

TABLE 7. RESISTANCE TO CORROSION OF MATERIALS USED FOR HOODS AND DUCTS^a

CLASSIFICATION	APPROXIMATE SERVICE LIFE	SEE FOOTNOTE 1												
		Galvanized Iron	Black Iron	Stainless Steel	Monel	Lead Lining	Aluminum	Hard Rubber	Natural Rubber	Pressed Wood	Neoprene	Turn Plate	Buna S	Koroseal
E—Excellent	Over 5 years	EP	EP	S	S	ES		E	E4	SP	S	S	E	
S—Satisfactory	2 to 5 years	EP	P	E	S	F			S		E	E		
F—Fair	1 to 2 years	P	P	E	S	E			S					
P—Poor	6 months			E	E	E								
Combinations (EP)	Indefinite rating			S5		E8			E7					
Acid, Chromic (Plating and Anodizing)														
Acid, Hydrochloric														
Acid, Hydrofluoric														
Acid, Nitric														
Acid, Oxalic (Anodizing)														
Acid, Sulfuric														
Acid Dipping and Pickling (Hot Ducts)														
Alkaline Cleaner (Caustic 140–180 F)														
Alkaline Cleaning Solutions														
Alkaline Plating (Cu, Cd, Ag)														
Plating and Anodizing (Horizontal Ducts)														
Plating, Bright Nickel														
Plating and Dipping (Vertical Ducts)														
Tanning, Dressing, Dyeing, Bleaching Sol														
Water, Boiling and Steam														
Decarbonizing Agents														
Degreasing Compounds; Organic & Mineral Sol														
Enamels and Lacquers (Coating & Dipping)														
Fabric Impregnation														
Salt, Superaturated Solution 300–400 F														
Wire Insulation														

Notes: 1. Ratings are based upon collated field service reports. Indefinite ratings are given where reports are inconsistent due to varying operating conditions (such as dilution, exposure to weather, etc.). Blank spaces denote insufficient information, not poor service. 2. Mild soaps, detergents, water soluble oils, 140–180 F. 3. Cresote oil, kerosene, ethylene dichloride. 4. To 20 percent; E: 50–70 percent, 150 F; S: 5. To 50 percent; plating; E: 20 percent anodizing; agitated 80 F; S: 6. To 50 percent plating; S: over 50 percent pickling, 20 percent anodizing; E: 7. 5–22 percent, 135–215 F pickling; S: plating, pickling, anodizing; E: 8. Except acid. 9. Acid.

TABLE 8. RESISTANCE TO CORROSION OF MATERIALS USED FOR EXHAUST FANS^a

PROCESS	SEE FOOTNOTE 1																		
	STEEL	ALUMINUM	GALVANIZED STEEL	CAST IRON	BRASS	LEAD	ASPHALT PAINT	VINYL RESIN PAINT	RED LEAD PAINT	HOT ASPHALT	PHENOLIC RESIN BAKED COATING	HARD RUBBER LINING	SOFT RUBBER	NEOPRENE	EPOXY RESIN	KOROLAC	PRESSED WOOD	ALSI 316	ACID BRONZE
Acid Dipping, Pickling and Stripping.....	EP	S	E	E		E	EP				S	E	ES	E	E	E		E	
Alkaline Cleaning.....	EP	S	E	E			EP				S	ES		E	E	E			
Anodizing.....	SF	S					E				E	E		E	E	E			
Coating—Enamel and Lacquer.....	E	E									E	E		E	E	E			
Decarbonizing.....	ES						P				S								
Degreasing and Metal Cleaning.....	ES																		
Hardening and Quenching.....	ES																		
Plating.....	EP	S		E			ES	S			ES	E	E	E	E				
Washing and Rinsing.....	EP	E		E			SP			S									

CLASSIFICATION

APPROXIMATE SERVICE LIFE

E—Excellent
S—Satisfactory
F—Fair
P—Poor
Combinations

Over 5 years
2 to 5 years
6 months to 2 years
6 months
Variable performance

Note: Ratings are based upon collated field service reports. Forward curved fans are not recommended for open-tank ventilation service. Cleanout doors and bottom drains are recommended on all fans on open-tank operations. The deposits which build up on fan wheels and casings should be removed by regular cleaning. Repaint where any coating has been broken and removed.