

**14.00**

# **DRAIN CONNECTIONS**

## **Hunter Underground Systems**

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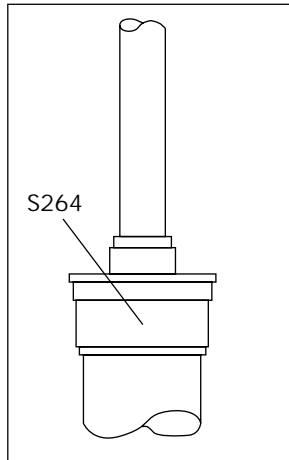
**14.05** Soil Pipe Connection - Long Radius

# 14.00

## Drain Connection

### 14.01 CONNECTION DETAILS

Isolated ground floor sanitary appliances are frequently supplied with their own 110mm drain unventilated branch. Therefore to connect a single 32mm, 40mm or 50mm waste pipe to 110mm drain pipe Hunter Plastics Ltd manufacture a reducer (S264) with an open boss that must be used with the appropriate connector listed below. The reducer is to be lubricated and pushed into a ring seal socket or glued into a solvent weld socket (DS208). Alternatively, when two waste pipe connections are required one could use the Flexible Waste Adaptor (DS25) described in section 15.01.



#### Connectors 1 and 2.

The boss adaptor rubbers (W58 and W59) can be used for both polypropylene pipe (BS EN 1451), (MUPVC) modified unplasticized polyvinyl chloride pipe (BS5255) and copper waste where an expansion connection is acceptable. The boss rubbers will push inside the reducer boss. The W59 will reduce the opening to connect 40mm pipe and the W58 is used to connect the 32mm pipe.

#### Connectors 3 and 4.

If a solvent weld connection is required for pipe, the W106 and W104 reducers will be used. The W106 will connect 40mm pipe and the W104 will reduce the opening to connect the 32mm pipe.

#### Connectors 5 and 6.

A straight solvent adaptor (S750) will solvent over the outside of the boss to connect 50mm pipe, and the push fit adaptor (S751) will push over the reducer boss for 50mm push-fit pipe.

#### Connectors 7 and 8.

The 2½° angled solvent weld adaptor S753 will solvent over the outside of the boss to connect 50mm solvent pipe. The W725 50mm angled (90°) solvent weld adaptor will glue into the socket of the S264.

### 14.02 SURFACE WATER CONNECTIONS

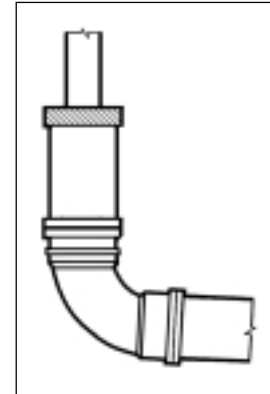
External rainwater pipes usually connect direct to the drain or, depending on the design of the sewerage system, via a gully trap.

The diameter of 110mm PVCu Solid Wall above and below ground drainage systems are the same and therefore direct connection may be achieved without an adaptor. Where rainwater pipes connect directly to a drain and are of different sizes, a suitable reducer and adaptor fitting will be required.

1. 110mm PVCu to 68mm circular rainwater pipe (R3)
2. 110mm PVCu to 65mm square rainwater pipe (R3 + R397)
3. 82mm PVCu to 68mm circular rainwater pipe (R4)
4. 110mm PVCu to 82mm circular rainwater pipe (S633)

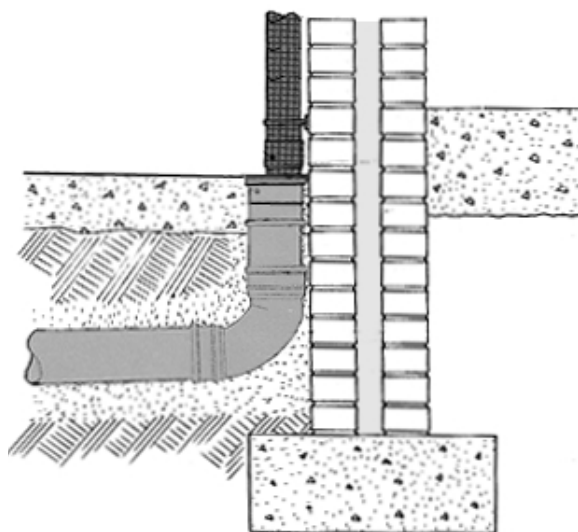
### CONNECTION OF EXTERNAL RAINWATER PIPES

1. Lubricate adaptor seal with silicone lubricant.
2. Ensure that the Rainwater Pipe is free from swarf.
3. Place the pipe into the Adaptor, working the pipe through the opening until the pipe is located in the Adaptor to a suitable depth
4. Fix a rainwater bracket no more than 150mm above the Adaptor.



### RAINWATER PIPE CONNECTIONS

If Rainwater pipes are to be situated externally then connections can be made by fitting a Rainwater pipe Adaptor to a socket and via a bend as shown in the illustration (Right). Should the system be combined the Rainwater pipe would have to be dropped into a gully trap.



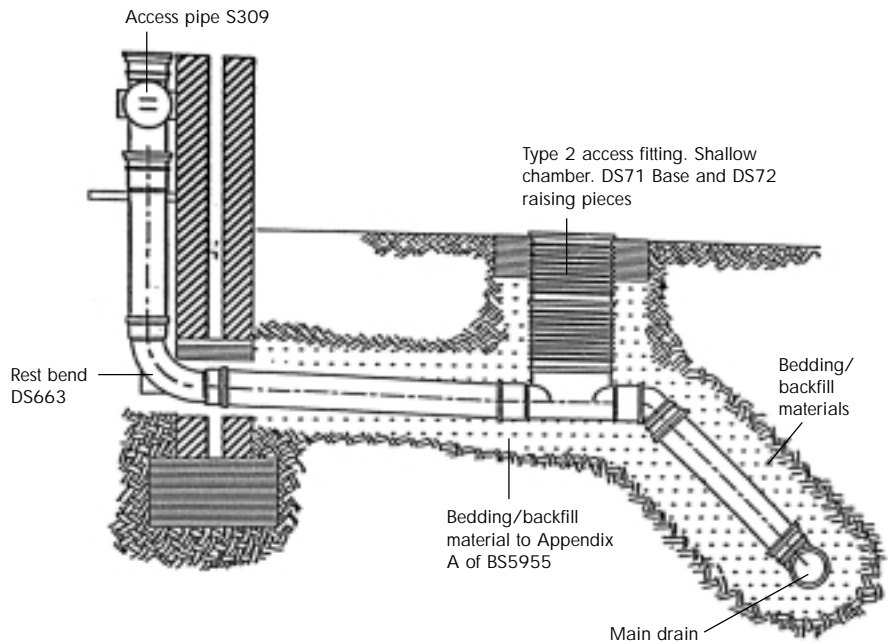
### 14.03 CONNECTIONS TO OTHER MATERIALS

Various adaptor fittings are available to facilitate connection of PVCu pipework to drainage systems of other materials.  
(These are dealt with fully in section 7.01).

1. PVCu spigot to vitrified clay plastic coupling
2. PVCu spigot to stoneware socket
3. PVCu socket to stoneware/cast iron spigot
4. PVCu spigot to cast iron socket

### 14.04 SOIL PIPE CONNECTION

Diagram shows how to connect an internal soil stack to an underground drainage system using a rest bend (DS663). The pipe is then taken to ground level and connected to the stack with a coupler.



### 14.05 SOIL PIPE CONNECTION (LONG RADIUS)

Diagram again shows the connection of underground drain to soil by the use of a long radius bend connected together with two couplers.

It is advisable to use a long radius bend when heavy or fast flows are expected e.g. flats etc.

