

7. **Temperature Range:**
Ambient temperature range : 25 °C to + 70° C
Cold Resistance : No cracking at - 25°
Heat Resistance : 7 days at +70° C – No changes
8. **Atmospheric Conditions:**
To withstand extreme weather conditions. The MSCN screens should not lose any of its camouflage properties under adverse conditions. The tarpaulin effect is to be minimum and it blends to be well with vegetation in the background and the shrubs etc.
9. **Material:**
To be made of robust and non-snagging material of synthetic yarn.
Fabric : Synthetic fibre
Tensile strength : equal to or more than 340 Newton
TIE, Loop & Edge Cord : Polyamide or polyester
Tensile strength : equal to or more than 1000 Newton
Sewing thread for panels & edge cord : Polyamide or polyester
Tensile strength : equal to or more than 35 Newton
10. **Drying of Nets:**
After 30 minutes of becoming wet, the water retention is to be less than 5%.
No change in shape of the screen, Shrinkage if any, after first wash is to be less than 4% and none thereafter.
11. **Shine:**
To be a Matt finish to avoid any shine on the surface.
Gloss : The gloss shall be Less than or equal to 2 at 85 / 85
12. **Tearing:**
To be capable of withstanding high altitude and high speed winds up to 40 KMPH and short gusts of strong wind bursts of 80 KMPH.
Tearing Strength : Equal to or more than 120 Newton.
13. **Weight:**
The weight should be approximately 225 g/sm.
14. **Easily Washable:**
Easily washable using mild detergents.
15. **Source of Supply**

M/S BARRACUDA CAMOUFLAGE LTD.,
103, PHASE-VI,
UDYOG VIHAR, HSIDC,
GURGAON, HARYANA

Fax No: 124-2370590/ 591

Contact Person: Shri Naresh Ummat, MD, Contact No: 098101 62174

I. QUALITATIVE REQUIREMENTS

1. Range of Spectrum:

A. Visual:

Range of 320 – 710 nanometers wavelength using binoculars, telescopes and aerial photography etc. Colour distribution
Should be able to blend the object to be camouflaged well with the background.

B. Near infra Red:

Detection by NRI devices, both active and passive in the range of 680 - 1500 nanometers wavelength.

a. Semi Desert terrain:

<u>Colour % age</u>	<u>ISC Std No.</u>
Olive Green – 33%	220
Dark Brown – 17%	412
Light Green – 33%	278
Sand - 17%	386

C. Thermal Infra Red:

The thermal properties shall be effective in the wavelength bands of 3-5 micrometer and 8-14 micrometer. The thermal transmission shall correspond to less than or equal to 30%.

Thermal Transmission : 30% corresponding to a visual cover of 70%

Thermal Signature : 4 C above ambient air temperature

D. Radar:

The radar properties shall be effective in the wavelength bands of 1- 100 GHz. The level of attenuation shall correspond to average Radar Cross Section (RCS) of 6dB in the entire wavelength area of 1- 100 GHz. The validation (laboratory tests) of the values shall be made in the 9GHz and 94GHz wavelength bands.

The polarization limit shall be a maximum of 10% difference in the RCS reduction between the horizontal and vertical position of the MSCN to the radar wave.

RCS reduction (Average):	9GHz	35GHz	94GHz
	6dB	6dB	6dB

2. Adaptability to different types of terrain:

The screens should adapt and perform well in the different terrain.

3. Sizes & Qty :

Diameter – 2.5 m - Qty 7 Nos.

4. Retention of colours (Colour stability): The screens should provide colour fastness during their shelf life and under different usage conditions. A laboratory test method to be employed to check the same.