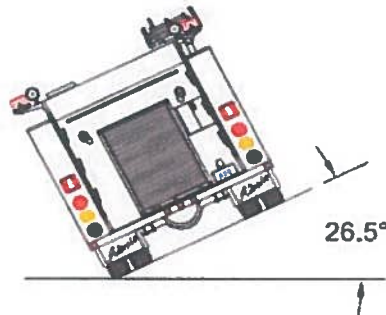
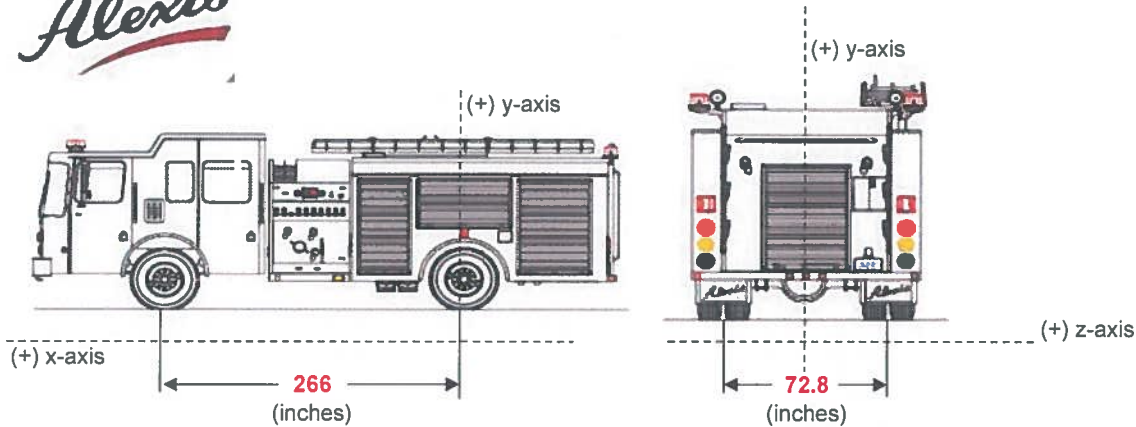


VERTICAL CENTER OF GRAVITY / WEIGHT DISTRIBUTION

5/10/2016



Contract No:
 Proposal Name: **AFE DEMO**
 Calculated By: **Melissa Tinkham**
 Approved By:
 Revision:
 Type of Chassis: **Freightliner M2 106 4-dr**
 Type of Pump: **Darley PSM 1500gpm**
 Cab to Axle: **153.2**
 Tank Capacity: **1000**

Item	Weight (lbs)	Coordinates Local C.G. (in)			% Rear	Weight (lbs)	
		z	x	y		Front	Rear
Chassis	13568	0	165	42	38%	8411	5157
Poly Tank (w/water)	9250	-3.25	11.75	72	96%	409	8841
Officer & Driver	500	0	216	63	19%	406	94
Men & Equip. (cab)	1000	0	169	63	36%	635	365
Pump Module	1500	0	107	55	60%	603	897
Pump	1400	0	89	48	67%	468	932
Body Module (SS)	4750	-6	-6.5	66	102%	-116	4866
Hose Bed	1000	0	-19.5	102	107%	-73	1073
Add. Equip. front	1000	-3	48	56	82%	180	820
Add. Equip. Rear	1500	-3	-54.5	56	120%	-307	1807
Preconnects	400	0	121	61	55%	182	218
	0	0	0	0	0%	0	0
Ladder Rack	300	47	-6.5	99	102%	-7	307
Suction Hose	150	28	-19	67.5	107%	-11	161
	0	0	0	0	0%	0	0
	0	0	0	0	0%	0	0
	0	0	0	0	0%	0	0
	0	0	0	0	0%	0	0
	0	0	0	0	0%	0	0
	0	0	0	0	0%	0	0
Total	36318	Global Center of Gravity				10780	25538
GAWR	41600	x	y	z		14600	27000
Load as % of Total	100%	-1.3	79.0	57.8		30%	70%
						OK	OK

Truck Tipping Angle: 31 degrees (Full Water Tank) OK
 Maximum vertical center of gravity "z" = 58.24 OK
 (Maximum "z" is 80% of the rear axle track width)

HOSE CAPACITIES

5/10/2016

Customer AFE DEMO
 Calculated By Melissa Tinkham

Drawing No. P-V52 Rev. _____
 Contract No. _____

HOSE BED

Length	134		
Width	71		
Height	18		
Cu. Ft.	99.10	0.00	
Total		99.10	

Hose Size				
Amount				
DF	0	0	0	0
Cu. Ft.	0.00	0.00	0.00	0.00
Total		0.00		

MATTYDALES

Length			
Width			
Height			
Cu. Ft.	0.00	0.00	0.00
Total		0.00	

Hose Size			
Amount			
DF	0	0	0
Cu. Ft.	0.00	0.00	0.00
Total		0.00	

CARTRIDGE LAYS

Length	73	73	
Width	10	10	
Height	8	12	
Cu. Ft.	3.38	5.07	0.00
Total		8.45	

Hose Size	1 3/4	2 1/2	
Amount	200	150	
DF	26	41	0
Cu. Ft.	3.01	3.56	0.00
Total		6.57	

HOSE TRAYS

Length			
Width			
Height			
Cu. Ft.	0.00	0.00	0.00
Total		0.00	

Hose Size			
Amount			
DF	0	0	0
Cu. Ft.	0.00	0.00	0.00
Total		0.00	

HOSE WELLS

Length	12		
Width	26.5		
Height	12		
Cu. Ft.	2.21	0.00	0.00
Total		2.21	

Hose Size	1 3/4		
Amount	150		
DF	26	0	0
Cu. Ft.	2.26	0.00	0.00
Total		2.26	

Standard Hose Dimensions per NFPA (2003 Edition)

1 3/4" lays 3 1/4" wide	DF=	26
2" lays 3 3/4" wide	DF=	24 (ANGUS)
2 1/2" lays 4 1/2" wide	DF=	41
3" lays 5 1/4" wide	DF=	50
4" lays 6 1/2" wide	DF=	58
5" lays 8" wide - Angus	DF=	96
5" lays 8-1/2" wide - Cotton	DF=	102

COMPARTMENT SPACE

Department Name:	AFE DEMO	Calc. By:	Melissa Tinkham
Drawing Number:	P-V52	Rev. Number:	
Contract Number:		5/10/2016	

Compartment	Width	Height	Depth	Cubic Feet
	0	0	0	0.00
	0	0	0	0.00
L1 UPPER	41.925	28.1875	12	8.21
L1 LOWER	41.925	33.625	26	21.21
L2	63.85	45.9375	12	20.37
L3 UPPER	49.75	28.1875	12	9.74
L3 LOWER	49.75	33.625	26	25.17
	0	0	0	0.00
R1 UPPER	41.925	11.875	12	3.46
R1 LOWER	41.925	33.625	26	21.21
R2	49.75	19.9375	12	6.89
R3 UPPER	0	11.875	12	0.00
R3 LOWER	0	33.625	26	0.00
	0	0	0	0.00
REAR	43	66	37	60.77
	0	0	0	0.00
	0	0	0	0.00
PM DUNNAGE	68.5	17.5	19.5	13.53
	0	0	0	0.00
SH COMP	13.6875	18	135	19.25
	0	0	0	0.00
	0	0	0	0.00
	0	0	0	0.00
	0	0	0	0.00
	0	0	0	0.00
	0	0	0	0.00
	0	0	0	0.00
	0	0	0	0.00
	0	0	0	0.00
	0	0	0	0.00
	0	0	0	0.00
	0	0	0	0.00
	0	0	0	0.00
	0	0	0	0.00
	0	0	0	0.00
	0	0	0	0.00
	0	0	0	0.00

TOTAL 209.79 Cubic Ft.