

DESIGNING DUST COLLECTION SYSTEMS

DUST COLLECTION



Straight Pipe Terminal (For 2" PVC Pipe)



DUST COLLECTION



(For 3" PVC Pipe)



DUST COLLECTION

Required Velocity for Start of Run: No less than 3500 FPM Required Velocity for End of Run: No less than 4000 FPM

Area [square inches] = Πx (Pipe Radius in inches)²

Velocity [FPM] = Volume [CFM of Dust Collector] ÷ (Area ÷ 144)

Drop In Static Pressure for Straight Pipe, per linear foot.			
	3500 FPM	4000 FPM	4500 FPM
2" Dia	0.105 in.	0.120 in.	0.132 in.
3" Dia	0.075 in	0.100 in.	0.110 in.
4" Dia	0.055 in.	0.070 in.	0.085 in.

Drop In Static Pressure for Pipe Fittings, per fitting			
	90° Elbow or T-connector	45° Elbow or Y-connector	
2" Dia	0.420 in	0.210 in.	
3" Dia	0.375 in.	0.188 in.	
4" Dia	0.330 in.	0.165 in.	

Static Pressure of Dust Collector > Σ of Static Pressure Drop for Longest Run

