

INSTALLATION INSTRUCTIONS

This instruction has been prepared for the correct and safe installation of wide tolerance Wall Couplings designed to ensure leak-proof and secure passage of pipelines through concrete walls, structures, and civil elements.

1. Pre-Installation Preparation

- **Product Verification:** Check the label information (DN size and tolerance range) and ensure compatibility with the pipe outer diameter.
- **Positioning:** Determine the exact installation coordinates (centerline/axis dimensions) according to project drawings.
- **Surface Check (Sealing Collar):** Ensure that the sealing collar (puddle flange) located on the central body is clean, dry, and free of oil. Proper bonding between concrete and this surface is critical for watertight performance.
- **Reinforcement Compatibility:** Verify that the unit fits within reinforcement bars without interfering with structural elements.

2. Installation Procedure

2.1 Fixing Before Concreting

- Place the wall penetration unit between formworks.
- Ensure both ends are perpendicular and properly aligned with the form surfaces.
- Important:
 - Secure the unit to reinforcement using wire ties to prevent movement during concrete pouring.

2.2 Protection Measures

- Seal both ends of the unit with plastic caps or tape to prevent concrete ingress.
- For flanged types, protect bolt holes and threads from concrete contamination.

2.3 Concrete Pouring & Vibration

- During pouring, ensure no air voids remain beneath or around the unit.
- Apply vibration carefully to allow proper concrete compaction.
- Warning: Do not allow the vibrator head to directly hit the unit.

2.4 Formwork Removal & Cleaning

- After concrete curing and formwork removal:
 - Remove protective caps
 - Clean internal surfaces and flange faces
 - Remove any concrete residues completely

3. Important Notes

- **Axial Alignment:** Misalignment during installation may prevent proper flange matching in later stages. Use a spirit level to ensure correct alignment.
- **Thermal Expansion:** For long units, consider using flexible connections to accommodate expansion differences between steel and concrete.
- **Leak Testing:** Do not subject the structure to full water pressure before the concrete has fully cured.

