



What Kind of Material Do You Want to Heat or Dry?

This information is used to compare the absorption spectra of the material with the emission spectra of the infrared heaters. A good match ensures that the radiant energy from the E-mitter will be effectively absorbed by the material with minimum losses due to transmittance or reflectance. The table below was prepared to help you select the best heater rating for your particular application. If you need additional information, contact **Tempco** for technical assistance.



In situations where the material or its released solvents/vapors are easily flammable, special protection is required. Explosion-protected types of E-Mitters are not available. You will have to take proper steps to prevent the flammable media from coming into contact with the hot heater surfaces and electrical wiring. Current regulations and electrical codes must be complied with to prevent unsafe conditions.

Examples of Common Applications

The table below presents some of the most common infrared applications encountered in several industries. The wavelength of the infrared energy was matched to the absorption characteristics of the material to be heated. Various wattages for the same appli-

cation are recommended due to the absorption characteristics and variables of the application. Select the wattage according to the application requirements. Testing is strongly recommended before final selections are made.

Industry	Wattage	CRB Infrared Heater Ratings									
		150	250	300	350	400	500	650	750	1000	
	Surface Watt Density	6.48	10.8	12.95	15.11	17.27	21.59	28.07	32.39	43.18	
PAPER											
• Heating paper pulp and papier-mâché before pressing/molding*								■			
• Quick drying of lacquered paper, gummed or glued paper and cardboard*									■	■	
PLASTICS & RUBBER											
• Drying/curing plastic/latex emulsion/surfacing*					■	■					
• Gelling PVC paste/film on fabrics etc.*					■	■					
• Preheating plastic foil/sheet/vacuum forming*					■	■	■	■	■	■	
• Preheating rubber sheeting prior to extrusion*						■	■				
TEXTILES, SILK & FIBERS											
• Drying washed, dyed and finished textiles*		■						■	■	■	
• Fiberglass layup and molding; Resin curing*			■	■	■						
• Silk-screen printing; Fusing metallic inks*					■	■	■			■	
• Stress curing ovens for synthetic fibers*				■	■	■	■				
TOBACCO & FOOD INDUSTRY											
• Heating food in restaurants*		■	■	■							
• Tobacco drying; Grain drying*		■	■								
GENERAL											
• Activation of adhesives and surface sealing*					■	■					
• Drying/baking lacquered tin components*			■	■	■	■	■				
• Heat/dry/fixing adhesives (boot and shoe trade)*								■	■	■	
• Low temperature drying of atomized chemicals*				■	■	■	■				
• Ore drying and sampling for laboratory work*					■	■	■				
• Preheating large metal embossing rollers*					■	■	■				
• Powder coating processes*				■	■	■	■				
• Setting Nylon® and Perlon® threads, etc.*		■	■	■	■						
• Water evaporation*		■							■	■	