



## MICA AND METALLIC PAINT SYSTEMS

Valspar offers several finishes with a metallic or pearlescent appearance in our extrusion and coil coating product lines. Fluropon Classic® and Fluropon Classic® II are available in both spray and coil formulations. Acrodize® coatings are available only in spray formulations.

When a sparkle effect is desired, we recommend using the mica flake formulation technology due to its many advantages. Although similar in appearance, pearlescent coatings are formulated with mica flakes while metallic coatings are formulated with metal flakes.

Mica flakes offer better color consistency. They minimize “tiger striping” and the “flop-of-flake” effect in spray application. This phenomenon can make the color appear different from panel to panel. The mica flakes found in Fluropon Classic II will not pick up an electrostatic charge or follow the back and forth movements of electrostatic application equipment which can occur with metal flakes.

Fluropon Classic II is a two-coat fluoropolymer (PVDF) system. It consists of a primer coat and a durable pearlescent color coat that utilizes inert, non-conductive mica pigmentation. A clear coat is typically not required with the mica pigmentation.

Fluropon Classic is a three-coat fluoropolymer (PVDF) system. It consists of a primer coat, a durable aluminum metal flake color coat and a clear topcoat. A clear topcoat is required as a measure of protection against harmful environmental elements. It forms a barrier between the metallic flake and harmful environmental elements such as acid rain, salt spray, and general air pollution.

Acrodize coatings are one or two-coat fluoropolymer (PVDF) systems available for spray application. It consists of an optional primer coat and a durable mica pearlescent color coat. Acrodize is a colorful alternative to anodizing.

### Key Differences Between Mica and Metallic Paint Systems

MICA	METALLIC
<ul style="list-style-type: none"> <li>Improved overall color consistency</li> </ul>	<ul style="list-style-type: none"> <li>Prone to “flop-of-flake” effect</li> </ul>
<ul style="list-style-type: none"> <li>One or two coat system</li> </ul>	<ul style="list-style-type: none"> <li>Three or four coat system</li> </ul>
<ul style="list-style-type: none"> <li>Clear coat optional</li> </ul>	<ul style="list-style-type: none"> <li>Clear coat required</li> </ul>
<ul style="list-style-type: none"> <li>Generally less expensive due to fewer coats</li> </ul>	<ul style="list-style-type: none"> <li>Generally more expensive due to more coats</li> </ul>
<ul style="list-style-type: none"> <li>Inert</li> </ul>	<ul style="list-style-type: none"> <li>Reacts with elements</li> </ul>

## COIL COATINGS

- Use one batch when possible.
- Apply at room temperature - above 70°F and below 100° F.
- Special primers may be required.
- Apply three rolls for best flow and appearance.
- Identify application direction by stenciling.
- Slow uniform agitation during application.
- Filtration through 400 µm bag or equivalent.
- Proper film thickness is critical for long-term performance and color consistency.
- Visual color is most important. Color difference numbers can be misleading and should only be used as a guide.
- Use coils from same batch when possible.
- Coils and sheets should be dry. No moisture.
- Care in handling is required to minimize touch-up.

## EXTRUSION COATINGS

- Use one batch when possible.
- Apply at room temperature - above 70°F and below 100° F.
- Special primers may be required.
- Minimize use of slow solvents.
- Minimize touch-up after automatic application.
- Slow uniform agitation during application.
- Filtration through 150 Mesh or 100 µm bag.
- Integrate project for level and elevation into spray schedule.
- Indicate application direction by stenciling.
- Proper film thickness is critical for long-term performance and color consistency.
- Visual color is most important. Color difference numbers can be misleading and should only be used as a guide.
- Use one application when possible.
- Direction of application critical for color consistency.
- Keep dry. No moisture.
- Care in handling is required to minimize touch-up.