

# HEC-22 Inlets

Specify an inlet compliant with HEC-22. HEC-22 Inlets can be specified with the use of the **Gutter** and **Inlet** tabs.



This option may not be available for your region. For more information, refer to the [Regionalisation](#) topic.

The Size Inlets button opens the [Inlets form](#).

## Gutter Tab

Simple Junction

Name: Simple Junction

Dimensions | **Inlets** | Outlets

+ -

Name	Incoming Item(s)	Capacity Type
Inlet		HEC-22

Bypass Destination: (None)

**HEC-22**

Size Inlets

Gutter	Inlet
Long. Slope (ft/ft)	0.01
Road Cross Slope [ $S_x$ ] (ft/ft)	0.02
Gutter Cross Slope [ $S_w$ ] (ft/ft)	0.04
Gutter Width [ $W$ ] (ft)	2.0
Manning's n	0.015

OK Cancel Apply

Name Help

**Long. Slope** - The longitudinal slope of the road (pavement).

**Road Cross Slope** - The cross-section slope of the road (pavement).

**Gutter Cross Slope** - The cross-section slope of the gutter.

**Gutter Width** - The width of the gutter.

**Manning's n** - Manning's n roughness value. Used by the [Manning Formula](#) equation.

## Inlet Tab

Simple Junction

Name: Simple Junction

Dimensions | **Inlets** | Outlets

+ -

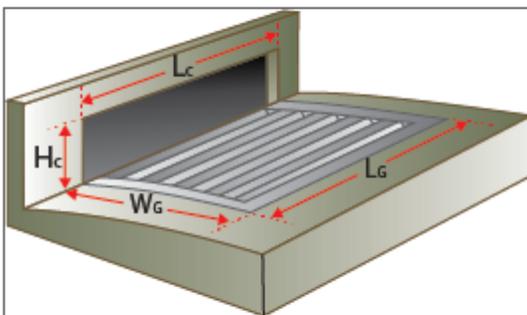
Name	Incoming Item(s)	Capacity Type
Inlet		HEC-22

Bypass Destination: (None)

**HEC-22**

Size Inlets

Gutter	Inlet
Inlet Type	Combination
Location	On Grade
<b>Combination</b>	
Grate Length [Lg] (ft)	1.75
Width [Wg] (ft)	1.5
Curb Length [Lc] (ft)	2.0
Height [Hc] (ft)	0.2
Depression (in)	0.0
Clogging (%)	0



OK Cancel Apply

Name [Help](#)

**Inlet Type** - The type of inlet: Grate, Curb, Combination, or Slotted. This value will change the **Inlet Details** section of the form, and the preview image.

**Location** - The location of the inlet: On Grade, or In Sag.

**Inlet Details** - Dependant on the inlet type. **Depression** and **Clogging** are show for all inlet types.

**Grate & Slotted:**

- **Grate Length** - The length of the grate, along the road.
- **Width** - The width of the grate, across the road.

**Curb:**

- **Curb Length** - The length of the curb, along the road.

- **Height** - The height of the curb, orthogonal to the road.

Combination:

- **Grate Length** - The length of the grate, along the road.
- **Width** - The width of the grate, across the road.
- **Curb Length** - The length of the curb, along the road.
- **Height** - The height of the curb, orthogonal to the road.

**Depression** - The depth of the depression on the inlet below the gutter.

**Clogging** - The amount of clogging to be considered on the inlet.

## Runoff Tab (Inlets form only)

Flow (ft³/s)			Spread (ft)		Depth (ft)	
Approach	Captured	Bypass	Gutter	Bypass	Gutter	Bypass
3.000	0.098	2.902	10.3	10.2	0.2	0.2

When opened from the **Inlets form**, HEC-22 inlets have a third tab. This is used to determine the flow into the inlet.

**Runoff Type** - The runoff type determines the method of calculating flow into the inlet, using one of the following:

- **Use Plan Data** - Data from the plan will be used to calculate a total inflow by summing flows from individual items into the inlet. **Inflow areas** will have flow calculated by multiplying the rainfall intensity of the selected rainfall by their area and runoff coefficient. **Hydrographs** will use their peak flow. **Bypass Connections** will be included when originating from another HEC-22 inlet.
- **User** - Set flow into the inlet manually.
- **Dynamic** - Available only once analysis is completed. The flow will be set to the result from the dynamic analysis for the currently selected storm.

**Rainfall (Use Plan Data only)** - The button will open the rainfall manager. From here an existing or new rainfall file can be edited / created. Once finished in the rainfall manager the drop down list will be populated with rainfall sets. The rainfall selected will be used to calculate the intensity used when calculating the inflow using the **Use Plan Data** runoff type.

**Flow** - The flow into the inlet, the method to set or calculate this value is determined by the runoff type.