

Installation Guide: NexBot Robotics 611-016 Perimeter Guard Panel 2000mm x 1000mm

SKU: NXB-GEN-611-016 | Revision: 1.0 | Category: Safety Systems > Safety Fencing > Perimeter Guards

DANGER: Disconnect all power sources before beginning installation. Follow lockout/tagout (LOTO) procedures per OSHA 1910.147.

1. Required Tools & Materials

- Safety Glasses and Steel-Toed Boots
- Work Gloves
- Metric Socket/Wrench Set
- Torque Wrench (optional, for post mounting)
- 4-foot Spirit Level
- Tape Measure
- Rubber Mallet
- Panel Lifting Straps or Grips

2. Pre-Installation Checks

1. Verify that the installation area is clean, level, and free of obstructions.
2. Confirm receipt of all required mounting hardware (posts, brackets, fasteners) as per the system design plan.
3. Inspect each NexBot Robotics 611-016 panel for any shipping damage, such as dents or scratches to the powder-coat finish.
4. Review the overall safety fencing layout diagram to confirm the correct placement and orientation for this 2000mm x 1000mm panel.
5. Ensure the floor surface is suitable for anchoring the support posts according to NexBot Robotics guidelines.
6. Confirm that at least two trained personnel are available for installation, as the panel weighs 24.5 kg.

3. Installation Procedure

Step 1: Position and Secure Mounting Posts

Install the vertical mounting posts according to the master layout plan. Ensure posts are plumb using a spirit level and securely anchored to the floor per the post's specific installation guide.

Warning: Improperly anchored posts can lead to fence instability and system failure. Follow all anchoring specifications precisely.

Step 2: Attach Lower Panel Brackets

Loosely attach the lower mounting brackets to the installed posts at the specified height. Do not fully tighten the fasteners at this stage to allow for panel alignment.

Step 3: Prepare Panel for Lifting

Unpack the NXB-GEN-611-016 panel on a clean, protected surface to avoid scratching the finish. Ensure a clear path exists from the unpacking area to the installation point.

Warning: Panel has finished edges that can be sharp. Always wear protective work gloves when handling.

Step 4: Lift and Position the Panel

Using two personnel and proper lifting techniques, carefully lift the 24.5 kg panel. Guide the bottom edge of the panel into the loosely attached lower brackets between the two posts.

Warning: Crush and pinch hazard. Keep hands and fingers clear of the space between the panel and the mounting posts during placement.

Step 5: Attach Upper Panel Brackets

While one person holds the panel stable and vertical, the second person should attach the upper mounting brackets. Insert fasteners but do not fully tighten them yet.

Step 6: Align and Level the Panel

Use a spirit level along the top 2000mm edge of the panel to ensure it is perfectly horizontal. Adjust the panel's position within the brackets as needed to achieve alignment with adjacent panels and ensure consistent gaps.

Step 7: Secure All Fasteners

Once the panel is correctly aligned and level, systematically tighten all upper and lower bracket fasteners. Ensure they are secured firmly to prevent any movement or vibration during robot operation.

Warning: Do not over-torque fasteners, as this can damage the brackets or panel frame. Tighten to a snug fit.

4. Post-Installation Verification

1. Verify that the panel is rigid and does not exhibit excessive movement when manual pressure is applied.
2. Check that the gap between the bottom of the panel and the floor complies with safety standards (e.g., ISO 13857) to prevent access.
3. Ensure all fasteners on the panel brackets are secure and have been tightened correctly.
4. Visually inspect the panel for any scratches or damage that may have occurred during installation and touch-up if necessary.
5. Confirm the panel's position matches the approved engineering drawings for the workcell.
6. Wipe down the panel to remove any dirt or handprints from the installation process.

Note: For technical support, contact your authorized service provider or visit <https://robotics.barca.group/support>.

