

## Related Test of PPGI

--by wanzhi steel research institute

### Color coated plate related test

#### (1) Acid and alkali resistance test

##### A: Principle

The sample is immersed in a certain concentration of acid-base solution for a certain period of time, and after taking out, the color difference, the gloss change, and whether the coating is blistering or falling off are evaluated.

##### B: Results

According to GB/T1766, the sample shall be evaluated for the level of loss of light, the level of discoloration, the level of foaming, and the grade of shedding. The difference between the results of the parallel samples is the test result.

#### (2) Neutral salt spray test

##### A: Principle

After the sample was exposed to a neutral sodium chloride salt mist atmosphere for a prescribed period of time, the surface blistering, rust grade and corrosion propagation distance were evaluated.

##### B: Results

1. For flat specimens, evaluate the foaming grade, rust grade, etc. according to GB/T1766, and take the worst value of the parallel specimens as the test result.
2. For the cross-cut and slit samples, select a representative area on the scribe line and measure the maximum corrosion spread distance from the scribe line to the blistering and rust at a position of less than 6 equidistant distances. The average value is the average corrosion spread distance and the maximum and minimum corrosion spread distance of the scribe line is recorded.

#### (3) Atmospheric exposure test

##### A: Principle

The color coated board is evaluated for aging properties of the coating such as loss of light, discoloration, chalking, foaming, rusting, cracking, etc. after natural atmospheric aging.

**B: Results**

1. For flat specimens, the recent GB/T 1766 evaluation of the sample's loss of light grade, color change grade, chalking grade, foaming grade, rust grade and cracking grade, etc., the maximum difference of parallel samples is the test result.
2. For the damaged sample, in accordance with GB/T 1766, evaluate the T-bend, impact, fork, riveting, bending position of the bent part, rust level and edge corrosion spread distance, etc. The difference is the test result.
3. The assessment of atmospheric exposure samples may also be provided by a test report after completion of each atmospheric exposure test.