



Attachment B – Specifications

RFx No.: 3000023203

Title: Aluminum - DOC-PE

Line Item No. 1: Aluminum: .027" x 12.125"

Conversion coated aluminum for Motor Vehicle License Plates

General Specifications:

- A. Coils of Aluminum substrate shall be wound to a nominal weight of 2,000 lbs. The coils shall have 18" to 20" inside diameter cores with a 0.1) of 48" to 58" and shall be packaged on individual skids with a total weight of not more than 2,000 lbs. No more than 10% undersized in weight will be accepted.
- B. Coils shall be packaged on a pallet. They shall be packaged and wrapped with reinforced waterproof paper (no tar paper) sufficiently to insure protection against environmental hazards. Pallets should allow 4" clearance for pallet truck and have 4" X 4" parallel runners at 28". Pallet coils may be double stacked for shipping and storage.
- C. Each coil shall be securely banded around and through the eye of the coil to prevent telescoping.
- D. Coils shall be free from edge damage caused by cable marks. Forklifts, dull cutting dies, rough separator discs, or 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. Printed on tag attached to each or on a tape used to tie the coil, shall be the name of the producer that performed final processing or finishing operation prior to making the product along with the applicable lot number and net weight of the coil.

Product 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.

The Aluminum must be produced to the following properties:

- A. Alloy Temper: 8112-H111, 7069-HI 11, or 3105-H21
- B. Thickness: .027 (+/- .015")
- C. Width (standard size): 12-1/8" + 1/32" – 0
- D. Ultimate Strength: 17,000 to 23,000 KSI



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- E. Minimum Yield Strength: 11,500 KSI
- F. Elongation of 2” Standard Specimen: Minimum 16% (20% nominal)
- G. Quality: To withstand embossing with all-steel dies at 3/32” height without breaking, cutting or appreciable plate warping.
- H. Front Surface Finish and Backside Preparation:
Coating: Sheetting to be treated with a light, tightly adherent, chromate conversion coating or chrome free coating, *Approved & Certified by State’s Sheetting Supplier*(see below) applied in accordance with ASTM B-449 for chromate conversion or BetzDearborn Permatreat 1021 B for chrome free conversion, and free of any powdery residue, oil or other foreign material that may affect adhesion of reflective sheetting. Chromate coating weight shall be 10 to 35 mg/sq ft. Chrome free conversion coating weight will be 8 to 12 mg/sq ft with a median of 10 mg/sq ft as optimum.

Shelf life: 6 months

*If bidding aluminum with a chrome-free conversion coating, the Successful Bidder must supply a letter from 3M (the current sheetting supplier), stating that their aluminum will work with 3M’s sheetting.

If bidding aluminum with a chromate conversion coating, then no further documentation will be required.

Shipping Specifications:

- A. Shipment must arrive by open flatbed trailer for side off-loading by fork truck.
- B. Buyer to unload at destination.
- C. Buyer to be notified at least 24 hours prior to arrival of shipments. Deliveries accepted Monday thru Friday, 8:00am to 2:00pm, except holidays. Contact PE Tag Plant at (225) 655-4411.
- D. Two deliveries, one week apart:
1st delivery will be 40,000 pounds
2nd delivery will be 40,000 pounds.

Packing:

Packing slip/invoice must accompany each shipment. Items are to be packed so as not to be damaged in any way. Agency will not accept damaged material.
