RAIL SAFETY SYSTEMS

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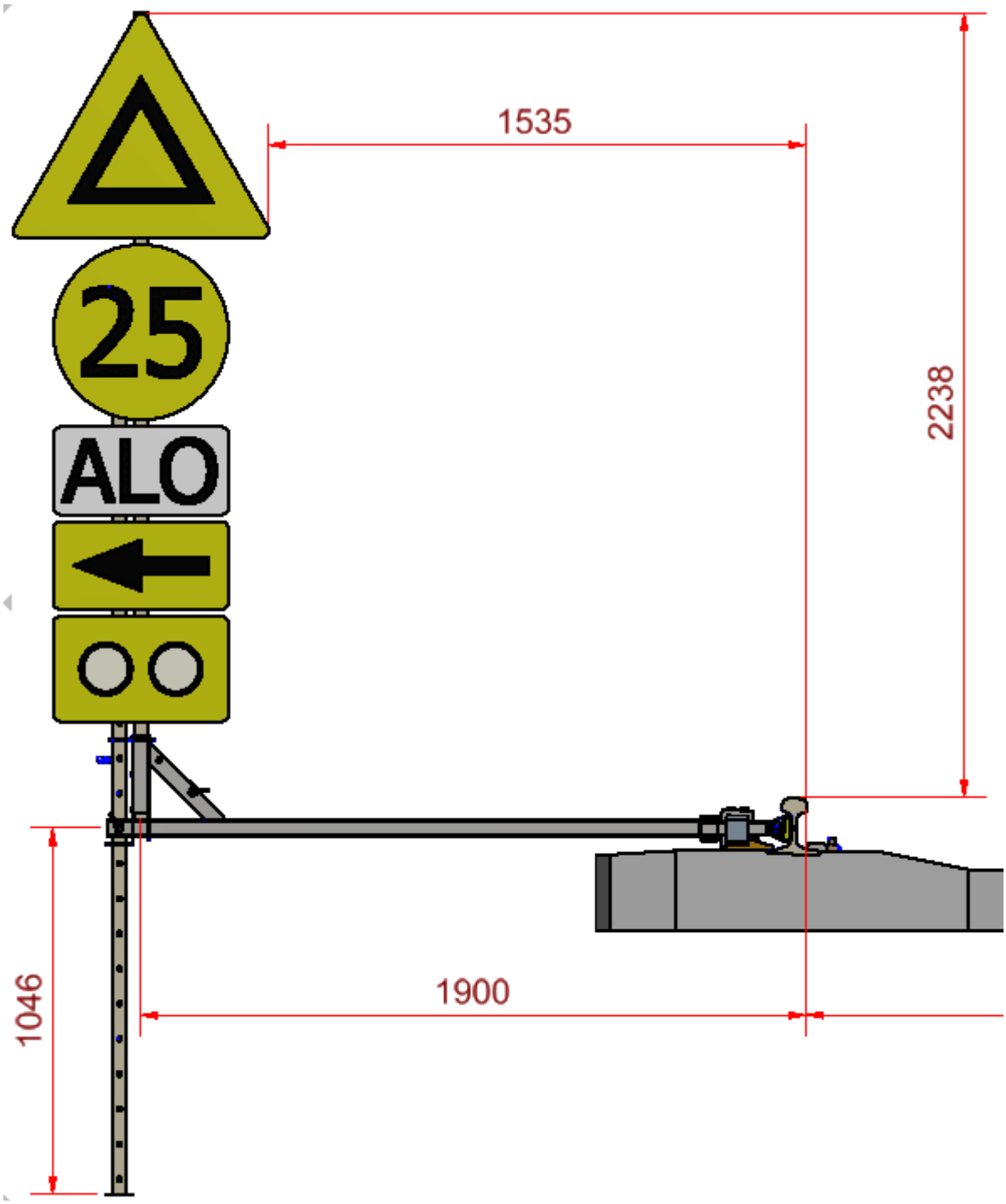
USER INSTRUCTIONS TSR BOARDS

RSS Patented Magnetic Attached TSR Board (Temporary Speed Restriction Board) provides physical and health protection for the workforce working in and on the railway.

A. Purpose of the system

Under local and European regulations, it is in most cases, a legal requirement when working on and at the track-side to protect people with both a physical barrier to prevent operatives coming too close to any track with trains operating on them and TSR signage to warn the train driver of a forthcoming 'work-site' area. The RSS patented Magnetically Attached TSR Board system is intended to realise effective protection for work on the track.

NB:
When fitted in axle counter areas it is required that the head of the magnet is placed at least 100 mm minimum distance either side of any trackside signaling equipment (e.g. magnets are no closer than 100mm from any axle counter head or track circuit). This requirement is to avoid any potential magnetic interference, and/or actually touching/attaching to any specialized equipment accidentally and causing damage during the installation or removal of the magnet.



Main TSR system Ireland dimensions.

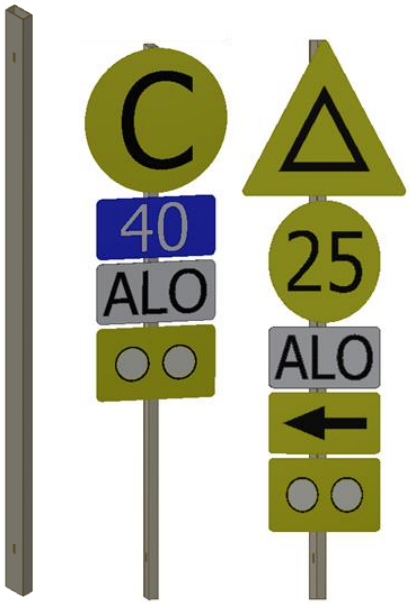
The system is suitable for rails UIC 54, 56E1 and UIC 60 Flat Bottomed.

B. Components of the RSS system

1) **Horizontal Stanchion**

(Total Weight 16,6 kg)

2)



3)

2) **Vertical Support Leg**

(Total Weight: 1 kg)

3) **Vertical Stanchion**
For connecting of the signs.

(Total Weight: 4,2 kg without signs)

C. Applications of the system.

The horizontal stanchion is a fixed length in order that any signage remains a determined distance from any moving vehicles (Trains and RRV's etc.).

As ballast tends to vary in distance and angle of slope from the side of the rail, the adjustable leg is should be adjusted and secure, so that it rests squarely on a firm surface, ensuring that the horizontal stanchion is horizontal relative to the rail and does NOT slope 'inwards' towards the rail track, thus maintaining the horizontal distance required.

- Furthermore, all safety precautions and standards applicable to safety on the track must be observed.
- If necessary, safety personnel also need to be present.
- The maximum permissible working temperatures of the system are -20˚ and +60˚ Celsius.

D. Periodic maintenance and checking of the system

Maintenance and checks / inspection:

1. Equipment should be checked once a year by your supplier, or a competent person.
2. Given that all components have been engineered and produced to be durable - stanchions are hot-dipped galvanized, plastic parts in UV-resistant materials - maintenance on the system is minimal.
3. If the system is to be used for periods exceeding 1 week, we recommend that a visual check be carried out on the system at least once a week.

Periodic check:

Every time the RSS TSR Boards are used, the components need to be checked for any defects such as dents and/or damage to the stanchions, broken magnet housings, damage to the transport stillage etc.
Check if all the components are complete, see section **B**.
The magnet must be free of coarse soiling and steel parts. If found, they can be wiped off the magnet with a cloth – using a gloved hand – do ***NOT*** use unprotected exposed flesh as metal debris collected by the magnet may be sharp.
Also check that the magnets are moving freely in their plastic housings and that the plastic housing moves freely at the hinged joint to the stanchion. In the event of damage or cracks in the plastic, ***DO NOT USE*** and replace the housing immediately.
On the type plate (see appendix) is the name of the manufacturer and the type of TSR Board.

E. Building and dismantling the system

NB: This RSS TSR Board system is *NOT* designed to be used in situations where a 'third rail' is present.

When building, dismantling or moving the system, ensure appropriate personal protection equipment is used and all safety rules and procedures are followed.

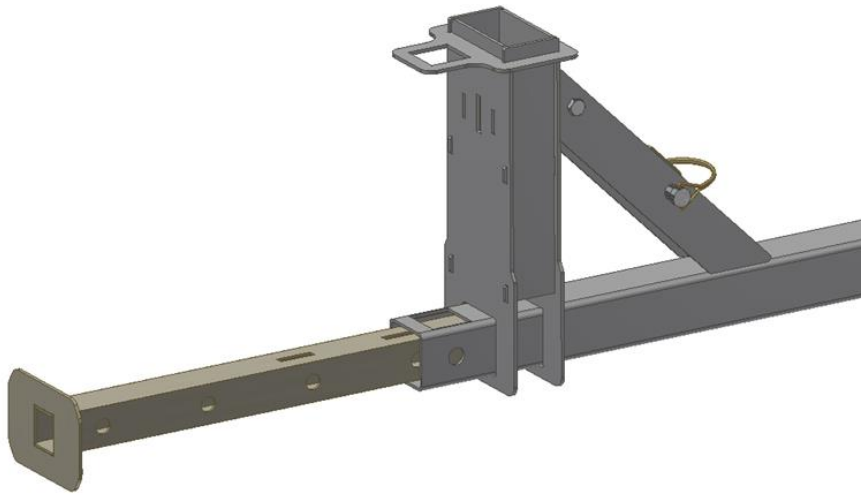
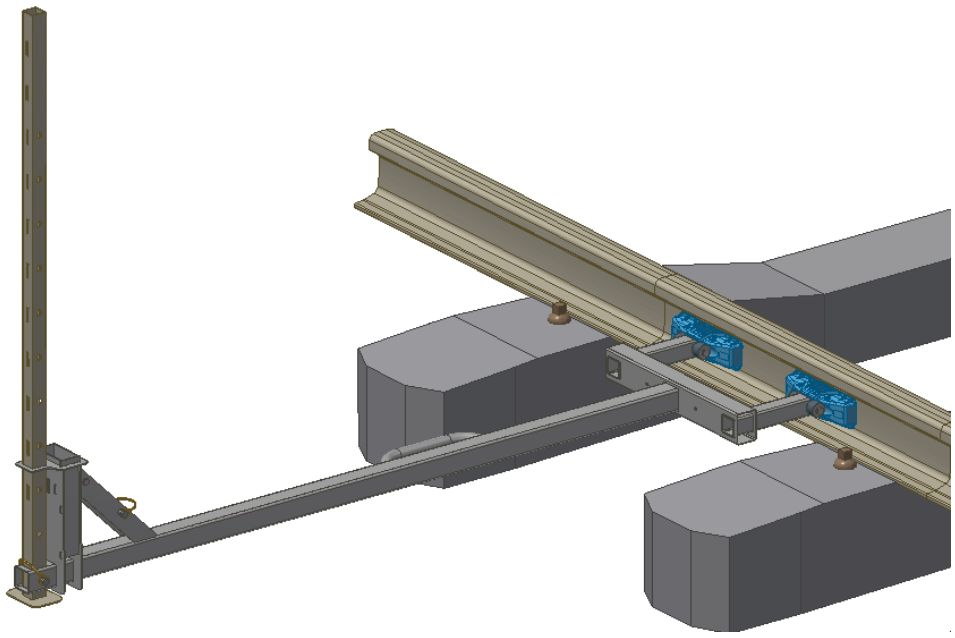
Before building

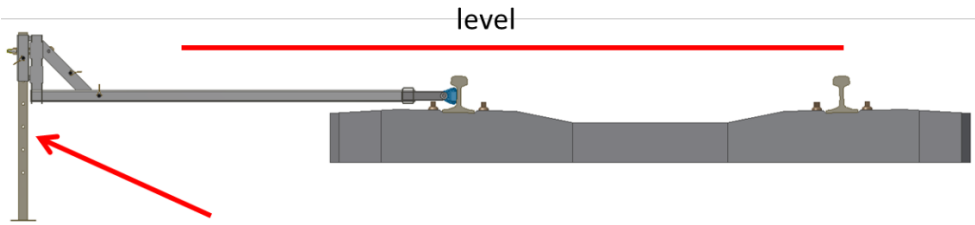
1. Check that all components of the RSS system to be used are free of damage or any defects.
2. Check beforehand that the rails are not fitted with noise-dampening rubber in the web of the rail. If noise-dampening rubber is present in the web of the rail, this TSR Board magnetically attached system cannot be used
3. Check that the sleepers on which the stanchions may be supported are free of obstacles or debris on the top surface.

Building

Place the horizontal stanchion with magnetic heads into the web of the rail either side of the 'Pandrol/rail clips' or between them. The Horizontal Stanchion should not rest on a sleeper; the RSS TSR Board should rest on the Vertical Support.

Before you begin installing, using a 'gloved-hand' wipe the magnet surface clean of any debris picked up during transportation.
Ensure you maintain the Safe System of Work that is in place.

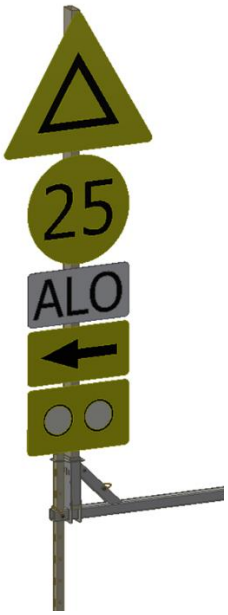
	**Building horizontal stanchion.** **1.** Unlock the locking clip and remove the adjustable vertical leg from the horizontal stanchion.
	**Building horizontal stanchion.** **2.** Mount the vertical pole upright in the horizontal stanchion. **3.** Place the horizontal stanchion in the web of the rail either each side of the 'rail clip' or between them. **Remove any coarse soiling or flaking rust between the magnet and the rail. The stanchion must be freely supported on the adjustable vertical leg.**



Adjustable Vertical Leg.

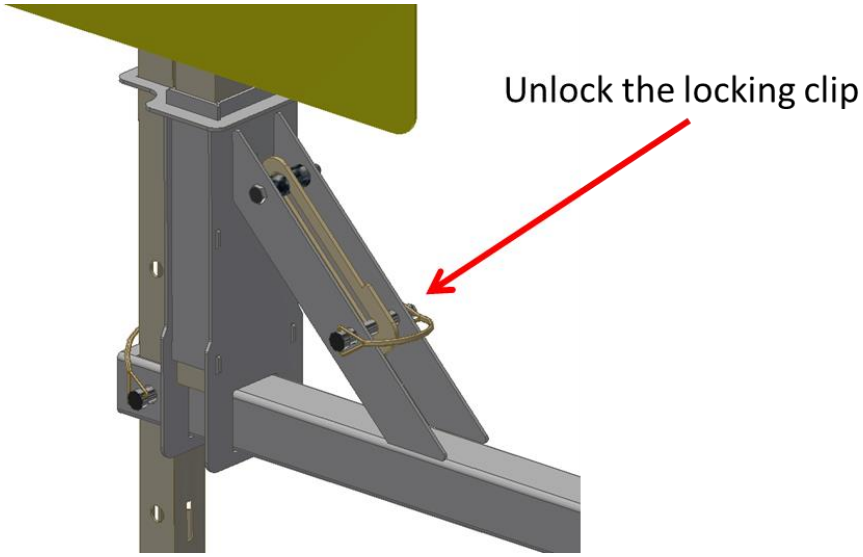
4. Adjust the vertical support in such a way that the Horizontal stanchion is horizontal/level with the rail track.

5. Secure the locking pin



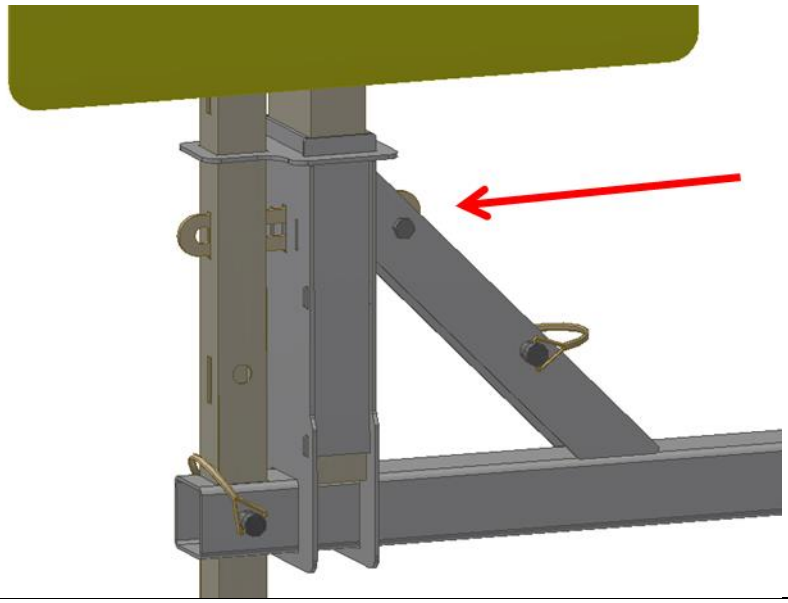
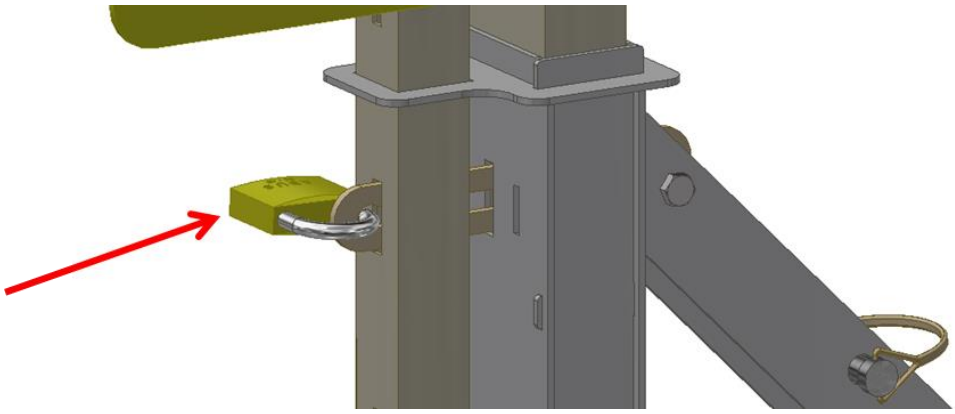
Vertical stanchion with signs attached

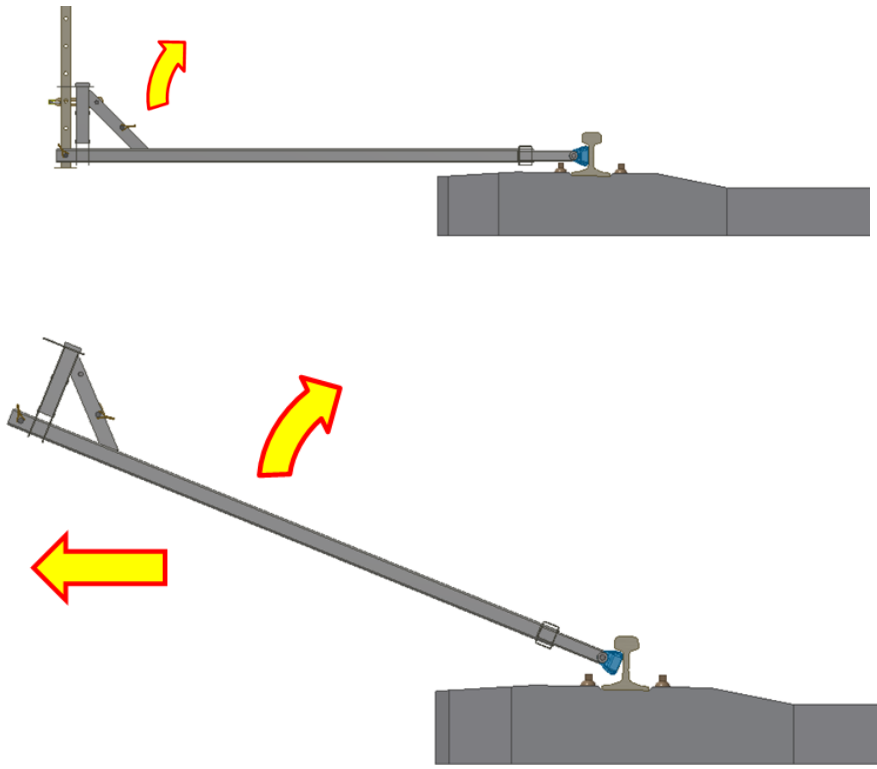
6. Place the vertical stanchion with the signage attached to it into the space within the horizontal stanchion.



Safety Bar

7. Remove the Safety clip freeing the 'locking bar' and replace the clip securely for future use.
(The clip can also be used as spare for the vertical support.)

	**Locking Bar** **8.** Pass the locking bar through the horizontal stanchion, the vertical stanchion and vertical support leg.
	**Padlock** **9.** Secure the locking strip and the hole unit with the padlock.

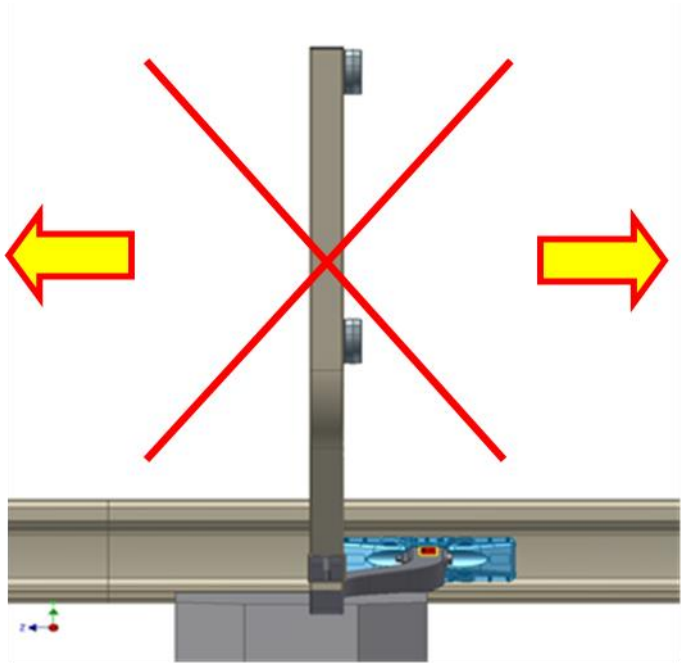


Dismantling system

10. Dismantling takes place in the reverse order.

Unlock the padlock and remove the vertical stanchion.

To dismantle the horizontal stanchion, assume the weight and lift the horizontal stanchion vertically towards the rail. At approximately 45 degrees the magnet easily releases from its attachment to the rail and can be gently pulled away.
Remove the vertical support leg and slide into the horizontal leg for transport.



Prohibited!

11. Trying to **pull the stanchion away from the rail sideways is not possible or recommended.** This action will only result in you damaging the equipment

Appendix: