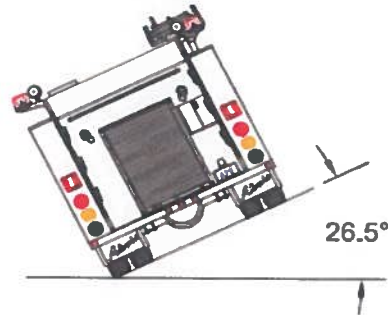
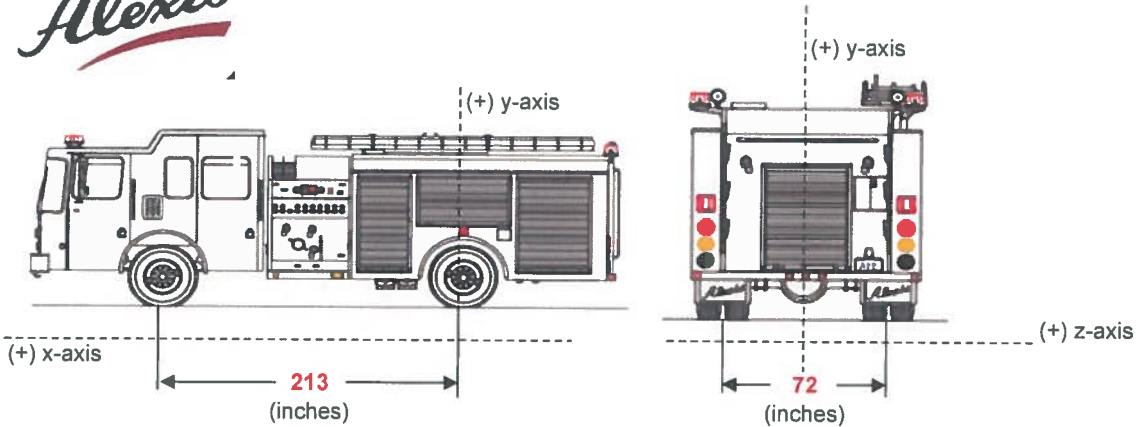


VERTICAL CENTER OF GRAVITY / WEIGHT DISTRIBUTION

5/10/2016



Contract No:
 Proposal Name: **AFE DEMO**
 Calculated By: **Melissa Tinkham**
 Approved By:
 Revision:
 Type of Chassis: **HME 1871-W-MFDxL 12RR**
 Type of Pump: **Darley PSM 1500gpm**
 Cab to Axle: **153**
 Tank Capacity: **1000**

Item	Weight (lbs)	Coordinates Local C.G. (in)			% Rear	Weight (lbs)	
		z	x	y		Front	Rear
Chassis	18020	0	162	42	24%	13700	4320
Poly Tank (w/water)	9250	-3.25	11.75	72	94%	510	8740
Officer & Driver	500	0	239	63	-12%	561	-61
Men & Equip. (cab)	1000	0	169	63	21%	793	207
Pump Module	1500	0	107	55	50%	754	746
Pump	1400	0	89	48	58%	585	815
Body Module (SS)	4750	-6	-6.5	66	103%	-145	4895
Hose Bed	1000	0	-19.5	102	109%	-92	1092
Add. Equip. front	1000	-3	48	56	77%	225	775
Add. Equip. Rear	1500	-3	-54.5	56	126%	-384	1884
Preconnects	400	0	121	61	43%	227	173
	0	0	0	0	0%	0	0
Ladder Rack	300	47	-6.5	99	103%	-9	309
Suction Hose	150	28	-19	67.5	109%	-13	163
Bumper Extension	250	0	295.5	30	-39%	347	-97
	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	41020	Global Center of Gravity				17060	23960
GAWR	45740	x	y	z		18740	27000
Load as % of Total	100%	-1.2	88.6	55.9		42%	58%

Truck Tipping Angle: **32** degrees (Full Water Tank) **OK**

Maximum vertical center of gravity "z" = **57.60** **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-V51 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-V51	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
	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.