

**SPECIFICATIONS
CONVERSION COATED ALUMINUM
FOR
MULTI-YEAR MOTOR VEHICLE LICENSE PLATES**

PURPOSE AND SCOPE

It is the purpose of these specifications to define a conversion coated aluminum substrate material suitable in the manufacture of reflectorized multi-year motor vehicle license plates. Detailed qualitative and quantitative criteria for the manufacture and delivery of the substrate are included in these specifications.

DESCRIPTION

The aluminum must be produced to the following properties:

A. Alloy-Temper	7069-H111 or 3105-H12
B. Thickness	.028" + .0015" - .0015"
C. Width (Standard Size)	12-1/8" + 1/32" - 0
(Motorcycle)	7-1/8" + 1/32" - 0
D. Ultimate Strength	17,000 to 23,000 psi
E. Minimum Yield Strength	12,000 psi
F. Elongation on 2" Standard Specimen	16 Min. / 20 Typical
G. Quality	To withstand embossing with all steel dies at 3/32" height without breaking, cutting or appreciable plate warping.
H. Front Surface Finish & Backside Preparation	Treated with a light, tightly adherent, chrome-free conversion coating pretreatment. The chrome-free aluminum pretreatment shall provide for the proper level of adhesion of reflective license plate sheeting. Coating to be and free of any powdery residue or oil or other foreign material, which may affect adhesion of reflective sheeting.
I. Backside Surface Finish	Treated with a polyester washcoat to protect the backside surface as well as provide protection to frontside conversion coated surface. Finish will be free of any powdery residue or oil or other foreign material, which may affect adhesion of reflective sheeting.
J. Conversion Coating Weight	4 to 6 mg/ft ²

TEST AND ANALYSIS OF SAMPLES

On or before the date of the bid opening, each prospective bidder shall submit a 50-pound sample piece of conversion coated aluminum meeting the criteria defined above. The sample must be properly labeled with the name of the manufacturer, alloy, gauge, strength, and any other characteristic that would benefit testing and analysis.

- A. Any sample that does not meet the specification or production testing may result in the rejection of the bid.
- B. Acceptance of the sample does not relieve the bidder of the responsibility of furnishing the purchaser with the production material that meets design criteria and/or sample quality in accordance with these specifications. Any deliveries over the duration of the contact may be rejected if design specifications are not sustained at the highest level.
- C. Address samples to:

Attention:

PACKAGING

- A. Coils of 12-1/8" wide aluminum substrate shall be wound to a nominal weight of 2,000 lbs. The coils shall have 20" cores with a maximum O.D. of 51" and shall be packaged in individual skids with a total weight of not more than 3,000 lbs. No more than 10% under sized in weight will be accepted.
- B. Coils shall be packaged on a pallet. They shall be packaged and wrapped with reinforced waterproof (no tarpaper) paper sufficiently to insure proper protection against environmental circumstances. Pallets should allow 4" clearance for pallet truck, and have 4" x 4" parallel runners, 28" apart. Pallet coils may be stacked two high for shipping and storage purposes.
- C. Each coil shall be securely banded both around the circumference and through the eye of the coil to prevent telescoping.
- D. Coils shall be free from edge damage, as caused by cable marks, forklifts, dull cutting dies, rough separator discs or any other causes that result in rough, wavy or damaged edges. Coils shall be coiled straight and fairly tight with no more than 1/16" interweave.
- E. A securely attached packing slip, legible without removal, shall be attached to each skid and shall indicate the size, gross and net weights, and purchase order number.

CONDITIONS

The quantity of aluminum specified in the bid is an estimated amount. The purchaser reserves the right to increase or decrease the quantities defined herein by no more than 10% of the ordered amount and upon 60 days written notice. If more than the estimated amount is needed, the bidder agrees to furnish the additional quantities with no increase in the bid price.

Purchaser reserves the right to refuse or reject any part or all shipments that fail to conform to all requirements of this specification. Any material deemed unusable will be replaced by the vendor in like quantities at no cost.

SHIPPING

- A. To be delivered 60 days after receipt of order.
- B. Shipments must be open flatbed trailer for side off-loading by forklift truck.
- C. Shipments to be approximately 40,000 pound truck loads.
- D. Delivery shall be FOB destination.
- E. Buyer to unload at destination.
- F. Buyer to be notified by trucker 24 hours prior to arrival of shipments. Monday through Friday deliveries only, 8:00 a.m. to 2:00 p.m., no holidays.
- G. Payment will be made upon the completion and acceptance of specified deliveries.