READY TO INSPECT — FIELD CHECKLIST

Busway annual maintenance checklist

The annual busway (bus duct) service is the deep pass: the measurements, cleanings and tests a quarterly round doesn't reach. This checklist keeps the full service on record with the photos that make it defensible later. Work is commonly verified against NFPA 70B, NETA maintenance testing standards. Confirm the edition your authority having jurisdiction has adopted.

Who runs it: The facility electrician recording the inspection during a planned outage, checking joint bolts while the testing firm performs the electrical tests on the run. When: Once a year during a scheduled shutdown, coordinated with the NETA technician so the busway is locked out and joint covers opened while it's dead, then tested before the run is re-energized.

Isolation and access

- [ ] Owner told which floors and loads lose power
  Written outage notice agreed with the owner: panels, floors and any plug-in loads that go dark, the window, the restore order and any temporary feed needed.
  No photo required
- [ ] Every feed to the run identified for lockout
  Source breaker, any tie or alternate feed and anything that could backfeed the run listed and locked, with the utility coordinated where it is service busway.
  No photo required
- [ ] Busway locked out and verified dead
  Feed isolated, absence of voltage tested at the run, lockout applied before any joint cover is opened.
  2 photos required
- [ ] Joint covers opened and joints inspected
  Bolted joints exposed and cleaned of dust, no discoloration, deformation or moisture staining on the bars, insulators clean and uncracked.
  2 photos required

Joint torque

- [ ] Joint method taken from the manufacturer's instructions
  Instructions on hand for the joint type: torque-indicating bolt heads, a set torque or a resistance check, and when a joint is re-torqued or its bolt replaced.
  No photo required
- [ ] Joint bolts checked to torque at the boltings
  Each joint torque verified or its resistance measured per the manufacturer, re-torqued only where found loose, belleville washers at the specified flatness, any that moved noted for re-scan.
  2 photos required
- [ ] Plug-in stab contacts inspected
  Plug-in stabs and contact fingers checked for pitting, spring tension and alignment, cleaned and re-seated where required.
  No photo required
- [ ] Plug-in unit switches, fuses and lugs inspected
  Where the run has plug-ins, each one opened dead, switch or breaker and load lugs free of heat marks, fuses matching the unit label, and the handle mechanism moving freely.
  No photo required

Run and supports

- [ ] Hanger hardware checked tight along the run
  Rods, clamps and fasteners checked with hand tools at every reachable section, beyond the quarterly's visual look, riser springs set to the manufacturer's mark.
  1 photo required
- [ ] Expansion and flexible fittings checked where fitted
  Expansion fittings free to slide and flexible connections at transformers or gear intact, no cracked braid, binding or stressed joint.
  No photo required

Testing observed and recorded

- [ ] NETA electrical tests witnessed and logged
  Insulation-resistance and any contact-resistance results from the testing tech recorded along the run, out-of-range values flagged before re-energizing.
  2 photos required

- [ ] Ground path continuity measured along the run
  Testing firm's ground continuity reading from the source to the far end set against the last outage, and any high-resistance joint cleaned and remade before closing up.
  1 photo required

Return to service

- [ ] Covers refitted and the run cleared before re-energizing
  Joint covers back with every screw, any plug-in units stabbed and latched, the run clear of tools and temporary grounds, and each lock removed by the person who hung it.
  1 photo required

- [ ] Run re-energized and loads confirmed back with the owner
  Feed closed in the planned order, voltage read under the energized-work procedure, owner confirms floors and loads restored, reworked joints flagged for the next scan.
  1 photo required