

Rational Method Runoff Coefficients

<u>Character of Surface</u>	<u>Runoff Coefficient</u>
Asphalt or Concrete Pavement	0.70 to 0.95
Brick Pavement	0.70 to 0.85
Building Roofs	0.75 to 0.95
Lawns, Sandy Soil	
Flat (Average 2% Grade)	0.05 to 0.10
Gentle (Average 2% to 7% Grade)	0.10 to 0.15
Steep (Average > 7% Grade)	0.15 to 0.20
Lawns, Heavy Soils	
Flat (Average 2% Grade)	0.13 to 0.17
Gentle (Average 2% to 7% Grade)	0.18 to 0.22
Steep (Average > 7% Grade)	0.25 to 0.35
Business	
Downtown	0.70 to 0.95
Neighborhood	0.50 to 0.70
Residential	
Single Family	0.30 to 0.50
Multi-Units, Detached	0.40 to 0.60
Multi-Units, Attached	0.60 to 0.75
Residential, Suburban	0.25 to 0.40
Apartments	0.50 to 0.70
Industrial	
Light	0.50 to 0.80
Heavy	0.60 to 0.90
Parks/Cemeteries	0.10 to 0.25
Playgrounds	0.20 to 0.35
Railroad Yards	0.20 to 0.35
Unimproved	0.10 to 0.30

Note: The range of runoff coefficient values is typical for rainfall events with a frequency of between 2 to 10 years. Higher values are appropriate for larger design storms. Suggested multiplier factors for larger design storms are:

<u>Storm</u>	<u>Multiplier</u>
25 year	1.15
50 year	1.20
100 year	1.25

Information taken from ASCE & Water Environmental Federation, Design and Construction of Urban Stormwater Management Systems.