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UKAS TESTING
0366

Test Report

Our Ref: GBW Number 19-01187-1 Issue 1 Date 08/03/2019 Page 1 of 7

A/C No: K012

Tested For:-

A KENRICK & SONS LTD
Kenrick Way
West Bromwich
West Midlands
B70 6DB

SALT SPRAY TESTING OF DOOR HARDWARE SAMPLE

INTRODUCTION

The finished sample was submitted to the laboratory for Salt Spray Corrosion Resistance Testing in accordance with the relevant specifications.

RELEVANT INFORMATION

Description:	1 off. Gold Letterbox Assembly
Finish:	PVD Coated / Zn Die Cast Substrate
Specifications:	Salt Spray Test in accordance with BS EN ISO 9227:2012 & BS EN 1670:2007
Test Duration:	480 – 1008 Hours Exposure
Submitted By:	Brian Corbett & Tracey Fletcher
Customer's Order No:	8047
Sample Receipt Date:	24/01/2019

Salt Spray Test (BS EN ISO 9227:2012)

The photograph in fig 1 is showing the as- received condition of the sample prior to test, the sample was then exposed to a neutral 5% Salt Spray for a test period of 480 – 1008 hours with examinations after every 24 hours, revealed the following observations:-

Gold Letterbox Assembly

24 – 192 Hours

The flap section and outer frame section showed no evidence of corrosion product, (see photograph after 96 hours).

REPORT COMPILED BY G B Withers
Corrosion Science Technician

REPORT APPROVED BY G B Withers
Corrosion Science Technician

264 – 360 Hours

The outer frame section showed a slight amount of white corrosion product / staining from the bottom edge

The flap section and the outer frame section exhibited a moderate loss of the protective film, (see photographs after 264 hours).

432 – 480 Hours

The flap section showed isolated corrosion spots and leaching white corrosion product / staining from the channel recesses less than 1.5mm.

The outer frame section showed a slight / moderate amount of white corrosion product / staining from the end interface joint, the flap section and the outer frame section exhibited a significant loss of the protective film, (see photograph after 480 hours).

504 - 528 Hours

The flap section showed isolated corrosion spots and leaching white corrosion product / staining from the channel recesses less than 1.5mm.

The outer frame section showed a slight / moderate amount of white corrosion product / staining from the end interface joint, the flap section and the outer frame section exhibited a significant loss of the protective film.

600 – 696 Hours

The flap section showed isolated corrosion spots and leaching white corrosion product / staining from the channel recesses less than 1.5mm.

The outer frame section showed a moderate amount of white corrosion product / staining from the end interface joint, the flap section and the outer frame section exhibited a significant loss of the protective film.

768 - 864 Hours

The flap section showed isolated corrosion spots and leaching white corrosion product / staining from the channel recesses less than 1.5mm.

The outer frame section showed a moderate amount of white corrosion product / staining from the end interface joint, the flap section and the outer frame section exhibited a significant loss of the protective film.

936 - 1008 Hours

The flap sample showed evidence of 3 x corrosion spots (2.0mm Ø) and leaching white corrosion product / staining from the small channel recess and the top edge and 1 x corrosion spot (3.0mm Ø) and leaching white corrosion product / staining from the large channel recess, the significant surface of the flap sample showed a slight amount of small corrosion spots (0.50mm Ø).

The outer frame sample showed a moderate amount of white corrosion product / staining from the end interface joint, the outer frame edges showed white corrosion product / staining from the underside of the sample.

The significant surfaces exhibited significant loss of the protective film, (see photographs after 1008 hours).

COMMENTS

The flap section and the outer frame section exhibited a loss of the protective film, however this is not classed has a corrosion, and however in our opinion with the protection coating film breakdown after 264 hours, it would be not considered cosmetically appealing.

Introduction of BS EN 1670:2007: Corrosion protection alone is not specified in any of the six essential requirements of the construction product directive, but is an implicit requirement for durability.
This standard provides for the corrosion resistance of all building hardware, classified according to application.
Wherever reference is made to classes they are considered to be technical classes and not classes according to article 3(2) of the Construction Products Directive (89/106/EEC).

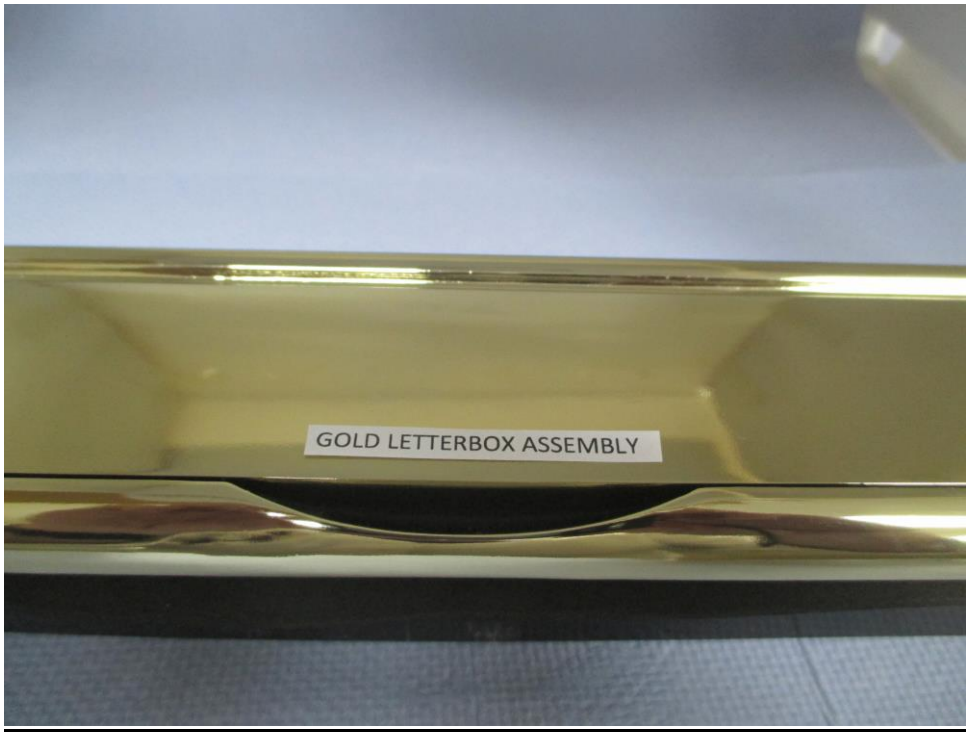
CONCLUSION

The finish applied to the Gold Letterbox Assembly (Appearance) tested, **satisfied** 480 hours Salt Spray Test Requirement to British Standard Specification, BS EN.1670:2007, Grade 5.

The mechanism applied to the Gold Letterbox Assembly (Function) tested, **satisfied** 480 hours Salt Spray Test Requirement to British Standard Specification, BS EN.1670:2007, Grade 5.

END of TEXT

FIG 1



Photograph showing the condition of the Gold Letterbox Assembly prior to Salt Spray Test

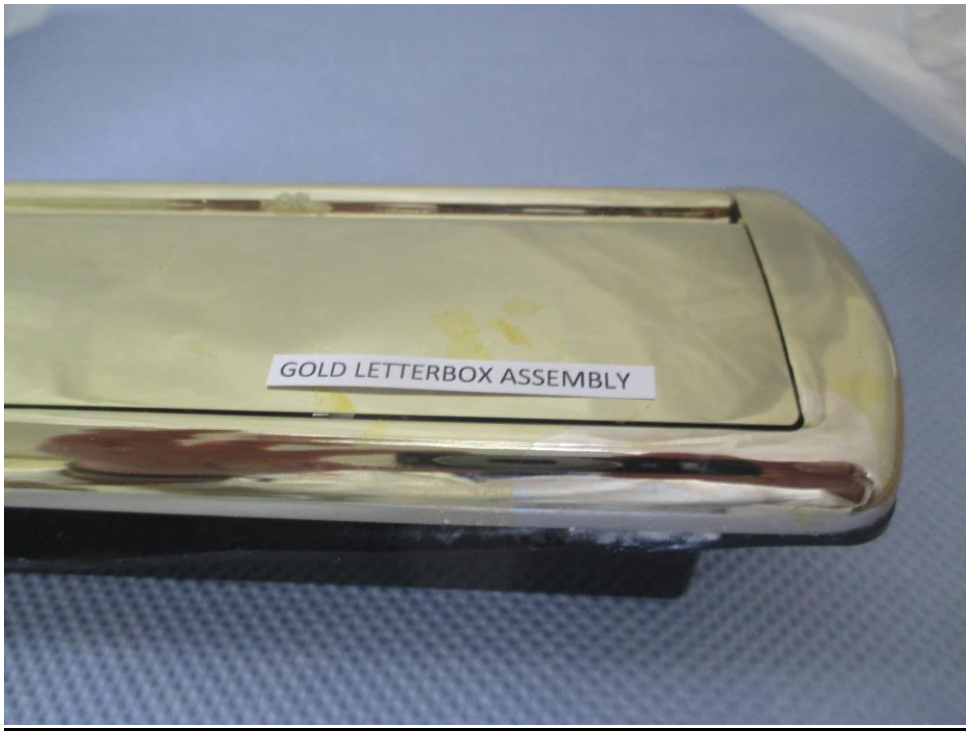
FIG 2

Photograph showing the condition of the Gold Letterbox Assembly after 96 hours Salt Spray Test

FIG 3

Photograph showing the condition of the Gold Letterbox Assembly after 264 hours Salt Spray Test

FIG 4

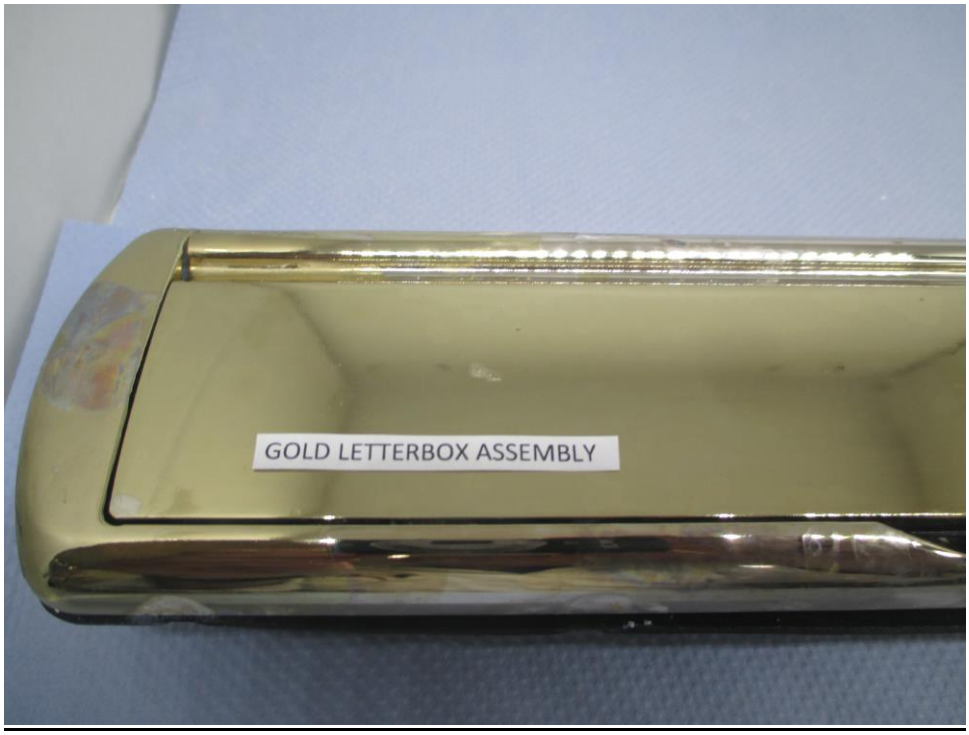


Photograph showing the condition of the Gold Letterbox Assembly after 264 hours Salt Spray Test

FIG 5

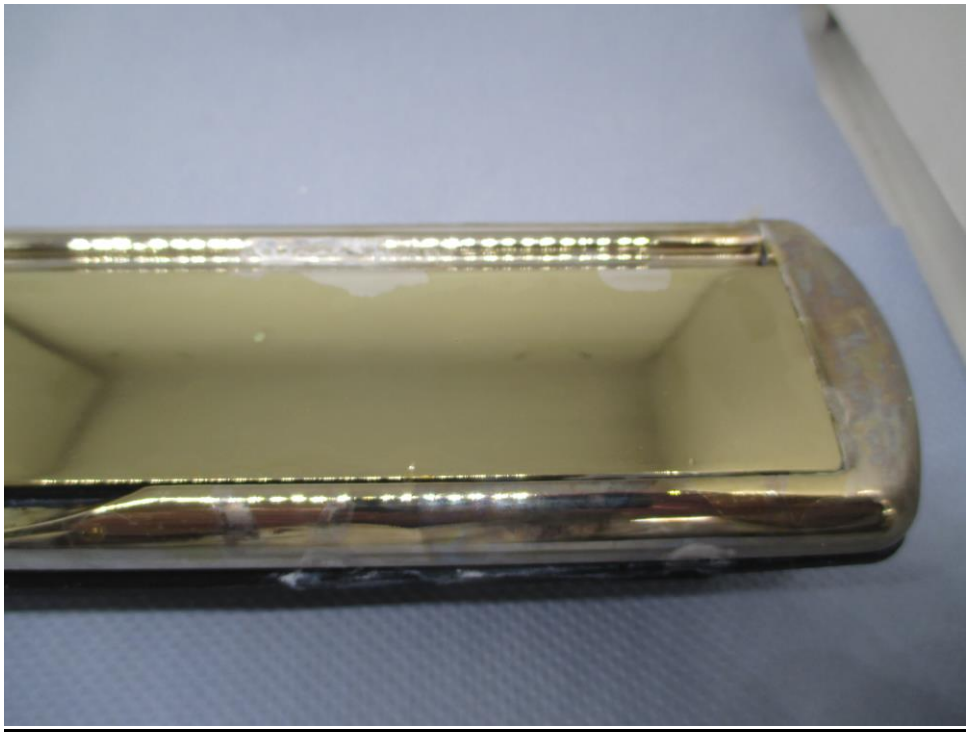
Photograph showing the condition of the Gold Letterbox Assembly after 480 hours Salt Spray Test

FIG 6



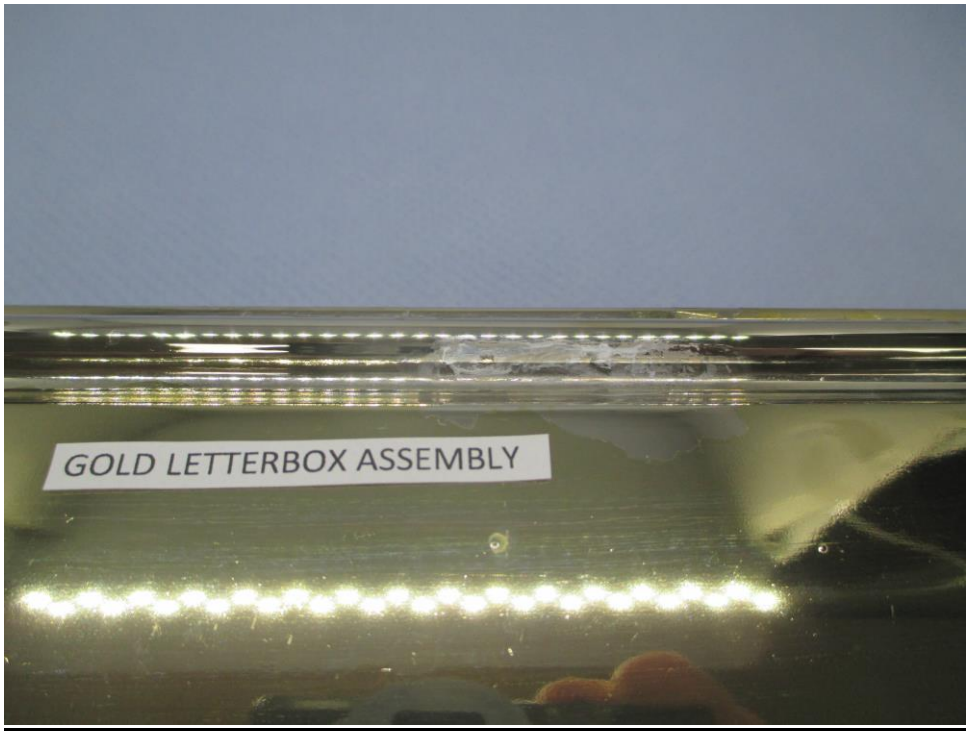
Photograph showing the condition of the Gold Letterbox Assembly after 1008 hours Salt Spray Test

FIG 7



Photograph showing the condition of the Gold Letterbox Assembly after 1008 hours Salt Spray Test

FIG 8



Photograph showing the condition of the Gold Letterbox Assembly after 1008 hours Salt Spray Test