

BOMBARDIER

Toronto (de Havilland)

PROPRIETARY INFORMATION

PPS 18.05

PRODUCTION PROCESS STANDARD

Tolerance Requirements for "Cut to Size" Material

- Issue 3
- This standard supersedes PPS 18.05, Issue 2.
 - Vertical lines in the left hand margin indicate changes over the previous issue.
 - Direct PPS related questions to PPS.Group@aero.bombardier.com or (416) 375-4365.
 - This PPS is effective as of the distribution date.

Prepared By: _____ (Michael Wright) _____ November 10, 2011

Production Process Standards (PPS)

Approved By: _____ (L.K. John) _____ November 15, 2011

Materials Technology

_____ (B. DeVreede) _____ November 15, 2011

Quality

The information, technical data and designs disclosed in this document (the "information") are either the exclusive property of Bombardier Inc. or are subject to the proprietary rights of others. The information is not to be used for design or manufacture or disclosed to others without the express prior written consent of Bombardier Inc. The holder of this document, by its retention and use, agrees to hold the information in confidence. These restrictions do not apply to persons having proprietary rights in the information, to the extent of those rights.

Signed original on file. Validation of paper prints is the responsibility of the user.

TABLE OF CONTENTS

Section & Title	Page
1 Scope.	3
2 Hazardous Materials	3
3 References.	3
4 Materials and Equipment.	3
4.1 Materials	3
4.2 Equipment.	3
5 Procedure	4
6 Requirements.	4
7 Safety Precautions.	4
8 Personnel Requirements	4

1 Scope

1.1 This standard specifies the tolerance requirements for “cut to size” material.

1.1.1 This PPS complements the engineering drawings that specify its use as an authorized instruction. The procedure specified in this PPS must be followed to ensure compliance with all applicable specifications. In general, if this PPS conflicts with the engineering drawing, follow the engineering drawing. The requirements specified in this PPS are necessary to fulfil the engineering design and reliability objectives.

1.1.2 Refer to [PPS 13.26](#) for the subcontractor provisions applicable to this PPS.

1.1.3 Procedure or requirements specified in a Bombardier BAPS, MPS, LES or P. Spec. **do not** supersede the procedure or requirements specified in this PPS. Similarly, the procedure and requirements specified in this PPS are not applicable when use of a BAPS, MPS, LES or P. Spec. is specified.

2 Hazardous Materials

2.1 Before receipt at Bombardier Toronto (de Havilland), all materials must be approved and assigned Material Safety Data Sheet (MSDS) numbers by the Bombardier Toronto (de Havilland) Environment, Health and Safety Department. Refer to the manufacturer's MSDS for specific safety data on any of the materials specified in this PPS. If the MSDS is not available, contact the Bombardier Toronto (de Havilland) Environment, Health and Safety Department.

3 References

3.1 [PPS 13.26](#) - General Subcontractor Provisions.

3.2 [PPS 27.05](#) - Manual Edge Finishing Equipment.

4 Materials and Equipment

4.1 Materials

4.1.1 Not applicable to this PPS.

4.2 Equipment

4.2.1 Suitable mechanical shearing presses, saws, etc.

5 Procedure

- 5.1 Cut material to size using suitable cutting equipment (see Equipment section, [paragraph 4.2.1](#)).
- 5.2 After cutting the material to length, remove standing burrs using manual edge finishing equipment according to [PPS 27.05](#).

6 Requirements

- 6.1 If the work order specifies that the material be cut “dead size and square” or to “dead length”, cut the material to the tolerance specified on the engineering drawing (if dimensioned) or to DS 50 (if lofted).
- 6.2 If the work order specifies that the material be cut “to size” or “to length”, cut the material within -0.000" and +0.030" of the dimension specified.
- 6.3 Do not assume that because the shop orders give dimensions to 3 decimal places that a tolerance of ± 0.010 applies to the material supplied. The number of decimal places used in specifying dimensions on shop orders is a default in the printing program and has no significance.

7 Safety Precautions

- 7.1 The subcontractor performing the work for Bombardier Toronto (de Havilland) shall define the safety precautions applicable to the procedures specified in this PPS.

8 Personnel Requirements

- 8.1 Personnel responsible for “cut to size” material must have a good working knowledge of the procedure and requirements as specified herein and must have exhibited their familiarity to their supervisor.