

TOLERANCES & VARIABILITY DOWN & FEATHER TESTING

<u>Label Tolerances</u> — (Government Allowance of Actual Results vs. Label Claim)

Labeling standards very often have a "label tolerance".

For example, a label "80% GOOSE DOWN" has a different tolerance in each country:

USA (Zero tolerance – Must have 80% Down Cluster)
 Europe (Required minimum of 71.43% Down Cluster)
 Japan (Required minimum of 77% Down Cluster)

Australia (Required minimum of 68% Down Cluster – OLD Australia Standard)

Canada (Required minimum of 60% Down Cluster)

<u>Testing Tolerance</u> — (Variability of Results When Testing the Same Material)

Testing Tolerance is something very different. The testing tolerance is the expected variability between results of different samples for the same lot (or) results of different labs testing the same sample. Because down is a natural product the testing tolerances are larger than other products.

Content

The International Down & Feather Bureau (IDFB) allows a **± 2-3%** testing tolerance when certifying laboratories around the world. This means that if a sample is actually 80% down, a laboratory test of 77% down or 83% down would be in the acceptable testing range. The average of multiple tests will give a result with a smaller testing tolerance.

High fiber samples are very time-consuming and difficult to test. Therefore, high fiber samples may have a testing tolerance of up to $\pm 5\%$. Couché samples (used material) may require an even higher testing tolerance of up to $\pm 5-10\%$.

Species ID

IDFB states that a $\pm 5\%$ testing tolerance is normal for specie tests. The most common specie mix is about 10% duck in a goose sample. If the duck % in a goose sample is 20% or higher, the testing tolerance is often higher, as the mix of duck and goose is not always consistent.

Oxygen

This test gives fairly consistent results. A difference of one unit (1.6) is reasonable.

Turbidity

Normal samples have a testing tolerance of \pm 5%. Dirty samples have a higher testing tolerance.

Fill Power

A **5%** testing tolerance is reasonable if conditioning methods and climate conditions are identical. Steam is now the official IDFB method for testing as of June 2006.

Net Fill Wt

The process of filling a pillow, comforter or jacket has a variability of around 5%.

Net fill testing tolerances are affected by humidity. If a product is filled in a humid climate and tested in a dry climate, the weight of the filling material can be lower.

Thread Count Varies by company — a common tolerance is $\pm 5\%$.

Fabric Tests The USA FTC has set a ±3% tolerance for fiber content and other claims on fabrics.

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