

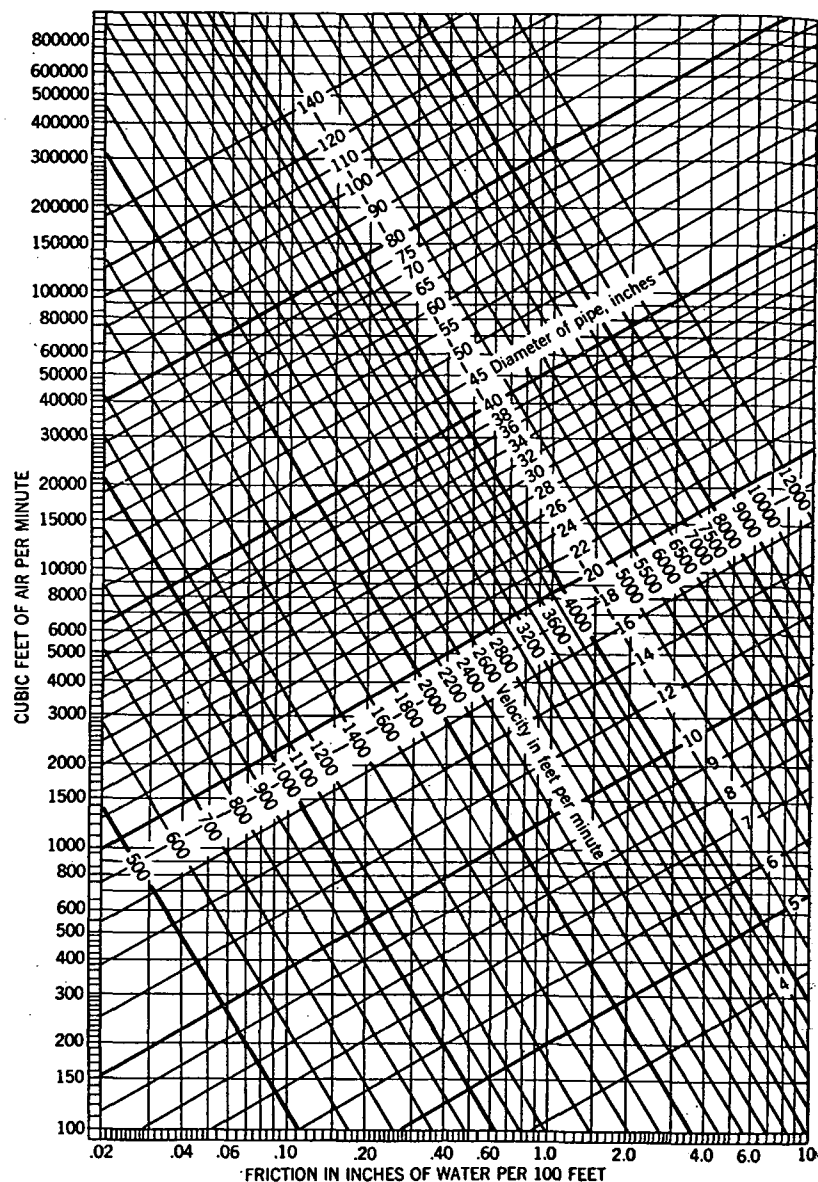


FIG. 2. FRICTION OF AIR IN PIPES

the coefficient of friction based on the rule that the coefficient of friction varies inversely as the $2/7$ power of the diameter, and inversely as the $1/7$ power of the velocity. The chart in Fig. 2 is based on a loss of one velocity head (at a velocity of 2000 fpm) in a length equal to 50 diameters

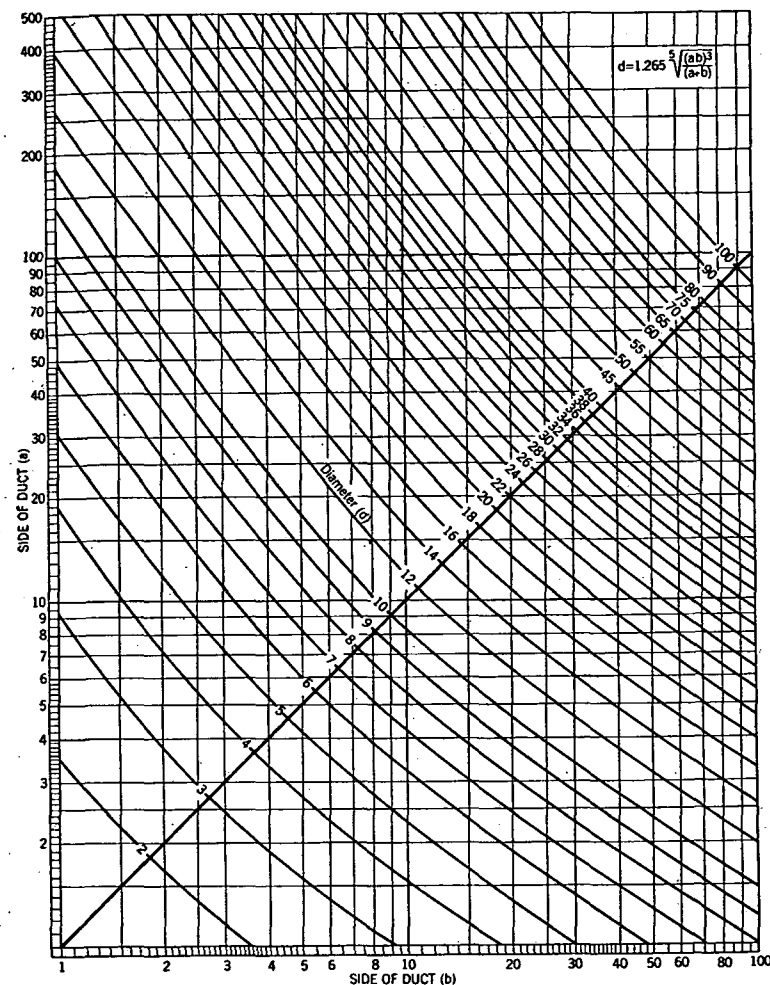


FIG. 3. RECTANGULAR EQUIVALENTS OF ROUND DUCTS

of 24 in. round galvanized iron duct of the usual construction. Although this chart is laid out for a value of C equivalent to 50, it may be used for other values of C by varying the friction inversely as this constant. For example, if a rougher pipe is used with 40 as the value of C , the friction loss as read from the chart should be multiplied by $50 \div 40$.