

ZERO VOC HIGH-GLOSS TOP COAT COLD TEMPERATURE CHIP RESISTANCE

ILLUSTRIUM™ M1172 DTM

TEST PARAMETERS

Substrate: 1/4" steel test panels sandblasted to

SSPC-SP5 White Metal Blast.

Coatings: ILLUSTRIUM™ M1172 DTM.
Test Method: ASTM D3170-03 "Standard Test Method for Chipping Resistance of Coatings"

PROCEDURE

Blasted panels were given one spray application of **ILLUSTRIUMTM M1172 DTM**. Panels were allowed to cure for approximately one month at ambient conditions (23°C, 30%RH) prior to testing. Testing was completed outdoors at our St. Albert facility in January 2018 when the temperature was -21°C to replicate impacts such as gravel from vehicle traffic in cold climates.

The test consists of a gravelometer used to accelerate a set volume of alluvial road gravel using compressed air and directed at a test panel inclined 45° from vertical. After the panels are returned to room temperature they are covered with a layer of tape, which is peeled away to remove any loose or flaked paint.

RESULTS

The panels performed exceptionally well; the impacts scuffed the surface of the coating but resulted in only a single chip on one of the panels tested.

Rating Number	Number of Chips
10	0
9	1
8	2-4
7	5-9
6	10-24
5	25-49
4	50-74
3	75-99
2	100-149
1	150-250
0	>250

Rating Letter	Size of Chips
Α	<1 mm
В	1-3 mm
С	3-6 mm
D	>6 mm

-	Test Result
Panel 1	10
Panel 2	9B
Panel 3	10
Panel 4	10



Figure 1: Panels after completion of chip testing