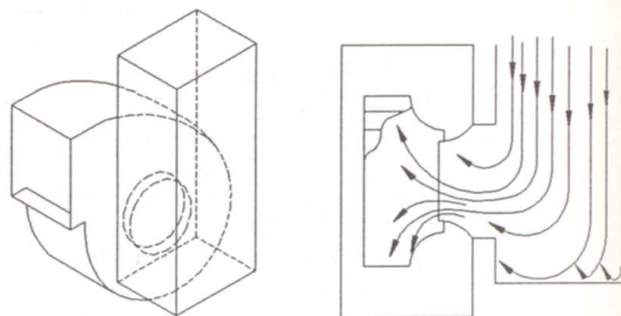


SYSTEM EFFECT FACTORS

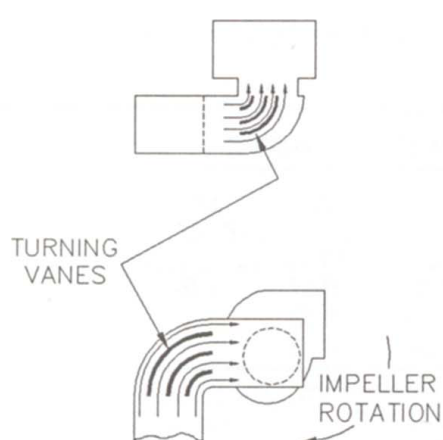
$R/D$	NO DUCT	2D DUCT	5D DUCT
0.75	1.4	0.8	0.40
1.0	1.2	0.66	0.33
2.0	1.0	0.53	0.33
3.0	0.66	0.40	0.22

A. NON-UNIFORM FLOW INTO A FAN INLET BY A 90° ROUND SECTION ELBOW — NO TURNING VANES.

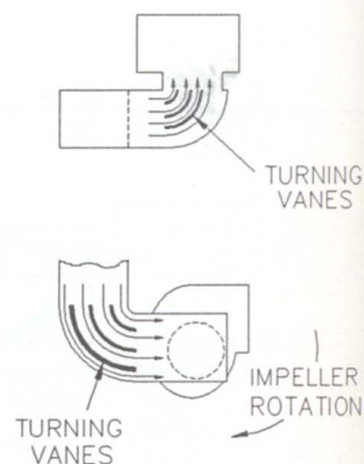
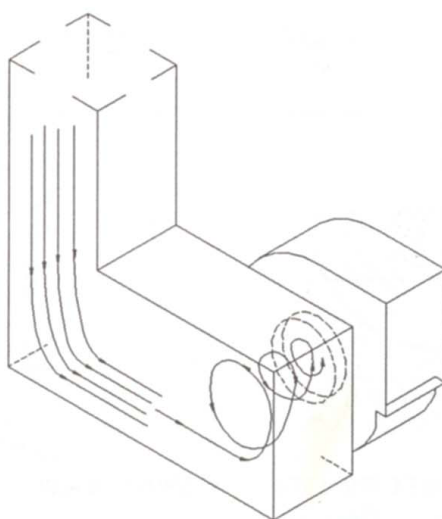


THE REDUCTION IN FLOW RATE AND PRESSURE FOR THIS TYPE OF INLET CONDITION IS IMPOSSIBLE TO TABULATE. THE MANY POSSIBLE VARIATIONS IN WIDTH AND DEPTH OF THE DUCT INFLUENCE THE REDUCTION IN PERFORMANCE TO VARYING DEGREES AND THEREFORE THIS INLET SHOULD BE AVOIDED. FLOW RATE LOSSES AS HIGH AS 45% HAVE BEEN OBSERVED. EXISTING INSTALLATIONS CAN BE IMPROVED WITH GUIDE VANES OR THE CONVERSION TO SQUARE OR MITERED ELBOWS WITH GUIDE VANES.

B. NON-UNIFORM FLOW INDUCED INTO FAN INLET BY A RECTANGULAR INLET DUCT.



CORRECTED PRE-ROTATING SWIRL



CORRECTED COUNTER-ROTATING SWIRL

C. NON-UNIFORM FLOW INTO A FAN INLET BY AN INDUCED VORTEX, SPIN OR SWIRL.