

ASSEMBLY GUIDELINES EPPIC Insert System

CELO



EPPIC system is designed for an **easy and efficient assembly of EPP foam** to metal, plastic, or other cover materials, in applications requiring:

- Repeated **assembly and disassembly**.
- High **pull-out and loosening resistance**.
- Manual, semi-automated or fully automated assembly lines.
- Process reliability: a **large safety margin** between installation and stripping torque.



Final assembly

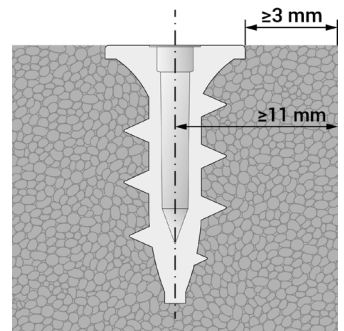
First step: Screwing the insert EPPIC into the EPP

EPPIC pierces the foam directly. No pre-hole required, although it's recommended for consistent alignment.

- Pre-hole $\varnothing=5 \text{ mm} \times 12 \text{ mm}$
- Min. **11 mm radius from insert axis** (wall thickness $\geq 22 \text{ mm}$)
- Min. **3 mm from insert head to panel edge**
- Hexalobular recess ISO 10665 N.30
- Recommended speed 50-300 rpm
- Install at the torque indicated in the table, then **fine-tune in 0.2 Nm** steps until the insert head sits flush with the foam surface

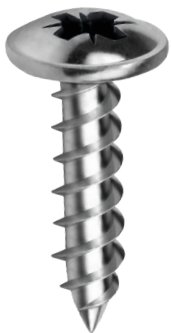
EPP Density (g/L)	Tightening torque (Nm)
60	1.7
80	2.2
100	2.5
120	2.6

These values are indicative. Use them as a starting baseline and validate by application testing.



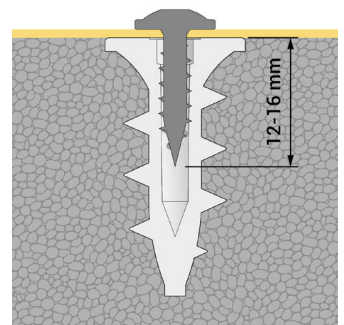
EPPIC installed into EPP

Second step: Install self-threading screw to assembly the cover

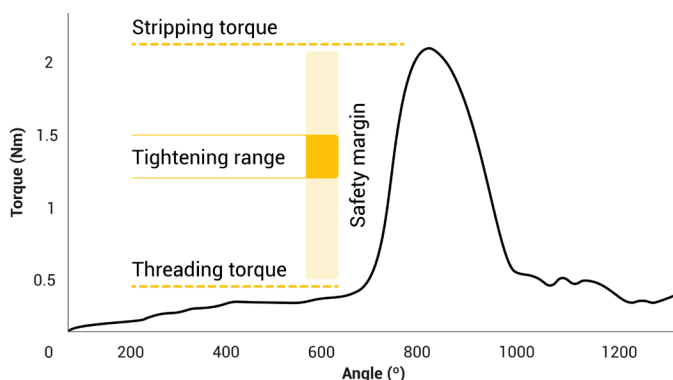


We recommend **TWINPLAST** screw, twin-lead design provides fast installation and higher tightening torque.

- Screw diameter $\varnothing 4 \text{ mm}$
- Screw length selection: Add the cover thickness **+12-16 mm of thread engagement** inside the EPPIC insert
- POZI Z2 recess
- Tightening torque **1.3-1.5 Nm**
- Recommended speed max. 500 rpm



TWINPLAST into EPPIC insert



Torque curve **TWINPLAST** Diameter 4 mm, length 16 mm.

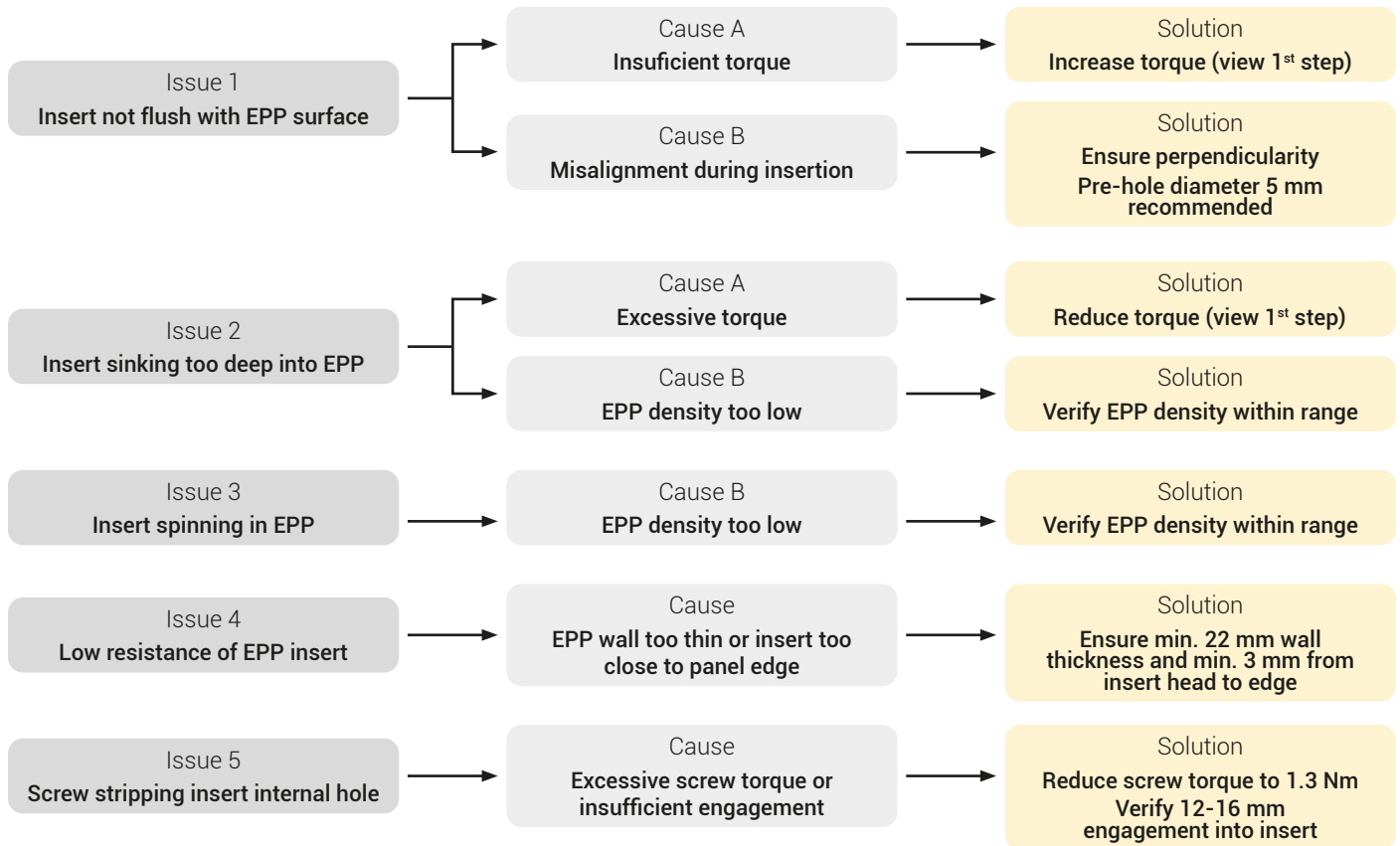
Install the **TWINPLAST** screw at recommended tightening torque **1.3-1.5 Nm at 500 rpm max.** to ensure a **high process safety**.

TWINPLAST dimensions available in stock:
4x16 416TP88Z 4x25 425TP88Z
4x20 420TP88Z 4x30 430TP88Z

REMFORM® screws are also compatible when different head styles, drive systems, or coatings are needed.

Troubleshooting guide

Use this guide to solve some of the problems that may arise when assembling EPP parts.



For more information contact us on celo@celo.com
www.celofasteners.com