

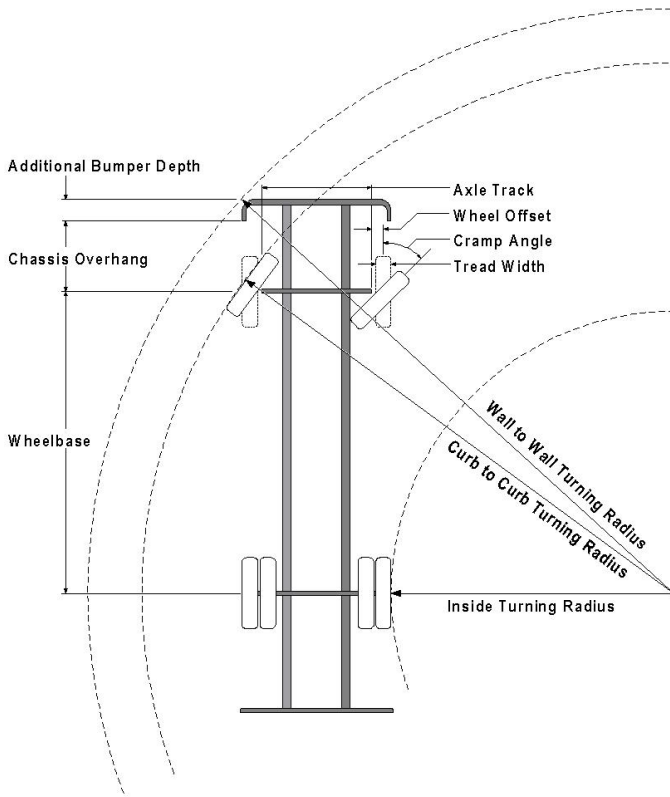


Turning Performance Analysis

06/01/2021

Bid Number: 1003
Department: Hoffman Estates Fire Department

Chassis: Velocity Chassis, 100AAT
Body: Aerial, 100AAT, No Pump, Alum Body



Parameters:

*Inside Cramp Angle:	40°
Axle Track:	82.92 in.
Wheel Offset:	4.68 in.
Tread Width:	17.7 in.
Chassis Overhang:	78 in.
Additional Bumper Depth:	15 in.
Front Overhang:	93 in.
Wheelbase:	265 in.

Calculated Turning Radii:

Inside Turn:	25 ft. 2 in.
Curb to curb:	41 ft. 0 in.
Wall to wall:	45 ft. 6 in.

Category	Option	Description
Axle, Front, Custom	0508846	Axle, Front, Oshkosh TAK-4, Non Drive, 24,000 lb, Velocity
Wheels, Front	0019611	Wheels, Front, Alcoa, 22.50" x 12.25", Aluminum, Hub Pilot
Tires, Front	0677684	Tires, Front, Michelin, XFE (wb), 425/65R22.50, 20 ply, Fire Service Load Rating
Bumpers	0767817	Bumper, 15" Extended, Alum, Painted, 100AAT, VEL
Aerial Devices	0771866	Aerial, Ascendant 100' Aerial Tower

Notes:

*Actual Inside cramp angle may be less than shown.

Curb to Curb turning radius calculated for 9.00 inch curb.

Definitions:

Inside CrampAngle	Maximum turning angle of the front inside fire.
Axle Track	King-pin to King-pin distance of front axle.
Wheel Offset	Offset from the center line of the wheel to the King-pin.
Tread Width	Width of the tire tread.
Chassis Overhang	Distance of the center line of the front axle to the front edge of the cab. This does not include the bumper depth.
Additional Bumper Wheel	Depth that the bumper assembly adds to the front overhang.
Wheelbase	Distance between the center lines of the vehicles front and rear axles.
Inside Turning Radius	Radius of the smallest circle around which the vehicle can turn.
Curb to Curb Turning Radius	Radius of the smallest circle around which the vehicle's tires can turn. This measures assumes a curb height of 9 inches.
Wall to Wall Turning Radius	Radius of the smallest circle around which the vehicle's tires can turn. This measures takes into account any front overhang due to chassis , bumper extensions and or aerial devices.