



“THE REVOLUTION HAS BEGUN”

POWERED BY **3M** Series 3840 High Intensity Grade Reflective Sheeting
Revolution Series



JBC SAFETY PLASTIC INC - REVOLUTION SERIES SPEC SHEET

A. Material

Conical Section of the traffic cone is pure premium PVC. The base section is composed of recycled PVC permanently bonded to the conical section.

B. Tensile Strength

Method: ASTM D638

Jaw separation rate: 500mm/min (20 in/min)

Type IV specimens were created along a vertical line of the cones sides. The cones press-punched using standard die such that sample width constant at 6.35mm and sample initial

length constant at 33mm. Each specimen's thickness was measured to accurately determine stress.

Strength (MPa)

MEASURED	REQUIRED MIN.
13.0	8.3

C. Elongation Test

MEASURED	REQUIRED MIN
350	200

D. Tensile stress at 200% Elongation

Stress at 200% Elongation (MPa)

MEASURED	REQUIRED MIN
9.4	6.9

E. Harness

Method: ASTM D2240

Hardness measure using a Shore A durometer. Samples were placed with the conical section's inner surface on the 1/2" thick aluminum plate, engaging the indenter on the outer surface of the material. 15 secs after the pressure foot was engaged, the hardness was measured.

MEASURED	REQUIRED
75	80 +/- 10

F. Tensile Strength of Joint

Method: ASTM D638 :
 Jaw separation rate: 130mm/min (5inch/min)

The test specimens were created from the side of the cone sample. Sample was 1" (25mm) wide to accommodate the maximum width of the tensile jaw clamps instead of the specified 50mm. Length of the specimens included 300mm of the conical section and 50mm of the base section. The thickness of the base section was partially reduced at the end of the sample in order for the jaws to clamp.

Strength (N per mm width)

MEASURED	REQUIRED MIN
27	11

G. Foldability

Samples placed in normal position on flat surface and folded at the middle of the cone by bringing tip of cone to ground next to base while keeping all of base on the ground and holding for 10 seconds.

The tip was then released and the time for the cone to return to its original shape was measured.

Times (seconds)

MEASURED	REQUIRED MIN
2.9	15

Meets the foldability requirements

H. Heat resistance

Cones placed upright for 1 hour in a preheated circulating air oven at 82°C with a 1.36 +/- 0.05 kg mass suspended approx. 350mm from the top of each cone secured using a 65mm diameter flat metal disc.

RESULT
No significant slump or slag, no change in appearance.

After test while cones still warm(ambient air temperature at 50°C), cones were stacked in various configurations with one another. Although the PVC material was more pliable, cones did not stick to one another and were easily removed from the stack.

I. Cold Resistance

Samples placed upright for 3 hours in a circulating air environmental chamber at -18°C (0°F). Afterward, cones were quickly removed from the chamber and placed horizontally on ground with cone tip supported so that base plumb. A 60mm diameter, 0.91kg steel ball was dropped through a 1.5 high virtually frictionless guide tube to impact the surface of the frozen cone. The ball was dropped in 3 places - at the top above the upper reflective sleeve recess, in the middle within the lower reflective sleeve recess, and at the bottom approx. 150mm above the base.

RESULT
No cracking, splitting, or fracturing observed

J. Color Fastness

Test method: ASTM E308, E1349, E991, E1164 (Illuminant D65 , 2° Observer, 45/0 Geometry)

Instrument: Hunterlab Colorflex A60 spectrophotometer

3"x 3" Square sample from II.C. Color were exposed for 500 hrs in accordance with ASTM G155, Table X3.1, cycle 1 then color was remeasured.

JBC SAFETY PLASTIC - REVOLUTION SERIES

Revolution Series Cone are tested and certified to meet the requirements of NCHRP-350 Standards & MUTCD Standards.



Revolution Series Specification

Model NO.	Weights	Heights	Wall Thickness Top	Wall Thickness Bottom	A	A - Diameter	B - Diameter	C
RS45015C	3.52LBS	18"	0.10	0.18	1.97	1.18	7.29	10.52
RS45015C-LIME	3.52LBS	18"	0.10	0.18	1.97	1.18	7.29	10.52
RS70032C	7.26LBS	28"	0.13	0.14	1.97	1.30	10.24	13.79
RS70032CT	7.26LBS	28"	0.14	0.16	1.97	1.58	10.44	13.79
RS70032C-LIIME	7.39LBS	28"	0.13	0.14	1.97	1.30	10.24	13.79
RS70032SR	7.26LBS	28"	0.14	0.16	1.97	1.38	7.88	13.79
RS70045S	10.12LBS	28"	0.13	0.17	1.89	1.38	7.84	14.38
RS70045SR	10.12LBS	28"	0.14	0.16	1.89	1.38	7.88	14.38
RS70045CT	10.12LBS	28"	0.15	0.16	2.17	1.30	10.44	15.13
RS90045CT	10.12LBS	36"	0.14	0.17	1.97	1.42	10.95	14.62
RS90055CT	12.32LBS	36"	0.14	0.17	1.97	1.42	10.95	14.70
RS90070CT	15.84LBS	36"	0.16	0.16	2.07	1.42	10.95	15.35

*Measurments shown have been rounded. All Specification and descriptions are subject to change without notification.

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For customer service please call 866-PICK-JBC We are here to help.