

Developed new functional nanotech coating solution by Japanese patented technology

Proposal of new application business by nanotech coat



Sketch History

Stage 1) 1995~ Business entry into the nanotechnology industry

- 1995~1998 Participate as a consultant at the start of TOTO's photocatalyst "Hydrotect" business
- 1999~ Consulting to Tonen company that developed polysilazan and held utilization seminar in Japan.
- 2000~ Transfer development of room temperature glass coat to Izumi paint = oasis, Nationwide deployment as car body coat・quartz glass coat
- 1999~ Development of antistatic, super hydrophilic self-cleaning coat Super Glass Barrier
- 2000~ Development of Anti-Static,Super Hydrophilic Self Cleaning Coat for outer-wall
It has been selling 10million㎡ equivalent material till 2017
- 2001~ It starts to manufacture and to sell Thermal Insulated Glass Coat =IRUV Cut Coat

Stage 2) 2006~ Sales Promotion Active period in Japan and China Market

- 2006~ Participate as Japan representative at the Beijing National Grand Theater Roof Photocatalyst self-cleaning review meeting.
(Sketch announced products that demonstrate antistatic superhydrophilic self-cleaning function even without light in contrast with the photocatalyst related products of the Chinese Academy of Sciences, Beijing University, Tsinghua University, South Korea, Germany and France, Sketch Product evaluated as having the highest No,1 antifouling effect.)
- 2004~It starts to sell Deodorant,Anti-bacterial Coat by No photocatalyst & Visible Light response photocatalyst
- 2006~It sells large amount of Deodorant ,Anti-bacterial Coat to Japan,China market.
- 2007~Sketch sells 30t or more Photocatalytic deodorization, antibacterial coat products for government offices starting from the conference room in the Great Hall of the People

Stage 3) 2008~ : To Japanese No,1 Manufacturer

- 2008~ It establishes ECO BUSINESS CLUB CO.,LTD. It contract with over 100 companies as distributor.
It starts to sell IRUV cut coat as the nationwide unified application price of 6000JPY/㎡
- 2011~ With the power shortage due to the Great East Japan Earthquake on March 11, 2011,the IRUV cut coat was a big hit as an energy saving measure, and it will be introduced as 70% in Japan domestic share.
- 2012~ With the start of subsidy from the country concerning installation of solar panels and the start of electric power purchase system by electric power company, solar self maintenance coat will be released as antifouling measures for solar panels.

Stage 4) 2013~ : Starting Sales promotion in the overseas

- 2013~ **Certified as Tokyo-supported overseas products**、With the support from the Tokyo Metropolitan Small Business Promotion Corporation and JETRO, we started overseas deployment by participating in overseas exhibitions such as Southeast Asia, China, Germany. The Distributor development mainly started mainly in Southeast Asian countries.
- 2015~ Response to the fact that China's VOC regulations has become stricter, with the development of the photocatalyst deodorant antibacterial and VOC decomposition products, TOSHIBA, TOYOTA Central R & D Labs, etc., in collaboration with leading photocatalyst manufacturers, started selling to China with cheap price.
- 2016~ Start selling formaldehyde, acetaldehyde strong decomposition products.
Beginning full-scale sales to the Chinese market, a huge hit.

Stage 5) 2015~ ; Full-fledged world expansion of IRUV cut coat

- 2015~ Infrared cut rate of IRUV cut coat is 80% or more (other company 50%). Worldwide expansion of the world's best heat shield performance products.Guide start at the application price of 1㎡3900JPY that can amortize the air conditioning bill within 3years. (Japan 1㎡8800JPY, 5-year amortization)
- 2016~Full-scale deployment of IRUV cut coat collaborative research by providing technology to Chinese manufacturers. A big market will be born in the future as the Chinese government publicly approved a thermal insulation glass coat besides the LOW-E pair glass and film.
- 2017~Develop business model of energy saving green coat system that reduces air conditioning fee by 30% or more, especially from Kyushu area in Japan. IRUV Cut Coat H-SP Construction Price 1㎡ 8800 yen, Air Conditioning Fee 20% or More Reduction, 5 Years Depreciation As a catchphrase business development in Japan, many companies joined to promote this business as power-saving measures.
- July,2017~ It starts to sell Outdoor Unit Cover coat that is Japanese patented technology to apply thermal paint & anti-fouling coat on the roof outdoor unit and the surroundings
Energy saving is 15% or more per year and within 1-year amortization.・ This business model to overseas expansion, Taiwan, Vietnam, China, Sri Lanka, USA, Canada, Italy and so on.
- Oct,2017~ Sketch contracts Fulinmenshijia company as area distributor of 14 provinces in South and Southwest China,

Stage 4) 2019~ : 2 branded business of Eco & Health Friendly paint by Setsuden ECO SHOP

- April, 2019~ Setsuden ECO SHOP starts 2brands new business, Energy Saving Green Coat System for corporate use and ECO & Health Friendly House for private house.
- It develops new products, CoolHeat Shield NF (Water based interior paint with Incombustible, heat insulation, High level of Far Infrared ray resistivity performance) as interior paint and Outdoor Unit Cover Coat (thermal paint only for outdoor unit on the roof of building) as exterior paint.



World NO, 1 Nano Tech Binder Manufacturer

1.Thermal Insulated Glass Coat

2.Anti-fouling Coat

Application Price 8,800JPY/㎡
Amortization five-year plan

Anti-Static & Super
Hydrophilic Self Cleaning

Company name; SKETCH.CO.,LTD

CEO; Yasuhiro Shimada

Foundation; February 1989

Capital; 50 million yen

Address; 3F, Chaco Paper Hall, 2-25-10, Asakusabashi, Taito-ku, Tokyo

111-0053 Japan TEL +81-(0)3-5825-6503 FAX +81-(0)3-5825-6504

URL; <https://www.sketch-english.com/>

Main banks; MIZUHO BANK.LTD Tokyo-Mitsubishi UFJ BANK.LTD

BusinessDevelopment and manufacturing of nanotechnology coating using inorganic adhesive binder

- “IRUV Cut Coat ”・・・World No,1 Products as to Thermal Insulated glass coating
- “Anti-static, Super Hydrophilic Self Cleaning coat・・・World Only 1 Products

Domestic clients ; about 100 Japanese authorized Distributor and 20 OEM distributors

R&D partners ;Kyoto University, Mitsubishi Material Group,Teika Co. Ltd,
TOYOTA Central R&B Labs.,INC, Taki Chemical Industries Co. Ltd,
JGC Catalysts and Chemicals Ltd,Tanaka Kikinzoku Kogyo Co. Ltd ,
Toshiba Co. Ltd,Dainichiseika Color & Chemicals Mfg.Co. Ltd,
Chinese Nano material company,etc.

Affiliated company: SETSUDEN ECO Shop Co. Ltd.

14 countries Solo Distributor

Oversea Distributor

- 1、Canada・・・Sketch Nanotechnologies Inc.(2016~)
- 2、The United States of America ・・・DryWired,LLC (2017~)
- 3、Taiwan・・・Window Expert CO.,LTD (2017~)
- 4、Philippine・・・Metro Hue-Tec Chemical Co.,Inc (2014~)
- 5、New Zealand・・・AFA Development Trust (2014~)
- 6、Australia・・・ NANO SHIELD AUSTRARIA PTY LTD (2017~)
- 7、Vietnam・・・Sketch Vietnam Paint Joint Stock Company (2019~)
- 8、14 provinces area in China・・・福臨門世家 (2017~)
- 9、Busan Area in Korea・・・GREEN ECO TEC (2015~)
- 10、Sri Lanka・・・ Inmark Eco Solutions Pvt Ltd (2018~)
- 11、Thailand・・・Green Synergy Co.,Ltd (IRUV Cut Coat 2018~)
Iemamori Thailand Co.,Ltd (Anti-fouling Coat 2018~)
- 12、13,14, Singapore, Malaysia, Brunei・・・ Relation Co.,Ltd (2019~)

Oversea Sales Record・19 countries

Indonesia・Cambodia・Nepal・India・Dubai・Qatar・Azerbaijan・Poland・Russia・Brazil・Chile・Lithuania・Spain・Germany・Switzerland・South Africa・Pakistan・Turkey,Italy

World No,1 High function,Low-Cost, Three Japanese state-of-the-art nanotech products

The world's most advanced nanotechnology coat of Japan, in accordance with the respective country, commercialized, product announcements, by training support, will continue to grow into the future of big business.

1、Reduction of CO2 emissions, global warming prevention, thermal insulation of the inner window glass of the existing building, 20%~30% energy saving ..., IRUV CUT COAT H-SP/H-SC

Air conditioning consumption in summer is growing rapidly year by year becomes hot, it has become a major problem of CO2 emissions. Especially building covered with glass increases unlike the old days, thermal insulation of window glass is a big issue. Sketch, has developed a thermal insulation glass coating that can be coated with roller easily in the window glass. There are 100 companies of distributors in Japan, the share of 70% or more in Japan as a commodity power saving measures after Fukushima nuclear power plant accident .1 sqm price is 8,800 yen in Japan against the window glass insulation other products, (General Price in Japan is 16000JPY) On the other hand, 1 sqm price is 3000 yen to 5000 yen for low labor costs in China and Southeast Asia.Also, we developed heat cut performance with IR cut ratio 80%~90%.The other company's glass coat is about 50% IRU cut, our products also exceed the performance of 3M and V Cool's transparent thermal barrier film, it can be said that it is the best insulation and thermal insulation products for both China and Southeast Asia, as well as in Japan. Summer air conditioning bills and reduce 20% to 30%, it is possible to recover the application cost within five years, then more than 10 years will be the energy saving of 25% or more. Also, cold countries keep indoor warmth without losing indoor heating heat from the windows. This heat retention effect is outstanding, the heating cost can be greatly reduced and the condensation prevention effect is also provided, and the effect is sustained for more than 15 years in one coat, and it can be said that it is the best product in the global warming era . Currently in Japan there is a history of 20 years, Currently there is a history in Japan 20 years, there is a millionth square meters or more of the construction results, in earnest, exclusive distributors in 15 countries around the world, there is a transaction in more than 30 countries, is the world's NO, 1 of goods.

2, non-combustible, heat insulation, mildewproof, health promotion coat, ... the world's highest performance indoor multi-functional coating agent

The second product developed CoolHeat Shield NF and Clean Air Guard as PM2.5 measures, VOC measures, sick house measures + power saving measures and health measures products that are the most problematic now. . Clean Air Guard is a new, world's first coating product that purifies indoor space with antioxidant, far infrared, and negative ion effects, and promotes health. Currently, we have the know-how to solve VOC problems that can not be solved in China. In addition to the above-mentioned paints, we will develop the world's first thermal insulating paint and health promoting paint with non-combustible paint based on the patented product Nofire with the above-mentioned paint and sell it mainly to the Chinese market. = CoolHeat Shield NF. We aim to develop multi-functional, high-performance products for indoor paints.

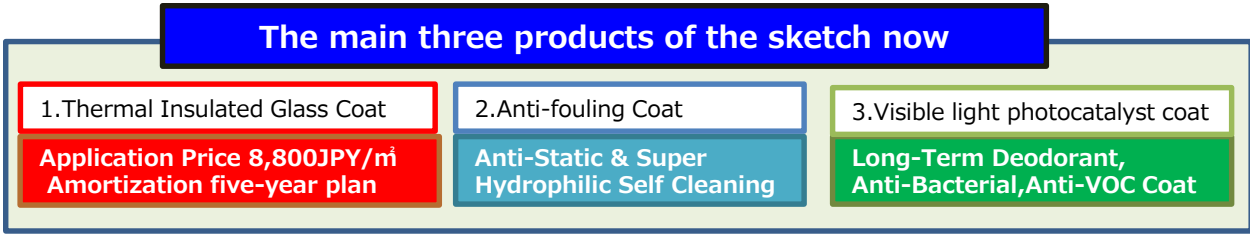
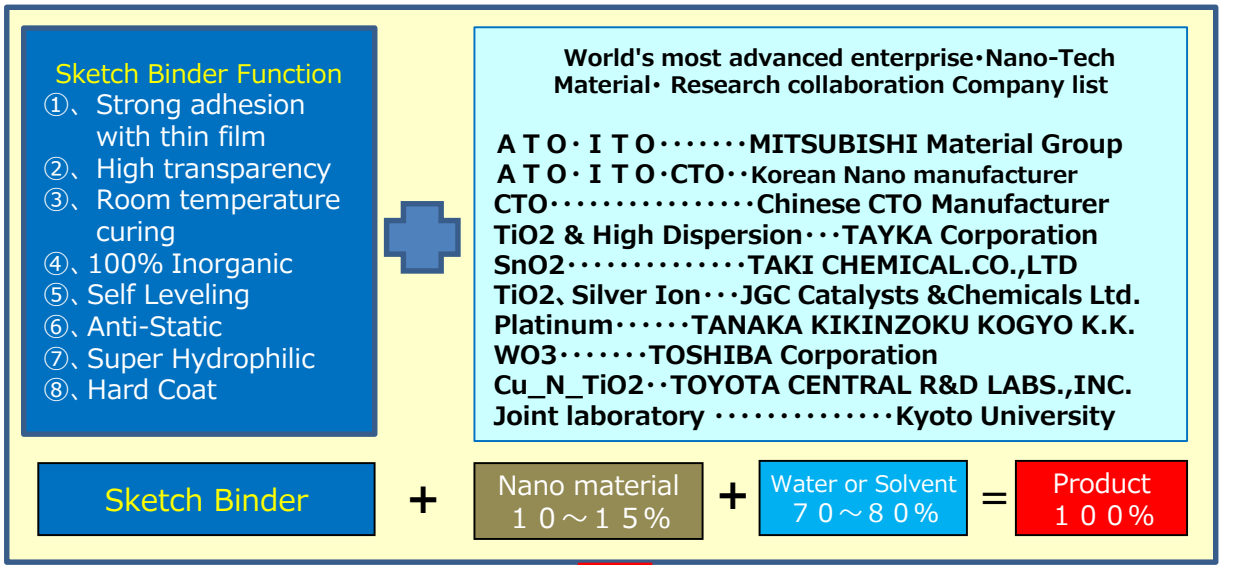
3、Heat insulation for outdoor unit and surroundings, exterior, insulation paint ... Outdoor Unit Cover coat

For the third product, we developed an outdoor unit cover coat that reduces the air conditioning cost by 15% or more by shielding heat and insulating the roof outdoor unit and its surroundings. It can be painted on the exterior of a building. However, this is specially designed to shield the roof outdoor unit and equipment from heat and is designed to have the lowest thermal conductivity in the industry. With over two years of cooperation from major power companies in Japan, we have demonstrated power savings of over 15% annually in both hot and cold areas. As an energy saving green coat system, combined with power saving from windows and power saving from the interior of the room, we are promoting the reduction of air conditioning costs by more than 50%.

2、Anti-Static,Super-Hydrophilic Self-Cleaning Coat
=Super Glass Barrier, Solar Self Maintenance Coat,Clean Self Coat MC-T,Resin Primer

1998, TOTO announced HYDROTECT, the photocatalyst, hydrophilic antifouling coat using titanium oxide, this has opened a new market in antifouling market of building, and the car. However, China, Southeast Asia, the Middle East, there are dirt and carbon sand lot, the photocatalyst coating using titanium oxide, have little effect.. So Sketch, has developed a coating material of super-hydrophilic antistatic anti-fouling self-cleaning by using a tin oxide SnO2 and SiO2 silica. We develop products that flow down with running water and rain in the super-hydrophilic it is difficult to stick the dirt.. And firmly adhered for inorganic material, outer wall, tile, and glass, there is a self-cleaning antifouling effect for long term. This product can be long-lasting coating one time, will be the main product of the aesthetic maintenance of the building in the future. It is easy maintenance coat that there is anti-static function in the Dust and exhaust gas in particular, it is hard to stick the dirt from the beginning, it is easy to come off the dirt easily. Since the maintenance cost can be cost down to less than one-third from the half, this is ideal in a country where high-rise buildings are built many. In particular, anti-static, hydrophilic , anti-fouling coat for glass, solar panel and aluminum panel, could not anyone to commercialize until now. On the other hand, SKETCH has developed a product that can be coated easily. There will be a big market in the future.

Sketch binder technology enabling development of various functions



Current main business = power saving measures air conditioning cost 50% or more reduction plan by application business



- 1、Insulated thermal barrier coat of window glass of existing building, IRUV Cut Coat: Save 25% or more of energy saving · 5 years depreciation
- 2、Air conditioning cost reduced by 15% to 20% or more by heat insulation antifouling coating on the roof outdoor unit and the surrounding area · Annual depreciation
- 3,For indoor use, power saving measures and health measures, heat insulation, non-combustible, health paint energy saving 25%
- 4,Regular maintenance cleaning cost on exterior window glass, building exterior, more than 50% reduction
- ⑤、Improvement of more than 5% by prevention of solar panel power generation efficiency
- ⑥、Safety by indoor air cleaning, sterilization measures

Future main development = Added value increase strategy of differentiated products centering on processed products

- ①、For Glass processing line, thermal barrier, thermal insulation glass coating + outside glass for anti-static self-cleaning + inner window glass for VOC measures, long-term deodorant, air purification, sterilization function add
- ②、For Solar Panel, Antistatic Super hydrophilic Self-Cleaning Coat
- ③、For exterior material manufacturer especially for resin board, to add new function of antistatic self cleaning with hard film.

In May, 2019 , Exclusive distributors in 14 countries, and other sales in 19 countries, expanded to a 33 countries totally.

★ **Exclusive area:** USA, Canada, South China 15 Provinces, Korea Busan area, Taiwan, Philippines, Thailand, Vietnam, Singapore, Malaysia, Brunei, Sri Lanka, Australia, New Zealand

★ **Other sales results:** Brazil, Chile, Switzerland, Poland, Germany, India, Dubai, Qatar, Azerbaijan, Nepal, Hong Kong, Indonesia, Cambodia, Russia, Lithuania, Pakistan, South Africa, Belgium, Italy

Canada



U.S.A



China



Korea



Vietnam



Sri Lanka



Switzerland



Philippines



Thailand



Australia



New Zealand



Taiwan

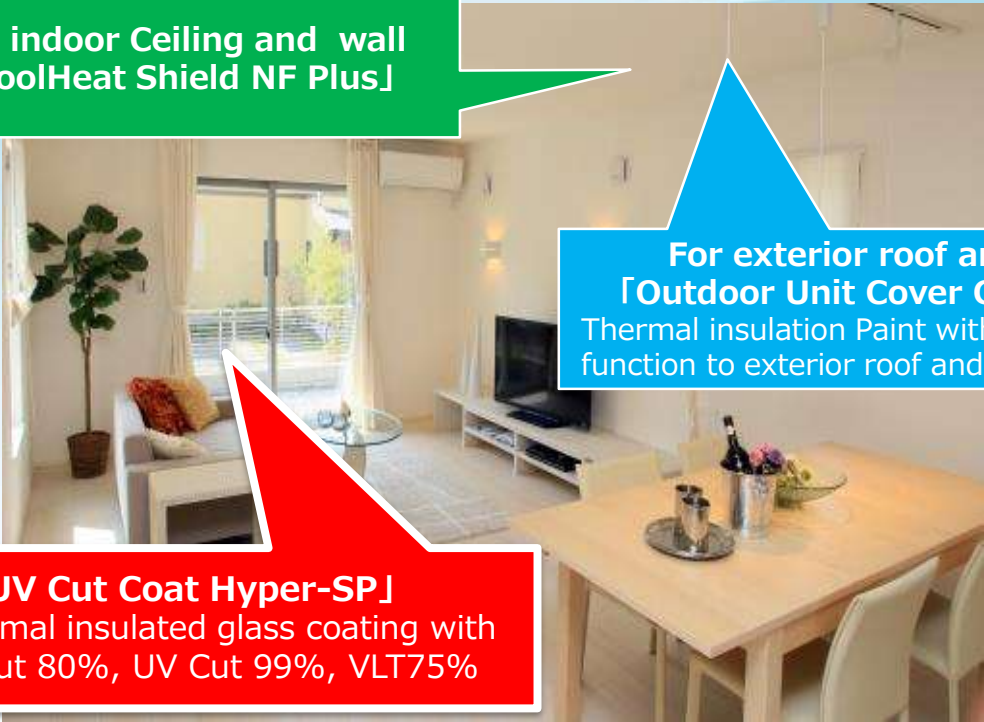


For Housing Market



Energy saving, health measures for the living room in the house and Condo

For indoor Ceiling and wall
「CoolHeat Shield NF Plus」



For exterior roof and wall
「Outdoor Unit Cover Coat Plus」
Thermal insulation Paint with Anti-fouling function to exterior roof and wall.

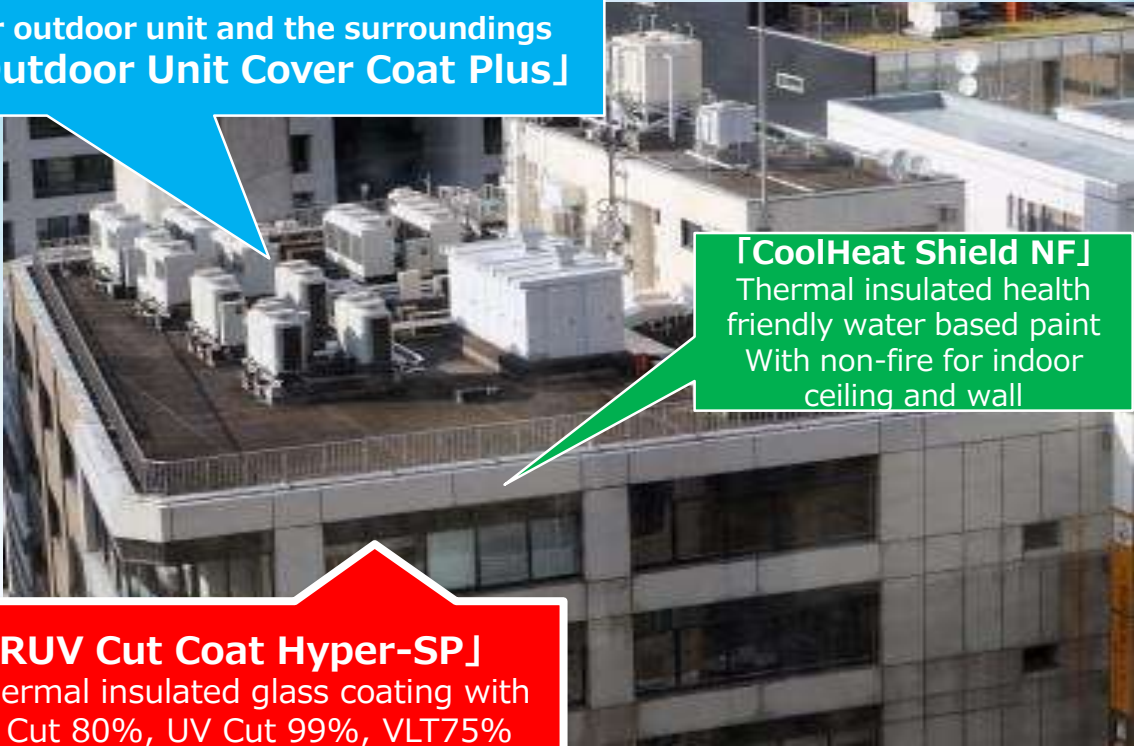
「IRUV Cut Coat Hyper-SP」
Thermal insulated glass coating with IR Cut 80%, UV Cut 99%, VLT75%

For Corporation Market



Energy Saving for Office Building, Service facilities

For outdoor unit and the surroundings
「Outdoor Unit Cover Coat Plus」



「CoolHeat Shield NF」
Thermal insulated health friendly water based paint With non-fire for indoor ceiling and wall

「IRUV Cut Coat Hyper-SP」
Thermal insulated glass coating with IR Cut 80%, UV Cut 99%, VLT75%

Renovation for comfortable Living room

We are thinking about how to improve the living environment where we spend most of the day, and this most important place of living in a comfortable environment. Interior problems with sick house, VOC, Virus, Mold, Odor, Energy Saving, Dew Condensation, UV rays, Heat, fire and so on can be solved by applying ECO & Health promotion coat for window glass and interior ceiling to improve more comfortable living room. First of all, It is applied in the living room, and next in the children's room and bedroom step by step.



20%~ Energy Saving And Health promotion from indoor Ceiling, wall
①、CoolHeat Shield NF

25%~ Energy Saving from window glass
②、IRUV Cut Coat Hype-SP or Hyper-SC

10%~ Energy Saving from Exterior roof and wall
③Outdoor Unit Cover Coat Plus



Energy Saving Green Coat System:
The air conditioning cost **50% or more cut**

Energy-saving green coat system, as global warming, the air-conditioning costs, which account for nearly 50% of the electricity consumption of existing buildings, by three items collaboration, is an innovative business model that can be reduced by 50 percent or more. We will also develop businesses below ①, ②, ③ individually according to customer's needs



20%~ Energy Saving And Health promotion from indoor Ceiling, wall
① CoolHeat Shield NF



25%~ Energy saving for window glass
②、IRUV Cut Coat Hyper-SP or Hyper-SC



15%~Energy Saving for outdoor unit on the roof
③、 Outdoor Unit Cover Coat Plus

The way to utilize The Lanchester Strategies in order to win the business for a small company

The Lanchester Winning Strategy for small company

1. It does not compete in the strong point of the opponent against the leading home builder which is the competitor, and it develops with a one-point concentration principle where it can be won.
2. Subdivide the scope, area to win ... NO, 1 product, differentiated product, area, sales promotion.

NO,1 Principle

What is NO, 1 point against a leading house builder that is a competitor?

It becomes NO, 1 in differentiated products.

Small home builder companies can't win against leading home builder in terms of brand power, sales power and popularity. Even doing the same sort of thing, There is no way but to make it cheaper. Even more, competition will become even tougher as new construction starts is substantially reduced in the next 10 years in Japan. The strong point of small home builder companies are to be able to build trust as very long and close relationship with customer for good support customized. To utilize our products related to energy saving and health promotion never lose against leading home builder.

'The Renovation only in the Living room for comfortable environment' is No,1 business strategy as ECO & Health Friendly house brand because Competition than there are many new construction, can be differentiated because it specializes only in the renovation of the living room.

The reason why it can be said that it is the NO.1 product

Thermal insulating glass coat for window glass

IRUV Cut Coat Hyper-SP of 80% IR Cut and Hyper-SC of 90% IR Cut

1. Application results No. 1 in the world. : 1million m² or more of application record from 2000 year until now
2. Worldwide sales results NO, 1 Exclusive distributor is 12 countries, sales record is 30 countries until March 1, 2009. Material sales record of over 200,000 m² annually.
3. Thermal insulation performance, ease of application is the NO, 1.
With a near infrared cut of 80% or more, a visible light transmittance of 75% a UV cut of 99%, even a large window glass can be coated evenly with a roller application.
4. Sales promotion & Support by Manufacture is No,1 : There is abundant sales promotion presentation, technical data, application manual and so on

Thermal Paint & Antifouling Coat for outdoor unit and the surroundings on the roof-top

Outdoor Unit Cover Coat + Super Glass Barrier

Thermal insulation performance No,1

Ordinary thermal barrier paintings are mainly painted on the outer wall of a building, and light reflectance is selected by the customer's preference, so the infrared reflectance is 80% or more. The amount of balloon hollow that determines the insulation performance is also about 5% of the total content of the paint. Since the outdoor unit cover coat is specialized for application to the roof outdoor unit, the color is selected only for white with high reflectance. Therefore, the infrared reflectance is as high as 90% or more, and by further containing 10% or more of the hollow beads in the paint, the thermal conductivity is as low as possible and the highest level of heat insulation performance is exhibited. Furthermore, it is waterproof. In addition, the top coat is coated with an antistatic super hydrophilic self-cleaning coat to prevent the decrease in the infrared reflectance of the coating film due to dirt.

Thermal insulating infrared rays health paint for indoor ceiling

CoolHeat Shield NF + Clean Air Guard

Thermal insulation performance & far infrared emissivity NO, 1

The world's first multi-functional paint that contains ceramic beads of amphibole with far infrared emissivity No.1 to eliminate heat unevenness by hollow beads, etc., for indoor ceilings and inner walls. In other words, CoolHeat Shield NF with heat insulation, Incombustible, condensation suppression, sound insulation, heat insulation, constant temperature, deodorizing, antibacterial and anti-oxidant functions. After painting it, we apply Clean Air Guard by spray application as final coating. It has multi functional performance with a long-term deodorant, anti-bacterial, anti-oxidative, VOC reduction.

One-point concentration with 3 unique products

Deploy at a single point on energy saving and health promotion measures with Differentiated product 3-piece set

1. One-point concentration for housing market → It focuses on only living room

For housing market, other competitor builder proposes thermal painting for whole exterior house as 1.5million JPY or more of application cost. We will promote to renovate not whole house, but only for living room where family spends most of a day as on-point concentration in ECO & Health friendly House strategy. We will concentrate to renovate by thermal insulating glass coat for window glass and thermal far infrared ray radiation health promotion paint for ceiling in living room. We called "Renovation only for Comfortable Living room" as catchphrase. It is very easy to recommend this program to customers, because Renovation cost including energy saving and health promotion measure is cheap price such as about 300,000yen. In addition, nobody can imitate this program due to differentiated only one products.

Conduct regular surveys of existing users, analyze them, set priorities for problem solving, create support manuals, and efficiently deploy them.

2. One-point concentration for corporation building market

For the corporate building market, we will concentrate on developing a "energy saving green coat system" strategy that achieves a 50% or more reduction in air conditioning costs with the three coatings. ① Outdoor Unit Cover Coat PLUS = 15% or more of energy saving by heat insulation, and antifouling coat for outdoor unit and its surroundings on the roof-top, ② IRUV Cut Coat = thermal insulation of indoor window glass, energy saving rate by 25% or more. ③ CoolHeat Shield NF PLUS = 20% or more energy saving by heat insulation infrared radiation painting of the indoor ceiling, An application cost is inexpensive and cost effective.

In particular, It is cheap in cost by IRUV Cut Coat and Outdoor unit cover coat PLUS, and it is easy to propose because the amortization is within one year.