

Proposed Special Condition for the installations of placards on the aircraft cabin
windows
Applicable to the Boeing B737 aircraft

Introductory Note:

The following Special condition has been classified as non-important according to terms of the EASA Management Board decision 02/04 dated 30 March 2004, article 3 (2.). However, the novelty of the topic justifies a public consultation process.

Statement of issue

The following Special Condition is meant to detail the EASA requirements ensuring an acceptable level of safety after the installations of placards on the aircraft cabin windows.

There are three main considerations to be taken into account: the flammability characteristics and the window function as well as the continued airworthiness of the placards installations.

Special Condition

Considering the installation of placards that are not safety-relevant on the cabin windows, a sidewall panel is created by the covered part implying corresponding requirements.

The following requirements apply:

1. Flammability considerations for the acceptability of the installations:
 - a. Placards transparent or non-transparent with a size over or equal to 30cm² (ca. 1 ft²) need to be demonstrated fully compliant to 25.853 (including Appendix F Part IV&V).
 - b. Placards transparent or non-transparent with a maximum size between 7,5x7,5cm (ca. 3x3 in) and 30cm² (ca. 1 ft²).
The flammability tests (CS 25 app. F Part I)must be performed with the placard on a substrate representative of the window material. The test results must demonstrate an advanced performance of the window with the placard compared to the original design.

The Heat Release/Smoke Density (CS25 app. F Part IV and V) test is not requested provided that the surrounding sidewall up to and including the next window is compliant.

- c. Placards with a max dimension of 7,5x7,5 cm (ca. 3x3 in).
Those placards are usually considered to be "small parts".
As a consequence, those placard installations are exempted from Heat Release / Smoke Density tests. Moreover, the flammability tests performed using only the placard without substrate are acceptable.

One placard installation per window is considered to be acceptable if the above is met.

Additional restrictions can result from sections 2 and 3 of this special condition.

2. Window function considerations for the acceptability of the installations:
 - a. The placard installation must not be performed on windows that are necessary for monitoring outside or inside conditions or aircraft systems

- (regardless of normal conditions or not). The assessment for each window must be delivered by the applicant. In particular, placards must not be installed on Emergency Exit and Class A or B Compartment windows;
- b. The placard messages and symbols must not be designed in such a way that they can be confused by the passengers with safety-relevant indications. In particular, they cannot be superimposed onto safety-relevant indications
 - c. The placards installation shall maintain the window function “monitoring of outside and inside conditions” of section 2(a) according to the sections 2(d) and 2(e) in order to be eligible to the conditions of this Special Condition.
 - d. A minimum area of 60% of the total transparent window area shall be maintained uniformly transparent at the centre of the window with the placard installed. This value is acceptable for B737 aircraft and must be re-evaluated for any other aircraft type.
 - e. The placard area is considered as to being “transparent” if it does not degrade the window original characteristics with regards to transparency.

Additional restrictions can result from sections 1 and 3 of this special condition.

- 3. Continued airworthiness considerations for the acceptability of the installations:
 - a. The applicant shall deliver a manual or manual supplement to the aircraft owner describing the placards installation and removal procedures and limitations.
 - b. The installation and removal of the placards must not cause damages to the window.
 - c. The placards ageing process must not change the placards characteristics in such a way that the requirements of this Special Conditions are not met anymore. If transparency effect on aging cannot be excluded, there must be a life-limit on the installation.
 - d. Placards are only allowed to be installed on the protective inner window sheet. Any window pane that is designed to carry pressurisation loads is not allowed to be placarded.

Additional restrictions can result from sections 1 and 2 of this Special Condition.