Painting Edges

This is an expanded version of a "Coatings Clinic" on fat 
edges and picture framing that previously appeared in JCT  

Edges cause problems for coatings. Defects can occur  
at edges of panels, parts, automobile fenders and style  
lines, lower edges of house siding and shingles, etc.  

Sometimes edges cause problems for painters, especially  
amateurs like me. I am thinking of the difficulty in producing  
a sharp, precise line at an edge or corner of a wall or ceiling.  
There also is an appearance defect that can occur when a  
wall is painted with a roller, but is brushed at the edges.  

With industrial coatings, edge defects tend to occur as  
thick beads along edges or just back from them (fat edge  
or picture framing), or they may involve an inability to coat  
edges, especially if they are sharp (see Figure 1 for both  
types of defects). Edge defects can occur either with baked  
coatings or those that are air-dried. The culprit often is sur-
face tension, but gravity-driven flow also can be the cause.  
Occasionally, a fat edge on a vertical surface will be thick  
and sheen). Also, nearly all paints are somewhat floccu-
larized. With a system that is more than a little flocculated,  
the shearing action of brushing could improve the quality of  
the dispersion enough to change the color, just like rub-up.  

Figure 1—Thin edge and fat edge.