

Expansion Joints — Installation, Operation & Maintenance Manual

Changzhou Baoshuo Pipe Fittings Co., Ltd.
www.baoshuopipe.com | sales@baoshuopipe.com

Version 1.0 · 2026

1. Overview

This manual covers Baoshuo expansion joints — the straight coupling, flanged adapter, double-flange, elbow, tee and cross types. Expansion joints join and seal pipe ends while absorbing axial movement and thermal expansion. The telescopic body with rubber sealing sleeves compensates for misalignment and simplifies installation. For UPVC, PVC-M, ABS, steel, ductile iron, FRP and cement pipelines.

2. Safety Precautions

- Depressurize the line before installation where safe; wear appropriate PPE.
- Confirm the pipe ends are fully inserted before tightening — a short insertion under pressure is dangerous.
- Do not over-tighten the seal screws — the joint must remain free to slide axially.

3. Tools Required

Wrenches (torque wrench recommended), cleaning cloth, pipe-safe solvent, marker for insertion depth, measuring tape.

4. Installation Steps

1. **Select the correct joint.** Choose the expansion joint matching the pipe OD and the required connection type.
2. **Prepare the pipe ends.** Clean both pipe ends and mark the full insertion depth.
3. **Open the seals.** Loosen the seal screws/bolts so the pipe ends can slide into the sleeves freely.
4. **Insert the pipe ends.** Push both pipe ends to the full insertion depth, keeping the designed expansion gap centered in the joint.
5. **Tighten evenly.** Tighten the seal screws/bolts evenly in a criss-cross sequence until snug. Do not over-tighten — axial sliding must remain possible for thermal movement.
6. **Test.** Pressurize to working pressure and check the sleeve seals.

5. Pressure Testing

Hold at working pressure and inspect both sleeves. Re-tighten slightly if weeping, but never lock the joint rigid.

6. Maintenance & Storage

- Periodically check seal-screw torque.
- Never anchor the joint rigid — it must slide to absorb thermal expansion.
- Inspect rubber sleeves for ageing; replace if cracked or hardened.