
Harmony Greens

Greens from Harmony Flooring

Significantlybetterperformancethan market artificial grass in tuft withdrawal test.

Test conducted on multiple artificial Grass samples collected from Delhi, Hyderabad, and Mumbai markets. *Tuft withdrawal force (lbs) varied from 12.24 to 16 in market samples.*

- Big Advantage over competition's product.
- Harmony Greensoutperformedall thesamples -tuft withdrawal force of 17.4 (lbs) – thehighest.

Greens is Highly Durable

- Greens willnotwear down due to heavy foot traffic or weather change.
- Nomorebarepatches
- Highly resilentfibers used, don’t flatten easily.
- Cushioned feeling throughtthe year.
- It is non-toxic and safe for pets and children.
- Prevents soil erosion
- Reduces storm water runoff.

Greens offers Versatility

Ideal in harsh climate or on rough terrain.
Virtually impervious to in drought conditions, muddy areas, steep slopes, or hard-to-grow terrain.
Great year-around grass

Greens are Low on Maintenance

- Low-maintenance.
- No more watering, weeding, fertilizing, mowing, and patching.
- Beautifies and looks like real grass.
- No need of lawn equipment.
- Saves up to 50% on Soil on maintenance per Sq Meter and zero cost on Manure.
- **CAPEX**: Total Lawn Development cost/m2 @ Rs. 522 (Natural) vs Rs. 963.5 for Artificial grass.
- **OPEX**: Lawn Maintenance cost/m2/10 years @ Rs. 1199 for Natural grass vs Rs. 376 for Artificial grass.
- Cost impact - save appx. 383/sq. meter on Capex + Opex expenses combined
- **22% lower cost than Natural grass.**

***Assumptions**:Totallawndevelopmentinitiallyis261rupees/sq.mandfinallawn development cost for over a period of 10 years comes around Rs522, taking a multiplier of 2, as natural grass requires soil supply, rotovator etc. over its lifetime*

Maintenance Costs

For grass (both natural and artificial) two variable costs are important , i.e. –water and soil which are geographically dependent

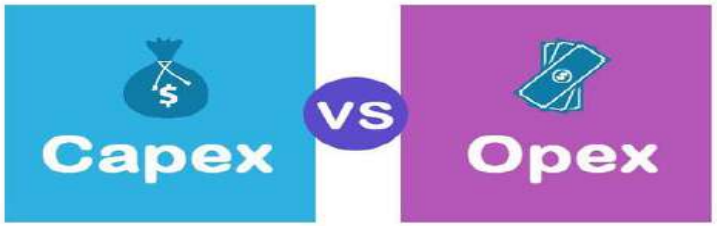
Water

Soil

Natural Grass **V.S** **Artificial Grass**

Resources	Cost (in INR)
Rateof water/permeter (Tier 1 cities)	120
Rateof Soil/per meter	500
Total	**620**

Resources	Cost (in INR)
Rateof water/per meter (Tier 1 cities)	120
Rateof Soil/per meter (low quality soil can be use)	250
Total	**370**



No.	Constituents/Process	Natural Grass (Rate InRs.)	ArtificialGrass (Rate in Rs.)
1	Soil supply @ 6" layer	75	37.5
2	Spreading of soil with JCB	9	9
3	Levelling with rotovator	9	9
4	Manure @ 1:8 v/v	17	0
5	Mixing of manure and levelling	9	0
6	Supply and Planting of grass	35	750
7	Cost of irrigation installations	108	108
8	Drainage Pipes	0	0
9	Installation	0	50
	Lawn Development cost/m2	261	963.5
	Total Lawn Development cost/m2	**522**	**963.5**

No.	Constituents/Process	Natural Grass (Rate InRs.)	ArtificialGrass (Rate in Rs.)
1	Cost of Garden Maintenance p @ 1.25 person per permonth	4.0	1.9
2	O and M cost of irrigation system pr month	0.26	0.26
3	Cost of water(excluding 100 rainy days per annum) per month	5	1
4	Cost of manures and fertilizers/ pesticides etc/ month	1	
	Lawn Maintenance cost/m2/year	**120**	**38**
	Lawn Maintenance cost/m2/10 years	1199	376

Total Cost	Natural Grass (Rate InRs.)	ArtificialGrass (Rate in Rs.)
Capex+ Opex	**1,722**	**1,339**

Assumptions :Total lawn development initially is 261 rupees/sq.mand final lawn development cost for over a period of 10 years comes around Rs522, taking a multiplier of 2, as natural grass requires soil supply, rotovatoretc. over its lifetime

Cost Impact

For Bungalows

Average grass area requirement = 50 sq.m

Average cost savings/sq.m=Rs. 383

Total savings =Rs. 19,150

For Office Spaces

Average grass area requirement = 250 sq.m

Average cost savings/sq.m=Rs. 383

Total savings =Rs. 95,750

Natural Grass *Vs.* ***Artificial Grass***

Total natural grass cost for 10 years/per sq. m = Rs. 1,722

Total artificial grass cost for 10 years/per sq. m = Rs. 1,339

Average cost Savings/Sq.m=

Rs.383

Greens are Sustainable

- Conserves water
- Eliminates often-toxic fertilizers and pesticides.
- Reductions in maintenance
- Lawn equipment expenses saved.
- Harmful emissions into atmosphere reduced.
- Greens are durable and benefits the Environment.

- Upto 80% water saving in case of artificial grass will help from shortage of water for human consumption.

No cropping, mowing, or watering, saving up to an average of73000 litresof water annually, as compared to real grass.

Water Usage data / Household

DELHI

Daily waterconsumption: 377 lts

Yearly water consumption: 1,37,605 lts

MUMBAI

Daily waterconsumption: 406 lts

Yearly water consumption: 1,48,190 lts

HYDERABAD

Dailywaterconsumption:391 lts

Yearly water consumption: 1,42,715 lts

KOLKATA

Daily waterconsumption: 443 lts

Yearly water consumption: 1,61,695 lts

Water Usage @ Landscape

Average consumption per household per day (in liters) = 404

Average consumption per household per year (in liters) = 147551

Indoor & Outdoor -Water consumption for Natural Grass

Target Group	Avg.area of grass requirement (sq.m)	Water required per year, based on total area (in litres)		WaterSaved in litres	Saved water used for human consumption
Indoor		**Natural Grass**	**Artificial Grass**		
Bungalows	50	91,250	18,250	73,000	1 household for 186 days
Offices (Tier 1 cities	200	3,65,000	73,000	2,92,000	2 households for 361 days

Target Group	Avg.area of grass requirement (sq.m)	Water required per year, based on total area (in litres)		WaterSaved in litres	Saved water used for human consumption
Outdoor		**Natural Grass**	**Artificial Grass**		
Bungalows	50	66,250	13,250	53,000	1 household for 135 days
Offices (Tier 1 cities	200	2,65,000	53,000	2,12,000	1 households for 524 days

Present Collection

Purpose / Article code	Landscape		
	GL000201	**GL000200**	**GL000203**
Pile height(mm)	25	35	45
Gauge	3/8”	3/8"	3/8"
Stitch/10cm	14	10	10
Dtex	9300	9300	9300
Total GSM	1644	1635	1864
Fiber	PP+ PE	PP+ PE	PP+ PE
Backing	PP cloth+ SBR	PP cloth+ SBR	PP cloth+ SBR
Golden yarn	Yes	Yes	Yes
Straight and twisted yarmmix	Yes	Yes	Yes
Roll Size	25 x 2 mtr	25 x 2 mtr	25 x 2 mtr

Dtexor Decitexis a unit of measurement that indicates the linear mass of yarn in decigrams, per 10,000 metres.
It relates to the weight, or density, of the yarn used to make**Artificial grass**