



QUICK-FIT

THE WORLD'S FASTEST DUCTING

How to Design A Dust Collection System

- **Clamp together ducting**
- **Easy & fast to install,** just clamp together, no rivets, screws or welding needed
- **Adaptable to your existing ductwork**
- **Local dealer support**
- **Leak-tight laser welded seams,** instead of lock-form or spiral duct - which badly leaks and allows debris harbors and snag opportunities
- **45% less labor to install**
- **45% less downtime for installation**
- **Re-useable,** easy to modify and easy to move as your needs change
- **Nordfab provides:** quick delivery, order tracking and lower freight costs

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Step One: Layout the Machinery Of Your Shop.

The first consideration is the limitation of workshop space (ceiling height, obstructions, electrical service, etc.). It is advisable to place machines requiring the largest cubic feet per minute (CFM) of airflow closest to the dust collector. The required CFM for each machine may be available in your owner's manual. If not, measure the diameter of the dust ports on the machine and use the chart below to estimate the CFM requirements (example: if your woodworking machine has a 3" port you can infer that it requires approximately 220 CFM). If a machine has multiple dust ports, the total CFM for the machine is the sum of all of the ports.

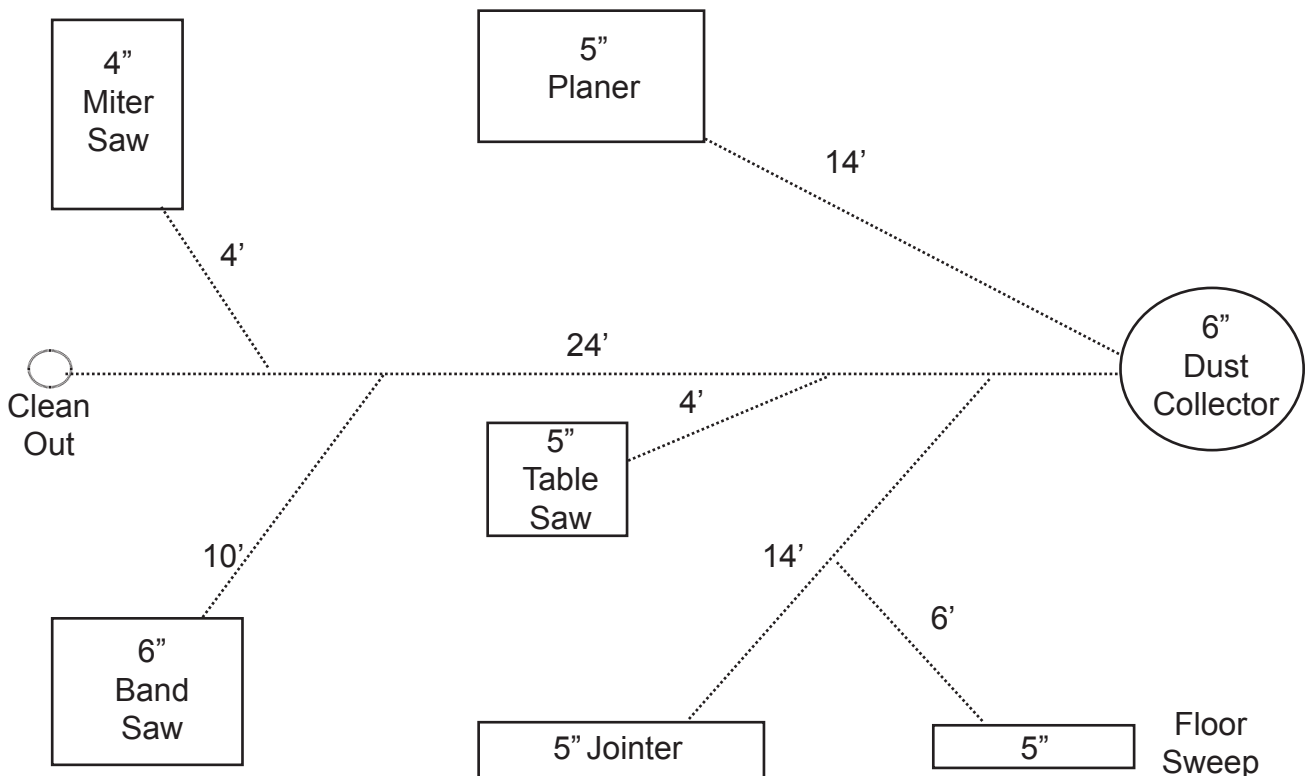
Inlet Diameter	1"	1.5"	2"	2.5"	3"	4"	5"	6"	7"	8"	9"	10"
CFM	24	53	98	150	220	395	614	884	1203	1570	1990	2455

Step Two: Draw a Top-Down View Sketch (to Scale) Of Your Machines and Dust Collector.

Using grid paper makes this job more accurate. Be sure to indicate the exact location of each dust port. Indicate the CFM requirements for each dust port.

Step Three: Determine the Total CFM Required For Your Whole System

Do this by adding the CFM requirements for all dust ports on all of your machines. The total CFM requirements for your entire shop may exceed the capacity of your dust collector. If that's the case blast gates which allow machines not in use to be isolated from the dust system by closing the appropriated blast gate.



Illustrates a simple bird's-eye view of a 30' x 24' shop with the mainline duct running down the center of the shop.

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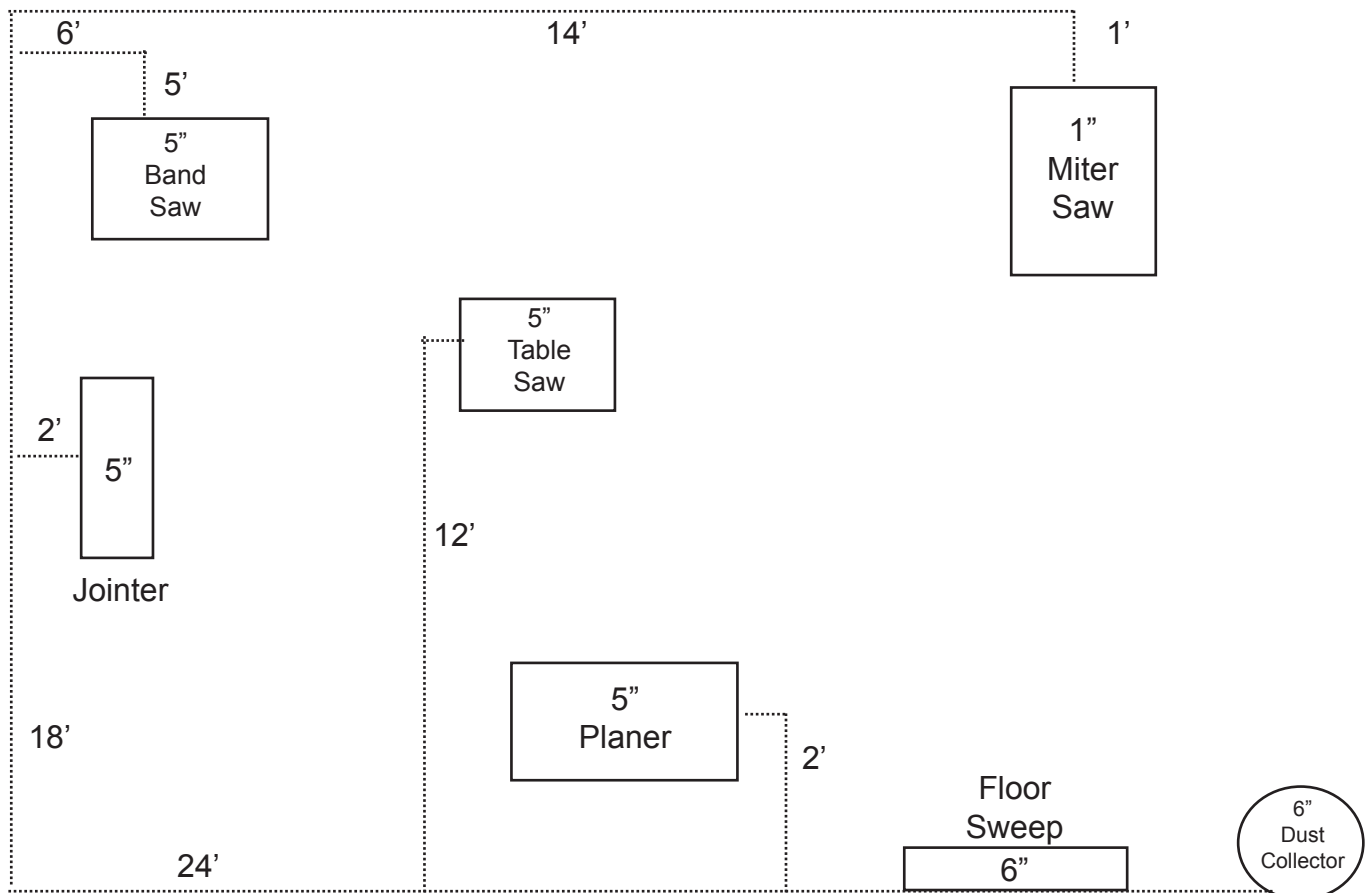
Step Four: On Your Drawing, Sketch Out The Position of Your Main Duct Line.

Be sure to run the ducting so that it ends directly above each dust port.

Step Five: Determine The Size Of your Ducting.

Begin at the machine that is farthest away from your collector and work your way back towards the filter. Determine the appropriate diameter for the CFM requirements at the first machine. (Example, if the machine has a total air volume of 395, then 4" ducting will be required.) Continue on to the second machine. If machine two has a dust port that is 3" when it connects to the main duct (where the 4" duct from machine one connects), you will add the CFM from the chart ($220 + 395 = 615$ or 5" duct). You would size the branch as a 5-3-4, with 5" being the largest reducing to 4" with a 3" branch going out the side at 30-degrees. Keep in mind that it will require a 60-degree elbow to make the run perpendicular.) **(NOTE:** It is likely that the CFM requirements of your machine will not match the chart below exactly. When this occurs, select the pipe size that is the closest to the required diameter). Continue on to the remaining machines per the example above, until your main trunk is equivalent in diameter to the size of the collector inlet. For example, consider a system where the main trunk line is 6" in diameter (representing 615 CFM). When connecting to a machine that requires 395 CFM (4" diameter), you would normally add $615 + 395 = 1010$ (requiring a 7" duct). However, if the machine can be isolated with a blast gate, then you will not need to add the two air volumes. The existing 6" trunk line would suffice.

IMPORTANT SAFETY NOTE: All dust systems MUST be grounded to avoid a buildup of static electricity in the ductwork or filter.



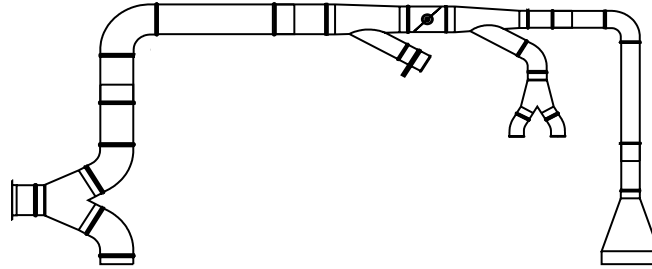
Illustrates a simple bird's-eye view of a 30' x 24' shop with the mainline duct running around the perimeter of the shop.



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These metal industrial dust collection fittings are simply the best you can find—period! The Quick-Fit™ system makes assembly a snap and is virtually airtight! No measuring or cutting. The Quick-Fit system features simple to use clamps with nitrile seals, welded heavy gauge galvanized pipe and fittings with rolled ends. And talk about versatility, Quick-Fit offers just about every fitting you'll ever need. Forget about stove pipe and duct tape, if you're looking for a truly efficient, easy to assemble duct system, this is it!



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