

## PVC PRESSURE PIPE: DEFINING “LARGE-DIAMETER”

Some engineers consider PVC pressure pipe greater than 12 inches to be “large-diameter.” For the PVC Pipe Association, however, large diameter is defined as 30 inches and larger. PVC pipe up to 48 inches has been part of the AWWA standard for PVC pressure pipe for more than 15 years and now 54- and 60-inch sizes are being manufactured.

## TWO STANDARDS FOR ONE PRODUCT: AN ARTIFICIAL BARRIER

One reason for the engineers’ perception is the format of existing AWWA standards: AWWA C900 tops out at 12 inches and AWWA C905 begins at 14 inches.

- C900 covers sizes from 4" through 12" and was first published in 1975.
- C905 includes sizes from 14" to 48" and was first published in 1988. A revision to add 54" and 60" is now working its way through the AWWA process.
- Upcoming revision will add the larger sizes and combine C900 and C905 into one standard called C900.

This artificial barrier has sometimes caused only part of the full size range of PVC pressure pipe to be included in municipal specifications.

## AWWA C905: A LONGSTANDING PROGRESSION OF LARGER SIZES

- 1988 – 24" was the largest size in original C905 standard.
- 1997 – maximum increased to 48" size.
- 2010 – current edition did not add any larger sizes.
- 2015 – proposed revision will add 54" and 60" sizes.

Product Overview					
AWWA C905 CIOD PVC Pressure Pipe (30-inch and Larger)					
Pipe Size (in)	DR	Pressure Class	Pipe Size (in)	DR	Pressure Class
30	51	80	36	51	80
	41	100		41	100
	32.5	125		32.5	125
	25	165		25	165
	21	200		21	200
42	18	235	48	51	80
	51	80		41	100
	41	100		32.5	125
	32.5	125		25	165
	25	165		25	165

## TIME TO REDEFINE “LARGE DIAMETER”

- Some still consider 12" as large-diameter, but 24" has been in the AWWA C905 standard for more than 25 years
- The 48" size has been in the C905 standard for more than 15 years.
- The artificial transition point between small and large diameter will be removed by the combining of C900 and C905 standards – to be called C900.
- Maximum size will increase to 60" in the proposed revision.

References: AWWA C900 “Polyvinyl Chloride (PVC) Pressure Pipe and Fabricated Fittings, 4 In. Through 12 In.,” 2007, current draft; AWWA C905 “Polyvinyl Chloride (PVC) Pressure Pipe and Fabricated Fittings,” 1988, 1997, 2010