Facts about Aluminum License Plates

ENVIRONMENTAL BENEFITS

- License plates will be made from recycled aluminum.
- Sources of reclaimed aluminum include beverage cans, siding, gutters, storm window frames and lawn furniture.
- Approximately 2 million pounds of aluminum will be used to manufacture approximately 8 million license plates each year.

STABILITY AND DURABILITY

- Aluminum is much lighter than steel and when the alloy is designed to the same standards as steel, it is made to be higher in overall strength. Aluminum reaches its "endurance limit" sooner than steel in terms of flexure and aluminum has "structural efficiency" much greater than that of steel. This means the strength of aluminum is the same or higher strength as steel with the balance tipped somewhat in favor of aluminum in terms of overall yield, ultimate failure, and its light weight.
- Steel is highly susceptible to rust. Aluminum is more resistant to corrosion.
- Steel plates are susceptible to warping during the embossing process, often wasting materials. Aluminum produces flatter plates with minimal warping and production of a better quality end product.
- Aluminum is ductile (malleable) enough to bend without breaking.

COST AND EFFICIENCY

- Aluminum material costs a little more than galvanized steel, but the state will save more than $121,000 per year in freight and mailing costs because of aluminum's lighter weight.
- The market for steel is currently unpredictable, causing it to be more difficult to secure long term price contracts in the industry.
- Two license plates can be produced from one pound of steel. One pound of aluminum yields four plates.

SAFETY

- Boxes of aluminum plates are easier and safer to lift. Steel plates weigh about 22 pounds per box, while aluminum plates weigh about 12 pounds per box. Boxes contain 50 license plates, or 25 sets.

STORAGE, MAINTENANCE AND PROCESSES:

- Less storage space is required for aluminum coil storage than that of steel.
- Aluminum is gentler on machinery components than steel, decreasing maintenance and down-time.
- Aluminum substrate requires only a hot rinse, thus eliminating the wash/rinse tank process required for steel.