

EN71-8 ASTM Toys Testing Equipment Pendulum Test Apparatus for Toddler Swing



A pendulum is used to simulate a child falling forwards and backwards.

Specification

Barbell weight	4.5kg
Diameter of barbell weight	210mm
Material	steel

Procedure

The pendulum test apparatus consists of a 4,5 kg barbell weight at the top of a freely pivoting bar and a 4,5 kg barbell weight affixed to the bottom of the test apparatus. The

barbell weights shall have a maximum diameter of 210 mm. The total mass of the pendulum test apparatus shall not exceed 10,9 kg.

Suspend the toddler swing seat in accordance with the manufacturer's instructions. If the swing height is

adjustable, perform the test at both the highest and lowest settings. With the swing at rest, establish a

horizontal reference line on the swing seat.

Secure the complete pendulum test apparatus within 13 mm of the geometric centre of the swing seating

surface with the direction of travel of the pendulum arm the same as the swing direction.

If the seating area of the toddler swing is made of a flexible material, additional bracing material may be added

to the exterior bottom of the swing seat to aid in securing the pendulum test apparatus. Care should be taken

to ensure that the additional bracing material does not influence the test results.

The centre of gravity of the top weight of the pendulum test apparatus shall be at a height of 410 mm from the

top of the seating surface when the pivot arm is positioned vertically

Testing Standards

ISO -8124-4, 6.1.5

