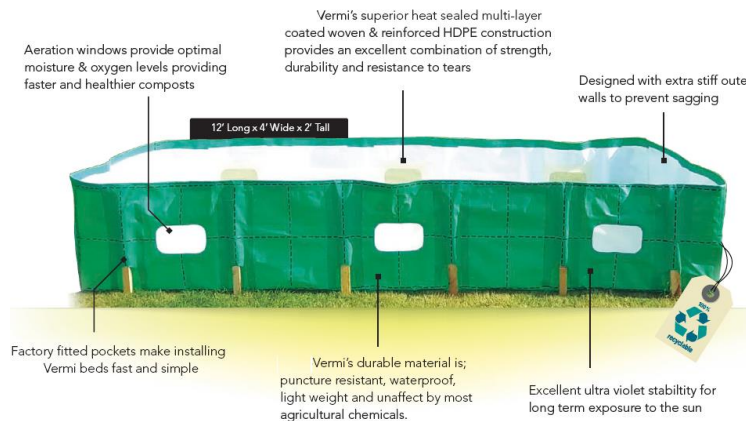


VERMIBED



Vermicompost is the excreta of earthworms, which is rich in humus and nutrients. Vermicompost is greatly humified through the fragmentation of the parent organic materials by earthworm colonization by microorganisms. It is a non-thermophilic process by which organic materials are converted by earthworms and microorganisms into rich soil amendments with greatly increased microbial activity and nutrient availability. Earthworms have been on the earth for over 20 million years. They are nature's way of recycling organic nutrients from dead tissues back to living organisms. Vermicomposting is the process of composting crop residues / agri wastes using earthworms comprise spreading the agricultural wastes and cow dung in gradually built up shallow layers. The pits are kept shallow to avoid heat built-up that could kill earthworms. To enable earthworms to transform the material relatively faster a temperature of around 30⁰C is maintained.

The final product generated by this process is called vermicompost which essentially consist of the casts made by earthworms eating the raw organic materials. The process consists of constructing brick lined beds generally of 0.9 to 1.5 m width and 0.25 to 0.3 m height are constructed inside a shed open from all sides. Textile based Vermibed is a cost effective and sustainable alternative to the cement pit option. It's a seven layered HDPE fabric which is structured in trough form. Its portability allows easy placement and shifting as per the requirement. Vermibed is used under shade-net structure which keeps temperature low, suitable for earthworm.



Vermibeds are manufactured in various sizes, however the most preferred dimensions of the bed is 3600 mm (L) × 1200 mm (W) × 600 mm (H). SASMIRA is Center of Excellence for Agrotexiles (CoE-Agrotech) under Ministry of Textiles, GoI. CoE-Agrotech is actively involved in development and promotion of Agrotextile in the country and also providing support to Industry in manufacturing quality products for export purpose. Vermibed is manufactured and used in India in compliance with national product standard IS 15907: 2010.

Specification of Vermibed as per IS 15907 : 2010

Sl No. (1)	Characteristic (2)	Requirements (3)	Method of Test, Ref to (4)
i)	Mass, g/m^2 , <i>Min</i>	340 (see 6.1)	IS 1964
ii)	Breaking strength before UV exposure, N, <i>Min</i>	1 900 (Warp) } 1 300 (Weft) }	IS 1969
iii)	Elongation at break, percent	20 \pm 5	IS 1969
iv)	Retention of breaking strength after UV exposure, N, <i>Min</i>	85 percent of original actual value (fabric)	Annex B and IS 1969
v)	Welded seam strength before UV exposure, N, <i>Min</i>	65 percent of original actual value (fabric)	IS 1969
vi)	Welded seam strength after UV exposure, N, <i>Min</i>	85 percent of original actual value	Annex B and IS 1969
vii)	Tear strength, N, <i>Min</i>	100 (Warp) } 100 (Weft) }	Method A2 of IS 7016 (Part 3)
viii)	Puncture strength, N, <i>Min</i>	325	Annex C
ix)	Environmental stress cracking test	There shall be no evidence of stress cracking	Annex D
x)	Resistance to chemicals, change in the mass, percent, <i>Max</i>	0.1 percent	Annex E
xi)	Colour fastness to artificial light ¹⁾	4 or better	IS 2454 (Xenon lamp method)
xii)	Bursting pressure, kgf/cm^2 , <i>Min</i>	35	IS 1966

¹⁾ Applicable for coloured beds only.

Contact Details

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