

Floor Drains,

Cleanouts, Gratings &



Flexible Tube Connectors





Site Human Visdom

We treasure the local and international relationships of which our founders deepened with our customers.

We always work on making these relationships even deeper and more valuable.

Technology has been one of the key factors to improve our lives throughout history and has been helping us to connect with others worldwide.

The bonds strengthened with our customers are extremely important to us just as our quality products are for every system and construction.

Each of our associates is rich in practical wisdom and delivers quality service in timely professional manner every day. We would like you to always be 100% satisfied by the quality and efficiency of our service.

CORPORATE PROFILE

Firm name HAMADA MFG.CO.,LTD.

Foundation | April, 1908

Established 22nd June, 1962

Capital 10,000,000JPY(Authorized 12,500,000JPY)

Address 2-12,3-Chome Itachibori Nishi-ku Osaka, Japan

(POSTAL CODE) 550-0012

Tel/Fax +81-6-(6541)-5439/+81-6-(6541)-5954

President Takeshi Hamada

Trade Mark (S.H.W.)®

URL http://www.s-h-w.net

OUT LINE OF CORPORATE HISTORY

Mr. Shokichi Hamada founded a factory under the firm name of "HAMADA SEISAKUSHO", started production of faucets, valves and cocks, and put "SHW"logo on our products.

"S.H.W." stands for Shokichi Hamada Works.

Our former President, Mr. Isamu Hamada, opened a sales branch in Nishi-ku,

1938 Reorganized the sale branch to an independent sales department.

1938 Established under the firm name of EISHIN COMPANY LIMITED in Manchuria and started to produce faucets, floor drains, valves and cocks.

1943 Established the consolidated company, "YAMATO VALVE MFG. CO., LTD.", based on the firm name of HAMADA SEISAKUSHO by order of the Japanese authorities.

Through enlargement of production facilities, the company supplied military circles with ship parts and other munitions serving the wartime industry until the end of the World War II.

1950 Changed the firm name to HAMADA VALVE CO., LTD.

1962 Changed the firm name to HAMADA MFG. CO., LTD. and Mr. Yasuo Hamada became the president.

1997 Moved the head office to the present address.

2012 Mr. Takeshi Hamada became the president.

Mr. Takeshi Hamada became the chairman of the Youth Group of PST Osaka (The Osaka Plumbing, Sanitary Trade Association).

Introduction

This catalogue contains complete products of HAMADA MFG.CO.,LTD.

Since commencement of export in 1934,"SHW" have supplied products to prestigious projects worldwide. And we meet with an unexceptionally gratifying receiption in the trade in approval of quality, most competitive price and correct time of shipment from clients in many overseas markets.

High Quality

"SHW" Floor Drains, Cleanouts, Gratings
Flexible Tube Connectors and other products are
made of specially selected materials by expert
engineers and strict quality control procedures are
adhered to.

WITHSTAND LOAD FOR THE PRODUCTS

*Conclusion:

"SHW" Hamada gratings ref: H-397-PF 4" (Traditional series) has heavy duty performance and is capable of withstanding a load of upto 5 kgs/cm without any fracturing to the grating.

Sakura series is also has great performance against load. There is no deformation under 3kgs/cm². The grating part & other parts do not break under 10kgs/cm².





Conversity ent to Quality

We continue producing Floor Drains & Flexible connecters in pursuit of trust, relief and satisfaction of customers. We devise our own strict quality manual, and we practice it to follow our quality standard. We establish a procedure of the quality control and fix the system which we set up an inspection appliance, a measuring instrument, and can support a guarantee of quality. In addition, we examine quality contents regularly and work on continuous quality improvement at our whole Hamada company.































(Flow rate measuring)

Product warranty and period

Thank you for choosing our products. When placing an order for a product, the following conditions apply unless noted otherwise in the quotation, contract, or specifications.

Details of warranty

OWarranty period

The warranty period is each series are difference. Please ask our agency.

Scope of warranty

In the event that our product fails due to our responsibility within the warranty period, we will provide substitutes or repair the product in question free of charge at our factory. Damage due to any reason for which we are not responsible, as well as opportunity loss for the customer, passive damage, secondary damage, accident compensation, damage to products other than ours, and others resulting from the failure of our products, is not covered by our warranty.

Cases not covered by warranty

- a) The cases shown bellow are not covered by the warranty even if they occur within the warranty period:
 Failure due to incorrect usage or improper repair or remodeling(Including cases where the conditions of usage differ from the manufacturing specifications)
- b) Damage or failure due to dropping the product after purchase.
- c) Failure due to fire, earthquake, flood, lightning, or other natural disaster.
- d) Failure due to entry of foreign matter come from outside.
- e) Failure due to specific problem resulting from combination with incorporated equipment.
- f) Cases where we consider that we are not responsible The customer's and its client's opportunity loss, as well as damage to products made by other companies and other damage, due to the failure of our products are not covered by our warranty.

Model Number Configuration

Floor Drain & Cleanout

514WT=Loose Grate and Cover Type 512=Screwed Blind Cover Type 397=Screwed Grating Type 340=Round Shape Top with Screwed Blind Cover 394=Round Shape Top Grating with Trap

395=Round Shape Top Grating 396=Round Shape Top & Insect Proof Grating,etc

SS=Stainless Steel 304 SSM=Stainless Steel 316 CP=Brass + Chrome Plated* Square Size

150×150, 109×109,79×79

H-514WT-PF-SS-0

150×150×4"

Connection

PF=Push Fit Type(standard) ****BSPT** connection is available only for Round Type.

P=Cover Type (*Resurgence)

Option Code

HL=HairLine Finish, AD=Adaptor Reducer EX=Excentrique Adaptor GOLD=Golden color (for C.P.) etc (Customized)

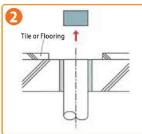
Pipe Size

*Step of Chrome Plating: Nickel Plating $15\sim20\,\mu$ m(Base Plated) + Chrome Plating $0.25\,\mu$ m(Finish Plated)

Floor Drain

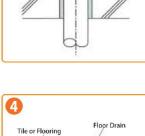
Installation Manual & Handling

When you request reducer, please put requested outlet size as bellow; 4"-3",or 4"-2"

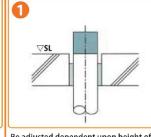


Be adjusted dependent upon height of

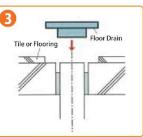
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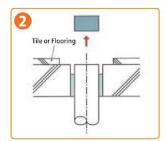
Completed.

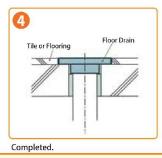


Be adjusted dependent upon height of finished floor.



Install the Floor Drain.





PRECAUTION IN HANDLING OF "SHW" FLOOR DRAINS

MAINTENANCE

Do not put adhesive tape such as masking tape on our products. The chemicals in the tape may damage the plated surface.

WASHING & CLEANING

•Use of chemicals & detergents for cleaning is to be avoided, especialy acid based detergents.

Install the Floor Drain.

●To maintain its beauty, clean regularly with a dry and soft cloth.

PRECAUTION IN KEEPING

- Our Chrome Plated Floor Drain can keep brightness for long years unless otherwise Big mis-usage such as outside use and/or scrub hard etc.
- Direct sun-ray should be avoided when our goods for stored long period of time.

ROUND FERESERIES

H-340-PF CLEANOUT, FOR PVC PIPE, PUSH FIT CONNECTION



BRASS MADE + CHROME PLATED STAINLESS STEEL MADE + POLISHED

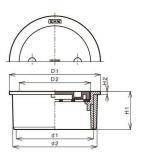
H-340-PF-CP H-340-PF-SS

H-341-PF-CP

H-341-PF-SS

SS316 is available.

	d1	d2	D1	D2	H1	H2
1-1/2"	40	44	50	37	25	2
2"	51	56	62	47	25	2.5
2-1/2"	67	71	78	63	25	2.5
3"	77	83	91	73	25	3
4"	100	107	116	96	25	3
5"	125	131	142	121	31	4
6"	146	154	167	137	32	4



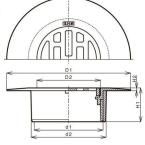
H-341-PF GRATING WITH WIDE FLANGE, FOR PVC PIPE, PUSH FIT CONNECTION



BRASS MADE + CHROME PLATED STAINLESS STEEL MADE + POLISHED

SS316 is available.

Dime	Dimensions.								
	d1	d2	D1	D2	H1	H2			
1-1/2"	40	44	75	37	25	2			
2"	51	56	85	47	25	2.5			
2-1/2"	67	71	105	63	25	2.5			
3"	77	83	115	73	25	3			
4"	100	107	145	96	25	3			
5"	125	131	175	121	31	4			
6"	146	154	200	137	32	4			



H-342-PF CLEANOUT WITH WIDE FLANGE, FOR PVC PIPE, PUSH FIT CONNECTION



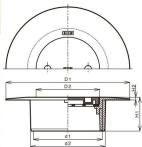
BRASS MADE + CHROME PLATED STAINLESS STEEL MADE + POLISHED

SS316 is available.

H-342-PF-CP

H-342-PF-SS

	d1	d2	D1	D2	H1	H2
1-1/2"	40	44	75	37	25	2
2"	51	56	85	47	25	2.5
2-1/2"	67	71	105	63	25	2.5
3"	77	83	115	73	25	3
4"	100	107	145	96	25	3
5"	125	131	175	121	31	4
6"	146	154	200	137	32	4



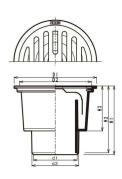
H-394-PF GRATING WITH P-TRAP, FOR PVC PIPE, PUSH FIT CONNECTION



Dimensions.										
	d1	d2	D1	D2	H1	H2	Н3			
75 φ x 1-1/2"	40	44	78	69	70	66	45			
100 ω x 2"	51	56	105	95	70	66	45			

Parts and	Materials.
No	Name

No.	Name	Materials
1	Body	Brass
2	Grating	SUS
3	Socket	PVC



H-395-PF GRATING, FOR PVC PIPE, PUSH FIT CONNECTION

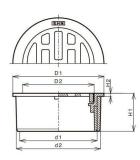


BRASS MADE + CHROME PLATED

STAINLESS STEEL MADE + POLISHED

SS316 is available.

	Dimensions.						
		d1	d2	D1	D2	H1	H2
	1-1/2"	40	44	50	37	25	2
II SOE DE CD	2"	51	56	62	47	25	2.5
H-395-PF-CP	2-1/2"	67	71	78	63	25	2.5
	3"	77	83	91	73	25	3
H-395-PF-SS	4"	100	107	116	96	25	3
555 55	5"	125	131	142	121	31	4
	6"	1/16	15/	167	137	32	1



SAKCER & SECOND DRAIN SERIES

NEW ECONOMICAL FLOOR DRAIN

STAINLESS STEEL (SS304,SS316) TOP & STRONG ABS CORE

"SAKURA" is Japanese traditional beautiful flower which is loved by all. Our "SAKURA" series FLOOR DRAIN comes from this SAKURA.

They are beautiful, strong and light.

H-514-WT-PF-SS-ABS(3pcs Type)

EN1253-2

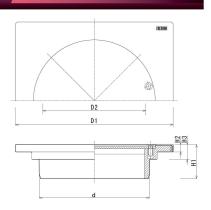
PUSH FIT CONNECTION







Dimensions.						(mm)
	d	D1	D2	H1	H2	H3
150eg v 4"	102	150	QQ.	32	7	16



H-512-PF-SS-ABS

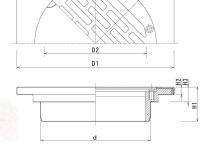
EN1253-2 for 4"

PUSH FIT CONNECTION



CLEANOUT

Dimensions.						(mm)
	d	D1	D2	H1	H2	H3
150sq x 4"	102	150	98	32	7	16



H-397-PF-SS-ABS

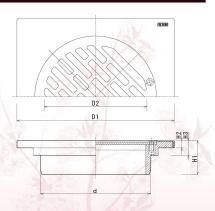
PUSH FIT CONNECTION



GRATING

Dimensions.						(mm)
	d	D1	D2	H1	H2	Н3
150sq x 4"	102	150	98	32	7	16
79sq x 2"	51	79	45	29	4	16

Flow Rute 2":39 ℓ /min*





☆ SUPERIORITY brings better maintenance.(for 4" outlet) Drain trap slot cover can be removed easily.

Drain trap slot cover can be removed easily. Customers can choose many kinds of drain base. Terrain Drain Base is available.

TRADITIONALE BRASS CHROME PLATED SQUARE TYPE SERIES

H-514-WT-PF-CP

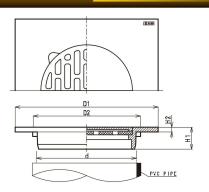
EN1253-2 for 4"

PUSH FIT CONNECTION

LOOSE GRATE&LOOSE BLIND COVER(3PCS)



BRASS + CHROME PLATED



Dimensions.					(mm)
	d	D1	D2	H1	H2
79sq x 2"	51	79	47	20	2.5
109sq x 3"	77	109	73	21	2.5
150sq x 4"	103	150	106 ※	23	2.5

***D2 SIZE IS LARGER THAN SS PRODUCT**

H-512-PF-CP

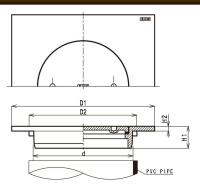
EN1253-2

CLEANOUT(SCREWED BLIND COVER)



BRASS + CHROME PLATED

PUSH FIT CONNECTION



Dimensions.					(mm)
	d	D1	D2	H1	H2
79sq x 2"	51	79	47	20	2.5
109sq x 3"	77	109	73	21	2.5
150sq x 4"	103	150	106%	23	2.5

*D2 SIZE IS LARGER THAN SS PRODUCT

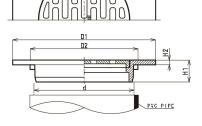
H-397-PF-CP

GRATING(SCREWED GRATE)



BRASS + CHROME PLATED

PUSH FIT CONNECTION



Dimensions.					(mm)			
	d	D1	D2	H1	H2			
79sq x 2"	51	79	47	20	2.5			
109sq x 3"	77	109	73	21	2.5			
150sq x 4"	103	150	106 %	23	2.5			
Y DO CIZE IO LADOED THAN CO DECENIOT								

%D2 SIZE IS LARGER THAN SS PRODUCT



☆ SUPERIORITY brings better maintenance.(for 4" outlet) Drain trap slot cover can be removed easily.

Drain trap slot cover can be removed easily. Customers can choose many kinds of drain base. Terrain Drain Base is available.

TRADITIONALES ELECTIONALES ELEC

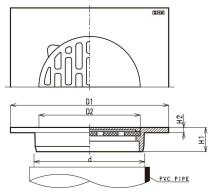
H-514-WT-PF-SS

EN1253-2 for 4"

PUSH FIT CONNECTION

LOOSE GRATE&LOOSE BLIND COVER(3pcs)





 Dimensions.
 (mm)

 d
 D1
 D2
 H1
 H2

 79sq x 2"
 51
 79
 47
 20
 2.5

 109sq x 3"
 77
 109
 73
 21
 2.5

 150sq x 4"
 103
 150
 96
 23
 2.5

STAINLESS STEEL MADE + POLISHED

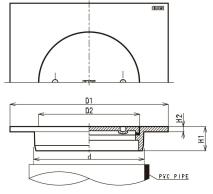
CLEANOUT(SCREWED BLIND COVER)

SS316 is available.

H-512-PF-SS

EN1253-2 for 4"

PUSH FIT CONNECTION



Dimensions.					(mm)
	d	D1	D2	H1	H2
79sq x 2"	51	79	47	20	2.5
109sq x 3"	77	109	73	21	2.5
150sq x 4"	103	150	96	23	2.5

STAINLESS STEEL MADE + POLISHED

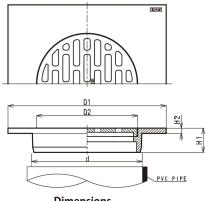
SS316 is available.

H-397-PF-SS

EN1253-2 for 4"

GRATING(SCREWED GRATE)

PUSH FIT CONNECTION



Dimensions.					(mm)	*
	d	D1	D2	H1	H2	Flow rate
79sq x 2"	51	79	47	20	2.5	48 ℓ/min
109sq x 3"	77	109	73	21	2.5	156 ℓ/min
150sq x 4"	103	150	96	23	2.5	246 ℓ/min

%Flow rate measured under the secondary side open. (Refter to P3)

STAINLESS STEEL MADE + POLISHED

SS316 is available.

TRADITIONALE BRASS CHROME PLATED SQUARE TYPE SERIES

H-514-WT-P-CP

COVER TYPE CONNECTION

LOOSE GRATE&LOOSE BLIND COVER(3PCS)



BRASS + CHROME PLATED



*GOLDEN COLLOR IS AVAILABLE Model: H-514-WT-P-GOLD

DI DE PICE PICE PICE

imensions.	d	D1	D2	H1	(mn
79sq x 2"	56.5	79	59	20	2.5
109sq x 3"	82.5	109	86	21	2.5
150sq x 4"	110.5	150	110	23	2.5

H-512-P-CP

CLEANOUT(SCREWED BLIND COVER)

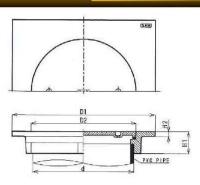


BRASS + CHROME PLATED



*GOLDEN COLLOR IS AVAILABLE Model: H-512-P-GOLD

COVER TYPE CONNECTION



	d	D1	D2	H1	H2
79sq x 2"	56.5	79	59	20	2.5
109sq x 3"	82.5	109	86	21	2.5
150sq x 4"	110.5	150	110	23	2.5

H-397-P-CP

GRATING(SCREWED GRATE)

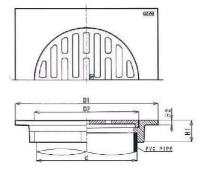


BRASS + CHROME PLATED



*GOLDEN COLLOR IS AVAILABLE Model: H-397-P-GOLD

COVER TYPE CONNECTION



imensions.		(mn			
	d	D1	D2	H1	H2
79sq x 2"	56.5	79	59	20	2.5
109sq x 3"	82.5	109	86	21	2.5
150sq x 4"	110.5	150	110	23	2.5

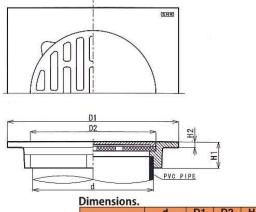
TRADITIONALESS STEEL SQUARE TYPE SERIES

H-514-WT-P-SS

COVER TYPE CONNECTION

LOOSE GRATE&LOOSE BLIND COVER(3pcs)





| Marcolons | Marc

STAINLESS STEEL MADE + POLISHED

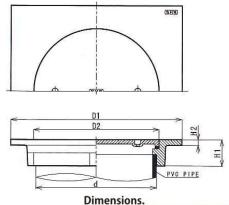
SS316 is available.

H-512-P-SS

COVER TYPE CONNECTION

CLEANOUT(SCREWED BLIND COVER)





Dimensions.		(mm)			
	d	D1	D2	H1	H2
79sq x 2"	56.5	79	59	20	2.5
109sq x 3"	82.5	109	86	21	2.5
150sq x 4"	110.5	150	110	23	2.5

STAINLESS STEEL MADE + POLISHED

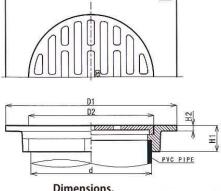
SS316 is available.

H-397-P-SS

GRATING(SCREWED GRATE)



COVER TYPE CONNECTION



Dimensions.					(mm)	*
	d	D1	D2	H1	H2	Flow rate
79sq x 2"	56.5	79	59	20	2.5	48 ℓ/min
109sq x 3"	82.5	109	86	21	2.5	156 ℓ/min
150sq x 4"	110.5	150	110	23	2.5	246 ℓ/min

%Flow rate measured under the secondary side open. (Refter to P3)

STAINLESS STEEL MADE + POLISHED



NEW STYLE RECESSED FLOOR DRAIN ~ "EN1253-2:2015 Class K3".

HI-DRAIN blends into other tiles, which makes the floor Stylish & Elegant ! HI-DRAIN is the high-end model of floor drain. **Purposes** Clubhouse

Special Feature

TRAY COVER SS304(2mm thick) (SS316 is option) BODY -

Same size as 150mm or 100mm square tile. OUTLET

4" outlet for 150mmSQ 2" outlet for 100mmSQ

BODY & TRAY COVER: SS304 (SS316 is available as an option.)

Entrance

Depth of Tray Cover: 12mm

Kitchen, Restaurant Bathroom

- Thickness of Body & Tray Cover: 2mm (folded)
 - Old "H-515-PF" has been changed model number to "H-515-PF-SA". (Specification of "SA-type" is difference from the above.)
 - New "H-515-PF" has been approved "EN1253-2:2015 Class K3".

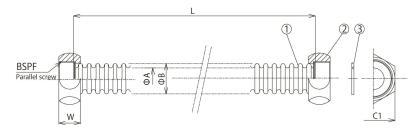


Outlet: 2" or 2-1/2"

STAINLASS STEEL FLEXIBLE TUBE CONNECTOR



Size	(mm)
	LENGTH
1/2"	200,250,300,350,400,450,500,600,700,800,900,1000,
3/4"	-ditto-







			TUBE			NUT		LEGTH	DESIGN	TEMP
SI	ZE	I.D.	O.D.		w	PF	C1		PRESS	RANGE
		φА	φВ	·	VV			L	(MPa)	(Deg-C)
15A	1/2B	12.6	16.0	0.3	12.0	1/2	23.0		0.98	0-120
20A	3/4B	16.5	20.0	0.3	14.0	3/4	/4 29.0		0.90	0-120

3	PACKING	NON-ASBESTOS	1	t=1.5
2	NUT	BRASS+CP	2	C3604BD
1	TUBE	STAINLESS STEEL	1	SS304
No.	NAME	MATERIAL	Qt.	REMARKS

ADAPTOR REDUCER



This is THE 4"outlet model for using 2" or 3" pipe.





EXCENTRIQUE ADAPTOR

Excentrique Adaptor is used with our Chrome Plated series, SS-WD & SAKURA series. series when Gully trap is difficult to take out from drainage. In case, your gully trap is bigger than one of TERRAIN gully trap, we suggest to use this adaptor as bellow photos.









Is it Trouble? It is not material problem.

Is it rust? Material problem?

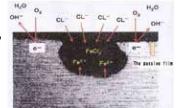


Color is dark brown. There are spots.

It is not material problem. it is rust. However, it is not material problem. It is chloride attack on Stainless Steel. Chloride is included in the detergent, sea water and others.

As a feature, large and small spots appear on surface. If you find this situation in the beginning, you can remove the rust easily, however, if the spot becomes bigger and deep, it is difficult to remove it.

⇒For repair, need to re-polishing.





Color is white.

It is not material problem. it is something adhering of calcium, silicon, magnesium and iron component which is included in water.

→For repair, just wash them with water. In case, the white part is still there, please use "Citric asid-contining" liquid. After washing, please wash again and dry up for keeping clean condition.



Color is brown.

It is not material problem. it is rust. it is. this rust is brought by other iron such as metal chip, metal dust, nail, hair pin and etc.

⇒For repair, need to re-polishing.



Color is yellow or black.

It is not material problem. It is the damages by strong acid or alkali. It is the phenomenon that the material got acid or alkali treatment.

- ⇒For repair SS products, need to re-polishing.
- ⇒For repair Chrome plated products, it is impossible to repair.





Yes, it is real Stainless Steel. However, It is not material problem. it is rust. Machined, Pressed & Polished products has magnetic property.

SS304(CF8) & SS316(CF8M) are common Austenite Stainless Steel which does not have magnetic property.

However, after mechanical working(machining, pressing, vending, polishing, welding and etc.), the Austenite metallographic structure exchanges to Martensite partly.

Chemical components and Mechanical Characteristic are not difference, from SS standard, therefore, Corrosion-resistant is same as SS Standard (SS304, SS316 and etc.).

Projects



















(random order)

- Abu Dhabi International Airport
- Al Markaz
- Aramco Rabigh Gas Plant
- Dubai International Airport T-3
- Ferrari World
- Habshan 5process plant
- King Faisal University
- Mac Donald's
- OLAYA Towers
- SABIC Housing
- Yas Mall

- Al Maktoum Hospital,
- Al Sahel Towers
- Cristal Hotel
- Emirates International Schools
- GOSI Housing,
- Holiday Inn Hotels
- Le Meridien Hotels & Resorts
- Marriott Int. (Sheraton Hotels)
- Qassim University
- Seba Tower
- Yas Marina Hotel

- Al Marfa Port Landside Development
- Aramco Residence
- Civil Defence Bidgs-AUH
- Etihad Towers
- GRAND HYATT Hotels
- King Abdul Aziz University
- Lifco International
- National Guard Housing-KSA-
- Ruwais Housing Complex
- The dome tower Jumeirah lake towers

etc.

DANINESESKUN

High Quality Multi Function Heat Insulating Paint

断熱人。 DAN-NETSU KUN

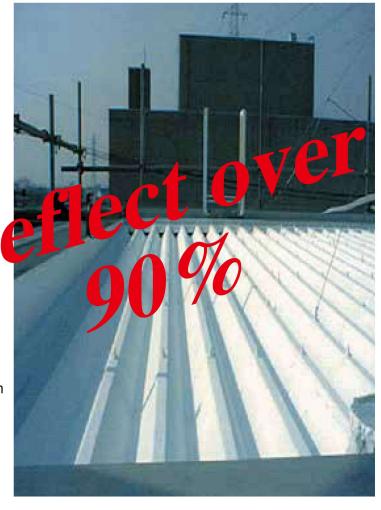
Save Energy!!



R

Micro special ceramic beads in DAN-NETSU KUN make a heat insulation layer which reflects radiation heat energy (hot and cold).

DAN-NETSU KUN helps you save money!



Easy to use!!



DAN-NETSU KUN is a water-borne paint and does not contain any organic solvents. Therefore, it is very easy to handle and environmental friendly.

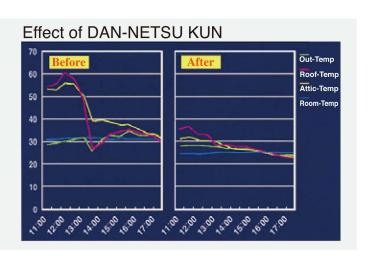
You can use tap water for dilution. DAN-NETSU KUN can be applied as any ordinarypaint with a brush, sprayed or with a trowel.

Case1

Gymnastic Hall

After painting DAN-NETSU KUN, all temperatures were dramatically reduced, especially "roof temperature" and "attic temperature". Before painting, the "room temperature" was higher than the outside temperature.

After painting DAN-NETSU KUN, the room temperature became lower than the outside temperature. In this case, DAN-NETSU KUN was painted ONLY on the roof surface of the gymnastic hall.



Case2

Heat Pipe Line

After applying DAN-NETSU KUN, the surface temperature of the pipe line was reduced by more than 50 deg.C!! DAN-NETSU KUN will help prevent contact burns of workers by greatly reducing surface temperatures. And in case of pipe lines, such as cold or hot water pipe line, DAN-NETSU KUN keeps the fluid temperature and reduces energy loss.



More than 50°C reduced!!





Multi function

Benefits of using DAN-NETSU KUN:

- Reduces both hot and cold energy loss
- Waterproof
 Aids in burn prevention
- Aids in soundproofing

Applications

- Roofs and walls (inside/outside)
- Pipe lines
- Boilers

- Containers
- Machine cases and covers
- Many other applications

Characteristics

Thermal conductivity	0.015W/mK (0.013 kcal/m.h.degC.) (1mm thickness)	Temperature gradient method
Impact resistance	No crack and no peel-off by deforming (weight :500g , Drop height :350mm)	JIS K 5400
Tensile strength	0.3 N/mm2 (3.1 kgf/cm2)	JIS K 7113
Accelerated weather resistance	No abnormality for1000 hours	JIS K 5600
Salt water resistance	No abnormality for 120 hours (3W/V% salt water)	JIS K 5400

Specifications

Solvent	Water (water borne paint)
Content	14kg
Colors	about 100 colors
Operating Temp.	-100 ∼ 200 °C
Painting method	Brush, Roller, Spray, Trowel

^{※)} DAN-NETSU KUN is special and water borne paint. Therefore, please use up within 3-4 months after production to keep its quality.
Do not keep DAN-NETSU KUN in your stock yard or building site for a long time to avoid rotting solvent

water or drying out.





Solution for bad odor in your room Air-cleaning wall-coverings ®



'Air-cleaning wall-coverings TF-V'

decompose bad odor ingredients into water and carbon dioxide by its cycled semipermanent deodorizing function.

Its effects last repeatedly and keep air always clean and fresh.

It is safe.

The safety of the chemicals are confirmed by various tests designated by "SEK standard."

It is high tolerant.

It is high tolerant. It cleared the tests to confirm its effect after wiping the surface for 100 times. It is confirmed that its effects after wiping changes little comparing with it before use.

Sufficient effects.

Sufficient effects can be obtained by using these products on four walls in a 6-mat tatami room.
We recommend to use the products on four walls, but theoretically using the products on three walls could produce sufficient effects.

Its effects last semipermanently.

Deodorizing mechanism employing catalysis last semipermanently.

Mechanism of cycle deodorizing of 'Air-cleaning wall-coverings TF-V'

'Air-cleaning wall-coverings TF-V' has unique cycled deodorizing mechanism. It continues absorbing, decomposing and destroying bad odor ingredients semipermanently.

POINT 1

- **⑤**After emission, TRIPLEFRESH gains its original state. (Catalyst does not affect original material.)
- ●Bad odor ingredients are decomposed into water and carbon dioxide(CO2) and emitted into air

dioxide (CO2) and emitted into air.

ecompositio

●TRIPLEFRESH is processed(fixed) on the surface of 'Air-cleaning wall-coverings TF-V.'

②Bad odor ingredients are touched on TRIPLEFRESH on the surface by the of flow air and absorbed in TRIPLEFRESH.

cycled deodorizing

bad odor ingredients

absorption

Unique deodorizing performance is a feature of TRIPLEFRESH.

It applied TRIPLEFRESH which enables cycled deodorizing as absorption → decomposition → recycle. It is a unique deodorizing chemical with high quality and reputation.

TRIPLEFRESH (Image)

TF metallic salt It decomposes bad odor ingredients into water and carbon dioxide (CO2) by catalysis.

> TF nitrogen compound It absorbs and decomposes aldehyde ingredients.

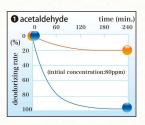
- Absorbed ingredients are decomposed into water and carbon dioxide(CO2)by catalysis.
- As long as air flows, it continues absorbing and decomposing bad odor ingredients.
- ** Metallic salt posesses catalysis and changes little after decomposition of bad odor ingredients and its performance keeps its original power.

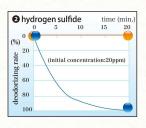
'Air-cleaning wall-coverings TF-V'

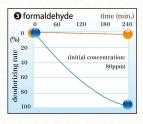
'Air-cleaning wall-coverings TF-V' deodorizing performance test (Suminoe method)

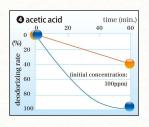
High performance data of bad deodorizing performance are obtained.

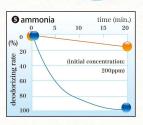
POINT 2

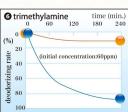


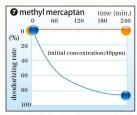


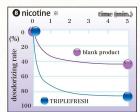


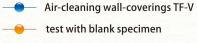










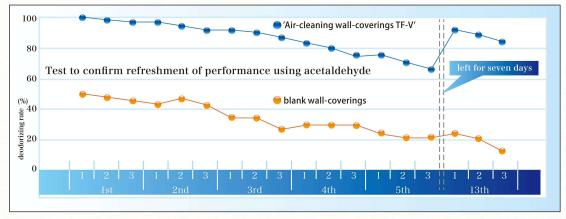


**As per deodorizing performance test for nicotine As nicotine gas is not stabilizing in room temperature, different test method is used. Data in the above chart is data from deodorizing test method for TRIPLEFRESH (TF).

Performance refreshing test to prove cycled deodorizing of 'Air-cleaning wall-coverings TF-V' (Suminoe method)

Refreshment of high deodorizing performance comparing with blank product is confirmed.

A test method to confirm refreshment and change of deodorizing performance through repeated deodorizing tests of 'Air-cleaning wall-coverings TF-V'.

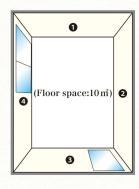


As shown in the left chart, it is confirmed that blank products stop absorbing ingredients and are saturated after a set of time, while 'Air-cleasning wall-coverings TF-V' refreshes deodorizing performance after left out for a week.

POIN

Figures in the chart are not guranteed figures.
They vary by room conditions.

Guideline of effective space of 'Air-cleaning wall-coverings TF-V'





Recommended space are 4 walls $(30\,\text{m}^3)$, but 3 walls $(abt.22\,\text{m}^3)$ are theoretically enough to obtain sifficient effect. In combination with wall-coverings on ceilings, more effect can be obtained.

Effect can be obtained by using this product on 4 walls in a room with a space of up to 100 m.

A 12-mat room in a business hotel

12-mat room (Floor space 19m², ceiling height 2.5m) ··· Effect can be obtained by using this product on 4 walls.

A bangueting hall

Middle-sized banqueting hall (floor space $300\,\text{m}^2$, ceiling height 3.0m) ··· Using this product on 4 (all) walls and ceilings is recommended.

** Space mentioned above is a guideline. The more space this product is used, the more effect is expected. Senced effect varies by the circumstances or each individual who experiences.

Odors which 'Air-cleaning wall-coverings TF-V' cannot absorb and decompose ··· Aromatic compounds as incense, perfume, toluen, xylene, etc. and mould odor

A group of materials called 'Aromatic' have complicated molecule structures, and moulds are of many kinds and also have complicated molecule structures, they will not be decomposed by 'Air-cleaning wall-coverings TF-V.'

Particular odor from an air-conditioner is considered as one of materials which are difficult to be decomposed.

