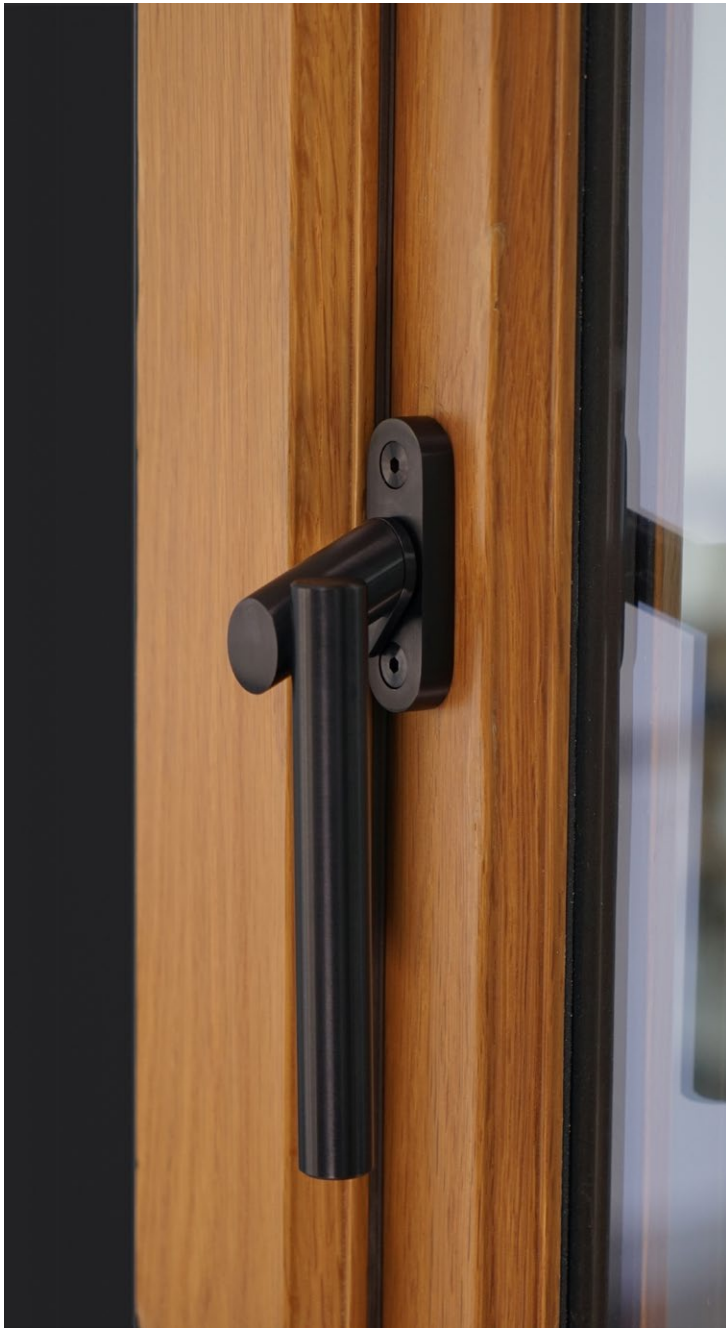




BLU™

316 Marine Grade Stainless Steel Hardware

SST87
Window Espagnolette
Handle

BS EN 1191 DURABILITY TEST REPORT

Conducted by:
White Technology and
Engineering Ltd



COASTAL
Shaping the future.

TEST REPORT



Title: **SST87-40-LH-316-SSS
Window Espagnolette Handle
- Durability Evaluation**

Report Number: **WTE-19-052**

On behalf of: **Coastal Specialist Ironmongery
Limited
Global House
Bojea Industrial Estate
Trethowel
St Austell
Cornwall
PL25 5RJ**

Date: **14 December 2019**

White Technology and Engineering Ltd
Weeke Farm
Pennymoor
Tiverton
Devon
EX16 8PG

admin@wteltd.eu

This report is confidential to the above client and may not be reproduced in part or in total without permission from WTE Ltd.

WTE-19-052

SST87-40-LH-316-SSS Window Espagnolette Handle - Durability Evaluation

Introduction

It was requested that White Technology and Engineering Ltd carry out a durability evaluation of the Coastal Specialist Ironmongery Limited SST87-40-LH-316-SSS Window Espagnolette Handles

Window handle durability can be evaluated in isolation following the methods of EN 13126-3 or alternatively on a complete window using EN 1191. In this instance, it was decided to use the methods of EN 1191 using a window supplied by Coastal Specialist Ironmongery Limited.

It was decided that Class 2 of EN 12400 should be used which comprises 10,000 cycles.

The results are presented below:

Samples

One sample of the SST87-40-LH-316-SSS Window Espagnolette Handle was supplied on the 25 November 2019.

For testing this was fitted to a side hung aluminium casement window delivered on the 26 September 2019.

The window overall size was 530 mm x 800 mm.

The window overall mass was 13.4 kg.

The window stays were replaced due to wear as required.

WINDOW ESPAGNOLETTE HANDLE - SST87

BS EN 1191 DURABILITY TEST REPORT

Page 4 of 6

LIT-TR-SST87-DT

WTE-19-052

SST87-40-LH-316-SSS Window Espagnolette Handle - Durability Evaluation

Results

The test method was based on EN 1191: 2012 (Appendix G).

The window reference velocity was 0.5 m/s

The window was opened to 45°.

The window was operated on a 12 second sequence.

Window operation was via the handle.

SST87-40-LH-316-SSS Window Espagnolette Handle

Operating efforts:

	Pre Test	Post Test
Handle open torque (window open)	2.00 Nm	2.05 Nm
Handle close torque (window open)	1.65 Nm	1.95 Nm
Handle open torque (window closed)	3.05 Nm	1.95 Nm
Handle close torque (window closed)	3.35 Nm	2.20 Nm
Window open force	22.4 N	27.2 N
Window close force	24.0 N	32.1 N

Window operating efforts complied with EN 13115:2001 Class 1.

The window completed 10,000 operations in accordance with EN 12400:2002 Class 2.

At the completion of the test there was some wear of the handle leading to play.
On removing the handle it was noted that one arm of the spring had broken.

The handle was returned to Coastal Specialist Ironmongery Limited for their examination.

WINDOW ESPAGNOLETTE HANDLE - SST87

BS EN 1191 DURABILITY TEST REPORT

WTE-19-052

SST87-40-LH-316-SSS Window Espagnolette Handle - Durability Evaluation

Summary

When subject to a durability evaluation based on EN 1191:2012 the Coastal Specialist Ironmongery Limited, SST87-40-LH-316-SSS Window Espagnolette Handle completed 10,000 operations. The window completed 10,000 operations in accordance with EN 12400:2002 Class 2.

Report authorised by:



Dr Martin White
Director

Date: 14 December 2019

REPORT ENDS



COASTAL

Shaping the future.

COASTAL GROUP

Head Office: Global House, Bojea Industrial Estate, St Austell, Cornwall, PL25 5RJ, UK

T 01726 871 025 E sales@coastal-group.com W coastal-group.com