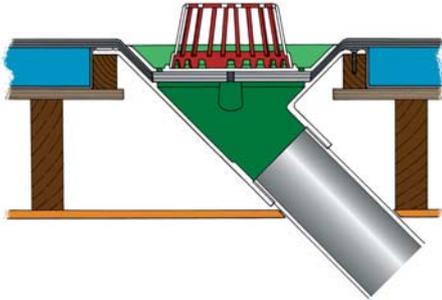


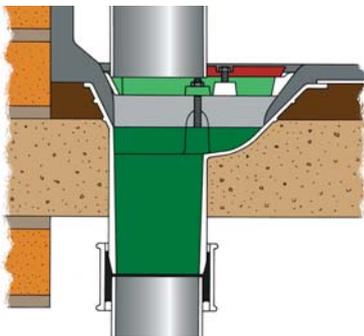
Caroflow Roof Outlets provide a watertight connection between the roofing membrane and drainage pipework, thereby removing the problem of water penetrating the roof at this critical point. They give a ready made, engineered sump that is mechanically sealed to the roof waterproofing membrane and then connect that sump to the pipework, without a break. All **Caroflow** outlets follow the same principle and are ideally suited to all membranes from traditional 3-layer felt, asphalt and copper (or lead clad) to today's high performance single ply membranes. Some examples of their use are detailed below.

45 degree Threaded with CAROFLOW adaptor - Warm Roof



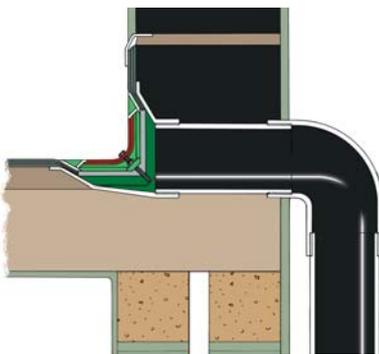
- Position outlet body (with CAROFLOW Threaded adaptor already connected) into pre-formed hole within roof deck and secure to timber spacers through outlet flange.
- Lay vapour barrier up and over into outlet mouth and place rigid insulation board into position.
- Dress three layer felt into outlet mouth, insert clamping ring and tighten down.
- Secure grating into clamping ring.

Balcony Outlet with Grate Cut-out - Cold Roof



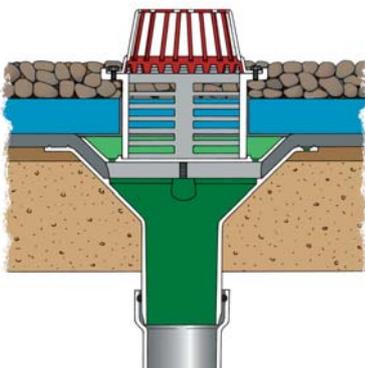
- Grout outlet body into pre-formed hole, within slab, ensuring that flange is set at minimum screed level.
- Lay screed to correct falls to finish level with outlet flange.
- Treat outlet flange and mouth with suitable bitumen-based primer and add isolating membrane prior to dressing in of two layer mastic asphalt.
- Whilst second layer is still pliable insert clamping ring into position and tighten down. Trim off excess length of stud before securing grating.
- (If grating is required to accept downpipe from upper level, the relevant section should be cut away to allow downpipe into outlet mouth).
- Secure lower pipework to outlet spigot.

Two Way horizontal take-off - Cold Roof



- Connect required length of threaded steel tube (or CAROFLOW adaptor for PVC pipework) to Two Way outlet and place assembly into junction between horizontal and vertical surfaces.
- Ensure that horizontal flange is positioned level with finished screed and vertical flange to be level with wall surface. Ensure minimal drainage fall away from outlet into pipework.
- Lay screed to correct falls to finish level with outlet flange.
- Dress 3 layer felt into outlet mouth, insert clamping ring and tighten down whilst still pliable.
- Trim off excess stud lengths and secure grating into position.

Vertical Spigot with Extension Ring - Inverted Roof



- Grout outlet body into pre-formed hole within slab, ensuring that flange is set at minimum screed level.
- Lay screed to correct falls to finish level with outlet flange.
- Treat outlet flange and mouth with suitable bitumen-based primer and add isolating membrane prior to dressing in of two layer mastic asphalt.
- Whilst second layer is still pliable insert clamping ring into position and tighten down.
- Lay insulation board leaving circular hole sized to accept Extension Ring.
- Secure Extension Ring and grating and lay 20mm minimum diameter washed ballast.
- Connect pipework to outlet spigot.