



Pressure Marking of Prepainted Sheet Steel

Pressure marking, also known as pressure mottling or imprinting, is an uneven or irregular gloss pattern on the face of a prepainted sheet steel. The photograph in Figure 1 shows what pressure marking looks like. The mottled appearance takes place when the gloss components in the prepainted top coat are compressed or flattened during the manufacturing and coiling process. The condition is more prevalent on dark colours and high gloss products. Pressure marking is also typically noted in the centre of the strip where the coiled product is under the most pressure.

The marking will dissipate naturally once the sheet has been un-coiled and left exposed to the ambient temperature. The natural gloss appearance will return faster if the painted sheet is subjected to heat. Typically exposure to sunlight is sufficient to remove the mottling. The heat will release the flattened paint surface and return the gloss to its original uniform appearance. In all but the most severe cases the coating will recover naturally once the pressure of being in a coil has been removed and the material exposed to the sun for a couple of hours to a few days.

The following steps can be taken to minimize the severity and occurrence of pressure marking

- Select a back coat that has a similar gloss level and hardness to the top coat
- Where possible store coils in a vertical position

Pressure marking does happen, but only in very rare cases would it be permanent and not dissipate under standard conditions. A small section can be heated using a hair dryer or hot water to accelerate the process and confirm that the lot will return to its original gloss given time. Pressure marking is a cosmetic condition and will not affect the weathering performance of the product.

For More Information

For more information on sheet steel building products, or to order any CSSBI publications, contact the CSSBI at the address shown below or visit the web site at www.cssbi.ca

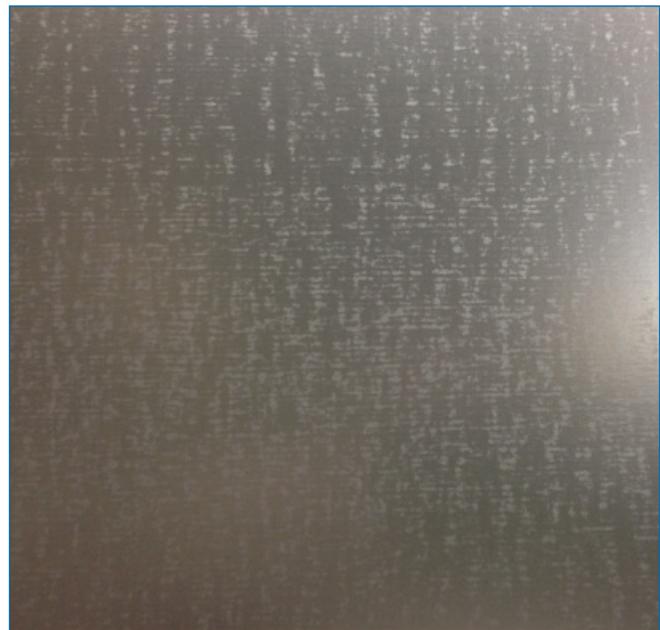


Figure 1: Pressure Marking of Prepainted Sheet Steel