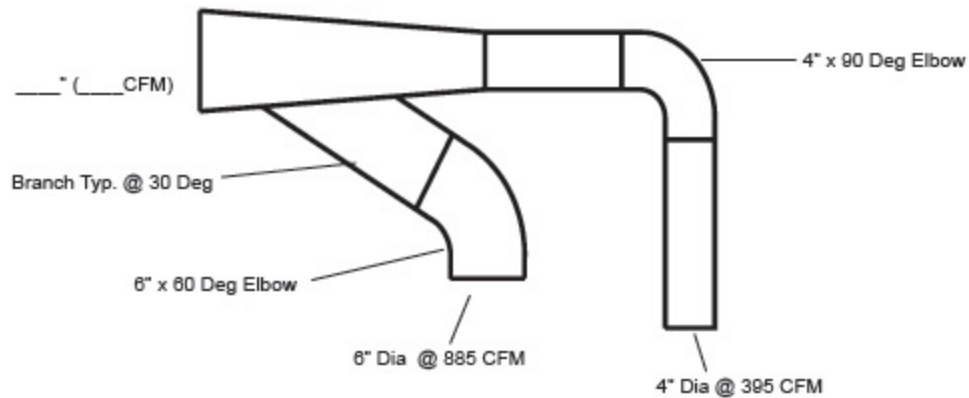
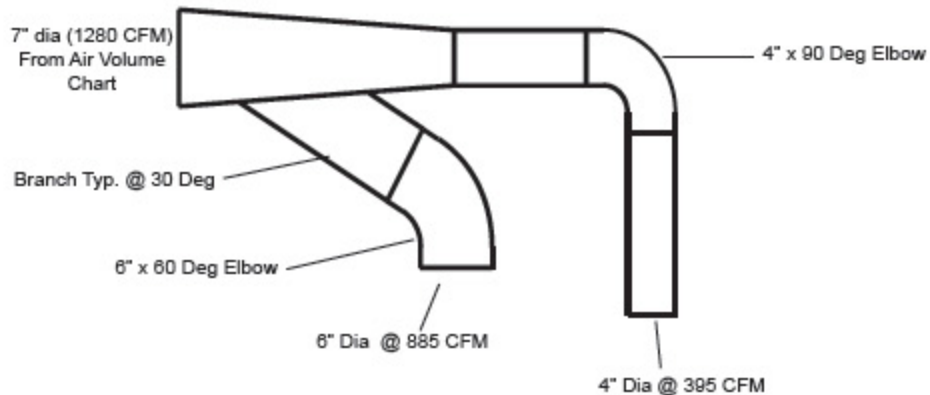


SIZING BRANCHES



The chart will also allow you to determine the transitions and branches needed
 EXAMPLE: Always work from your machines back toward the filter, suppose that you have a 4" drop that rises and runs back to join with a 6" drop as sketched above. What size branch will you need?

SOLUTION



The 4" pipe carries 395 CFM at 4500 FPM. (See Chart). The 6" pipe will need 885 CFM at the same velocity. (See Chart). Added together you have a total of (395+ 885) 1280 CFM coming together. Looking again at the chart under 4500 FPM, you find that 1280 CFM is not listed, but falls very close to the 1205 CFM listed for a 7" pipe. This indicates that the 4" joined to the 6" will require a 7" pipe to carry all of the material at the right velocity. The branch, therefore, will be 7" on the downstream end reducing down to a 4" with a 6" branching off of it. That is listed as a 7-6-4 branch.

All branches come off the duct at a 30 degree angle, so it is important to add a 60 degree elbow to complete a full 90 degree drop or turn. (See Diagram above) The "Q-F" catalog contains all pertinent data about the duct and sizes. With a few basic pieces of information, you should be well equipped to design a system. But, if you have any questions as to the design, please do not hesitate to call.