

TB12 – Inflatables with clear chambers

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Title	TB12 – Inflatables with Clear Chambers		

Version	Date	Notes
V1.00	09-05-2025	Initial release – Authorised by CWW
	09-05-2027	Next review due date

Overview

Manufacturers have developed a new variant on a standard bouncy castle. This is in almost all aspects, a completely normal and compliant inflatable and all considerations of BS/EN-14960-1, and the PIPA inspection framework, shall apply.

The exception to this is that the forward-facing panels of the front pillars are made from a clear material, and the air chamber within the pillar has been adapted to enable ballons to circulate freely within.

The balloons are inserted into the tower (chamber) through an access point located on the tower itself.

This type of inflatable uses a structural material that does not comply with the requirements of BS/EN 14960-1. This technical bulletin will enable these devices which comply with the enclosed guidance, to be inspected under the PIPA inspection scheme.

Considerations

- 1. Failure of materials leading to:
 - a) Insufficient evacuation time
 - b) Hard or sharp edges
 - c) Entrapment
 - d) Failure of containment
 - e) Failure to support users

- 2. Access to items contained within chamber:
 - a) Balloons
 - b) Dangling features
 - c) Air agitated strands
- 3. Additional concerns:
 - a) Person attracted to stand in front of towers
 - b) Users falling from step while attempting to look inside
 - c) Collisions between users and persons

Inspection Considerations

- 1. Materials used by manufacturer
 - a) The clear material must be either
 - i. a polyvinylchloride (PVC) type with a minimum thickness of 0.5mm.
 - ii. a thermoplastic polyurethane (TPU) type with a minimum thickness of 0.3mm.
 - b) Materials must be attested by the manufacturer and be recorded in any pre-use and/or initial inspection reports.
- 2. Condition of clear material
 - a) The clear material must not show signs of strain or failure.
- 3. Location and position
 - a) The pillar must not be formed of clear material which consists of more than 180° of its total circumference, and the centre of the clear panel must face directly forward.
 - b) The clear material must not form any part of the connection between the pillar and the side wall. The clear material may connect directly to the bed.
- 4. Access to the chamber
 - a) Users must not be able to easily access the opening mechanism of the chamber.
 - b) The access panel to the chamber must not be located within the playing area.

c) The opening mechanism of the chamber may be a zipper. It must be secured by a Velcro panel to discourage users tampering with the chamber zip.

5. Deflation time

- a) Deflation time in the event of a power failure is assessed in the usual manner.
- b) Internal pressure readings should be taken with the access panels to the chambers closed.
- c) An assessment of the deflation and evacuation time during failure of the clear fabric may be assessed by opening the access panels to the chamber.

6. Step

- a) If there is a step present, it does not have to be wider than that specified in BS/EN 14960-1.
- b) There must be a sufficiently sized step available to support users who wish to observe the contents of the chamber.
- c) For the avoidance of doubt, the front step should overlap the front pillars by at least 50% of the width of the pillar.

Examples of devices

