cascade corporation

Cascade World Headquarters
P.O. Box 20187
Portland, OR 97294
800 CASCADE (227-2233)

www.cascorp.com

Form 6023385 R4 C2G 1K 09/15

CONTACT PAD GUIDE

A pad for every paper

Contact Pads for Damage-Free Paper Handling

Choosing the right paper roll clamp for your application is extremely important and choosing the correct contact pads is no exception. In fact, selecting the correct pad for your application is crucial to perfect paper handling. The correct contact pads optimize clamp force resulting in overall damage reduction.

Cascade offers contact pads for all paper types, with the widest variety of pads in the industry. This booklet is a guideline to help find the contact pad best suited for your application.

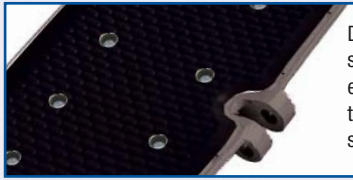
Cascade can help you deliver a perfect roll every time.

Two special pad types for reducing clamp force on printing papers:

RXH (Rubber Cross Hatched)

Durable non-marking rubber with cross hatch surface offers excellent friction.

Bolt-On UDP (Urethane Domed Profile)



Durable non-marking urethane surface with oval domes for excellent friction and the ability to glide more easily past tightly stacked rolls.

DENSITY-BASED TISSUE PAD SELECTION

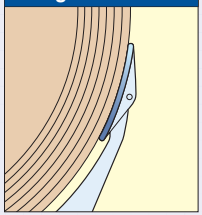
Tissue paper can be divided into three categories, each of which should use a different style pad.

Choosing the correct tissue pad type can be simplified by using a technique based on the density of the paper roll. The density-based solution is determined by how the tissue interacts with the pad as shown in the graphic to the right. Note the tissue flowing around the pad in the case of the convex pad and soft tissue. Conversely, the dense tissue holds its shape and is best handled with a pad that matches the diameter of the roll.

The following pages outline Cascade's three tissue pad offerings. Determination of the optimal pad size is based on the pad surface pressure and allowable clamp force. For more details on tissue pad selection please see tissue pad section in the Paper Handling Technology Handbook or consult Cascade.

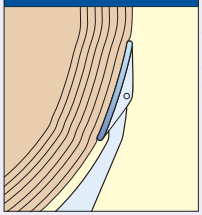
Tissue Type	Typical Paper Types	Recommended Pad
High Density	Service toweling-hard surface	Single Diameter
Medium Density	toweling, facial, toilet	Double Diameter
Low Density	Ultra soft tissue–soft toilet, facial (TAD paper)	Convex

Single Diameter



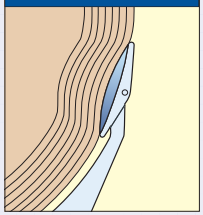
For use on high density tissue, such as industrial toweling

Double Diameter



For use on medium density tissue, such as toweling

Convex



For use on low density tissue, such as ultra soft tissue (TAD paper)

Recommended Pad Types

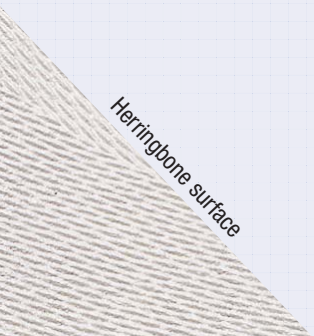
Printing Papers	Recommended Pad Types	Alternative Pad Types	
Newsprint	RXH pg. 5, Bolt-On UDP pg. 9	Flexipad pg. 15	Herringbone pg. 1
Coated/Magazine (LWC)	RXH pg. 5, Bolt-On UDP pg. 9	Bolt-On Rubber or Bolt-On UPD pg. 13	Herringbone pg. 1
Supercalendered (SC) Clay Coated	RXH pg. 5, Bolt-On UDP pg. 9	Bolt-On Rubber or Bolt-On UDP pg. 13	Herringbone pg. 1
Lithographic/Fine	Herringbone pg. 1	RXH pg. 5, Bolt-On UDP pg. 9	Bolt-On Rubber or Bolt-On UDP pg. 13,
White Printing	Herringbone pg. 1	RXH pg. 5, Bolt-On UDP pg. 9	Bolt-On Rubber or Bolt-On UDP pg. 13,
Packaging Papers			
Kraft Linerboard/Preprint	Herringbone pg. 1, Ribbed Herringbone pg. 3	RXH pg. 5, Bolt-On UDP pg. 9	Bolt-On Rubber or Bolt-On UDP pg. 13
Kraft Medium/Fluting	Herringbone pg. 1, Ribbed Herringbone pg. 3		
Test Liners/Grey Carton	Herringbone pg. 1, Ribbed Herringbone pg. 3	RXH pg. 5, Bolt-On UDP pg. 9	Bolt-On Rubber or Bolt-On UDP pg. 13
Milk Carton/Waxed	RXH pg. 5, Bolt-On UDP pg. 9	Bolt-On Rubber or Bolt-On UDP pg. 13	—
Linerboard-coated	Ribbed Herringbone pg. 3	RXH pg. 5, Bolt-On UDP pg. 9	Herringbone pg. 1
Tissue			
Low Density Tissue—Facial/Soft toilet	Tissue Convex pg. 23	—	—
Medium Density Tissue—Toweling	Tissue Double Diameter pg. 21	—	—
High Density Tissue—Industrial	Tissue Single Diameter pg. 19	—	—
Tissue—Dry-Lap/Roll Pulp	Herringbone pg. 1	—	—
Specialty Papers			
Gypsum Board Facing	Herringbone pg. 1	Ribbed Herringbone pg. 3	RXH pg. 5, Bolt-On UDP pg. 5
Glassine/Greaseproof	RXH pg. 5, Bolt-On UDP pg. 9	Ribbed Herringbone pg. 3	—
Plastic/Polywrapped	Herringbone pg. 1	Bolt-On Rubber or Bolt-On UDP pg. 13	—
Carbonless	Carbonless pg. 7	RXH pg. 5, Bolt-On UDP pg. 9	Bolt-On Rubber or Bolt-On UDP pg. 13

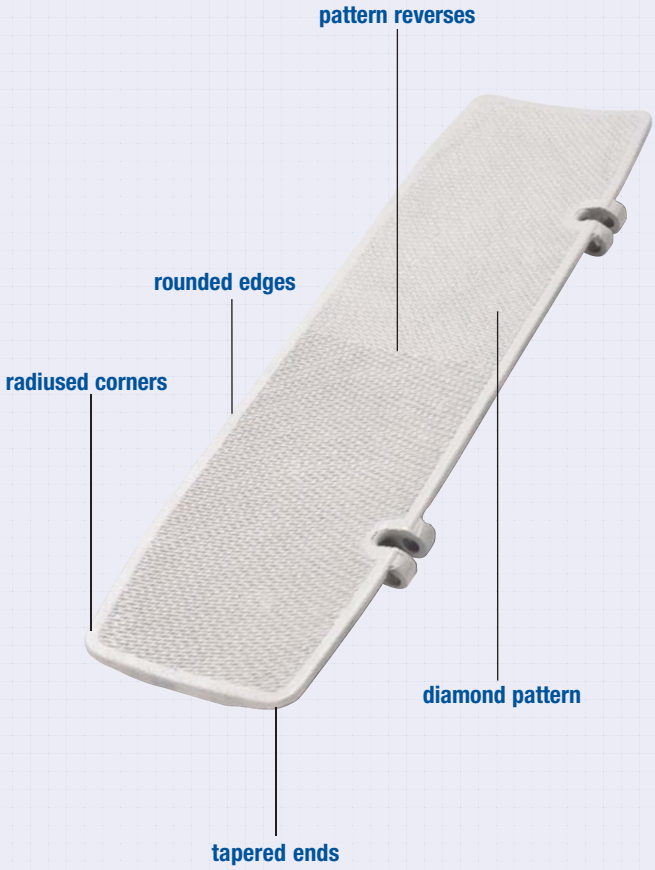
HERRINGBONE

Paper types:
Excellent general purpose pad for most paper types including newsprint, kraft, tissue (see tissue section), gypsum board facing, dry-lap (rolled pulp), white printing and lithographic/fine paper.

Design features:
- Herringbone pattern provides a multi-purpose gripping surface.
- Orientation of diamond pattern provides excellent friction in horizontal and vertical directions.

Application notes:
- Available in custom sizes upon request.
- Suitable for virgin or medium recycled kraft in average capacity applications.
- Preferred for unwrapped fine paper rather than rubber.
- Not recommended for large kraft rolls with high recycled content approaching maximum clamp capacity. For this application use the Ribbed Herringbone pad (see page 3).
- Not recommended for slick stock (use RXH or Bolt-On UDP).



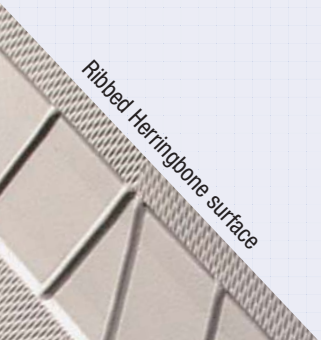


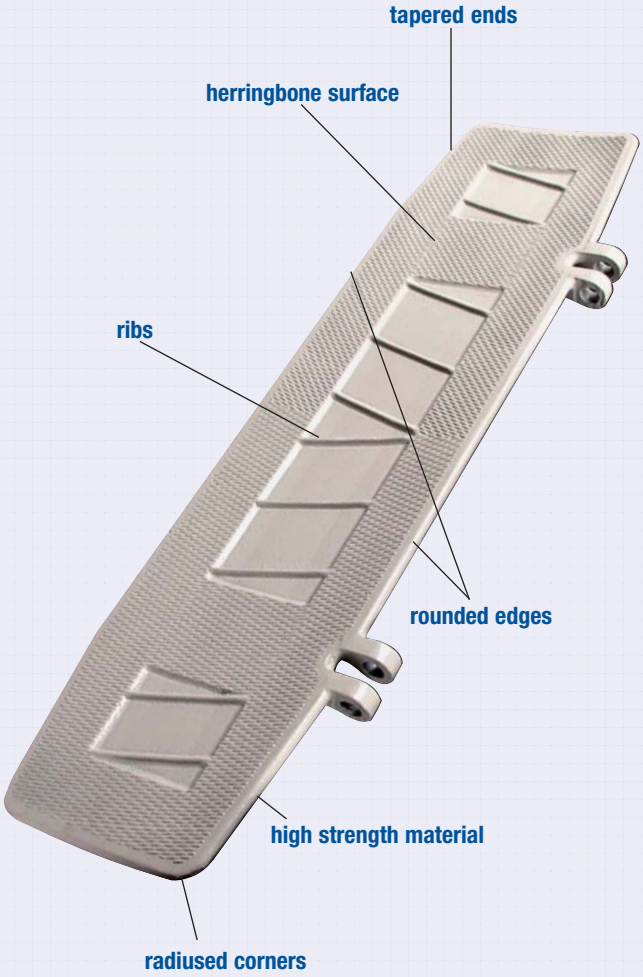
RIBBED HERRINGBONE

Paper types:
Kraft papers (linerboard and medium/fluting), preprint, gypsum board facing, linerboard-coated and glassine/greaseproof.

Design features:
- Ribs provide increased friction compared to standard pad.
- Reduce risk of telescoping layers.

Application notes:
- Allows decrease in required clamping force.
- Limited to certain models as a casting.
- Available as a custom/fabricated pad on other models and pad sizes.





RXH (RUBBER CROSS HATCHED)
Bonded Non-Marking Black Rubber

Paper types:

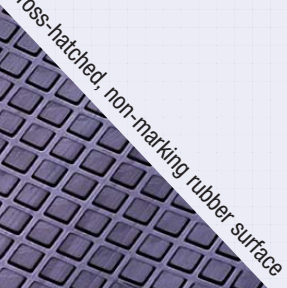
Used with newsprint, supercalendered SC, coated/magazine papers LWC, milk carton and waxed stock, glassine/greaseproof and white printing.

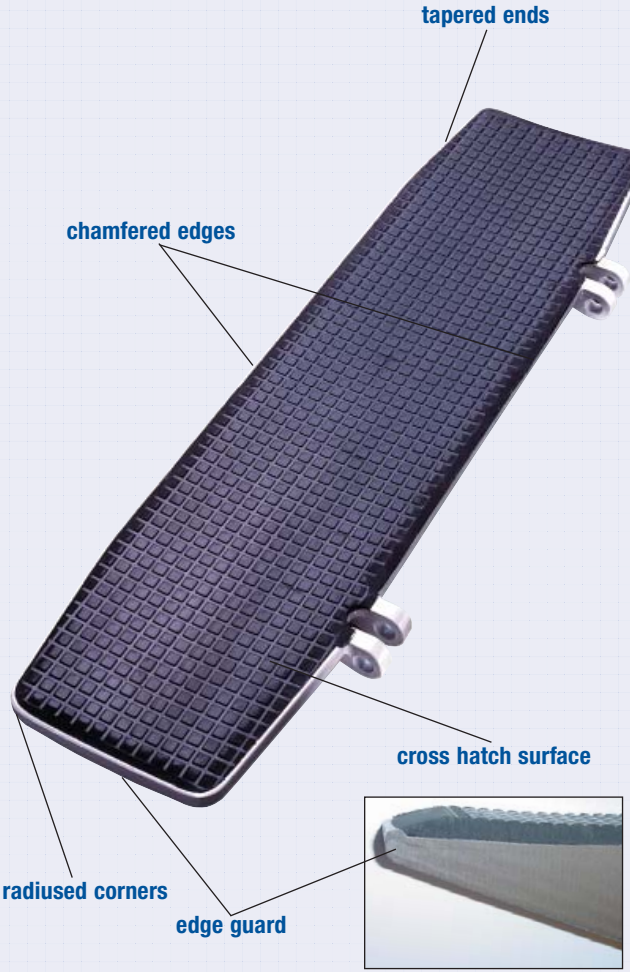
Design features:

- Cross-hatched surface to prevent suction cup effect and increase friction.
- Large chamfered edge to improve knifing between rolls.
- Non-marking rubber compound.
- Protective metal edge guard helps prevent rubber from peeling.

Application notes:

- Reduces pressure points and conforms to roll surface due to resiliency of rubber.
- Used in applications where a resilient surface is beneficial to prevent marking the roll.
- Excellent frictional characteristics.
- Smooth, non-RXH pattern bonded rubber also available.
- Available in various measures of hardness. (Generally friction increases with lower durometer. Durability increases with higher durometer.)
- Available in custom pad sizes.





CARBONLESS

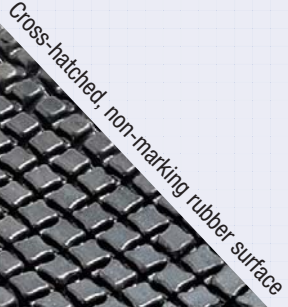
Paper types:
Carbonless.

Design features:

- Extra thick cross hatched surface to provide a cushioned clamping surface and excellent friction.
- Large chamfered edge to improve knifing between rolls.
- Non-marking rubber compound.
- Protective metal edge guard helps prevent rubber from peeling.

Application notes:

- Reduces pressure points and conforms to roll surface due to resiliency of rubber.
- Used in carbonless applications where variations in roll diameter (up to 6mm - 1/4") exist on narrow width rolls.
- Available in custom pad sizes.



BOLT-ON UDP
(URETHANE DOMED PROFILE)

Paper types:

Supercalendered SC, milk carton and waxed stock, coated/magazine LWC, kraft linerboard, kraft medium/fluting, preprint, fine papers, glassine/greaseproof, white printing and newsprint.

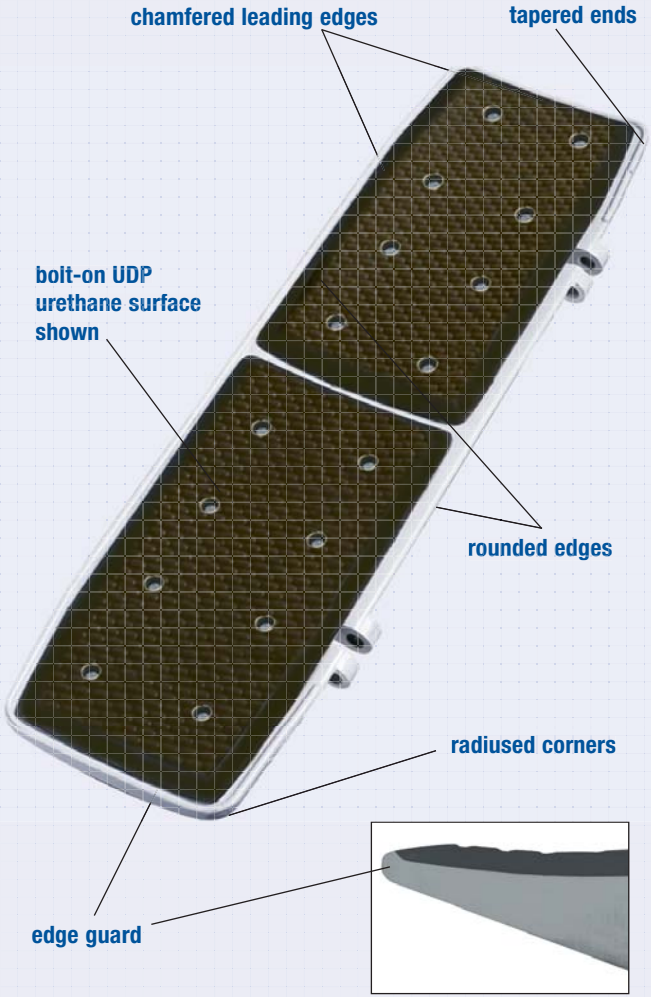
Design features:

- Durable urethane bonded to a special pad casting with a perimeter edge to protect the urethane when wedging between loads.
- Urethane is excellent pad material for use on difficult-to-handle papers.
- Domed oval surface helps prevent suction cup action in humid climates, increases friction and resiliency of pad surface.
- Similar durability to rubber.
- Bolt-On UDP pad profile has slightly less tendency to grab paper when moving past the roll.

Application notes:

- Used when a resilient surface is beneficial to decrease roll damage by allowing the pad to conform to the roll.
- Excellent frictional characteristics.
- Available in various measures of hardness (65 durometer is standard and recommended for most applications).

Note: Bolt-On UDP surface available for standard size pads.



BOLT-ON RUBBER & URETHANE

Paper types:

Milk carton and waxed stock, slick coated/magazine paper LWC, kraft linerboard, kraft medium, preprint, newsprint, supercalendered SC, carbonless, plastic/polywrapped, lithographic/fine, white printing or any paper requiring increased friction to reduce necessary clamp force.

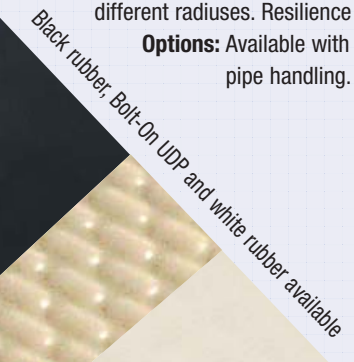
Design features:

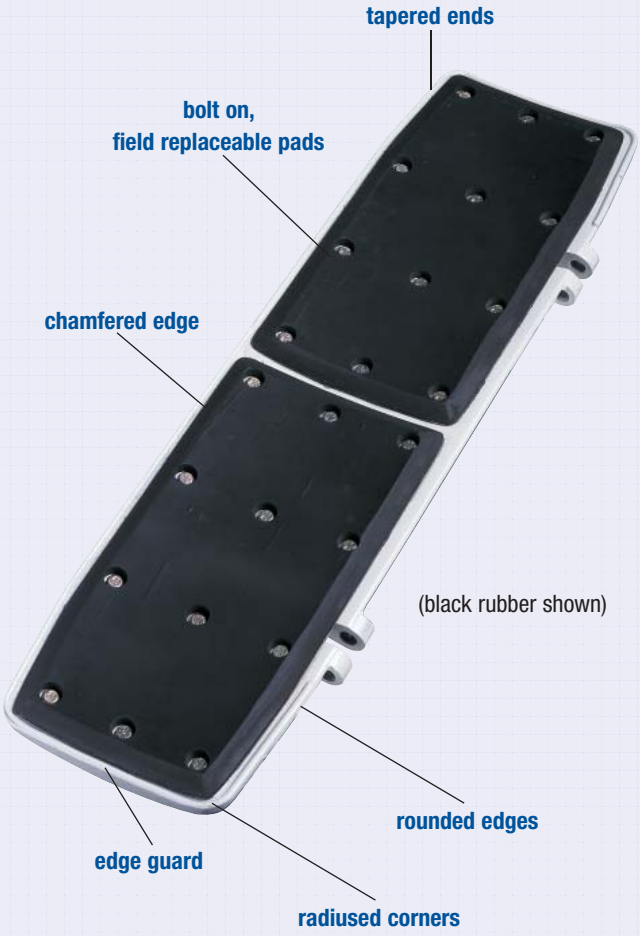
- Rubber or Bolt-On UDP is bonded to a durable steel backing plate.
- Bolt-on pads are easy to replace.
- Rubber and Urethane available in various durometers.
- Black rubber is standard and is recommended because it is more durable than white rubber.
- White rubber is available as an option.

Application notes:

- Rubber and urethane pads provide increased friction to allow decreased clamp force.
- Friction generally increases as durometer decreases.
- Durability increases as durometer increases.
- Rubber and urethane pads are resilient and able to conform to different radiuses. Resilience increases as durometer decreases.

Options: Available with fiberglass inlay for concrete pipe handling.





(black rubber shown)

TISSUE, SINGLE DIAMETER

Paper types:

Dense tissue such as industrial toweling.

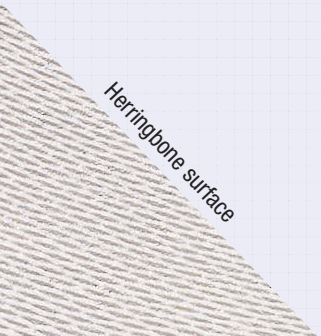
Design features:

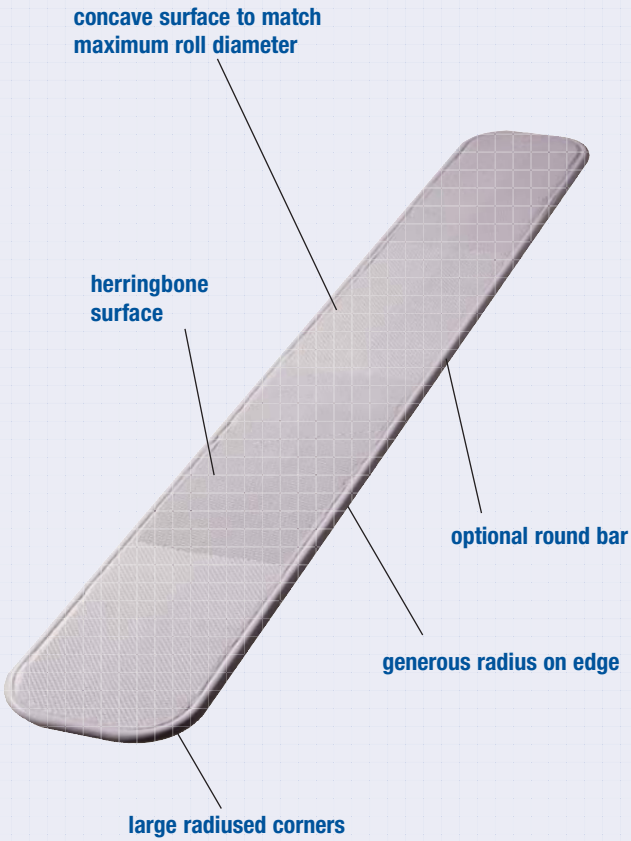
- Herringbone surface provides excellent friction surface without grabbing tissue.
- Large corner radius prevents cutting of tissue.
- Large surface area to minimize roll deformation.
- Optional round bar around perimeter prevents tearing.

Application notes:

- Pad size is generally smaller than convex but larger than standard pads.
- As a general rule, pad length should be 55-65% of roll height.
- Not recommended for medium or soft tissues.
- Can be used in applications where narrow width rolls are handled.

Note: Choosing the correct tissue pad depends on the density of the tissue roll. Consult Cascade for this analysis when choosing a tissue pad.





TISSUE, DOUBLE DIAMETER

Paper types:

Medium density tissue such as common facial and toweling grades.

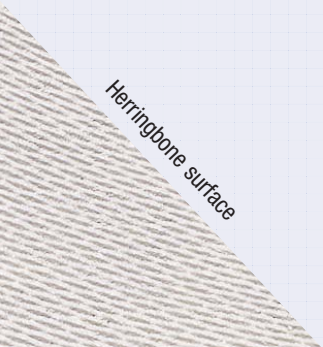
Design features:

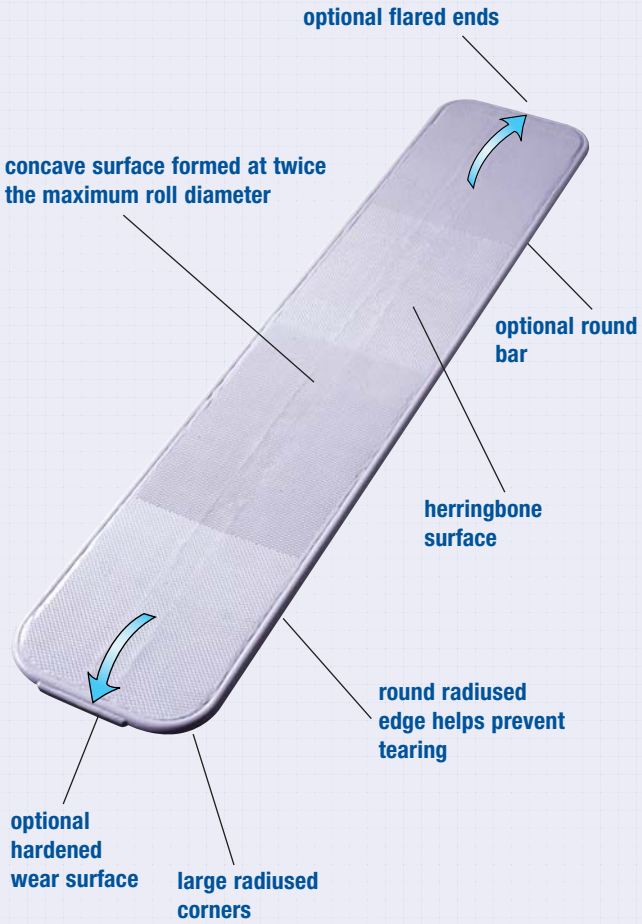
- Herringbone surface provides excellent surface friction.
- Available with or without flared end.
- Flared end recommended to reduce cutting of tissue at pad ends.
- Full radius edge allows paper to transition around pad without tearing.

Application notes:

- Pad length and width greater than standard pad.
- As a general rule, pad length should be 60-70% of roll height.
- Flared end not recommended for narrow rolls less than 510 mm (20") wide.

Note: Choosing the correct tissue pad depends on the density of the tissue roll. Consult Cascade for this analysis when choosing a tissue pad.





TISSUE, CONVEX

Paper types:

Low-density, soft tissue such as facial, toilet tissue and soft toweling.

Design features:

- Herringbone surface provides excellent surface friction.
- Convex surface with round bar perimeter provides a smooth transition during roll deflection to prevent tearing.
- Optional flared ends prevent cutting of tissue.
- Hardened wear surface prevents pad wear caused by floor contact.

Application notes:

- Relatively large pad to distribute clamping force over larger area of roll.
- As a general rule, the length of the pad should be equal to 65%-75% of the height of a full parent roll.
- The width should be proportional to paper's density.
- Flared end is not suggested for narrow rolls less than 510 mm (20") wide. Use standard convex tissue pad without end flare for narrow rolls.
- Do not use convex pad on hard stock.

Note: Choosing the correct tissue pad depends on the density of the tissue roll. Consult Cascade for this analysis when choosing a tissue pad.