

Commercial Decals for Year 2022

Scope of Work – The contractor shall provide all labor and material as specified herein.

Description – The reflective sheeting shall consist of lens elements enclosed within a transparent resin and shall have a pre-coated pressure sensitive adhesive backing protected by a removable liner. The retro reflective sheeting shall provide a weather resistant, essentially smooth, flat, outer surface when finished with material in the manner recommended by the retro reflective sheeting manufacturer.

Retro Reflective Sheeting Requirements

A. *Reflective Characteristics*

1. The unprinted retro reflective sheeting shall have the following minimum brightness values expressed as average candlepower per square foot of material. Measurements shall be conducted in accordance with the reflective intensity testing procedures for reflective sheeting specified in Federal Specification LA-300C, “Sheeting and Tape, Reflective: Non-Exposed Lens, Adhesive Backing”, Para. 4.4.7.

Observation Angles	White	0.2	0.5
Entrance Angles	-4	30.0	18.0
	40	6.0	5.0

2. Rainfall Performance

The brightness of the sheeting, totally wet by rain, shall not be less than 90% of the above values. Wet performance measurements shall be conducted at 0.2 observation and -4 entrance in accordance with the Rainfall Test Method specified in Federal Specification LS-300C, “Sheeting and Tape Reflective: Non-Exposed Lens, Adhesive Backing”, Para. 4.4.9.4.

B. *Adhesive*

1. The pre-coated pressure sensitive adhesive shall form a durable vandal resistant bond to clean, dry, painted, varnished, fiberglass, aluminum, or steel surfaces. Surfaces may be moderately rough, pitted or waxed.
2. The protective liner attached to the adhesive shall be removed by peeling without soaking in water or other solvents and shall be easily removed after accelerated storage for four hours at 150°F under weight of 2.5 lbs. per square inch.

3. The adhesive shall not exude from edges of the sheeting when processed into the finished decal so as to cause stacked pieces to stick together during shearing, cutting, printing, handling, or while packaged in shipment and distribution.

C. *Film*

1. The sheeting shall have a similar diffuse (daytime) and reflected (nighttime) color.
2. The sheeting surface shall be readily cut/die cut without cracking, or flaking, and shall be compatible with transparent or opaque inks and protective finishing clear as designed and supplied by the reflective sheeting manufacturer for decal fabrication.
3. The decals processed and applied in accordance with the recommendations of the reflective sheeting manufacturer shall be easily cleansed of normal direct accumulation by washing with water and mild detergent. The surface shall be sufficiently solvent resistant to permit cleaning with solvents such as VW&P Naphtha, mineral spirits, turpentine and other solvents commonly used on vessel finishes. Rinsed and dried, the surface shall show no appreciable change following cleaning when compared to a new clean decal surface.
4. Protective finished clear coating shall remain clear and durable as well as provide a compatible surface for direct application of additional registration decals.

D. *Physical Characteristics*

Retro reflective sheeting shall be free from ragged edges, cracks, and blisters and be packaged in accordance with accepted commercial standards. Decals shall have a service life of a minimum of twelve (12) months.

Fabrication Requirements

A. *Annual Commercial Registration Decals (Item No. 1)*

1. Design, Color and Size

The size, shape and design of the decals, as well as the size and position of all printing, shall be in strict conformity with the attached sample and the following requirements.

The commercial registration decals shall have a background sheeting of "Confirm" Brand Security Film No. 4230 (white). The border and wording shall be reversed printed with "Scotchlite" Brand Transparent Process **International Orange** or a material of equal quality. Finished decals must be clear coated with "Scotchlite" Brand Clear Coat No. 260 or a material of equal quality.

All wording and numeric shall be printed with “Scotchlite” Brand Process Color No. 200 (black) or a material of equal quality. The month shall be followed by a slash and the year “22”.

The dimensions of each decal shall be three inches (3.0”) in diameter.

The adhesive protective liner on sheeting intended for fabrication of individual decals shall be scored at or near the center of each sticker for easy removal.

2. Serial Number

Decals shall be manufactured in pairs, and each pair shall have identical serial numbers and must be easily separated.

Each pair of decals shall be printed with a serial number running consecutively from W00001 to W11850 for 2022. The serial number shall be printed with “Scotchlite” Brand Process Color No. 200 (black) or a material of equal quality. (See attached illustration, DOBOR 1-10)

3. Quantity

Month	Amount	Month	Amount
1	625 pairs	7	675 pairs
2	850 pairs	8	700 pairs
3	775 pairs	9	1125 pairs
4	950 pairs	10	575 pairs
5	850 pairs	11	800 pairs
6	1675 pairs	12	850 pairs

The month on the remaining 1400 pairs of decals shall be left blank. **(w/year imprinted on the decals)**

B. *Annual Tow in Decals (Item No. 2)*

1. Design, Color and Size

The size, shape and design of the decals, as well as the size and position of all printing, shall be in strict conformity with the attached sample and the following requirements.

The annual tow in decals shall have a background sheeting of “Confirm” Brand Security Film No. 4230 (white). The border shall be reversed printed with “Scotchlite” Brand Transparent Process **International Orange** or a material of equal quality. Finished decals must be clear coated with “Scotchlite” Brand Clear Coat No. 260 or a material of equal quality.

The “month number” shall be followed by a slash, the year of the decal expiration shall be “22”. All wording and numeric shall be printed with “Scotchlite” Brand Process Color No. 200 (black) or a material of equal quality.

The dimensions of each decal shall be three inches (3.0”) per side.

The adhesive protective liner on sheeting intended for fabrication of individual decals shall be scored at or near the center of each sticker for easy removal.

2. Serial Number

Decals shall be manufactured in pairs, and each pair shall have identical serial numbers and must be easily separated.

Each pair of decals shall be printed with a serial number running consecutively from W0001 to W0350 for 2022. The serial number shall be printed with “Scotchlite” Brand Process Color No. 200 (black) or a material of equal quality. (See attached illustration, DOBOR 2-10.)

3. Quantity

Month	Amount
8/22	350 pairs

C. *Application Instruction*

Application instructions shall be printed on the back of each pair of decals. See attached sample for printing of application instructions.

D. *Responsibility*

The successful sheeting bidder shall furnish all inks, clear coating, and thinners needed to produce boat registration decals meeting the requirements of this specification.

E. *Security Measures*

The Contractor must provide adequate security methods and supervision to protect decals from hazard or loss. A complete description of the plant security precautions must accompany each bid. The State reserves the right to enter the vendor’s premises at any time during the production of decals to inspect the progress of production, the quality of workmanship, and the adequacy of security.

F. *Workmanship*

All workmanship shall be first class and done in accordance with generally accepted decal manufacturing standards.

G. *Warranty*

The decal manufacturer shall certify that all decals furnished conform to the specifications herein. The decal manufacturer shall replace all defective decals without further expense to the State.

H. *Packaging*

Decals shall be packaged in such a manner as to prevent sticking or damaging of printed surface while in transit or in storage.

I. *Delivery*

Delivery shall be made within thirty (30) calendar days from the date indicated in the Notice to Proceed.

J. *Payment*

Payment shall be made in lump sum to the vendor awarded the contract. Payment shall include labor, materials, State and Federal taxes and delivery.

Guarantee

The vendor shall submit a statement guaranteeing that the decals he furnished will be free of any defective material or workmanship for a period of 12 months from the date of delivery. The vendor shall further agree to furnish, at no cost to the State, labor and materials for replacement decals in which defects appear within the guarantee period.