## Rittal – The System.

Faster – better – everywhere.

# Handling guidelines for shipping and storage





### **Guidelines for storage and shipping**

Rittal products must always be stored and shipped with due care in accordance with these guidelines. These guidelines apply to all persons and companies involved in the transport chain and set out vehicle-related requirements that apply to the logistics operations of Rittal GmbH & Co. KG and its international subsidiaries. The aim is to provide an overview of the types of vehicle and their equipment and describe the relevant requirements.



1. Vehicle equipment



2. Securing cargo and protecting products



3. Handling

### 1. Vehicle equipment

- Vehicles must clearly display the identification required by the EN-12642 standard and the driver must have the relevant certificate to hand for presentation.
- The body structures of the trucks used in shipping operations for Rittal must satisfy the EN 12195-1 and EN 12642 standards, the applicable guidelines for load securing pursuant to Sections 22 and 23 of the German Road Traffic Code (StVO) and Sections 30 and 31 of the German Road Traffic Licensing Code (StVZO) and Directive VDI 2700 of the Association of German Engineers.
- The truck body structure must be designed so that the side, front and rear walls of the cargo area and the bed can accommodate all the forces generated by the load when the vehicle is carrying its full payload and under the influence of dynamic acceleration.



The equipment of the vehicles used must comply with the Rittal haulage vehicle requirements. Loading must always be performed such that road and transport safety are ensured.



Cargo area clean, clear and undamaged. Slats/side wall made of aluminium > 300 mm, at least 3 slats per side.



Orderly and clean appearance, tarpaulins in Rittal design as far as possible.





Removable slats and stop rails must be in perfect condition.

RITTAL

ENCLOSURES POWER DISTRIBUTION

**CLIMATE CONTROL** 

IT INFRASTRUCTURE

**SOFTWARE & SERVICES** 

FRIEDHELM LOH GROUP

2

## 1. Vehicle equipment

Rittal reserves the right to block the loading of vehicles with inadequate equipment or to provide load securing equipment at cost.





Protective packing on the stanchions. Undamaged inserts to prevent shipping damage caused by friction.





Stanchions and tarpaulins must not be damaged.

Vehicle/body structure type					Minimum requirements for vehicle equipment														
	Internal length (m)	Internal width (m)	Internal height (m)	Orderly appearance	Tarpaulins or markings in Rittal design as far as possible	Loading area clean, clear and undamaged	Slats/side wall > 300 mm	Side wall	Number of stanchions	Protective packing on stanchions	Lashing points on vehicle bed	Air suspension	Bed loading: Forklift with 4 ton axle load	Vehicle body structure to DIN EN 12642 Code XL	The body structure must comply with the CSC structural and inspection regulations	2 rear doors with swivel lock bars	3 slats on both sides *1 (undamaged)	Anti-slip mats and lashing straps 1*	Safety devices to accommodate up to $0.5 \times \text{payload}$
Mega trailer semi-trailer	13.60	2.44 - 2.48	max. 3.00	х	х	х	х		3	х	х	х	х	х		х	х	х	х
Mega trailer multi-trailer	15.20	2.44 - 2.48	max. 3.00	х	х	х	х		2	x	x	x	x	x		x	x	x	х
Curtainsider semi-trailer	13.60	2.44 - 2.48	2.65 - 2.70	х	х	х	х		3	х	х	x	х	х		х	x	х	х
Curtainsider multi-trailer	15.20	2.44 - 2.48	2.65 - 2.70	х	х	х	х		2	х	х	х	х	х		х	x	х	х
Sidewall semi-trailer	13.60	2.44 - 2.48	2.65 - 2.70	х	х	х	х	х	3	х	х	х	х	х		х	х	х	х
Sidewall multi-trailer	15.20	2.44 - 2.48	2.65 - 2.70	х	х	х	х	х	2	х	х	х	х	х		х	х	х	х
Box semi-trailer	13.60	2.44 - 2.48	2.65 - 2.70	х	х	х					х	х	х	х		х		х	х
Box multi-trailer	15.20	2.44 - 2.48	2.65 - 2.70	х	х	х					х	х	х	х		х		х	х
Swap body	7.80	2.55	max. 3.00	х		х		х			х		х			х		х	х
Container 20 ft	5.89	2.35	2.39	х		х					х		х		х	х			
Container 40 ft	12.02	2.35	2.39	х		х					х		х		х	х			
Container 40 ft high cube	12.02	2.35	2.69	х		х					х		х		х	х			

<sup>\*1</sup> Subject to chargeable use by Rittal



Retaining bars as prescribed load securing equipment on the rear closure.



Integrated lashing points on vehicle for securing loads.

**SOFTWARE & SERVICES** 

**ENCLOSURES POWER DISTRIBUTION**  **CLIMATE CONTROL** 

IT INFRASTRUCTURE

## 2. Securing cargo and protecting products





**Retaining bars**Retaining bars are to be installed to prevent cargo from tipping over. Securing straps are to be used in containers. Several retaining bars are to be fitted in the case of mixed loads.





### Form-fit loading

The most reliable method to ensure transport safety is to avoid cavities when loading and to utilise the load-bearing capacity of



Edge protection for boxed flat parts
Flat parts are to be protected with additional corner angles in the transport frames, so as to eliminate the risk of impact or friction damage.





#### Cavity packing material and airbags

Where spaces between separate consignments are unavoidable, packing material or airbags must be used to fill out cavities.





#### Stanchion protectors

To protect the products, cushioning material is to be inserted between the product and any adjacent metal parts (e.g. stanchions) to prevent impact or friction.





FRIEDHELM LOH GROUP

## 2. Securing cargo and protecting products

## Packaging consignments to ensure product safety and secure shipping

Individual consignments are to be protected during transport with stretchwrap, strapping or similar.



#### Pallets and transport bases

Exchange pallets must comply with the Class A exchange criteria of the European Pallet Pool. Rittal-specific transport bases are to be handled in accordance with the applicable guidelines.

applicable guidelines.

Rittal aims to sell shipping pallets to shipping agents and purchase the same number of Class A pallets from the shipping agents.



#### Anti-slip pads

When consignments are stacked (e.g. wooden crates), anti-slip pads must be inserted and the load must be lashed, where appropriate.

αργ

### 3. Handling

#### **Handling symbols**

All products must be transported, stored and loaded in accordance with the handling symbols marked on the packaging (example: upright loading of flat parts and enclosures).











**ENCLOSURES** 

**POWER DISTRIBUTION** 

**CLIMATE CONTROL** 

IT INFRASTRUCTURE

**SOFTWARE & SERVICES** 



FRIEDHELM LOH GROUP

8

### 3. Handling





Health and safety at work

To eliminate the risk of products in frames tipping over, flat parts in widths > 800 mm are to be tilted before removal by shifting the



When removing parts from frames that are full, it is advisable to lift the frame by approx. 15 cm on the removal side with the aid of an industrial truck so as to minimise the risk of tipping during removal.





#### Clamp-lift truck

The clamp must be applied only to the bottom section of a consignment, with contact over the whole surface area and with a maximum clamping pressure of 90 bar. Special instructions (e.g. signs indicating that lifting by clamping is not permitted) must be observed under all circumstances.







### Use of industrial trucks

Cautious use of the appropriate industrial trucks (fork lift, lifting trolley, etc.) is a prerequisite to avoid damage during transport. Protruding forks, for example, present a particular danger for products already placed in adjacent areas.



The loading and load-securing methods described in the Rittal transport and handling guidelines comply with the requirements of the applicable VDI guidelines 3968/2700 ff, as well as with all relevant road traffic legislation.

**ENCLOSURES** 

**POWER DISTRIBUTION** 

**CLIMATE CONTROL** 

**IT INFRASTRUCTURE** 

**SOFTWARE & SERVICES** 



FRIEDHELM LOH GROUP

10

# Rittal - The System.

### Faster – better – everywhere.

- Enclosures
- Power Distribution
- Climate Control
- IT Infrastructure
- Software & Services

RITTAL GmbH & Co. KG Postfach 1662 · 35726 Herborn, Germany Phone: +49(0)2772 505-0 · Fax: +49(0)2772 505-2319 E-mail: info@rittal.de · www.rittal.com

**ENCLOSURES** 

IT INFRASTRUCTURE SOFTWARE & SERVICES

