Note: *Highlighted, italicized text* indicates REVISIONS to the version of the NJTA 2004 Standard Supplementary Specifications which existed prior to the issuance of this DCA.

SECTION 920 – TRAFFIC CONTROL DEVICES

920.01 TRAFFIC CONES

…

Cones shall have the following physical properties:

		Design Criteria	
		28″ Cone	**36″ Cone**
(1)	Material	PVC/Plastic or Rubber	PVC
(2)	Overall Height	28"	36″
(3)	Cone Weight	7 lbs. (min.)	15.5 lbs. (min.)
(4)	Total in-place Weight	*7 lbs. (min., Parkway only)* 15 lbs. (min.)	15.5 lbs. (min.)
(5)	Cone Diameter, Top Interior (1" from top)	2-3/8" ± 1/8"	2-3/8″ ± 1/8″
(6)	Cone Diameter, Bottom Interior	10-5/8" ± 1/2"	11-3/8″ ± 1/2″
(7)	Base Size, Square	13-3/4" ± 1/2" With Cleats	17" ± 1/2" Without Cleats
(8)	Tensile StrengthASTM D638	1,000 psi (min.)	1,000 psi (min.)
(9)	Elongation	200% (min.)	200% (min.)
(10)	Hardness – Durometer ASTM D2240	80 ± 10	80 ± 10
(11)	Fold Resistance – A cone is placed in an upright position and folded at a point near the middle of its vertical height by holding the upper tip of the cone by hand for ten seconds to the base and touching the surface upon which the base is resting.	The cone shall return to its original vertical position within 15 seconds after release.	
(12)	Heat Resistance - Cones are placed upright for 1 hour at 180°F with a 3±0.11 Lb mass suspended approximately 14″ from the top of each cone. and secured using a 2.6 inch diameter flat metal disc. Cones are returned to ambient air temperature, and are stacked in various configurations with one another.	The cones shall not stick to one another and shall be easy to remove from the stack(s).	
(13)	Cold Resistance – A cone is placed upright for 3 hours at 0°F. Immediately after, a steel ball weighing 2 pounds (0.9 kg) is dropped a distance of 5 feet (1.5m) through a virtually frictionless guide tube onto the surface of the cone. The surface of the cone that was struck by the steel ball shall be in a horizontal position, with the cone supported and held in	The cone shall show no evidence of fracturing, cracking or splitting	

	position at both ends. The cone shall be subjected to five concurrent impacts concentrated near the middle.	

(*B*) Stabilizers

On Turnpike roadways, separate stabilizers shall be provided for 28" cones to meet the *Total in-place Weight* requirement listed herein for cones without molded bases; *on Parkway roadways, separate stabilizers are not required for 28" cones that meet the Total in-place Weight required.* The separate stabilizers shall be black in color and shall be constructed so that they rest evenly on the base of the cone without overhanging. The stabilizer shall be a minimum of 5 pounds and shall have the same physical properties as cones in tensile strength, elongation and hardness. Only one stabilizer per cone shall be used.