



British Precast Drainage Association

Publications from the British Precast Drainage Association (BPDA):

BPDA was formed in 2017 from the integration of the Concrete Pipeline Systems Association (CPSA) and the Box Culvert Association (BCA).

Information published by both CPSA and BCA will be rebranded and replaced as BPDA in due course. New material will be branded BPDA.

All CPSA and BCA web traffic will be redirected to the new BPDA web site at www.precastdrainage.co.uk

GUIDE FOR OFFLOADING DELIVERIES FROM CONCRETE PIPELINE PRODUCT SUPPLIERS

1. Introduction

This Guide is intended for use by persons responsible for the safe delivery and unloading of vehicles which transport precast concrete drainage products from CPSA member factories to either construction sites or merchant's yards.

This Guide gives clear indications of the scope of responsibilities before, during and after the products have been delivered, and in two Appendices gives helpful advice for achieving a safe working practice.

This Guide also acknowledges the comprehensive information published on the HSE website; namely **“Safe driving: loading & unloading”**, also **“Delivering safely”** they are both available for download at: www.hse.gov.co.uk

2. Prior to Delivery

2.1 Prior to any delivery of precast products, and before leaving the manufacturers premises, the driver must make sure the load is safe and he/she is satisfied with how it is loaded. The load must then be properly secured using heavy duty restraining systems, such as ratchet webbing straps with sleeve protection. This is to prevent cuts and failure of the straps themselves due to sharp corners and edges of the products.

Nylon ropes should not be used to restrain, or hold secure, some of the heavy precast products that are delivered to customer sites. Apart from the possibility of failure of the ropes, it could lead to a potential hazard and danger on the public highways. It is advisable only to use ropes to secure any nets or sheets and not the actual precast product on the vehicle. Some members who manufacture other products apart from heavy precast units which can be secured using ropes safely, are advised to make sure the ropes are in good condition, free from cuts, knots and abrasions, and are edge protected when securing loads. However, where possible it is always advisable to use webbing restraining systems. Individual member site specific rules will determine the kind of securing systems that can be used

2.2 The three key 'dutyholders' in the delivery process are:

- I. The supplier;
- II. The carrier, and
- III. The recipient

Health and Safety legislation places a requirement for co-operation between these dutyholders and for all dutyholders to assess delivery and collection risks.

2.3 All parties should agree a safe delivery plan. In the case of regular deliveries, this should be an agreed written delivery plan. In the 'last minute, one-off basis' it may only be practical to exchange generic delivery safety information by email or telephone. A typical safe delivery plan is shown in Appendix A.

2.4 The supplier will provide such information as product weights, advice on how to offload the products, and advice on preparation of a Risk Assessment to offload the products.

2.5 The recipient should ensure that he knows what type of product is to be delivered and should familiarise himself as to whether any special lifting equipment is required. The supplier (the CPSA member manufacturer) can advise on this.

- 2.6 The recipient should make certain that he knows the individual weights of the products to be unloaded and that he has the correct mechanical lifting equipment necessary with the right capacity and reach for a safe offloading process.
- 2.7 A safe area in which to unload should be provided with adequate room for any manoeuvring required by the delivery vehicle. Also level ground capable of carrying the combined weight of the vehicle and load without any possibility of the vehicle sinking.

3. Delivery

- 3.1 The carrier has a responsibility to carry the products to site in a safe manner.
- 3.2 Advice on preferred methods of securing the products manufactured by CPSA member companies can be obtained from the suppliers. (See section 2.1)
- 3.3 If requested, and if available, 'side rail- fall protection' where possible, will be assembled at the load collection point and before leaving the manufacturing site. The design of the side rail – fall protection systems should allow most of the kit to be assembled and positioned from ground level. The full system will then be secured with top and middle strap rail sections to allow working on the bed of the vehicle safely.
- 3.4 On arrival at the delivery point, It is the driver's decision as to where he can manoeuvre his vehicle and it is his/her right to point out to the recipient of the goods any concerns that they may have about the chosen unloading area. (Note: Most hauliers in the industry have a long experience of carrying these products – See section 2.7).
- 3.5 Upon arrival at a safe delivery place, the driver will wear the appropriate PPE as designated by his/her company, and as determined by the recipient site rules before un-sheeting and loosening any straps, and securing devices.
- 3.6 The delivery driver should use an assessment flow chart such as is shown in Appendix B before unloading commences.

4. Offloading

- 4.1 The site or yard must take responsibility for the safety of the driver whilst the products are offloaded. If he is to remain in his cab, then no lifting operation should take place over the cab; if he is required by site practice to leave his cab, then a safe location must be provided for him.
- 4.2 The recipient should be aware that to be on the back of a lorry during the offloading process constitutes 'working at height' and so the requirements of the Working at Height Regulations 2005 must be satisfied. (See section 3.3)
- 4.3 Unless the delivery is made with a vehicle 'Crane mounted offload system', whereby the driver operates the crane. It is the recipient's duty to lift the products off the back of the wagon with appropriate safe lifting tackle using appropriate capacity craneage. (See section 2.6)
- 4.4 The recipient should ensure that there is adequate stocking area for the products and that they are stacked in a safe manner. Refer to the CPSA web site for further details.
- 4.5 In line with sections 3.3 and 4.2 The Freight Transport Association Guide entitled 'Preventing Falls from Vehicles' gives guidance on all aspects of the unloading procedures and notes that it may not be possible to unload without working at height. This document is available for download at <http://www2.fta.co.uk/information/otherissues/workplacesafety/falls.pdf>.

5. Summary

- 5.1** The manufacturers of precast concrete products undertake through their hauliers to deliver their products in a safe and secure manner.
- 5.2** The recipients of such deliveries have a responsibility to ensure that they have full knowledge of all aspects of the delivery and to have carried out all their obligations to make sure that the offloading operation is carried out safely with minimal risk to all parties.
- 5.3** The manufacturers are available to advise further on general handling of product, specialised lifting equipment and any other aspects of their products.

For further information please contact your usual supplier

CPM Group

Tel: 0117 981 2791
www.cpm-group.com

F P McCann

Tel: 01530 240 000
www.fpmccann.co.uk

Stanton Bonna

Tel: 0115 944 1448
www.stanton-bonna.co.uk

Milton Precast

Tel: 01795 425 191
www.miltonprecast.com

Concrete Pipeline Systems Association – The Old Rectory, Glenfield, Leicestershire, LE3 8DG

Tel: 0116 232 5170

Email: email@concretepipes.co.uk

Web: www.concretepipes.co.uk

Appendix A: Typical Safe Delivery Plan

(To be used in conjunction with Assessment Flow Chart found in Appendix B)

The following Safe Delivery Plan is for the purpose of the carrier who arrives at customer sites with precast products. The products are of varying shapes, sizes and weights, therefore specialist offloading equipment may be required. Information for this should be made at the order enquiry stage.

In order for a safe offloading procedure to commence there are certain points which must be observed.

- On arrival at customer site, the delivery driver must report to the responsible person in charge of deliveries and remind them of the type of product(s) that are being delivered. This is to help the site organize their workforce and equipment necessary to offload.
- The delivery driver must make sure he/she uses the designated on site traffic route, or otherwise as per instruction from the responsible person, and that the vehicle is parked safely and does not obstruct any highways or pedestrian walkways.
- The site is required to provide a hard standing area prior offloading of the products.
- If the vehicle is required to reverse while on the customer's site, a banks man, or responsible person must deliver instructions to the driver before the vehicle reverses.
- The delivery driver must make sure he/she parks the vehicle in a way as to ease the release and removal of all the necessary securing devices and that they are safe from other moving vehicles or pedestrians on site. This also applies if being loaded in order to return any products back to the manufacturer.
- The delivery driver must always make sure that full PPE is worn to the specifications of the customer requirements when he/she gets out of the vehicle.
- If safe to do so, the driver releases and removes the securing devices and stores them in his vehicle.
- Any lifting equipment used for offloading (provided by the manufacturer or recipient) should have a valid and current test certificate appropriate for the task and this should be validated prior to work commencing
- If the products are being delivered on a lorry mounted 'Crane offload' system, the operator should be fully trained and competent, and carry the relevant certification.
- If the recipient has the responsibility of offloading the products, then the driver satisfied that vehicle is ready for offloading. Can hand the vehicle over for unloading.

Avoidance of 'Working at Height' must be implemented where possible, But:

- If the recipient or driver has to access the load area, the recipient must provide a means of protection in case of 'falls from height'
- This can be in the form of air bags, fall arrester gantries etc.
- In some cases the vehicle may be fitted with fall arrester frames or "Side Rail Protection System" but this also depends on the type of product being carried, and must be used if and where possible.
- After the products have been successfully and safely offloaded, the driver must leave the site as per instruction by the responsible person.

This completes the safe offloading of precast products.

Appendix B: Assessment Flow Chart for Offloading Concrete Products on Customer Sites (Courtesy of Ian Kenning, CPM)

