

PH FITNESS

3-Tier Dumbbell Rack

TWO MODELS: Model A — 138 cm | Model B — 162 cm

Heavy-Duty Steel • 500 kg+ Capacity • Hex Dumbbells

USER MANUAL & ASSEMBLY GUIDE



MODEL A — MEDIUM

138 × 55 × 87 cm

Shelf width: 128 cm

~upto 15 pairs of hex dumbbells

500 kg+ total capacity

MODEL B — LARGE

162 × 55 × 87 cm

Shelf width: 152 cm

~upto 18 pairs of hex dumbbells

500 kg+ total capacity

Model
3-Tier Dumbbell Rack

Document Type
User Manual

Version
1.0 — 2025

Your gym. Your performance. Your pace.

1. Safety Instructions

Read all safety instructions before assembling or loading this rack. These instructions apply equally to both Model A and Model B. Follow all rules to prevent injury, dumbbell damage and floor damage.

⚠ WARNING: Never exceed the maximum rated load of 500 kg+ total across all three tiers. Both models are rated equally. Overloading can cause structural failure and serious injury.

⚠ WARNING: Always load the HEAVIEST dumbbells on the BOTTOM tier. Top-heavy loading dramatically increases the risk of the rack tipping forward. This is the single most critical safety rule.

⚠ WARNING: The rack must be FULLY assembled and all bolts torqued to 55–60 Nm before loading any dumbbells. Never load a partially assembled rack.

General Safety — Both Models

- 1–2 persons required for assembly. 2 persons strongly recommended for Step 6 (standing the frame).
- Place the rack on a level, hard, stable floor. Rubber gym matting is strongly recommended.
- Do not use this rack as a step stool, climbing frame or for any purpose other than dumbbell storage.
- Keep children and pets away from the rack during assembly and use.
- Inspect all bolts and the rack structure visually before each use.
- If any bolt is loose, bent or the frame shows deformation — unload and do not use until repaired.
- The rubber feet protect the floor and prevent sliding — keep them clean and intact.

Loading Safety

- Always place dumbbells with handles facing outward for safe, ergonomic retrieval.
- Lower dumbbells carefully onto shelves — never drop them from height. Impact loading stresses welds.
- Retrieve and replace one dumbbell at a time.
- Stand directly in front of the tier being accessed — do not reach across the body.

Placement Requirements

- Allow minimum 100 cm clear access space in front of the rack at all times.
- Model A minimum floor area: 140 cm × 80 cm. Model B: 165 cm × 80 cm.
- Ensure rack is completely stable and does not rock before loading any dumbbells.
- For high-traffic environments: position rack against a wall for additional security.

2. Product Overview & Model Selection

The PH Fitness 3-Tier Dumbbell Rack is available in two sizes. Both models are structurally identical — same A-frame design, same height, same depth, same 500 kg+ load rating. The only difference is width, which determines dumbbell capacity.

MODEL COMPARISON

Specification	Model A — Medium	Model B — Large	Both Models
Total Width	138 cm	162 cm	Different
Shelf Width	128 cm	152 cm	Different
Height	87 cm	87 cm	Identical
Depth	55 cm	55 cm	Identical
Total Load	500 kg+	500 kg+	Identical
Tier Count	3 tiers	3 tiers	Identical
Dumbbell Capacity	~15 pairs	~18 pairs	Different
Assembly Time	~25 min	~30 min	Similar
Floor Space	~138 x 55 cm	~162 x 55 cm	Different

COMPATIBLE DUMBBELL TYPES:

Chrome Hex Dumbbells	Rubber Hex Dumbbells	Neoprene Hex Dumbbells	Urethane Hex Dumbbells
2.5 kg - 30 kg Standard chrome hex Both models compatible.	2.5 kg - 30 kg Rubber end cap hex Both models compatible.	2.5 kg - 20 kg Neoprene coated hex Both models compatible.	2.5 kg - 30 kg Urethane coated hex Both models compatible.

Which Model to Choose

Choose Model A (138 cm) if...	Choose Model B (162 cm) if...
✓ Space is limited — floor area under 145 cm wide	✓ You have space for a 165 cm+ wide rack
✓ You store hex dumbbells up to 25 kg (10 pairs)	✓ You need to store a full set up to 30 kg (15+ pairs)
✓ Home gym with 1–2 users	✓ PT studio, commercial gym or 3+ users
✓ Dumbbell set 2.5–25 kg range	✓ Dumbbell set 2.5–30 kg full range

i NOTE: Both models are fully identical in height (87 cm), depth (55 cm), load capacity (500 kg+), assembly method and compatible dumbbell types. Only the width and shelf length differ.

3. Technical Specifications — Both Models

Verified Dimensions

Specification	Model A — Medium	Model B — Large
Total Width (base)	138 cm	162 cm
Shelf Width	128 cm	152 cm
Total Depth	55 cm	55 cm
Total Height	87 cm	87 cm
Dumbbell Capacity	~upto 15 pairs	~upto 18 pairs
Floor Space Required	~140 × 55 cm	~165 × 55 cm

Construction — Both Models Identical

Frame Material	Heavy-duty thick-wall steel
Finish	Matt black powder coating — scratch and sweat resistant
Colour	Matt black
Shelf Tiers	3 tiers — top, middle, bottom
Shelf Design	Angled forward ~10° — ergonomic dumbbell access
Fasteners	M10×70 bolts (4 groups) + angle iron brackets (6 pieces)
Rubber Feet	4 anti-slip rubber feet — floor protection
Rated Load	500 kg+ total (both models)

Compatible Dumbbells

Hex Dumbbells (rubber or chrome)	2.5 kg – 30 kg per pair — both Model A and Model B
NOT Compatible	Round PU dumbbells, kettlebells, barbells, weight plates, medicine balls

General

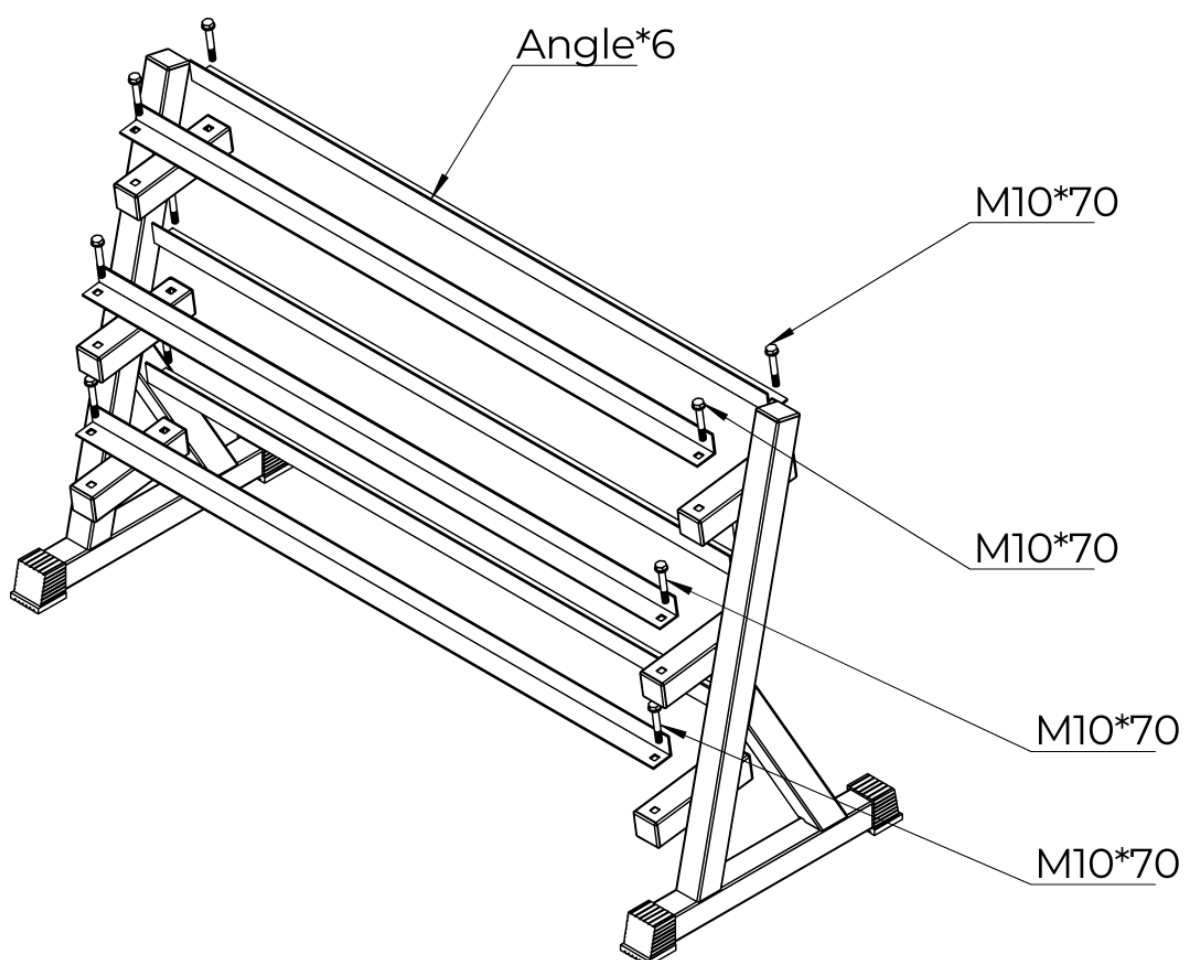
Available Models	Model A (138 cm) and Model B (162 cm)
Assembly Time	20–30 minutes (2 persons)
Warranty	2 years from date of purchase
Delivery	Free home delivery
Brand	PH Fitness — gevestigd in Sittard, Nederland

4. Assembly Instructions

i NOTE: Assembly procedure is identical for both Model A and Model B. Model B simply has longer shelf rails. Assembly time: 20–30 minutes. Tools required: 17 mm spanner or adjustable wrench (not included in package).

Preparation

- Clear floor area: 2.0 × 1.2 m (Model A) or 2.4 × 1.2 m (Model B).
- Lay all components on a clean protected surface.
- Cross-reference all parts against the parts list in Section 4.
- If installing on gym flooring, position the rack in its final location before assembling.
- Read all 7 steps before picking up any tools.



Step 1 — Identify and Position the Side Uprights

1

Lay Both Side Upright Frames Flat — Identify Front and Rear Orientation

Place both side upright frames (#1) flat on the floor, parallel to each other, approximately 128 cm apart (Model A) or 152 cm apart (Model B). Identify the front face (slightly angled for shelf tilt) and the rear face (X-brace mounting side). Both uprights must face the same direction.

- Lay left side upright on the floor.
- Lay right side upright parallel at the correct distance apart.
- Identify front and rear face of each upright before connecting anything.
- Identify the three sets of bracket mounting holes — one per tier.

Step 2 — Connect Base Rail

2

Attach Base Rail (#6) Between Both Uprights

Position the base rail (#6) horizontally between the bases of both uprights. Insert M10×70 bolts (#8) through the upright and base rail holes. Add washers and nuts. Leave finger-tight only at this stage — full torque applied in Step 7.

- Position base rail (#6) between the two uprights at floor level.
- Align mounting holes precisely.
- Insert M10×70 bolts with washers. Thread nuts — finger-tight only.

Step 3 — Attach X-Brace

3

Mount X-Brace Cross Support (#5) to the Rear Face

With the frame still flat, attach the X-brace (#5) diagonally across the rear face of the two uprights. The X-brace provides critical rigidity — do not skip or omit this component. Secure with M10×70 bolts — finger-tight only.

- Position X-brace (#5) diagonally across the rear face of both uprights.
- Insert M10×70 bolts through all four mounting points.
- Finger-tight only — do not fully tighten at this stage.

Step 4 — Mount 6 Angle Iron Brackets

4

Attach Angle Iron Brackets (#7) — 2 Per Tier, 3 Heights

Attach the 6 angle iron brackets (#7) to the inside faces of both uprights — 2 brackets at each of the 3 tier heights. Each bracket mounts with its shelf-support surface pointing forward and slightly upward to create the ergonomic shelf tilt. Use M10×70 bolts — finger-tight only.

- Identify the three tier positions: top, middle and bottom.
- Attach one bracket to the LEFT upright at each tier (3 brackets left side).
- Attach one bracket to the RIGHT upright at each tier (3 brackets right side — 6 total).
- All brackets must face the same direction — support surface pointing forward-upward.
- M10×70 bolts — finger-tight only.

Step 5 — Install Shelf Rails

5

Bolt Shelf Rail Sets Onto the Angle Iron Brackets — 3 Tiers

Position each shelf rail set (top #2, middle #3, lower #4) across the angle iron brackets on both sides. Each set has a front lip rail and two rear rails — position per the bracket alignment. Bolt each rail end to its bracket. Finger-tight only until all rails are positioned.

- Place the TOP shelf rail set (#2) onto the top-tier angle iron brackets.
- Bolt both ends using M10×70 bolts — finger-tight only.
- Repeat for MIDDLE shelf rail set (#3).
- Repeat for LOWER shelf rail set (#4).
- Verify all shelves appear level and parallel before proceeding.

Step 6 — Stand the Frame Upright

6

Stand Frame Upright — 2 Persons Strongly Recommended

With all rails attached (loosely), stand the rack upright to its final position. Have one person at each side. Once upright, press the 4 rubber foot caps (#9) firmly onto all base feet. Verify the rack stands stable with all 4 feet in full floor contact.

- Clear the final position floor space.
- With one person at each side, carefully lift and stand the rack upright.
- Lower into its final floor position.
- Press rubber foot caps (#9) firmly onto all 4 base feet.
- Rock the rack gently in all directions — all 4 feet must contact the floor uniformly.
- If the rack rocks, check the floor is level and adjust rubber feet as needed.

Step 7 — Final Torque & Safety Check

7

Torque ALL M10 Bolts to 55–60 Nm — Systematic Order

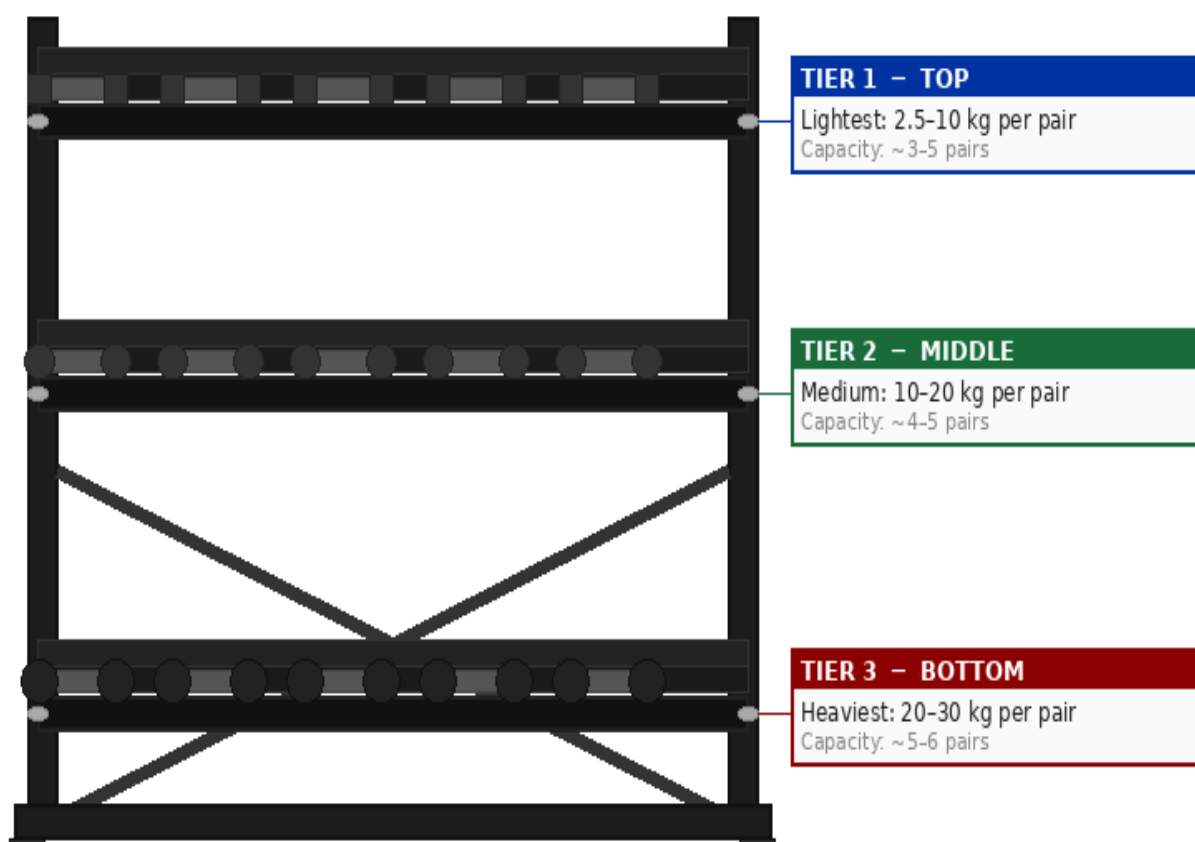
With the rack standing upright, tighten all M10×70 bolts using a torque wrench and 17 mm socket. Work in order: base rail → X-brace → angle iron brackets → shelf rails. Do NOT overtighten — deforming the angle steel brackets will compromise shelf alignment.

- Tighten base rail bolts to 55–60 Nm.
- Tighten X-brace bolts to 55–60 Nm.
- Tighten 6 angle iron bracket bolts to 55–60 Nm each.
- Tighten all shelf rail bolts to 55–60 Nm.
- Push rack firmly from both sides and front — must feel completely rigid.
- Load a test dumbbell on each tier before loading the full set.

⚠ WARNING: Re-check all bolt torque after the first 2 weeks of use. Bolts settle under load. Thereafter: monthly for commercial use, every 3 months for home use.

5. Loading Guide & Compatible Dumbbells

Correct loading order is essential for rack stability and user safety. Both models follow the same loading rules and have the same 500 kg+ total rated capacity.



Loading order: heaviest at bottom, lightest at top — BOTH models

Loading Order — Critical for Safety

Tier	Weight Range	Approx. Capacity	Notes
TIER 1 — TOP	2.5 kg – 10 kg	3–5 pairs	<i>Lightest. Reach above shoulder height.</i>
TIER 2 — MIDDLE	10 kg – 20 kg	4–5 pairs	<i>Most ergonomic. Easiest safe retrieval.</i>
TIER 3 — BOTTOM	20 kg – 30 kg	5–6 pairs	<i>Heaviest always at base. Load LAST.</i>

Compatible Dumbbell Types

Hex Dumbbells (rubber or chrome)	2.5 kg – 30 kg per dumbbell
NOT Compatible	Round PU dumbbells, kettlebells, barbells, Olympic plates, medicine balls

i NOTE: Store hex dumbbells in pairs with handles facing outward. Arrange left-to-right by weight within each tier — lightest on the left, heaviest on the right. This creates a visually clear system and makes selection faster and safer.

6. Maintenance & Care

Both models require identical maintenance. The heavy-duty steel construction requires minimal care — regular bolt checks and simple cleaning are sufficient for years of professional performance.

Frequency	Component	Task	Standard
Weekly	Visual inspection	Check for loose bolts or deformed shelf rails — do not use if damage found	No movement
Weekly	Wipe down	Wipe all steel surfaces with damp cloth — sweat, chalk and dust	Dry surface
Weekly	Rubber feet	Check all 4 feet are intact, not cracked, not slipping	Full contact
Monthly (home)	All M10 bolts	Hand-check all bolts — retighten if any movement detected	No movement
Monthly (commercial)	Full torque check	Torque wrench check all M10 bolts to 55–60 Nm	55–60 Nm
3 Monthly (home)	Full torque check	Torque wrench all M10 bolts to 55–60 Nm	55–60 Nm
3 Monthly	Powder coat	Check coating for chips — touch up with matte black spray	Fully coated
Annually	Full inspection	Check all welds and steel joints for stress cracks	No damage

Cleaning

- Wipe steel with a damp microfibre cloth and mild soap. Dry immediately — standing moisture can mark the powder coat.
- Do not use abrasive pads, steel wool or solvent-based cleaners — these damage the powder coat.
- Gym chalk and rubber dumbbell residue are the main soiling agents — wipe after each session.
- Rubber feet: wipe with a damp cloth only. Do not use alcohol-based cleaners on rubber.

7. Troubleshooting

Problem	Likely Cause	Solution
Rack rocks or wobbles	Floor uneven; 1 or more rubber feet not in full contact	Check floor is level. Ensure all 4 rubber feet (#9) are fully seated and intact.
Shelf rail feels loose	Bracket or rail bolts below target torque	Unload that tier. Retorque all M10 bolts for that tier to 55-60 Nm.
Rack leans or tips forward	Top tiers overloaded vs bottom	Redistribute — heaviest dumbbells MUST be on bottom tier always.
A bolt won't stay tight	Thread damage; wrong bolt; no thread-lock	Check M10×70 specification. Apply mild thread-lock compound if persistent.
Rubber feet slip on floor	Floor type; contaminated feet	Clean both rubber feet and floor surface. Use rubber gym matting.
Frame creaks under load	Bolt torque has settled since assembly	Remove dumbbells. Re-torque all M10 bolts to 55-60 Nm.
Shelf rail slightly bowed	Overloaded tier; impact-loaded dumbbells	Reduce weight on that tier. Never drop dumbbells onto shelves.
Powder coat chipped	Impact from dumbbells	Touch up with matt black aerosol spray paint. Prevent future impacts.

8. Warranty & Customer Support

Warranty Terms — Both Models

Warranty Period	2 years from original date of purchase
Frame & Uprights	Covered — manufacturing defects and weld failures
Shelf Rails & Brackets	Covered — manufacturing defects
Powder Coat	Covered — factory defects (not wear from normal use)
Rubber Feet	Covered — manufacturing defects (normal wear excluded)
NOT Covered	Overloading beyond 500 kg, use with non-hex dumbbells, impact damage, modifications, normal wear

Contact & Warranty Claims

- Quote product and model: PH Fitness 3-Tier Dumbbell Rack — Model size.
- Have proof of purchase ready before contacting support.
- Do NOT return to point of sale — contact PH Fitness directly first.
- Provide clear photographs and a description of any defect.

PH FITNESS

Website: phfitness.nl

Mail: support@phfitness.nl

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