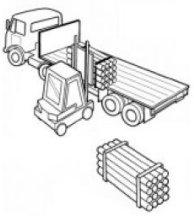
PVCu Soil Pipe to BS4514/BS-EN1329:2000

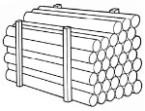
Handling

PVCu pipes are very strong, but having said that care should be taken when handling to avoid damage, such as scratching or scoring. Not only does this affect the look of pipework but can also affect the jointing of the push-fit or solvent weld fittings. In extreme cold conditions extra care should be taken, because extreme conditions reduce the impact strength of most plastics.

Pipes should be loaded by hand if possible, but if mechanical means are used then protected slings are recommended. In addition, when unloading block bundles use nylon belt type slings or fork lift trucks with smooth forks (metal hooks, slings or chains must not come into contact with the pipes).



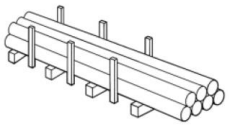
Handling block bundles



(2 m or 7 layers maximum)

Storage

For on-site storage, lay pipes on flat ground, free from large or sharp objects - or preferably on timber battens not less than 75mm wide spaced at a maximum of 1m centres. In addition, side support should also be provided at intervals of not more than 1.5m. Block bundles can be stored up to three high without extra side supports or bearers.



Loose pipe storage on the ground

Extra care should be taken when removing pipe from bundles as the straps are under extreme tension and may move erratically when cut.

Loose pipe – Different sized pipe should be stacked separately. If this is not possible we recommend that larger sized diameter pipe should be stacked at the bottom, not more than seven layers high or to a maximum height of 2 meters

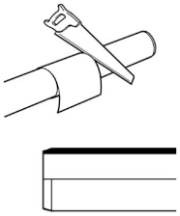
Spigot and socketed pipe – Spigot and socket pipes should be stacked with sockets protruding and at alternate ends to ensure even support along their length.

Fittings – Plastic pipes and fittings sealed in plastic bags or wrappers will distort if subjected to high temperatures achieved in places such as tin storage huts, or direct sunlight. Therefore, any plastic product should be stored in a cool area until needed. Solvent cement, silicone lubricants, fillers and degreasing cleaners should be stored out of direct sun light and away from any heat source.

Pipe cutting

When cutting pipe on-site, it is recommend pipe to be;

- Clean cut at right angles to its axis.
- Cut end then de-burred with a scraper
- If cut end is inserted into a push-fit or solvent weld joint then the spigot end must be chamfered to ensure that the glue or the sealing ring is not displaced during insertion.



General maintenance

Assuming the system is installed correctly, no maintenance will be required. If there is a blockage, use only flexible or roller type rods. Pointed or bearing type metal fittings should not be used. Tests carried out using standard equipment from specialist drain cleaning contractors have shown their equipment to be suitable. Further guidance should be taken from BS EN 12056: 2000.

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Pipe Dimension

Nominal Diameter	***Min***	***Max Min (mean)***	***Wall Thickness***	***Weight KG/m***
82mm (3in)	82.4mm	82.8mm	3.2mm	1.27
110mm (4in)	110.0mm	110.4mm	3.2mm	1.70
160mm (6in)	160.0mm	160.6mm	3.2mm	2.52

JOINTING PROCEDURES FOR PUSH-FIT SOIL

Cut pipe square, using fine tooth saw. Wrap paper around pipe as guide line.

Chamfer end of pipe, using medium file or rasp. Standard lengths of pipe are already chamfered.

Remove swarf, dust and file dirt from end of pipe.

Lubricate end of pipe.

Check that ring seal is in position in housing.

Push pipe fully home and mark lightly with pencil.

Withdraw pipe (10mm).
This will allow for expansion.
All fittings must be supported by a bracket.

Pipe support - vertical pipes

PVCu or galvanised mild steel, or rubber lined steel support brackets must be selected to fit either around the pipe socket or the circumference of the pipe. We recommend that metal brackets be used on vertical pipes in multi-story dwellings because of their greater fire resistance. It is recommended that socket brackets are used to prevent the pipes from slipping out of position causing leaking at the joints and excessive weight on fittings at the base of the stack. By securely fixing socket brackets it also ensures that necessary thermal movement is taken up. Pipe brackets do not restrict thermal movement and are for intermediate support only.

Horizontal suspended pipes

The same brackets as discussed above are used but the brackets will need to be suspended from a bracket back plate and threaded rod that can be made and assembled on site by the installer. Due to the lightness of our pipework, the threaded rod only needs to be M8, but the installer should provide these items. As plastic is subject to thermal movement, we recommend that the pipe sockets are held firmly by braces to prevent them from moving. This ensures that any thermal movement is taken up in the expansion coupling, preventing buckling of the pipe between the supports. Please note that intermediate pipe brackets are for support only and must not restrict movement. The British Standard BS EN 12056-2: 2000 recommends that pipe should be supported at the following intervals.

Material	**Pipe diameter (mm)**	**Horizontal (m)**	**Vertical (m)**
Unplasticised polyvinylchloride (PVCu)	82	1.0	2.0
	110	1.0	2.0
	160	1.2	2.0

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Testing

On the completion of any installation work, the system should be inspected and tested in accordance with BS EN 12056-2: 2000 and the Building Regulations. Air testing is the preferred form of leak detection. The use of smoke testing of plastics pipework should be avoided as there are certain smoke generating devices which are harmful to plastics materials and rubber seal rings. It is essential that where smoke testing is required assurance is obtained from the manufacturer of the device that it is safe for use With PVCu systems.

Maintenance

Correctly designed and installed systems should require very little or no maintenance whatsoever. However, should a form of blockage occur, only flexible or roller type rods should be used. Pointed or boring type metal fitting s are not to be used. Mechanised rodding equipment should only be used by properly trained operators. Should any pipework need leaning, ensure that you use the correct cleaning materials.