



Name customer
date

Names of POFM

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Photo





Responsibilities

All legislators agree that everyone in the transport chain has a shared responsibility to ensure that the load is correctly positioned and secured.

UK

Road Vehicles (Construction and Use) Regulations 1986

Road Traffic Act 1988 Regulation 40A

Health and Safety at Work Act 1974

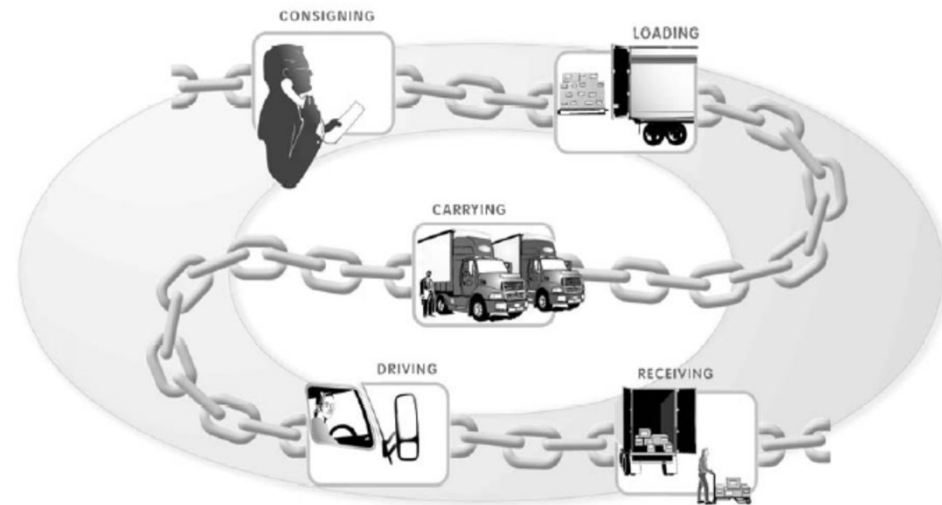
NETHERLANDS

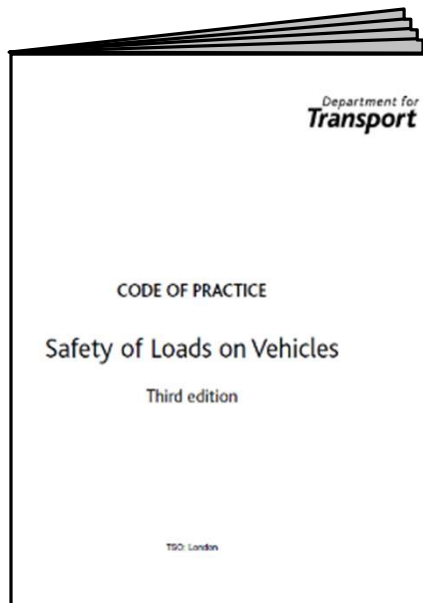
Ministry of Transport, Public Works and Water Management:

Wegenverkeerswet 1994

GERMANY

Straßenverkehrs-Ordnung (StVO): 2009





DfT Code of Practice
1st Edition 1972; 3rd Edition 2002
UK



EN 12195-1:2010
EU

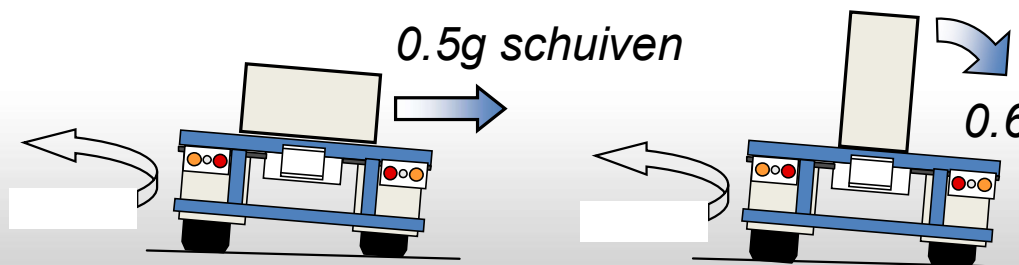
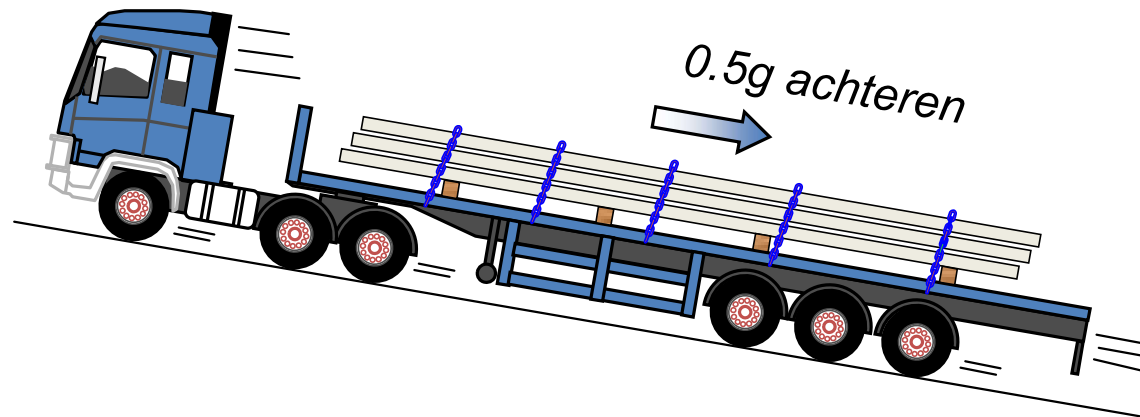
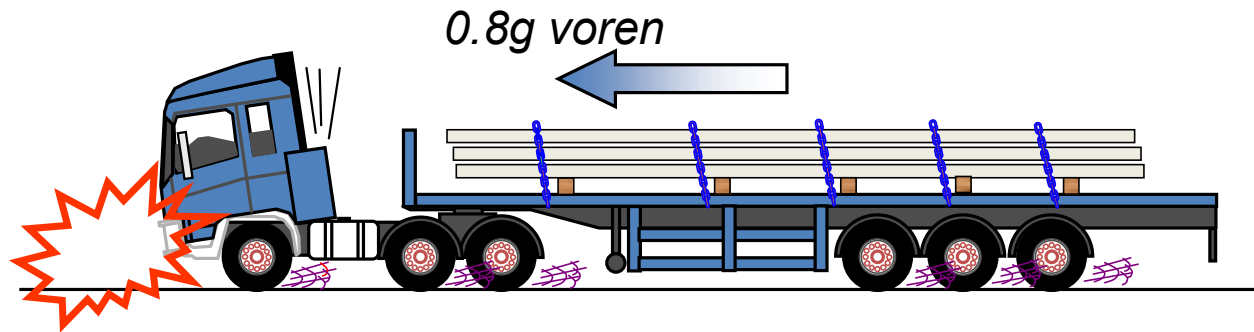


VDI: 2700 – 2011
Germany

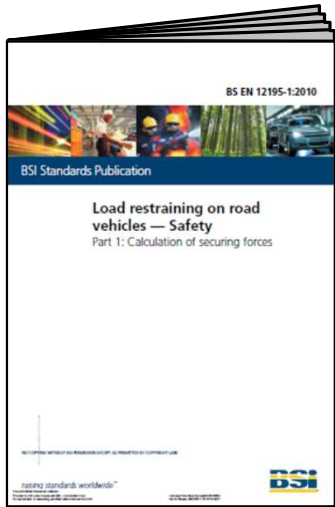
UK legislation does not necessarily refer to regulations ... but the enforcers/auditors do!



G-forces

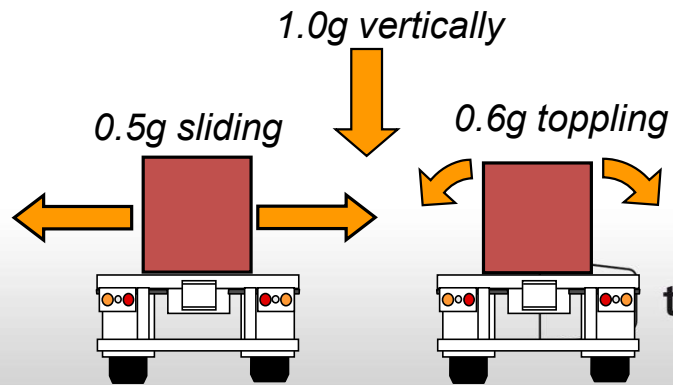
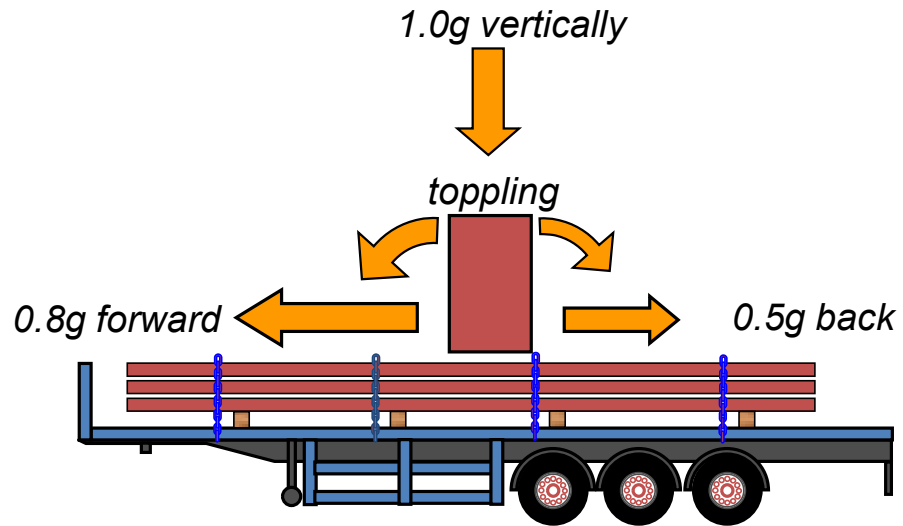


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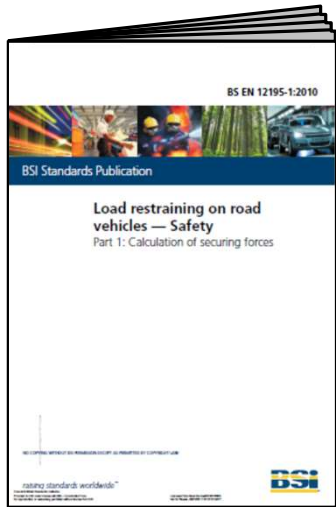
G-forces

EN 12195-1:2010



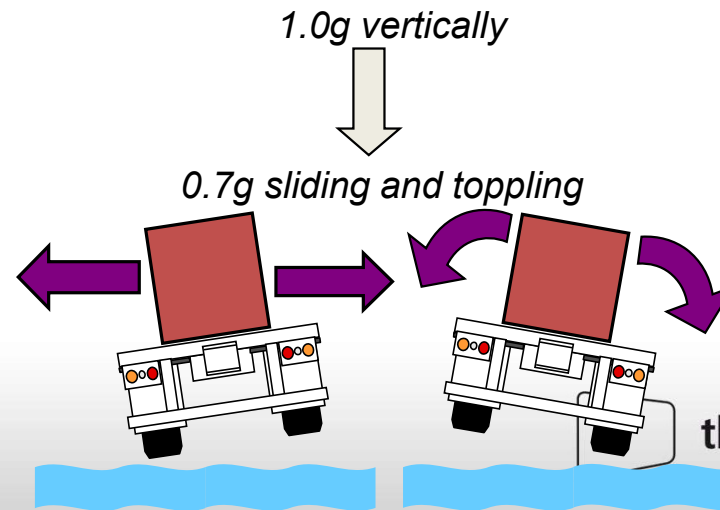
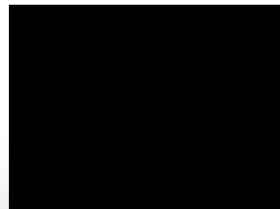
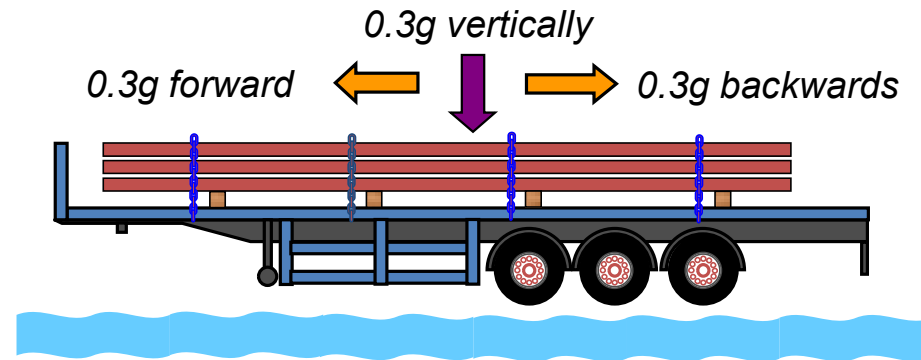
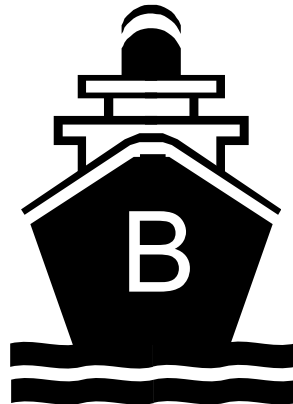
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EN 12195-1:2010

G-forces



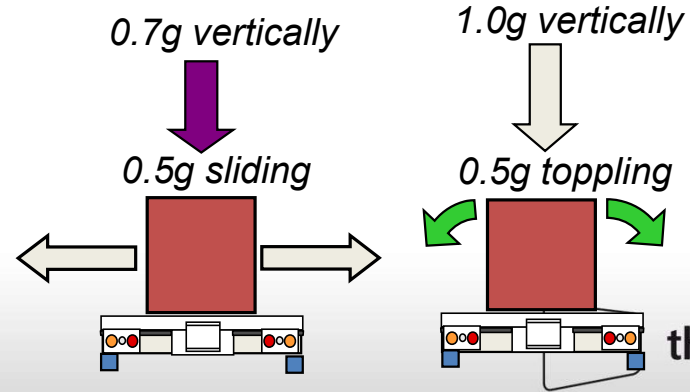
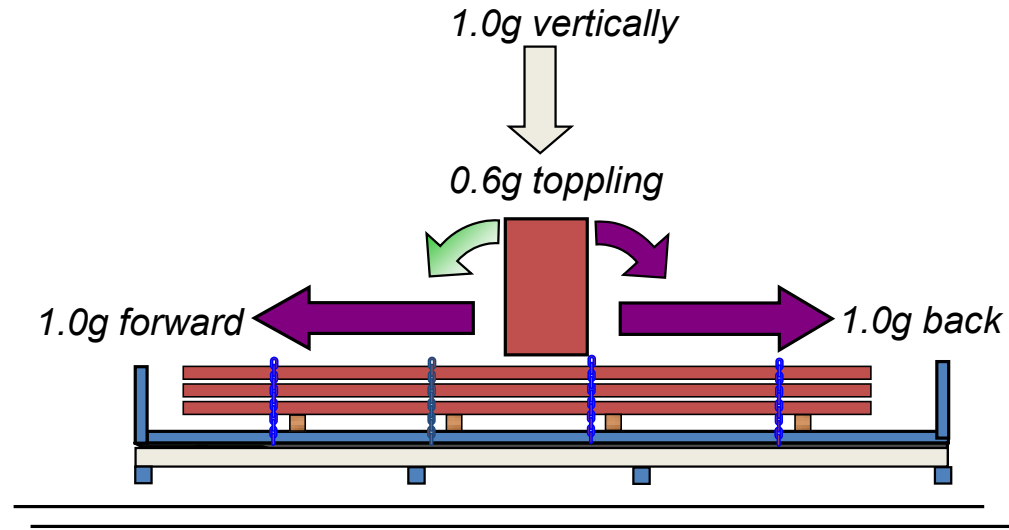
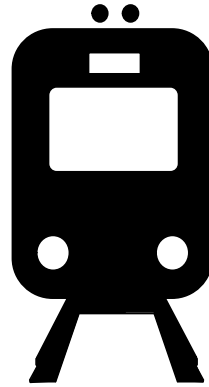
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EN 12195-1:2010

G-forces



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Best practices European Guideline

Cargo Securing

Cargo securing for road transport

2014 European best practices guidelines

The purpose of these guidelines is to provide basic practical advice and instructions to all persons involved in loading/unloading and securing cargo on vehicles, including carriers and shippers. They should also be useful for enforcement bodies performing technical roadside inspections in accordance with Directive 2014/47/EU and rulings of courts of law. It could also serve as a basis for Member States when taking the necessary steps for putting into practice the training of drivers, in accordance with Directive 2003/59/EC, on the initial qualification and periodic training of drivers of certain road vehicles for the carriage of goods or passengers. The guidelines aim to provide a guide for adequate cargo securing for all situations that may occur in normal traffic conditions. The guidelines should also serve as a common basis for both practical application and enforcement of cargo securing.



FOR ROAD TRANSPORT
ON CARGO SECURING

 the **sense** of logistics



Packaging

3. Packaging

3.1. PACKAGING MATERIALS

Cargo to be transported by road is often packed. The CMR convention does not enforce packaging, but relieves the carrier of his or her liability for loss or damage if the cargo is not properly packed. Depending on the type of product and the mode of transport, the main function of the packaging can be: weather protection, support the product during loading and unloading, prevent product damage, enable efficient load securing,



3.3. PACKAGING TEST METHODS

The rigidity of a load unit can be tested by doing a type test. Since all load units tend to deform, an acceptable deformation has been described in detail in specific packaging standards. Also, the method to quantify different types of deformation is described in detail. The most important deformation is measured in a plane that is parallel to the loading platform and calculated as a percentage of the height of the load unit (when standing on a horizontal floor). This elastic deformation shall be less than 10%, this permanent deformation after the test shall be lower than 6 cm and lower than 5%. Products, primary and secondary packaging shall not show any permanent deformation or damage.

Any of the following three test methods can be used:

- In an inclination test the loading platform is tilted. A tilting angle of 26.6° corresponds to an inertia force of 0.5g and a tilting angle of 38.7° corresponds to 0.8g (simple static approach according to EN12195-1).
- An acceleration test at pallet level applies inertia forces for at least 0.3s. A shorter duration of the inertia forces might not result in the maximum steady state deformation of the deformable load unit. To include the dynamic effects in the test, the acceleration should be applied within 0.05s. (dynamic approach according to EUMOS40509)
- An acceleration test at vehicle level. The load unit is put on a vehicle that is driven on a S-curve to generate an inertia force of 0.5g including the dynamic effect. An emergency brake is performed to generate an inertia force of 0.8g. More detailed requirements and the measurement method are described in the European standard. (dynamic approach according to EN12642)



EUMOS 40509

Making transport safe

The media often mention "truck loses load" or "traffic jam due to loss of load". These are things we have become "used to". However, it is important to consider the causes.

Inadequate load securing is often the start of all the trouble, but even more often the cause lies with inadequate transport packaging.

EUMOS 40509-2012 is a standard that describes the test method for analyzing and evaluating unit load stiffness. This test protocol is based on the application of horizontal dynamic forces/accelerations to the unit load in order to evaluate the stiffness of the unit loads. We could say that the stiffer a unit load is, the more stable and safer it will be when transported in a vehicle. Thus, the standard includes a detailed description of the **conditions required** to perform the test, in addition to the evaluation criteria for measuring the deformation of pallet loads.



European
Safe
Logistics
Association

EUMOS

EUMOS



eumos.eu



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RHA

Road Haulage Association

Newsletter May 2022

NEW LOAD SECURING REQUIREMENTS FOR PALLETISED GOODS

The on-road enforcement approach used by the Driver & Vehicle Standards Agency and the police is changing on 1st of May 2022. Here are some of the new PG9 defects and changes to existing defects that relate to goods carried by the pallet networks/operators. Please familiarise yourselves with the changes.

The fundamental principles of load security have not changed. Anything transported on or in a road-going vehicle or trailer must be secured so that it does not slide, tip, or bounce off the vehicle or move around inside it so that it affects the vehicle handling.

Employers and the self-employed whose work activities could put others at risk should continue to consider load security in conjunction with work at height, manual handling, and other relevant issues when assessing the risks in their business.

It is very important to minimise the risk of load movement during the journey to protect the driver and site workers during the unloading process as well as other road users during the journey.

- Palletised goods should be securely attached to the pallet using shrink wrap or banding and must be stable on it before they are loaded onto the vehicle or trailer and secured for transport. A load that is fundamentally unstable can never be secured correctly.
- Where pallets are stacked, the stack must be stable without lashings.
- Buckle straps or internal nets hanging from roof rails inside a curtainsider can only be used to secure individual pallets or stacks that weigh less than 400kg. Heavier pallets or stacks must be secured by alternative means.
- The gap between the front of the load and the headboard must be no more than 30cm.
- Pallets that weigh more than 400kg must not be loaded on the upper deck of a curtain-sided double-deck trailer. Heavy pallets must be on the main deck or swan neck.

Over the last ten years, the use of trailers constructed to the BS EN 12642 XL standard has become more common. In many cases, these trailers allow goods to be carried without additional lashings as long as certain conditions are met.

- In addition to minimising the gap between the front of the load and the headboard, the gap between the load and the rear doors must be no more than 30cm
- The gap between the load and the curtain side must be no more than 8cm on one or both sides.

The updated Categorisation of Defects document can be accessed here: [How vehicle defects are categorised in roadside checks and vehicle tests - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/108482/How_vehicle_defects_are_categorised_in_roadside_checks_and_vehicle_tests_-_GOV.UK_(www.gov.uk).pdf)

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- Where pallets are stacked, the stack must be stable without lashings





UIC Guidelines (Rail)

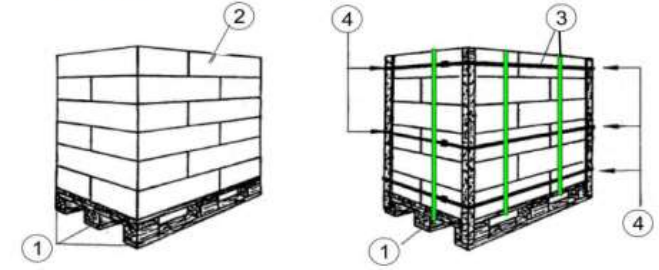
5 Methods of loading and securing

5.1 Basic principles

The type of goods, the characteristics of the wagon and of the line on which it is to run must be taken into account during loading. Railway operating safety must not be compromised by displacement of the load or its centre of gravity, the influence of wind or the presence of snow or ice on the loading surface or on the goods, etc. **The goods must therefore be loaded in a stable position and secured both lengthways and crosswise against lifting, falling, moving, rolling and tipping. Damage must not arise from the way they are positioned or held in place.**

Method of loading

- ② Goods should be arranged on the pallet in stable and compact manner, with sides flush with the pallet edges (avoid offset or projecting goods)
- in interlocking layers (e.g. crates)
 - stacked in criss-cross formation (e.g. sacks)



Loading Guidelines

Code of practice for the loading and securing of goods on railway wagons

Volume 1

Principles

Version 01/04/2024

8th edition



INTERNATIONAL UNION OF RAILWAYS

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Advise packaging



Enough containment

No dragging film tails



Advise packaging

Containment Force Recommendations

Using Lantech's CFT-6 Containment Force Tool

Very Light Loads

2 - 5 lbs
(0.9 - 2.3 kg)

Paper Towel Bundles
Empty PET Bottles
Empty Containers



Stable Mid-weight Loads

5 - 7 lbs
(2.3 - 3.2 kg)

Cartons
Trays



Heavy Unstable Loads

7 - 12 lbs
(3.2 - 5.4 kg)

Tall
Narrow Cartons
Unstable Beverage



Very Unstable Loads

12 - 20 lbs
(5.4 - 9.1 kg)

PET Water



*Containment force recommendation is starting point only and does not guarantee successful shipment. It is based on Lantech's field observations.

Pallet wrap guide

Pallet wrap guide: helping you choose the right pallet wrap

	My pallet looks like this:	My pallet looks like this:	My pallet looks like this:	My pallet looks like this:	My pallet looks like this:
Pallet wrap to use	Light Duty	Medium Duty	Heavy Duty	Blue (food)	Black (security)
Thickness	General purpose	17 micron	20 micron	17 micron	23 micron
Roll width	400mm	400mm	400mm	400mm	500mm
Roll length	300m	300m	300m	300m	240m
Core diameter	4cm	4cm	4cm	4cm	4cm
Colour	clear	clear	clear	blue tint	black
Suitable for wrapping:					
Boxes	✓	✓	✓	✓	✓
Regular shaped loads	✗	✓	✓	✓	✓
Sharp edged loads	✗	✗	✓	✗	✓
Light loads	✓	✓	✓	✓	✓
Heavy loads	✗	✗	✓	✗	✓
UV-sensitive products	✗	✗	✗	✗	✓
Other features:					
Contents hidden	✗	✗	✗	✗	✓
Used for food packaging	✗	✗	✗	✓	✗
Stands out from other pallets	✗	✗	✗	✓	✓
Hand held dispenser	Click here	Click here	Click here	Click here	Click here

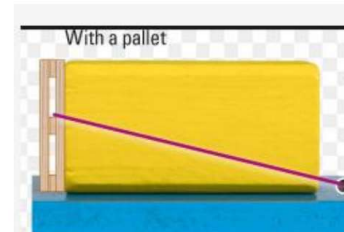




Advice securing

If the load does not completely fill the space between the side and back walls, these spaces will have to be filled with fillers to get a good shape closure.

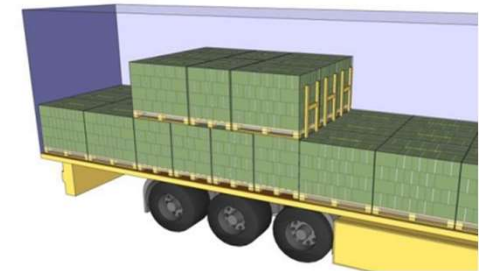
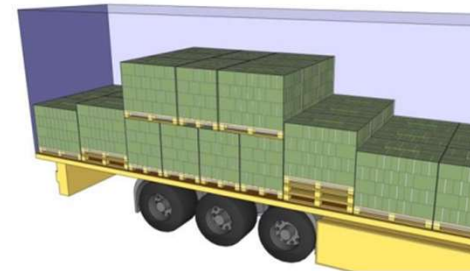
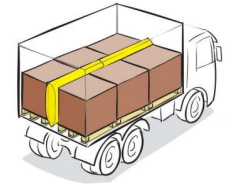
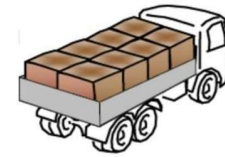
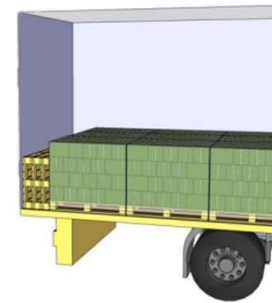
- Examples for filling up the empty spaces between pallets:
- Airbags
- Pallets
- Chocks
- PE foam



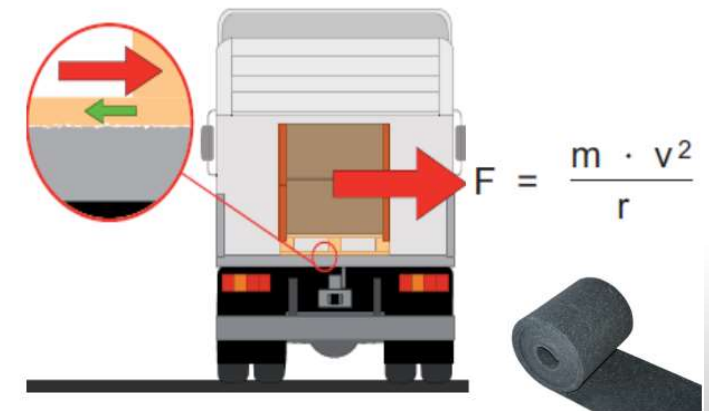


ABC method

- A. Locking/blocking the cargo
- B. Anti slipmat (friction)
- C. Lashing



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Advise

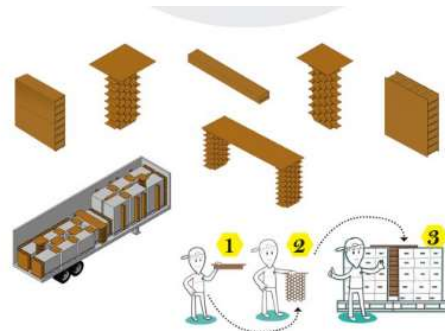
Additional advise

Suitable for many different types of cargo, D-Connect dunnage bag solutions ensure cargo is secured in the safest and most efficient way possible. Direct Connect technology combined with valve positioning on the edge of the bag and solid tooling ensure enhanced safety and speed. A comprehensive tooling range enables inflation of different types and sizes with one single inflator type.

Cordstrap help companies worldwide transport hazardous and non-hazardous cargo in containers. Our dunnage bags are the safest and most effective way to fill empty spaces during shipping.



Divider Sheets



Cardboard separator



Dunnage bag portfolio for container cargo securing

Cordstrap dunnage bags are available in five performance levels. Cargo stabilizer and lower level dunnage bags are specifically designed for use in containers. Each level is available in various sizes.

The different types of bags are coded with coloured labels to make them easy to recognize. Depending on the transport type and cargo, Cordstrap experts can advise on the correct bag for optimal cargo securing.

<https://www.cordstrap.com/en/Products/Dunnage-Bags/>

Shrink wrap(higher than 23 micron)



Anti slip paper





Alternatives for containers



This 40' container is secured with Cordstrap AnchorLash® 105.3



Cargo securing method complies with CTU Code of Practice and IMDG code.
Cargo securing values are accessible via QR-codes.
CTU code compliancy certified by Maritem and Eurosafe.*

For further questions, please contact:
support.tech@cordstrap.com

* Certified by Maritem (Certificate CS202003) and Eurosafe (certificate 2020-11-003) according to the principles of the IMO/ILO/UNECE Code of Practice for Packing of Cargo Transport Units (CTU Code).

Eurosafe



Maritem AB



cordstrap

www.cordstrap.com/instructions



Eumos 40674; Cargo Safety cards

- <https://www.youtube.com/watch?v=NccAIZUB7Q>
- This format allows companies to provide the mandatory information on cargo and cargo securing to the carrier and other parties involved, such as inspection services or The recipient

Example of ESCC. Do not use without permission.

Traceability code: **CGAME00000000**

1. Transport or Transport mode

2. Itinerary PFC

3. General view

4. Storage view

5. Lateral view

6. Number of lashing straps needed to prevent slipping. Example of calculation made.

7. Used Technique or Techniques for Best Practice

European Cargo Safety Card Standard: EUMOS 40674

Example of ESCC. Do not use without permission.

Liability Protocol

Applicable regulations and responsibility (1)

OSDR - Data Protection notice (2)

Agreements between the parties (3)

Chain of Responsibility (CSR) for all involved parties (7)

Signature, head or representative of the company (8)

Signature, carrier Company (11)

Signature, Responsible for Calculation, Technical Part (9)

Signature, Responsible for Liability Part, (Revenue Side) (10)

Signature, Driver

Support: Eligible codes for Tracking Code

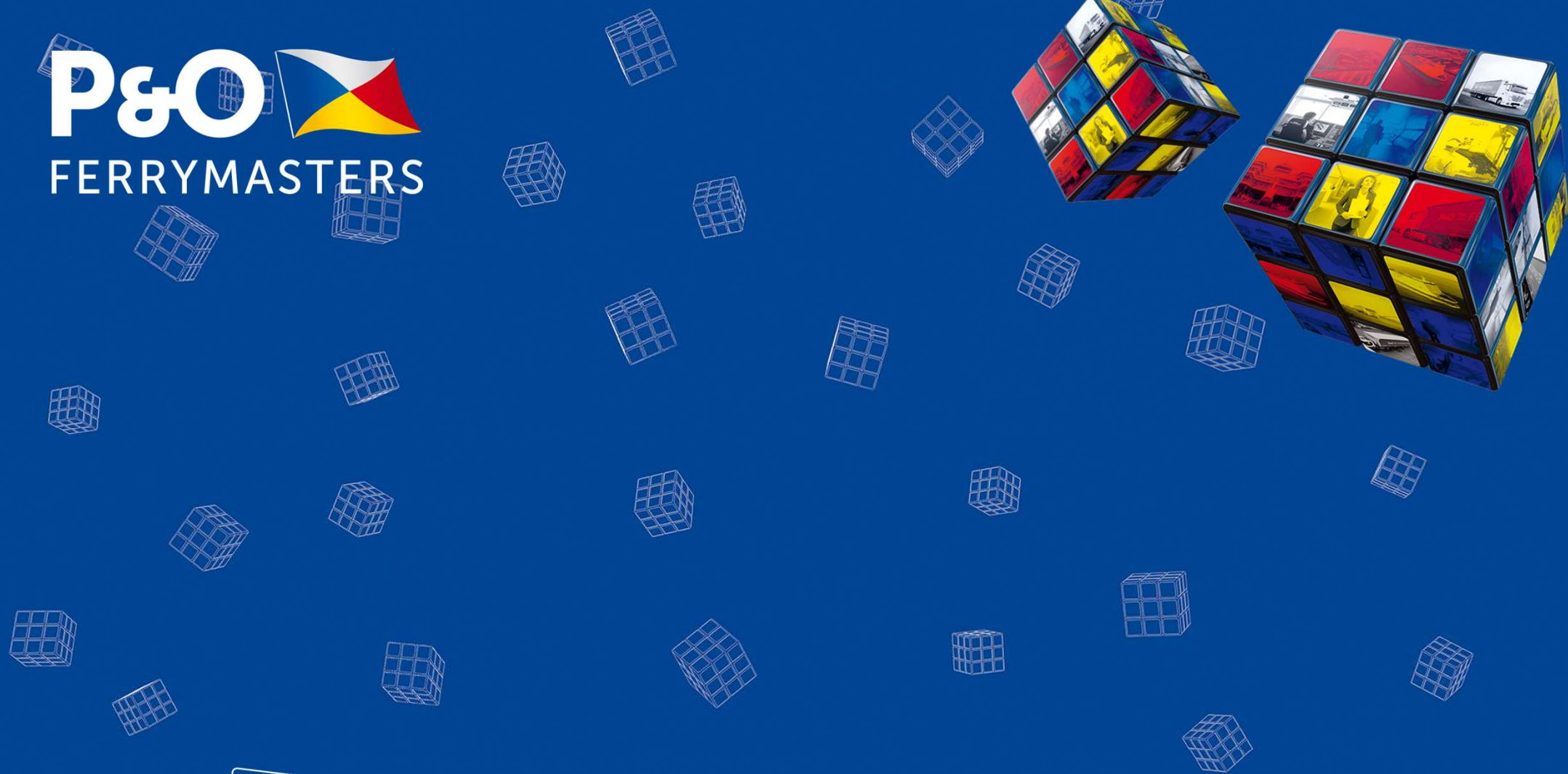
European Cargo Safety Card Standard: EUMOS 40674



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the sense of logistics Delivery on time, to the right place and in perfect condition