OBSTACLE COURSE PLAY ZONE

Technical & Design Specifications Document

Doc ID: SPEC-OPS-2026
Target Age: 5–12 Years

1. PROJECT SCOPE & LAYOUT

This document outlines the standard structural, spatial, and safety specifications for the installation of an active Obstacle Course Play Zone. The zone is designed to enhance physical agility, balance, and cooperative play while adhering to strict safety compliance standards.

2. SPATIAL & ZONE REQUIREMENTS

Zone Area	Dimensions & Clearance	Primary Elements
Zone A: Entry & Prep	Min. 4.0m × 3.0m Clear height: 3.0m	Briefing area, safety matting, seating benches, footwear cubbies.
Zone B: Low Balance	Min. 8.0m × 4.0m Clear height: 3.5m	Stepping logs, low balance beams, zig-zag balance steps, low web nets.
Zone C: Dynamic Agility	Min. 10.0m × 5.0m Clear height: 4.5m	Ninja wall, hanging ring traverse, cargo net climb, foam obstacle blocks.
Zone D: Finish & Cool Down	Min. 4.0m × 4.0m Clear height: 3.0m	Soft landing pads, egress lane, hydration station mount.

3. MATERIALS & CONSTRUCTION STANDARDS

Structural Framework

- **Main Posts:** Heavy-gauge galvanized steel frame (100mm × 100mm) with powder-coated anti-corrosion finish.
- **Padding:** High-density EVA foam protection (min. 50mm thickness) wrapped in heavy-duty vinyl cover on all structural uprights up to 2.0m height.
- **Connectors:** Grade 316 stainless steel hardware and tamper-proof security bolts.

Surfacing & Safety Matting

- **Impact Surfacing:** Seamless poured-in-place EPDM rubber surfacing or 60mm safety interlocking foam tiles.
- **Critical Fall Height:** Surface calibrated for maximum fall height rating of 2.4m.
- **Ropes & Nets:** 16mm steel-reinforced vandal-resistant polypropylene ropes with aluminum connector knots.

4. COMPLIANCE & OPERATIONAL GUIDELINES

Category	Requirement Standard
Safety Standards	Compliant with ASTM F1487 / EN 1176 play equipment safety codes.
Capacity Limit	Maximum 25 active participants per section simultaneously.
Inspection Protocol	Daily visual checks of padding; monthly hardware torque testing; annual full structural safety audit.