



ECONOMY ♦ EXCELLENCE ♦ ETHICS

ESD+

NO STATIC
CHARGE
MAKES ALL
THE DIFFERENCE.



UNBELIEVABLE SURFACES
by Merino

Disclaimer

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Actual Design & Color may vary
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Please contact your nearest Merino
Dealer / Merino Team for order
fulfilment."

A top-down view of a workspace. On the left, a person's hands with red nail polish are typing on a silver laptop. Above the laptop is a white mug of black coffee. To the right of the coffee is a small green succulent in a white pot. In the bottom left corner, a portion of a tablet with a brown leather case is visible. The background is a solid grey.

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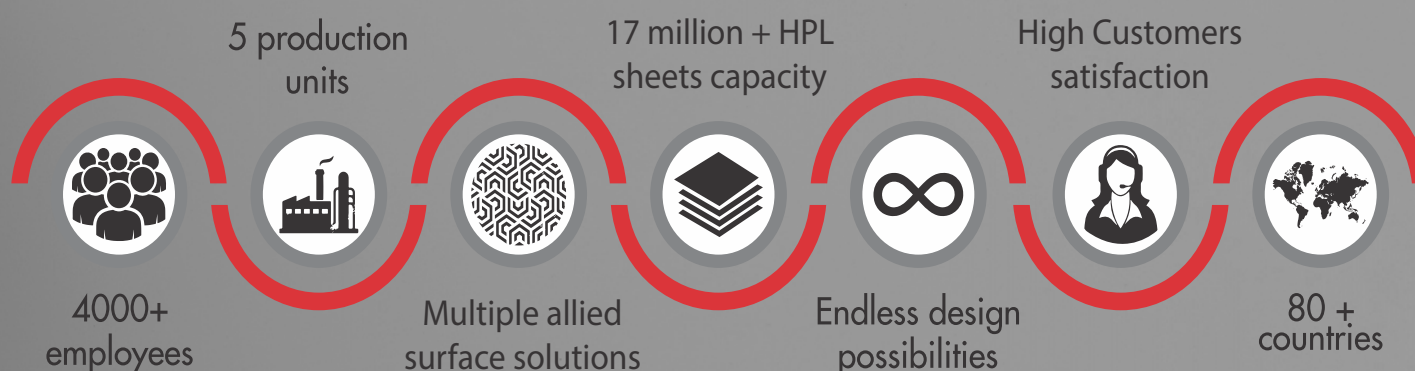
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ABOUT MERINO

The Merino Group is a leading player in the laminates and panel industry. The first product was plywood, launched in 1974 and later it spread its wings into high-pressure decorative laminates in 1981. The Group has diverse business interests expanding into Interior Architectural Products, Information Technology and Food & Agro business. Over 4000 employees, 5 production units and multiple allied surface solutions having endless design possibilities are what ensure a consistent range of superior quality products and the Group's continuous significant growth in the challenging market scenario. With innovation and perfection at its core, Merino commits to the highest manufacturing standards with a strong customer support.



CERTIFICATIONS



"IGBC - MP - 1076"



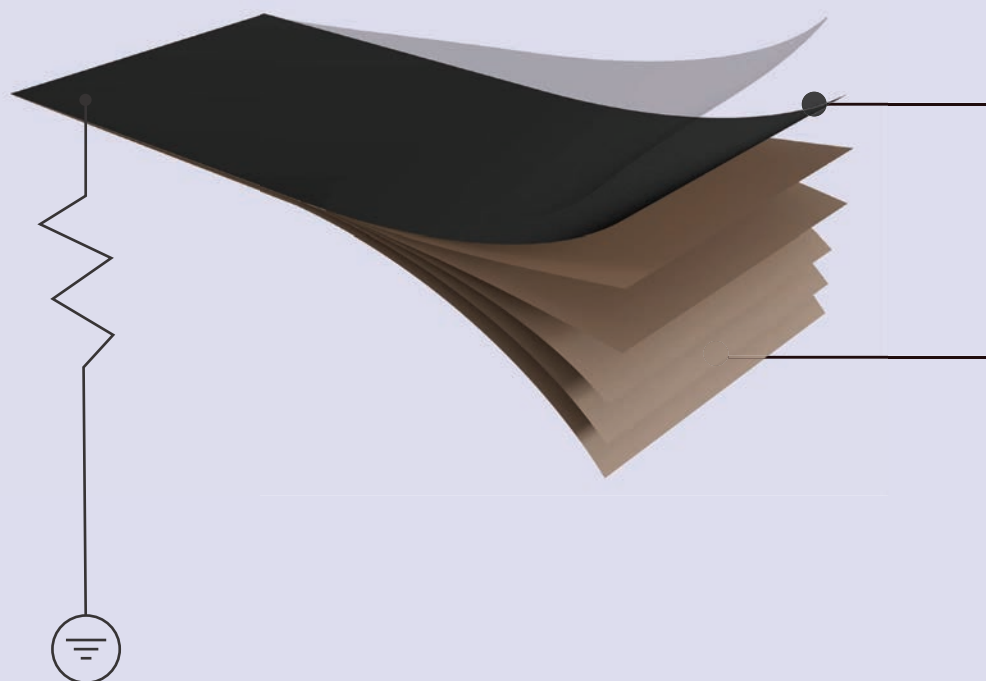
THE *Un*-RESISTIBLE ELECTROSTATIC DISSIPATIVE (ESD+)

ESD+ range of laminates has been developed with a purpose to dissipate charge & repel dust particles. Its top layer has static charge dissipative properties incredibly higher than products available in the market till now. The special conductive layer guarantees safe discharge of static charges when used with appropriate earthing. This helps by reducing damage to delicate internal circuits & increasing productivity of electrical gadgets around 30%.

ELECTROSTATIC DISSIPATIVE



Un-RESISTIBLE COMPOSITION



DÉCOR PAPER WITH ESD CONTROL LAYER

Décor Paper impregnated with specially formulated MF resin and a ESD control layer ensure that any accumulated charge is dissipated in a controlled manner without damaging equipment

KRAFT PAPER

Kraft Paper that has been impregnated with special Phenol Formaldehyde resin ensuring adequate backing strength for the laminate.

Un-RESISTIBLE FEATURES

**ELECTROSTATIC
DISSIPATIVE**



**DUST
REPELLENT**



**REDUCED DAMAGE TO
INTERNAL CIRCUITS**



SAFE FOR WORK

(Reduced discomfort, risks of shock, sparks & even fire)

Un-RESISTIBLE APPLICATION
For both vertical and horizontal application.



Countertop

11005
Neo Highland
Pine



Tabletops

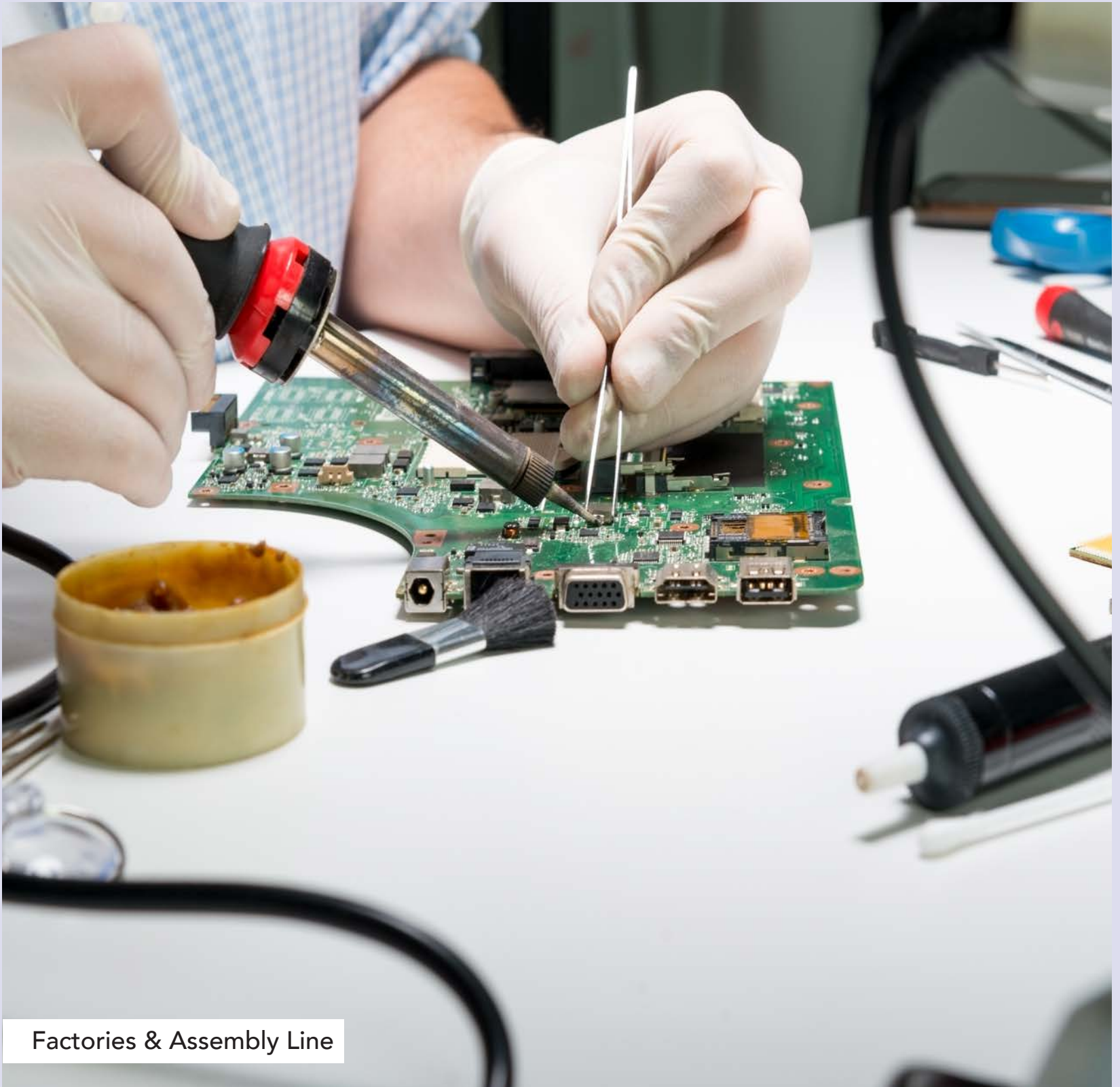
21141
Snow White

*Image shown are for reference. Actual product may vary

Un-RESISTIBLE SECTORS

ESD+ is a unique laminates range that is engineered with electrostatic dissipative properties that makes it repellant to dust particles. Hence, it can be used in sectors like – electronics manufacturing and repair, laboratories, IT offices, factories and assembly line, server rooms & data centres and cleanrooms.

Laboratories



Factories & Assembly Line

"Image shown are for reference. Actual product may vary"



"Image shown are for reference. Actual product may vary"

IT Offices

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Data Centres

21141
Snow White

*Image shown are for reference. Actual product may vary



Electronics Manufacturing & Repair

ESD Grounding Procedure

The recommended installation for best performance with ESD+ laminates involves using a screw insert that sits flush with the surface of the laminate. This screw is attached on the underside of the laminate using a nut with a terminal. To this terminal two wires are attached, one connecting to the common ground outlet, while the other provides the connection to the banana plug socket on the frontside.

A protruding ring made of brass is in contact with the conductive layer of the laminate.

A high-quality lock-washer is used to give the screw a snug sit, preventing it from vibrating loose.

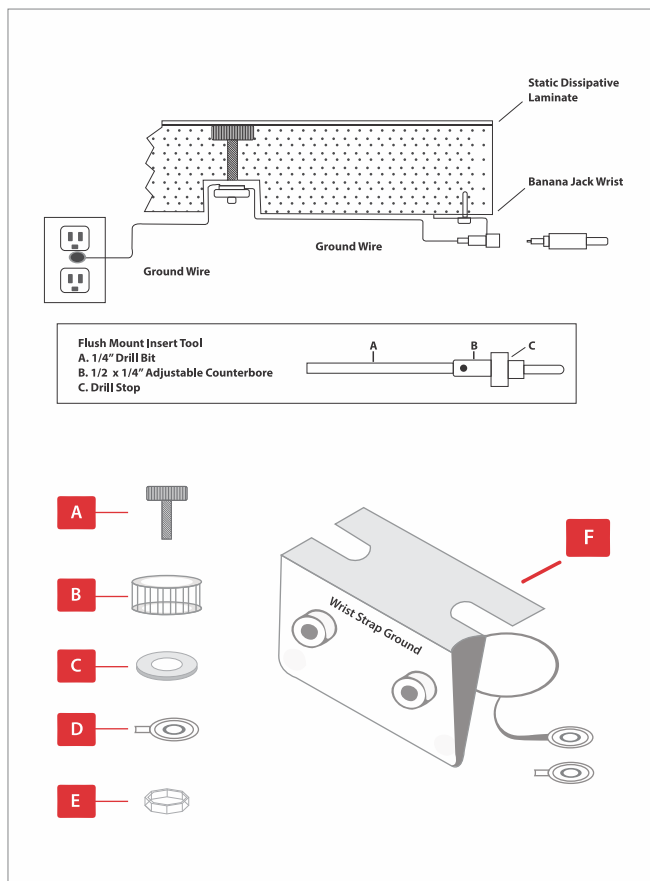


Fig. 1 Installation Process-1

Key (Fig. 1):

A: Flat Head Cap Screw

B: Brass Insert

C: Washer

D: Terminal ring

E: Nut

F: Dual banana jack terminals

Alternative method used In India:

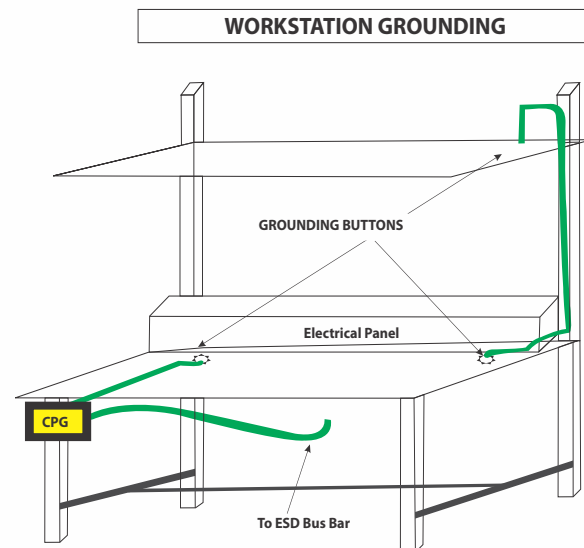
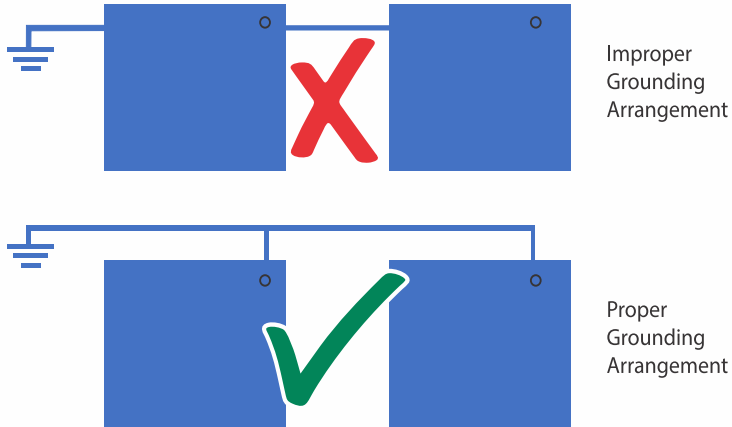


Fig. 2 Installation Process-1

Generally, the pin which is put on the table, will have male shape top and grounding wire will have one cap having female groove in one end and other end will have crocodile pin which will connect to earthing point.

This female cap will just fit with the inserted pin head and will get the connection with the earthing point.

Grounding arrangement:



Care and Maintenance:

1. No film or residue should be left on ESD laminate's top surface as it will reduce laminate's dissipative properties.
2. To clean the surface, use a damp cloth or sponge and a mild soap or detergent.
3. Stains belonging to group 2 such as coffee or tea can be removed using a mild household cleaner/detergent and a soft bristle brush
4. Cleaners containing abrasives or strong acids or alkalines should be avoided.

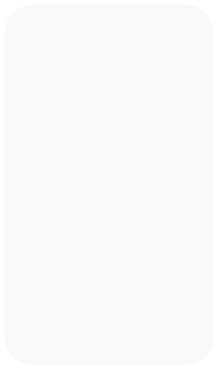


TEST VALUES OF MERINO ESD GRADE LAMINATE AS PER (EN438-3)

Thickness :1.00mm

Properties	Test Method as per EN 438-2	Property or attribute	Unit (max or min)	Values as per EN 438-3	Merino Value
Thickness Maximum Variation	5		mm	±0.10mm	< 0.10mm
Length & Width	6		mm	+10mm -0.0mm	+10mm -0.0mm
Density	EN ISO 1183	Density	g/cm ³	≥1.35	>1.35
Resistance to Surface wear	10	Wear Resistance	Revolution (min)	≥350	>400
Resistance to Impact by Small diameter Ball	20	Spring Force	N(min)	≥20	>20
Resistance to Scratching	25	Force	Rating (see annex a)	3	≥3
Dimensional stability at elevated temperature	17	Cumulative dimensional change	% long % Cross	≤ 0.55 ≤ 1.05	<0.45 < 0.90
Resistance to immersion in boiling water	12	Appearance	Grade (min) Gloss Finish Other finish	3 4	>3 >4
Resistance to dry Heat at 180°C	16	Appearance	Grade (min) Gloss Finish Other finish	3 4	>3 >4
Resistance to Staining	26	Appearance	Rating Group-1&2 Group-3	≥5 ≥4	5 ≥4
Resistance to water vapour	14	Appearance	Grade (min) Gloss Finish Other finish	3 4	>3 >4
Resistance to cigarette burn	30	Appearance	Grade (min)	3	>3
Light Fastness (Xenon arc)	27	Contrast	Gray Scale Rating	4 to 5	>4
Resistance to Cracking under stress (optional)	23	Appearance	Grade (min)	4	>4
ESD Properties At 50 % RH	IEC61340& ESD S-4.1	Surface Resistance	Max ohm	<1.0x10 ⁹ ohm	<1.0x10 ⁹ ohm
		Surface to Ground Resistance		<1.0x10 ⁹ ohm	<1.0x10 ⁹ ohm

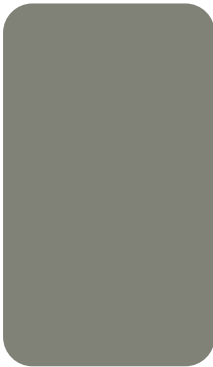
AVAILABILITY RANGE



21141
Snow White



21187
Champagne



21369
Pebble grey



21069
Silver Grey



11005
Neo Highland Pine



10016
Precious Beech

AVAILABILITY MATRIX

Product	Thickness	Sizes in feet	Finishes	Designs
ESD+ Standard	1 mm	4 X 8, 4 X 10, 4.3 X 10, 5 X 8, 5 X 12, 6 X 14, 6 X 12	Suede	6 designs with 2 sheets MOQ.
ESD+ Flex	≥0.7 mm		Suede	All other designs* with 50 sheets MOQ

* For more information visit www.merinolaminates.com

Available Standard Sizes (mm) width X length

S. No	Design	Color	1220 x 2440 (4ft X 8 ft)	1220 x 3050 (4ft X 10 ft)	1300 x 3050 (4.3ft X 10 ft)	1550 x 2440 (5ft X 8 ft)	1550 x 3660 (5ft X 12 ft)	Compact Only (1830 x 3660) (6ft X 12 ft)	1830 x 4300 (6ft X 14 ft)
1	21069	Silver Grey	Y	Y	Y	Y	Y	Y	Y
2	21141	Snow White	Y	Y	Y	Y	Y	Y	Y
3	21187	Champagne	Y	Y	Y	Y	Y	Y	Y
4	21369	Pebble grey	Y	Y	Y	Y	Y	Y	Y
5	11005	Neo Highland Pine	Y	Y	Y	Y	Y	Y	Y
6	10016	Precious Beech	Y	Y	-	-	-	-	-

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