

CARB EXECUTIVE ORDERS

TRANSTEX® VS. UTILITY TRAILER MANUFACTURING (UTM)

DEVICE	$\Delta C_d A (m^2)^*$	TEST TYPE	TRAILER TYPE	CARB EXECUTIVE ORDER
E-1930T	0.49	Wind Tunnel	Long Dry and Long Refrigerated Vans	AD-05-002
E-1932T	0.50	Wind Tunnel	Long Dry and Long Refrigerated Vans	AD-05-001-1
E-2330T	0.51	Wind Tunnel	Long Dry and Long Refrigerated Vans	AD-05-003
UTM USS-120A-4	0.44	Wind Tunnel	Long Dry and Long Refrigerated Vans	AD-06-001-1

*The $\Delta C_d A (m^2)$ value is the difference in the coefficient of aerodynamic drag by the area between a trailer without an aerodynamic device and a trailer with an aerodynamic device. The $\Delta C_d A (m^2)$ value correlates to fuel savings; as the $\Delta C_d A (m^2)$ increases, fuel savings increase proportionally.

TESTING

When testing Long Dry Vans and Long Refrigerated Vans, the lowest $\Delta C_d A (m^2)$ value is recorded. This value always results from Long Refrigerated Vans. When comparing CARB's Executive Order for the UTM USS-120A-4 skirt with a $\Delta C_d A (m^2)$ of 0.44 to CARB's Executive Orders for TRANSTEX® EDGE™ Skirts with $\Delta C_d A (m^2)$ values of 0.49, 0.50, and 0.51 yields the most accurate results.

TRANSTEX® and UTM completed testing on Long Dry Vans and Long Refrigerated Vans.

CASE STUDY | E-1930T VS UTM USS-120A-4

$$\begin{aligned}
 \% \text{ Increase in Fuel Savings} &= \frac{\Delta C_d A (\text{TRANSTEX}^\circ) - \Delta C_d A (\text{UTM})}{\Delta C_d A (\text{UTM})} \times 100 \\
 &= \frac{0.49 - 0.44}{0.44} \times 100 \\
 &= 11.36\%
 \end{aligned}$$

FUEL SAVINGS COMPARISON TRANSTEX® VS. UTM USS-120A-4	
E-1930T	11.36% greater fuel savings
E-1932T	13.64% greater fuel savings
E-2330T	15.91% greater fuel savings

CONCLUSION

By equipping trailers with TRANSTEX® EDGE™ Skirts, fleets benefit from **between 11% and 16% more fuel savings** than with UTM's USS-120A-4 skirt.

