

**S.H.W.**<sup>®</sup>

CAT.NO.41

# Floor Drains, Cleanouts, Gratings and Flexible Tube Connectors



HAMADA MFG. CO., LTD.

OSAKA

**Japan**

# Site Human Wisdom

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

<b>Firm name</b>	HAMADA MFG.CO.,LTD.
<b>Foundation</b>	April, 1908
<b>Established</b>	22nd June, 1962
<b>Capital</b>	10,000,000JPY(Authorized 12,500,000JPY)
<b>Address</b>	2-12,3-Chome Itachibori Nishi-ku Osaka, Japan (POSTAL CODE) 550-0012
<b>Tel/Fax</b>	+81-6-(6541)-5439/+81-6-(6541)-5954
<b>President</b>	Takeshi Hamada
<b>Trade Mark</b>	
<b>URL</b>	<a href="http://www.s-h-w.net">http://www.s-h-w.net</a>

## ● OUT LINE OF CORPORATE HISTORY

- 1908** 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.
- 1928** Our former President, Mr. Isamu Hamada, opened a sales branch in Nishi-ku, Osaka, Japan.
- 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.
- 2016** 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 reception 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 :

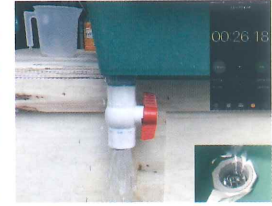
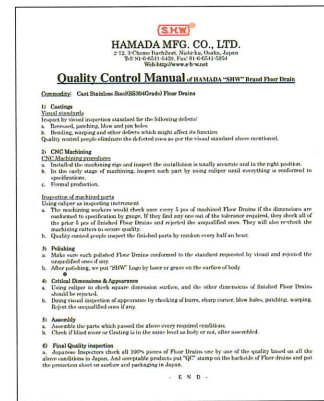
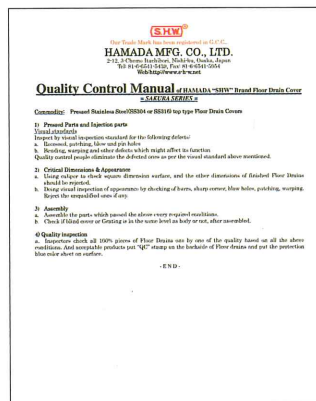
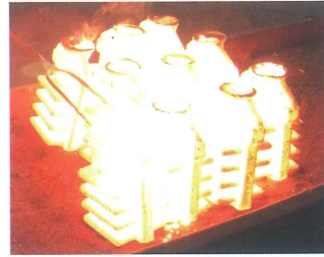
"SHW" Hamada gratings ref : H-397-PF 4" (Traditional series) has heavy duty performance and is capable of withstanding a load of upto  $5 \text{ kgs/cm}^2$  without any fracturing to the grating.

Sakura series is also has great performance against load. There is no deformation under  $3 \text{ kgs/cm}^2$ . The grating part & other parts do not break under  $10 \text{ kgs/cm}^2$ .



# Commitment to Quality

We continue producing Floor Drains & Flexible connectors 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

### ① Warranty period

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

### ② 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.

### ③ Cases not covered by warranty

a) The cases shown bellow are not covered by the warranty even if they occur within the warranty period:

- a) 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

### Material

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

### Square Size

150×150, 109×109,79×79

# H-514WT-PF-SS-●●-●● 150×150×4"

### Connection

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

### Option Code

HL=HairLine Finish,  
 AD=Adaptor Reducer  
 EX=Excentrique Adaptor  
 WD=Wide Drainage area  
 etc (Customized)

### Pipe Size

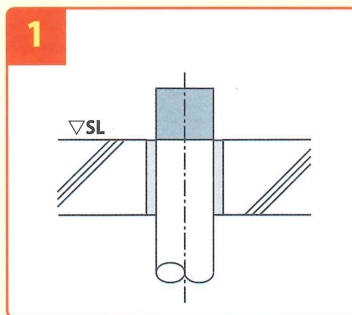
\*Cover Type connection has been obsolete.

\*Step of Chrome Plating: Nickel Plating 15~20 μm(Base Plated) + Chrome Plating 0.25 μm(Finish Plated)

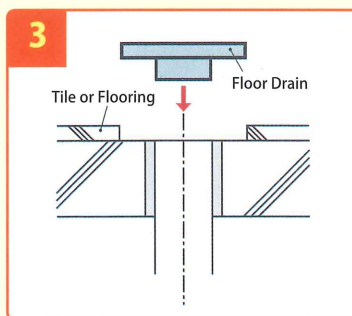
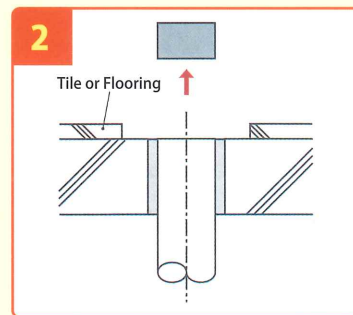
## Installation Manual & Handling

### PUSH FIT CONNECTION

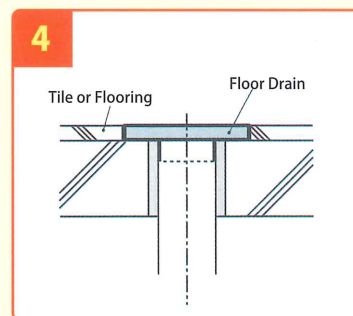
When you request reducer, please put requested outlet size as below;  
 4"-3", or 4"-2"



1 Be adjusted dependent upon height of finished floor.



3 Install the Floor Drain.



4 Completed.

## 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, especially acid based detergents.

### KEEPING

- 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.

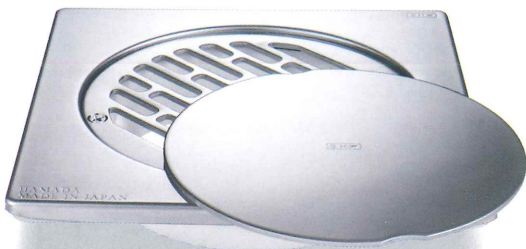
# SAKURA FLOOR DRAIN SERIES

NEW ECONOMICAL FLOOR DRAIN  
**STAINLESS STEEL (SS304,SS316) TOP & STRONG ABS CORE**

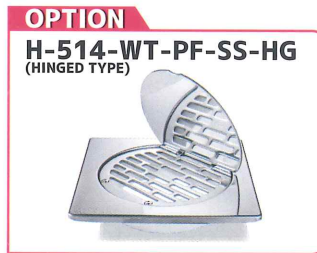
“SAKURA” is Japanese traditional beautiful flower which is loved by all. Our “SAKURA” series FLOOR DRAIN comes from this SAKURA. They are beautiful, strong and light.

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

PUSH FIT CONNECTION

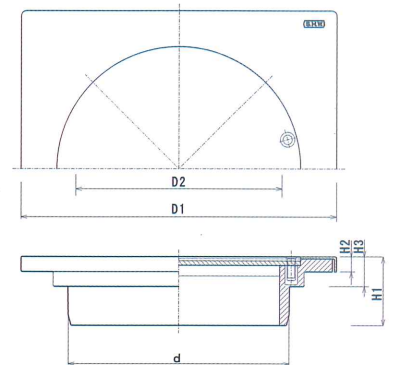


FLOOR DRAIN



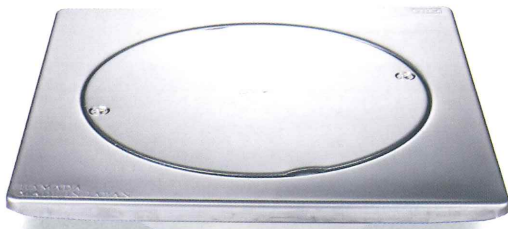
Dimensions. (mm)

	d	D1	D2	H1	H2	H3
150sq x 4"	102	150	98	32	7	16



## H-512-PF-SS-ABS

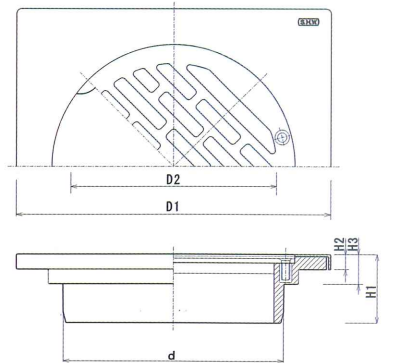
PUSH FIT CONNECTION



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

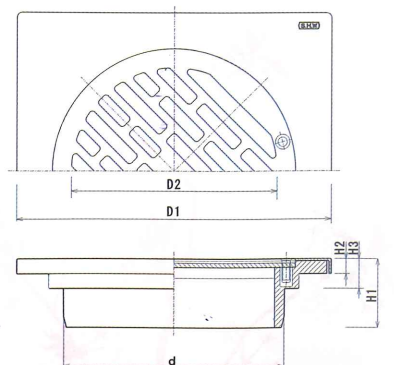


GRATING

Dimensions. (mm)

	d	D1	D2	H1	H2	H3
150sq x 4"	102	150	98	32	7	16
79sq x 2"	51	79	45	29	4	16

Flow Rate 2":39 ℓ /min\*



☆**SUPERIORITY** brings better maintenance.(for 4" outlet)

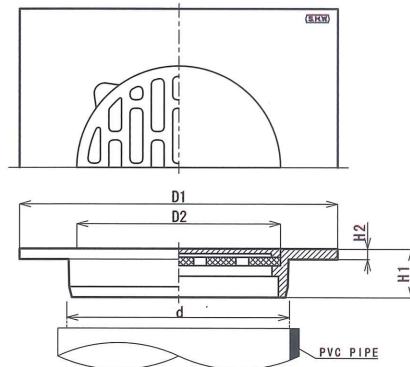
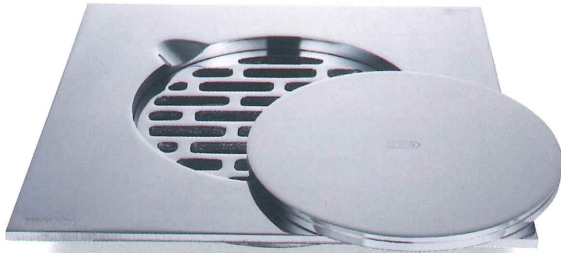
Drain trap slot cover can be removed easily.  
 Customers can choose many kinds of drain base.  
 Terrain Drain Base is available.

# TRADITIONAL STAINLESS STEEL SQUARE TYPE SERIES

## H-514-WT-PF-SS

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

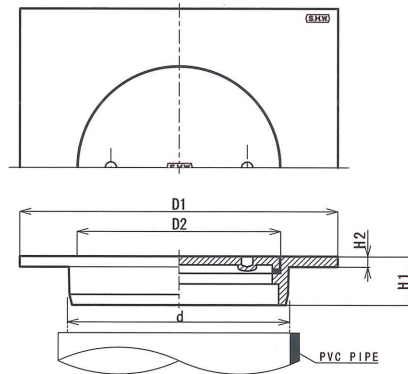
STAINLESS STEEL MADE + POLISHED

※SS316 is available.

## H-512-PF-SS

PUSH FIT CONNECTION

CLEANOUT(SCREWED BLIND COVER)



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

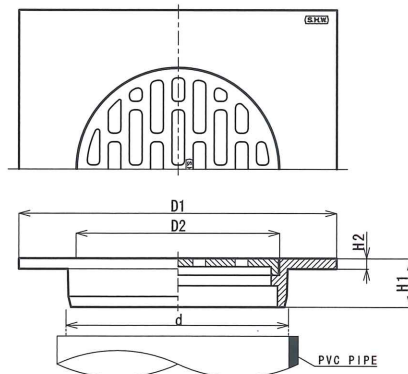
STAINLESS STEEL MADE + POLISHED

※SS316 is available.

## H-397-PF-SS

PUSH FIT CONNECTION

GRATING(SCREWED GRATE)



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

STAINLESS STEEL MADE + POLISHED

※SS316 is available.

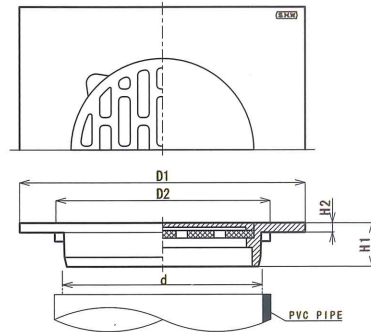
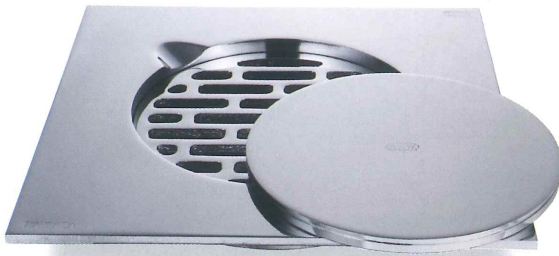
※Flow rate measured under the secondary side open.  
(Refer to P3)

# TRADITIONAL BRASS CHROME PLATED SQUARE TYPE SERIES

## H-514-WT-PF-CP

**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	106※	23	2.5

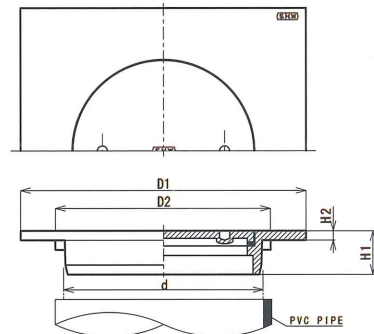
※D2 SIZE IS LARGER THAN SS PRODUCT

**BRASS + CHROME PLATED**

## H-512-PF-CP

**PUSH FIT CONNECTION**

CLEANOUT(SCREWED BLIND COVER)



**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

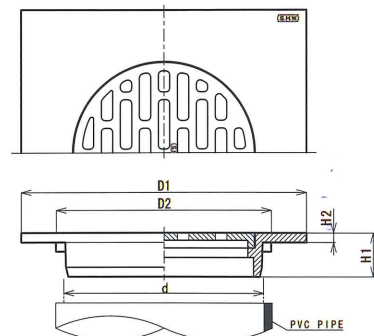
※D2 SIZE IS LARGER THAN SS PRODUCT

**BRASS + CHROME PLATED**

## H-397-PF-CP

**PUSH FIT CONNECTION**

GRATING(SCREWED GRATE)



**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

**BRASS + CHROME PLATED**



★**SUPERIORITY brings better maintenance.(for 4" outlet)**

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



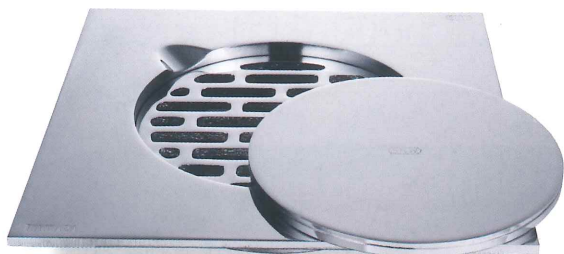
# WIDE DRAINAGE FLOOR DRAIN SERIES

only for  
150mmSq x 4"

NEW BIGGER DRAINAGE FLOOR DRAIN for Gully Trap Maintenance.  
**STAINLESS STEEL (SS304,SS316) TOP & STRONG ABS CORE**

## H-514-WT-PF-SS-WD (3pcs Type)

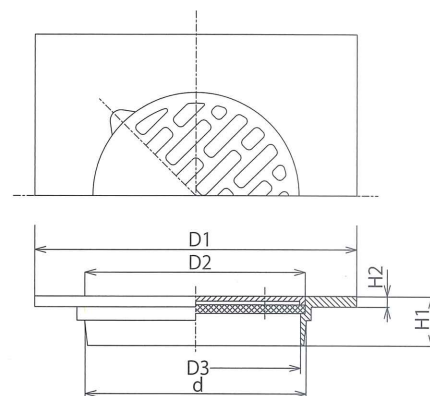
**PUSH FIT CONNECTION**



**FLOOR DRAIN**

Dimensions. (mm)

	d	D1	D2	D3	H1	H2
150sq x 4"	102	150	106	98	23	2.5



## H-512-PF-SS-WD

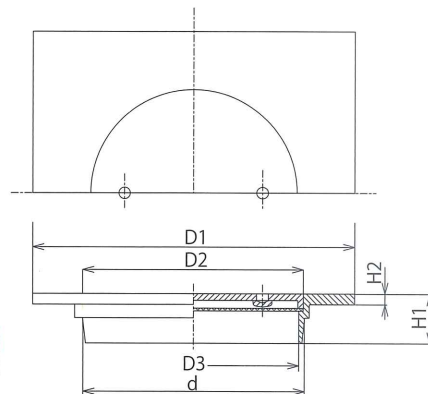
**PUSH FIT CONNECTION**



**CLEANOUT**

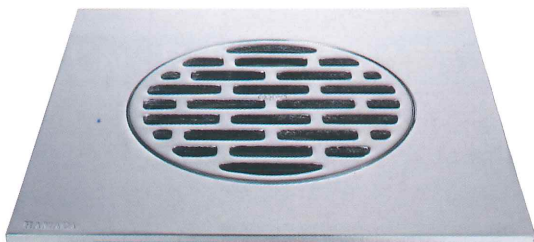
Dimensions. (mm)

	d	D1	D2	D3	H1	H2
150sq x 4"	102	150	106	98	23	2.5



## H-397-PF-SS-WD

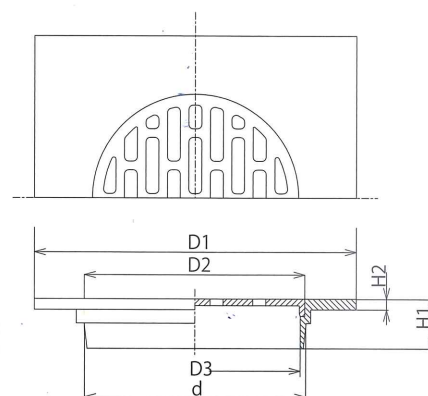
**PUSH FIT CONNECTION**



**GRATING**

Dimensions. (mm)

	d	D1	D2	D3	H1	H2
150sq x 4"	102	150	106	98	23	2.5



☆ **SUPERIORITY** brings better maintenance.(for 4" outlet)

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

# ROUND TYPE SERIES

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



**BRASS MADE + CHROME PLATED**

**H-340-PF-CP**

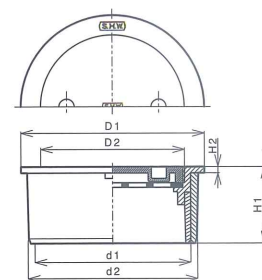
**STAINLESS STEEL MADE + POLISHED**

**H-340-PF-SS**

※SS316 is available.

Dimensions. (mm)

	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**

**H-341-PF-CP**

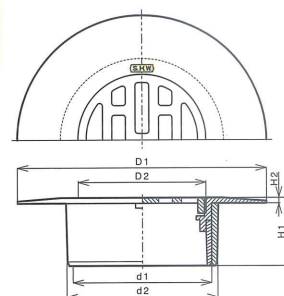
**STAINLESS STEEL MADE + POLISHED**

**H-341-PF-SS**

※SS316 is available.

Dimensions. (mm)

	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**

**H-342-PF-CP**

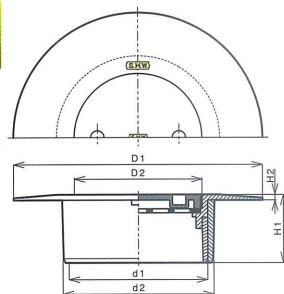
**STAINLESS STEEL MADE + POLISHED**

**H-342-PF-SS**

※SS316 is available.

Dimensions. (mm)

	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

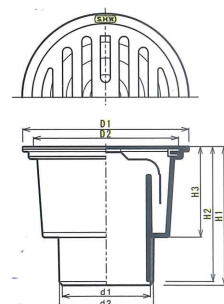


Dimensions. (mm)

	d1	d2	D1	D2	H1	H2	H3
75φ x 1-1/2"	40	44	78	69	70	66	45
100φ x 2"	51	56	105	95	70	66	45

Parts and Materials.

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**

**H-395-PF-CP**

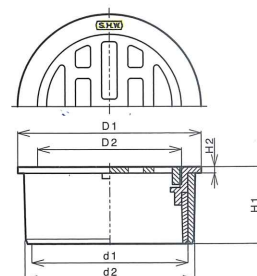
**STAINLESS STEEL MADE + POLISHED**

**H-395-PF-SS**

※SS316 is available.

Dimensions. (mm)

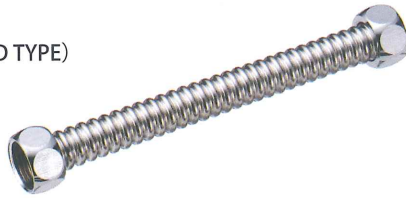
	d1	d2	D1	D2	H1	H2
1-1/2"	40	44	50	37	25	2
2"	51	56	62	47	25	2.5
2-1/2"	67	71	78	63	25	2.5
3"	77	83	91	73	25	3
4"	100	107	116	96	25	3
5"	125	131	142	121	31	4
6"	146	154	167	137	32	4



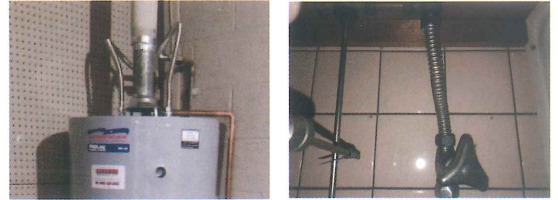
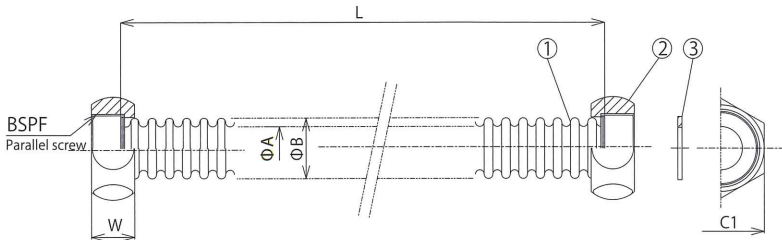
# STAINLESS STEEL FLEXIBLE TUBE CONNECTOR

## H-1525

(FULL CORRUGATED TYPE)



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



SIZE	TUBE		t	NUT			LEGLH	DESIGN PRESS (MPa)	TEMP RANGE (Deg-C)
	I.D. φA	O.D. φB		W	PF	C1	L		
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	29.0			

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.



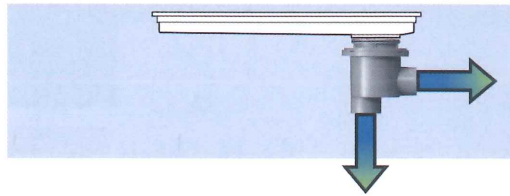
## EXCENTRIQUE ADAPTOR

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.

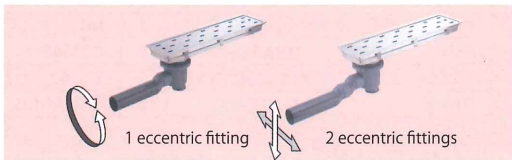


## DRAIN UNIT WITH P-TRAP

This is the new style valuable Floor Drain which meets with your cool tile arrangement. H-TP Series promises the comfortable drain design and environment. P-trap prevents the bad smell and insects from coming up. H-TP Series sweets for 150mm square tile and 200mm square tile.



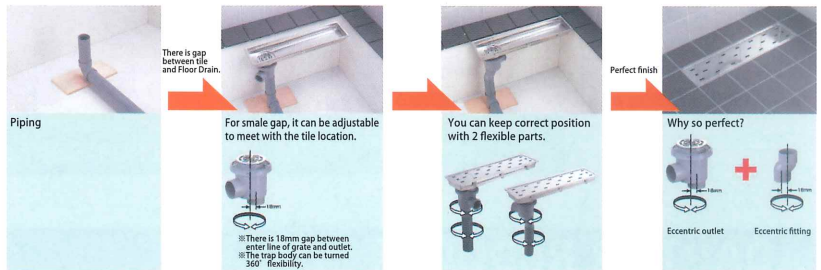
● It can be installed at horizontal and vertical piping.



● In case vertical line.

(One eccentric fitting is included the Packaging a eccentric fitting.)

● You can adjust the Floor Drain location to meet with the tiles.



### Special Feature

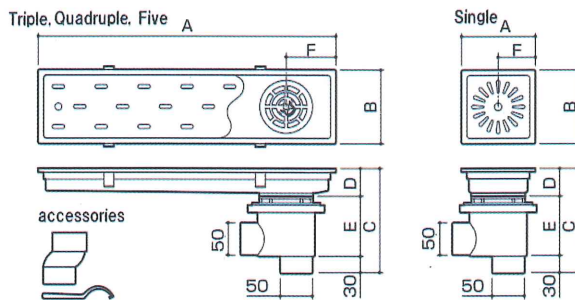
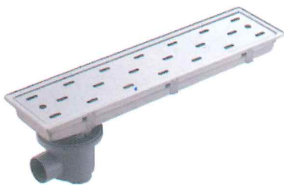
● Even after installing the drain pan, it is possible to adjust the piping position without any problem. Capacity is within 36mm.



● You can chose horizontal line or vertical line without any problem.



● H-TPE-150Q  
TPE



[150mm SQ type]

	A	B	C	D	E	F
H-TPE-150S	148	148	194	57.5	106.5	74
H-TPE-150T	448	148	193.5	57	106.5	100
H-TPE-150Q	598	148	194	57.5	106.5	100
H-TPE-150F	748	148	193.5	57	106.5	100

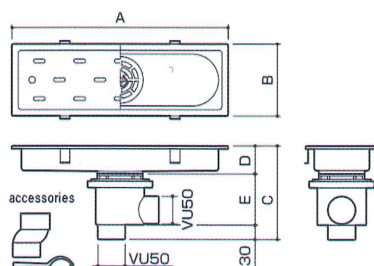
[200mm SQ type]

	A	B	C	D	E	F
H-TPE-200S	198	198	193.5	57	106.5	99
H-TPE-200T	598	198	176.5	40	106.5	150
H-TPE-200Q	798	198	177.5	41	106.5	150

[250mm SQ type]

	A	B	C	D	E	F
H-TPE-250S	248	248	193.5	57	106.5	124

● H-TPC-150T

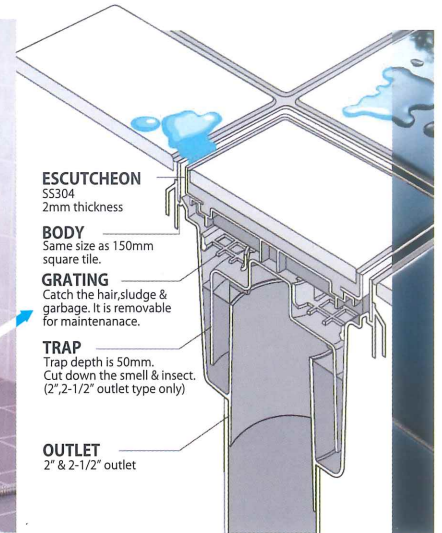
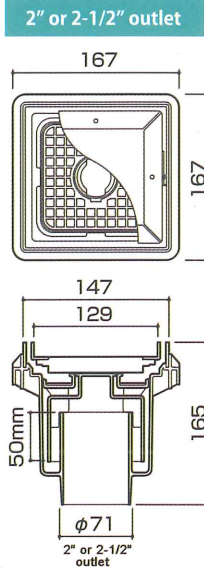


[150mm SQ type (Center Outlet Type)]

	A	B	C	D	E
H-TPC-150T	448	148	192.5	57.5	105
H-TPC-150Q	598	148	194	59	105

# HI-DRAIN

## MODEL No. H-515-PF



## Stylish & Elegant "HI-DRAIN"

### NEW STYLE FLOOR DRAIN

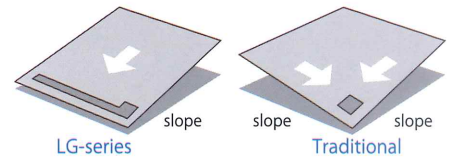
This is the new style Floor Drain which adds a stylish & elegant touch to the interior. The whole floor will be decorated harmoniously. Simple and beautiful design will be attained.

# LG-Series

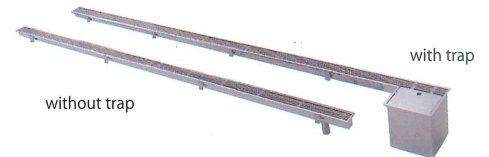


### Speedy drain

Long drainage area bring big flow of sewer water

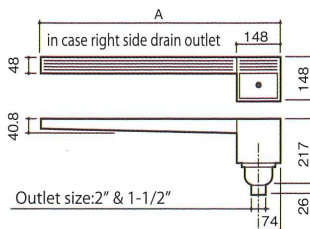


### TWO kinds of drain style



### Elegant finish

Drain Parts are made by Stainless Steel(SS304). The width is only 48mm and ditch width is only 4mm. Elegant outlook of Floor is not spoiled by drainage.

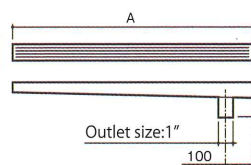


### LINEAR TYPE GRATING with TRAP

Material: Stainless Steel(SS304)

FIG	OUTLET Position	A	unit:mm	Minimum qt.
NT 59112	R	1200		1
NT 59212	L	1200		1
NT 59115	R	1500		1
NT 59215	L	1500		1
NT 59118	R	1800		1
NT 59218	L	1800		1
NT 59121	R	2100		1
NT 59221	L	2100		1

Please choose outlet position RIGHT or LEFT.



### LINEAR TYPE GRATING without TRAP

Material: Stainless Steel(SS304)

FIG	A	unit:mm	Minimum qt.
NL 59512	1200		1
NL 59515	1500		1
NL 59518	1800		1
NL 59521	2100		1

# Is it Trouble? It is not material problem.

## Is it rust? Material problem?

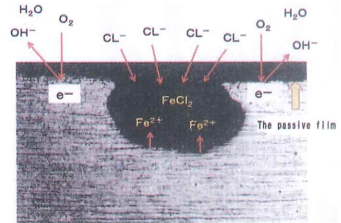


**Color is dark brown. There are spots.**

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 acid-containing" 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.



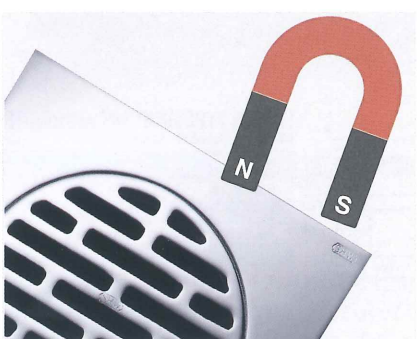
**Color is yellow or black.**

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.

## Magnetic! Is it real SS?



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.

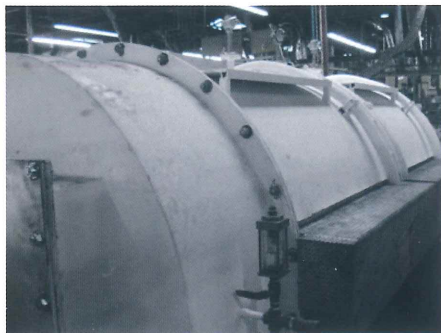
# DAN-NETSU KUN

## High Quality Multi Function Heat Insulating Paint

# 断熱くん

## DAN-NETSU KUN

Save Energy!!



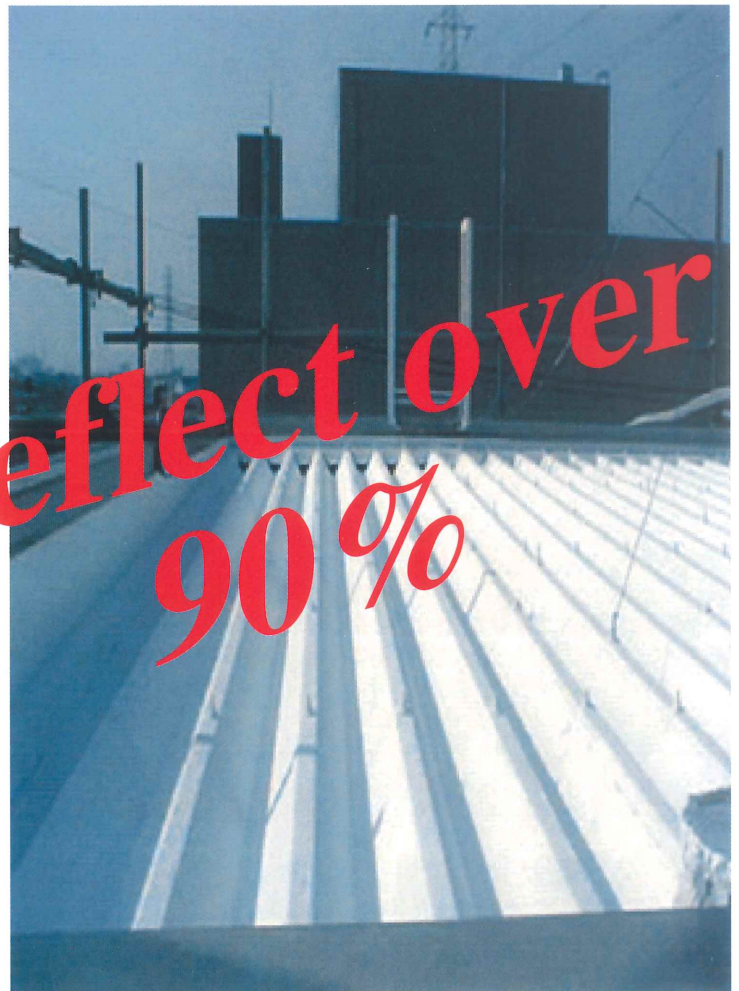
Micro special ceramic beads in DAN-NETSU KUN make a heat insulation layer which reflects radiation heat energy (hot and cold). DAN-NETSU KUN helps you save money!

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 ordinary paint 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.

#### Effect of DAN-NETSU KUN

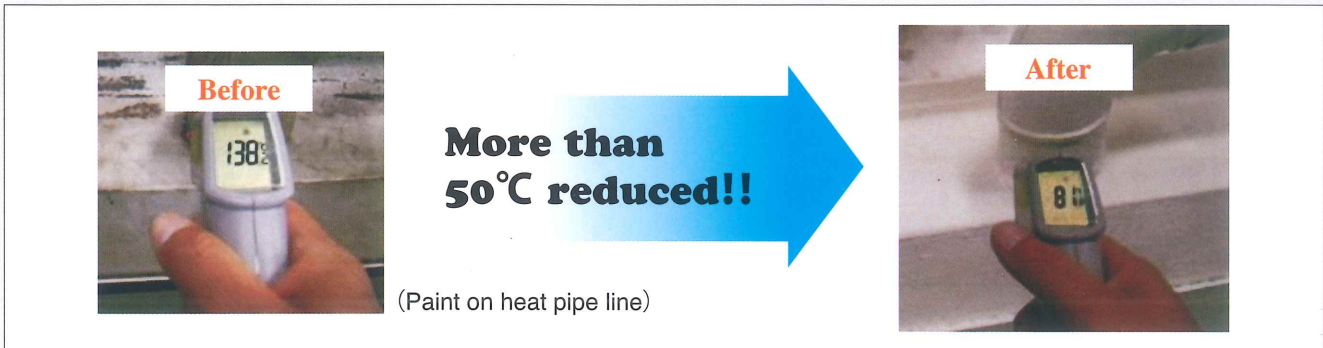




**Case2**

**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.



**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<sup>®</sup>



### '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.

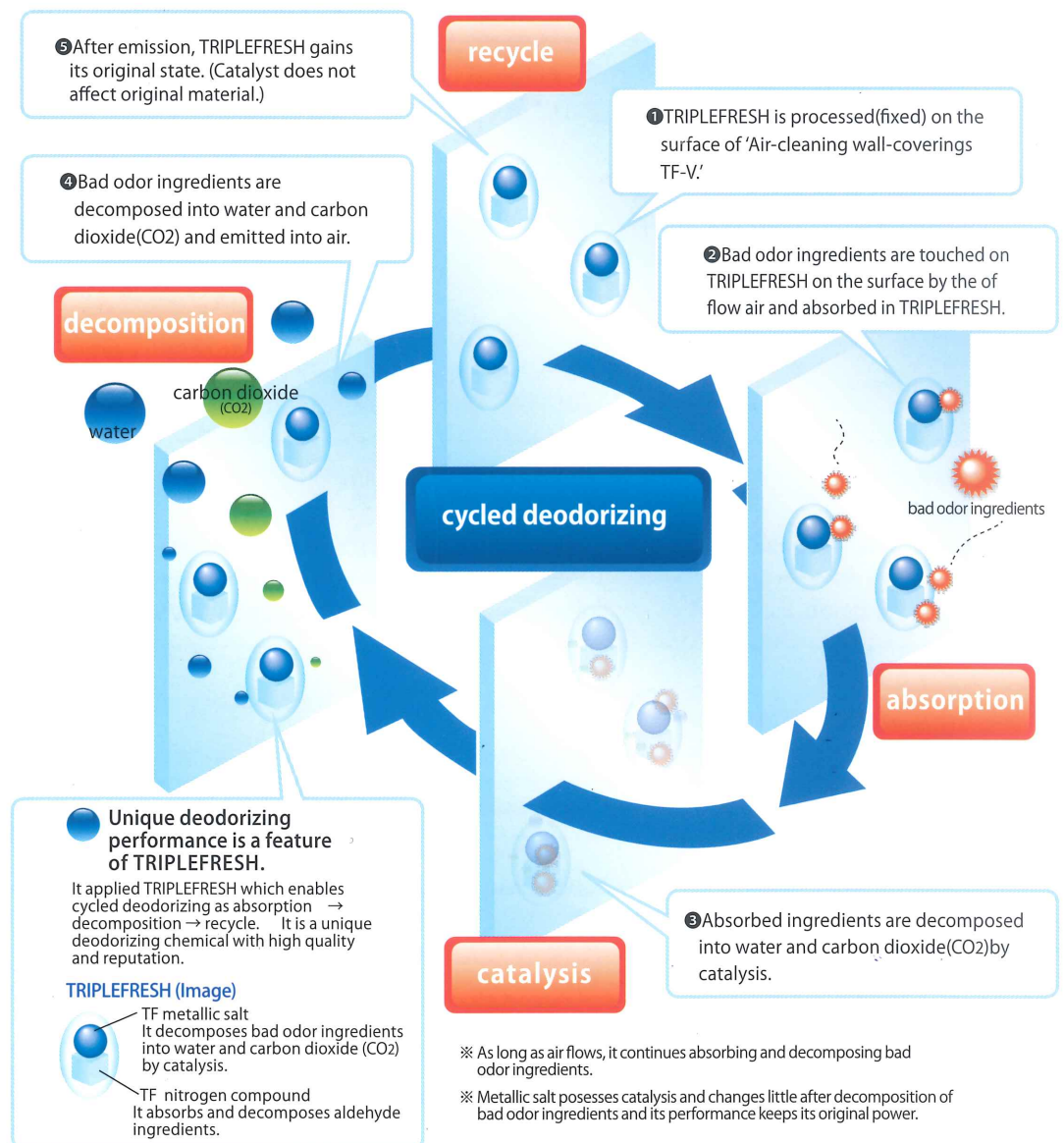
### Its effects last semipermanently.

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**

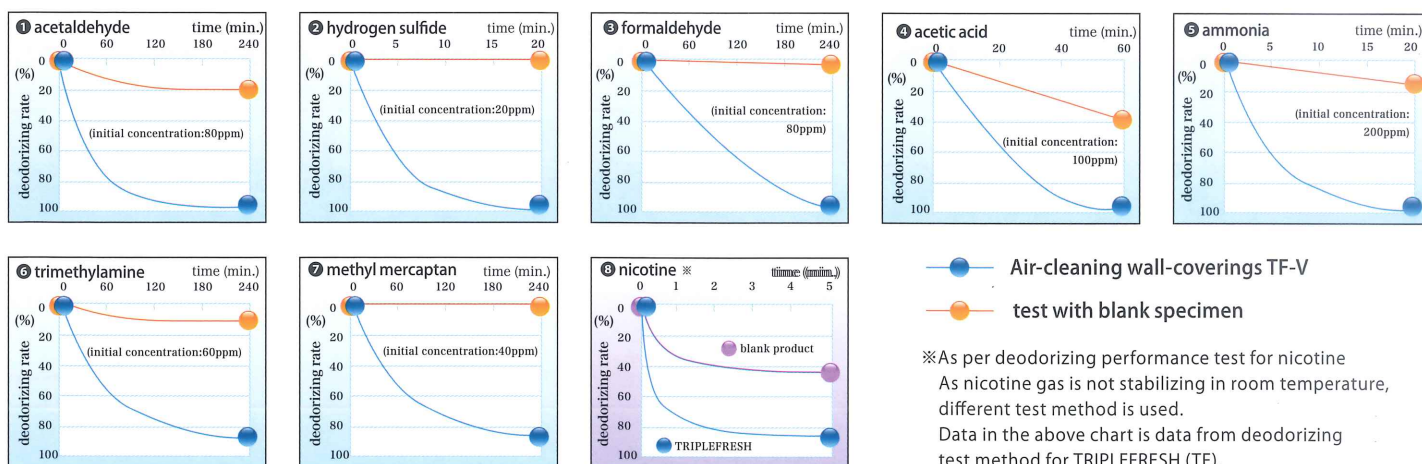


# 'Air-cleaning wall-coverings TF-V'

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

**POINT 2**

High performance data of bad deodorizing performance are obtained.

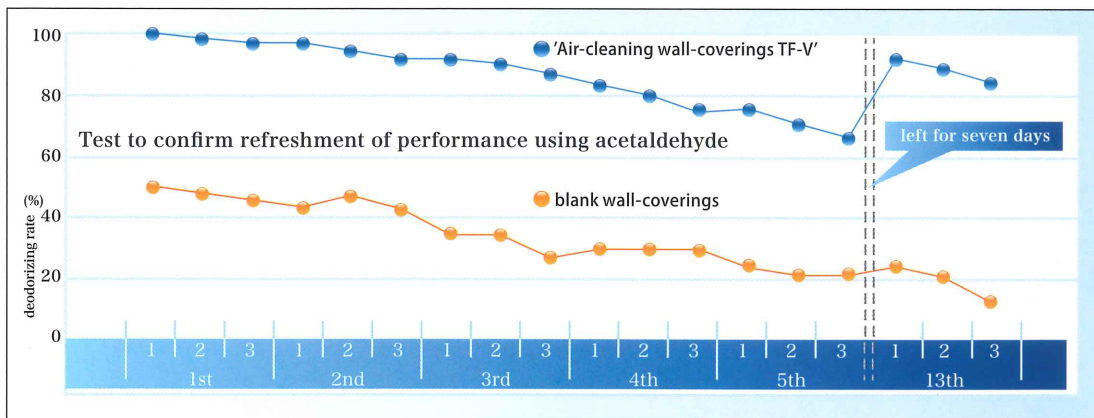


## Performance refreshing test to prove cycled deodorizing of 'Air-cleaning wall-coverings TF-V' (Suminoe method)

**POINT 3**

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'.

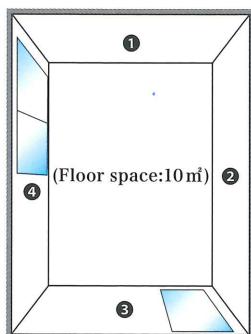


As shown in the left chart, it is confirmed that blank products stop absorbing ingredients and are saturated after a set of time, while 'Air-cleaning wall-coverings TF-V' refreshes deodorizing performance after left out for a week.

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

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

**POINT 4**



Sufficient effect can be obtained by using wall-coverings on four walls in a 6-mat room. (Floor space:10 m<sup>2</sup>. Ceiling height:2.5m)

Recommended space are 4 walls (30m<sup>2</sup>), but 3 walls (abt.22m<sup>2</sup>) are theoretically enough to obtain sufficient 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 100m<sup>2</sup>.

**A 12-mat room in a business hotel**

12-mat room (Floor space 19m<sup>2</sup>, ceiling height 2.5m) ... Effect can be obtained by using this product on 4 walls.

**A banqueting hall**

Middle-sized banqueting hall (floor space 300m<sup>2</sup>, 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. Sensed 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.



**(S.H.W.)<sup>®</sup>**

**HAMADA MFG. CO.,LTD.**

**OSAKA,JAPAN**

**<http://www.s-h-w.net>**

**Distributor**

A large empty rectangular box with rounded corners, intended for a distributor's name and contact information.