ABBOTTACTION
PACKAGING

Certifications

Amazon APASS

International Safe Transit Association

Idealliance G7 Master Facility

Lab Testing Capabilities

- Cape Pack Palletization Software
- Color Spectrophotometer
- Basis Weight Testing
- Dynnamic Stiffness Testing
- Box Compression Testing
- Drop Testing
- Score Compression Testing
- Transportation Simulation Vibe Testing
- Edge Crush Testing

abbottaction.com | 781-821-8200 | 3 Venus Way Attleboro, MA 02703

ABBOTTACTION PACKAGING

Lab Certifications

Amazon APASS Certified

The Amazon APASS Network was created by Amazon to help vendors, sellers and manufacturers to obtain certification of their products as Frustration Free Packaging (FFP), Ships-in-Own-Container (SIOC) or Prep-Free Packaging (PFP).

We can test, design and supply packaging in line with Amazon's Packaging Certification

International Safe Transit Association (ISTA)

ISTA is an international body of organizations and professional individuals dedicated to the development, design and evaluation of cost-effective and protective transport packaging, with set standards for packaging that protect products from risks associated with everyday shipping.

ISTA 1 Series: Non-Simulation Integrity Performance Tests
ISTA 2 Series: Partial Simulation Performance Tests
ISTA 3 Series: General Simulation Performance Tests
ISTA 5 Series: Focused Simulation Guides
ISTA 6 Series: Member Performance Tests
ISTA 7 Series: Development Tests

Idealliance G7 Master Facility

Idealliance G7 is the global industry-leading set of specifications for achieving visual similarity across all print processes. Master Facility Qualification is a three-level compliance program that indicates the facility has calibrated certain equipment and systems to G7 gray balance and neutral tone curves and is capable of delivering G7 proofs and print products.

ABBOTTACTION PACKAGING

Cape Pack

Palletization Reports

What is Cape Pack ?

Cape Pack is palletizing software that allows you to optimize your primary product size for shipping, create new case sizes, build efficient pallet patterns, analyze compression strength of cases and pallets, and improve material and cube utilization.

Optimized Palletization: How does it work?

Cape Pack helps you determine the best size, case quantity, product arrangement, case size, pallet and container load. Start with an existing case size, an existing product size, or use Cape Pack to determine the most appropriate size for a new product.

Design the optimum product size and perform compression strength analysis on your case and pallet load.

Evaluate alternative case sizes, maximize pallet loading & improve space utilization.

Create a sustainable packaging supply chain. Cut transportation costs & reduce the number of trucks on the streets.

ABBOTTACTION PACKAGING

"ArtiosCAD works along side CAPE software to determine palletization configurations very quickly. We removed 15-20% of the cost of a project by the reduction of fiber. There were also pallet-handling efficiencies of 10-15%. Overall savings were about 30%."

Greg Archer, Sales Department Manager, Abbott-Action

ABBOTTACTION
PACKAGING

X-Rite
Color Spectrophotometer

What is a Spectrophotometer?

A spectrophotometer is a color measurement device used to capture and evaluate color. As part of a color control program, designers use spectrophotometers to specify and communicate precise colors and monitor color accuracy throughout production.

Why is it used?

This process offers the highest accuracy and repeatability for precise color measurement and quality control across the supply chain. The data collected can identify a trend for continuous improvement and ensures tolerance is at a level below what the human eye can notice in terms of a change in value.

x-rite PANTONE®

ABBOTTACTION PACKAGING

Basis Weight

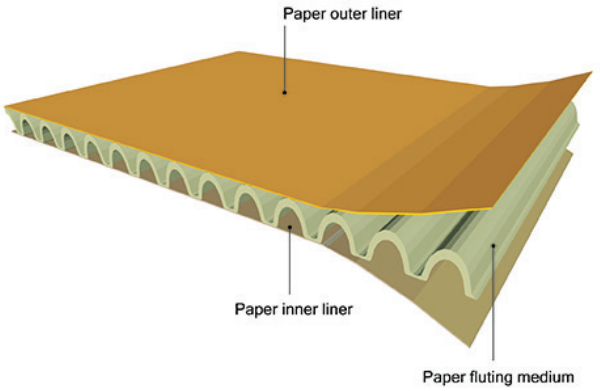
Board Testing

What is a corrugated sheet made of?

There are several layers in corrugated boards. Liner boards are the thin facings that you see on the outside and inside of a corrugated board and fluted mediums are the wavy-looking inner arches that are attached in between the liner boards with adhesive.

What is basis weight?

The basis weight of corrugated board is measured in lbs/1000 sq. ft. and it directly impacts paper strength. In other words, the higher the basis weight of the corrugated paper, the stronger it is.



How is basis weight tested?

Basis weight is tested by separating the inner and outer liners from the internal fluted medium. We weigh these sheets separately to determine the combined board grade of the material.

Why check basis weight?

Basis weight confirms the type of board used in a sheet of corrugate, which is directly linked to the material's properties and strength. For example, if a corrugated container has a 200 ECT rating, that means it can withstand 200 lbs of pressure on the edges of the corrugated.

ABBOTTACTION
PACKAGING

DST

Dynamic Stiffness Testing

What is DST?

The Chalmers Dynamic Stiffness Tester (DST) measures the torsional stiffness of corrugated board by determining the natural angular frequency of a sample when it is rotated with an inertial mass attached to it. This frequency is directly proportional to torsional stiffness.

Why test for DST?

Dynamic Stiffness Testing (DST) measures how well the corrugated board has been made and how much flute damage is received during the printing and converting processes.

Why is flute strength important?

Corrugated boards are engineered structures made up of flutes and liners. The flutes are the bracing elements in the structure that keep the liners apart and from moving relative to each other, so a corrugated carton can resist buckling and compression forces. If the flutes are well made and not crushed, then the performance property of the board will be maximized.

ECT vs DST

Edge Crush Testing (ECT) is a common test that tells you how strong a corrugated board is. Whereas, Dynamic Stiffness Testing (DST) shows you the degradation of a corrugated sheet, essentially showing how weak it is.

ABBOTTACTION
PACKAGING

BCT
Box Compression Test

What is BCT?

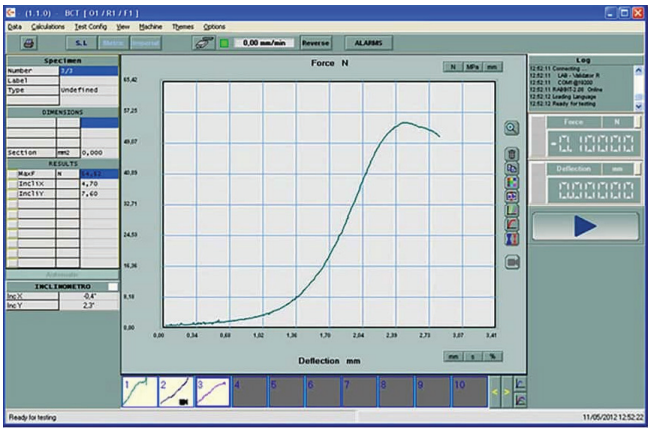
Box Compression Testing (BCT) measures the compressive strength of a carton. It's used to determine a carton's behavior under crushing loads and it's maximum load bearing strength.

How does BCT work?

The testing instrument applies a specific load to the upper area of a corrugated box to determine the strength of the carton.

Why run BCT?

Box Compression Testing is used to determine the strength of packaging and to ensure the safety of stacked loads. It also provides information about a carton's ability to protect it's contents from compression damages. Testing determines the exact time to carton failure and the point of critical deformation.



ABBOTTACTION
PACKAGING

Drop Test

What is drop testing?

A drop test is performed on corrugated boxes to test the sustained structural integrity of a carton when dropped from a certain height.

Why run a drop test?

Drop testing ensures that your packaging can withstand the rigors of shipping and handling. This is important because you want to make sure that your product arrives at it's destination in one piece and without any damage.

By conducting drop tests on cartons, manufacturers can identify any potential weaknesses in your packaging design. This information can then be used to improve the design to make it more robust.

What are common drop tests?

Free Fall Impacts are the most commonly referenced drop tests. They simulate containers of various sizes being dropped from different heights and orientations. Distribution standards such as ISTA 3A and ISTA 2A dictate these variables.

ABBOTTACTION
PACKAGING

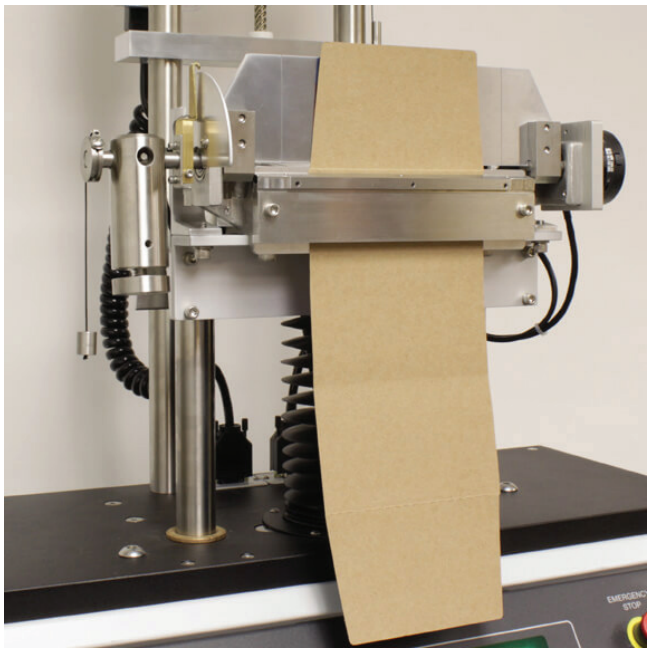
Score Bend Test

What is a score bend test?

A score bend test measures the force needed to open or bend a scored corrugated carton.

What does a score bend test measure?

- Opening Force
- Bending Stiffness
- Ratio of scored vs unscored carton's fold
- Springback force



ABBOTTACTION
PACKAGING

Vibration Table

Transportation Simulation

What is a vibration table?

A vibration table is a machine that shakes to replicate the the damage done to cartons in shipment.

Why run a transportation simulation?

A vibration table is an accurate and affordable solution for calculating the damage caused by repetitive movement caused to cartons during transportation.

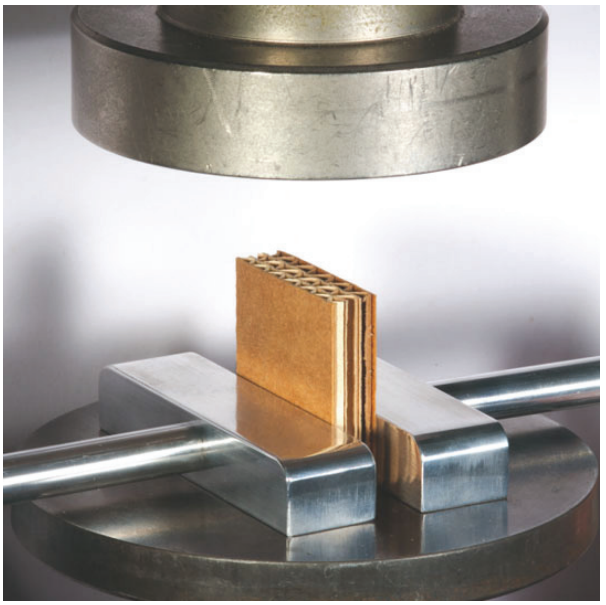
ABBOTTACTION PACKAGING

ECT

Edge Crush Test

What is ECT?

The edge crush test (ECT) is a measurement of the edgewise compressive strength of corrugated board. ECT tests how much weight can be stacked on top of a box without the edges being damaged. Common ECT ratings are 32 for single-wall boxes, 44-48 for double-wall boxes and 60-90 for triple wall boxes.



Why run an ECT?

ECT helps determine the board's stacking strength. It provides a reliable measurement of how well the box will hold it's form under the vertical weight during transit.

How does the test work?

ECT is measured by compressing a small segment of board on edge between two rigid platens perpendicular to the direction of the flutes, until a peak load is established. This is measured in pounds per lineal inch of load bearing edge (lb/in), but is usually reported as an ECT value (for example, 44 ECT).

What do the results mean?

Understanding the results of an ECT is relatively easy. If a corrugated container has a 200 ECT rating, it means that it can withstand 200 lbs of pressure on the edges of the corrugated.