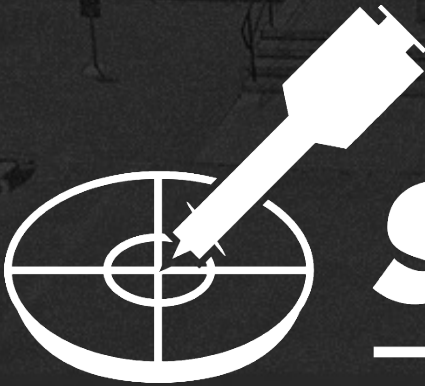




**RAM JACK**



***SIGN DART***<sup>TM</sup>  

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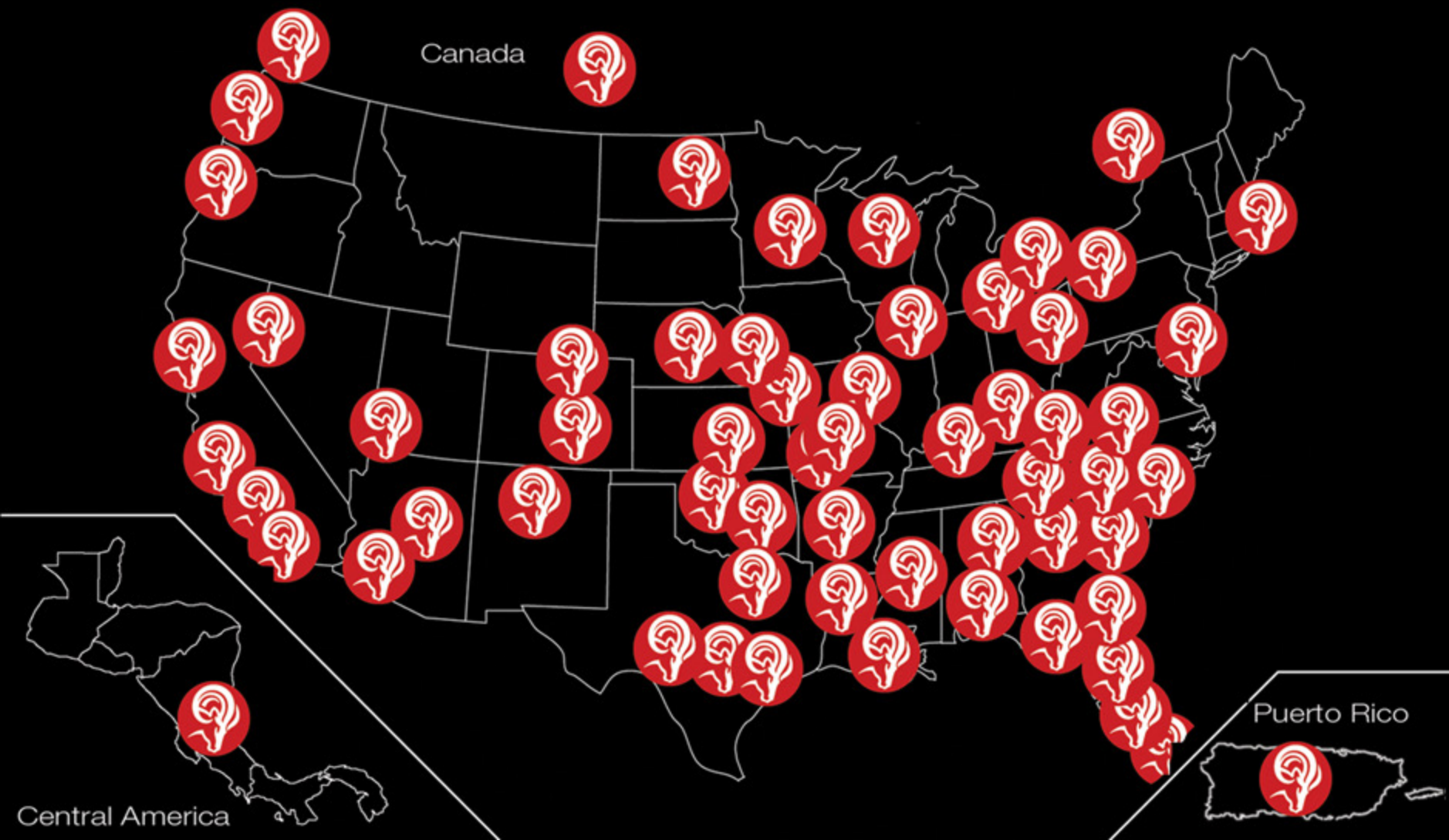


**Powder Coating**





# INTERNATIONAL DEALER NETWORK







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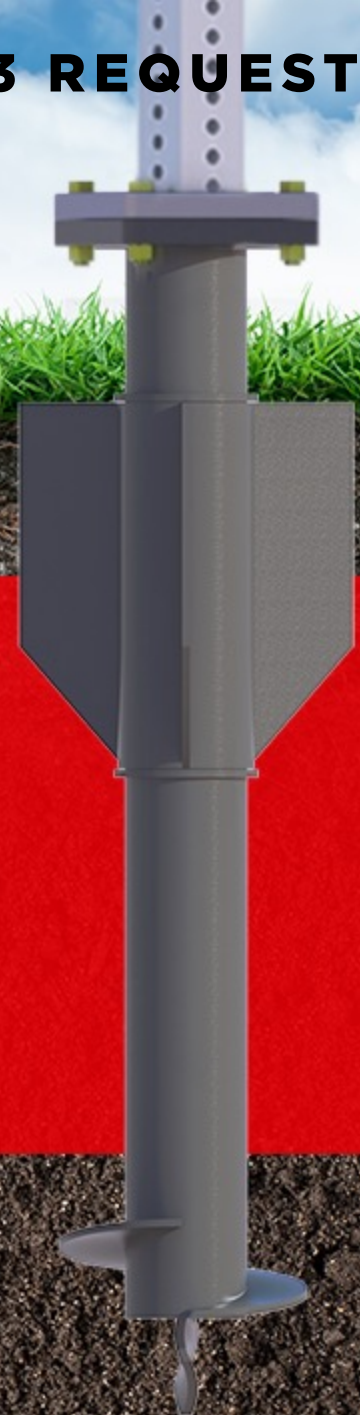


# CONCEPT FROM DIVISION 3 REQUEST

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## BENEFITS

- Install Time
- No Wait time for concrete to set up
- Re-Use and Maintenance
- Cost Savings







# COST SAVINGS DETAILS

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## Current Install (1.5hrs)

- ✓ 3 Employees @ \$15/hr
- ✓ 3 Trucks (2 International & 3/4 ton)
- ✓ Concrete & Materials
- ✓ Drive Time
- ✓ Cure Time
- ✓ Return Trip to Set Sign

**\$403.50**

W/O FUEL COSTS

## Sign Dart Install (15 mins)

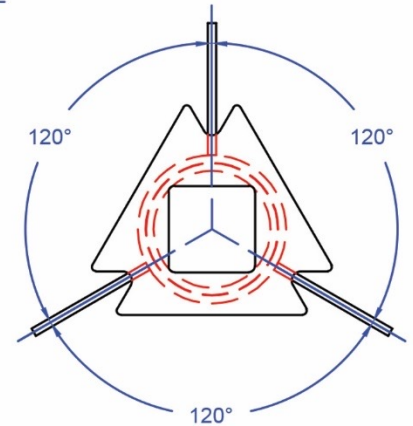
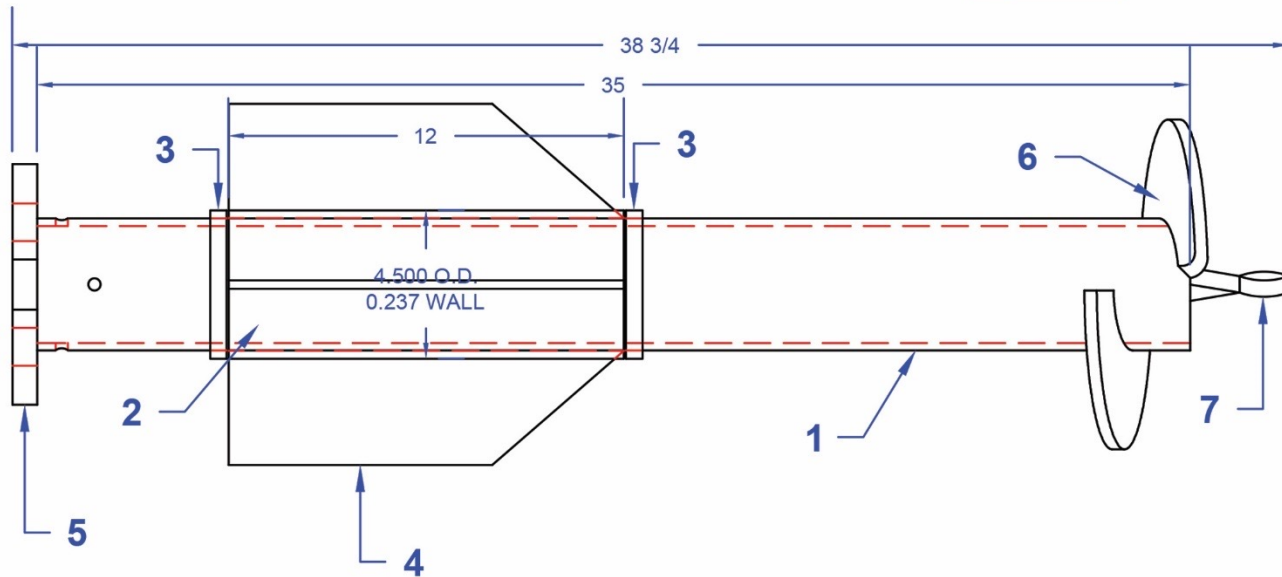
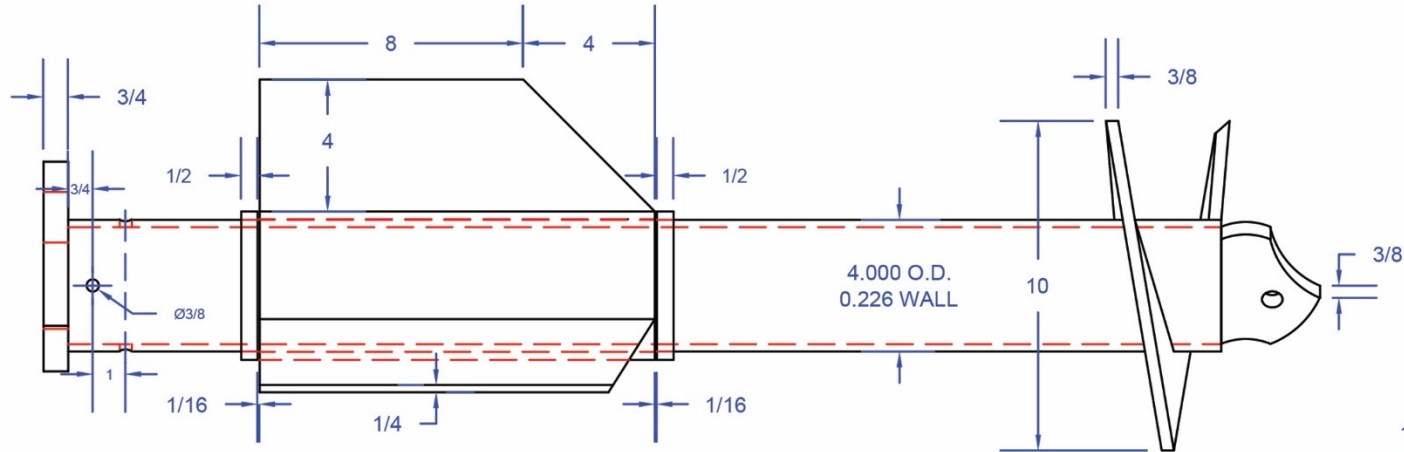
- ✓ 2 Employees @ \$15/hr
- ✓ 1 Truck
- ✓ 1 Trip

**\$250.00**

W/O FUEL COSTS



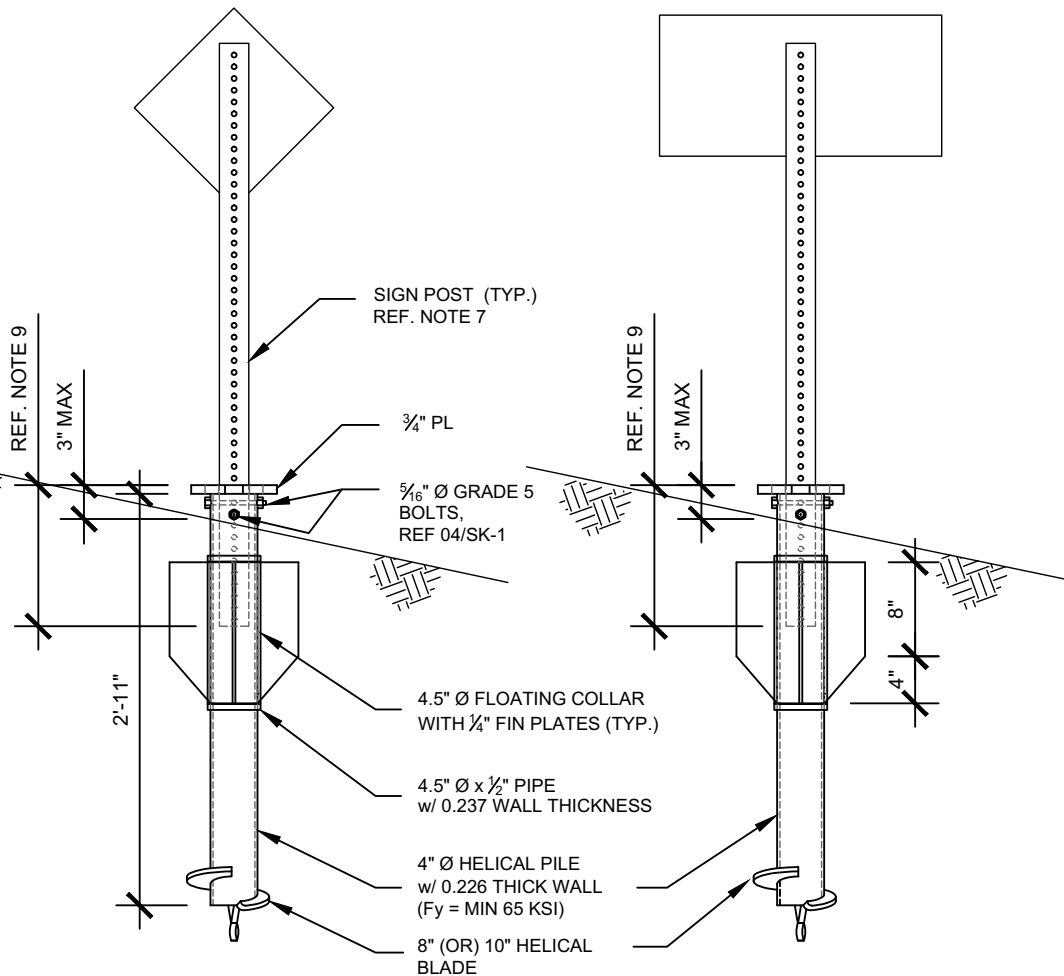
# SIGN DART COMPONENTS



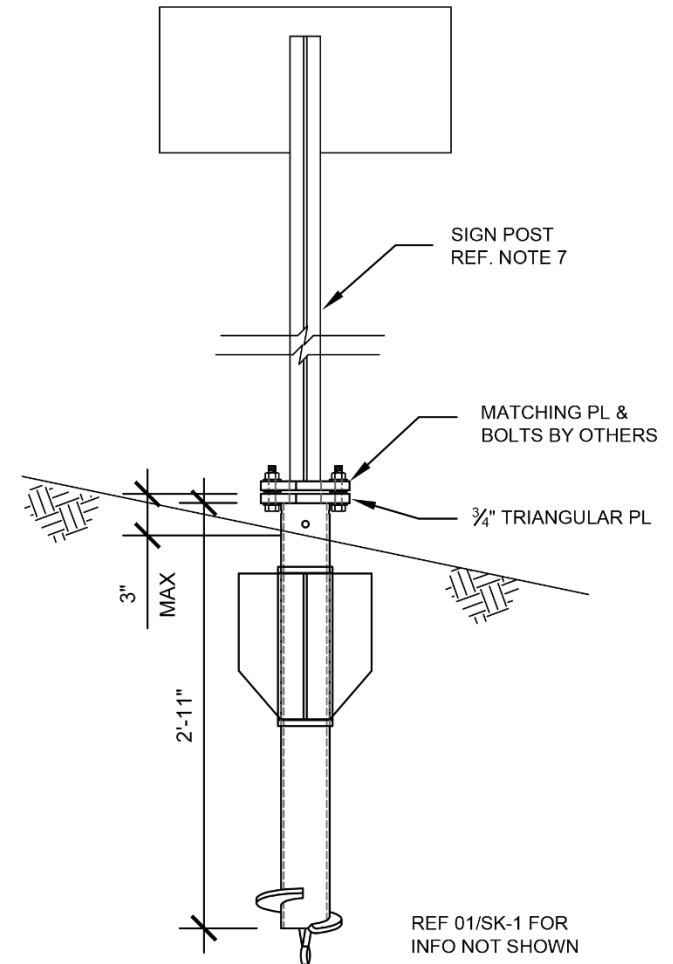




# SIGN DART COMPONENTS



## TYPICAL BASE



## SLIP BASE





## IN-HOUSE TESTING

### TESTING RESULTS

T1

**6422**lbs

T2

**5725**lbs

T3

**5851**lbs

AVG

**6000**lbs

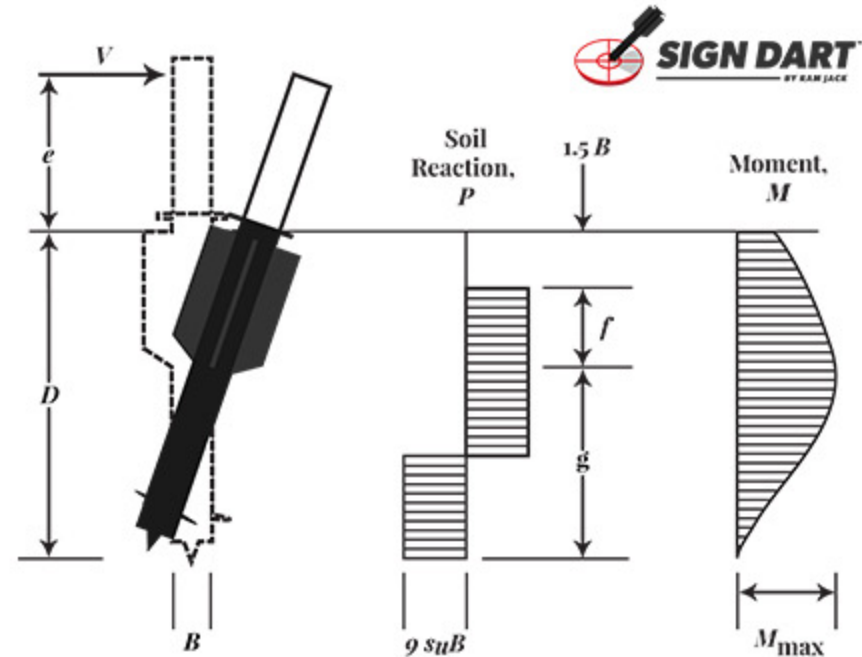
— AVERAGE OF —  
**6000lbs**  
LATERAL LOAD FOR  
**1" DEFLECTION**







# SIGN DART COMPONENTS



**Table 3. Maximum Allowable Wind Load Capacity of Square Tube Posts**

ODOT Standard Square Tube Post Specification	Maximum Allowable Sign Area for Single Post (ft <sup>2</sup> )	Maximum Allowable Wind Load (lbs.)
1 1/2" x 12 gauge (perf.)	7.14	144
1 3/4" x 14 gauge (perf.)	8.04	162
1 3/4" x 12 gauge (perf.)	10.01	201
2" x 14 gauge (perf.)	10.71	215
2" x 12 gauge (perf.)	13.36	269
2 1/4" x 14 gauge (perf.)	13.77	277
2 1/4" x 12 gauge (perf.)	17.20	346
2 1/2" x 12 gauge (perf.)	21.52	433





# SIGN DART COMPONENTS

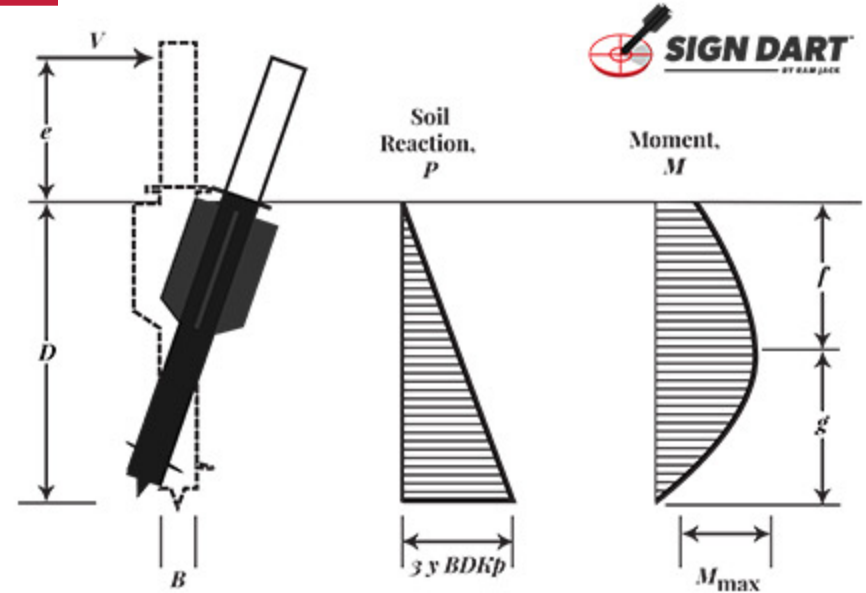


Table 2. Allowable Pile Capacity in Different Soil Conditions

Application Type	Soil Type	Test #	Allow. Pile Capacity from Individual Tests (lbs.)	Max. Allowable Pile Capacity (lbs.)
Lateral	Clay	L1-C	3,000	2,570
		L2-C	3,000	
		L3-C	2,570	
	Sand	L1-S	1,350	1,350
		L2-S	2,120	
		L3-S	2,120	
Tension	Clay	T1-C	3,800	3,600
		T2-C	3,600	
		T3-C	4,200	
	Sand	T1-S	1,600	1,400
		T2-S	1,800	
		T3-S	1,400	





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