

# Load STAR

The EN 12642-XL curtainsider design standard allows reduced load securing in exchange for a reinforced body and curtain. Brian Wall explores the dynamics behind these increasingly-prevalent semi-trailers

A great deal of debate has taken place over what constitutes 'load restraint' and 'load safety', and the standards and regulations that exist to ensure due diligence in how these are adhered to. The Department for Transport (DfT) Code of Practice 'Safety of Loads on Vehicles' ([www.is.gd/bedaxo](http://www.is.gd/bedaxo)) states quite clearly that "the combined strength of the load restraint system must be sufficient to withstand a force not less than the total weight of the load forward...and half of the weight of the load backwards and sideways."

This applies to all vehicles, irrespective of size. Most curtainsider vehicles must use additional suitable load restraint to prevent loads from moving during transit, as these vehicles' curtains are only designed for weather protection (for example as shown on p37).

However, vehicles and trailers built to the European Standard EN 12642-XL are the exception to this rule. New European guidance states that the bodywork of vehicles built to the XL standard, such as the SDC Freespan trailer pictured above, will meet the 50% of load securing to the side, as per the DfT Code of Practice.



"We now accept XL-rated vehicles as providing 50% of the total maximum vehicle load to the side," states the DfT, "so you would not need to use additional lashing or other load security solutions, as long as you have loaded the goods with a positive fit." 'Positive fit' means:

- Any gap between the load and the side curtains must not exceed 80mm
- The load must be positioned up to the front bulkhead
- The rear of the load must be restrained with a net or other means to prevent rearward shift when there is space remaining at the rear of the body.

Even XL-rated vehicles must be treated in the same way as a normal curtainsider vehicle, and other appropriate methods used to secure the load, such as



lashings, should be used if the load is not a positive fit. A note of caution: EN 12642-XL is not to be confused with the similar EN 12642-L. The latter does not allow a vehicle's curtains to retain any of the load.

## COMPLEX AND CHALLENGING

Load restraint is one of the most discussed topics in the industry and one of the thorniest tasks to get right, states Richard Owens, group marketing manager of trailer-builder Don-Bur. He is on the HSE's load restraint steering group, and Don-Bur also works closely with the DVSA. Owens says: "Although the legal requirement is simple, this simplicity has led to interpretation and variation over the years. There is now a raft of compliance guidance and best practice for different vehicle types, which both operators and enforcement officers are expected to know. If not, the operator could be penalised with a prohibition."

One of the roles of the steering committee is to agree a minimum specification for curtainsiders that is both compliant and operationally practical. "That specification is likely to include EN 12642-XL as part of the solution," Owens

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Tony Sturgess



## SEVEN MAINTENANCE TIPS FROM TRAILER BUILDER LAWRENCE DAVID

### 1 SUSPENSION MONITORING

Check for visible signs of wear and tear such as cracks on the suspension springs. Also check that nothing is impeding the suspension and that the pressure is correct.

### 2 TYRE PRESSURE CHECKS

Check tyres for general wear and tear, including tyre tread. Monitor tyre pressure to ensure all tyres are at the recommended inflation levels.

### 3 CHECK WIRES, FUSES AND LIGHTS

### 4 BRAKE MAINTENANCE

Check brake adjustments and functionality to keep the fleet safe. Also confirm that the brake lights are working properly.

### 5 CHECK INSIDE

Look for holes, broken cross members and general wear and tear. Any holes that let water in may lead to corrosion.

### 6 STRAP MAINTENANCE

Inspect any chains, ratchets and straps to ensure your load is secure. Look for holes, loose stitching, snags, tears or general weak points. Replace any that are worn.

### 7 LUBRICATION

Keeping components well-greased will increase the longevity of the trailer.



adds. "The committee's intention is not to make the compliance requirements expensive or complicated. The key goal is to provide a base, rubber-stamped standard that will make it simpler for operators to follow and for the DVSA to enforce. It will effectively root out the 'bad boys' - those operators that are regularly flouting the rules."

He also cites how several operators are still deferring to roof-mounted straps, in the belief that load restraint requirements have been met when the driver sets out. But Owens observes: "In fact, they are only suitable for pallets up to 400kg. That's the equivalent of a 10.4t load".

Owens further believes that, in an ideal world, drivers should be able to challenge how a load has been secured by having a document that specifies this. "Instead, they will often find themselves in a situation where a consignment has already been sealed, without the driver knowing exactly what that consignment is and how it has been secured. The sticker on the back of the vehicle may say it's 'EN 12642-XL', so the driver assumes everything is in order, but that can be far from the case.

For example, a challenging duty

cycle for that standard is multi-drop operations. Gaps between loaded items aren't allowed under EN 12642-XL. Instead, as a load diminishes, those holes must be blocked, or the load repacked back to the rear door, fitting lateral restraint straps or nets that must be capable of retaining 50% of the load.

"One way of doing this," advises Tony Sturgess, commercial engineering officer at trailer builder SDC, "is to have longitudinal straps fitted with 'D' rings - say, every 500mm built into the curtains at two heights [depending on load].

"These straps are attached to the curtain poles or by separate hooks to the front and rear frame. With a diminishing load, lateral ratchet straps can be passed across the rear and attached to the D-rings on the longitudinal straps. These are then pulling the load tight to the headboard and retain the positive fit."

Not all operations enable the load to be a positive fit. In these cases, an EN12642-XL trailer is not required, so the load must be fully strapped, he adds.

Where an EN12642-XL trailer is used, though, as with any equipment, it must be checked to ensure no damage has occurred to the body structure, including doors and curtains, as this

could reduce the body's structural strength and therefore invalidate the EN12642-XL certificate, were a load to move and cause an incident.

"Repairs to the bodywork must be done to the trailer/curtain manufacturer's instruction, to ensure the EN12642-XL certification is maintained," adds Sturgess. "A visual check by the driver should be carried out each time the trailer is loaded, as well as during maintenance checks." **TE**