



## Sliding Friction End Stop

Oleo's sliding friction end stop range is designed to reduce the risk of damage to rolling stock and injury to passengers whilst offering a cost efficient solution to the market.

Typically used within metro applications for both mainline and depot, each solution is optimised based on the specification. When impacted, the energy is transferred through the main frame to the friction shoes which are fitted under and behind the end stop structure. The end stop will then start to slide along the rails gradually absorbing the energy and slowing the train.

#### **Product details**

- Different frame sizes available depending on application
- Suitable for both centre coupling impacts and side buffering impacts
- Friction shoes installed directly to the rail profile and also detached from the main end stop frame, allowing the system to slide once impacted
- 50kN of braking force per pair of friction shoes
- Number of friction shoes dependent on the train mass, impacting speed and required deceleration

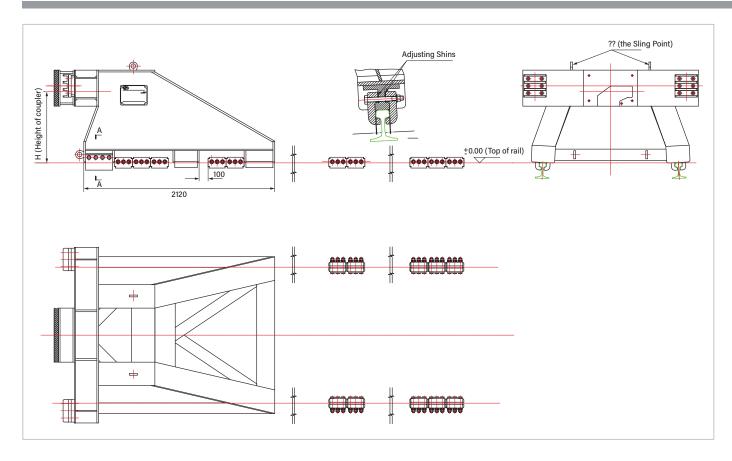
#### **Product advantages**

- Purely mechanical device no power or manual control required
- Suitable for a wide range of rail profiles
- · Cost effective design
- · Simple resetting procedure
- · Minimal maintenance required
- · Long service life
- Fully optimisable design based on requirements
- Additional configuration options available including electrical insulation, paint finish and galvanisation



Site supervision and training provided by Oleo professional engineers for the installation of end stops

# Sliding Friction End Stop Designs Example Application



- · Contains one pair of anti-climber shoes
- Impacting height: designed in accordance with train interface

Examples for conditions and installation length with average braking force 550kN:

### (1) 6 Cars

- For cars with passengers. Train mass: 376t, Impacting speed: 25km/h, Installation length: 25m
- For cars without passengers testing line. Train mass:
  246t, Impacting speed: 25km/h, Installation length: 18m
- For cars without passengers depot. Train mass: 246t, Impacting speed: 10km/h, Installation length: 7m







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