U.P. Government Undertaking)

Head Office: Urja Bhawan Victoria park Meerut-250001

Procedure for Determination of Connected Load

1. Bulb / Fan	Actual rating or 60 Watt each, if it is not possible to read the rating on the bulb / fan.
2. Tube Light	Actual rating or 40 Watt each
3. Light Plug	60 Watt up to three plugs and extra 60 Watts for every three plugs or less.
4. Television a) Color b). Black & White	100 Watt 60 Watt
5. Power Plug	500 Watt up to three plugs and extra 500 Watts for every three plugs or less.
6. Fridge	250 Watt
7. Dessert Cooler	250 Watt
8. Geyser	1500 Watt
9. Air Conditioner 1 / 1.5 Ton	1500 Watt / 2200 Watt
10. Water lifting pump	180 Watt or 360 Watt (According to Pump) or according to the equipment's original rating (Name plate & Specification).

Note:-

- 1) If any equipment is connected with plug point equipment's load or plug point rating whichever is maximum shall be taken. In such case, load of plug point shall not be counted separately.
- 2) For non-domestic light & fan consumer load of every bulb shall be taken as 100 Watt.
- 3) The load for Arc / induction furnace shall be worked out on the basis of 600 KVA per ton of the capacity of the furnace.
- 4) The higher rating of only one equipment shall be considered if both Geyser and Air-conditioner (without heater) are installed. Only heating or cooling use of these apparatus / loads shall be taken into account as per prevailing season (i.e. 1st April to 30th September for cooling use and 1st October to 31st March for heating use).

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- 5) The equipment which is under installation and not connected electrically, equipment stored in warehouse / showrooms either as spare or for sale is not to be considered as “connected load”.
- 6) For the purpose of assessment in domestic connections, the water pump, microwave ovens, washing machines, small domestic appliances shall be considered for assessment for one hour working per day on 100 % load factor. Appliances less than 200 watt shall not be taken into account.

Guidelines for Determination of Load in case of Multi-storied Building/Colonies

- (i) For domestic – 500 watt per 10 sq. meters of the constructed area or requisitioned load, whichever is higher.
- (ii) For commercial – 1500 watt per 10 sq. meters of the constructed area or requisitioned load, whichever is higher.
- (iii) For lift, water lifting pump, streetlight if any, corridor / campus lighting and other common facilities, actual load shall be calculated.
- (iv) The constructed area calculated for (i) and (ii) above shall exclude the constructed area arrived at in (iii).
- (v) Following diversity factors shall be considered for determining the maximum demand: -
 - a) Non Domestic Area: 0.75
 - b) Domestic Area: 0.5

Note:-

1. Multistoried building means a building having three or more stories excluding basement.
2. For car parking area, staircase area and balcony area, 50% of the area shall be taken for calculating the built up/constructed area.
3. Water tank area and Chajja projection area shall not be considered for calculating the built up/constructed area.
4. In case the sanctioned plan indicates two or more buildings in the same premises or the colony, they shall be clubbed together to calculate built up/constructed area.

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5. In case only a portion of the building / colony is constructed as against the entire building/colony sanctioned as per plan, and as per the sanctioned plan the built-up area of building/colony is more than 500 Sq. Mtr. or requisitioned load is 25 KW or more, then in such cases space for transformer shall be given and power supply shall be arranged on L.T. basis by installing a transformer in his premises at applicant's cost and also an undertaking shall be obtained agreeing to convert to H.T. in future, when the requisitioned load of the building/area exceeds 50 KW .
6. If the requisitioned load of the M.S. Building is 75 KW, the transformer rated capacity shall be fixed to the nearest available capacity i.e., $75 \text{ KW} / 0.90\text{PF} = 84 \text{ KVA}$ or 100KVA which is the nearest higher Standard rating as per BIS. However if the transformer capacity so calculated does not exceed 15 % of the lower Standard rating, the Licensee can permit the erection of lower capacity transformer provided the requisitioned load is within the transformer capacity.
7. The Licensee can provide higher capacity transformer if found necessary to cater to other loads in the area, instead of the transformer of capacity indicated above, the extra cost being met out by the Licensee.