This brochure is intended to assist automotive packaging specialists with packaging designs for hoods, doors, trunks, and windshields. Designs featured are the creations of FedEx® Express packaging engineers and have passed the FedEx® Express Packaging Design and Development test procedures. All designs are available for FedEx customer use.

An important aspect of each design is the use of cost effective corrugated pads/roll-ups which provide sufficient cushioning needed to prevent damage during transit. If you would like more detailed information on any of these designs, please call the FedEx Packaging Design and Development Department at 1.800.633.7019.

**Flat Style Hood Design**

Specially engineered pads and roll-ups provide vital cushioning and help prevent movement during shipping.

The illustration above shows the ease of the Flat Style Hood Design. Center nose and rear roll-up pads and staple to inner flaps of end loaded full overlap shipping container. Place hood in container followed by roll-up slit cut pads. Close and tape. Hood and cushioning are placed inside a 275# BC flute full overlap corrugated shipping container prior to shipment by FedEx Express.

**Acceptable Shipping Guidelines For FedEx® Express Freight Service**

**Forklift/Pallet Jack Base**

All freight shipments over 150 pounds (68 kg) must be secured on a forkliftable base and be compatible for pallet jack usage. The minimum specifications for a typical base for forklift or pallet jack configuration are illustrated below. Pallet jack entry is required on two sides of either type base.

- To consolidate multiple piece shipments and protect against the elements, use shrink or stretch wrapping. All shrink or stretch-wrapped shipments should be banded or strapped together as described to prevent shifting and loss of packages. Individual packages should include the origin and destination address whenever possible. Cover the top layer of the shipment to protect the unitized load from the weather.

**Labeling Tips**

- Remove or mark through all old labels.
- Attempt to follow all orientation symbols or verbiage ("TOP LOAD ONLY," "DO NOT STACK," "THIS SIDE UP," etc.) for all skidded shipments.

**Parts Requiring Additional Protective Packaging**

Listed below are parts that pose a safety hazard to personnel and are likely to damage sorting equipment and other customers’ shipments:

- Mufflers and Exhaust Systems
- Gas Tanks
- Metal Bumpers
- Stamped Metal Sheet Panels including Floor Pans
- Thin Metal Trim Piece Fenders
- Suspension Struts
- Radiator Housings and Similar Front-End Housing Brackets
- Thin Plastic Trim Parts
- Fuel Lines
- Springs
- Loose Nuts and Bolts
- Wheels

Any Mechanical/Automotive Parts Packaging That Does Not Meet The Minimum Shipping Standards For Acceptance May Be Rejected By FedEx Express

**NOTE**

This packaging brochure is provided free to FedEx® Express customers to reduce the possibility of loss or damage during transit. It is NOT intended to be a comprehensive guide for packaging items we accept for transit. We make no warranties, expressed or implied, regarding this information. Proper packaging is the sole responsibility of the shipper. For more information and guidelines, contact the FedEx® Express Packaging Design and Development Department at 1.800.633.7019. Refer to the current FedEx Service Guide for terms, conditions and limitations applicable to FedEx Express delivery services.
FedEx® Express Freight & Air Cargo Services
Size & Weight Restrictions

For all your express freight or air cargo shipments, contact FedEx® Express Freight Customer Service at 1.800.332.0807 (or the FedEx® Forwarder Hotline at 1.877.398.5851 for air cargo shipments only). For terms, conditions, and limitations, refer to the current FedEx Service Guide on fedex.com.

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>U.S. EXPRESS FREIGHT</th>
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<th>INTERNATIONAL AIR CARGO</th>
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<tr>
<td></td>
<td>F1 or F2</td>
<td>F3</td>
<td>IPF or IEF</td>
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<tr>
<td>Minimum weight per piece (skid)</td>
<td>151 lb</td>
<td>151 lb</td>
<td>No minimum restrictions</td>
</tr>
<tr>
<td>Maximum weight per piece (skid)</td>
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<td>2,200 lb</td>
<td>2,200 lb (997 kg)</td>
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<tr>
<td>Maximum weight per shipment</td>
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<tr>
<td>Maximum length plus girth per piece (skid)</td>
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<td>300”</td>
<td>300” (762 cm)</td>
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<tr>
<td>Maximum length per piece (skid)</td>
<td>119”</td>
<td>48”</td>
<td>119” (302 cm)</td>
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<tr>
<td>Maximum height per piece (skid)</td>
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<td>70”</td>
<td>70” (178 cm)</td>
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Footnotes:
1 Minimum billable weight is 151 lb regardless of actual weight.
2 Pieces (skids) exceeding the maximum require pre-approval by FedEx Express.
3 Length and girth formula: package length + twice the height + twice the width (see diagram at right).
4 Maximum length depicted for F1 and F2 is suggested maximum.

Grill Style Hood Design
This design incorporates side rails to elevate and suspend the hood. The air space created by the elevation helps protect the grill from external forces.

Overbox Style Hood Design
This design uses molded pulp inserts on all 4 class A sides of the inner container to help provide cushioning.

Door Pack Design
This design combines the use of a scored pad, a die-cut laminated corrugated insert and a molded pulp insert to help provide cushioning and bracing of the door inside the outer shipping container.

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**Fascia (Bumper Cover) Pack Design**
This design protects the fascia from scratches and abrasions. Additional poly bag surface protection is optional.

**Windshield Pack Design**
This design helps protect windshields from shock and/or torque during transit. The corrugated wrap converts a non-rigid part into a rigid surface, thus making it possible to cushion/brace off of the corrugated wrap.

**Rim Pack Design**
This design protects the rim from dents, scratches and abrasions. The molded pulp inserts are designed to fit multiple sizes.

**Trim/Molding Pack Design**
This rigid outer package design protects the pre-paint trim/moldings from scratches and bending.

**FedEx Express Freight Cart**
In response to concerns regarding movement of non-palletized freight through the FedEx Express system, FedEx Express has developed a specially designed Cart. This Cart allows the freight to be moved in its desired orientation and takes full advantage of the package’s maximum strength.

**FedEx Express Freight Box**
FedEx Express is dedicated to providing important freight deliveries the protection needed to reach customers safely. The FedEx Freight Box provides security, along with the reliable, flexible, time-definite service expected from FedEx Express.

**Trunk Pack Design**
This design helps protect the trunk pack from external forces. Molded pulp inserts are used to create air cells and brace the trunk lid.

Once the inserts are in place, both trunk lid and cushioning are placed inside a 275# BC flute full overlap corrugated shipping container prior to shipment by FedEx® Express.

Prior to shipment, the windshield and cushioning are placed inside a full overlap 275# BC flute corrugated shipping container.

**Corrugated roll-up. 275# C flute.**

**Corrugated scored pad. 275# BC flute.**

**Corrugated wrap. 275# C flute.**

**Molded pulp insert.**

**Poly bag, minimum 2 mil thickness.**

**Molded pulp insert.**

**Regular slotted container, minimum of 200# C flute.**

**Outer corrugated tube, minimum of 275# C flute.**

Tape both ends with pressure-sensitive adhesive plastic tape that is at least 2 inches wide.

Note: Sonopost® may be trimmed to fit part length. Call 615-262-3837 for information on Sonoco’s Sonopost® Technology.

**Corrugated tube/sleeve “Hold down.” 275# C flute.**

**Corrugated tube. 275# BC flute.**

**Corrugated insert. 275# C flute.**

Prior to shipping, place the fascia inside a 275# BC flute corrugated full overlap shipping container. Then place inserts and tube/sleeve into position.