



WSGO - Europe

IN-HOUSE PACKAGE TESTING

Each carton must conform to WSInc. packaging requirements. It could be subjected to re-testing and modification when necessary.

The owner of pkg approval process is WSGO QA European Team.

The procedure is a partial simulation representing transport and handling through the distribution environment.

The test protocol is referenced from the International Safe Transit Association test procedure: ISTA 1A and ISTA 3A.

ISTA 3A: to be used for UPS full case shipped product (Retail POs)

ISTA 1A: to be used for:

- Direct To Customer product (DTC/MAIL POs)
- Retail split case (=when the minimum retail pkg dimensions are not met and/or when the DL is not equal to the MC qty)
- Softline products

When the same product is sold by both Retail and DTC channels → we test the pkg according to ISTA 3A protocol.

Drop test video is available here <https://www.wsgo.eu/index.php/video.html>

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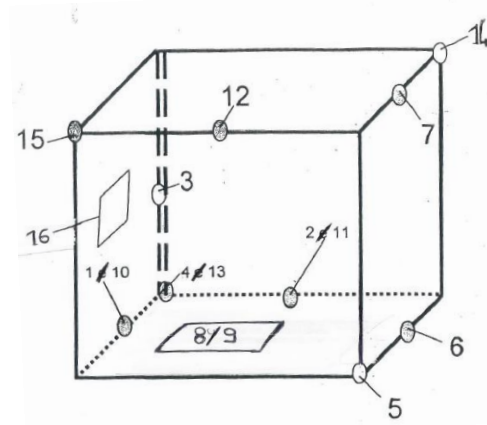
ISTA 3A drop test protocol: series of 16 free-fall impacts from the following drop heights

1° - 7° fall impacts: from 46cm

8° fall impact: from 91cm

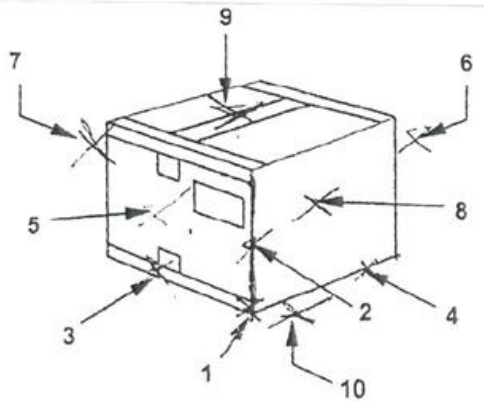
9° - 15° fall impacts: from 46 cm

16° fall impact: from 91cm



Note: the fall impact number 3 is on the joint edge of the carton.

ISTA 1A drop test protocol: series of 10 free-fall impacts from 76cm



Orientations of the impacts are as follows: (Must be in the order listed)

1. Most fragile corner; if not known, at the carton manufacturer's joint
2. Shortest edge radiating from that corner
3. Medium edge radiating from that corner
4. Longest edge radiating from that corner
5. Flat on one of the smallest faces
6. Flat on the opposite small face
7. Flat on one of the medium faces
8. Flat on the opposite medium face
9. Flat on one of the largest faces
10. Flat on the opposite largest face

Note: the fall impact number 2 is on the joint edge of the carton.