



Handling Manual

Billerud mills/Paper machines

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Updates in this version:

Section 5.7 Loading instructions

Appendix V: Reporting transport and handling damages

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1. Background and purpose

The purpose of the handling manual is to safeguard that Billeruds logistics partners have a good knowledge and operations of the requirements for paper and pulp handling.

Since in many cases the logistics service provider (LSP) is the last link in the chain between Billerud and the final customer it is essential that the LSP acts in accordance with this manual

To secure that the routines and instructions in this manual is understood and applied by the LSP, Billerud have the right after agreement of time with the LSP, to make an audit.

2. General description of Billerud

For an up-dated description of Billeruds' products and organization please visit:

www.billerud.com

3. Customers' demands

Detailed information about the customers' demands shall be received from the responsible at Billeruds' customer service centre. Billerud recommends that the LSP have a customer file in their local warehousing system. The customer files should have the following information for every single delivery address:

- Ⓞ Loading instruction
- Ⓞ Delivery time when the customer can unload
- Ⓞ Special documents required
- Ⓞ Contact information
- Ⓞ If any type of special carrier is required

4. Product Safety

Product Safety is the general term used indicating all aspects of safe cargo handling:

- ④ Food safety requirements
- ④ Product quality inspection
- ④ Handling and storage demands (see section 5)
- ④ Environmental demands (see section 6)
- ④ Traceability

4.1 Food safety

It is not only mechanical requirements included in product safety but also health and food safety aspects since Billeruds' products are used for high quality demanded packages in different sectors. Therefore, the cargo must be handled in a protected way throughout the transport chain.

Billeruds' mills are food safety certified according to ISO/FSSC 22000. This requires that the supplier takes the same precautions and follows applicable routines in the same manner as Billerud. Billerud does not allow such handling, storage or equipment that causes damage and/or contamination to the product or wrapping material. Relevant requirements due to logistics handling of material are incorporated in this document, chapter 5 and 6. The supplier is obliged to conduct a risk assessment in accordance with the ISO/FSSC 22000 standard or similar and take necessary preventive actions where needed.

The risk assessment shall identify and assess potential food safety hazards (physical, chemical and biological) as well as the risk of fraud, sabotage (internal/external) and unauthorised entry to the storage/production areas, transportation and distribution. Appropriate control measures shall be in place to manage the risks.

A template for risk assessment can be found in appendix III.

4.2 Product Quality Inspection

Billerud expects all goods to be in the same condition when it reaches the final customer as when leaving the production site, meaning zero damage tolerance.

To ensure Billeruds' product quality and food safety a visual inspection is required during unloading at arrival and before loading at dispatch at all steps in the supply chain. The terminal manager is responsible to implement a documented routine on reel inspection at the terminal in accordance to below requirements. The document must be available upon Billeruds request.

Inspection of product

The product must be reported if it has:

- ⦿ Damage wrapping (visible product)
- ⦿ Imprints (Body, Edge or End)
- ⦿ Deformation
- ⦿ Dirt (that cannot be cleaned)
- ⦿ Petrochemical stains
- ⦿ Excrement
- ⦿ Moist/wet (See handling routine for wet reels, appendix IV)
- ⦿ Not a readable label

More details in section 9 and appendixes

4.3 PEFC/FSC

The mills in Billerud are FSC COC and PEFC COC certified (Chain of custody). This means that Billerud can sell certain volume of certified products since we use certain volume of certified wood.

The Terms of Delivery states to which final destination Billerud has the responsibility for documents and traceability. All transport documents for all transport steps in the logistic chain must apply to the FSC - and PEFC standards.

If Billerud are responsible for the transport to a terminal only then all transport documents to the specified terminal must and will apply to the standard. The Weight Specification is Billeruds' official document for all transport modes in this respect.

Terminals shall also create CMR's/Waybills to be distributed with the truck to the final customer - these documents do not need the FSC text (see table below).

Transport documents with FSC and/or PEFC texts:

- ⦿ EDI-connected terminals: Billerud can provide EDI-connected terminals with correct FSC and PEFC texts (included in the call off message). It is the warehouse manager's responsibility to make sure that FSC and PEFC texts given by Billerud are printed on Delivery Notes created by the warehouse manager and accompanying the transport to the customer.
- ⦿ Non-EDI terminals: Manually handled terminals (not EDI connected) shall include Billeruds' official Weight Specification whenever this text is mentioned accompanying the transport of those units to the customer.

FSC and PEFC texts to be on the transport document:

Mill	FSC COC	FSC Controlled Wood	PEFC COC	PEFC Controlled Sources
Gruvön	FSC MIX CREDIT, SGSCH-COC-010858	FSC CONTROLLED WOOD, SGSCH-CW-010858	100 % PEFC CERTIFIED, SE16/819942339	PEFC Controlled Sources, SE16/819942339
Karlsborg	FSC MIX CREDIT, SGSCH-COC-000091	FSC CONTROLLED WOOD, SGSCH-CW-000091	100 % PEFC CERTIFIED, SE16/819942340	PEFC Controlled Sources, SE16/819942340
Skärblacka	FSC MIX CREDIT, SGSCH-COC-010857	FSC CONTROLLED WOOD, SGSCH-CW-010857	100 % PEFC CERTIFIED, SE16/819942338	PEFC Controlled Sources, SE16/819942338
Pietarsaari	FSC MIX CREDIT, DNV-COC-000537	FSC CONTROLLED WOOD, DNV-CW-000537	100 % PEFC CERTIFIED, 123481-2012-COC-FIN-FINAS	PEFC Controlled Sources, 123481-2012-COC-FIN-FINAS
Gävle	FSC MIX CREDIT, SGSCH-COC-001719	FSC CONTROLLED WOOD, SGSCH-CW-1719	100 % PEFC CERTIFIED, SGS-PEFC/COC-0163	PEFC Controlled Sources, SGS-PEFC/COC-0163
Frövi	FSC MIX CREDIT, SGSCH-COC-001719	FSC CONTROLLED WOOD, SGSCH-CW-1719	100 % PEFC CERTIFIED, SGS-PEFC/COC-0163	PEFC Controlled Sources, SGS-PEFC/COC-0163

4.2.1 USA and China



Billerud operates two models for sales in USA and China:

- ④ Internal Buy and Sell, when the Sales Company takes legal ownership of the material
- ④ Agent, when the mill export to the customer

When the Agent Model is used, the FSC and PEFC texts will be according to table in 4.2.

For the **Internal Buy and Sell** the following FSC and PEFC texts shall be used:

Mill	FSC COC	FSC Controlled Wood	PEFC COC	PEFC Controlled Sources
Billerud USA LLC	FSC MIX CREDIT, SGSCH-COC-000446	FSC CONTROLLED WOOD, SGSCH-CW-000446	100 % PEFC CERTIFIED, US15/842388	PEFC Controlled Sources, US15/842388
Billerud China Limited	FSC MIX CREDIT, SGSHK-COC-010724	FSC CONTROLLED WOOD, SGSHK-COC-010724	- No certificate	- No certificate

5. Terminal operations

The following section describes the expected standard at the terminal when storing and handling Billeruds' products. This is to ensure safe and effective handling and to attain Billeruds' quality throughout the logistics supply chain.

Billerud require that all Logistics Service Providers (LSP) at a minimum level comply with all applicable national and international legislation and regulations.

If the LSP at any stage consider the given assignment not possible to execute without breaking laws or other regulations the LSP must refuse the assignment and inform Billerud about the situation

5.1 Safety

Safety is always the number one priority for Billerud.

Billerud aim to provide engaging workplaces, where safety, diversity and human rights are a priority.

Billerud create a predictable, orderly environment with the help of robust regulations and clear procedures and develop the attitudes and behaviors needed to ensure that all of us take responsibility to guarantee a safe working environment.

We expect our logistics service providers (LSP) to do the same!

Billerud strongly recommend that a risk assessment is conducted for the internal logistical system taking safe handling, transport, securing of goods, lifting issues, etc. into consideration to prevent any risk of personal injury.

Work-specific safety rules and procedures must exist for all work done where a risk is identified. These should be based on the findings in the risk assessments and should include a clear description of necessary safety precautions and personal protective equipment.

The LSP is responsible for ensuring that its staff as well as any subcontractors are informed, provided with, and using necessary safety equipment and personal protective equipment. Subcontractors or transporters are on their behalf obliged to learn and follow the safety rules at the current site.

5.2 Warehouse

The storage facility must be suitable for storage of pulp and paper products.

There are high requirements on routines for cleaning and hygiene on the facilities.

Required level of warehousing:

- ⦿ Hard and even surface of the floors
- ⦿ No trace of small stones or other material on the floor that could damage and/or contaminate the product.
- ⦿ Scheduled cleaning of the warehouse according to documented routine.
- ⦿ A clean separation between the product and warehouse walls. Has to be able to walk in between for inspection.
- ⦿ Good lightning, recommended to use shatter proof lightening. If shatter proofed lightning is not used a risk assessment and a defined routine for handling of glass scattering is required. Shatter proofed lightening will be required at the next investment.
- ⦿ Pulp & paper products separated from other products.
- ⦿ Damaged or downgraded goods should be held separated in a dedicated area of the warehouse



Safety first!

- ⦿ Even stacks, with a min of 5 cm between the stacks. Overlapping of reels causing high risk of edge damages. See figure 1.
- ⦿ Line paintings are recommended.
- ⦿ Routines and equipment to ensure protection against noxious animals or intruders.
- ⦿ Closing of doors to the outside to prevent entering of birds etc.
- ⦿ No vegetation alongside warehouse outer walls
- ⦿ A register of all glass and hard plastic materials inside the warehouse. To be checked according to planned intervals.
- ⦿ Pest control (birds, insects, rodent); Suitable control programs and pest control devices at strategic places in the warehouse. Preferably carried out by external professional part.
- ⦿ Fire protection in accordance with national legislation.
- ⦿ Cargo should when possible be stored in a way that the FIFO-principle (First In – First Out) and FEFO-principle (First Expired First Out) can be applied.
- ⦿ Stock lists per customer should be possible to generate from the local warehousing system. The lists should be able to be sent to the customer service centre if requested.

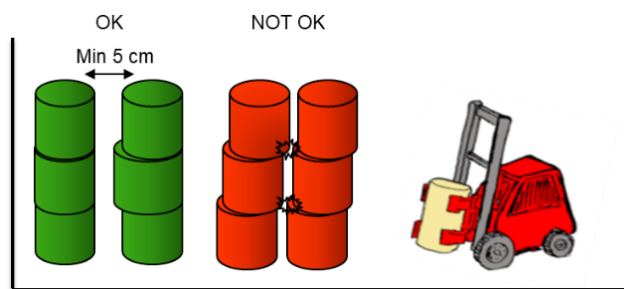


Figure 1, even stacks, no overlapping

5.3 Fork lift instructions

Billerud expect logistics providers that is handling our goods, have the latest features/devices to improve handling quality (quality appearance) of our products.

Handling equipment must be adapted for correct handling for the variation of paper units and loading/unloading prerequisites. One essential parameter is to avoid drag/push units on a surface. Enough horizontal distance might need an extension adapter and/or adjustable load extender. For final adjustment, a sideway tilting device (swing frame) is also a good feature.

To ensure safe and effective handling and to avoid damages all forklifts must have adapted clamping equipment for the handling of Billeruds' paper reels, pallets and pulp packages.

Correct clamping force is essential in order that all products reach the customer in a good condition. Too high clamping force means a risk for deformation of product, too low can result in dropping the product causing damage to both product and equipment.

Billerud recommend using clamping forces calculated by a clamping factor.

The recommended clamping factor is between 1,6 – 1,9. For example with clamping factor 1,8: Total paper weight 2000 kg x factor 1,8 = total pressure = 3600 kp = 36 kN

The total clamping force has to be calculated according to model of clamp/arms and be adjusted according to the type of product handled at the time and situation at site.

When calculating clamping force on clamps with divided arms the total force used is the clamping force value read from the display unit multiplied with number of pads = Total clamping force in kN.

See example as below. In this case clamping force is 20 kN/arm.

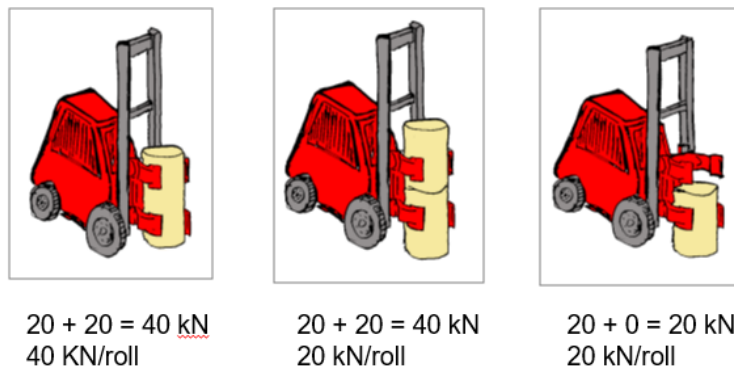


Figure 2, clamping force calculation with multiple arms

The clamping force must be controlled at regular intervals, as a minimum in combination with the periodical maintenance of the forklift. It is recommended to check the clamping force for a constant pressure for five minutes.

A record of clamp force control shall be kept available for Billerud upon request

Before starting the daily operation, check the condition of the equipment. Make sure the clamps and pads are clean with no oil stains or sharp edges that can contaminate or damage the product. Billerud expect the forklift operators to be well trained to the safe use of the machinery, equipment and handling of paper and pulp products.

It is strongly recommended that forklift trucks are equipped with fixed automatic fire extinguishers in the engine compartment.

5.4 External converter / Product re-conditioner

Billerud consider an external converter as an actor that may affect the products in sheeting, coating (plastic, aluminum), lamination, rewinding incl. reconditioning etc. Billerud still has the quality, product and food safety responsibility for the products during and after external converting, therefore the following requirements must be fulfilled:



- ④ A documented risk assessments in accordance with the ISO/FSSC 22000 standard or similar with necessary preventive actions taken where needed.
- ④ Shatter proofed lightning in the converting areas.
- ④ All chemicals (incl. PE, aluminum etc.) must be approved by Billerud
- ④ All packaging (incl. tape and pallets) must be approved by Billerud
- ④ Collecting required documentation for the inputs used to enable Billeruds' assessment from a food & product safety perspective.
- ④ Traceability should be ensured for the products and any raw materials used for all stages in the subcontracted process.
- ④ The external converter may not make any changes in the chemicals, recipes or packaging materials that may have an impact on food & product safety without getting an approval in advance from Billerud.

All converters have a separate audit process with Billeruds' Subcontracting Manager before agreement. The risk assessment, approval of chemicals and packaging material can be done in combination with the audit. Any change of chemicals, packaging material, etc., please contact Billeruds' Subcontracting Manager.

5.4.1 Safety recommendations for handling single paper reels lying

When using a reel mover for laying units (a forklift truck with cradled forks, see picture). In this case the reels are always positioned so that the reel end is pointing in the direction of the forklift movement. This will prevent the risk of the reel getting into a rolling motion if the reel mover is stopped or is moved over an uneven surface. The forks on the reel mover need to support the full width of the reel. Reels with high diameter in relation to the width of the reel should not be transported in this manner.



When a package that contains more than one reel is unwrapped, the strap or other device holding the reels together should always be taken off, and each reel should be handled individually from a transportation safety perspective. The bundle strap or other device itself is not a sufficient securement.

The weight of a paper reel, and the risks attached should not be underestimated. Paper reels are very heavy and can easily come into rolling motion. Caution should be taken and safety distance should be kept from reels. When paper reel is lifted it is advisable to introduce a safety area underneath and around the reel, to secure that no person is at risk in the event of the reel being accidentally dropped.

Safety shoes and safety gloves should always be used when paper reels are handled. Operators should never try to stop a reel in motion with the feet, even when safety shoes are used.

Billerud strongly recommends that a safety assessment is conducted for the internal logistical system taking safe handling, transport and lifting issues into consideration to prevent any risk of personal injury.

5.5 Repairing zone

The repairing zone is a temporary or a dedicated area at the terminal. In the repairing zone damaged goods can be inspected, re-conditioned or re-wrapped.



For a terminal to establish and operate a repairing zone it requires a separate audit process with Billeruds' Logistics Senior Manager, or by him approved representative, before approval.

5.6 Unloading instructions

A check must be made that the received cargo is the same as stated on the loading specifications. If there are any discrepancies, the terminal must inform the Billeruds' customer service specialist latest the first office working day after unloading at the terminal.

Unloading must take place under conditions where and when there is no risk to damage and/or contaminate the cargo. In conjunction with unloading a visual inspection of the cargo has to be made in accordance with the criteria stated in section [4.2](#) product quality inspection. If there is any damage and/or contamination of the cargo should be handled as specified in section 9.

All unloading must be registered via the agreed EDI communication with Billerud (see section 11).

5.7 Loading instructions

The cargo must be loaded in accordance with Billeruds' demands. Information regarding loading procedure will be communicated from Billerud via transport order, waybill or delivery note. Before loading, a visual inspection of Billeruds' products and carrier is required. Still, all loading patterns, securing of goods and transportations have to follow all international or national laws and regulations. Deviations according to the assignments given must be reported to Billerud.

The terminal manager is responsible to implement a documented routine on reel- and container inspection at the terminal in accordance to below requirements. The document has to be available upon Billeruds' request.

5.7.1 Inspection of carrier (i.e.: lorry, rail wagon, container)

The carrier must be clean and free from:

Clean carrier meaning-dry and free from loose debris such as stones, wood splinters, dirt or remains from previous cargo, etc..

- ⊗ Cracks or holes in walls, roof or floor
- ⊗ Sharp edges on walls, roof or floor (No deformation/dents that intrudes the loading space)
- ⊗ Uneven or weak floor
- ⊗ Damage doors (intact door rubber)
- ⊗ Protruding objects that can damage or contaminate the product
- ⊗ Dirt, glass or hard plastics
- ⊗ Odour
- ⊗ Petrochemical stains or other transferable stains
- ⊗ Excrement
- ⊗ Insects or other vermins
- ⊗ Ruptures sticker or glue
- ⊗ Items attached to lashing loops
- ⊗ Secure free ventilation, remove covered or taped ventilation holes (container)
- ⊗ IMO-labels/placards

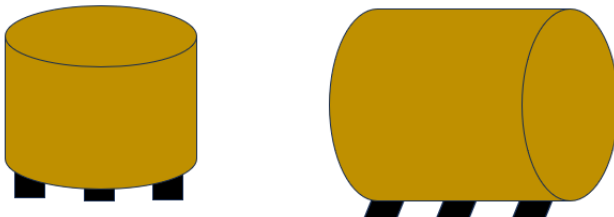
If a container – in addition to above

- ⊗ It must at least follow the UCIRC Inspection Criteria (Rev 3, 21 April 2004)
- ⊗ Maximum weight on container floor acc to (ISO 1496/I): Axle load of trucks: 5 460 kg (12 037 lbs) if the contact area per wheel is at least 142 cm² (22 in²)
NB! The container must be in level with loading area.

5.7.2 Floor: Prevent sharp and protruding objects

1. Try to fix sharp and protruding objects.
2. Plan loading pattern to avoid loading close to protruding objects.
3. Protect potential remaining sharp edges by adding 5 mm rubber mat.
4. For protruding objects up to 5 mm, protect by adding 5 mm rubber mat.

Rubber mat according to IRU standard, minimum thickness 5 mm

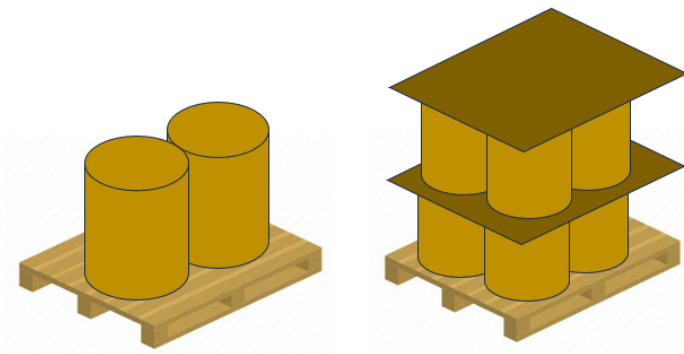


The loading manager reserves the right to reject any carrier that is not up to the set standards.

5.7.3 Palletizing patterns

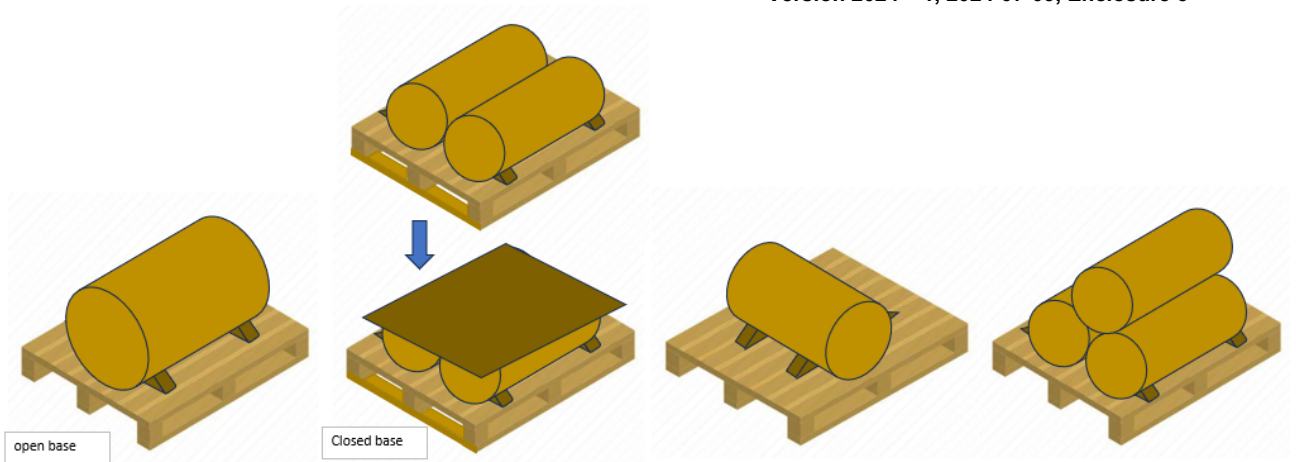
Most common patterns for standing units (Eye to the sky) if dimensions for units fits the requirements per customer

Levels	Units/level
1	1
1	2
1	4
2	1
2	2
2	4

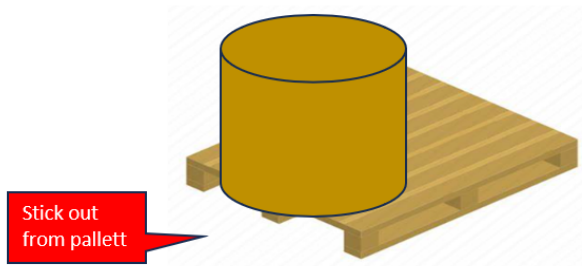


Laying units on pallets (Core direction “Eye to the sea”) must always be secured with wedges fastened with screws or nails. Stacking of pallets, add a quality protection board under pallet.

Levels	Units
1	1
1	2
2	2+1



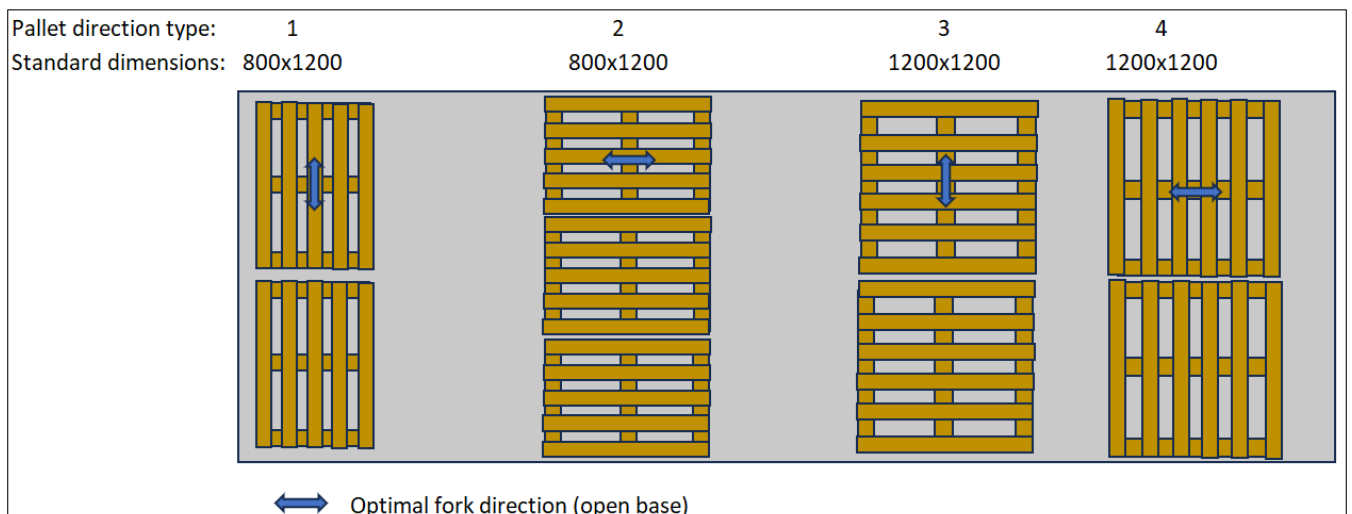
Units sticking out from pallet must be avoided. But can under specific circumstances not be avoided.



OBS! Units must be lashed on pallets.

5.7.4 Pallett orientations in Carriers

Most common pattern requirements from customers in carriers when open base pallets are used



Pattern requirements from customers for CartonBoard (multiple dimensions Length x Width)

5.7.5 Edge protectors



The edge protector has the following specification:

Name	Miko Edge Protector SR™
Dimensions	130x55x150mm (+/- 1 mm)
Angle of aperture	85° (+/- 5°)
Weight	325 g
Material	PP (Polypropylene) / PE-HD (Polyethylene-High Density)

Other:

- ⊕ All dunnage material used to protect or secure the goods have to fulfill the above stated criteria's of a carrier inspection.
- ⊕ No external cargo is allowed to be loaded on top of Billeruds' cargo.
- ⊕ Other cargo with risk to contaminate Billeruds' products are not allowed to be transported on the same carrier as Billeruds' cargo.
- ⊕ If nothing else is specified, unloading a lorry at the customer must be possible from the back and the side of the trailer.¹
- ⊕ When pallets or wooden material have to be heat-treated according to ISPM 15, the terminal must only use ISPM 15 certified suppliers of pallets/wooden material. The certificate must be documented by the terminal. The ISPM 15 marking must be clearly visible on the pallet/wooden item.
- ⊕ An general inspection of the carrier is needed to prevent the cargo being contaminated with any illicit activity, such as, smuggling of arms, illegal goods or money laundering.
- ⊕ When lashing reels and pallets is necessary, edge protectors must be used in order to not damage the products – When loading at Billeruds' mills only edge protectors provided by Billerud are allowed to be used.
- ⊕ Terminals shall use Mikoplast Edge protectors or equal.

¹ Not applicable for USA

6. Environmental demands

Billerud as part of the Swedish Forest Industry should strive for sustainable transport systems and the work should be managed with focus on continuous improvements. This should be accomplished by continuous evaluation and development of the logistic systems and as one measure by setting high demands on the suppliers.

As a result of this commitment the following demands should be followed by the logistics service provider (LSP)

- ⦿ The LSP must follow laws and regulations comprised by the agreed activities
- ⦿ Lowest class “Euro 4” engines are allowed on trucks
- ⦿ Documented training of truck drivers in Eco-driving
- ⦿ The LSP should be able to list all the trucks used and their environmental status regarding Euro class.
- ⦿ If subcontractors are used for any activity it is the responsibility of the LSP that the subcontractor fulfils the above demands
- ⦿ On demand from Billerud the LSP must be able to give information and data on the above demands.

7. Delivery precision

Billerud expects that the LSP can produce statistics on the delivery precision, i.e. the time of delivery in relation to the confirmed time of delivery specified on the transport booking/Call off.

The LSP should always, without any delay, contact the customer service centre in cases where the confirmed time of delivery cannot be kept.

8. Product dimensions

Reel dimensions	Min	Max
Diameter (mm)	500	1900
Width (mm)	480	3300
Weight (kg)	150	5000
Pallet dimensions (Sheeted material)	Min	Max
Height (mm)	500	1600
Width (mm)	300	1850
Weight (kg)	-	1600

Information on pulp bales

Unit Identifier is a unique code for each pulp package. The Unit identifier is printed on all pulp bales in one package. One pulp package consists of 8 pulp bales.

Pulp package dimensions	Gruvön	Karlsborg	Skärblacka
Weight (kg)	1600	1600	1600
Package size , Height (mm)	1720	1720	1800
Length (mm)	900	850	830
Width (mm)	1200	1200	1200

9. Routines in case of transport damages

As described in section 4.2 Product Quality Inspection, Billerud expects all goods to be in the same condition when it reaches the final customer as when leaving the production site, meaning zero damage tolerance. A visual inspection is required during unloading at arrival and before loading at dispatch at all steps in the supply chain. This section will describe how to act if a damage product is identified.

9.1 Damage handling

- A. If a damage is discovered when the carrier arrives, the terminal operator must report the damage to Billerud. The damage must be documented on the way bill and photos to be taken in accordance to appendix V.
- B. If a damage type 2-3 occurs while unloading incoming deliveries, into the warehouse or during loading of outgoing deliveries the same routine for information should be applied as in (A), but in this case Billerud will hold the terminal operator responsible for the damage and recover the eventual costs of the damaged paper.
- C. If damage is discovered when the customer unloads the cargo and the customer makes a note in the CMR/Waybill and the terminal operator hasn't made any remarks previously, the same routine as in (B) will be applied.

9.2 Report damage

9.2.1 Report damage in mobile Application (recommended)

The terminal using the application reports damages directly via their mobile/cell phone. The terminal using the application have specific responsibilities towards their users. Users will get a notification to take part of Billerud privacy notice. Detailed instructions will be available separately

9.2.2 Manual damage reporting (back-up)

When reporting a damage it's important to include information that enable Billerud to investigate, take actions and make the right decision whether the product can be delivered to customer or has to be blocked, and if blocked, what action is needed.

Needed information:

- ⊗ Photos of the damage
- ⊗ Damage position
- ⊗ Damage type
- ⊗ Damage size
- ⊗ Cause of damage

Products from, Gruvön, Karlsborg, Pietarsaari and Skärblacka site – send an e-mail to Billeruds' Customer Service Centre

Products from Frövi or Gävle site - Report in the Terminal Portal. Contact Billeruds' Logistics team to get access to the terminal portal.

9.3 Handling damaged goods

If the damage is too extensive and the product has to be blocked the logistics service provider (LSP) is responsible to block the product in their internal system and separate the product to a dedicated area for blocked goods. Billerud is then responsible for actions taken to the damage goods.

Decision support and recommended corrective actions are found in appendix I, II, III, depending on the product group.

10. Routine for yearly stock taking

The terminal operator is responsible to carry out and document one physical stock taking every year. The time and how the stock taking is made will be decided together with Billerud.

11. Communication and documentation

Communication should be handled electronically between Billerud and the LSP. The LSP can choose between the two following options:

- ④ Papinet and XML communication, where the communication protocol and standard messages will be decided between the LSP and Billerud
- ④ Billeruds' Internet application. "The Terminal Portal" is for Gävle and Frövi, and "Web BonD" for the other mills.

Some paper documentation will probably exist. The layout and contents of these documents must be specified and explained to eliminate the risk of misunderstanding.

It is the responsibility of the LSP to require such information and documentation that enables the LSP to fulfil the demands required in this manual.

Appendix I Guideline Transport Damages Reels

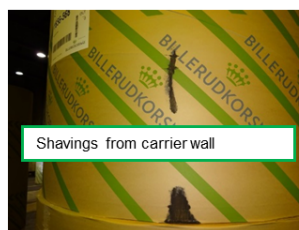
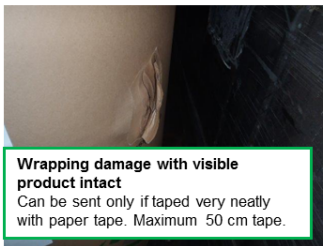
Decision support and recommended corrective actions. Gruvön, Karlsborg, Pietarsaari, Skärblacka, Gävle and Frövi. Cartonboard excluded, see appendix II.

Type 1:	Type 2:	Type 3:
<p>Only wrapper damaged < 50 x 50 cm</p> <p>Liquid board and MG Kraft Paper are not allowed to tape if visible board/paper</p> <p><u>Action:</u> Tape damage</p>	<p>Wrapper damaged ≥ 50 x 50 cm</p> <p><u>Action</u> (decided by customer service centre): Tape damage at terminal, recondition at terminal or send back to mill for rewinding</p>	<p>End damage on reel</p> <p><u>Action:</u> (decided by customer service centre) Total loss, either sell or send back to mill</p>
	<p>Reel damaged < 10 mm</p> <p><u>Action</u> (decided by customer service centre): Tape damage at terminal, recondition at terminal or send back to mill for repair</p>	<p>Reel damaged > 40 mm</p> <p><u>Action:</u> (decided by customer service centre) Total loss, either sell or send back to mill</p>
	<p>Reel damaged 10 - 40 mm</p> <p><u>Action</u> (decided by customer service centre): Recondition at terminal or send to back mill for repair</p>	<p>Crushed reel core</p> <p><u>Action:</u> (decided by customer service centre) Total loss, either sell or send back to mill</p>
		<p>Wet reel</p> <p><u>Action:</u> see appendix IV Handling of wet reels. Total loss, either sell or send back to mill</p>
		<p>Oil stained</p> <p><u>Action:</u> (decided by customer service centre) Total loss, either sell or send back to mill</p>

What is a damage and what is not:



NB!
SEE STRICTER INSTRUCTIONS FOR LIQUID, MEDICAL, HYGIENE OR FOOD PACKAGES AND INTERLEAVING



Not allowed to deliver



Liquid board and MG Kraft Paper

- ④ A reel with a minor damage on package on the belly is allowed to be amended with brown tape. The damage to the packing material can be up to 50 cm.
- ④ As a rule of thumb, when it comes to packaging damages: If the product itself (board/paper) is visible, the reel shall be blocked.
- ④ Some of our Medical customers doesn't accept tape on units at all. Therefore it is **NOT** allowed to tape packaging damages for the brands Sterikraft Medikraft or Medikrepe.

Action: Inform the Customer Service Specialist and they decide if the unit is ok to send without tape, or if it shall be blocked.



Block



OK to deliver



Block



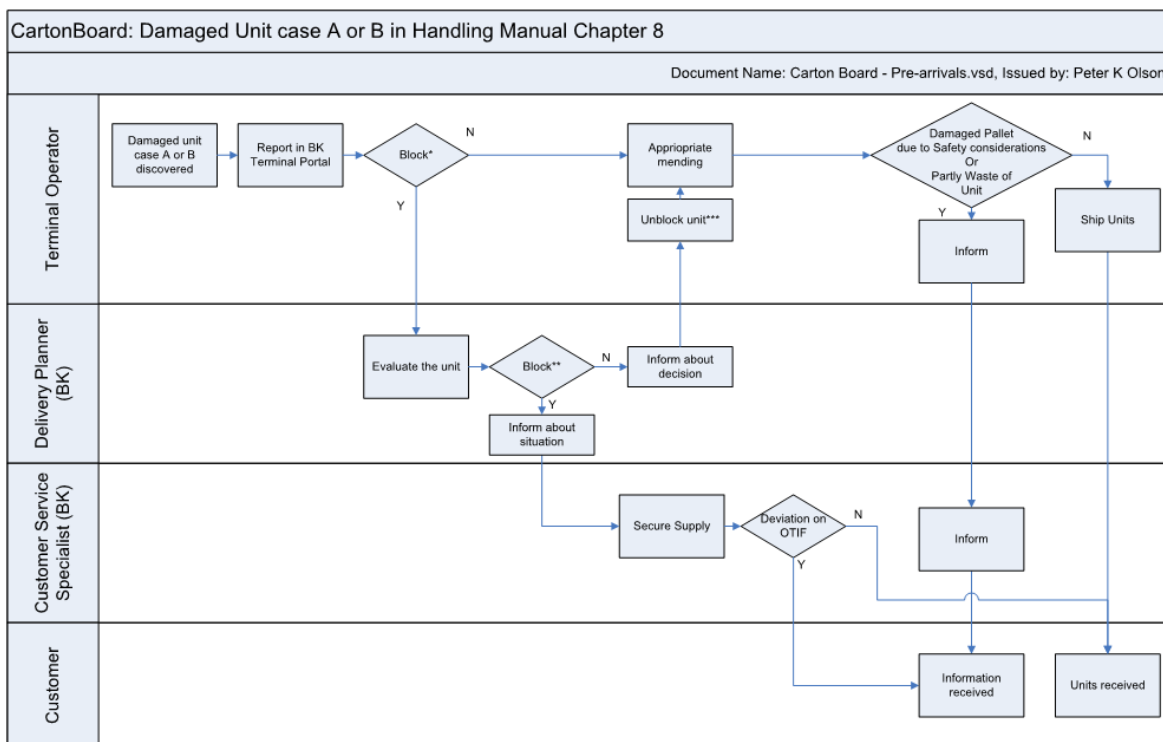
Tape with brown tape, then OK to deliver

Appendix II: Guideline Transport Damages - CartonBoard

Process for pre-arrival damages

Terminal Operator and Billerud interact according to the process chart when managing pre arrival damages for CartonBoard. References:

- Judgements of damages of pallets according to “CartonBoard Pallet damage manual”.
- Judgements of reel damages according to Table in Chapter 8 of “Handling Manual”



* This activity is done in the BK Terminal Portal and in IT-system of Terminal Operator

** This activity is done in the IT-system of BillerudKorsnäs

*** This activity is done in the IT-system of Terminal Operator

CartonBoard Pallet damage manual

Damage types:

Damaged pallet wrapper

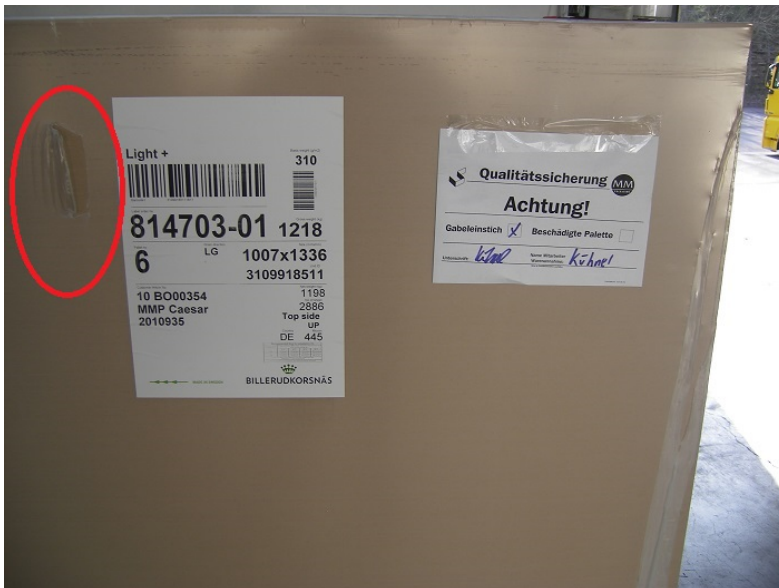
Damaged pallet base

Dropped/Fallen pallet

Dirt on pallet

Water damaged pallet

Damage pallet wrapper example



Ok to tape.



Ok to tape but inform customer about damaged sheets.



Ok to tape but inform customer about damaged sheets.

Damaged pallet base examples:



Pallet base to be mended or exchanged if possible if one block missing the pallet can still be delivered.

Dropped/fallen pallet base examples: Cannot be delivered.



Dirt on pallet example:

Cannot be delivered unless cleaned or re-wrapped.



Appendix III: Risk Assessment Food safety

In accordance to ISO/FSSC 22000 standard

Date:
Area:
Participants:

The purpose of the risk assessment is to identify potential risks and work proactive to reduce incidents within the terminal that can affect the products.

A risk assessment has to be conducted a minimum of once per year.

The risk assessment can be made by an operator at the terminal or a person with the required competence.

Document the risk assessment. The document has to be available upon Billeruds' request.

Evaluate the probability and consequence to generate the level of risk for the area. Implement suitable actions to limit the risk.

Probability x Consequence = Level of Risk

Probability

Level of Probability	
5	Very likely (daily)
4	Likely (weekly)
3	Rarely (monthly)
2	Unlikey (yearly)
1	Very unlikely (every 10th year)

Consequence

Level of Consequence	
5	Severe (death or permanent disability)
4	Significant (extensive injuries, illness > 2 days)
3	Moderate (minor injuries, illness < 2 days)
2	Minor (cuts, nauseas)
1	Insignificant (discomfort)

Consequence					
5	5	10	15	20	25
4	4	8	12	16	20
3	3	6	9	12	15
2	2	4	6	8	10
1	1	2	3	4	5
	1	2	3	4	5
Probability					

Level of risk

Level of risk		Action
White	Low risk	Inform
Yellow	Medium risk	Control - Prevent
Orange	High risk	Investigate - Necessary action
Red	Very high risk	Avoid/Special routines needed

Hazard	Probability	Consequence	Level of Risk	Action
Glass Illuminator, Windows, Glass bottles		3		
Oil Hydraulic oil, Spray		2		
Floor Uneven or wet floor, Sharp edges, Loose dirt (Stones, Hard plastics, etc)		1		

Pests Birds, Insects, Rodent		3		
Dirt and dust From machines, Surrounding building, Tools and Material		1		
Odor Bad smelling from surroundings		1		
Remains from maintenance work Hard plastics, tools, machine parts etc.		3		
Site security Unauthorised people		3		
Sabotage/Fraud Production, Storage, Transportation and Distribution		3		

Appendix IV: Handling of wet reels at external terminals

Purpose

A wet product is never allowed to be delivered to Billeruds' customers. If a reel arrives wet to the terminal or found in the warehouse in a wet condition special handling is required. This ensures safe and effective handling of wet reels at external terminals.

Scope

A defined routine for external terminals on how to handle wet Billeruds' products (reels).

Exceptions for the following MG-products: Release, Interleaving, MediKraft, SteriKraft, ConFlex where the routine is not applicable. If it concerns any of the mentioned products, report to Billerud CSS and await further actions.

N.B.: Fluting wrapping has a punched hole at core

Report reel

Before proceeding according to below instruction. Always put the reel the side and report wet reel with photos to Billeruds' terminal portal or customer service specialist and await go ahead.



on

Handling instructions

Before opening the wrapping to check reel condition, always make sure your hands are cleaned with water and soap and that the knife/tools are clean and in a good condition with no risk of contaminating the reel. Clean dedicated floor area. Razor knives or snap-off blades are not allowed.

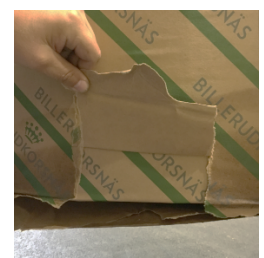
1. Wet reel identified at arrival or in WH



2. Check the extent of the water damage. Carefully open the first layer of the wrapping to see if the second layer is affected.

If wet, follow step 3.

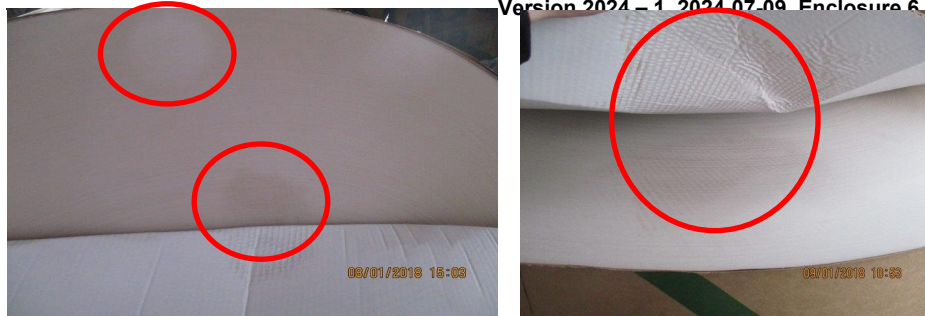
If not wet, go to step 4.



3. Carefully open the disc to see if the inner product is wet or in any way affected.

3 a. Wet reel

Wet markings on the reel end.



3 b. Not wet but affected

Can be seen as wave markings in the layers on reel end.

Affected reel

If wet/affected, follow step 5.

If not wet/affected, follow step 4



4. Inner product not wet/affected. Carefully tape the disc and wrapping. Put the reel on the side and let dry. Report the reel to Billerud as "tape and deliver", include photos.

When the reel is dry, check the condition of the wrapping. If it has obvious markings from the water, contact Billerud before delivering to customer.



5. Inner product is wet/affected. Block the reel. Tape the disc and wrapping. Put the reel on the side and let dry. Report the reel to BK as "water damage", include photos and await further instructions from Billerud.



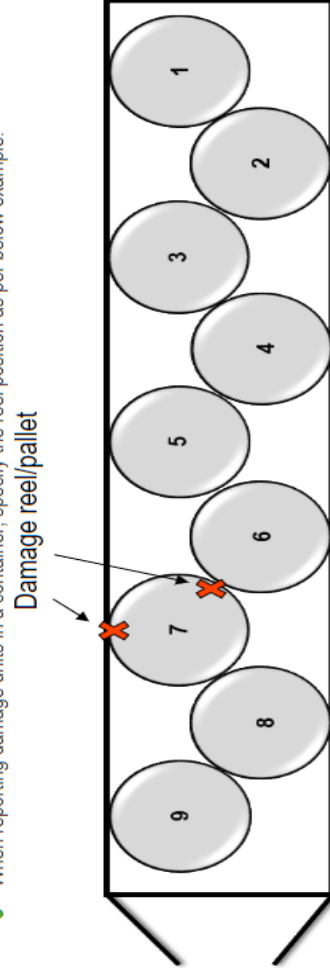
Appendix V: Reporting transport and handling damages

Reporting transport and handling damages



- o If damage products at arrival - Stop unloading, take initial pictures and report.
- o To enable investigation of damages, the following information is very important upon arrival.
 1. Photo of carrier showing ID (if container, photo of seal, same for railway wagons)
 2. Photo of opened lorry/container/railway wagon
 3. If a damage is detected, preferably a photo inside carrier before unloading
 4. Photo of label with the unit identity visible
 5. Photo of damage and label (in the same picture), to show where the damage is located
 6. Close up photo of damage
 - o If possible, photo of possible cause of damage.
- o Regardless of Incoterm, sign official freight document with notification of damage (sign all copies)
 - Hold carrier liable for the loss by giving the driver a signed copy and/or via letter/e-mail
 - If damage upon arrival found later, hold carrier liable via letter or e-mail
 - Example of valid official freight documents are [CMR/Waybill/Bill of Lading/Sea Waybill/Freight bill/Consignment note](#)
- o If several trucks/containers have damages, please report separately by carrier unit.
- o Report immediately to average agent (stated on Insurance policy/certificate; incoterm related primarily C-terms) or if applicable direct to Billerud (primarily D-terms) latest within 3 days of arrival.

- o When reporting damage units in a container, specify the reel position as per below example.



General