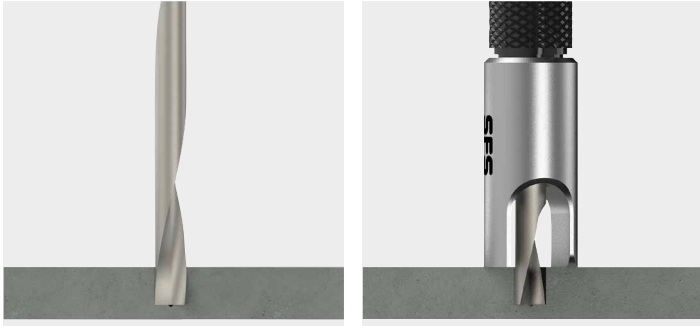


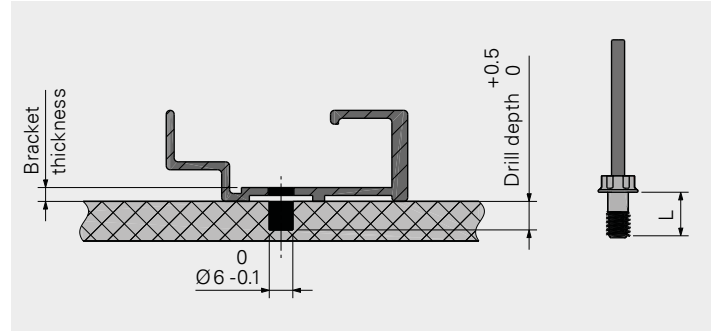
TUF-S / TU-S

1. Pre-drill the panel

Pre-drill a $\varnothing 6.0$ mm blind-hole using a milling cutter or a SFS drill bit combined with the SFS depth locator universal



The geometry of the drill hole shall be checked minimum on 1% of all drillings. **Nominal measure: $\varnothing 5.9 - 6.0$ mm**
(Can be measured with a vernier caliper)



For CNC milling, a milling cutter $\varnothing 6.0$ mm with tolerance h6 is recommended



1.1
Use a blind-hole drill bit

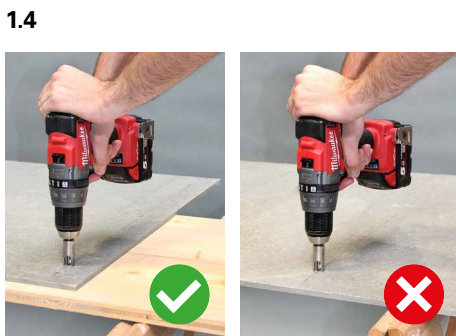
1.2
Do not use a drill bit with a point angle

1.3
Do not use a worn-out drill bit

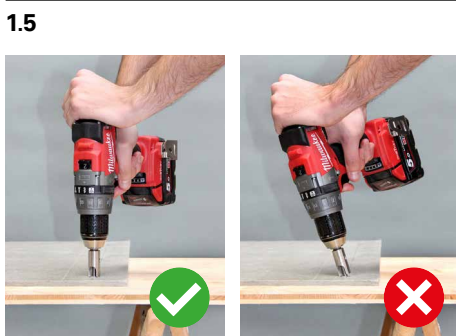
TUF-S Drill depth + Bracket thickness = TUF-S Length
TU-S Drill depth + Bracket thickness - 0.5 mm = TU-S Length

Example: 5.5 mm Drill depth + 3.5 mm = TUF-S-6x**9**-A4
6.0 mm Drill depth + 3.5 mm - 0.5 mm = TU-S-6x**9**-A4

Life expectancy for SFS VHM drill bits: min. 500 drills



1.4
Panel must lie on a hard surface and be fully supported



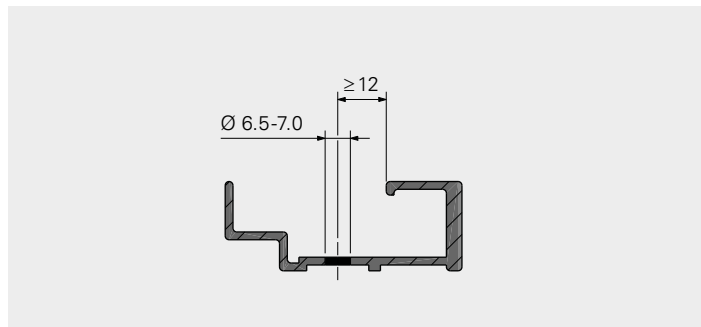
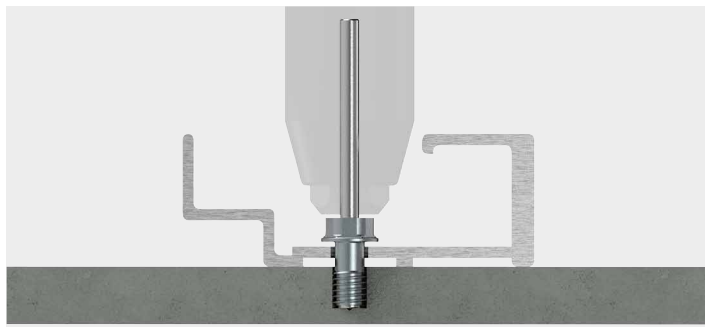
1.5
Keep a right angle during the drill process



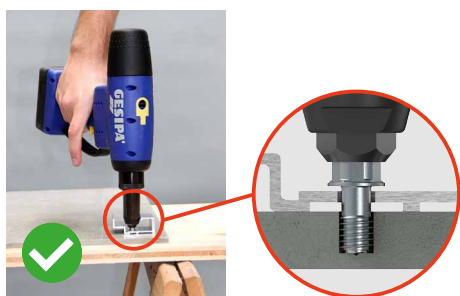
1.6
Remove debris from drill hole

2. Position the hanger

Position the pre-drilled hanger over the hole in the panel and push through the TU-Fastener



2.2



2.2 Before setting there can be a small gap between the TU-Fastener head and hanger

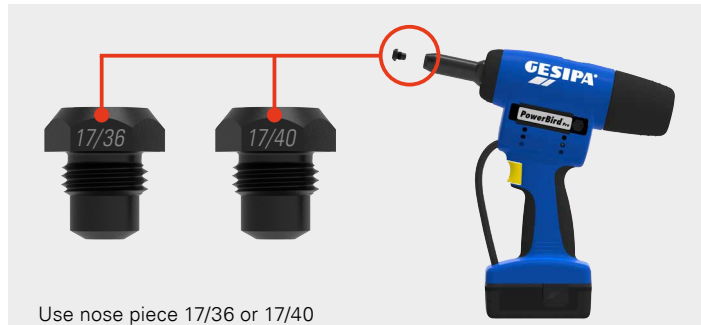
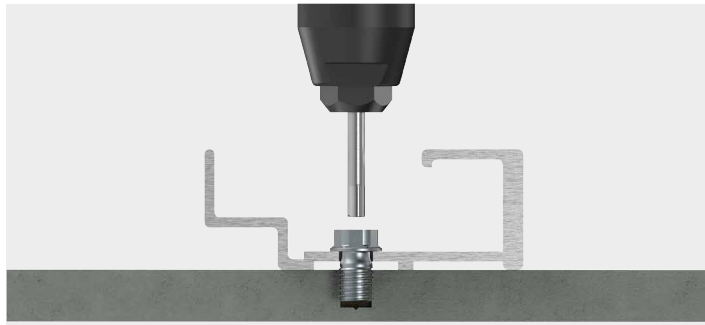
2.3



2.3 Do not apply force to the TU-Fastener before setting as this may cause damage to the panel face

3. Remove mandrel

Remove the mandrel using a battery riveting tool from GESIPA® (e.g. PowerBird® Pro)



3.1



3.1 Panel must lie on a hard surface and be fully supported

3.2



3.2 Keep a right angle during the setting process

Apply positive pressure to the GESIPA® battery riveting tool towards the panel during mandrel removal