

## Room Specifications for Liquid Photopolymer Plate Processing

The design of your photopolymer plate production area can affect plate processing efficiency and overall comfort of the work environment. Processing photopolymer plates requires a dust-free environment, similar to other photographic processes such as film development.

The ideal production area is enclosed and has a low level of environmental pollutants such as dust and chemical vapors. The technology required for this is common and relatively inexpensive, and the benefits realized in production and material savings will far outweigh the costs. For worker's health and comfort, make sure your plate processing room is properly ventilated to allow fresh air into the room. Always follow the safety recommendations given in instructions, labels, and Material Safety Data Sheets on your plate material.

### **Room Layout**

Your plate processing room should be designed for easy cleaning (dusting, mopping, etc.) and efficiency. Ideally, the room does not allow for through traffic, and entrances and exits should connect to low-dust environments. Furniture should produce a minimum of particles and be easy to clean. Equipment should be arranged for efficiency. Position processing units for effective work flow and maximum operator convenience.

### **Proper Lighting**

Plate processing areas should be well lighted using light fixtures that eliminate or minimize dust collection. Cover any light sources (exposed windows, fluorescent lamps, etc.) with UV filters. These clear plastic films are extremely effective and last for many years. The cost of UV filters is easily recouped by the money and time saved by having to replace a set of mounted plates.

### **Room Temperature**

The ideal temperature range for plate processing is between 70° and 75°F (21° and 24°C). Dedicated plate room temperature control is important if this temperature range cannot be maintained.

### **Humidity**

Relative humidity of your plate processing area should be between 55 and 65 percent.

### **Ceilings**

Drywall ceilings with a smooth finish or ceilings that do not collect dust work best. Drop ceilings made from dust-free, non-flaking panels may also be used.

### **Walls**

Walls should be painted with a smooth, low-glare finish. Avoid wall surfaces that collect dust and avoid walls with ledges, chair rails, or panels that collect dust.

### **Floors**

Floor surfaces should be easily cleaned. Floors may be solvent-resistant tile or epoxy-sealed concrete that can be mopped for easy cleanup. Rubber floor mats may be used for operator comfort.

### **Airflow**

Room design should include multiple air ducts (ceiling inputs and cold air returns) with a high-efficiency filtration system that traps dust and contaminants.