Catch Basins

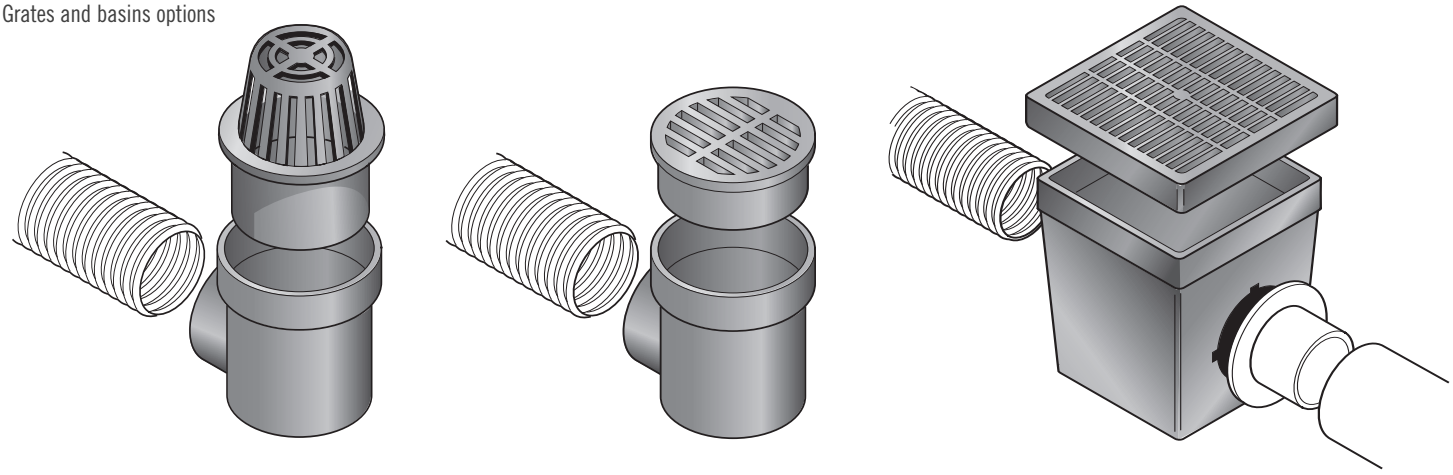
Catch Basins and Inlets – materials

Catch basins are used to collect debris from run-off water that may clog drain lines. The debris is collected in the sump area of a catch basin and should be cleaned out periodically. A catch basin should be used in areas where debris like mulch, leaves, sand, silt, or grass clippings are prevalent. NDS basins are flexible by design and easy to install. Basins range in size from 6" round Spee-D basin and 9"x9" to 24"x24" square basins.

Atrium grates are used in landscape areas, planter beds, window wells, or where debris like mulch and leaves might clog a flat grate. They also have larger open surface areas to handle more run-off. Round grates are used often in landscape while square grates are easier to form around in concrete, pavers and other pavement applications.

Surface drain

Grates and basins options



Atrium grate **Round grate** **Square grate**

All **NDS grates** fit directly into corrugated pipe, sewer/drain fittings, or NDS catch basins, adapters and risers. All NDS catch basin outlets fit directly into Corrugated or Sewer and Drain pipe and may be adapted to SCH 40 or DWV pipe.

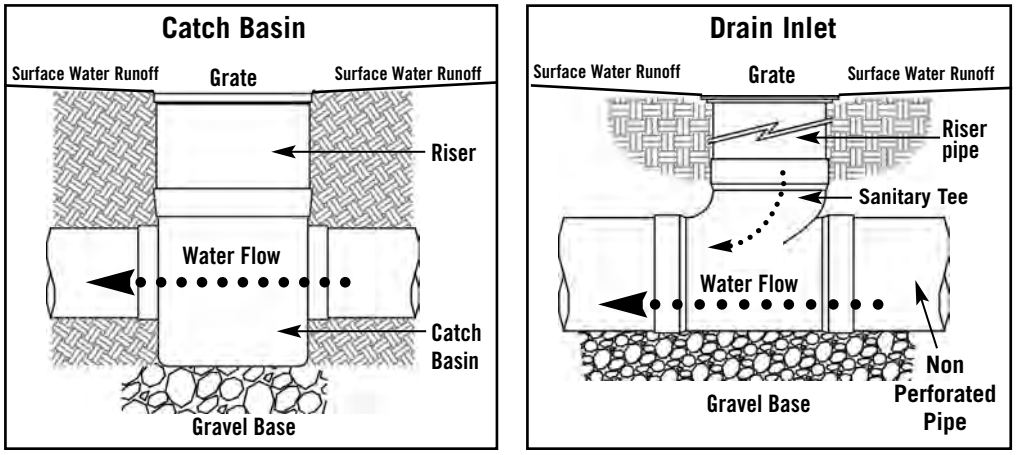
NDS universal outlets allow the installer to customize basins with 3", 4", 6", 8", 10", or 12" connections in 1, 2, 3 and 4 outlet configurations.

Riser extensions allow the installer to vary the depth of the basin outlets to maintain the proper slope of the drain line. Additional sump area may be created by using risers with universal outlets.

Low profile adapters simplify installation in difficult soil conditions, or in areas where a sump area is not required.

Basin and Grate – installation

1. Choose the grate size according to amount of rainfall, surface area, and type. It may be necessary to install more than one grate or basin to accommodate excessive run-off or a combination of low spots. Use catch basins in applications where it is necessary to collect debris from run-off water in a sump pump. This helps minimize clogging of drainage pipes.
2. Locate low spot or any areas where excess water will accumulate.
3. Dig hole deep enough for overall height of basin and grate. Install basin in hole on top of a firm base. Work from the discharge point back to the grate. Excavate the base of the trench with a minimum 1% slope to ensure drain pipe slopes to the discharge point.
4. Connect pipe to the basin and backfill the trench and area around basin.
5. Finish of landscaping surrounding project area.



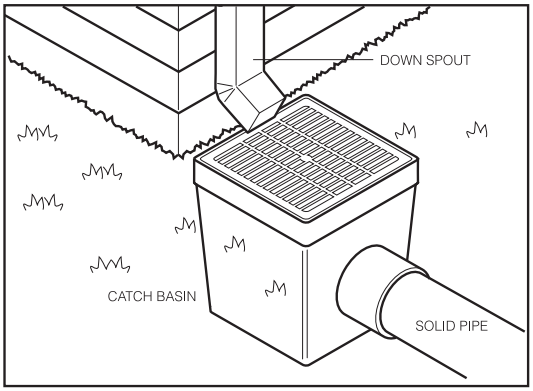
Surface drains

Catch basin (left)

Drain inlet (right)

Down Spouts

Down spouts remove a tremendous volume of water from roofs. The down spout can be directly connected to the drain pipe utilizing a down spout adapter. However, it is highly recommended that the down spout be placed over a drain basin to prevent debris from entering and clogging the drain pipe.



Down Spout

With catch basin