

INTRODUCING

# TrueVent<sup>®</sup>

An aerator for single stack system  
... an advance drainage solution for hi-rise buildings



- **Simple yet a versatile design**
- **Better performance**
  - Offers versatile branch connections
  - Reduced stack size - needs smaller ducts
  - Perfect balance between hydraulic and pneumatic pressures
- **Cost effective**
  - Offers 6 branch connections in 3 different directions
  - Saves pipes, fittings, space, time and labour cost
  - No separate vent pipes or back vents required
  - Upto 70 apartments can be connected in one stack
- **Durability**
  - Strong and sturdy product
  - Minimum 50 years of service life
- **Simple and quick installation**
- **Maintenance free**

The Supreme is an acknowledged leader of India's plastic industry. With a portfolio of over 7500 diverse products, the most comprehensive range in the industry, we cater to almost every conceivable need and application of the customer in piping. While helping the country transit from conventional to modern piping, we have several path breaking products to our credit making us a trend setter in the industry.

After successfully introducing many innovative and useful products, we are pleased to introduce yet one more specialty product "Truevent". Truevent is the most innovative and versatile fitting designed for single stack system in hi-rise buildings where multiple branch connections in different directions can be easily connected. It helps to increase the stack capacities and reduces the negative pressure fluctuations and their adverse effects on the overall flow performance of the drainage system.

## Need of a Truevent system

Over a period of time, design of building drainage systems has evolved from a two pipe system to one pipe system and now to single stack system. In single stack system, soil as well as waste discharge from different appliances flow through a single stack eliminating even vent stack(s). In hi-rise buildings, where flows from different floors enter and intermix in the main vertical stack leaving little or no space for air flow or ventilation, normal pipes and fittings do not meet the functional and installation requirements. To address multiple branch connections at every floor and to improve the performance of single stack system, "Truevent" is a very useful and effective means. This will not only make the installation simpler but also improve the flow performance. The perfectly engineered Truevent aerator eliminates the need for a separate vent stack for venting and offers excellent performance and economy over conventional drainage systems.

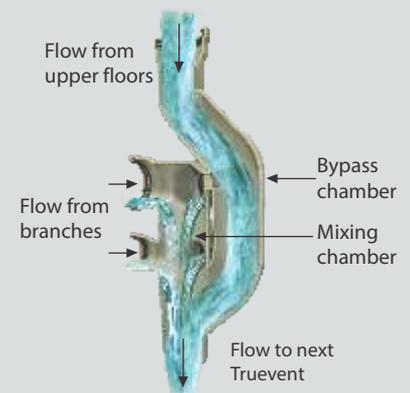
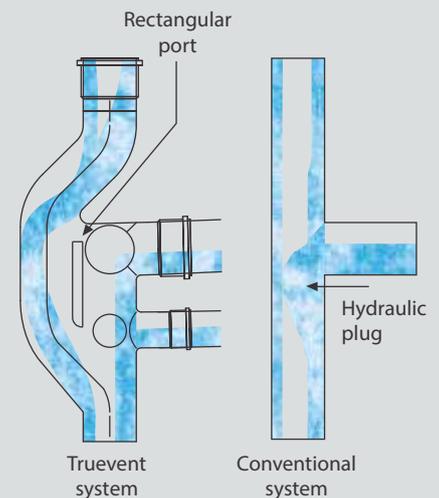
Perfect balance between hydraulic and pneumatic pressures in vertical stack is an important aspect while designing the single stack drainage system. The negative pressure fluctuations in a drainage system should be reduced to protect the water seal of various fixtures. Designing of a single stack drainage system and its venting is easily made possible using Truevent.

## Working principle

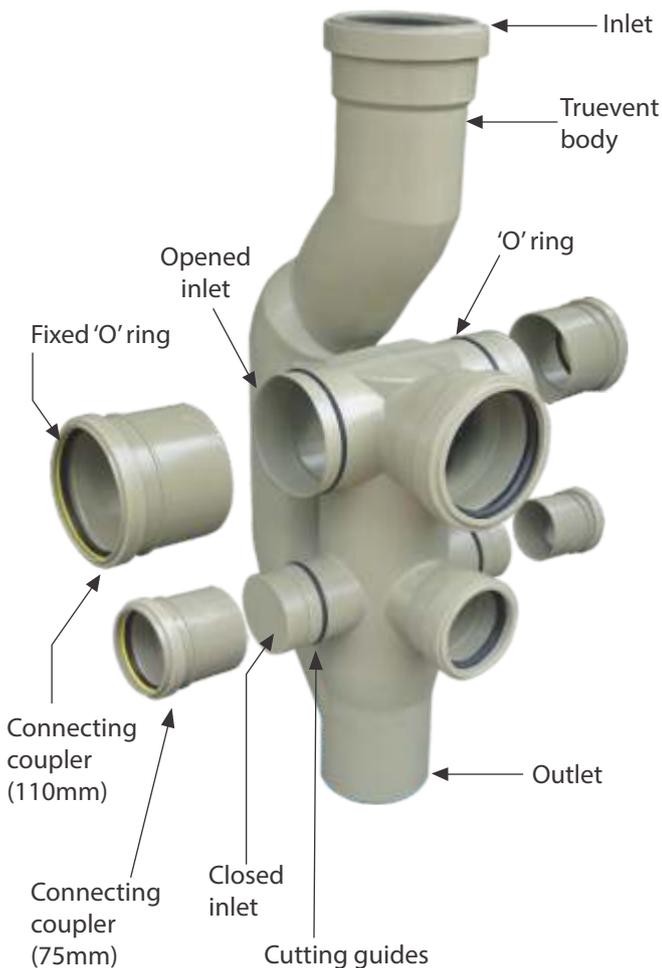
Truevent is fitted at each floor level to provide access for different branch lines from three directions. It is designed in such a way that the flow of branch connections are taken into a separate compartment and main stack is diverted. Thus the flow at individual floors are not intermixed with the main flow thereby eliminating the possibility of water plugs and blockage of central core. As the main flow is diverted, it also helps to reduce the flow velocity in main stack. Besides this, triangular diverter provided at the entrance divides the flow in two parts. Thus diversion of main flow and reduction of velocity helps avoiding formation of hydraulic plug in the stack. The rectangular port provided between bypass chamber and mixing chamber helps to balance the pressure fluctuations in the stack.

## Unique features

- **Unique design** - Unique and versatile design in common stack size of 110mm to accommodate six branch connections from three directions. Joints can be easily made using simple rubber ring type connections.
- **Strong and sturdy product** - Made from polyethylene and is strong and sturdy enough to take care of all types of loads that it will encounter during and after installation.
- **Maintenance free** - Being free from corrosion and chemical re-activeness, it is maintenance free.
- **Needs smaller space for installation** - Installation can be carried out in smaller duct hence space can be saved.
- **Cost effective** - As six connections are possible on one fitting, it saves extensively on pipes, fittings, space, time and labour cost. Besides this, it eliminates the need for separate vent pipes or back vents and further saving on costs.

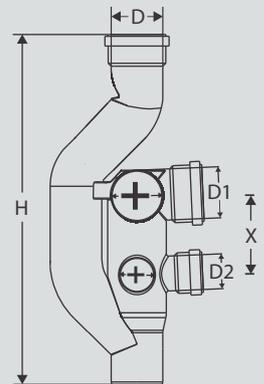


## Components of Truevent

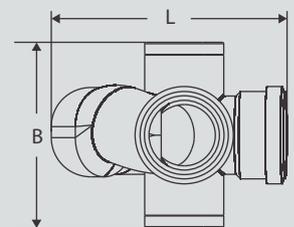


## Product details

Dimensions (mm)	
D	110
D1	110
D2	75
H	753
L	328
B	261
X	169



Branch connections (mm)	Front		Side	
	1	2	1	2
110	1	2	1	2
75	1	2	1	2



### Maximum flow rate (LPS)

Stack size	Without Truevent	With Truevent
110	4 to 5	8 to 9

## Applications

Truevent aerator system can be used for varied applications as given below :-

- Hi-rise buildings
- Schools, colleges and hostels
- Hotels and hospitals

## Installation procedure

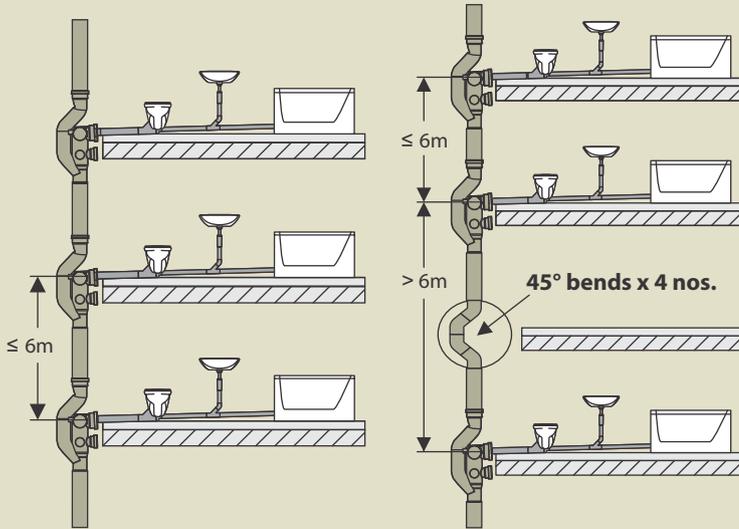
- Truevent is supplied in a ready to use form in two variants, i.e., one with all branch inlets open and the other with all branch inlets closed except for front inlets open.
- Once the required configuration of Truevent is selected according to site requirements, fix the location and connect it with main vertical stack.
- Make the branch connections and in case of closed branch variant, cut the closed portion using hacksaw or cutter through marked cutting guides. After cutting the closed end, place the 'O' ring on the given groove and fix the

connecting coupler using lubricant. This makes the Truevent ready for branch connections.

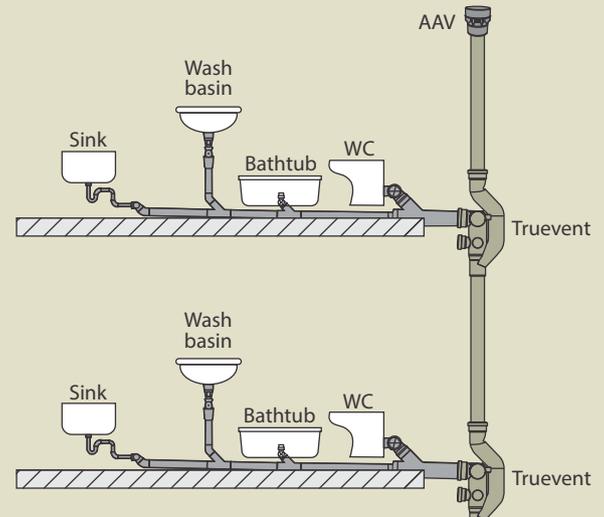
- Chamfer the edge of branch pipe using file and make the connection with the branch inlet(s) of Truevent. Follow the similar procedures for making all branch connections.
- In case, the front inlets are not required to be used then, they can be closed using blanking plugs.
- Provide support to the Truevent after completion of installation.

## Installation requirements

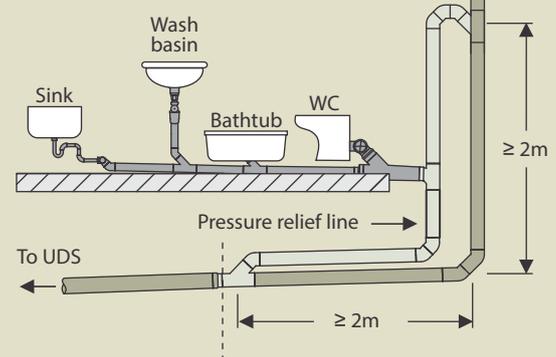
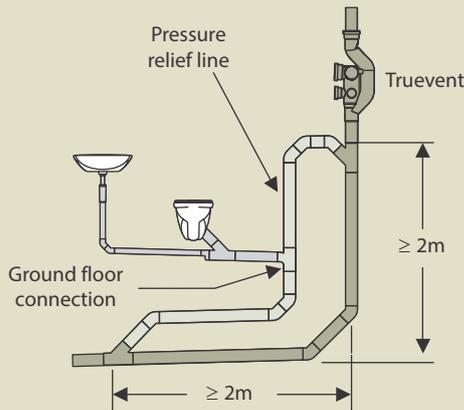
1. Supreme Truevent is required to be installed at every floor, where branch connections are required to be connected with the main stack. However, the maximum distance between two Truevent fittings should not exceed 6m. If the distance is more, instead of a Truevent, an offset with four bends should be installed in the discharge stack as shown in following diagram:-



3. A typical installation of single stack system with Truevent aerator.



2. To eliminate the possibility of pressure build up in single stack system, it is recommended to provide the pressure relief line of 110mm size as given below:-



• Any specification may change without prior notice. • All information contained in this literature is given in good faith and believed to be accurate and reliable. Because of many factors which may be outside our knowledge or control and affect the use of the product, no warranty is given or implied with respect to such information, nor do we offer any warranty of immunity against patent infringement. No responsibility can be accepted for any error, omissions or incorrect assumptions.

### The Supreme Industries Ltd. (Plastic Piping Division)

**Corporate Office:** 1161/1162, Solitair Corporate Park, Building No. 11,167, Guru Hargovindji Marg, Chakala, Andheri Ghatkopar Link Road, Andheri (East) Mumbai - 400 093. India. Tel: 91-22-67710000, 40430000

**Regd. Office:** 612 Raheja Chambers, Nariman Point, Mumbai 400 021. India. Tel.: (022) 22851656, 22820072  
E-mail: pvc-pipes@supreme.co.in Website: www.supreme.co.in

**Export Division:** Tel: 91-22-6771 0126 / 4043 0126; Fax: 6771 0130

**Overseas Office:** Sharjah, UAE. Tel# +971 6 557 4484; Fax# +971 6 557 4485

CIN: L35920MH1942PLC003554

### Branch Offices Tel.

**Ahmedabad** : 079-30028371  
**Bangalore** : 080-30913715  
**Chennai** : 044-39811182  
**Cochin** : 0484-2385346  
**Hyderabad** : 040-23221130  
**Indore** : 0731-2432684  
**Jaipur** : 09910995853  
**Jalgaon Gadegaon** : 0257-3050541,42  
**Kanpur** : 0512-2332280  
**Kolkata** : 033-30070123  
**Noida (Delhi)** : 0120-6660000

Authorised Distributor



I & T SIL Gadegaon, Dist-Jalgaon • PC/TV-MP/IMG/113 • REV.00-12/2017