

ECO CARAT

Rooted in traditional Japanese mud-wall construction, ECOCARAT offers a beautifully designed range of interior wall-finishing materials. Infused with a feel of natural material content and coloring daily scenes with magnificent spirit, ECOCARAT transforms everyday spaces into havens of genuine relaxation, exquisite taste, and refreshing imagery. Beyond aesthetics, its installation provides moisture-regulating performance, capturing or releasing indoor humidity, and effectively adsorbing harmful airborne particles. . Genuine beauty comes alive across the five senses through wise Japanese tradition.



Sheet Size : 300 x 300 mm
Seed Size : 60.6 x 60.6 mm
Thickness : 5.5mm, 8.5mm Mix
Sheet Per carton : 11 Sheets
Price Per Sheet : RM64.00
Price Per Carton : RM704.00
Price Per SQM : RM723.20



ECP-60NET/PTS1N
Light Grey

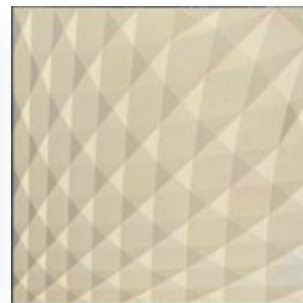


ECP-60NET/PTS2N
Light Beige

Size Per Pc : 303 x 303 mm
Thickness : 6.5 mm
Sheet Per carton : 22 pcs
Price Per Pc : RM45.00
Price Per Carton : RM990.00
Price Per SQM : RM508.50



ECP-303/NTC1N
White



ECP-303/NTC2N
Beige



ECP-303/NTC3N
Grey



ECO CARAT is made from "Allophane", a natural mineral contained in volcanic ash, which has innumerable micro-pores. This combined with the natural ionic exchange phenomenon of Allophane enables ECO CARAT to passively reduce VOC (volatile organic compounds) and absorb moisture.

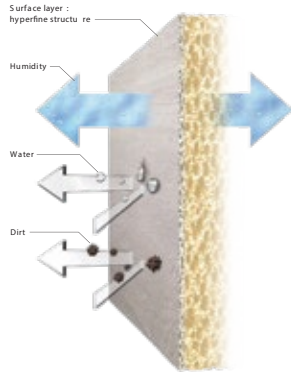
- Humidity controls inhibit the spread of mould and mites which cause allergies.
- Absorbs harmful VOC which causes sick building syndrome
- Reduces odours containing ammonia, trimethylamine and the like, produced by pets, human waste, soiled clothing etc.

ECO CARAT, manufactured in Japan, is a mature product sold in large numbers domestically and is only now offered to the Malaysian market by GNG Tiles Malaysia.

- As well as residential applications, ECO CARAT has been improving air quality in Japanese public buildings such as clinics, hospitals, kindergartens, beauty parlours, spas, museums, cafes and restaurants.

IT PASSES HUMIDITY, BUT HARDLY PASSES WATER AND DIRT.

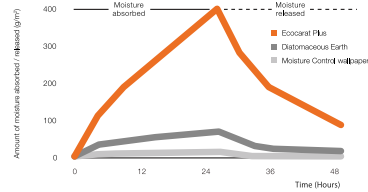
Controls humidity to natural and comfortable temperature, absorb unpleasant odor, reduce harmful substances in the air, and easy maintenance.



More comfortable with humidity control function

IT HUMIDIFY AND DEHUMIDIFY. SO NATURAL AND COMFORTABLE.

It absorbs moisture when the temperature is high and releases moisture when it is dry. Ecocar Plus maintains comfortable humidity with excellent moisture control function. Its effect is about 6 times that of diatomaceous earth and more than 25 times that of moisture control wallpaper. So you can control condensation and control the growth of mold and mites. It is also recommended to keep the laundry room dry.



The test results are based on our company's test (measurement of temperature / amount of temperature when the relative temperature is 50% → 80% → 50%).



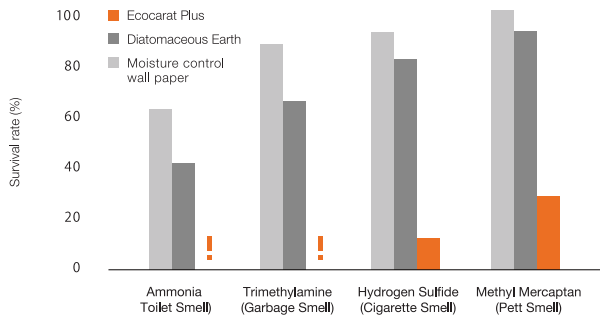
Uncomfortable humidity level.

The walls and mattresses of a bedroom may suffer from mold during the time from the rainy season until summer time, when humidity rises sharply. By using ECOCARAT, the musty odor is removed, the dampness of the bed is taken care of, and we can sleep soundly.

Quickly deodorize the odor

CLEANSSES ROOM AND ELIMINATES THE SMELL.

Toilet, garbage, cigarette, pet - there are a lot of smells to be worried about in daily life. Ecocar Plus adsorbs the components that cause those odors. Ecocar Plus deodorizes odor faster than diatomaceous earth and wallpaper. It works well for "combined odor" in which

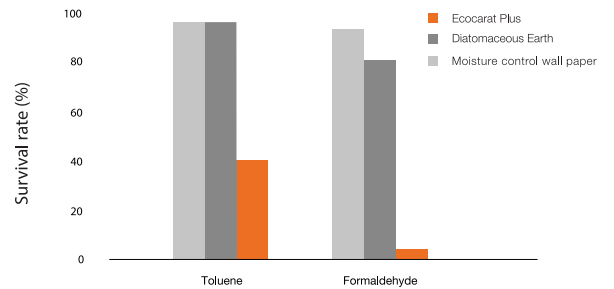


! The residual rate of Ecocar Plus's ammonia and trimethylamine is below the detection limit.
 * The test results are based on our company test (place the test body in a bag filled with various odor gases and measure the gas concentration initially and after 5 hours). Varies depending on environmental conditions such as room usage conditions, weather conditions, and ventilation.

Reduce harmful substances

ECOCARAT ALSO PROTECTS THE FAMILY FROM HARMFUL SUBSTANCES.

Formaldehyde and toluene can cause sickness in the house. Ecocar Plus adsorbs and reduces those harmful substances floating in the air. Small children are said to be particularly susceptible to the air environment. Because the house is the place where we can relax, the interior wall must be able to protect the family from the unseen anxiety.



* The test results are based on our company test (place the test body in a bag containing various VOC gases and measure the gas concentration in the initial 5 hours). Varies depending on room usage conditions, weather conditions, and environmental conditions such as ventilation.



The smell of pets..

There is a disturbing smell of dogs in houses where dogs live as family members. When ECOCARAT is used in such houses, the smell of pets is not very obvious and house members can relax in the living room having a clean atmosphere.



"I'm worried about harmful substances".

Since the number of patients visiting a hospital due to allergies such as asthma and atopy condition is high, the characteristic of ECOCARAT that helps remove harmful substances (that could strongly irritate the mucous membrane or worsen their symptoms) brings a huge relief to patients.

Pursued Beauty And Comfort

DESIGN

Precisely expressing the rich look of natural materials.

The precise textures of stones and woods are expressed with highly precise decorating technology. Shadow, color and patterns change with lighting, making the enjoyable different appearances through a day. Realistic beauties of stones and woods create a comfortable space.



“Light x Ecocarat” wallspace enhanced with beautiful shadow.

Shadow that changes the type and angle of lightings, such as ceiling lights, indirect lightings and down lights. The space can be designed based on how to spend there -relaxing, socializing, learning or sleeping. The lights, diffused by the natural uneven surface of materials, are gentle for eyes.

Leading design trend.

We are awarded “Best of the Best” award, the highest design award of an international design award “Red Dot Design Award.” “LINEE” and “DORIS,” Ecocarat products created by collaborations with designers who are popular abroad and in Japan are also launched.

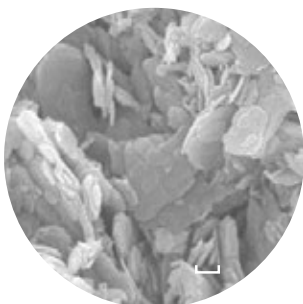


reddot award 2018
best of the best

COMFORT

The modern “earth wall” which inherits Japanese philosophy.

The roots of Ecocarat Plus are found in the traditional method “earth wall” which has a good combination with the Japanese climate. The Ecocarat Plus continues to evolve by combining the pottery technology that LIXIL has cultivated through many years of research, while still maintaining traditional Japanese wall construction method. In addition, because it plays an active part in zero energy, it is a building material that is friendly to both the environment and people.



One millionth of the latest technology of 1 mm.

Ecocarat Plus has holes that absorb and release air. Its size is 1 nanometer (one millionth of a millimeter), which is ideal for adsorption of warm air and odor. It is a technology pursued in an invisible world. Because the number of holes is abundant, it can exert superior air cleaning power compared to diatomaceous earth.

Precautions

Before purchase

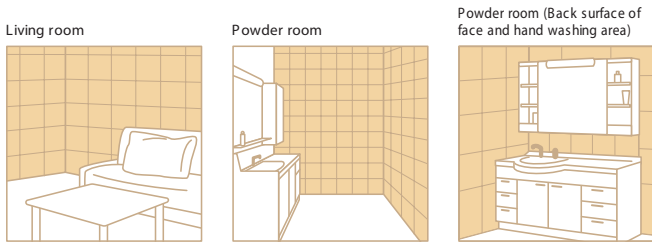
* Important information. Please read.

Precautions

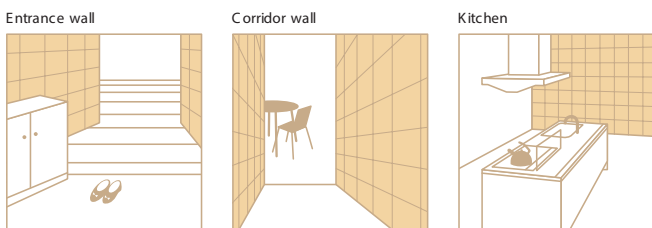
- Cannot be used at locations that are directly exposed to water from a water supply, and locations where splashing or collection of water may occur at all times.
 - Cannot be used in bathrooms and kitchen backsplash. Please check below for locations where Ecocarát Plus can be installed.
 - Depending on the condition of the base (unevenness, etc.), a gap of a few mm may happen between base and Ecocarát Plus sheets.
- In an environment where humidification of a room is performed continuously, such as when a gas stove is burned in a building made of RC, where the thermal insulation of walls is not performed sufficiently and the level of airtightness is high, it may be difficult to control dew condensation on the wall only by installing Ecocarát Plus, other method must also be examined together
- Depending on the usage conditions of the room, weather or ventilation conditions, etc., Ecocarát Plus may not be able to exhibit a sufficient effect
 - We cannot guarantee against the occurrence or multiplication of molds and mites. In places with poor ventilation, periodically open windows, etc. to let in fresh air. In the case of occurrence of molds, we recommend performing maintenance using chlorine bleach.
 - Do not use a tape with a strong adhesion power, such as a curing tape, as it may damage the surface.
 - Depending on the way the light hits the Ecocarát Plus, there may be differences in visibility from place to place.
 - The coloring may vary from lot to lot, from one shape to another, or from one piece to another
 - If the edges become dirty, clean promptly using a toothbrush dipped in household detergent. It may not be possible to clean some stains.



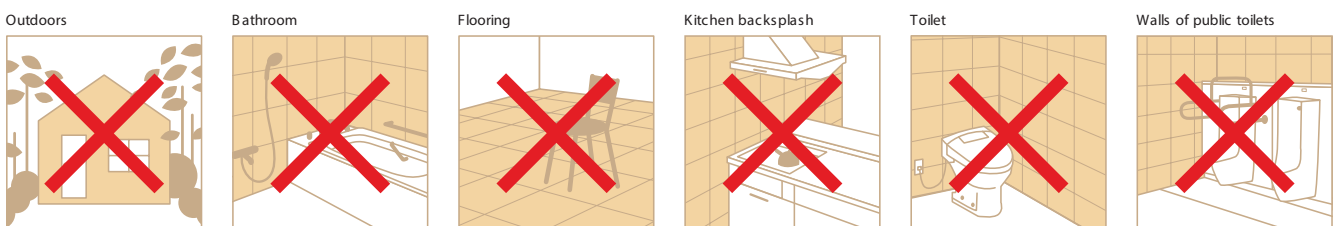
Locations where Ecocarát Plus can be installed



* Cannot be used when the washing counter does not have a raised surface and water gets collected all the time in the portions that are in contact with the wall surface.



Locations where Ecocarát Plus can't be installed



Ecocarát Plus is recommended.

Handling Precautions (Be sure to read)

In order to fully demonstrate the function of the product

Ecocarot Plus is a wall that carries out "humidity control", "smell adsorption" and "adsorption of harmful chemical substances" by the power of the material itself, but please consider the following in order to benefit from the function of the product effectively.

Sufficient ventilation is required



It is recommended to have proper ventilation.
As a result, the function of Ecocarot Plus will be more effective.
It is said that the use of ventilation is also effective in eliminating humid air and harmful chemicals.

Please reduce the possibility of chemical substances exertion around you



Besides building materials, chemical substances are said to exert from various things. Please note that if the exertion amount exceeds the adsorption capacity of Ecocarot Plus, sufficient functions will not be exhibited.

Please avoid heating more than necessary.

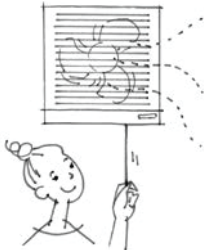


Please note that excessive heating will make it difficult to achieve the original function. In addition, please avoid direct steaming with a heating product etc. Besides building materials, chemical substances are said to exert from various things.

Please note that if the exertion amount exceeds the adsorption capacity of Ecocarot Plus, sufficient functions will not be exhibited.

Notes on using

After moving in, please ventilate frequently for 1 to 2 weeks.



For a while after construction, the moisture of the adhesive may be brought into the room and the room temperature may increase.

Please be careful not to rub clothes, curtains, etc. strongly on the surface.



The uneven surface of Ecocarot Plus may damage the fabric.

Do not hit it with a sharp point.



The tile surface may be scratched or scraped.



Do not use hooks or screws with a hammer or the like.

If you insert it directly, it may cause breakage or damage the fabric.

Please consult the contractor in detail.

Recommended installation area of Ecocarot Plus

As a guide to exert the articulatory effect of the entire space, it is recommended to construct it on a wall area of 1/4 or more of the floor area of the space.

Used room	Living	Bedroom	Children's room
	12 quantities (about 19.4 m ²)	8 quantities (about 13.0 m ²)	6 quantities (about 9.7 m ²)
Estimated installation area	4~6㎡	3~4㎡	2~3㎡

#Ceiling height is calculated as 2.5m.

#The recommended area is a standard only, and the effect after construction is not guaranteed for any customer. Where ventilation is poor, please provide adequate ventilation measures such as a regular window opening.

How to care (Please read)

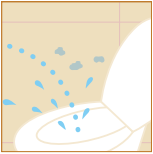
Daily care method Ecocarart Plus can be cleaned with water and detergent. Daily maintenance has become easier.

Clean the dirt with a clean cloth. Please avoid washing with water directly.

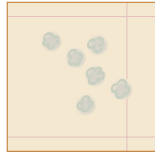


- Use of general household detergents will increase the cleaning performance.
- Partial stains can be effectively removed using melamine foam (dish washer foam)
- The combination of melamine foam and detergent further enhances cleaning.

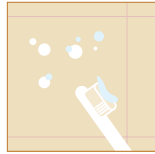
Splash of urine



Restroom dirt



Dental powder



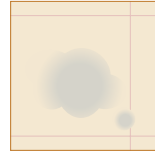
Shoes slippers



Rubbing of resin



Finger marks



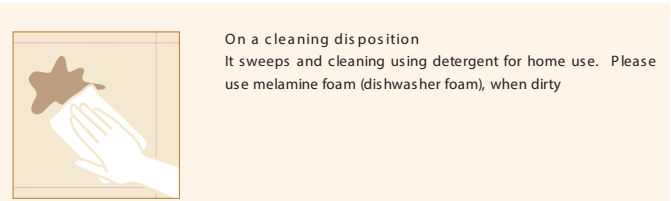
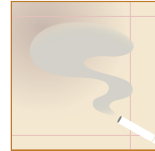
Coffee stain dirt



Ketchup, mayonaise, soy sauce



Cigarettes, nicotine



On a cleaning disposition
It sweeps and cleaning using detergent for home use. Please use melamine foam (dishwasher foam), when dirty

(Recommendation care tool)

Dirt cleaner	Super Drop (Material: Melamine Foam, Rec. (Corp.))
Detergent (Detergent for home use)	Easy my pet (Kao Corp.) My pet (Kao Corp.) 40 to 50 times use Mizuno Super Drop Rec. (Corp)

* Detergent: in the case of use of a standard bleach, please use it after often reading precautions for use beforehand.

* General household detergents are for cleaning furniture, wall paper, a windowpane, an electric product, etc., and have a surfactant concentration of 1% or less. Do not use cleaning fans, range hood detergents, detergents such as thinners, cleanser acid detergents (such as toilet bowl cleaning detergents), solvents such as thinners, or cleansers. Maintenance nature may fall.



Notes These stains are hard to remove. The following should be careful not to adhere.

Dirt which is hard to remove

Lipstick



Hair dye liquid



Other:

- Paint tool
- Pen (water based, oil based)
- Crayon
- Nail polish
- Ink

Caution Point When Cleaning

- Please be careful for dirt and detergent to turn to neither the side nor the back at the time of cleaning. Please use a line stick etc. if needed.
- The dirt case which has passed for a long time after adhering when dirty may not disappear by the above-mentioned care method. When dirt adheres, please wipe off promptly.
- It becomes difficult to remove, if it stick until tar of tobacco becomes yellow. In addition, we recommend you care in the top.
- When dirt adheres to the side of a product, please attach detergent for home use to a toothbrush etc., and remove dirt promptly. Depending on adhering dirt, it may be unremovable.

Cleaning tools that can NOT be used

#In case where dirt and a crack become severe.

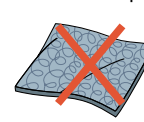
Dirty dustcloth



Sand eraser



Kitchens Hard sponge



Steel sponge



Caution for installation (Please read before use)

Base which is suitable for installation of Ecocarot Plus

Base material		Ecocarot Plus	Conditions and characteristics
Gypsum board	Gypsum board (GB-R)		Thickness 9.5mm or more, also called plasterboard
	Reinforced gypsum board (GB-F)		Thickness 9.5mm or more, fire resistant
	Gypsum sheathing board (GB-S)		Thickness 9.5mm or more, cannot be used for areas with water use, resistant for humidity
Plywood	Ordinary plywood		Thickness 9.5mm or more, type I, JAS Standard F
	Structural plywood		Thickness 9.5mm or more, Special type, type I, JAS Standard F
	[Notes]	① Please use plywood with formaldehyde emission rate at the level of JAS Standard F ② Please confirm that the product does not have any unusual smell. ③ To prevent warpages, please keep the space between screws within 150mm and between furring strips approximately 303mm. ④ For a base with lightweight steel, please keep the space between studs approximately 303mm, and use a joint tape (FATAPE-100/LI XIL Corporation, to be arranged separately) for the vertical and horizontal joints of the base.	
Reinforcement of cement board fiber	Calcium silicate board		Specific gravity 1.0, thickness 6mm or more
	[Notes]	For a base with lightweight steel, please keep the space between studs approximately 303mm, and use a joint tape (FATAPE-100/LI XIL Corporation, to be arranged separately) for the vertical and horizontal joints of the base.	
Cement type	Concrete + mortar base		For 303, 303x606 and combinations of different shapes, please make spaces of 0.5~1mm. Otherwise, please make a gypsum board base with gypsum lining method.
	Extrusion cement panel ALC panel		Please assign within the panel.

- Suitable. * Please keep the surface accuracy within ± 1.0 mm/2m for any type.
 Suitable with notes. * Synthesis base requires an air tacker.
 × Cannot be applied. * Joint tape is not included in the design package.

* Recommended comb shaped adhesive and standard usage of adhesive

Ecocarot Plus	Recommended comb shaped adhesive	Standard usage of adhesive
ROUGHCEMENT, GRAN QUARZ, STONE GRACE, ANTIQUE MARBLE, VINTAGE OAK, FABRICO, NEOTRAVERTINE, SMOKE WOOD	5mm comb shaped adhesive	1.5 ~ 2.0kg/㎡
Products other than above	3mm comb shaped adhesive	1.0kg/㎡

Caution for installment on existing finishes, for renovation, etc.

In case the existing wall is finished with a wallpaper

In case the wall to install Ecocarot Plus has wallpaper, the basic method is to remove the wallpaper first. However, if the answers to the following items are all "a," Ecocarot Plus can be installed over the wallpaper. Even if all conditions are met, pre-treatment is required before installment. For detailed information, please refer to Ecocarot Plus installment manual.

* Please also remove the wallpaper in case the material or surface processing are unknown as well.

1	The material is vinyl (except for products with water-repellent finish by fluorine or EB) (*1)	a. Yes b. No
2	There is no mold (*2)	a. Yes b. No
3	There is no dirt	a. Yes b. No
4	Wallpaper is not peeled.	a. Yes b. No
5	The installment part is not a ceiling (in case installing on a ceiling, please replace with a base without wallpaper)	a. Yes b. No

*1 For olefinic (chloride) based or paper (including kenaf paper) based wallpaper, please select "No" as Ecocarot Plus cannot be installed over them.

*2 If there is significant amount of mold, please exchange the base itself.

In case the existing wall is finished with material other than a wallpaper

Ecocarot Plus cannot be installed with normal specifications. Please follow the methods as below.

Existing finishes	Methods
Coating, spraying	Install the same material as the finishing under the finishing, or remove the coating material
Japanese stucco (Shikkui), gypsum plaster	Install the same material as the finishing under the finishing
Iron plate	Install the same material as the finishing under the finishing
Stone (marble, terrazzo, etc.)	Install the same material as the finishing under the finishing