

Table 6.1 Hazen - Williams coefficients

Pipe Material	Recommended C Value	
	New Pipes [@]	Design Purpose
Unlined Metallic Pipes		
Cast Iron, Ductile Iron	130	100
Mild Steel	140	100
Galvanized Iron above 50 mm dia. #	120	100
Galvanized Iron 50 mm dia and below used for house service connections. #	120	55
Centrifugally Lined Metallic		
Cast Iron, Ductile Iron and Mild Steel Pipes lined with cement mortar or Epoxy		
Upto 12000 mm dia	140	140
Above 1200	145	145
Projection Methose Cement Mortar Lined Metallic Pipes		
Car Cast Iron, Ductile Iron and Mild Steel Pipes	130*	110**
Non Metallic Pipes		
RCC Spun Concrete		
Prestressed Concrete		
Up to 1200 mm dia	140	140
Above 1200 mm dia	145	145
Asbestos Cement	150	140
PVC, GRP and other Plastic Pipes.	150	145

Notes:

@ The C values for new pipes included in the Table 6.1 are for determining the acceptability of surface finish of new pipelines. The user agency may specify that flow test may be conducted for determining the C value of laid pipelines.

The quality of galvanizing should be in accordance with the relevant standards to ensure resistance to corrosion through out its design life.

* For pipes of diameter 500 mm and above; the range of C values may be from 90 to 125 for pipes less than 500 mm.

** In the absence of specific data, this value is recommended. However, in case authentic field data is available, higher values upto 130 may be adopted.