At Northrich, we believe everything is possible. So we’re always challenging ourselves to make it happen by working as a team with our agents, distributors, suppliers and employees to create the most innovative solutions to fulfill our customer’s unique needs.

Making great protective packaging solutions is not just our job - it’s our commitment.
offering unlimited possibilities

Every industry’s needs are different, so we offer industry-specific protective packaging solutions with virtually unlimited applications. While each product has been designed to solve a specific protective packaging challenge, often our multiple edge protection products are used together for a customized, cost-saving solution.
NORTHRICH THROUGH TECHNOLOGY
From **EDGE PROTECTORS** to **SHEETS**, **PADS** and **TUBES & CORES**, we offer a wide array of strong and reliable products. Whether you require standard or custom products, we can cater to your needs by creating, developing and manufacturing protective packaging solutions just for you.

<table>
<thead>
<tr>
<th>EDGE PROTECTORS</th>
<th>PACKAGING SHEETS</th>
<th>TUBES &amp; CORES</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANGLE-GUARD™</td>
<td>STRAP GUARD</td>
<td>SEPARATOR SHEETS</td>
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<tr>
<td>Produce</td>
<td></td>
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<tr>
<td>Growers</td>
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<tr>
<td>Wood and Lumber</td>
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<tr>
<td>Metal</td>
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<tr>
<td>Windows and doors</td>
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<tr>
<td>Office furniture</td>
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<tr>
<td>Food and beverage</td>
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<tr>
<td>Appliance</td>
<td></td>
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<tr>
<td>Generic manufacturing</td>
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<tr>
<td>Labels and tapes</td>
<td></td>
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</tr>
<tr>
<td>Paper Mills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Textile</td>
<td></td>
<td></td>
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<tr>
<td>Tissue and Kitchen towel</td>
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</tbody>
</table>
Engineered to provide extra strength for load stability and superior edge protection, ANGLEGUARD™ products are built to the industry’s highest standards of quality and consistency, providing you with dependable protection along with load containment, stabilization and weight distribution.

**BENEFIT FROM A NEW GENERATION OF EDGE PROTECTORS**

Were traditionally used for corner protection to avoid damage and to provide safe transportation and storage, edge protectors provide companies with dependable protection along with load containment, load stabilisation and weight distribution.

But is that all? Your business reality is unique. Standard products probably don’t provide all the protection you need. With that in mind, we created a range of standard and custom specialized edge protectors to adapt your needs.

- Providing flexibility to adapt the ANGLEGUARD™ to fit your needs
- Providing vertical strength for stacking to reduce the storage space requirement
- Providing box reinforcement to protect your product against damage during transportation
- Providing a moisture and water resistance solution using a totally new technology
- Minimize damage and replacement costs
- Protects metal machinery
- Protects corners
- Stabilizes pallet loads
- Higher stacking strength
- Better shock absorption
- Maximize storage space
- Minimize transportation costs
- 100% recyclable
- Cost-effective
WHAT MAKES IT SO DIFFERENT?

- quality of the raw material,
- latest technologies used,
- different packaging (lego block/strap every row),
- different manufacturing process (full wrap and overlap in the angle),
- 90 degrees angle construction, ANGLEGUARD™ plus facilitate the construction of display ready solution and facilitate the implementation of automatic palettizer machine.
Engineered to provide extra strength for load stability and superior edge protection, STRAP GUARD products are built to the industry's highest standards of quality and consistency, providing you with dependable protection along with load containment, stabilization and weight distribution.

**How can Northrich's STRAP GUARD be a better cost effective solution?**

> By using higher quality raw material, by using a unique manufacturing process (full wrap and overlap in the angle)

Northrich's STRAP GUARD provides a better protection being much stronger in the angle because of the overlap.

Northrich STRAP GUARD manufacturing process being fully automated using leading edge technology makes Northrich STRAP GUARD better and very price competitive.

**How can STRAP GUARD reduce your cost?**

> STRAP GUARD will improve safety and prevent load shifting in transit to minimize damage.

STRAP GUARD is engineered to eliminate crush damage to products caused by strapping pressure in the angle.
Also known as tier sheets, skid protector, pallet dividers/separators or pallet cover, chipboard sheets are commonly used to protect finished products from damage throughout transportation and are used to stabilize load and as interleaving between layers. Different sizes and thicknesses available to match your needs.

**COVER SHEET**

Protects products while keeping dust away during transportation and storage.

**SEPARATOR SHEETS/PADS**

Stabilizes boxes and products during transportation and storage.

**GRIP PUSH-PULL SHEETS**

Eliminate slippage, secure loads, increase productivity and safety using GRIP PUSH-PULL SHEET, thin pallet-sized sheets designed to replace or supplement wooden pallets in transportation and warehouse applications.
**NEW GENERATION**

**New generation of antiskid and square grid slip sheets to provide a cost-effective and cost competitive solution**

Antiskid sheets solve ordinary slippage problems. Antiskid sheets are made of wet strengthened high-quality Kraft liner. Antiskid SLIP SHEETS are a lighter, less expensive and more efficient alternative to wood pallets. Multi-laminated material makes Antiskid SLIP SHEETS extremely tear and moisture resistant.

- Reduce pallet storage space requirements as well as labour, freight and repair costs associated with pallets
- Eliminate pallet infestation problems
- Made from 100% virgin kraft

Can be placed on top of wooden/plastic pallets or between layers of products (boxes, bags, etc.) to prevent all slippage and damage issues.

- Secure shipping and handling
- Increase security & safety to avoid accidents
- Optimize warehousing
- Increase stability in multiple skid handling
- Increase product volume per skid
WHY GRIP PUSH-PULL SHEET?

1. Using GRIP PUSH-PULL SHEET instead of wooden pallets allows for 12–15% more products in material handling containers. Significant reduction in material handling costs.

2. Weighs 1/20 as much as wooden pallets, reducing shipping costs.
   - Reusable and reliable.
   - Unlike wooden pallets GRIP PUSH-PULL SHEET are not subject to phytosanitary restrictions.
Why?

• Eliminate slippage and increase safety
• Stabilize difficult load
• Reduce storage space
• Environment friendly

Standard and custom sizes to separate and protect items in boxes; also used as backing materials for the printing industry.

Antiskid sheets solve ordinary slippage problems.
Used for many packing purposes.
Manufacturing tubes and cores for over 15 years and building upon this expertise, Northrich is now part of the leading providers of total converting solutions.

Northrich is well known in the tapes and labels industry as the supplier of choice when it comes to excellent service and consistent quality with our tape and label cores. Northrich is also very specialised in the kitchen towels tubes, toilet paper tubes and wrapping paper.

The tube produced by Northrich may be considered as a product completely **recyclable**.

By using quality raw materials and state-of-the-art technologies, Northrich’s can provide a variety of products to address multiple industry solutions in a variety of size and thicknesses:
- Cores for labels and tapes (adhesives)
- Cores for tissues (toilet paper and kitchen towel)
- Cores for paper mills, plastic film, textile bobbins.

Northrich can provide customers with the right solution. If you are looking for a solution, we can help!
Northrich cores are designed to improve productivity, visibility and profitability for tape and label and tissue products manufacturers.

- Superior and proven manufacturing processes and graphics ensure that our cores also offer the highest in quality, performing under the toughest packaging demands.
- Continuous R&D activities enables Northrich to measure radial strength of paper cores by simulating the pressures applied during the winding processes of rolled products.
- To ensure dimensional consistency and wall strength, quality assurance reports and lab tests are available on request.
- Northrich’s needs assessment process supported by our packaging specialists; testing and quality assurance, where cores are tested repeatedly for dimensional consistency and wall strength guarantees consistent quality.
Northrich also produces custom paper tubes for many industry applications. Our customers use our custom paper tubes in the most recognizable form of:

- mailing and shipping tubes for steel,
- aluminum,
- tooling,
- wood moldings,
- fishing rods,
- art work,
- vehicle parts,
- machine and printing dies,
- paper mills and textile.
## Edge Protectors

### ANGLEGUARD™

<table>
<thead>
<tr>
<th>LEG WIDTH</th>
<th>WALL CALIPER</th>
<th>LENGTH</th>
<th>COLOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.5 x 1.5&quot; to 2 x 2&quot;</td>
<td>0.060&quot; to 0.400&quot;</td>
<td>12&quot; to 144&quot;</td>
<td>kraft or white</td>
</tr>
<tr>
<td>2.5 x 2.5&quot;</td>
<td>3 x 3&quot;</td>
<td>4 x 4&quot;</td>
<td>For length over 144&quot;, please contact us</td>
</tr>
</tbody>
</table>

### STRAP GUARD

<table>
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<td>4&quot;</td>
</tr>
<tr>
<td>3 x 3&quot;</td>
<td>6&quot;</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Packaging Sheets

### CHIPBOARD SHEETS

<table>
<thead>
<tr>
<th>Cover/separator sheets:</th>
<th>Size</th>
<th>Target Thickness</th>
<th># of sheet/pallet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width</td>
<td>Min</td>
<td>11&quot;</td>
<td>Max</td>
</tr>
<tr>
<td>Length</td>
<td>18.75&quot;</td>
<td>72&quot;</td>
<td>35&quot;</td>
</tr>
<tr>
<td>Thickness</td>
<td>12 pts</td>
<td>40 pts</td>
<td>40 pts</td>
</tr>
</tbody>
</table>

Width tolerance: Plus or minus 1/6"  
Length tolerance: Plus or minus 1/8"  

### GRIP SHEETS

- No toxicity  
- Biodegradable  
- Recyclable  
- Color Brown/Grey  
- Fully coated on both sides  
- Standard sizes (all other sizes are available on special request): 37 x 45" 40 x 48"  
- Other specifications available on request:  
  - Friction factor  
  - Resistance factor  
  - Bursting Strength  
  
### GRIP PADS/PADS

- Size: to 60" x 120" (92.3 m x 4.6 m)  
- Thickness: 0.050 to 0.125"  
- Non slip coating: 100% on both sides  
- Quantity/pallet: based on the specific spec's  

**Grip Pad 1 side coated**  
- Size: Up to 60" x 120" (2.3 m x 4.6 m)  
- Thickness: 0.085 to 0.165"  
- Non slip coating: 100% on one side  
- Material: Dry finish chipboard 100% recycled  
- Quantity/pallet: based on the specific spec's  

### GRIP PUSH-PULL SHEETS

- Construction: Multiple layers of Kraft liner board with the top side laminated with Grip sheet (laminated coating/PVA) & recyclable.  
- Color: Brown  
- Dimensions Maximum width: 73" (including tabs)  
- Maximum length: 100" (including tabs)  
- Gripping handle: Standard width of 3"  
- Standard thickness: Maximum load:  
  - 36 pts (kraft+grip sheet): 1,800 lbs (800 kg)  
  - 48 pts (kraft+grip sheet): 2,400 lbs (1,100 kg)  
  - 60 pts (kraft+grip sheet): 3,000 lbs (1,400 kg)  
- Maximum load depends on product type or specific application.  

## Tubes & Cores

### Light Weight Tubes

<table>
<thead>
<tr>
<th>INTERIOR DIMENSION</th>
<th>WALL CALIPER</th>
<th>LENGTH</th>
<th>OPTIONAL PRINTING</th>
</tr>
</thead>
<tbody>
<tr>
<td>From 1.01 to 6&quot;</td>
<td>0.02 to 0.25&quot;</td>
<td>20 to 144&quot;</td>
<td>up to 6 colors</td>
</tr>
</tbody>
</table>

### Light Weight Cores

<table>
<thead>
<tr>
<th>INTERIOR DIMENSION</th>
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</tr>
</thead>
<tbody>
<tr>
<td>From 1.01 to 6&quot;</td>
<td>0.02 to 0.25&quot;</td>
<td>1/2 to 20&quot;</td>
<td>up to 6 colors</td>
</tr>
</tbody>
</table>
FAILURE IS NOT AN OPTION

FROM PRODUCTION TO CUSTOMER SATISFACTION, YOUR PRODUCTS ARE EXPOSED TO MANY RISKS DURING SHIPPING, HANDLING AND WAREHOUSING.

TAKE ONE RISK OUT OF THE EQUATION:

BENEFIT FROM NORTHRICH’S SOLUTIONS.
FLEXIBILITY
QUALITY
MARKETING SUPPORT
ECO-FRIENDLY PRODUCTS
INDUSTRY SOLUTIONS
EXPERTISE
SERVICE