Made in Korea

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Part2. Building Materials

# MIRAE CONSTRUCTION PRODUCTS

passway

## PRODUCTS OF MIRAE INDUSTRY

EFFICIENCY

### allows precise construction by a constructor

The problems of existing products are resolved so that convenience and efficiency in the field are increased, and strong fixation and firm connection are available for more accurate and precise works.

COMFORT

### considers the convenience of a user.

We make efforts to improve the convenience of people when residing in a building. The details of our products are differentiated from those of existing ones. Our products significantly decrease the inconvenience frequently experienced by people in their lives.

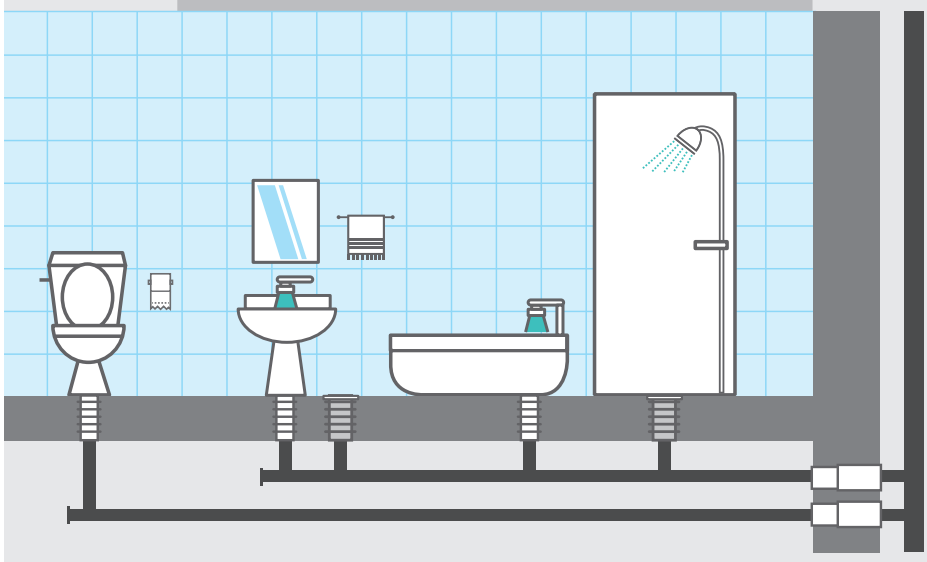
DURABLE

### has a value that gets better as time goes by

From the construction stage, precise and firm construction is available. Thus, there are no problems that may occur due to shoddy and faulty construction over time.

Floor Drains - p. 4

### HOW IT WORKS



Balcony Drain / Roof Drain - p. 7

passway

Wall Sleeve - p. 10

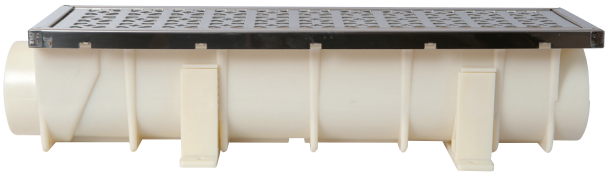
Beam Sleeve - p. 11

Balcony Drain - Vortex - p. 8

Toilet Sleeve - p. 9

Toilet Bowl Sleeve - p. 11

Eccentric Slider Drain - p. 11



Channel Drain - p. 5

Multi-purpose

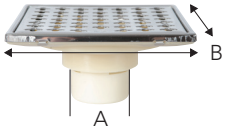
# Floor Drain M-11

Connecting part to Laundry machine
:Chrome plated ABS plastic

※End of part number : Floor (F), Laundry (L)

**Water-holding trap**
blocks odor from the pipe

**Supporting part**
prevents the grate from being bent




**Common Option**
Material: Stainless steel, ABS

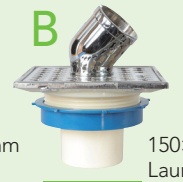
**Selection**
- Connecting Pipe : Φ50, Φ65, Φ75, Φ100
- Grate size: 150×150, 200×200
- Use: Floor, Laundry machine

| A: Pipe Size(Φ) | B: Grate size(mm) | Weight (g) | Product # |
|---|---|---|---|
| 50 | 150x150 | 305 | C40N01F |
| | | 335 | C40N01L |
| 65 | 150x150 | 330 | C40N02F |
| | | 360 | C40N02L |
| 75 | 150x150 | 330 | C40N03F |
| | | 360 | C40N03L |
| 100 | 150x150 | 385 | C40N04F |
| | | 415 | C40N04L |
| | 200x200 | 625 | C40N05F |
| | | 635 | C40N05L |

**Grate Selection**
For Below 3 sets
(M-10, M-9, M-10H)

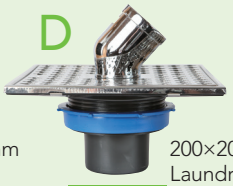
A

150×150 mm Floor
C40N04F

B

150×150 mm Laundry
C40N04L

C

200×200 mm Floor
C40N05F

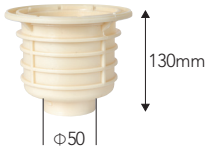
D

200×200 mm Laundry
C40N05L

## Floor Drain M-10

SET CODE

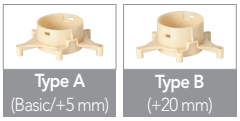
| | | | |
|---|---|---|---|
| A | C40N11F | B | C40N11L |
| C | C40N12F | D | C40N12L |

3110 Fixed Body / ABS




**Common Option**
(Grate : 4 types / Body : 1 type)
Pipe Size: Φ50
Material: Stainless steel, ABS
**Selection**
- Grate size: 150×150, 200×200
- Use: Floor, Laundry machine

Fixing Foot



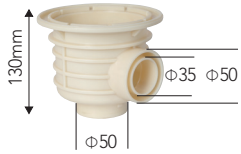

Total Height (mm): 135, 150
Lower part weight (g): 285(+)

## Joint Floor Drain M-09

SET CODE

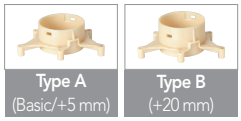
| | | | |
|---|---|---|---|
| A | C40N21F | B | C40N21L |
| C | C40N22F | D | C40N22L |

3111 Fixed Body / ABS




**Common Option**
(Grate : 4 types / Body: 1 type)
Pipe Size : Φ50
Side connecting pipe: Φ35, Φ50
Material: Stainless steel, ABS
**Selection**
- Grate size : 150×150, 200×200
- Use : Floor, Laundry machine

Fixing Foot




Total Height (mm): 135, 150
Lower part weight (g): 320(+)

## Height Adjustable Drain Trap M-10H

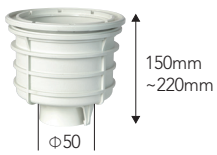
Adjustable in
**15 mm increments**

**Common Option**
(Grate : 4 types / Body : 2 types)
Material: Stainless steel, ABS, PP
**Selection**
- Pipe Size : Φ50, Φ75
- Grate size: 150×150, 200×200
- Use : Floor, Laundry machine

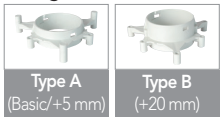
SET CODE

| | | | |
|---|---|---|---|
| A | C40H11F | B | C40H11L |
| C | C40H12F | D | C40H12L |

3112 Adjustable Body / PP




Fixing Foot

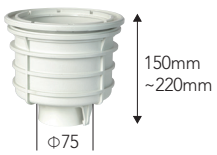



Maximum Height (mm): 225, 240
Lower part weight (g): 475(+)

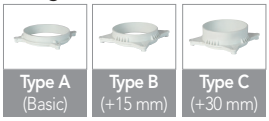
SET CODE

| | | | |
|---|---|---|---|
| A | C40H13F | B | C40H13L |
| C | C40H14F | D | C40H14L |

3113 Adjustable Body / PP

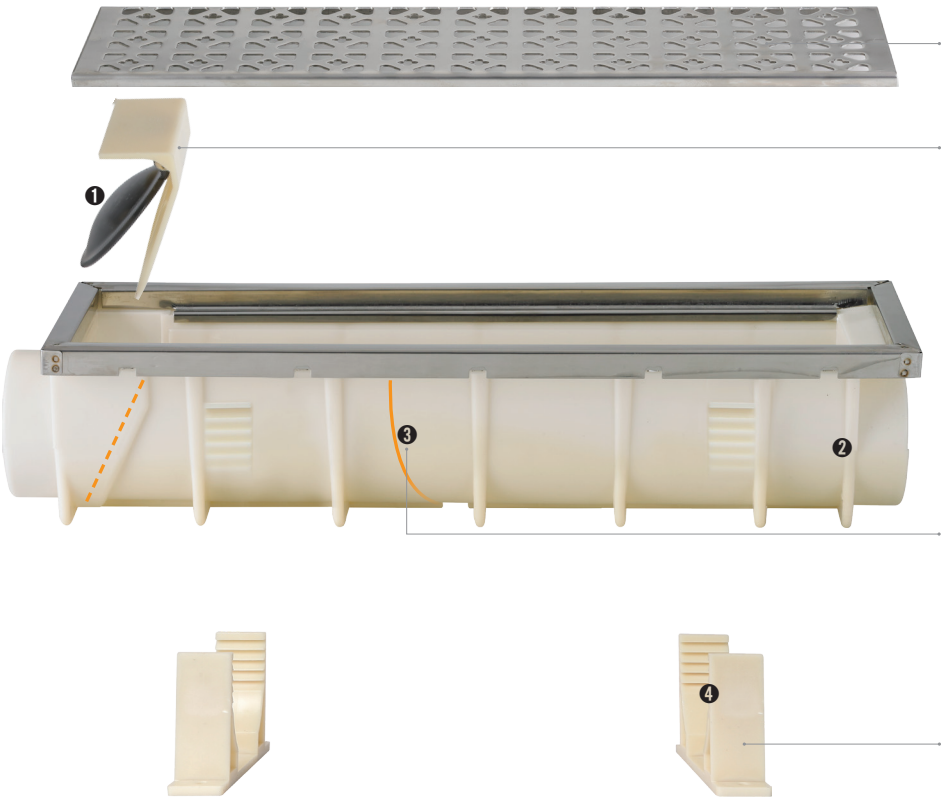



Fixing Foot




Maximum Height (mm): 225, 240
Lower part weight (g): 465(+)

# Channel Drain M-17




1205 (S) 1206 (L)
**Grate**/Stainless steel 304

4113 **Flaps**/ABS

❶ Opened only when the water flows
Prevents odor and insect movement

6118
**End Cap**/ABS

❷ Create a channel as long as you want

3117(S) 3118 (L)
**Body**/ABS
Available in two widths:
500mm, 1,000mm

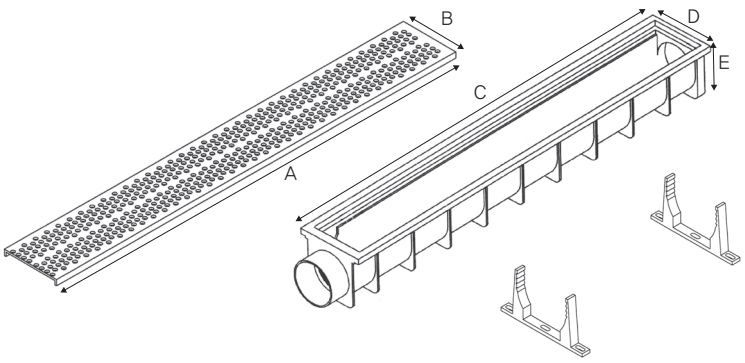
❸ Circular body aiding smooth drainage






5115
**Fixing Feet**/ABS

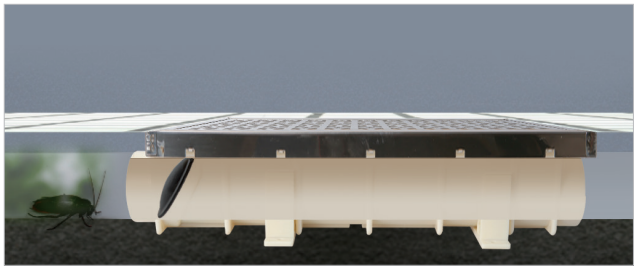
❹ Prevents movement to ensure sophisticated construction.

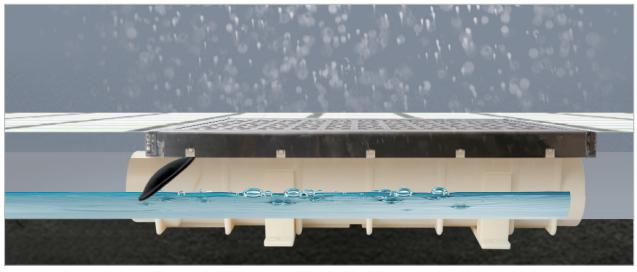



**Common Option**
(Grate/Body 2 Types each)
material: Stainless steel 304, ABS
Pipe Size: Φ75

**Selection**
- Product Length : 500mm, 1,000mm

| Model | SET # | A | B | C | D | E | Outlet (Φ) | Weight (g) |
|---|---|---|---|---|---|---|---|---|
| M-11 | C50N11 | 970 | 120 | 1000 | 150 | 120 | 50, 75 | 2,050 |
| | C50N12 | 470 | 120 | 500 | 150 | 120 | 50, 75 | 3,735 |





Eccentric Slider

# Drain Trap M-8

**Common Option**
(Grate: 2 types / Body: 3 types)
Grate size: 200×200
Material: Stainless steel, ABS, PP
**Selection**
- Connecting pipe: Φ50, Φ75, Φ100
- Use: Floor, Laundry machine

**Grate** rotatable in 360°
Height is adjustable in mm slightly.

**Slide plate** that can be moved left and right according to the tile angles

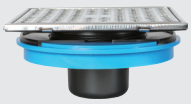
**Cup** holding stagnant water to prevent odor from the pipe

**Foot** for fixing the lower body

**The lower body** is adjustable by 15 mm from 150 mm to 210 mm according to the concrete thickness.

## • Grate Selection

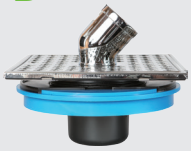
A Floor



C45N00L

Size: 200×200 mm
Weight(g): 835

B Laundry Machine



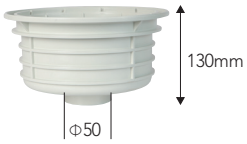
C45N00F

Size: 200×200 mm
Weight(g): 845

## • Body Selection

SET CODE
A C40N41F B C40N41L

3114 Fixed Body / PP

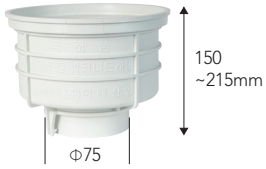



Fixing Foot

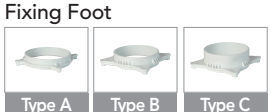
Maximum Height (mm): 135, 150
Lower part weight (g): 425(+)

SET CODE
A C40N42F B C40N42L

3115 Adjustable Body / PP



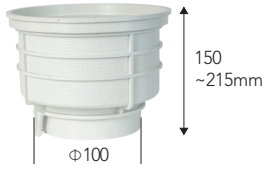

Fixing Foot



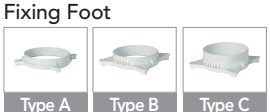

Maximum Height (mm): 215, 230, 245
Lower part weight (g): 560(+)

SET CODE
A C40N43F B C40N43F

3116 Adjustable Body / PP




Fixing Foot

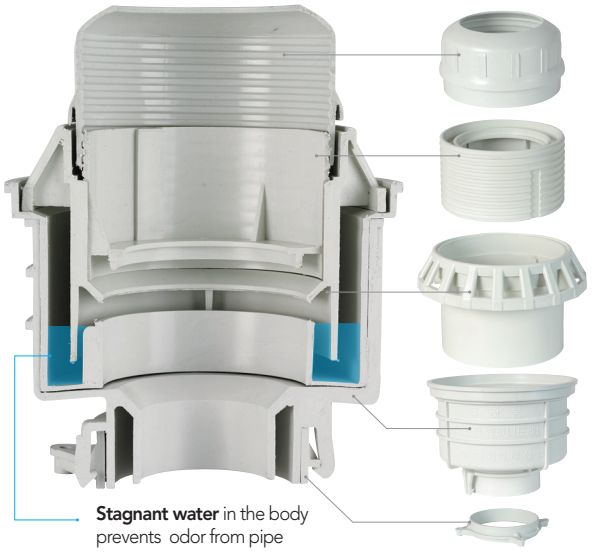



Maximum Height (mm): 215, 230, 245
Lower part weight (g): 600(+)

Adjustable body 3115, 3116 can be compatible with M-31H, M-32H

Height Adjustable

# Balcony Drain M-31H



Φ75 Φ100
2103.2 2104.2
**Rotating nut** for adjusting the height of the pipe

2105
**Ring** for fixing the pipe and lifting it to up

2106
**Outlet** for drainage of surface water

Φ75 Φ100
3115 3116
**Height Adjustable Body**
See details on left page

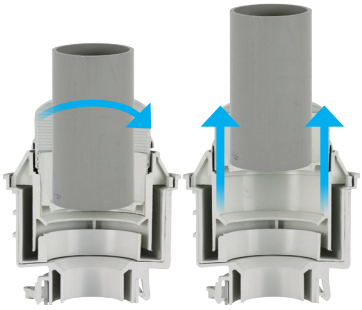
**Fixing Foot**

**Stagnant water** in the body prevents odor from pipe

**Common Option**
(Upper/Lowe r part 2 types each)
Material: PP
**Selection**
- Connecting pipe: Φ75, Φ100

SET CODE

| | |
|---|---|
| Φ75 | C60H01 |
| Φ100 | C60H02 |



After inserting the pipe into the product, rotate the upper nut(#2103, #2104) to lift a pipe for connecting with upstairs' one.
No gaps, and shakes are occurred with this product.

Height Adjustable

# Roof Drain M-32H

2601
**Cast iron Grate**

Φ75 Φ100
3115 3116
**Height Adjustable Body**
See details on left page

**Fixing Foot**

**Common Option**
(Grate: 1type / Body: 2 types)
Material: Cast Iron, PP
**Selection**
- Connecting pipe: Φ75, Φ100

SET CODE

| | |
|---|---|
| Φ75 | C60H01 |
| Φ100 | C60H02 |

## • Further Accessory

6122 3cm Riser/PP
Usable on body #3114

6122 3cm Riser/PP
Usable on body #3115, #3116

6123 Pipe Finishing Ring /Φ75 / ABS

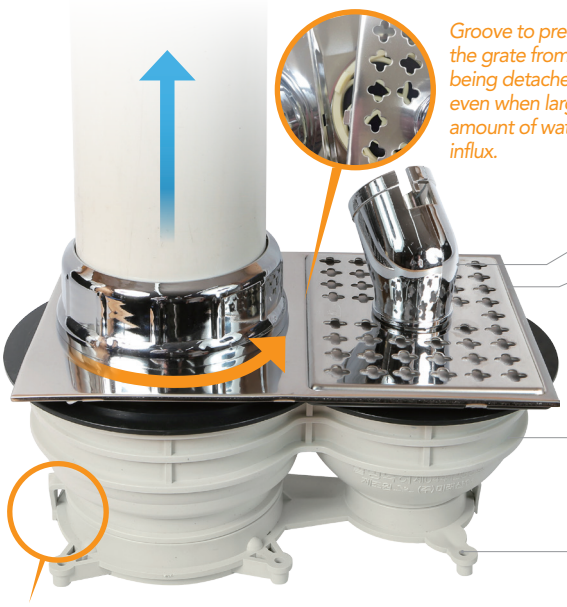
6124 Pipe Finishing Ring Φ100 / ABS

Balcony Drain-

# Vortex M-30

After mounting a pipe, turn the rotating nut right and left. Then, the pipe lifts up and down by the internal spiral pipe fixing ring. With our problem solving products, pipes can be connected precisely without any gaps ,ensuring sophisticated construction.

**Common Option**
Upper part: 4 types / Lower part: 4 types)
Material: Stainless steel, ABS, PP
**Selection**
Connecting pipe: Φ75, Φ100
Body Height: 120 mm, 180 mm
Grate: Floors, laundry machines
Rotating Nut: Basic, Chrome plated abs



*Groove to prevent the grate from being detached, even when large amount of water influx.*

*The hook-type fixing foot prevents the body from being moved from the first place. This highly improve the accuracy between floors*

## Rotating Nut

ABS (Basic) ABS (Chrome Plated)

## Grate

Floor Laundry Machine

## Upper Plate

## Lower Body

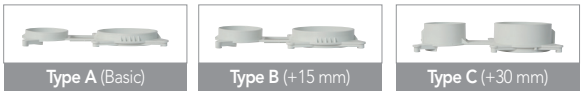
| | |
|---|---|
| Φ75 | 3119 |
| Φ100 | 3121 |

Total height (mm): 120, 135, 150
Lower part weight(g): 500(+), 670(+)

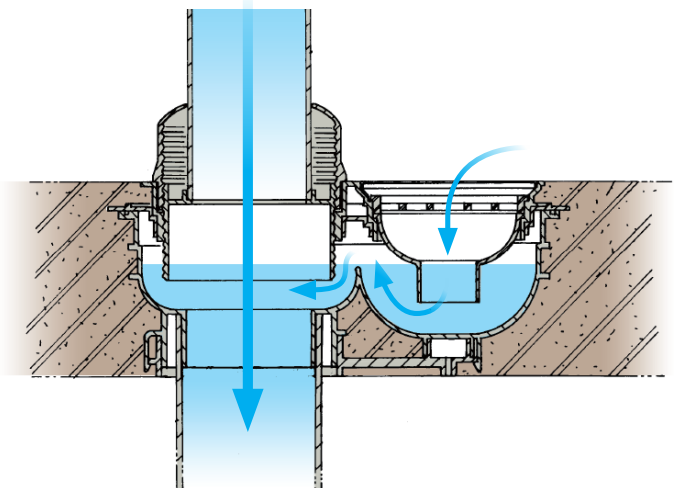
| | |
|---|---|
| Φ75 | 3120 |
| Φ100 | 3122 |

Total height (mm): 180, 195, 210
Lower part weight(g): 545(+), 700(+)

## Fixing Foot



Type A (Basic) | Type B (+15 mm) | Type C (+30 mm)



## M-29 Chrome Plated upper section

※End of part number Floor (F), Laundry (L)

| Pipe Size(Φ) | Body Height(mm) | Weight (g) | SET # |
|---|---|---|---|
| 75 | 120 | 1520 | C70N11F |
| | | 1550 | C70N11L |
| | 180 | 1690 | C70N12F |
| | | 1720 | C70N12L |
| 100 | 120 | 1540 | C70N13F |
| | | 1570 | C70N13L |
| | 180 | 1695 | C70N14F |
| | | 1725 | C70N14L |

## M-30 Basic upper section

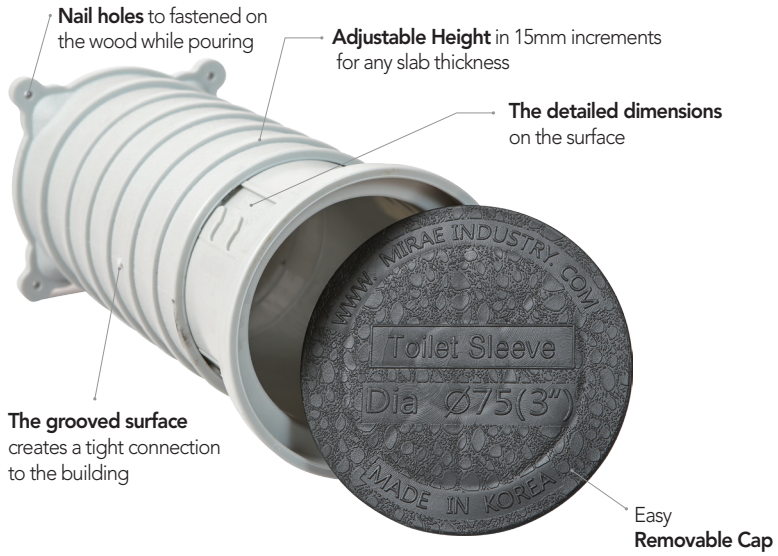
※End of part number Floor (F), Laundry (L)

| Pipe Size(Φ) | Body Height(mm) | Weight (g) | SET # |
|---|---|---|---|
| 75 | 120 | 1510 | C70N21F |
| | | 1540 | C70N21L |
| | 180 | 1680 | C70N22F |
| | | 1710 | C70N22L |
| 100 | 120 | 1530 | C70N23F |
| | | 1560 | C70N23L |
| | 180 | 1685 | C70N24F |
| | | 1715 | C70N24L |

Height Adjustable

# Toilet Sleeve M-12

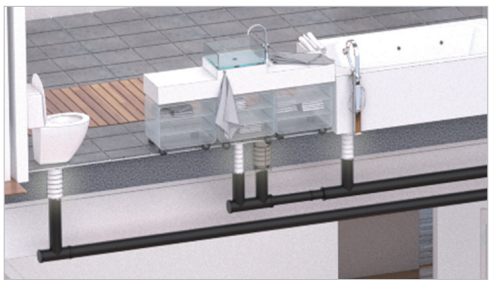
Used for discharging various domestic wastewater from toilet bowls and washbowls in buildings




Material: PP (Kopelen)

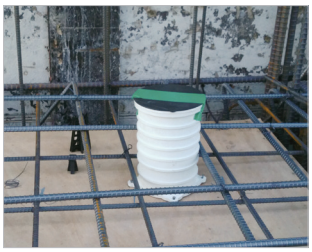
| Product | Height (mm) | Connecting Pipe (Φ) | Weight (g) | Product Code |
|---|---|---|---|---|
| Height Adjustable Toilet Sleeve (S) | Min 150 To Max 200 | 35 | 135 | C20H11 |
| | | 50 | 220 | C20H12 |
| | | 75 | 325 | C20H13 |
| | | 100 | 360 | C20H14 |
| Height Adjustable Toilet Sleeve (L) | Min 200 To Max 300 | 50 | 235 | C20H21 |
| | | 75 | 340 | C20H22 |
| | | 100 | 450 | C20H23 |

## • Installation Location



## • Construction Sequencing

Place, Fix, Control Height



Steel Reinforcement

Pour concrete

Piping work

# Toilet Sleeve M-13

Material: PP (Kopelen)

| Product | Height (mm) | Connecting Pipe (Φ) | Weight (g) | Product Code |
|---|---|---|---|---|
| Toilet Sleeve (S) | 120 | 50 | 125 | C20N01 |
| | | 75 | 230 | C20N02 |
| | | 100 | 290 | C20N03 |
| Toilet Sleeve (M) | 150 | 50 | 155 | C20N11 |
| | | 75 | 260 | C20N12 |
| | | 100 | 400 | C20N13 |
| Toilet Sleeve (L) | 200 | 50 | 225 | C20N21 |
| | | 75 | 330 | C20H22 |
| | | 100 | 470 | C20H23 |

## • Further Accessory

Simply use our 30mm incremental extenders.

6125 3cm Riser/PP
Size(Φ): 50 / Weight(g): 60

6126 3cm Riser/PP
Size(Φ): 75 / Weight(g): 65

6127 3cm Riser/PP
Size(Φ): 100 / Weight(g): 105

# Wall Sleeve M-14

Leave uniform holes for electrical, cables, plumbing, heating, air conditioning, and other services.

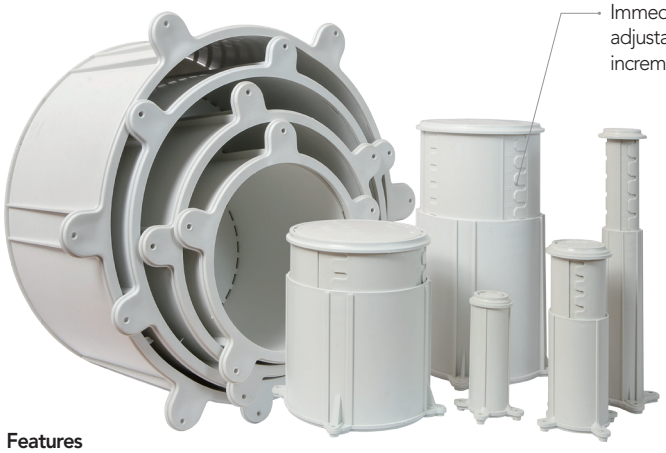
Make hole simply by hammering

Material: PP (Kopelen)

| Product | Height (mm) | Penetratin Pipe (Φ) | Weight (g) | Product Code |
|---|---|---|---|---|
| Wall Sleeve (S) | 150 | 25 | 65 | C10N11 |
| | | 40 | 100 | C10N12 |
| | | 50 | 110 | C10N13 |
| | | 75 | 182 | C10N14 |
| | | 100 | 255 | C10N15 |
| | | 125 | 230 | C10N16 |
| | | 150 | 275 | C10N17 |
| | | 200 | - | C10N18 |
| Wall Sleeve (M) | 200 | 25 | 120 | C10N21 |
| | | 40 | 155 | C10N22 |
| | | 50 | 165 | C10N23 |
| | | 75 | 230 | C10N24 |
| | | 100 | 310 | C10N25 |
| | | 125 | 285 | C10N26 |
| | | 150 | 330 | C10N27 |
| | | 200 | - | C10N28 |

## Height Adjustable

# Wall Sleeve M-15



Immediately height adjustable in 20mm increments

**Features**
- Low Cost
- Light Weight and Sturdy
- One Piece-unit. No assembly.
- Installs in seconds.

- Available in **about 30 sizes**
- Range from **250mm to 300mm** in diameter
- Accommodate **wall thickness up to 360mm**

**• On-site example**

Our Height adjustable product s decrease installation time innovatively

Material: PP (Kopelen)

| Product | Height (mm) | Penetrating Pipe (Φ) | Weight (g) | Product Code |
|---|---|---|---|---|
| Height Adjustable Wall Sleeve (S) | Min 120 To Max 200 | 25 | 75 | C10H01 |
| | | 35 | 100 | C10H02 |
| | | 40 | 120 | C10H03 |
| | | 50 | 165 | C10H04 |
| | | 75 | 220 | C10H05 |
| | | 100 | 300 | C10H06 |
| | | 125 | 425 | C10H07 |
| | | 150 | 495 | C10H08 |
| | | 200 | 645 | C10H09 |
| Height Adjustable Wall Sleeve (M) | Min 150 To Max 270 | 25 | 115 | C10H10 |
| | | 40 | 157 | C10H11 |
| | | 50 | 200 | C10H12 |
| | | 75 | 320 | C10H13 |
| | | 100 | 405 | C10H14 |
| | | 125 | 490 | C10H15 |
| | | 150 | 610 | C10H16 |
| | | 200 | 805 | C10H17 |
| | Min 150 To Max 255 | 250 | 1065 | C10H18 |
| | | 300 | 1285 | C10H19 |
| Height Adjustable Wall Sleeve (L) | Min 200 To Max 360 | 25 | 155 | C10H20 |
| | | 40 | 210 | C10H21 |
| | | 50 | 265 | C10H22 |
| | | 75 | 405 | C10H23 |
| | | 100 | 540 | C10H24 |
| | | 125 | 630 | C10H25 |
| | | 150 | 770 | C10H26 |
| | | 200 | 950 | C10H27 |
| | | 250 | 1230 | C10H28 |
| | | 300 | 1500 | C10H29 |

Length Adjustable

# Beam Sleeve M-16

Conveniently used for the breast walls or beams of buildings.

Length adjustable up to 710 mm on both sides
according to on-site conditions

Material: PP (Kopelen)

| Product | Height (mm) | Penetrating Pipe (Φ) | Weight (g) | Product Code |
|---|---|---|---|---|
| Length Adjustable Beam Sleeve(S) | Min 290 To Max 510 | 50 | 405 | C30H01 |
| | | 75 | 610 | C30H02 |
| | | 100 | 760 | C30H03 |
| | | 125 | 935 | C30H04 |
| | | 150 | 1110 | C30H05 |
| | | 200 | 1330 | C30H06 |
| Length Adjustable Beam Sleeve(L) | Min 390 To Max 710 | 50 | - | C30H11 |
| | | 75 | - | C30H12 |
| | | 100 | - | C30H13 |
| | | 125 | - | C30H14 |
| | | 150 | - | C30H15 |
| | | 200 | - | C30H16 |

• **On-site example**

# Toilet Bowl Sleeve

## M-27

Concentric
Weight(g) : 205

## M-26

Eccentric : 35 mm
Weight(g) : 275

## M-22S

Eccentric : 50 mm
Weight(g) : 335

## M-22

Eccentric : 100 mm
Weight(g) : 415

## M-23

Eccentric : 150 mm
Weight(g) : 455

## M-24

Eccentric:200–250 mm
Weight(g) : 445

## M-25

Eccentric : 270–400 mm
Weight(g) : 570

• **Instructions**

1. Adjust the Distance
2. Attach it with an adhesive.

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