SHERWIN WILLIAMS® | HIGH PERFORMANCE FLOORING

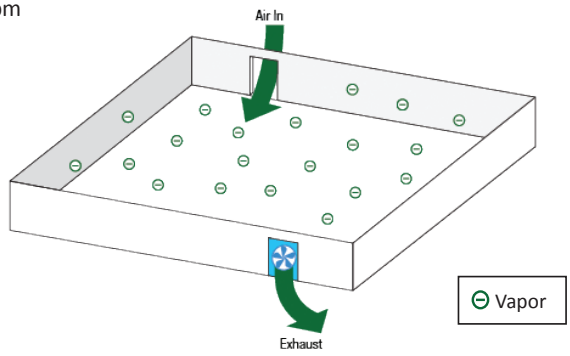
CRYLAFLOR™ VENTILATION GUIDELINES

All applications of Crylaflor (MMA) products require ventilation and airflow.

Proper ventilation serves three main purposes:

1. To assist in proper material cure (remove vapor from the surface)
2. To keep the vapor concentration below the maximum OSHA exposure limits of 100 ppm
3. For odor control

The best way to accomplish this is to set up a Negative Pressure Ventilation system. Negative pressure sucks air out of a room, versus positive pressure, which blows air into a room.



Fan mounted in doorway and completely sealed around door jamb.

Negative Pressure Ventilation makes it easier to:

1. Control the volume of airflow
2. Direct the exhaust
3. Maintain proper working time for the material

To create a Negative Pressure Ventilation (NPV) system, Sherwin-Williams recommends using Tempest Electric Powered Blowers. The motors used to power the fans must be explosion proof and properly grounded. Whether the fan is installed in a doorway or a window, it is important to make sure that the surrounding opening is properly sealed. This will ensure that the air is being drawn from the entire room.

It is also important to control the draw, or the amount of air coming into the room. Too much draw will limit the ability to control directional airflow and odor control. This is achieved by sealing off all openings except for at the furthest point. Partially opening a door or window at the furthest point may give better results than having either wide open.

Be aware of potential stagnant air areas: corners, low spots or dead ends. Without proper airflow, the MMA vapor will remain on the surface of the freshly applied material. This can stop the wax from rising to the surface and result in the material not curing. Make sure these areas have airflow after the material is applied, as too much airflow during the placing of the material can shorten the working time.

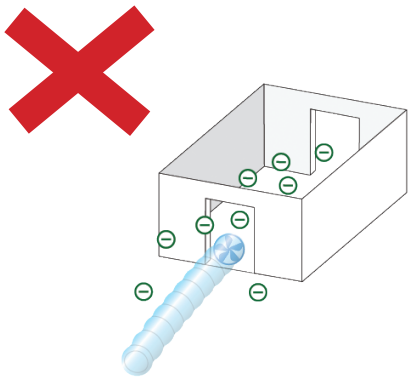
While installing Crylaflor MMA, it is recommended to have the air exchanged every 5 minutes, or 12 Air Changes per Hour (ACH). To calculate ACH, find the Cubic Feet per Minute (CFM) of your fan(s) and multiply that by 60. Divide that total by the total cubic feet of the room. This is your total ACH.

The number of fans needed for odor control is dependent on the jobsite and its adjacent areas. For example, a restaurant kitchen floor in a mall would require more ACH due to the potential impact the odors could have on the surrounding businesses. In contrast, an isolated new construction building would not impact its neighbors, and would not require as many fans.

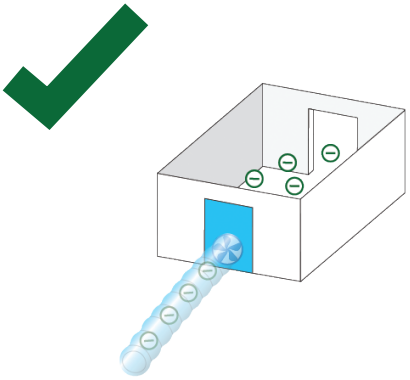
SHERWIN WILLIAMS® | HIGH PERFORMANCE FLOORING

CRYLAFLOR™ VENTILATION GUIDELINES

The next consideration in proper ventilation is to understand where the exhaust vapor is going. It is necessary to survey the area into which the exhaust will be expelled. Are there intake ducts for the building, does it point to a congested area, will it affect a neighbor or will the concentration build up due to a physical barrier or low spot? Smooth bore polyethylene tubing used in conjunction with the proper fan is very effective for directing and exhausting vapor.



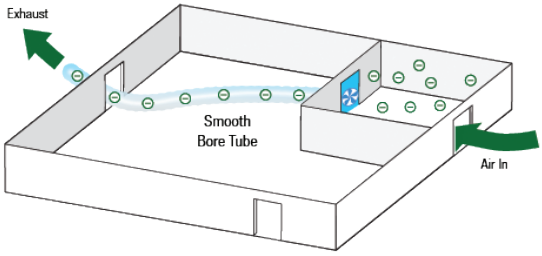
The fan is not sealed in the door jamb and the airflow is not being controlled or directed.



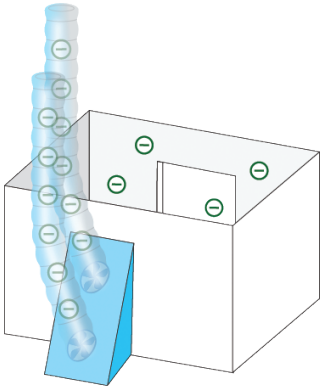
The fan is mounted and sealed in the door jamb, and the airflow and vapor are being properly directed out of the room.

Keep the smooth bore tubing as straight as possible; any bends and kinks can reduce the airflow.

Be mindful of where the exhaust is exiting the building. If neighbors are in close proximity, consider running the tubing a further distance away from the building or to the roof.



NPV with smooth bore tubing.



Two fans properly mounted and sealed with the smooth bore tubing being directed toward the roof.

Please contact Sherwin-Williams High Performance Flooring Technical Service with any questions.