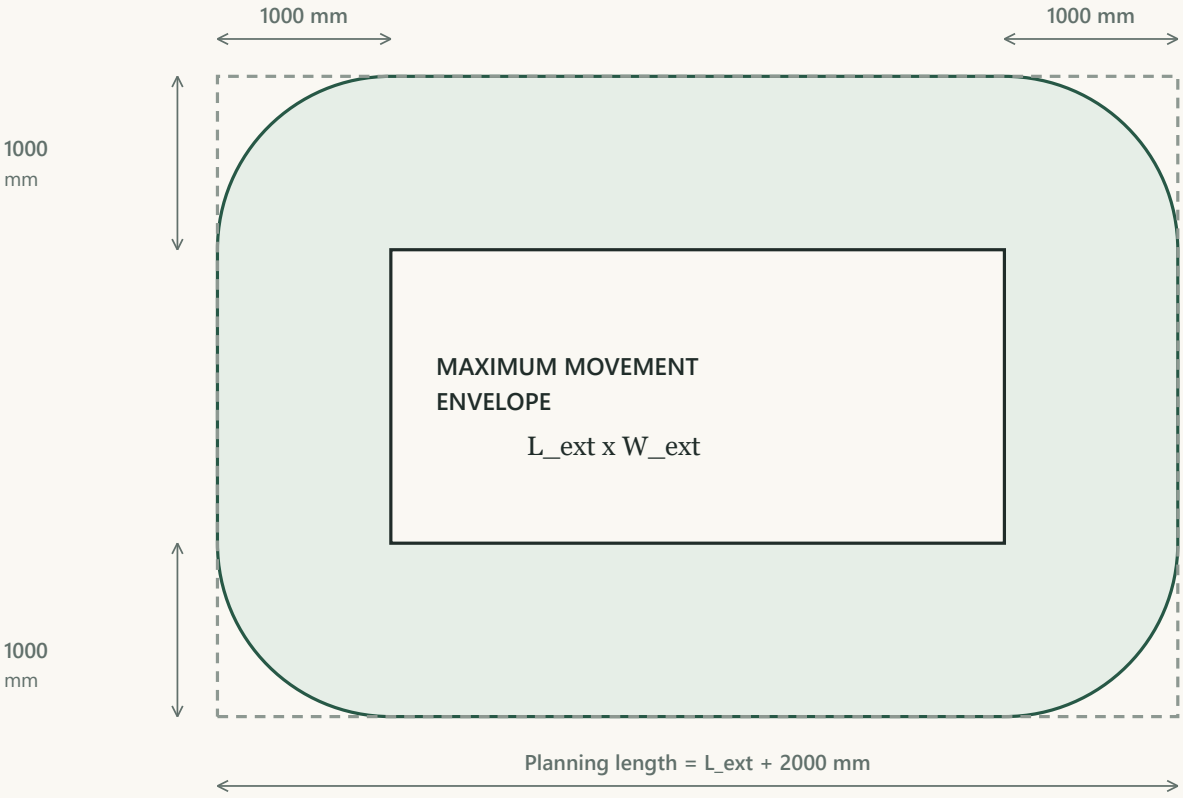
MEASURE THE MOVEMENT, THEN CALCULATE

Plan the surrounding space

For the 15 HonPlay single-seat spring riders. Record the equipment envelope at maximum movement, then calculate the planning dimensions below. No measured movement dimensions have been supplied for this worksheet.

SCHEMATIC PLAN VIEW / NOT TO SCALE



Planning width = W_ext + 2000 mm

READ THE TWO BOUNDARIES

Green rounded outline: an illustrative offset from a rectangular movement envelope. The actual required area follows the full measured movement envelope and the applicable standard.

Dashed outer rectangle: a convenient bounding footprint for layout planning. Its corner areas are not a claim about the exact shape or area of the required impact area.

CALCULATION BASIS

EN 1176-6, clause 4.10: for the seated equipment covered here, allow at least 1000 mm beyond the equipment perimeter at its most extreme movement positions. Confirm the equipment classification and full site requirements before finalising the layout.

COLLECTION CALCULATION REGISTER

Complete each model row

All dimensions are in millimetres. Static product dimensions are supplied for identification only. Fill the maximum-movement and planning columns after measuring or validating the full movement envelope.

MODEL	STATIC L x W	MAX. MOVEMENT L_ext x W_ext	PLANNING SIZE L_plan x W_plan
HP-SR-101 Woodland Sprout	884.6 x 428	_____ x _____	_____ x _____
HP-SR-102 Mushroom Sprite	801 x 428	_____ x _____	_____ x _____
HP-SR-103 Acorn Explorer	888.6 x 428	_____ x _____	_____ x _____
HP-SR-201 Panda Pal	869.7 x 424.8	_____ x _____	_____ x _____
HP-SR-202 Little Elephant	1016.3 x 424.8	_____ x _____	_____ x _____
HP-SR-203 Fox Explorer	1018.2 x 428	_____ x _____	_____ x _____
HP-SR-301 Blue Whale	913 x 424.8	_____ x _____	_____ x _____
HP-SR-302 Sea Turtle	998.8 x 424.8	_____ x _____	_____ x _____
HP-SR-303 Little Submarine	962.3 x 424.8	_____ x _____	_____ x _____
HP-SR-401 Fire Rescue	894.4 x 428	_____ x _____	_____ x _____
HP-SR-402 City Tram	881.8 x 424.8	_____ x _____	_____ x _____
HP-SR-403 Little Excavator	928.4 x 390	_____ x _____	_____ x _____
HP-SR-501 Rainbow Arc	840.2 x 428	_____ x _____	_____ x _____
HP-SR-502 Pebble Layers	866.1 x 424.8	_____ x _____	_____ x _____
HP-SR-503 Flowing Wave	902.7 x 424.8	_____ x _____	_____ x _____

L_plan = L_ext + 2000; W_plan = W_ext + 2000. Use the same fixed site reference for every extreme position. Never insert the static L or W in place of an unmeasured L_ext or W_ext.

Measured by: _____ Date: _____ Project: _____

MEASUREMENT & SPECIFICATION CHECK

From a sketch to a site plan

01 Define the complete movement envelope

Measure the equipment at all permitted extreme positions, including front, back and side movement and any rotation. Include every projecting part. Mark the union of these projections on the plan; record its overall L_ext and W_ext.

02 Reference the installed play surface

Record the greatest height of the seat centre above the finished protective surface as the rider reaches its extreme positions. Use this value as h for the surfacing calculation. Static decorative height is not a substitute for free height of fall.

03 Select the surfacing

For Types 2, 3 or 4, the surfacing critical fall height (CFH) must be at least 600 mm and no lower than the actual free height of fall h. Planning target: CFH >= max(h, 600 mm). CFH is a tested surfacing performance value, not a rubber thickness. Confirm the equipment type and its applicable fall-height limit.

04 Check the whole site

Confirm nearby equipment, access, obstacles and permitted overlap of areas using the applicable standards and project instructions. Confirm the equipment classification, installation and inspection requirements before fixing the site layout.

RECORD BEFORE FINALISING

Greatest applicable fall height: _____ mm Selected surfacing CFH: _____ mm

Layout reviewed by: _____ Date: _____

Installation drawing / measurement record reference: _____

STANDARD REFERENCES

EN 1176-6:2017+C1:2019, clauses 4.2 and 4.10. Current standard listing: NEN.

Issued BS EN 1176-6:2017 text, clause 4.10 (p. 12).

Surfacing: EN 1176-1, clause 4.2.8.5.2; current interpretation context, CEN/TR 17842-2:2024 (SIST).

This worksheet provides calculation steps and blank records. It does not supply a measured final safety-area size for any model.